

REQUEST FOR PROPOSALS

Item Description: AMPHITHEATER STAGE IMPROVEMENTS AT WATERPLACE PARK

Procurement/MinuteTraq #: 48462

Date to be opened: 4/7/2025

Issuing Department: Department of Parks

QUESTIONS

- Please direct questions related to the process, how to fill out forms, and how to submit an application(Pages 1-8) to the Purchasing Department.
 - o Email: purchasing@providenceri.gov
 - Please use the subject line "Solicitation Question"
- Please direct questions relative to the Minority and Women's Business Enterprise Program and the corresponding forms (Pages 10-11) to the MBE/WBE Outreach Director for the City of Providence, Grace Diaz
 - o Email: gdiaz@providenceri.gov
 - Please use subject line "MBE WBE Forms"
- Please direct questions relative to the specifications outlined (beginning on page 14) to the issuing department's subject matter expert:
 - o Name: Sam Greenwood
 - o Title: Landscape Architect
 - o Email Address: sgreenwood@providenceri.gov

Pre-submission Conference

There will be a Non-Mandatory Pre-Bid Conference

Date of Pre-Bid Conference: 3/25/2025 Time: 11:00 AM

Other details: Project Site –12 Finance Way, Providence, RI

Deadline for questions submissions: Monday, March 31 @ 2:00pm

INSTRUCTIONS FOR SUBMISSION

Meeting Date: 4/7/2025

Bids may be submitted up to **2:15 P.M.** on the above meeting date at the **Department of the City Clerk. Room 311, City Hall. 25 Dorrance Street, Providence.** At 2:15 P.M. all bids will be publicly opened and read at the Board of Contract Meeting in Conference Room 305, on the 3rd floor of City Hall.

• Bidders must submit 2 copies of their bid in sealed envelopes or packages labeled with the captioned Item Description and the City Department to which the solicitation and bid are related and must include the company name and address on the envelope as well. (On page 1).

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- If required by the Department, please keep the original bid bond and check in only one of the envelopes.
- Communications to the Board of Contract and Supply that are not competitive sealed bids (i.e. product information/samples) should have "**NOT A BID**" written on the envelope or wrapper.
- Only use form versions and templates included in this solicitation. If you have an old version of a form do not recycle it for use in this bid.
- The bid envelope and information relative to the bid must be addressed to:

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

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

This information is <u>NOT</u> requested to be provided in your initial bid by design.

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

BID PACKAGE CHECKLIST

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

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

- Bid Form 1: Bidder's Blank as the cover page/ 1st page (see page 6 of this document)
- **Bid Form 2**: Certification of Bidder as 2nd page (see page 7 of this document)
- Bid Form 3: Certificate Regarding Public Records (see page 8 of this document)
- Bid Form 4: Affidavit of City Vendor (see pages 9 and 10 of this document)
- Forms from the Minority and Women Business Enterprise Program: Based on Bidder Category. See forms and instructions enclosed (pages 10-11) or on: https://www.providenceri.gov/purchasing/minority-women-owned-business-mbewbe-procurement-program/
 - *Please note: MBE/WBE forms must be completed for EVERY bid submitted and must be inclusive of <u>ALL</u> required signatures. Forms without all required signatures will be considered <u>incomplete</u>.
- **Supplemental Bid Form**: Formal response to the specifications outlined in this RFP, including pricing information and details related to the good(s) or service(s) being provided. Please be mindful of formatting responses as requested to ensure clarity.
- Financial Assurance, <u>if requested</u> (as indicated on page 5 of this document under "Bid Terms")

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

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

NOTICE TO VENDORS

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

BID TERMS

1.	Financial assurances may be required in order to be a successful bluder for Commodity of Construction
	and Service contracts. If either of the first two checkboxes below is checked, the specified assurance
	must accompany a bid, or the bid will not be considered by the Board of Contract and Supply. The
	third checkbox indicates the lowest responsible bidder will be contacted and required to post a bond to
	be awarded the contract.
	a) A certified check for \$ must be deposited with the City Clerk as a guarantee that the
	Contract will be signed and delivered by the bidder.
	b) \boxtimes A bid bond in the amount of $\underline{5}$ per centum (%) of the proposed total price, must be deposited with
	the City Clerk as a guarantee that the contract will be signed and delivered by the bidder; and the
	amount of such bid bond shall be retained for the use of the City as liquidated damages in case of
	default. Any person signing a bid bond as an attorney-in-fact shall include with the bid bond an
	original, or a photocopy or facsimile of an original, power of attorney.
	c) A performance and payment bond with a satisfactory surety company will be posted by the
	bidder in a sum equal to one hundred per centum (100%) of the awarded contract.
	d) No financial assurance is necessary for this item.
	,

- 2. Awards will be made within **ninety (90) days of bid opening**. All bid prices will be considered firm, unless qualified otherwise. Requests for price increases will not be honored.
- 3. Failure to deliver within the time quoted or failure to meet specifications may result in default in accordance with the general specifications. It is agreed that deliveries and/or completion are subject to strikes, lockouts, accidents, and Acts of God.

The following entry applies only for COMMODITY BID TERMS:

4. Payment for partial delivery will not be allowed except when provided for in blanket or term contracts. The following entries apply only for CONSTRUCTION AND SERVICE BID TERMS:

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

BID FORM 1: Bidders Blank

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

Signature of Representation
Title

BID FORM 2: Certification of Bidder (Non-Discrimination/Hiring)

Up	on behalf of	(Firm or Individual Bidding),						
Ι,		(Name of Person Making Certification),						
bei	ng its	(Title or "Self"), hereby certify that:						
1.	Bidder does not unlawfully discriminate on the bas orientation and/or religion in its business and hiring							
2.	2. All of Bidder's employees have been hired in compliance with all applicable federal, state and local laws, rules and regulations.							
I af	ffirm by signing below that I am duly authorized on b	ehalf of Bidder, on						
this	sday of	20						
		Signature of Representation						
		Printed Name						

BID FORM 3: Certificate Regarding Public Records

Upon	behalf of	(Firm or Individual Bidding),
I,		(Name of Person Making Certification),
	its	
unders	tanding that:	
1. 2.	(RFQ's), documents contained record upon receipt by the City and Supply (BOCS) meeting.	Requests for Proposals (RFP's) and Requests for Qualification within, and the details outlined on those documents become public Clerk's office and opening at the corresponding Board of Contract the issuing department for this RFP/RFQ have made a conscious
	effort to request that sensitive/	rsonal information be submitted directly to the issuing everification of specific details is critical the evaluation of a
3.		rmation may be crucial to evaluating bids. Failure to provide lification, or an inability to appropriately evaluate bids.
4.	If sensitive information that hadefined supplemental informat submitted to the City Clerk, th	not been requested is enclosed or if a bidder opts to enclose the n prior to the issuing department's request in the bidding packet City of Providence has no obligation to redact those details and
5.	The City of Providence observe the bidding packet may not be	the information becoming public record. a public and transparent bidding process. Information required in ibmitted directly to the issuing department at the discretion of the information, such as pricing terms, from becoming public. Bidders be disqualified.
I affiri	n by signing below that I am du	authorized on behalf of Bidder, on
this	day of	20
		Signature of Representation

Printed Name

BID FORM 4: Affidavit of City Vendor

Per our Code of Ordinances Sec. 21.-28.1 (e), this form applies to a) the business, b) any political action committee whose name includes the name of the business, c) all persons holding ten (10) percent or greater equity interest or five thousand dollars (\$5,000.00) or greater cash value interest in the business at any time during the reporting period, d) all executive officers of the business entity, e) any spouse or dependent child of any individual identified in a) though d) above.

Executive officers who are not residents of the state of Rhode Island are exempted from this requirement.

			ship, partnership, firm, corporation, holding company, joint stock company, rough which business for profit or not for profit is conducted.
Nan	ne o	f the person making this affidavit:	
Posi	tion	in the "Business"	
Nan	ne o	f Entity	
Add	ress	s:	
Pho	ne n	number:	
The	nur	mber of persons or entities in your entity that are req	quired to report under Sec. 2128.1 (e):
Rea	d th	ne following paragraph and answer one of the op	tions:
are 1	10t i	in writing within the 12 month period preceding the	ubmission with the City of Providence, or with respect to the contracts that date of notification that the contract has reached the \$100,000 threshold, ear to (please list all persons or entities required under Sec. 2128.1 (e)).
a.	Me •	mbers of the Providence City Council? ☐ Yes If Yes, please complete the following: Recipient(s) of the Contribution: Contribution Date(s):	□ No Contribution Amount(s):
b.	Car •	ndidates for election or reelection to the Providence If Yes, please complete the following: Recipient(s) of the Contribution: Contribution Date(s):	City Council? ☐ Yes ☐ No Contribution Amount(s):
c.	The	e Mayor of Providence? Yes No If Yes, please complete the following: Recipient(s) of the Contribution: Contribution Date(s):	Contribution Amount(s):
d.	Car •	ndidates for election or reelection to the office of M If Yes, please complete the following: Recipient(s) of the Contribution: Contribution Date(s):	ayor of Providence? □ Yes □ No Contribution Amount(s):
		Signed under the pains and penalties of perjury.	Position

MBE/WBE Participation Plan

Please complete separate forms for each MBE/WBE subcontractor/supplier to be utilized on the solicitation.

Bidder's Name:							
Bidder's Address:							
Point of Contact:							
Telephone:							
Email:							
Procurement #:							
Project Name:							
	ns of Minority and/orprise certification we (Check all that applion capture commitme	r Woman ith the ly).		ractor		□Neither MBE nor W MBE/WBE subcontractors mitted to the prime contra	and suppliers,
						f Diversity, Equity and Op	
						BE page for details of the	
instructions and require	/						
	ganizations are not						
	i projects unable to ates to the MBE/Wl			rior t	o bid submis	sion (e.g. Design Build) a	re required to
Name of Subcontracto		DE Outrea	ch Office				
Type of RI Certification	* *	□МВЕ		DE		□Neither	
Address:)II.			DL			
Point of Contact:							
Telephone:							
Email:							
Detailed Description of Performed by Subcont to be Supplied by Supplied by Supplied in the Total Contract Value (ractor or Materials plier Per the Scope ne RFP		Subcontra			Participation	
			Value (\$)	:		Rate (%):	
Anticipated Date of Pe							
I certify under penalty		orgoing sta	tements are true	and c			
Prime Contractor/Ve	endor Signature				Title		Date
Subcontractor/Suppl	ier Signature				Title		Date

*If you did not meet the 20% MBE/WBE combined participation goal, submit a Waiver Request Form.

MBE/WBE Waiver Request Form

or Duly Authorized Representative

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

Submit this form to the City of Providence MBE/WBE Outreach Director, Grace Diaz, at gdiaz@providenceri.gov, for review <a href="mailto:priorito:pri

recommend a bidder for an award	l if this form is not included,	absent or is not signed by the cit	y of Providence MBE/WBE director
Prime Bidder:		Contact Email and Phone	
Company Name, Address:		Trade	
Project /Item Description (as seen	on RFP):		
To receive a waiver, you must lis whom you interacted, and the rea			ne name of the primary individual wi
MBE/WBE Company Name		Company Name	Why did you choose not to work with this company?
waiver of % MBE/WBE	E (20% minus the value of B	ox F on the Subcontractor Disclo	f the total bid value. I am requesting sure Form). If an opportunity is ffort will be made to select MBE/WI
Signature of Prime Contractor / or Duly Authorized Representativ	Printed	Name	Date Signed
Signature of City of Providence MBE/WBE Outreach Director /		Name of City of Providence /BE Outreach Director	Date Signed

FOR CONSTRUCTION PROJECTS

APPRENTICE REQUIREMENTS (Construction Projects Valued at \$100,000 or More).

Attention of prospective bidders is called to the fact that this project is to be bid upon and executed under the City of Providence Code of Ordinances Chapter 21 Art. II Section 21-28.1 c(1) and (2) related to utilizing apprentices in the contract. This ordinance outlines requirements for utilizing not less than 15% of total hours worked by apprentices. The City may lower this percentage only if it determines in writing that compliance is not feasible or that it would be unduly cost prohibitive to the project. The attention of prospective bidders is also called to the fact that reporting the efforts undertaken and progress towards achieving the requirements in this ordinance is a condition for payment. Compliance reporting shall be submitted with any contract payment requisition, in a format to be specified by the City. This demonstration of compliance through such reports shall be a condition of the requisition for payment to be processed. Upon the contract being awarded to the successful bidder, a mandatory meeting will be scheduled to review the project requirements relative to apprenticeship requirements and the process and protocols by which these goals will be achieved. At this meeting, specific forms and procedures for the documentation and achievement of these requirements by the successful bidder will be provided, discussed and agreed upon for the execution of the contract.

"FIRST SOURCE" REQUIREMENTS.

Attention of prospective bidders is called to the fact that this project is to be bid upon and executed under the City of Providence Code of Ordinances Chapter 21 Art. III 1/2 First Source Agreements Sec. 21-91 through 21-96. This ordinance outlines requirements for hiring Providence residents to work on this project. The City may waive this requirement only upon a determination in writing that qualified residents of Providence are not available for the project, pursuant to Sec. 21-94(e). The attention of prospective bidders is called to the fact that reporting the efforts undertaken and progress towards achieving the requirements in this ordinance is a condition for payment. Compliance reporting shall be submitted with any contract payment requisition, in a format to be specified by the City. This demonstration of compliance through such reports shall be a condition of the requisition for payment to be processed. Upon the contract being awarded to the successful bidder, a mandatory meeting will be scheduled to review the project requirements relative to the First Source Agreements and the process and protocols by which these goals will be achieved. At this meeting, specific forms and procedures for the documentation and achievement of these requirements by the successful bidder will be provided, discussed, and agreed upon for the execution of the contract.

Revised: 01/16/2025



BOARD OF CONTRACT AND SUPPLYCITY OF PROVIDENCE, RHODE ISLAND

SUPPLEMENTAL BID FORM

To whom it may concern:

- 1. The undersigned, having familiarized (himself) (themselves) (itself) with the Amphitheater Stage Improvements at Waterplace Park bid affecting the cost of work, and with the Contract Documents (which includes the Invitation for Bids, Instructions to Bidders, Form of Bid Bond, Form of Agreements, form of Non-Collusive Affidavit, Addenda (if any), Drawings, Technical Specification, Form of Surety Bond(s); as prepared by the Providence Parks Department, and on file in the office of the City Clerk 3rd Floor, City Hall, Providence, RI 02903, hereby proposes to furnish all supervision, technical personnel, labor, materials, machinery, tools, equipment and services including utility and transportation services, and to perform such other required work for the Amphitheater Stage Improvements at Waterplace Park and such other required and incidental work, complete, all in accordance with the above listed documents and for the unit prices for work in-place for the following items and quantities.
- 2. In submitting this Bid, the bidder understands that the right is reserved by The Providence Parks Department to reject any and all Bids, If written notice of acceptance of this Bid is mailed, telegraphed or delivered to the undersigned within (90) days after the opening thereof, or at any time thereafter before this Bid is withdrawn, the undersigned agrees to execute and deliver an Agreement in the prescribed form and furnish the required bond within (10) days after the Agreement is presented to him/her for signature.

Herewith in accordance with the instructions to Bidders.

- 3. Attached hereto is an affidavit in proof that the undersigned has not colluded with any person in respect to this. Bid or any bids for the Contractor for which this Bid is submitted. Also attached is a Statement of Bidder's Qualifications.
- 4. Application unit prices are contained in the Agreement (established as the result of either a Unit Price Bid or a Supplemental Schedule of Unit Prices), the City of Providence may order the Contractor to proceed with desired changes in the work, the value of such changes to be determined by the measured quantities involved and the application unit prices specified in the Contract.
- 5. The City of Providence reserves the right to determine the lowest responsible Bidder based on past experience with the City and/or recommendations by City and/or state agencies with an interest in this procurement. The City reserves the right to award the project to the appropriate bidder in the best interest of the City of Providence.

CERTIFICATION OF NON-SEGREGATED FACILITIES

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

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

DATE, 20		
Name of Bidder and Official Address:	Name of Authorized Representative (Contact):	
	By	
E-Mail:		
Bidder shall indicate, in space provided, the earliest possible Project Start-up Date:		
ADDENDA: The undersigned acknowledges receipt Any):	of the following Addenda, if any, and has included the provision	ons thereof in this Bid (If
Addendum No. Date	Addendum No. Date	
, 20	, 20	
, 20	, 20	
Sub-Contractors (If Any):		
Name:	Scope of Work:	MBE / WBE
Name:	Scope of Work:	MBE / WBE
Name:	Scope of Work:	MBE / WBE

Revised: 01/16/2025



BOARD OF CONTRACT AND SUPPLYCITY OF PROVIDENCE, RHODE ISLAND

BID PACKAGE SPECIFICATIONS

Project Description:

The amphitheater in Waterplace Park hosts concerts and performances during every Waterfire lighting and for other events from spring to fall. The existing wooden stage was not part of the original design but was added around 20 years ago. The goal of this project is to renovate and expand the existing structure to make it more functional, durable, and accessible.

BASE BID: The Base Bid scope of work for this project shall include, but not be limited to the following:

- R&D the existing stage surface & railing
- F&I pressure-treated 2x6 & plywood wood framing to raise and expand the stage
- F&I plywood sub-floor and finished floor w/ polyurethane coating for stage
- F&I PVC cladding panels and PVC trim for stage walls
- F&I steel railing system with wire mesh panels
- F&I LED lighting at edge of stage and in ex. seatwalls as shown
- F&I upgrades to ex. electrical system as shown
- Remove & Reset ex. granite pavers

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

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

All Work Included in this Project Shall b	e Comple	eted for the lump sum of:	
			Dollars
(\$), TOTAL BASE BID	
ALLOWANCE: \$35,000.00			
BASE BID W/ ALLOWANCE:	\$		

ABBREVIATIONS

R&S	Remove & Stockpile	EA	Each
R&D	Remove & Dispose	LF	Linear Foot
D&I	Deliver & Install, owner provided	SF	Square Foot
F&I	Furnish & Install	BF	Board Foot
LS	Lump Sum	PT	Pressure Treated

DEDUCT ALTERNATES:

		T .O.		
price in	weiting	LS	\$	
price in	wrung			
UNIT I	PRICES – BASE BID:			
1.	Mobilization – Per Lump Sum			
		LS	\$	
price in	-			
2.	F&I Erosion Control at LOD along Woonasquatucket River, comple	ete. – Per L	inear Foot	
		LF	\$	
price in			-	
3.	R&D Ex. Stage Flooring & Stairs, complete. – Per Lump Sum			
		IC	ø.	
price in	writing	LS	\$	
•	R&D Ex. Stage Railing, complete. – Per Linear Foot			
••	Ter Emen Tool			
		LF	\$	
price in -	G			
5.	R&D Ex. Stage Framing to Limits Shown, complete. – Per Lump Su	ım		
		LS	\$	
price in	writing			
6.	Remove & Reset Ex. Granite Pavers, complete. – Per Square Foot			
		SF	¢	
price in	writing	51	Ψ	
7.	F&I PT 2"x6" Floor Joists, complete. – Per Board Foot			
	•			
price in	writing	BF	\$	
-	F&I PT 2"x6"Cross Walls, complete. – Per Board Foot			
0.	rati i 2 xo Cross wans, complete. – i ei Board Foot			
		BF	\$	
price in	G			
9.	F&I PT 2"x6" Rim Joists, complete. – Per Board Foot			
		BF	\$	
price in	writing			<u></u>
10.	F&I PT 2"x6" Ramp Framing, complete. – Per Board Foot			
		BF	er e	
price in	writing	вг	5	

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

BIDDER:					

11. F&I 15/32" Plywood Shear Wall Panels, complete. – Per Square Foot		
	SF	\$
price in writing		
12. F&I PVC Open-Joint Cladding, complete. – Per Square Foot		
	SF	\$
price in writing	_ 51	Ψ
13. F&I 5/4" x 10" PVC Trim Board, complete. – Per Linear Foot		
, .		
price in writing	_ LF	\$
14. F&I 5/4" x 4" PVC Trim Board, complete. – Per Linear Foot		
	_ LF	\$
price in writing		
15. F&I 3/4" Plywood Wall Sheathing, complete. – Per Square Foot		
	SF	¢
price in writing	_ SI	Φ
16. F&I 23/32" Tongue & Groove Plywood Subfloor, complete. – Per Squ	are Foot	
, , , , , , , , , , , , , , , , ,		
	SF	\$
price in writing	TF 4	
17. F&I 15/32" Exposure 1 Grade Plywood Overlay, complete. – Per Squa	are Foot	
	SF	\$
price in writing		
18. F&I Ice & Water Shield between Subfloor & Overlay, complete. – Per	r Square Foot	
	SF	¢
price in writing	_ 51	Φ
19. F&I Textured Polyurethane Deck Coating, complete. – Per Square Fo	oot	
g, _F		
	SF	\$
price in writing		
20. F&I 3" Sch 40 Steel Post & Rail Guardrail, complete. – Per Linear Fo	oot	
	LF	\$
price in writing		
21. F&I 1-1/2" Sch 40 Steel Post & Rail Handrail, complete. – Per Linear	Foot	
	LF	¢
	_ Lr	\$
22. F&I Steel Wire Mesh Panel Infill for Railing, complete. – Per Square	Foot	
for square	_ = •••	
	SF	\$
price in writing		

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

BIDDER:					

23. F&I LED Strip Lighting @ Front of Stage, complete. – Per Linear Foot					
	LF	\$			
price in writing					
24. F&I LED Step Light, complete. – Per Each					
	EA	\$			
price in writing					
25. F&I 100 Amp Pin & Sleeve Receptacle, complete. – Per Each					
	EA	\$			
price in writing					
26. F&I Lockable, Waterproof GFI Receptacle , complete. – Per Each					
	EA	\$			
price in writing					
27. F&I 3/4" Sch 40 PVC Conduit, complete. – Per Linear Foot					
	LF	\$			
price in writing					
28. F&I 10 Gauge wiring, complete. – Per Linear Foot					
	LF	S			
price in writing		*			
29. F&I 8 Gauge wiring, complete. – Per Linear Foot					
	LF	\$			
price in writing					

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

BIDDER:				



BOARD OF CONTRACT AND SUPPLY

CITY OF PROVIDENCE, RHODE ISLAND

ADDITIONAL BID DOCUMENTS

The complete set of Bid Documents includes the pages above & the following:

- o PREVAILING WAGE DECISION
- SAMPLE CONTRACT
- TECHNICAL SPECIFICATIONS:

•	01 00 00	GENERAL REQUIREMENTS
•	01 20 00	MEASUREMENT & PAYMENT
•	02 41 19	SELECTIVE DEMOLITION
•	05 52 13	PIPE AND TUBE RAILING
•	06 10 63	EXTERIOR ROUGH CARPENTRY
•	06 16 00	SHEATHING
•	06 65 00	SIMULATED WOOD TRIM
•	07 46 33	PLASTIC SIDING

- 26 05 19 LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES
- 26 05 26 GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS
- 26 05 29 HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS
- 26 05 33.13 CONDUIT FOR ELECTRICAL SYSTEMS
- 26 56 00 EXTERIOR LIGHTING

COVED SHEET

o DRAWINGS:

•	C-0	COVER SHEET
•	C-1	EXISTING PLANS

- C-2 SITE ACCESS PLAN
- D-1 DEMOLITION PLAN
- S-1 AMPHITHEATER CONTROL PLAN AND SECTION
- S-2 AMPHITHEATER FRAMING PLANS
- S-3 AMPHITHEATER FRAMING SECTIONS AND DETAILS
- S-4 AMPHITHEATER ELEVATIONS
- E-1 ELECTRICAL GENERAL NOTES, SYMBOLS, ABBREVIATIONS
- E-2 ELECTRICAL SITE DEMOLITION
- E-3 ELECTRICAL SITE PLAN
- E-4 ELECTRICAL SINGLE-LINE DIAGRAM, ELECTRICAL DETAIL

ADDITIONAL INFORMATION REQUIRED WITH BID:

- Qualifications to Perform Work See Form Below for Information Required
- Addenda (If Any) Must Be Acknowledged on Bid Form (Page 14)
- Product Information for Items Submitted as 'Or Equal' to Specified Materials

PROVISIONS OF THIS PROJECT:

- Upon the Issuance of the Award from the Board of Contract the City shall issue a Contract to be executed by the City and the vendor incorporating the bid specifications. All Provisions of the Specifications are binding.
- Any Permits Required by the City of Providence and/or State of Rhode Island Shall be Obtained by the Vendor –
 Permit Fees by the City of Providence Shall be Waived the State ADA Fee Must be Paid

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

CLOSE OUT DOCUMENTS:

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

QUALIFICATIONS:

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

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

Questions regarding this bid package shall be submitted via e-mail to Purchasing at purchasing@providenecri.gov and Sam Greenwood, Landscape Architect, sgreenwood@providenceri.gov, no later than five (5) working days before the bid opening date.

SUPPLEMENTAL INFORMATION

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

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

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

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

You must be able to provide:

- Business Tax ID will be requested after an award is approved by the Board of Contract and Supply.
- Proof of Insurance.
- Certificate of Good Standing with the Rhode Island Secretary of State.



CITY OF PROVIDENCE STANDARD TERMS & CONDITIONS

- 1. The terms "you" and "your" contained herein refer to the person or entity that is a party to the agreement with the City of Providence ("the City") and to such person's or entity's employees, officers, and agents.
- 2. The Request For Proposals ("RFP") and these Standard Terms and Conditions together constitute the entire agreement of the parties ("the Agreement") with regard to any and all matters. By your submission of a bid proposal or response to the City's RFP, you accept these Standard Terms & Conditions and agree that they supersede any conflicting provisions provided by bid or in any terms and conditions contained or linked within a bid and/or response. Changes in the terms and conditions of the Agreement, or the scope of work thereunder, may only be made by a writing signed by the parties.
- 3. You are an independent contractor and in no way does this Agreement render you an employee or agent of the City or entitle you to fringe benefits, workers' compensation, pension obligations, retirement or any other employment benefits. The City shall not deduct federal or state income taxes, social security or Medicare withholdings, or any other taxes required to be deducted by an employer, and this is your responsibility to yourself and your employees and agents.
- 4. You shall not assign your rights and obligations under this Agreement without the prior written consent of the City. Any assignment without prior written consent of the City shall be voidable at the election of the City. The City retains the right to refuse any and all assignments in the City's sole and absolute discretion.
- 5. Invoices submitted to the City shall be payable sixty (60) days from the time of receipt by the City. Invoices shall include support documentation necessary to evidence completion of the work being invoiced. The City may request any other reasonable documentation in support of an invoice. The time for payment shall not commence, and invoices shall not be processed for payment, until you provide reasonably sufficient support documentation. In no circumstances shall the City be obligated to pay or shall you be entitled to receive interest on any overdue invoice or payment. In no circumstances shall the City be obligated to pay any costs associated with your collection of an outstanding invoice.
- 6. For contracts involving construction, alteration, and/or repair work, the provisions of applicable state labor law concerning payment of prevailing wage rates (R.I. Gen. Laws §§ 37-13-1 et seq., as amended) and the City's First Source Ordinance (Providence Code of Ordinances §§ 21-91 et seq., as amended) apply.
- 7. With regard to any issues, claims, or controversies that may arise under this Agreement, the City shall not be required to submit to dispute resolution or mandatory/binding arbitration. Nothing prevents the parties from mutually agreeing to settle any disputes using mediation or non-binding arbitration.
- 8. To the fullest extent permitted by law, you shall indemnify, defend, and hold harmless the City, its employees, officers, agents, and assigns from and against any and all claims, damages, losses, allegations, demands, actions, causes of action, suits, obligations, fines, penalties, judgments, liabilities, costs and expenses, including but not limited to attorneys' fees, of any nature whatsoever arising out of, in connection with, or resulting from the performance of the work provided in the Agreement.
- 9. You shall maintain throughout the term of this Agreement the insurance coverage that is required by the RFP or, if none is required in the RFP, insurance coverage that is considered in your industry to be commercially reasonable, and you agree to name the City as an additional insured on your general liability policy and on any umbrella policy you carry.
- 10. The City shall not subject itself to any contractual limitations on liability. The City shall have the time permitted within the applicable statute of limitations, and no less, to bring or assert any and all causes of action, suits, claims or demands the City may have arising out of, in connection with, or resulting from the performance of the work provided in the Agreement, and in no event does the City agree to limit your liability to the price of the Agreement or any other monetary limit.
- 11. The City may terminate this Agreement upon five (5) days' written notice to you if you fail to observe any of the terms and conditions of this Agreement, or if the City believes your ability to perform the terms and conditions of this Agreement has been materially impaired in any way, including but in no way limited to loss of insurance coverage, lapsing of a surety bond, if required, declaration of bankruptcy, or appointment of a receiver. In the event of termination by the City, you shall be entitled to just and equitable compensation for any satisfactory work completed and expenses incurred up to the date of termination.
- 12. Written notice hereunder shall be deemed to have been duly served if delivered in person to the individual or member of the



firm or entity or to an officer of the entity for whom it was intended, or if delivered at or sent by registered or certified mail to the last business address known by the party providing notice.

- 13. In no event shall the Agreement automatically renew or be extended without a writing signed by the parties.
- 14. You agree that products produced or resulting from the performance of the Agreement are the sole property of the City and may not be used by you without the express written permission of the City.
- 15. For any Agreement involving the sharing or exchange of data involving potentially confidential and/or personal information, you shall comply with any and all state and/or federal laws or regulations applicable to confidential and/or personal information you receive from the City, including but not limited to the Rhode Island Identity Theft Protection Act, R.I. Gen. Laws § 11-49.3-1, during the term of the Agreement. You shall implement and maintain appropriate physical, technical, and administrative security measures for the protection of, and to prevent access to, use, or disclosure of, confidential and/or personal information. In the event of a breach of such information, you shall notify the City of such breach immediately, but in no event later than twenty-four (24) hours after discovery of such breach.
- 16. The Agreement is governed by the laws of the State of Rhode Island. You expressly submit yourself to and agree that any and all actions arising out of, in connection with, or resulting from the performance of the Agreement or relationship between the parties shall occur solely in the venue and jurisdiction of the State of Rhode Island or the federal court located in Rhode Island.
- 17. The failure of the City to require performance of any provision shall not affect the City's right to require performance at any time thereafter, nor shall a waiver of any breach or default of this Agreement constitute a waiver of any subsequent breach or default or a waiver of the provision itself.
- 18. If any term or provision of this Agreement, or the application thereof to any person or circumstance shall, in any extent, be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby, and each term and provision shall be valid and enforceable to the fullest extent permitted by law.



PREVAILING WAGE

This project qualifies for prevailing wages per the Prevailing Wages Statute or the Davis Bacon Act (HUD). Certified payrolls will need to be submitted to the owner for all hours worked on site for this project.

The Wage Decision for this project shall be as recorded on the Bid Date and is available on the RI Department of Labor website.

Federal Labor Standards

U.S. Department of Housing & Urban Development

Applicability

- The Project of Program to which the Construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.
- A.1. (i) Minimum Wages. All laborers and mechanics employed or working up on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction of development of the project) will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers of mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification or work actually performed, without regard to skill, excepts as provided in 29 CFR Part 5.5 (a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFT part 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.
- (ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contact shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (2) The classification is utilized in the area by the construction industry; and
 - (3) The proposed wage rate, including any bona fide fringe benefits, bears a relationship to the wage rates contained in the wage determination.
 - (b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of



receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

- (c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)
- (d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)
 - 2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withhold from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much that the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract. HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.
 - 3. (i) Payrolls and basic records. Payrolls and basic record relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonable anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) or the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits ins enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)



- (ii) (a) The contractor shall submit weekly for each in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR Part 5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-34 is available for this purpose and may be purchases from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), Government Printing Office, Washington, Dc 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)
 - (b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) That the payroll for the payroll period contains the information required to be maintained under 20 CFR Part 5.5 (a)(3)(i) and that such information is correct and complete;
 - (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;
 - (3) That each laborer or mechanic has been paid not less that the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
 - (c) The weekly submission of a property executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph AA.3. (ii)(b) of this section.
 - (d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code. (iii) The contractor of subcontractor shall make the records required under paragraph A.3. (i) of this section available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR Part 5.12.
 - 4. (i) Apprentices and Trainees. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprentice program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the age determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the



applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the even the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less that the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirement of Executive Order 11246, s amended, and 29 CFR Part 30.
- 5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.
- 6. Subcontracts. The contractor or subcontractor will insert in any subcontract the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as HUD or its designee may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all contract clauses in 29 CFR Part 5.5
- 7. Contracts termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor as provided in 29 CFR 5.12
- 8. Compliance with Davis-Bacon and Related Act Requirements. All ruling and interpretations of the Davis-Bacon and Related Act contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.
- 10. (i) Certification of Eligibility. By entering in to this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR part 24.
 - (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act of 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.
 - (iii) The penalty to making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transaction", provides in part: "Whoever,



for the purpose of ...influencing in any way the action of such Administration...makes, utter of publishes any statement, knowing the same to be false...shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

- 11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.
- B. Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.
- (1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work I excess of forty hours I such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) or this paragraph, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$25 for each calendar day on which such individual was required or permitted to work in excess of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.
 - (3) Withholding for unpaid wages for liquidated damages. HUD or its designees shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold of cause to be withheld form any moneys payable on account of work performed by the contractor or subcontractor under any such contract or nay other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidates damages as provided in the clause set forth in subparagraph (2) of this paragraph.
 - (4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety

- (1) No laborer or mechanic shall be required to work in surrounding or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.
 - (2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 (formerly Part 1518) and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat. 96).
 - (3) The Contractor shall include the provisions of this Article in every subcontract so that such provisions will be binding on each subcontractor. The Contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

PREVAILING WAGE

This project qualifies for prevailing wages per the Prevailing Wages Statute or the Davis Bacon Act (HUD). Certified payrolls will need to be submitted to the owner for all hours worked on site for this project.

The Wage Decision for this project shall be as recorded on the Bid Date and is available on the RI Department of Labor website.

Federal Labor Standards

U.S. Department of Housing & Urban Development

Applicability

- The Project of Program to which the Construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.
- A.1. (i) Minimum Wages. All laborers and mechanics employed or working up on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction of development of the project) will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers of mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification or work actually performed, without regard to skill, excepts as provided in 29 CFR Part 5.5 (a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFT part 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.
- (ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contact shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (2) The classification is utilized in the area by the construction industry; and
 - (3) The proposed wage rate, including any bona fide fringe benefits, bears a relationship to the wage rates contained in the wage determination.
 - (b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove

- every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)
- (c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)
- (d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)
 - 2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withhold from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much that the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract. HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.
- 3. (i) Payrolls and basic records. Payrolls and basic record relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonable anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) or the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits ins enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

- (ii) (a) The contractor shall submit weekly for each in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR Part 5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-34 is available for this purpose and may be purchases from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), Government Printing Office, Washington, Dc 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)
 - (b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) That the payroll for the payroll period contains the information required to be maintained under 20 CFR Part 5.5 (a)(3)(i) and that such information is correct and complete;
 - (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;
 - (3) That each laborer or mechanic has been paid not less that the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
 - (c) The weekly submission of a property executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph AA.3. (ii)(b) of this section.
 - (d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.
 - (iii) The contractor of subcontractor shall make the records required under paragraph A.3. (i) of this section available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR Part 5.12.
 - 4. (i) Apprentices and Trainees. Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprentice program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the age determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount

of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the even the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less that the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirement of Executive Order 11246, s amended, and 29 CFR Part 30.
- 5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.
- 6. Subcontracts. The contractor or subcontractor will insert in any subcontract the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as HUD or its designee may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all contract clauses in 29 CFR Part 5.5
- 7. Contracts termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor as provided in 29 CFR 5.12
- 8. Compliance with Davis-Bacon and Related Act Requirements. All ruling and interpretations of the Davis-Bacon and Related Act contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.
- 10. (i) Certification of Eligibility. By entering in to this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR part 24.
 - (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act of 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.
 - (iii) The penalty to making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transaction", provides in

part: "Whoever, for the purpose of ...influencing in any way the action of such Administration...makes, utter of publishes any statement, knowing the same to be false...shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

- 11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.
- B. Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.
- (1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work I excess of forty hours I such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) or this paragraph, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$25 for each calendar day on which such individual was required or permitted to work in excess of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.
 - (3) Withholding for unpaid wages for liquidated damages. HUD or its designees shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold of cause to be withheld form any moneys payable on account of work performed by the contractor or subcontractor under any such contract or nay other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidates damages as provided in the clause set forth in subparagraph (2) of this paragraph.
 - (4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety

- (1) No laborer or mechanic shall be required to work in surrounding or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.
 - (2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 (formerly Part 1518) and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat. 96).
 - (3) The Contractor shall include the provisions of this Article in every subcontract so that such provisions will be binding on each subcontractor. The Contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

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"General Decision Number: RI20250001 01/03/2025

Superseded General Decision Number: RI20240001

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)(1).

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

- Executive Order 14026 generally applies to the contract.
- |. The contractor must pay all covered workers at least \$17.75 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 2025.

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

- If the contract was awarded on |. Executive Order 13658 or between January 1, 2015 and | generally applies to the January 29, 2022, and the | contract.
 - The contractor must pay all covered workers at least \$13.30 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 2025.

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.

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Modification Number Publication Date 01/03/2025

ASBE0006-006 09/01/2024

	Rates	Fringes
HAZARDOUS MATERIAL HANDLER (Includes preparation, wetting, stripping, removal scrapping, vacuuming, bagging & disposing of all insulation materials, whether they contain asbestos or not, from	¢ 40.01	26 62
mechanical systems)	\$ 49.91	36.63
ASBE0006-008 09/01/2024		
Asbestos Worker/Insulator Includes application of all insulating materials, protective coverings, coatings & finishes to all	Rates	Fringes
types of mechanical system	s.\$ 49.91 	36.63
BOIL0029-001 01/01/2021		
	Rates	Fringes
BOILERMAKER	\$ 45.87	29.02
BRRI0003-001 06/01/2022		
	Rates	Fringes
Bricklayer, Stonemason, Pointer, Caulker & Cleaner	\$ 46.86	29.14
BRRI0003-002 09/01/2022		
	Rates	Fringes
Marble Setter, Terrazzo Worker & Tile Setter		30.34
BRRI0003-003 09/01/2022		
	Rates	Fringes
Marble, Tile & Terrazzo Finisher CARP0330-001 06/03/2024		29.61
	Rates	Fringes
CARPENTER (Includes Soft Floor Layer) Diver Tender DIVER Piledriver WELDER	\$ 44.88 \$ 57.03 \$ 41.53	30.25 30.25 30.25 29.35 30.25

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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.

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CARP1121-002 01/02/2023

Rates Fringes

MILLWRIGHT.....\$ 41.54 30.73

ELEC0099-002 06/01/2024

Rates Fringes

ELECTRICIAN.....\$ 52.11 47.25%

Teledata System Installer......\$ 39.09 11.02%+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.

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ELEV0039-001 01/01/2024

Rates Fringes

ELEVATOR MECHANIC.....\$ 61.88 37.885+a+b

FOOTNOTES:

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

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

ENGI0057-001 12/01/2024

Rates Fringes

Operating Engineer: (power

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

GROUP	1\$ 4	19.05	29.70
GROUP	2\$ 4	17.05	29.70
GROUP	3\$ 4	12.67	29.70
GROUP	4\$ 3	39.82	29.70
GROUP	5\$ 4	16.10	29.70
GROUP	6\$ 3	36.90	29.70
GROUP	7\$ 3	30.90	29.70
GROUP	8\$ 4	12.75	29.70
GROUP	9\$ 4	16.67	29.70

a. BOOM LENGTHS, INCLUDING JIBS:

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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
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a. PAID HOLIDAYS:

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

a. FOOTNOTES:

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

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, lighters, boom trucks and derricks

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

GROUP 3: Oilers on cranes.

GROUP 4: Oiler on crawler backhoe.

GROUP 5: Bulldozer, bobcats, skid steer loader, tractor, scraper, combination loader backhoe, roller, front end loader (less than 3 yds.), street and mobile-powered sweeper (3-yd. capacity), 8-ft. sweeper minimum 65 HP).

GROUP 6: Well-point installation crew.

GROUP 7: Utility Engineers and Signal Persons

GROUP 8: Heater, concrete mixer, stone crusher, welding

machine, generator and light plant, gas and electric driven pump and air compressor.

GROUP 9: Boat & tug operator.

ENGI0057-003 12/01/2024

BUILDING CONSTRUCTION

	R	ates	Fringes
Power Equip	ment Operator		
GROUP	1\$	48.32	28.45
GROUP	2\$	46.32	28.45
GROUP	3\$	46.10	28.45
GROUP	4\$	42.10	28.45
GROUP	5\$	39.25	28.45
GROUP	6\$	45.40	28.45
GROUP	7\$	44.97	28.45
GROUP	8\$	42.29	28.45

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

ENGI0057-005 11/01/2024

	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	\$ 44.20	29.45
GROUP 2	\$ 42.20	29.45
GROUP 3	\$ 36.90	29.45
GROUP 4	\$ 23.50	29.45
GROUP 5	\$ 30.90	29.45

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

29.45

29.45

29.45

b. 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 6.....\$ 37.48

GROUP 7.....\$ 41.18

GROUP 8.....\$ 36.45

GROUP 1: Cranes, pile drivers, lighters, boom trucks, hoists, derricks

GROUP 2: Digging machines, excavators, locomotives, John Henry's, directional drilling machines, cold planers, reclaimers, pavers, spreaders, graders, front-end loaders (3yds & over), vacuum truck, drill/boring machine operators, vermeer saw, water blaster, hydraulic-demolition robot, Ross Carriers, concrete pump operators, asphalt/material transfer machines, rotating telehandlers, SPMT type equipment

GROUP 3: Wellpoint installation and drill/boring machine assistants

GROUP 4: Utility engineers

GROUP 5: Signal persons

GROUP 6: Oilers on cranes and deckhands

GROUP 7: Combination loader / backhoes, front-end loaders (less than 3 yds.), forklift, bulldozers, scrapers, boats, rollers, skid steer loaders (regardless of attachments), street sweepers, mechanics, welders, operators in materials yards, shops and garages

GROUP 8: Gas and electric drive heaters, concrete mixers, light plants, welding machines, pumps and compressors

IRON0037-001 09/16/2024

Rates Fringes 32.98 IRONWORKER.....\$ 41.59 LAB00271-001 12/03/2023

BUILDING CONSTRUCTION

		Rates	Fringes
			_
LABORER			
GROUP	1	\$ 37.00	26.90
GROUP	2	\$ 37.00	26.90
GROUP	3	\$ 37.00	26.90
GROUP	4	\$ 37.00	26.90
GROUP	5	\$ 39.00	26.90
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

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 11/27/2022

HEAVY AND HIGHWAY CONSTRUCTION

Rates

Fringes

		0
LABORER		
COMPRESSED AIR		
Group 1\$	55.40	24.15
Group 2\$	52.93	24.15
Group 3\$		24.15
FREE AIR		
Group 1\$	46.00	24.15
Group 2\$	45.00	24.15
Group 3\$	42.45	24.15
LABORER		
Group 1\$	33.05	24.05
Group 2\$		24.85
Group 3\$	36.50	24.85
Group 4\$	29.00	24.85
Group 5\$	37.50	24.85
OPEN AIR CAISSON,		
UNDERPINNING WORK AND		
BORING CREW		
Bottom Man\$		24.15
Top Man & Laborer\$	35.60	24.15
TEST BORING		
Driller\$	41.95	24.15
Laborer\$	41.95	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

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 06/01/2024		
	Rates	Fringes
PAINTER Brush and Roller Epoxy, Tanks, Towers,	\$ 38.07	25.80
Swing Stage & Structural Steel Spray, Sand & Water Blasting Taper	.\$ 41.07	25.80 25.80 25.80
Wall Coverer	.\$ 38.57	25.80
PAIN0011-006 06/01/2024		
	Rates	Fringes
CLAZTER		· ·
GLAZIER	\$ 41.63	26.15
FOOTNOTES:		
SWING STAGE: \$1.00 per hour addi	itional.	
PAID HOLIDAYS: Labor Day & Chris		
PAIN0011-011 06/01/2024		
	Rates	Fringes
Painter (Bridge Work)	.\$ 57.85	26.40
PAIN0035-008 06/01/2011		
	Rates	Fringes
Sign Painter		13.72
PLAS0040-001 07/01/2024		
BUILDING CONSTRUCTION		
	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	.\$ 44.00	29.10
FOOTNOTE: Cement Mason: Work of a planks width and which is 20 and any offset structure: \$.30	or more feet al	pove ground
PLAS0040-002 07/01/2024		
HEAVY AND HIGHWAY CONSTRUCTION		
	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	.\$ 39.45	25.30
PLAS0040-003 07/01/2024		

Fringes

Rates

PLASTERER		29.10
PLUM0051-002 08/26/2024		
	Rates	Fringes
Plumbers and Pipefitters	.\$ 52.49	33.60
ROOF0033-004 12/01/2024		
	Rates	Fringes
ROOFER	.\$ 45.77	31.01
SFRI0669-001 04/01/2024		
	Rates	Fringes
SPRINKLER FITTER	.\$ 49.98	32.85
SHEE0017-002 06/01/2024		
	Rates	Fringes
Sheet Metal Worker	•	38.45
TEAM0251-001 05/01/2024		
HEAVY AND HIGHWAY CONSTRUCTION		

		Rates	Fringes
TRUCK DRIVE	ER		
GROUP	1	.\$ 30.71	36.9125+A+B
GROUP	2	.\$ 30.86	36.9125+A+B
GROUP	3	.\$ 30.91	36.9125+A+B
GROUP	4	.\$ 30.96	36.9125+A+B
GROUP	5	.\$ 31.06	36.9125+A+B
GROUP	6	.\$ 31.46	36.9125+A+B
GROUP	7	.\$ 31.66	36.9125+A+B
GROUP	8	.\$ 31.16	36.9125+A+B
GROUP	9	.\$ 31.41	36.9125+A+B
GROUP	10	.\$ 31.21	36.9125+A+B

FOOTNOTES:

- A. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, plus Presidents' Day, Columbus Day, Veteran's Day & V-J Day, providing the employee has worked at least one day in the calendar week in which the holiday falls.
- B. Employee who has been on the payroll for 1 year or more but less than 5 years and has worked 150 Days during the last year of employment shall receive 1 week's paid vacation; 5 to 10 years - 2 weeks' paid vacation; 10 or more years - 3 week's paid vacation.
- C. Employees on the seniority list shall be paid a one hundred dollar (\$100.00) bonus for every four hundred (400) hours worked, up to a maximum of five hundred dollars (\$500.00)

All drivers working on a defined hazard material job site

shall be paid a premium of \$2.00 per hour over applicable rate.

TRUCK DRIVER CLASSIFICATIONS

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

GROUP 2: Two-axle on low beds

GROUP 3: Two-axle dump truck

GROUP 4: Three-axle dump truck

GROUP 5: Four- and five-axle equipment

GROUP 6: Low-bed or boom trailer.

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

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

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

GROUP 10: Tractor trailer

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

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) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular

rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate 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. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the 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. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and

prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

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

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

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

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail 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 an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail 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 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.

END OF GENERAL DECISION"

CONSTRUCTION AGREEMENT

This Construction A	greement ("Agreement") is made and entered into as of this	
day of	2023 by and between the City of Providence Board of	
Park Commissioners, havi	ing an address of The Dalrymple Boathouse, Roger Williams	
Park, 1000 Elmwood Ave.,	Providence, RI ("City") and [Contractor Name], having ar	
address of [Contractor Address] ("Contractor").		

WITNESSETH:

WHEREAS, the [Park Name] is located at [Park Address]. The City plans to make improvements to the park under the [RFP Name] project (the "Project"), as detailed in the Request for Proposals ("RFP") issued by the City on [RFP Date] (attached and incorporated by reference as Exhibit A); and

WHEREAS, the Contractor proposed to handle the Project, as detailed in a responsive bid opened on **[bid opening date]** (attached and incorporated by reference as Exhibit B); and

WHEREAS, the Board of Contract and Supply awarded the contract to the Contractor, pursuant to the Board's Memorandum dated [award letter date] (attached and incorporated by reference as Exhibit C).

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained in this Agreement, the Parties agree as follows:

- 1. SELECTION. The City hereby selects the Contractor to provide construction services outlined in its [bid opening date] submission.
- 2. TERM. The term of this agreement shall be from and after the date of execution through completion of the Project, which shall be not later than **[completion date].**
- 3. TERMS OF PAYMENT. The total amount of the awarded contract is **[contract amount]**. The City shall make a good-faith effort to pay the Contractor within sixty (60) days of receipt of a pay requisition for work completed and accepted, less retainage.
- 4. COMPENSATION. The Contractor shall be paid according to the breakdown contained in its bid package.
- 5. MERGER AND INTEGRATION. The procurement documents prepared and issued for purposes of this Project, including the RFP, the bid submitted by Contractor, and any other documents referenced in or attached to this Agreement, are hereby incorporated in and form a part of this Agreement; provided, however, that to the extent those documents differ or contradict the terms of this Agreement, this Agreement shall control.

- 6. INDEMNIFICATION AND LIABILITY. The Contractor is alone responsible for the safety, efficiency, and adequacy of the construction and for any damage which may result from improper construction, maintenance, or operation. The Contractor shall indemnify, defend, and hold harmless the City, and its employees, representatives, agents, successors and assigns (the "City Indemnified Parties") from and against any and all demands, claims, suits, cause or cause of action, whether at law or in equity, costs, expenses and attorneys' fees and any liability whatsoever to anyone for any bodily injury or property damage resulting from or arising out of the willful misconduct or negligent acts or omissions of the Contractor and/or its employees, representatives, subcontractors, and agents in the performance of this Agreement.
- 7. **RETAINAGE**: The City shall retain <u>5%</u> of all pay requests paid during the Project. When the City and/or its representatives deem the Project as "Substantially Complete," or 85% of the work has been completed, the retainage may be reduced to 2.5% for the work completed. The final payment will be released when all the work has been completed, inspected, and approved by the City's representative and all closeout documents, warranties and as-built plans have been received and approved by the City.
- 8. INSURANCE. The Contractor is required to carry liability insurance in the amount of not less than one million dollars (\$1,000,000) per occurrence and two million dollars (\$2,000,000) general aggregate and shall furnish to the City an insurance certificate naming the City of Providence, and the Board of Park Commissioners, and the Providence Public Buildings Authority as additional named insureds on a primary but non-contributing basis for General Liability.
- 9. BINDING EFFECT. This Agreement and all the covenants, provisions, and conditions herein contained shall inure to the benefit of and be binding upon the heirs, successors and assigns of the parties. Neuter pronouns shall be read as masculine or feminine, and words in the singular person as plural, if the nature or number of the parties require.
- 10. GOVERNING LAW. This Agreement is entered into pursuant to and shall be governed by and construed in accordance with the laws of the State of Rhode Island.
- 11. NATURE OF RELATIONSHIP. Nothing in this Agreement shall create a partnership, joint venture, trust or other fiduciary relationship between the Contractor and the City.
- 12. AMENDMENTS AND SUPPLEMENTS. The Contractor and the City may amend, modify, supplement, or waive any provisions of this Agreement in such manner as may be agreed upon by the Parties in a written instrument executed by both Parties.

- 13. MBE/WBE. The parties acknowledge that the City sets an MBE goal of 10% and a WBE goal of 10%, and the Contractor will make good faith efforts to comply with these goals.
- 14. TERMINATION. The City may terminate this Agreement at any time upon ninety (90) days prior written notice. This Agreement may be terminated by either party if the other party materially breaches any provision of this Agreement and fails to cure the material breach within 30 days after receiving notice thereof from the non-breaching party. Without limiting the City's right to terminate this Agreement, the City may suspend the Contractor's right to access the Project upon any actual, threatened, or suspected breach of this Agreement.
- 15. COUNTERPARTS. This Agreement may be executed in multiple counterparts, each of which shall constitute an original, but all of which shall constitute one document.

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed as of the date first above written.

CITY OF PROVIDENCE:

	By: Brett P. Smiley, Mayor
Approved as to form and correctness:	
Jeff Dana, City Solicitor	
	CONTRACTOR: By:
	[Contractor name and title]

EXHIBIT A: RFP EXHIBIT B: Bid

EXHIBIT C: Board of Contract and Supply Memorandum dated [award letter date]

EXHIBIT D: ARPA Amendment

TECHNICAL SPECIFICATIONS 100% DESIGN DOCUMENTS

AMPHITHEATER STAGE IMPROVEMENTS AT WATERPLACE PARK

Providence, Rhode Island

Project No. CITY.20.01



Prepared for:

Providence Parks Department Dalrymple Boathouse Providence, RI 02905

Prepared by:

Pare Corporation 8 Blackstone Valley Place Lincoln, RI 02865

February 6, 2025



Providence Parks Department Amphitheater Stage Improvements at Waterplace Park



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SECTION 010000 - GENERAL REQUIREMENTS

PART 1 - GENERAL

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

A. SCOPE OF WORK

- 1. The general summary of work to be done under this contract consists of, but shall not be limited, to the following as shown in the Contract Documents:
 - a. Mobilize to the site; establish site access and staging areas.
 - b. Complete selective demolition of existing stage and appurtenances.
 - 1) Remove and dispose existing stage flooring, wall panels, stairs, and railing system.
 - 2) Remove and salvage existing floor joists. Existing joists suitable for re-use shall be reinstalled following reconstruction of cross-walls. Existing cross-walls to remain where feasible.
 - 3) Remove and dispose debris from existing stage framing to remain and from existing granite paver surface within stage footprint.
 - 4) Remove and salvage existing granite blocks adjacent to the back corners of the stage.
 - c. Remove and reset existing granite pavers adjacent to the back of the existing stage to restore the original grading.
 - d. Complete reconstruction of stage:
 - 1) Install wood main cross-walls, shear walls, perimeter walls, and access ramp walls
 - 2) Install plywood panel at each main cross-wall.
 - 3) Install wood floor joists, access ramp joists, rim joists, and blocking.
 - 4) Install wood-framed opening and cover for access to existing manhole.
 - 5) Install plywood subfloor, plywood overlay, and polyurethane deck coating.
 - 6) Install steel post and guardrail system with steel wire mesh panel infills.
 - 7) Install PVC cladding wall panel system and ventilation openings with steel wire mesh panels along exterior faces of stage.
 - 8) Install PVC trim boards along top of exterior stage walls.
 - e. Complete lighting system improvements:
 - 1) Selective demolition of existing lighting and electrical components.
 - 2) Install conduits, wiring, power supplies, and receptacles.
 - 3) Install LED strip lighting along front of new stage.
 - 4) Install LED surface mount step lights at existing concrete seat wall.
 - f. Restore disturbed areas of site; demobilize.

B. WORK COVERED BY CONTRACT DOCUMENTS



- 1. The Contractor shall execute the scope of work indicated on Plans and Specifications to enhance the use and operations of the site as shown within the project limits.
- 2. Work shall be as specifically indicated, shown or described in the Drawings, Technical Specifications, and other Contract Documents.

C. PROJECT INFORMATION

- 1. OWNER
 - a. City of Providence Parks Department Roger Williams Park Dalrymple Boathouse, 1000 Elmwood Avenue, Providence, RI 02907, Telephone: 401.680.7200
 - b. Superintendent of Parks: Wendy Nilsson
- 2. OWNER'S REPRESENTATIVE
 - a. Sam Greenwood 401.680.7299

1.2 PROJECT LOCATION

A. Waterplace Park – 12 Memorial Boulevard - Providence, RI 02903

PART 2 - PRODUCTS

2.1 CONTRACTOR USE OF PREMISES

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

2.2 OWNER OCCUPANCY REQUIREMENTS

- A. The Owner (City) anticipates that site inclusive of all on-site amenities beyond the Limit of Work will remain open throughout the course of construction.
- B. Contractor shall provide the Owner's Representative with a written plan describing the sequences and durations anticipated for the execution of the Work.



2.3 MOBILIZATION, SITE PREPARATION, & DEMOLITION

A. THE WORK SPECIFIED IN THIS SECTION INCLUDES:

- 1. Mobilization of all personnel and equipment;
- 2. Preparing the construction site for construction operations;
- 3. Materials to be removed and legally disposed of off site.
- 4. When applicable, verifying and utilizing survey control points as shown on the Drawings
- 5. Protecting existing site features to remain, such as fences, trees, shrubs and grassed areas outside the limit of work.
- 6. Protecting underground and overhead utilities and other existing facilities from damage.
- 7. Where applicable, provisions for site access and of traffic control.
- 8. At cessation of site improvement operations: Site clean-up
- 9. De-mobilization of all personnel and equipment.

2.4 CONSTRUCTION STAGING/STOCKPILE AREAS

- A. Staging areas within the Park is permitted as shown on the Plans with the prior consent of and coordination with the Owner.
- B. Restoration of the site to pre-existing condition shall be the sole responsibility of the Contractor.

2.5 MATERIALS AND EQUIPMENT:

- A. Materials to be Removed and Stockpiled.
 - 1. Materials directed to be removed and stockpiled shall be removed, transported to and stacked in a location directed by the Owner's Representative. All materials shall be neatly stacked as directed.
 - 2. If the Owner's Representative determines that any part of the materials identified to be stockpiled are unsuitable for re use on the site or by the Owner elsewhere, such materials shall be evaluated for legal disposal by Owner's Representative and Contractor.
- B. Signs: Conform to requirements of Temporary Facilities and Controls.
- C. Temporary Site Protection: Temporary chain-link fence, if so desired shall be furnished, installed and maintained at no additional cost to the Owner. At the completion of all work at the site, the Contractor shall remove all temporary fencing and restore the site to its original condition at no additional cost to the Owner.





2.6 TEMPORARY CONSTRUCTION FACILITIES AND UTILITIES

- A. Make arrangements with the Owner's Representative for storage of materials and equipment in designated locations at the construction site. If staged on site, materials shall be secured from vandalism and or theft.
- B. Plastic construction fence or snow fencing if installed shall be maintained in good condition. Provide barricades, barrels, fencing and/or other barriers around excavations and trenches as required for safety. Upon completion, temporary fencing shall be removed and the affected area restored existing condition.

2.7 SITE MAINTENANCE

- A. Control dust from Contractor operations in accordance with specified dust control measures.
- B. Maintain the Site during construction in a manner that will not obstruct use on neighborhood streets. Proceed with the work in an orderly manner, maintaining the construction site free of debris and unnecessary equipment or materials.
- C. Legally dispose of all debris, rubbish, hazardous materials, oil, and grease in accordance with local ordinances.
- D. Maintain safety and security of the construction site and any stockpiled or staged materials or equipment if left on site.

2.8 TRAFFIC CONTROL

- A. For all of his operations, the Contractor shall provide appropriate traffic control in accordance with, TEMPORARY FACILITIES AND CONTROLS. The purposes of the traffic control are 1) to ensure that operations in the project area are performed in a safe and orderly manner, and 2) to minimize the impact of truck and equipment traffic and noise on adjacent homes near the project area. The Contractor shall be responsible for obtaining any and all required permits and approvals.
- B. Police Details, if required by the City, shall be paid directly to and coordinated with Providence Public Safety by the Owner.

2.9 DEMOBILIZATION

A. Contractor shall be responsible for site security and safety at all times. Upon substantial completion of the work, Contractor shall remove all excess materials, equipment, construction debris, temporary facilities and construction measures (fencing, signs, barriers, etc.) from the project area, and shall leave the site in suitable condition for full occupancy and use by the





Owner. The sedimentation and erosion controls installed as part of the Work may not necessarily be removed at this time (see below).

- B. The Owner's Representative shall be the sole judge of whether the site has been suitably cleaned.
- C. Upon suitable stabilization of all disturbed "erodible" areas (e.g. acceptable level of grass growth in loamed and seeded areas, mulch applied and stable in planting areas, etc.), contractor shall remove and legally dispose of all sedimentation and erosion control measures (silt fence, hay bales, catch basin inserts, etc.). See Section 024119 Selective Demolition for directives and procedures.

PART 3 - EXECUTION

3.1 GENERAL REQUIREMENTS

- A. The construction site entrance shall be as indicated on the plans. The Owner will provide access to any locked gate. Any tracked debris from the site present on adjacent roadways shall be removed and the roads swept daily to remove any excess mud, dirt, or rock originating from the site. Trucks hauling material shall be covered and equipped with gates that prevent material from falling out. If present, catch basins within 100 feet of site entry and exit locations shall be protected with inlet sediment control devices and maintained for the duration of the work.
- B. Identify, clearly mark and protect all survey monuments, temporary bench marks as well as any adjacent contractors' work and facilities (if applicable). Repair or replacement shall be at Contractor's sole expense if damaged by Contractor.
- C. Protect existing culverts, sewers, and all other utilities including gas, telecommunications, electricity, and water. Repair or replace at Contractor's sole expense if damaged by Contractor.
- D. Utilize or install drum or sawhorse barricades or backfill all open excavations, holes, trenches, and depressions occurring at construction sites or occurring as part of this work.

3.2 CHANGE ORDER PROCEDURE

A. DESCRIPTION

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



the Contractor to comply fully with this procedure and to expedite the resolution of changes.

3.3 CHANGE SUBMITTALS

- A. When requested, the Contractor shall submit the following to the Owner's Representative in accordance with the Submittals procedures described in these specifications:
 - 1. Proposal cover letter on Contractor's letterhead;
 - 2. Detailed price proposal;
 - 3. Drawings or other explanatory data; and
 - 4. Time extension statement with justification if any time extension is requested.

3.4 COMPLIANCE

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

3.5 PROCESSING CHANGES INITIATED BY THE OWNER'S REPRESENTATIVE

- A. The Owner's Representative will initiate changes only in writing. The Owner will sign any Request for Proposal (RFP). This will establish an Extra Work Order (EWO) number, by which the change will be identified until such time as it may be incorporated into the contract by formal Change Order (CO).
- B. The Contractor may or may not be authorized to proceed with the changed work pending resolution of changes in the contract price or time of performance. If the work described in the RFP becomes critical to the timely performance of the Contractor's work, a written request for a Notice to Proceed must be forwarded to the Owner immediately. The Owner will issue any Notice to Proceed. This unilateral modification to the contract may be subject to further negotiation regarding price and time for completion.
- C. Payment for changed work, covered by an authorized modification, will not be made until a notice to proceed covering the changed work has been executed.
- D. The Contractor shall prepare and submit its proposal for change to include at a minimum:
 - 1. A cover letter referencing the EWO number and citing the attachments, if any, which constitute the Contractor's total proposal.



- 2. A detailed price proposal showing labor, construction equipment, and material quantities and prices at the lowest practical level of each element of the work.
- 3. Any drawings, sketches, catalog cuts, samples, certifications, or other data required to be submitted by the Owner's Representative that is required to fully document
- 4. A statement of the proposed change in the time of completion of the contract, together with all required justification for such a change.
- 5. A statement to the effect that there is "no change in price and/or time of completion of the work under this contract as a result of this proposed change", if that is the case.
- E. The Owner may accept the Contractor's proposal without negotiation. Alternatively, upon receipt of a proposal which is satisfactory in form, the Owner's Representative may require negotiation with the Contractor to arrive at a fair and equitable change in the contract price and time of completion. Upon agreement, a contract modification will be issued by the Owner for Contractor's execution.

3.6 PROCESSING CHANGES INITIATED BY THE CONTRACTOR

- A. Should the Contractor feel that a change to the work under the contract, or to the contract itself, is necessary or desirable, it shall propose such a change to the Owner's Representative. This proposed change shall include a clear and concise description of the proposed change, along with that information cited in above.
- B. Within a reasonable time, the Owner's Representative will review the Contractor's proposal and determine if the proposed change is in the Owner's best interest. If so, Contractor will be advised of this and a an EWO number will be assigned to Contractor's proposal.

3.7 EXECUTING CHANGED WORK

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

3.8 TERMINATIONS AND DELAYS

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





also be liable to the City of Providence for liquidated damages for any delay work. in the completion of the work as provided below. work. If the Contractor's right to proceed is so terminated, the Local Public Agency Local Public Agency City may take possession of and utilize in completing the work such materials, tools, equipment, and plants as may be on the site of the work and necessary thereof. Project work must commence 30 days after award of Contract or as mutually agreed upon by the Contractor and the Owner. The Contractor is required to submit a Work Schedule including all items included in the scope of work. The Work Schedule shall mirror the Schedule of Values which should be in chronological order. Both items are identified in the standard Pre-Bid and Pre-Construction Meeting Minutes as required. The work shall be continuous and the Contractor shall staff the project appropriately to meet the agreed upon work schedule. De- Mobilization from the project, prior to completion, must be agreed upon in writing by the Owner.

3.9 INSPECTION OF WORK

A. DESCRIPTION

- 1. Work included in this Section consists of periodic observation of construction of the project. The Contractor's work shall be monitored periodically by the Owner's Representative
- 2. The Owner's Representative presence on site or construction observation work is inspectional in nature and will not include supervision or direction of the actual work of the contractor.
- 3. In no event will the Owner's Representative be responsible or liable for the contractor's use or administration of personnel, machinery, staging, or other temporary or precautionary construction, safety precautions or procedures, or for compliance by the contractor with the provisions, terms, or specifications of the contract. Observation services provided by the Owner's Representative are solely for the benefit of the Owner.
- 4. The Contractor shall keep the Owner's Representative informed concerning the work status and projected work schedule through regular communications.
- 5. The Contractor shall not cover any work related to the required field visits until one of the following occurs:
 - a. The Contractor is authorized by the Owner's Representative to proceed after the field visit
 - b. The field visit is re-scheduled by the Owner's Representative to a later construction event
 - c. The field visit is waived in writing by the Owner's Representative
- 6. The Contractor shall request a Final Inspection seven calendar days in advance of the planned completion date. After review of the Notice of Completion, the Owner's Representative may reject the Notice for cause or schedule the Final Inspection. The Owner's Representative will perform its Final Inspection on all phases of the work and develop a comprehensive punch list, which will be provided to the Contractor.
- 7. The Final Inspection will be scheduled when the punch list items discovered during the Final Inspection have been corrected. If discovered, the Owner's Representative may add new items to the punch list at this inspection.





- 8. The Contractor is advised that the Owner's Representative will not accept the work until the Owner's Representative determines Substantial Completion has been achieved. Therefore, to minimize its risk, the Contractor should schedule its work to be substantially complete in time to allow the Final Inspection and punch list work to occur in advance of the Project Close Out Date. Due to the construction time period and the anticipated weather conditions, substantially complete will be defined as the completion of construction for all item and the temporary stabilization of all disturbed areas, excluding planting and final seeding. Planting and final seeding is to occur during the time periods specified.
- 9. Nothing in this Section shall be construed to limit the Owner's Representative right to inspect the work at any time.

3.10 CONSTRUCTION SCHEDULES

A. DESCRIPTION

- 1. Work included in this Section consists of preparation, submittal, and updating of the project.
- B. Submit the following to the Owner's Representative in accordance with the Submittals Section. Submittals are for the record or approval as indicated.
 - 1. The proposed construction schedule shall be submitted for approval within five (5) calendar days after receipt of Notice to Proceed.
 - 2. Submit contract Weekly Summary Reports to the Owner's Representative for the record at weekly site meeting at request by the Owner.
 - 3. Submit construction progress schedule including a two week look ahead as back up to progress invoices.
- C. The construction schedule shall show all work activities for completion of the work to be performed under this contract and will reflect Contractor's general sequential approach to the work. The construction schedule will be in a bar chart format. The minimum level of detail (number of activities) shall include the activities described in the Schedule of Values and the Scope of the Work. The construction schedule shall demonstrate completion of all work within the period of performance of the contract in a reasonable and achievable manner.

3.11 PERIODIC SCHEDULE UPDATES

- A. The Contractor shall support monthly payment requests with an approved construction schedule marked to indicate progress. Submit updated schedule as necessary.
- B. When in the opinion of the Owner's Representative changes in the work occur that significantly affect the schedule, the Contractor shall submit a revised construction schedule for approval. The revised construction schedule shall be submitted within 10 calendar days after it is





requested by the Owner's Representative The current approved construction schedule shall be used as a baseline for progress reporting.

C. Acts of God: Claims for additional compensation for 'Acts of God' will be reviewed by the Owner. It is the Contractor's responsibility to secure the work site daily and failure to provide adequate provisions to do so may result in repairs to the site at the Contractor's expense. Documented 'Acts of God' such as the state issuing a 'State of Emergency' may result in the Owner's authorization to proceed repair funded by the Owner. No work shall proceed without written authorization by the Owner.

3.12 SUBMITTAL PROCEDURES

A. DESCRIPTION

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

3.13 DRAWINGS

- A. The term "drawings" as used herein includes 'Shop Drawings' as required for fabrication, erection and installation, layout, and setting of proposed improvements; lists or schedules of materials and catalogues and brochures; performance and test data; and all other drawings and descriptive data pertaining to materials and methods of construction as may be required to show that the materials, equipment, or systems and the positions thereof conform to the requirements of the Contract Documents.
- B. Where specified and if so directed by the Owner's Representative provide shop drawings that are accompanied by design computations.
- C. Sheet sizes of drawings shall not exceed 24 in. by 36 in. The title block on all drawings shall bear the name of the Owner, the name of the project, and the project location.
- D. The Contractor's drawings shall be submitted electronically in PDF format to the Owner's Representative for review and approval.
- E. The Contractor shall maintain a complete set of construction drawings at the jobsite, clearly marked to reflect as-built conditions. Upon completion of the work, the Contractor shall submit these Record Drawings to the Owner's Representative.
- F. The Owner's Representative will review drawings and schedules only for conformance with the design of the Project and for compliance with the Contract Documents and Contract Drawings.





The Contractor shall make any and all updates and corrections required by the Owner's Representative

- G. Drawings shall be reviewed and returned within ten (10) working days of receipt of drawings at jobsite. Drawings and all supporting data, catalogs, or similar information shall be prepared by the Contractor or his suppliers and subcontractors but shall be submitted as instruments of the Contractor.
- H. The Owner's Representative review of drawings will be of a general nature and shall not relieve the Contractor from responsibility for errors and omissions of any sort, for deviations from Drawings or Specifications, or for conflict with the work of others that may result from such deviations. The Owner's Representative review of drawings will not relieve the Contractor of responsibility to complete the work in accordance with the requirements of the Contract Documents.
- I. After Notice of Award, the Contractor shall submit a Submittal Schedule to the Owner's Representative. The Contractor's schedule shall be brought up to date from time to time to show the latest changes, omissions, and additions. The Schedule will be based on the Contractor's Construction Schedule and will show when the Contractor will submit the drawings and when he/she expects them to be returned so that construction activities shown on the Construction Schedule are not interrupted. There will be a minimum of three weeks between these two activities. Specific methods and routines for handling drawing reviews shall be established in advance within the general framework of the Contract Documents.
- J. Work for which the Contractor's submittals are required shall not be started until the submittals have been reviewed and accepted in writing by the Owner or Landscape Architect. Owner or Landscape Architect. Owner or Landscape Architect. Owner or Landscape Architect. Owner's Representative. Any revision by the Contractor of a previously accepted submittal must be accepted in writing by the Owner's Representative before implementation.

3.14 SAMPLES

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

3.15 PRODUCT DATA

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





- 1. Contractor to provided the following information:
 - a. An I.D. number for each item
 - b. Specification Section, Paragraph Number and Line Item Number (i.e. 321313 / 1.3 / A)
 - c. Item Name
 - d. Description of the Item
 - e. Date Submitted
 - f. Status: Approved / Approved As Noted / Rejected
 - g. Sub-Contractor (If any) providing the material
 - h. Comments

3.16 QUALITY CONTROL DESCRIPTION

- A. This Section provides the requirements for Contract quality control (QC) pertaining to the Work, including:
 - 1. QC of products and workmanship;
 - 2. Manufacturer's instructions; and
 - 3. Manufacturer's certificates and field services.

3.17 WORKMANSHIP

- A. The Contractor shall comply with industry standards of the region, except when more restrictive tolerances or specified requirements indicate more rigid standards or more precise workmanship.
- B. The Contractor shall provide suitably-qualified personnel to produce work of specified quality.
- C. The Contractor shall secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, and racking.
- D. The Contractor shall provide materials to match approved samples.

3.18 MANUFACTURER'S INSTRUCTIONS

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

3.19 MANUFACTURER'S CERTIFICATES

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





3.20 TESTING LABORATORY SERVICES (NIC)

A. Not Utilized in this Contract

3.21 MANUFACTURER'S FIELD SERVICES

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

3.22 AUTHORITY OF OWNER'S REPRESENTATIVE

- A. The Owner's Representative will decide all questions that may arise as to the quality and acceptability of materials furnished. All questions that may arise as to the interpretation of the Contract Drawing and Specifications shall be determined by the Owner's Representative.
- B. The Owner and Owner's Representative shall not be responsible for the Contractor's means, methods, techniques, sequences, or procedures of construction or the safety precautions and programs incident thereto, and the Owner's Representative will not be responsible for the Contractor's failure to perform the work in accordance with the Contract Documents.
- C. The Owner's Representative will not be responsible for the acts or omissions of the Contractor or any subcontractors, of the agents or employees of any Contractor or subcontractor, or of any other persons at the site or otherwise performing any of the work.

3.23 COORDINATION OF DRAWINGS AND SPECIFICATIONS

- A. The Contractor shall take no advantage of any apparent error or omission in the Contract Drawings or Specifications. In the event the Contractor discovers such a discrepancy, error or omission, he shall immediately notify the Owner's Representative. After review and consultation with the Owner's Representative the Owner's Representative will issue clarifications, provide interpretations and make such corrections as may be deemed necessary for the Contractor to proceed with fulfilling the intent of the Contract Drawings and Specifications.
- B. When general reference is made on the Contract Drawings or within the Specifications to any cited Standard Specifications, it shall refer to the current edition of such Specifications or the latest revision thereof or interim Specifications adopted and in effect on the date of Effective Date of Agreement. In the event of a conflict between the Contract Drawings and the specifications, the Owner's Representative shall be notified to provide a clarification to the Contractor.



3.24 COOPERATION WITH UTILITIES

- A. The Contractor will notify all utility companies, all pipeline owners, or other parties affected and endeavor to have all necessary adjustments of the public or private utility fixtures, pipelines, and other appurtenances within or adjacent to the limits of construction made as soon as practical.
- B. Water lines, gas lines, wire lines, service connections, water and gas meter boxes, water and gas valve boxes, light standards, cableways, signals, and all other utility appurtenances within the limits of the proposed construction which are to be crossed, relocated or adjusted are to be moved by the Contractor or its designated agents, except as otherwise noted on the Contract Drawings. In the case of utility lines, the Contractor shall coordinate with the respective utilities for their removal and relocation.
- C. Attention is directed to the possible existence of underground facilities not known to the Owner's Representative or in a location different from that which is shown on the Contract Drawings. The Contractor shall take steps to ascertain the exact location of all underground facilities prior to doing work that may damage such facilities or interfere with their service.

3.25 INDEPENDENT TESTING AND INSPECTION (NIC)

A. Not Applicable under this Contract

3.26 REQUIREMENTS

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

3.27 MATERIAL AND EQUIPMENT

A. DESCRIPTION

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

3.28 MANUFACTURER REQUIREMENTS

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



B. GENERAL

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

3.29 TRANSPORTATION AND HANDLING

- A. The Contractor shall receive, handle, and store materials and equipment supplied by him/her in a manner that will protect such items from damage or deterioration in accordance with procedures provided by product manufacturers and the Owner.
- B. Promptly inspect the shipments to assure that the products comply with requirements, the quantities are correct, and the products are undamaged.

3.30 STORAGE AND PROTECTION

- A. Materials and equipment shall be stored off the ground on blocking or pallets and shall be covered for protection from vandalism and weather damage.
- B. Materials and equipment shall be stored, tested, and cleaned prior to use, in accordance with the Specification and all specific manufacturers' requirements. Damaged or nonconforming items shall be removed immediately to a separated storage area for expeditious removal from site.
- C. The Contractor shall provide a secure outside storage area in the vicinity of the site.

3.31 SUBSTITUTIONS

- A. Substitutions will be considered only when a product becomes unavailable due to no fault of the Contractor or when deemed appropriate by the Owner's Representative
- B. Document each request with complete data substantiating the compliance of the proposed substitution with the Contract Documents.
- C. The requested substation proposed constitutes a representation that the Contractor:
 - 1. Has investigated the proposed product and determined that it meets or exceeds, in all respects, the specified product.
 - 2. Will provide the same warranty for substitution as for the specified product.
 - 3. Will coordinate installation and make other changes which may be required for the Work to be complete in all respects.
 - 4. Waives claims for additional costs which may subsequently become apparent.





- D. Substitutions will be considered when they are indicated or implied on shop drawings or product data submittals without separate written request, or when acceptance will require substantial revision of the Contract Documents.
- E. The Owner's Representative will determine acceptability of the proposed substitution, and will notify the Contractor of acceptance or rejection in writing within a reasonable time. Only one request for the substitution will be considered for each product. When substitution is not accepted, the Contractor shall provide the specified product.

3.32 REJECTED MATERIALS AND DEFECTIVE WORK

- A. Materials furnished by the Contractor and rejected by the Owner's Representative as unsuitable or not in conformity with the specifications shall forthwith be removed from the job-site and work area by the Contractor, and shall not be made use of elsewhere in the work.
- B. Any errors, defects, or omissions in the execution of work or in the materials furnished by the Contractor, even though they may have been passed or overlooked or have appeared after the completion of the work, discovered at any time before the final payment is made hereunder, shall be forthwith rectified and made good by and at the expense of the Contractor and in a manner satisfactory to the Owner or Owner's Representative.
- C. The Contractor shall reimburse the Owner for any expense, losses or damages incurred in consequence of any defect error, omission or act of the Contractor or his employees, as determined by the Owner's Representative, occurring previous to the final payment.

3.33 PROJECT CLOSEOUT

A. DESCRIPTION

- 1. This Section specifies administrative and procedural requirements for the project closeout including, but not limited to:
 - a. Project record document (As-Built drawings) submittal. Maintain a clean, undamaged set of blue or black line white-prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark whichever drawing is most capable of showing conditions fully and accurately; where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date.
 - b. Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover of each set. Upon completion of work, submit record drawings to the Owner's Representative.
- 2. Record Specifications





- a. Maintain one complete copy of the Project Manual, including addenda. Mark these documents to show substantial variations in actual Work performed in comparison with the Specifications and modifications. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation. Note related record drawing information and Product Data. Upon completion of the Work, submit record Specifications.
- 3. Test Results
 - a. Not Applicable this project
- 4. REMOVAL OF PROTECTION
 - a. Remove temporary protection and facilities installed for protection of the Work during construction. Fencing and erosion and sediment control measures and best management practices can be removed after permanent measures have been established.

3.34 WARRANTIES

A. DESCRIPTION

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

B. DEFINITIONS

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

C. WARRANTY REQUIREMENTS



1. Related Damages and Losses

a. When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for corrections of warranted Work.

2. Reinstatement of Warranty

a. When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.

3. Replacement Cost

a. Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner's Representative has benefited from use of the Work through a portion of its anticipated useful service life.

4. Owner's Recourse

a. Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights and remedies.

5. Rejection of Warranties

- a. The Owner's Representative reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents. The Owner's Representative reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to counter sign such commitments are willing to do
- b. All warranties shall be submitted to the Owner in accordance with conditions of the Contract and the Submittals.

D. WARRANTY PERIOD

- 1. All warranties required by the Contract documents shall commence on the date of Final Acceptance.
- 2. Warranty period is one (1) year from date of Final Acceptance unless otherwise specified.

END OF SECTION 010000



SECTION 120000 MEASUREMENT AND PAYMENT

SECTION 012000 - MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 EXTENT OF WORK

- A. Measurement. The quantities to be measured under the various Bid Items in the Request for Proposals (RFP) will be those quantities of work completed in accordance with the Drawings and Specifications. The methods of measurement will be as stated hereinafter for the individual items.
- B. Prices. The unit or lump sum prices for all Bid Items in the RFP shall be full compensation for the work of the Contractor specified and shall include the cost of furnishing all materials, labor, tools and equipment and all work and expense incidental to and necessary to complete the work in accordance with the Drawings and specifications.

1.2 WORK NOT PAID FOR SEPARATELY

- A. Preparation of Site. Payment for preparation of site is included in the Lump Sum Price provided for Item 1 in the Bid and no separate payment will be made thereof. Preparation of site includes setting up construction plant, offices, shops, storage areas, sanitary and other facilities required by the specifications or state law or regulations; providing access to the site; obtaining necessary permits and licenses; and payment of fees; general protection, temporary heat and utilities; providing shop and working drawings, certificates and schedules; sampling and testing materials; providing required insurance; cleaning up, and all other work regardless of its nature which may not be specifically referred to in the Bid but is necessary for the complete construction of the project set forth by the contract.
- B. Environmental Protection. Payment for work under this Section is included in the prices for the various Bid Items in the RFP and no separate payment will be made thereof.
- C. No separate payments will be made for cleaning up. Such clean-up shall be considered incidental to the item to which it applies and shall be included in the price for that item.
- D. All existing work removed or damaged by the Contractor's operations shall be replaced to the satisfaction of the Owner at no additional expense to the Owner.
- E. No separate payment will be made for Division 1 General Requirements. Contractor shall incorporate the cost for these items into the Bid Items listed in the RFP.
- F. All disturbed areas outside the limits of disturbance shall be restored at the Contractor's expense to the satisfaction of the Owner.



1.3 BID ITEMS

A. Appurtenant items of work shown on the drawings or specified which are required to complete the work but are not listed separately under the various applicable bid items of work, shall have no separate payment for such items. It shall be the responsibility of the Contractor to verify any missing or incomplete items.

1.4 MEASUREMENT

A. The measurement of all quantities of items listed in the Bid Form shall be done by the Contractor. The measurement will include proper and complete documentation of all items to the satisfaction of the Owner prior to the submission for payment. The measurement submitted shall be in the same unit description listed in the Bid Form.

1.5 PAYMENT

- A. Payments shall be made to the Contractor only after proper documentation of the unit quantity provided or percentage of work completed, and in accordance with the contract terms and conditions regarding payment.
- B. Payment for bid items shall include full compensation for all incidentals required for the complete installation of the completed product.
- C. Payment shall be made only for that work which is performed within the pay limits shown on the Drawings or detailed in the Specifications. No payment shall be made for work beyond these limits unless the work has been authorized by Owner in writing.

PART 2 - PRODUCTS

2.01 MOBILIZATION AND DEMOBILIZATION (BID ITEM NO. 1)

A. Measurement

- 1. The Work of this item shall be measured as specified at the Lump Sum price provided in the Bid. The payable quantity will be for the preparatory work and operations, which must be performed or for costs which must be incurred prior to beginning work, final cleanup, and demobilization of temporary facilities and equipment, restoration of impacted areas disturbed due to construction of all temporary facilities, preparation of as-built drawings, and the cost of payment and performance bonds as well as fees for all permits and Federal, State, and local approvals.
- 2. Mobilization shall include, but is not limited to, movement of personnel, equipment, supplies, and incidentals to the project site for the establishment of all Contractor's field offices; installing temporary utilities; furnishing and installing temporary fencing; furnishing and installing temporary signage; and furnishing, installing, and maintaining all other temporary facilities necessary for work on the project. Demobilization shall



- include, but is not limited to, moving out of personnel and equipment, removal and disposal of tracking pads and temporary signage, cleaning entire site, furnishing all required operation and maintenance documentation, and removing debris and rubbish.
- 3. The Lump Sum price provided for Bid Item No. 1 Mobilization and Demobilization shall not exceed 10% of the total amount of this bid.
- 4. There shall be no separate payment associated with furnishing, installing, maintaining, and removing a temporary field office for use by the Contractor.
- 5. Furnishing, installing, maintaining, and removing and disposing erosion and sediment controls, as required by the Owner or other entities presiding over the site relative to the Work, is incidental to this bid item, and no separate payment will be made thereof.

B. Payment

 Payment for this item shall be made as a percentage of the Lump Sum price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

2.02 SELECTIVE DEMOLITION OF STAGE (BID ITEM NO. 2)

A. Measurement

- 1. The Work of this item shall be measured as specified at the Lump Sum price provided in the Bid for the selective demolition of the existing stage and appurtenances as indicated on the Drawings or within the Specifications. Selective demolition under this item includes, but is not limited to, the following:
 - a. Removal and disposal of existing stage flooring, wall panels, stairs, and railing system.
 - b. Removal and salvaging of existing floor joists. Existing joists suitable for re-use shall be reinstalled following reconstruction of cross-walls. Existing cross-walls shall remain where feasible.
 - c. Removal and disposal of debris from existing stage framing to remain and from existing granite paver surface within stage footprint.
 - d. Removal and salvaging of existing granite blocks adjacent to the back corners of the stage.

B. Payment

 Payment for this item shall be made as a percentage of the Lump Sum price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.



2.03 REMOVE AND RESET GRANITE PAVERS (BID ITEM NO. 3)

A. Measurement

- 1. The Work of this item shall be measured as specified at the Lump Sum price for the removal and resetting of existing granite pavers adjacent to the back of the existing stage as shown on the Drawings, to restore the original grades. The work shall include all necessary labor, materials, equipment, and all incidental work required for completion of the work specified herein and included on the Drawings and in these Specifications.
- 2. The work under this bid item also includes importing, placement, and compaction of additional gravel borrow (if required), importing and placement of stone dust setting bed, and installation of mortar joints.

B. Payment

 Payment for this item shall be made as a percentage of the Lump Sum price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

2.04 STAGE FRAMING RECONSTRUCTION (BID ITEM NO. 4)

A. Measurement

- 1. The Work of this item includes all labor, materials, equipment, and incidentals to furnish and install all wood framing and associated components as shown on the Drawings and as indicated in the Specifications. The Work includes, but is not limited to, furnishing and installing the following: wood main cross-walls, shear walls, perimeter walls, and access ramp walls; plywood panel at each main cross-wall, the wood-framed opening and cover for access to the existing manhole beneath the stage; wood floor joists, access ramp joists, rim joists, and blocking; and all hardware, fasteners, anchorage, and appurtenances.
- 2. Existing joists removed, salvaged, and suitable for re-use shall be reinstalled. Reinstalling salvaged joists is incidental to this bid item.

B. Payment

1. Payment for this item shall be made as a percentage of the Lump Sum price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.



2.05 STAGE WALLS (BID ITEM NO. 5)

A. Measurement

- The Work of this item includes all labor, materials, equipment, and incidentals to fabricate, furnish, and install the PVC cladding wall panel system, ventilation openings with steel wire mesh panels, and associated components as shown on the Drawings and as indicated in the Specifications. The Contractor shall provide all hardware, fasteners, anchorage, and appurtenances.
- 2. Furnishing and installing weather-resistant barriers and wood furring strips in accordance with the wall panel system manufacturer's requirements is included under this item.
- 3. Furnishing and installing PVC trim is included under this item.

B. Payment

 Payment for this item shall be made as a percentage of the Lump Sum price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

2.06 STAGE FLOORING (BID ITEM NO. 6)

A. Measurement

- 1. The Work of this item includes all labor, materials, equipment, and incidentals to furnish and install the plywood subfloor, ice and water shield, plywood overlay, polyurethane deck coating, and associated components as shown on the Drawings and as indicated in the Specifications. The Contractor shall provide all hardware, fasteners, anchorage, and appurtenances.
- 2. Fabricating, furnishing, and installing the aluminum transition plate at the stage ramp as shown on the Drawings is included under this item.

B. Payment

1. Payment for this item shall be made as a percentage of the Lump Sum price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

2.07 STEEL POST AND GUARDRAIL SYSTEM (BID ITEM NO. 7)

A. Measurement



- 1. The Work of this item includes all labor, materials, equipment, and incidentals to design, fabricate, furnish, and install the hot-dip galvanized and painted steel post and guardrail system with steel wire mesh panel infills and associated components as shown on the Drawings and as indicated in the Specifications. The Contractor shall provide all hardware, fasteners, connectors, anchorage, and appurtenances.
- 2. The Contractor shall provide shop drawings and calculations prepared and stamped by a Professional Engineer registered in the State of Rhode Island for review and approval.

B. Payment

1. Payment for this item shall be made as a percentage of the Lump Sum price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

2.08 LIGHTING SYSTEM IMPROVEMENTS (BID ITEM NO. 8)

A. Measurement

- The Work of this item includes all labor, materials, equipment, and incidentals to
 furnish and install the LED strip lighting along the front of the stage, the LED
 surface mount step lights at the existing concrete seat wall, and all associated
 electrical components as shown on the Drawings and as indicated in the
 Specifications.
- 2. Furnishing and installing conduits, wiring, power supplies, receptacles, and associated appurtenances is included under this item.
- 3. Selective demolition of existing lighting and electrical components as required to complete the work is included under this item

B. Payment

1. Payment for this item shall be made as a percentage of the Lump Sum price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

PART 3 - EXECUTION

3.1 BID ITEMS

A. Appurtenant items of work shown on the drawings or described in the specifications are required to complete the work but are not listed separately under the various applicable bid items of work, and no separate payment will be made for such items. It shall be the responsibility of the Contractor to verify any missing or incomplete items.



3.2 MEASUREMENT

A. The measurement of all quantities of items listed in the Bid Form shall be done by the Contractor. The measurement will include proper and complete documentation of all items to the satisfaction of the Owner prior to the submission for payment. The measurement submitted shall be in the same unit description listed in the Bid Form.

3.3 PAYMENT

- A. Payments shall be made to the Contractor only after proper documentation of the unit quantity provided and in accordance with the contract terms and conditions regarding payment.
- B. Payment for bid items shall include full compensation for the complete installation of the complete product.

END OF SECTION 012000





SECTION 024119 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:

- 1. Demolition and removal of selected site elements.
- 2. Salvage of existing items to be reused or recycled.

1.3 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be salvaged or reinstalled.
- B. Remove and Salvage: Detach items from existing construction, in a manner to prevent damage, and deliver to Owner, ready for reuse or store on a per project basis.
- C. Remove and Reinstall: Detach items from existing construction, in a manner to prevent damage, prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Leave existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.
- E. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.

1.4 MATERIALS OWNERSHIP

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





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

1.5 PRE-CONSTRUCTION MEETINGS

- A. Predemolition Conference: Conduct conference at Project site.
 - 1. Inspect and discuss condition of construction to be selectively demolished.
 - 2. Review structural load limitations of existing structures.
 - 3. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
 - 4. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
 - 5. Review areas where existing construction is to remain and requires protection.

1.6 INFORMATIONAL SUBMITTALS

- A. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, for dust control and, for noise control. Indicate proposed locations and construction of barriers.
- B. Schedule of Selective Demolition Activities: Indicate the following:
 - 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure Owner's on-site uses are uninterrupted.
 - 2. Interruption of utility services. Indicate how long utility services will be interrupted.
 - 3. Coordination for shutoff, capping, and continuation of utility services.
 - 4. Coordination of Owner's continuing use of portions of existing site and of Owner's partial use of completed Work.
- C. Warranties: Documentation indicating that existing warranties are still in effect after completion of selective demolition.

1.7 FIELD CONDITIONS

- A. Owner will occupy portions of the site immediately adjacent to selective demolition area. Conduct selective demolition so Owner's use will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
 - 1. Before selective demolition, Owner will remove the items specifically indicated on the drawings





- C. Notify Owner's Representative of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
 - 1. Hazardous materials will be removed by Owner before start of the Work.
 - 2. If suspected hazardous materials are encountered, do not disturb; immediately notify the Owner. Hazardous materials will be removed by Owner under a separate contract.
- E. Historic Areas: Demolition and hauling equipment and other materials shall be of sizes that clear surfaces within historic spaces, areas, rooms, and openings, including temporary protection
- F. Storage or sale of removed items or materials on-site is not permitted.
- G. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

1.8 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials and using approved contractors so as not to void existing warranties. Notify warrantor before proceeding.
- B. Notify Owner on completion of selective demolition, and obtain documentation verifying that existing system has been inspected and warranty remains in effect. Submit documentation at Project closeout.

1.9 COORDINATION

A. Arrange selective demolition schedule so as not to interfere with Owner's use.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ASSE A10.6 and NFPA 241.





PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
 - 1. Contact Dig Safe-Provide Dig Safe number to Owner prior to mobilization.
- B. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.
 - 1. Meet with Owner's Representative to identify local utilities prior to mobilization.
- C. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs. measured drawings .
 - 1. Inventory and record the condition of items to be removed and salvaged. Provide photographs or video of conditions that might be misconstrued as damage caused by salvage operations. Notify Owner of damaged items.
 - 2. Before selective demolition or removal of existing elements that will be reproduced or duplicated in final Work, make permanent record of measurements, materials, and construction details required to make exact reproduction.

3.2 PROTECTION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
 - 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of the site.
 - 2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
 - 3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
 - 4. Cover and protect furniture, furnishings, and equipment that have not been removed.
 - 5. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Section 010000 "General Requirements".
- B. Remove temporary barricades and protections where hazards no longer exist.



3.3 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - 1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
 - 2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - 3. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
 - 4. Maintain adequate ventilation when using cutting torches.
 - 5. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
 - 6. Dispose of demolished items and materials promptly and legally off site.
- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- C. Work in Historic Areas: Selective demolition may be performed only in areas of Project that are not designated as historic. In historic spaces, areas, and rooms, or on historic surfaces, the terms "demolish" or "remove" shall mean historic "removal" or "dismantling."
- D. Removed and Salvaged Items:
 - 1. Clean salvaged items.
 - 2. Protect items from damage during transport and storage.
- E. Removed and Reinstalled Items:
 - 1. Clean and repair items to functional condition adequate for intended reuse.
 - 2. Protect items from damage during transport and storage.
 - 3. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- F. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Owner's Representative, items may be removed to a suitable, protected storage location during selective demolition and reinstalled in their original locations after selective demolition operations are complete.





3.4 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site and dispose of legally.
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.

3.5 CLEANING

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 024119





PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Steel pipe and tube railings.
 - 2. Stainless-steel pipe and tube railings.
- B. Related Sections:
 - 1. Section 061063 "Exterior Rough Carpentry" for wood blocking for anchoring railings.

1.3 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Railings, including attachments to stage construction, shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
 - 1. Handrails and Top Rails of Guards:
 - a. Uniform load of 50 lbf/ ft. applied in any direction.
 - b. Concentrated load of 200 lbf applied in any direction.
 - c. Uniform and concentrated loads need not be assumed to act concurrently.
 - 2. Infill of Guards:
 - a. Concentrated load of 50 lbf applied horizontally on an area of 1 sq. ft.
 - b. Infill load and other loads need not be assumed to act concurrently.
- B. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes acting on exterior metal fabrications by preventing buckling, opening of joints, overstressing of components, failure of connections, and other detrimental effects.
 - 1. Temperature Change: 120 deg F ambient; 180 deg F material surfaces.



C. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

1.4 SUBMITTALS

- A. Product Data: For the following:
 - 1. Manufacturer's product lines of mechanically connected railings.
 - 2. Railing brackets.
 - 3. Grout, anchoring cement, and paint products.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
- C. Samples for Initial Selection: For products involving selection of color, texture, or design, including mechanical finishes on stainless steel.
- D. Samples for Verification: For each type of exposed finish required.
 - 1. Sections of each distinctly different linear railing member, including handrails, top rails, posts, and balusters.
 - 2. Fittings and brackets.
 - 3. Assembled Sample of railing system, made from full-size components, including top rail, post, handrail, and infill. Sample need not be full height.
 - a. Show method of finishing and connecting members at intersections.
- E. Delegated-Design Submittal: For installed products indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation. The Contractor shall submit design computations for the railing system to the Engineer for review and approval. Design computations shall be stamped and sealed by a Professional Engineer registered in the State of Rhode Island. The design shall be in accordance with the R.I. State Building Code, SBC-1, and shall conform to ADA requirements.
 - 1. Shop drawings shall include the following: General layout of railing system, details for post anchorage, and fabrication and construction details for all components.
- F. Qualification Data: For qualified professional engineer.
- G. Mill Certificates: Signed by manufacturers of stainless-steel products certifying that products furnished comply with requirements.
- H. Welding certificates.
- I. Paint Compatibility Certificates: From manufacturers of topcoats applied over shop primers certifying that shop primers are compatible with topcoats.





J. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, according to ASTM E 894 and ASTM E 935.

1.5 QUALITY ASSURANCE

- A. Source Limitations: Obtain each type of railing from single source from single manufacturer.
- B. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code Steel."
- C. Welding Qualifications: Qualify procedures and personnel according to the following:
 - 1. AWS D1.1/D1.1M, "Structural Welding Code Steel."
 - 2. AWS D1.6, "Structural Welding Code Stainless Steel."

1.6 PROJECT CONDITIONS

A. Field Measurements: Verify actual locations of stage construction and other construction contiguous with metal fabrications by field measurements before fabrication.

1.7 COORDINATION AND SCHEDULING

- A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written recommendations to ensure that shop primers and topcoats are compatible with one another.
- B. Coordinate installation of anchorages for railings. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Steel Pipe and Tube Railings:
 - a. R & B Wagner, Inc.; a division of the Wagner Companies.
 - b. Or approved equivalent.





- 2. Stainless-Steel Pipe and Tube Railings:
 - a. Julius Blum & Co., Inc.
 - b. Stainless Fabricators, Inc.
 - c. Sterling Dula Architectural Products, Inc.; Div. of Kane Manufacturing.
 - d. Tri Tech, Inc.
 - e. Tubular Specialties Manufacturing, Inc.
 - f. Tuttle Railing Systems; Div. of Tuttle Aluminum & Bronze, Inc.
 - g. R & B Wagner, Inc.; a division of the Wagner Companies.
 - h. Or approved equivalent.

2.2 METALS, GENERAL

- A. Metal Surfaces, General: Provide materials with smooth surfaces, without seam marks, roller marks, rolled trade names, stains, discolorations, or blemishes.
- B. Brackets, Flanges, and Anchors: Cast or formed metal of same type of material and finish as supported rails unless otherwise indicated.

2.3 STEEL

- A. Recycled Content of Steel Products: Provide products with average recycled content of steel products so postconsumer recycled content plus one-half of preconsumer recycled content is not less than 25 percent.
- B. Tubing: ASTM A 500, Grade B, Schedule 40 or ASTM A 513.
- C. Pipe: ASTM A 53/A 53M, Type F or Type S, Grade A, Standard Weight (Schedule 40), unless another grade and weight are required by structural loads.
 - 1. Provide galvanized finish for exterior installations and where indicated.
- D. Plates, Shapes, and Bars: ASTM A 36/A 36M.
- E. Expanded Metal: ASTM F 1267, Type II (expanded and flattened).
 - 1. Style Designation: 1-1/2 number 10
- F. Woven-Wire Mesh: McNichols Wire Mesh, Designer Mesh, TECHNA 3150, Galvanized Steel, Pre-Galvanized, Woven Double Wire Intercrimp Weave, 74% Open Area; or approved equivalent.

Providence Parks Department Amphitheater Stage Improvements at Waterplace Park



2.4 STAINLESS STEEL

- A. Tubing: ASTM A 554, Grade MT 316L.
- B. Pipe: ASTM A 312/A 312M, Grade TP 316L.
- C. Plate and Sheet: ASTM A 240/A 240M or ASTM A 666, Type 316L.

2.5 FASTENERS

- A. General: Provide the following:
 - 1. Ungalvanized-Steel Railings: Plated steel fasteners complying with ASTM B 633 or ASTM F 1941 (ASTM F 1941M), Class Fe/Zn 5 for zinc coating.
 - 2. Hot-Dip Galvanized Railings: Type 304 stainless-steel or hot-dip zinc-coated steel fasteners complying with ASTM A 153/A 153M.
 - 3. Stainless-Steel Railings: Type 316 stainless-steel fasteners.
- B. Fasteners for Anchoring Railings to Other Construction: Select fasteners of type, grade, and class required to produce connections suitable for anchoring railings to other types of construction indicated and capable of withstanding design loads.
- C. Fasteners for Interconnecting Railing Components:
 - 1. Provide concealed fasteners for interconnecting railing components and for attaching them to other work, unless exposed fasteners are unavoidable or are the standard fastening method for railings indicated.
 - 2. Provide tamper-resistant hex socket flat-head machine screws for exposed fasteners unless otherwise indicated.
- D. Post-Installed Anchors: Torque-controlled expansion anchors capable of sustaining, without failure, a load equal to six times the load imposed when installed in unit masonry and four times the load imposed when installed in concrete, as determined by testing according to ASTM E 488, conducted by a qualified independent testing agency.
 - 1. Material for Exterior Locations and Where Stainless Steel is Indicated: Alloy Group 2 stainless-steel bolts, ASTM F 593, and nuts, ASTM F 594.

2.6 MISCELLANEOUS MATERIALS

- A. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.
 - 1. For stainless-steel railings, provide type and alloy as recommended by producer of metal to be welded and as required for color match, strength, and compatibility in fabricated items.





- B. Etching Cleaner for Galvanized Metal: Complying with MPI#25.
- C. Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.
- D. Paint System for Galvanized Pipe and Tube Railings: The railing system shall be galvanized prior to painting with a system described below as manufactured by Tnemec or approved equal. Galvanizing shall be touched up prior to painting. Galvanized surface shall be prepared to a uniform surface profile of 1.0-2.0 mils (SSPC SP 7) prior to painting. Paint color shall be as selected by the Owner from the manufacturer's standard palette.
 - 1. First coat, polyamidoamine epoxy: N69 High-Build Epoxoline II at 3.0 mils DFT.
 - 2. Second coat, aliphatic acrylic polyurethane coating: 73 Endura Shield, 4.0 mils DFT.
- E. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187.
- F. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107. Provide grout specifically recommended by manufacturer for interior and exterior applications.
- G. Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching, and grouting compound.
 - 1. Water-Resistant Product: At exterior locations, provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating and that is recommended by manufacturer for exterior use.

2.7 FABRICATION

- A. General: Fabricate railings to comply with requirements indicated for design, dimensions, member sizes and spacing, details, finish, and anchorage, but not less than that required to support structural loads.
- B. Assemble railings in the shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation. Use connections that maintain structural value of joined pieces.
- C. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.
- D. Form work true to line and level with accurate angles and surfaces.



- E. Fabricate connections that will be exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.
- F. Cut, reinforce, drill, and tap as indicated to receive finish hardware, screws, and similar items.
- G. Connections: Fabricate railings with welded connections unless otherwise indicated.
- H. Welded Connections: Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove flux immediately.
 - 4. At exposed connections, finish exposed surfaces smooth and blended so no roughness shows after finishing and welded surface matches contours of adjoining surfaces.
 - 5. Fabricate splice joints for field connection using methods and materials conforming to the manufacturer's specifications and instructions.
- I. Form changes in direction as follows:
 - 1. As detailed.
- J. Bend members in jigs to produce uniform curvature for each configuration required; maintain cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of components.
- K. Close exposed ends of railing members with prefabricated end fittings.
- L. Provide wall returns at ends of wall-mounted handrails unless otherwise indicated. Close ends of returns unless clearance between end of rail and wall is 1/4 inch or less.
- M. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors to interconnect railing members to other work unless otherwise indicated.
- N. Provide inserts and other anchorage devices for connecting railings to concrete or masonry work. Fabricate anchorage devices capable of withstanding loads imposed by railings. Coordinate anchorage devices with supporting structure.
- O. For railing posts set in concrete, provide stainless-steel sleeves not less than 6 inches long with inside dimensions not less than 1/2 inch greater than outside dimensions of post, with metal plate forming bottom closure.
- P. Woven-Wire Mesh Infill Panels: Fabricate infill panels from woven-wire mesh crimped into 1-by-1/2-by-1/8 metal channel frames. Make wire mesh and frames from same metal as railings in which they are installed.





1. Orient wire mesh with wires horizontal and vertical.

2.8 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- D. Provide exposed fasteners with finish matching appearance, including color and texture, of railings.

2.9 STEEL FINISHES

A. Galvanized Railings:

- 1. Hot-dip galvanize exterior steel railings, including hardware, after fabrication.
- 2. Hot-dip galvanize indicated steel and iron railings, including hardware, after fabrication.
- 3. Comply with ASTM A 123/A 123M for hot-dip galvanized railings.
- 4. Comply with ASTM A 153/A 153M for hot-dip galvanized hardware.
- 5. Do not quench or apply post galvanizing treatments that might interfere with paint adhesion.
- 6. Fill vent and drain holes that will be exposed in the finished Work, unless indicated to remain as weep holes, by plugging with zinc solder and filing off smooth.
- B. For galvanized railings, provide hot-dip galvanized fittings, brackets, fasteners, sleeves, and other ferrous components.
- C. Preparing Galvanized Railings for Shop Priming: After galvanizing, thoroughly clean railings of grease, dirt, oil, flux, and other foreign matter, and treat with etching cleaner.
- D. For nongalvanized steel railings, provide nongalvanized ferrous-metal fittings, brackets, fasteners, and sleeves, except galvanize anchors to be embedded in exterior concrete or masonry.



2.10 STAINLESS-STEEL FINISHES

- A. Remove tool and die marks and stretch lines, or blend into finish.
- B. Grind and polish surfaces to produce uniform, directionally textured, polished finish indicated, free of cross scratches. Run grain with long dimension of each piece.
- C. 180-Grit Polished Finish: Oil-ground, uniform, directionally textured finish.
- D. 320-Grit Polished Finish: Oil-ground, uniform, fine, directionally textured finish.
- E. Polished and Buffed Finish: Oil-ground, 180-grit finish followed by buffing.
- F. Directional Satin Finish: No. 4.
- G. Dull Satin Finish: No. 6.
- H. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine stage construction, where reinforced to receive anchors, to verify that locations of concealed reinforcements have been clearly marked for Installer. Locate reinforcements and mark locations if not already done.

3.2 INSTALLATION, GENERAL

- A. Fit exposed connections together to form tight, hairline joints.
- B. Perform cutting, drilling, and fitting required for installing railings. Set railings accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.
 - 1. Do not weld, cut, or abrade surfaces of railing components that have been coated or finished after fabrication and that are intended for field connection by mechanical or other means without further cutting or fitting.
 - 2. Set posts plumb within a tolerance of 1/16 inch in 3 feet.
 - 3. Align rails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet.
- C. Corrosion Protection: Coat concealed surfaces of aluminum that will be in contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint.



- D. Adjust railings before anchoring to ensure matching alignment at abutting joints.
- E. Fastening to In-Place Construction: Use anchorage devices and fasteners where necessary for securing railings and for properly transferring loads to in-place construction.

3.3 RAILING CONNECTIONS

- A. Welded Connections: Use fully welded joints for permanently connecting railing components. Comply with requirements for welded connections in "Fabrication" Article whether welding is performed in the shop or in the field.
- B. Expansion Joints: Install expansion joints at locations indicated but not farther apart than required to accommodate thermal movement. Provide slip-joint internal sleeve extending 2 inches beyond joint on either side, fasten internal sleeve securely to one side, and locate joint within 6 inches of post.

3.4 ANCHORING POSTS

- A. For anchoring posts to stage construction, use hot-dip galvanized thru-bolts with Simpson Strong-Tie DTT2Z ZMAX galvanized steel tension tie system, or approved equivalent, where indicated.
- B. For anchoring posts in existing concrete, core-drill holes not less than 5 inches deep and 3/4 inch larger than OD of post for installing posts in concrete. Clean holes of loose material, insert posts, and fill annular space between post and concrete with nonshrink, nonmetallic grout, mixed and placed to comply with anchoring material manufacturer's written instructions.

3.5 ADJUSTING AND CLEANING

- A. Clean stainless steel by washing thoroughly with clean water and soap and rinsing with clean water.
- B. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.
 - 1. Apply by brush or spray to provide a minimum 2.0-mil dry film thickness.
- C. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780.



3.6 PROTECTION

A. Protect finishes of railings from damage during construction period with temporary protective coverings approved by railing manufacturer. Remove protective coverings at time of Substantial Completion.

END OF SECTION 055213



SECTION 061063 - EXTERIOR ROUGH CARPENTRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Exterior stage framing with dimension lumber.
- B. Related Sections:
 - 1. Section 061600 "Sheathing".
 - 2. Section 066500 "Simulated Wood Trim".
 - 3. Section 074633 "Plastic Siding".

1.3 DEFINITIONS

- A. Dimension Lumber: Lumber of 2 inches nominal or greater but less than 5 inches nominal in least dimension.
- B. Lumber grading agencies, and the abbreviations used to reference them, include the following:
 - 1. NeLMA: Northeastern Lumber Manufacturers' Association.
 - 2. NLGA: National Lumber Grades Authority.
 - 3. RIS: Redwood Inspection Service.
 - 4. SPIB: The Southern Pine Inspection Bureau.
 - 5. WCLIB: West Coast Lumber Inspection Bureau.
 - 6. WWPA: Western Wood Products Association.

1.4 SUBMITTALS

- A. Product Data: For preservative-treated wood products.
 - 1. For preservative-treated wood products, include chemical treatment manufacturer's written instructions for handling, storing, installing, and finishing treated material.



B. Material Certificates:

- 1. For lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by ALSC's Board of Review.
- 2. For preservative-treated wood products. Indicate type of preservative used and net amount of preservative retained. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site.
- C. Certificates of Inspection: Issued by lumber grading agency for exposed wood products not marked with grade stamp.
- D. Evaluation Reports: For the following, from ICC-ES:
 - 1. Preservative-treated wood products.
 - 2. Metal framing anchors.

1.5 QUALITY ASSURANCE

A. Forest Certification: Provide wood products obtained from forests certified by an FSC-accredited certification body to comply with FSC STD-01-001, "FSC Principles and Criteria for Forest Stewardship."

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store materials under cover and protected from weather and contact with damp or wet surfaces. Stack lumber flat with spacers between each bundle to provide air circulation. Provide for air circulation around stacks and under coverings.

PART 2 - PRODUCTS

2.1 LUMBER, GENERAL

- A. Lumber: Comply with DOC PS 20 and with applicable rules of grading agencies indicated. If no grading agency is indicated, provide lumber that complies with the applicable rules of any rules-writing agency certified by ALSC's Board of Review. Provide lumber graded by an agency certified by ALSC's Board of Review to inspect and grade lumber under the rules indicated.
 - 1. Factory mark each item with grade stamp of grading agency.
 - 2. For items that are exposed to view in the completed Work, mark grade stamp on end or back of each piece.



- 3. Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry wood products.
- 4. Provide dressed lumber, S4S, unless otherwise indicated.

2.2 DIMENSION LUMBER

- A. Maximum Moisture Content: 19 percent unless otherwise indicated.
- B. Exposed Lumber: Provide material hand selected for freedom from characteristics, on exposed surfaces and edges, that would impair finish appearance, including decay, honeycomb, knot holes, shake, splits, torn grain, and wane.
- C. Provide lumber sizes and species as indicated on the Drawings.

2.3 MISCELLANEOUS LUMBER

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
 - 1. Blocking.
 - 2. Nailers.
- B. For blocking and nailers, select and cut lumber to eliminate knots and other defects that will interfere with attachment of other work.

2.4 PRESERVATIVE TREATMENT

- A. Pressure treat dimension lumber with waterborne preservative according to AWPA C2.
- B. Preservative Chemicals: Acceptable to authorities having jurisdiction.
 - 1. Do not use chemicals containing arsenic or chromium.
- C. Use process that includes water-repellent treatment.
- D. Use process that does not include water repellents or other substances that might interfere with application of indicated finishes.
- E. After treatment, redry dimension lumber to 19 percent maximum moisture content.
- F. Mark treated wood with treatment quality mark of an inspection agency approved by ALSC's Board of Review.



G. Application: Treat all exterior rough carpentry unless otherwise indicated.

2.5 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
 - 1. Use fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M or ASTM F 2329 unless otherwise indicated.
- B. Nails: ASTM F 1667.
- C. Power-Driven Fasteners: NES NER-272.
- D. Wood Screws: ASME B18.6.1.
- E. Lag Screws: ASME B18.2.1.
- F. Carbon-Steel Bolts: ASTM A 307 with ASTM A 563 hex nuts and, where indicated, flat washers all hot-dip zinc coated.

2.6 METAL FRAMING ANCHORS

- A. Provide metal framing anchors as indicated on the drawings.
- B. Hold-Downs: Brackets for fastening guardrail posts to stage framing with through-bolts.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

A. Set exterior rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit exterior rough carpentry to other construction; scribe and cope as needed for accurate fit.



- B. Framing Standard: Comply with AF&PA's "Details for Conventional Wood Frame Construction" unless otherwise indicated.
- C. Secure stage flooring to framing with fasteners as indicated on the Drawings.
- D. Install metal framing anchors to comply with manufacturer's written instructions.
- E. Do not splice structural members between supports unless otherwise indicated.
- F. Provide blocking and framing as indicated and as required to support facing materials, fixtures, specialty items, and trim.
- G. Sort and select lumber so that natural characteristics will not interfere with installation or with fastening other materials to lumber. Do not use materials with defects that interfere with function of member or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
- H. Comply with AWPA M4 for applying field treatment to cut surfaces of preservative-treated lumber.
 - 1. Use inorganic boron (SBX) for items that are continuously protected from liquid water.
 - 2. Use copper naphthenate for items not continuously protected from liquid water.
- I. Securely attach exterior rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
 - 1. NES NER-272 for power-driven fasteners.
 - 2. Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code.
- J. Use common wire nails unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view. Make tight connections between members. Install fasteners without splitting wood; do not countersink nail heads unless otherwise indicated.
- K. For exposed work, arrange fasteners in straight rows parallel with edges of members, with fasteners evenly spaced, and with adjacent rows staggered.

3.3 FLOOR JOIST FRAMING INSTALLATION

- A. General: Install joists with crown edge up and support ends of each member with not less than 2 inches of bearing on wood. Attach floor joists where supported by wood members by toe nailing or by using metal framing anchors. Do not notch joists.
- B. Frame openings with headers and trimmers supported by metal joist hangers; double headers and trimmers where span of header exceeds 48 inches.



- C. Lap members framing from opposite sides of beams or girders not less than 4 inches or securely tie opposing members together. Provide solid blocking of 2-inch nominal thickness by depth of joist over supports.
- D. Provide solid blocking of 2-inch nominal thickness by depth of joist as indicated on the Drawings.

3.4 WOOD BLOCKING AND NAILER INSTALLATION

- A. Install where indicated and where required for attaching other work. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.
- B. Attach items to substrates to support applied loading. Recess bolts and nuts flush with surfaces unless otherwise indicated.

3.5 WOOD FURRING INSTALLATION

- A. Install level and plumb with closure strips at edges and openings. Shim with wood as required for tolerance of finish work.
- B. Furring to Receive Cladding: Install furring to comply with cladding manufacturer's written instructions and recommendations.

3.6 CROSS-WALL FRAMING INSTALLATION

- A. General: Provide single bottom plate and double top plates using members of 2-inch nominal thickness whose widths equal that of studs. Fasten plates to supporting construction unless otherwise indicated.
 - 1. Provide 2-by-6-inch nominal size wood studs spaced 16 inches o.c. unless otherwise indicated.
- B. Provide plywood sheathing at cross-walls and shear walls between cross-walls as indicated on the Drawings.

END OF SECTION 061063



SECTION 061600 - SHEATHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Wall sheathing.
 - 2. Stage subfloor and overlay.
- B. Related Requirements:
 - 1. Section 061063 "Exterior Rough Carpentry".

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.
 - 1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated plywood complies with requirements. Indicate type of preservative used and net amount of preservative retained.
 - 2. Include data for fire-retardant treatment from chemical treatment manufacturer and certification by treating plant that treated plywood complies with requirements. Include physical properties of treated materials.
 - 3. For fire-retardant treatments, include physical properties of treated plywood both before and after exposure to elevated temperatures, based on testing by a qualified independent testing agency according to ASTM D 5516.
 - 4. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site.
 - 5. Include copies of warranties from chemical treatment manufacturers for each type of treatment.



1.4 INFORMATIONAL SUBMITTALS

- A. Evaluation Reports: For following products, from ICC-ES:
 - 1. Preservative-treated plywood.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Stack panels flat with spacers beneath and between each bundle to provide air circulation. Protect sheathing from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

PART 2 - PRODUCTS

2.1 WOOD PANEL PRODUCTS

- A. Certified Wood: For the following wood products, provide materials produced from wood obtained from forests certified by an FSC-accredited certification body to comply with FSC STD-01-001, "FSC Principles and Criteria for Forest Stewardship."
 - 1. Plywood.
- B. Plywood: DOC PS 1
- C. Thickness: As needed to comply with requirements specified, but not less than thickness indicated.
- D. Factory mark panels to indicate compliance with applicable standard.

2.2 PRESERVATIVE-TREATED PLYWOOD

- A. Preservative Treatment by Pressure Process: AWPA U1; Use Category UC4a.
 - 1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium.
- B. Mark plywood with appropriate classification marking of an inspection agency acceptable to authorities having jurisdiction.
- C. Application: Treat all plywood unless otherwise indicated.



2.3 WALL SHEATHING

- A. Plywood Wall Sheathing: Exposure 1, Structural I sheathing.
 - 1. Span Rating: Not less than 32/16.
 - 2. Nominal Thickness: Not less than 1/2 inch.

2.4 SUBFLOORING

- A. Plywood Subflooring: Exposure 1, Structural I sheathing.
 - 1. Span Rating: Not less than 48/24.
 - 2. Nominal Thickness: Not less than 23/32 inch.

2.5 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
 - 1. Provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M,
- B. Nails, Brads, and Staples: ASTM F 1667.
- C. Power-Driven Fasteners: NES NER-272.
- D. Wood Screws: ASME B18.6.1.

2.6 COATING SYSTEM FOR STAGE FLOOR SURFACE

- A. The stage floor surface shall be sealed with a deck coating system described below as manufactured by Liquid Rubber or approved equivalent. Apply coating system per manufacturer's requirements. Paint color shall be as selected by the Owner from the manufacturer's standard palette.
 - 1. Liquid Rubber Multi-Purpose Primer: 1 gallon per 200 square feet.
 - 2. Liquid Rubber Textured Polyurethane Deck Coating: 1 gallon per 30 square feet.



PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Do not use materials with defects that impair quality of sheathing or pieces that are too small to use with minimum number of joints or optimum joint arrangement. Arrange joints so that pieces do not span between fewer than three support members.
- B. Cut panels at penetrations, edges, and other obstructions of work; fit tightly against abutting construction unless otherwise indicated.
- C. Securely attach to substrate by fastening as indicated, complying with the following:
 - 1. NES NER-272 for power-driven fasteners.
 - 2. Table 2304.9.1, "Fastening Schedule," in ICC's "International Building Code."
- D. Use common wire nails unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections. Install fasteners without splitting wood.
- E. Coordinate sheathing installation with cladding and trim installation so these materials are installed in sequence and manner that prevent exterior moisture from passing through completed assembly.
- F. Do not bridge building expansion joints; cut and space edges of panels to match spacing of structural support elements.
- G. Coordinate sheathing installation with installation of materials installed over sheathing so sheathing is not exposed to precipitation or left exposed at end of the workday when rain is forecast.

END OF SECTION 061600



SECTION 066500 SIMULATED WOOD TRIM

SECTION 066500 - SIMULATED WOOD TRIM

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Cellular PVC trim boards for:

- 1. Corner boards
- 2. Soffits
- 3. Fascia
- 4. Door pilasters
- 5. Frieze boards
- 6. Rake boards
- 7. Architectural millwork
- 8. Door trim
- 9. Window trim
- 10. Skirtboards
- 11. Water tables

1.2 RELATED SECTIONS

- A. Section 061063 "Exterior Rough Carpentry".
- B. Section 061600 "Sheathing".
- C. Section 074633 "Plastic Siding".

1.3 REFERENCES

- A. ASTM D792 Density and Specific Gravity of Plastics by Displacement.
- B. ASTM D570 Water Absorption of Plastics.
- C. ASTM D638 Tensile Properties of Plastics.
- D. ASTM D790 Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- E. ASTM D1761 Mechanical Fasteners in Wood.
- F. ASTM D5420 Standard Test Method for Impact Resistance of Flat, Rigid Plastic Specimen by means of a Striker Impacted by a Falling Weight.
- G. ASTM D256 Determining the Pendulum Impact Resistance of Plastics.
- H. ASTM D696 Coefficient of Linear Thermal Expansion of Plastics Between -30°C and 30°C with a Vitreous Silica Dilatometer.
- I. ASTM D635 Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position.
- J. ASTM E84 Surface Burning Characteristics of Building Materials.
- K. ASTM D648 Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position.



L. ASTM D3679 - Standard Specification for Rigid Poly Vinyl Chloride (PVC) Siding.

1.4 SUBMITTALS

- A. General: Submit under provisions of Section 010000 General Requirements.
- B. Product Data: Manufacture's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation instructions and methods.
 - 4. Code compliance reports.
- C. Samples: For each product specified, two samples, minimum size 6 inches long, representing actual product, color, finish.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer with a minimum of 15 years producing PVC trim products.
- B. Installer Qualifications: Installer with a minimum of 3 years experience with the installation of PVC trim products.
- C. Regulatory Requirements: Check with Local Building Code for installation requirements.
- D. Allowable Tolerances:
 - 1. Variation in component length: -0.00 / +1.00"
 - 2. Variation in component width: $\pm 1/16$ "
 - 3. Variation in component thickness: $\pm 1/16$ "
 - 4. Variation in component edge cut: $\pm 2^{\circ}$
 - 5. Variation in Density -0% + 10%
- E. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas as shown on the Drawings.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by the Owner's Representative.
 - 3. Refinish mock-up area as required to produce acceptable work.
 - 4. Accepted mock-ups shall be comparison standard for remaining work.

1.6 DELIVERY, STORAGE AND HANDLING

A. Trim materials should be stored on a flat and level surface on a full shipping pallet. Handle materials to prevent damage to product edges and corners.



B. Store materials under a protective covering to prevent jobsite dirt and residue from collecting on the boards.

1.7 WARRANTY

A. Provide manufacturer's Limited Lifetime warranty against defects in manufacturing that cause the products to rot, corrode, delaminate, or excessively swell from moisture.

PART 2 - PRODUCTS

2.1 MANUFACTURES

- A. AZEK® Trimboards manufactured by The AZEK® Company, or approved equivalent.
- B. Requests for substitutions will be considered in accordance with provisions of Section 010000.

2.2 MATERIALS

- A. PVC: Free foam cellular PVC material with a small cell microstructure and density of .55 grams/cm³.
- B. Material shall have a minimum physical and performance properties specified in the following Section C.
- C. Performance and physical characteristic requirements:

Property	Units	Value	ASTM Metho d
PHYSICAL			
Density	g/cm ³	0.55	D 792
Water Absorption MECHANICAL	%	0.15	D 570
Tensile Strength	psi	2256	D 638
Tensile Modulus	psi	144,000	D 638
Flexural Strength	psi	3329	D 790
Flexural Modulus	psi	144,219	D 790
Nail Hold	Lbf/in of penetratio	35	D 1761
Screw Hold	Lbf/in of penetratio n	680	D 1761



Staple Hold	Lbf/in of	180	D 1761
	penetratio		
	n		
Gardner Impact	in-lbs	103	D5420
Charpy Impact (@23°C)	ft-lbs	4.5	D256
THERMAL			
Coefficient of Linear Expansion	in/in/°F	3.2 x 10-5	D 696
Burning Rate	in/min	No burn	D 635
		when flame	
		removed	
Flame Spread Index	-	25	E 84
Heat Deflection Temp 264 psi	°F	150	D 648
Oil Canning (@140°F)	°F	Passed	D 648

2.3 SIMULATED WOOD TRIM

- A. PVC Trimboard: AZEK® Trimboard with Sealed Edge, or approved equivalent.
 - 1. Size:
- a. Nominal Width:
 - 1) 2 inches
 - 2) 4 inches
 - 3) 5 inches
 - 4) 6 inches
 - 5) 8 inches
 - 6) 10 inches
 - 7) 12 inches
 - 8) 16 inches
- b. Nominal Thickness:
 - 1) 5/8 inch (5/8 inch actual size)
 - 2) 1 inch (3/4 inch actual size)
 - 3) 5/4 inch (1 inch actual size)
 - 4) 6/4 inch (1-1/4 inch actual size)
 - 5) 8/4 inch (1-1/2 inch actual size)
- c. Length:
 - 1) 12 feet
 - 2) 18 feet
- 2. Finish:
 - a. Smooth finish.
 - b. Reversible with Smooth/Woodgrain finish.
- B. Sheet Board: AZEK® Traditional (Smooth)/Frontier (Woodgrain) finish Sheet, or approved equivalent.
 - 1. Size:
- a. Width/Length:
 - 1) 4 foot by 8 foot



- 2) 4 foot by 10 foot
- 3) 4 foot by 12 foot
- 4) 4 foot by 18 foot
- 5) 4 foot by 20 foot
- b. Thickness:
 - 1) 3/8 inch
 - 2) 1/2 inch
 - 3) 5/8 inch
 - 4) 3/4 inch
 - 5) 1 inch
 - 6) 1-1/4 inch
 - 7) 1-1/2 inch
- 2. Finish:
 - a. Smooth finish.
 - b. Reversible with Smooth/Woodgrain finish.
- C. PVC Cornerboard: AZEK® Corners, or approved equivalent.
 - 1. Size:
- a. Nominal Corner Size:
 - 1) 4 inches
 - 2) 6 inches
 - 3) 8 inches
- b. Nominal Thickness:
 - 1) 5/4 inch (1 inch actual size)
- c. Length:
 - 1) 10 feet
 - 2) 20 feet
- 2. Finish:
 - a. Smooth.
 - b. Woodgrain.
- D. Mouldings: AZEK® Mouldings, or approved equivalent.
 - 1. Crowns:
 - a. 3 inches.
 - b. 4 Inches.
 - c. 5 inches.
 - d. 6 inches.
 - e. 8 inches.
 - f. Bed Mould.
 - g. Rams Crown.
 - h. Solid Crown.
 - i. Imperial Rake Crown.
 - i. Crosshead Pediment.
 - 2. Casings:
 - a. Base Cap.
 - b. Brick Mould.



- c. Back Band.
- d. Rake Moulding.
- e. Adams Casing.
- f. Crosshead Pediment.
- g. Fluted/Reeded Casing.
- 3. Cove:
- a. Quarter Round.
- b. Bed Moulding.
- c. Baluster Moulding.
- d. Scotia Cove.
- e. Cove Moulding
- 4. Sill:
- a. Sill.
- b. Sill Nose.
- c. Heavy Sill.
- d. Sub Sill Nose.
- e. Historic Sill.
- f. Large Historic Sill.
- g. Window Sill Nose 5. Specialty:
- h. Drip Cap.
- i. Shingle Mould.
- j. Garage Door Thermostop.
- k. Water Table.
- I. Beaded Cap.
- m. Panel Mould.
- n. Wainscot Cap.
- 6. J-Channel Series.
 - 1) J-Brick
 - 2) 4" J-Casing
 - 3) 6" J-Casing
 - 4) 4" QuickCorner
 - 5) 6" QuickCorner
- 7. Length:
 - a. 12 feet.
 - b. 16 feet.
 - c. 18 feet.
- 8. Finish:
 - a. Smooth finish.

2.4 SIMULATED WOOD TRIM

- A. PVC Trimboard: AZEK® Rabbeted Trimboard, or approved equivalent.
 - 1. Size:
 - a. Nominal Width:
 - 1) 4 inches
 - 2) 6 inches



- 3) 8 inches
- b. Nominal Thickness:
 - 1) 5/4 inch (1 inch actual size)
- c. Length:
 - 1) 18 feet
- 2. Finish:
 - a. Smooth finish.
 - b. Woodgrain finish.
- C. PVC Cornerboard: AZEK® Rabbeted Corners, or approved equivalent.
 - 1. Size:
- a. Nominal Corner Width:
 - 1) 4 Inches
 - 2) 6 inches
- b. Nominal Thickness:
 - 1) 5/4 inch (1 inch actual size).
- c. Length:
 - 1) 10 feet.
 - 2) 20 feet.
- D. PVC Skirtboard: AZEK® 1-Piece Skirtboard, or approved equivalent.
 - 1. Size:
 - a. Nominal Width:
 - 1) 5/4 inch x 4 inches
 - 2) 5/4 inch by 6 inches
 - 3) 5/4 inch by 8 inches
 - 4) 1 inch by 4 inches
 - 5) 1 inch by 6 inches
 - 6) 1 inch by 8 inches
 - 7) 1 inch by 10 inches
 - b. Length:
 - 1) 18 feet.
 - 2. Finish:
 - a. Smooth finish.
 - b. Woodgrain finish.
- E. PVC Skirtboard: AZEK® Universal Skirt Board, or approved equivalent.
 - 1. Size:
 - a. Nominal Width:
 - 1) 5/4 inch by 6 inches
 - 2) 5/4 inch by 8 inches
 - 3) 5/4 inch by 10 inches
 - b.Length:
 - 1) 18 feet.
 - 2. Finish:
 - a. Smooth finish.



b. Woodgrain finish.

- F. PVC Bandboard/Skirtboard: AZEK® Integrated Drip Edge, or approved equivalent.
 - 1. Size:
- a. Nominal Width:
 - 1) 5/4 inch by 6 inches
 - 2) 5/4 inch by 8 inches
 - 3) 5/4 inch by 10 inches
- b.Length:
 - 1) 18 feet.
- 2. Finish:
 - a. Smooth finish.
 - b. Woodgrain finish. G.

2.5 ACCESSORY PRODUCTS

A. Fasteners:

- 1. AZEK® Cortex for Trim, or approved equivalent.
- 2. Use fasteners design for wood trim and wood siding (thinner shank, blunt point, full round head).
- 3. Use a highly durable fastener such as stainless steel or hot-dipped galvanized.
- 4. Staples, small brads and wire nails must not be used as fastening members.
- 5. The fasteners should be long enough to penetrate the solid wood substrate a minimum of 1 ½".
- 6. Use 2 fasteners per every framing member for trimboard applications. Trimboards 12" or wider, as well as sheets, will require additional fasteners.
- 7. Fasteners must be installed no more than 2" from the end of each board.
- 8. PVC trim should be fastened into a flat, solid substrate. Fastening PVC trim into hollow or uneven areas must be avoided.
- 9. Pre-drilling is typically not required unless a large fastener is used or product is installed in low temperatures.
- 10. 3/8" and ½" sheet product is not intended to be ripped into trim pieces. These profiles must be glued to a substrate and mechanically fastened.

B. Adhesives:

- 1. Glue all PVC-to-PVC joints such as window surrounds, long fascia runs, etc. with the manufacturer's approved adhesive, a cellular PVC cement, to prevent joint separation.
- 2. The glue joint should be secured with a fastener and/or fastened on each side of the joint to allow adequate bonding time.
- 3. If standard PVC cements are used, the Contractor shall be aware these products typically cure quickly which will result in limited working time and may reduce adhesive strength.
- 4. Surfaces to be glued should be smooth, clean and in complete contact with each other.



5. To bond PVC trim to other substrates, various adhesives may be used. Consult adhesive manufacturer to determine suitability.

C. Sealants:

1. Use urethane, polyurethane or acrylic based sealants without silicone.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Manufacturer instructions:

1. Comply with manufacturer's product catalog installation instructions and product technical bulletin instructions.

B. Cutting:

1. Use carbide tipped blades designed to cut wood or blades recommended by the manufacturer. Avoid fine tooth metal cutting blades.

C. Milling:

- 1. Mill PVC trim using standard milling machines used to mill lumber.
- 2. Relief Angle 20° to 30°
- 3. Cutting speed to be optimized with the number of knives and feed rate.

D. Routing:

- 1. PVC trim should be routed using standard router bits and the same tools used to rout lumber.
- 2. Carbide tipped router bits are recommended.

E. Edge Finishing:

1. Finish all cut and milled edges by sanding, grinding or filing with traditional woodworking tools.

F. Nail Location:

- 1. Use 2 fasteners per every framing member for trimboard applications.
- 2. Trimboards over 12" or wider, as well as sheets, will require additional fasteners
- 3. Fasteners must be installed no more than 2" from the end of each board.

G. Thermal Expansion and Contraction:

- 1. PVC trim products expand and contract with changes in temperature.
- 2. Properly fastening PVC trim material along its entire length will minimize expansion and contraction.
- 3. When properly fastened, allow 1/8" per 18 foot length for expansion and contraction.



SECTION 066500 SIMULATED WOOD TRIM

4. Joints between pieces of PVC trim should be glued to eliminate joint separation. When gaps are glued on a long run of PVC trim, allow expansion and contraction at ends of the run.

END OF SECTION 066500



SECTION 074633 - PLASTIC SIDING

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Capped PVC Board Cladding and Accessories.

1.2 RELATED SECTIONS:

- A. Section 061063 "Exterior Rough Carpentry".
- B. Section 061600 "Sheathing".
- C. Section 066500 "Simulated Wood Trim".

1.3 DEFINITIONS:

- A. Rainscreen: An exterior open-joint cladding system incorporating a continuous air cavity created by furring, a water-resistive barrier to manage water intrusion through drainage and ventilation, and a physical air barrier (e.g. sheathing) to prevent air leakage into the building.
- B. RVFS: Rear-ventilated façade system.
- C. WRB: Water-resistive barrier. A code-acceptable material behind the capped PVC boards that prevents moisture in the air cavity from intrusion into the exterior building wall assembly.

1.4 SUBMITTALS

- A. Submit in accordance with requirements of Section 010000 General Requirements.
- B. Product Data: For each product specified include the following:
 - 1. Manufacturer's technical product data, including component descriptions, construction details, and test results showing compliance with specified performance criteria.
 - 2. Manufacturer's surface preparation and installation instructions.
 - 3. Safety Data Sheets (SDS).
- C. Sustainability Submittals:
 - 1. Product Data: For recycled content, indicated pre-consumer recycled content and cost.
- D. Verification Samples: Provide two samples of specified board, full board width by minimum 4 inches in length, including the selected color and finish.
- E. Informational Submittals:
 - 1. Installer qualifications.



- 2. Product test reports.
- 3. Sample warranties.

F. Closeout Submittals:

1. Maintenance data for installed system.

1.5 QUALITY ASSURANCE

- A. Installer's Qualifications: An entity with demonstrated experience installing systems similar in scope and complexity to those specified.
- B. Mock-Up: Arrange for the construction of a mock-up of the products specified in this section. Example must include one cladding section for each type specified, including the selected color and finish. The Owner's Representative will verify acceptance of products and workmanship.
 - 1. Accepted mockups may be incorporated into the work.
 - 2. Provide mockups as indicated on the drawings.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store and handle materials and products in accordance with the manufacturer's instructions and recommendations and industry standards.
- B. Store all materials in the manufacturer's original packaging until ready for installation. Protect all products from damage or exposure to adverse weather conditions.
 - 1. Store products in shaded or cool location.

1.7 PROJECT CONDITIONS

- A. Schedule work around the ambient conditions required by the manufacturer. Do not perform work outside manufacturer's recommended limits for environmental conditions.
- B. Prior to fabrication, verify that dimensions are consistent with those found in the construction drawings. Where discrepancies exist, confirm the proper dimensions with the Architect before proceeding with work.

1.8 WARRANTY

- A. Warranty on Cladding Material: Manufacturer agrees to replace or refund the purchase price of nonconforming capped PVC boards that fail within the specified warranty period.
 - 1. Failure Methods: Splitting, cupping, splintering, blistering, peeling, flaking, cracking, rotting or structural damage from termites or fungal decay.
 - 2. Residential Warranty Period: Limited Lifetime.
 - 3. Commercial Warranty Period: 30 years from date of purchase.
- B. Special Warranty on Cladding Finishes: Manufacturer agrees to replace or refund the purchase price of nonconforming capped PVC boards that show evidence of deterioration of factory-applied color beyond specified limit within the specified warranty period.
 - 1. Color Fade: Not to exceed 5 Delta E (CIE) units.



- 2. Residential Warranty Period: 50 years from date of purchase.
- 3. Commercial Warranty Period: 30 years from date of purchase.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. TimberTech, an AZEK Building Products Brand, or approved equivalent.
- B. Substitution Limitations:
 - 1. Submit substitution requests in accordance with provisions of Section 010000.
 - 2. Single manufacturer to provide, from a single source, primary products and accessories specified in this section.

2.2 PERFORMANCE REQUIREMENTS:

- A. Physical Performance: Provide cladding boards in accordance with ASTM D7254 and ASTM D3679, and ICC-ES AC227.
 - 1. Heat Shrinkage: Less than 0.2% linear shrinkage when tested in accordance with ASTM D1042.
 - 2. Impact Resistance: Pass; when tested at 265/220 (in·lb) mean failure energy in accordance with ASTM D4226.
 - 3. Surface Distortion: No effect at 120°F or at maximum developed temp of 165°F when tested in accordance with ASTM D3679 Section 6.12.
 - 4. Coefficient of Thermal Expansion: Maximum 2.72x 10-5 in/in/°F; when tested in accordance with ASTM D696.
- B. Rate and Extent of Burn: No sustained combustion when tested in accordance with ASTM D635.
- C. Surface-Burning Characteristics: Meet the following values when tested in accordance with ASTM E84:
 - 1. Class A Flame-Spread Index: 0 to 25.
 - 2. Class B Flame-Spread Index: 26 to 75.
- D. Ignition Resistance: Cellular PVC core boards pass NFPA 268.
- E. Environmental Performance:
 - 1. Water Absorption: No observed water droplets when tested in accordance with ASTM D570 & AATCC 127.
 - 2. UV Resistance: Pass at least 2000 hours of Xenon-Arc exposure when tested in accordance with ASTM D2565 Cycle 1.
 - 3. Fungus Decay Resistance: Pass; when tested in accordance with ASTM D2017. Boards do not contain cellulosic material.
 - 4. Termite Resistance: Pass; when tested in accordance with ASTM D3345. Boards do not contain cellulosic material.



- 5. Moisture Effect: Not prone to absorption, no adjustments when tested in accordance with ASTM D7032.
- 6. Freeze Thaw Resistance: Less than 10% effect, no adjustments when tested in accordance with ASTM D7032.
- F. Recycled Content: Greater than 45% combined pre-consumer (post-industrial) and post-consumer by weight.

2.3 CAPPED PVC BOARDS

- A. Capped PVC Boards: Cellular PVC core boards with PVC-based capping material and complying with ASTM D3679.
 - 1. Vintage Collection Cladding, by TimberTech, an AZEK Building Products Brand, or approved equivalent.
 - 2. Physical Characteristics:
 - a. Edge: Square; .0125-inch corner fillet radius.
 - b. Thickness: 1 inch.
 - c. Width: 3.5 inches.
 - d. Width: 5.5 inches.
 - e. Width: 7.25 inches.
 - f. Length: 16 feet.
 - g. Length: 20 feet.
 - h. Color: Coastline.
 - i. Color: Cypress.
 - j. Color: Dark Hickory.
 - k. Color: English Walnut.
 - l. Color: Mahogany.
 - m. Color: Weathered Teak.
- **B.** Capped PVC Boards: Cellular PVC core boards with PVC-based capping material and complying with ASTM D3679.
 - 1. Harvest Collection Cladding, by TimberTech, an AZEK Building Products Brand, or approved equivalent.
 - 2. Physical Characteristics:
 - a. Edge: Square; 0.125-inch corner fillet radius.
 - b. Thickness: 1 inch.
 - c. Width: 5.5 inches.
 - d. Width: 7.25 inches.
 - e. Length: 12 feet.
 - f. Length: 16 feet.
 - g. Length: 20 feet.
 - h. Color: Brownstone.
 - i. Color: Kona.
 - j. Color: Slate Gray.



2.4 ACCESSORIES

- A. Fasteners: Provide fasteners as recommended by the RVFS manufacturer.
 - 1. Cortex, by TimberTech, an AZEK Building Products brand, or approved equivalent.
 - a. Material: Electric coated epoxy painted carbon steel.
 - b. Size: Minimum #10 x 2 inch carbon steel fasteners.
 - c. Size: Minimum #10 x 2-1/2 inch carbon steel fasteners.
 - d. Installation: Counter-bored.
 - e. Corrosion Resistance: Pass; when tested in compliance with ASTM B117.
 - f. Plug: Match board colors.
 - 2. TOPloc, by TimberTech, an AZEK Building Products brand, or approved equivalent.
 - a. Material: Stainless Steel; Grade 305.
 - b. Size: Minimum #10 x 2-1/2 inch stainless steel fasteners.
 - c. Head Color: Color matching board.
 - d. Installation: Face-fastened.
- B. Weather-Resistive Barrier: Provide WRB in compliance with Manufacturer's recommendations, and authorities having jurisdiction.
- C. Wood Furring: Provide wood furring in compliance with Manufacturer's recommendations, authorities having jurisdiction, and Section 061063 "Exterior Rough Carpentry."

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates to receive the RVFS work and conditions under which the work will be performed including the following:
 - 1. Wall sheathing is in place and properly installed.
 - 2. WRB (or air barrier) is in place, continuous, and properly installed.
 - 3. Wood furring is level, plumb, and true to line, correctly placed, securely attached to building substrates. Maximum furring spacing, whether horizontal or vertical, not to exceed 16 inches on center.
 - 4. Air cavity is continuous with minimum 1 ½ inch unobstructed width. Unobstructed air intake (bottom) and exit (top) of at least 1 ½ inch.
 - 5. Flashings for penetrations, head of openings, and base of air cavity are properly installed to redirect moisture to the exterior.
 - 6. Wood blocking and insect screens are in place as required to prevent intrusion by pests and not diminish ventilation/drainage performance.
- B. Do not begin work until adjacent substrates have been properly prepared to receive work specified in this section. Commencement of RVFS work will constitute acceptance of substrates to receive the work.



3.2 PREPARATION

- A. General: Comply with manufacturer's printed installation instructions, clean substrates of projections and substances detrimental to application.
- B. Protect adjacent substrates not to receive the RVFS.

3.3 INSTALLATION

- A. General: Install in accordance with manufacturer's current installation instructions, industry recognized best practices, all code bodies having jurisdiction, and approved shop drawings.
 - 1. Do not install damaged products.
 - 2. Refer to manufacturer's published technical data for expansion and contraction due to changes in temperature.
- B. Securely attach capped PVC boards to furring substrates. Fastener size, number, spacing, and minimum dimensions from board edges and ends according to RVFS manufacturer's recommendations.
 - 1. Cut and rout capped PVC boards using only approved carbide-tipped blades, to preclude frayed edge cuts.
 - 2. Cut board ends square. Miter cuts at corners are acceptable.
 - 3. Install fasteners perpendicular to cladding board substrates and flush with board surface.

C. Horizontal capped PVC Board Orientation:

- 1. Determine and begin at lowest point of cladding installation.
- 2. Butt joints to occur only over furring and centered on furring. As capped PVC board courses are added, stagger butt joints in a consistent "stair step" manner.
 - a. Board lengths to span a minimum of three furring members.
 - b. Gapping: Refer to RVFS manufacturer's published technical data for spacing dimensions.
 - 1) End-to-End Boards: No gap.
 - 2) Between Board Edges: 1/8 inch.
 - 3) Boards and Adjacent Materials: 1/8 inch.
 - 4) Board to Roof: 1/8 inch.

3.4 CLEANING AND PROTECTION

- A. Clean and remove all stains, grime, or other soils using manufacturer's recommended methods. Only use materials and methods approved by the manufacturer for use on the finishes specified.
- B. Damaged products must be repaired or replaced prior to substantial completion.
- C. Protect installed products until completion of work specified in this section.

END OF SECTION 074643



SECTION 260519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 GENERAL

- 1.01 SECTION INCLUDES
 - A. Single conductor building wire.
 - B. Wiring connectors.
 - C. Electrical tape.
 - D. Heat shrink tubing.
 - E. Wire pulling lubricant.
 - F. Cable ties.

1.02 RELATED REQUIREMENTS

- A. Section 078400 Firestopping.
- B. Section 260526 Grounding and Bonding for Electrical Systems: Additional requirements for grounding conductors and grounding connectors.

1.03 REFERENCE STANDARDS

- A. ASTM B3 Standard Specification for Soft or Annealed Copper Wire; 2013 (Reapproved 2018).
- B. ASTM B8 Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft; 2023.
- C. ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire for Electrical Purposes; 2010, with Editorial Revision (2020).
- D. ASTM B787/B787M Standard Specification for 19 Wire Combination Unilay-Stranded Copper Conductors for Subsequent Insulation; 2004 (Reapproved 2020).
- E. ASTM D3005 Standard Specification for Low-Temperature Resistant Vinyl Chloride Plastic Pressure-Sensitive Electrical Insulating Tape; 2017.
- F. ASTM D4388 Standard Specification for Nonmetallic Semi-Conducting and Electrically Insulating Rubber Tapes; 2020.
- G. NECA 1 Standard for Good Workmanship in Electrical Construction; 2023.
- H. NEMA WC 70 Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy; 2021.
- I. NETA ATS Standard For Acceptance Testing Specifications For Electrical Power Equipment And Systems; 2021.
- J. NFPA 70 National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- K. UL 44 Thermoset-Insulated Wires and Cables; Current Edition, Including All Revisions.
- L. UL 83 Thermoplastic-Insulated Wires and Cables; Current Edition, Including All Revisions.



- M. UL 267 Outline of Investigation for Wire-Pulling Compounds; Current Edition, Including All Revisions.
- N.UL 486A-486B Wire Connectors; Current Edition, Including All Revisions.
- O.UL 486C Splicing Wire Connectors; Current Edition, Including All Revisions.
- P. UL 486D Sealed Wire Connector Systems; Current Edition, Including All Revisions.
- Q.UL 510 Polyvinyl Chloride, Polyethylene, and Rubber Insulating Tape; Current Edition, Including All Revisions.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordination:

- 1. Coordinate sizes of raceways, boxes, and equipment enclosures installed under other sections with the actual conductors to be installed, including adjustments for conductor sizes increased for voltage drop.
- 2. Coordinate with electrical equipment installed under other sections to provide terminations suitable for use with the conductors to be installed.
- 3. Notify Architect of any conflicts with or deviations from Contract Documents. Obtain direction before proceeding with work.

1.05 SUBMITTALS

- A. See Section 013000 Administrative Requirements, for submittal procedures.
- B. Field Quality Control Test Reports.

1.06 QUALITY ASSURANCE

A. Comply with requirements of NFPA 70.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Receive, inspect, handle, and store conductors and cables in accordance with manufacturer's instructions.

1.08 FIELD CONDITIONS

A. Do not install or otherwise handle thermoplastic-insulated conductors at temperatures lower than 14 degrees F (-10 degrees C), unless otherwise permitted by manufacturer's instructions. When installation below this temperature is unavoidable, notify Architect and obtain direction before proceeding with work.

PART 2 PRODUCTS

2.01 CONDUCTOR AND CABLE APPLICATIONS

- A. Do not use conductors and cables for applications other than as permitted by NFPA 70 and product listing.
- B. Provide single conductor building wire installed in suitable raceway unless otherwise indicated, permitted, or required.
- C. Nonmetallic-sheathed cable is not permitted.
- D. Underground feeder and branch-circuit cable is not permitted.



- E. Armored cable is not permitted.
- F. Metal-clad cable is not permitted.

2.02 CONDUCTOR AND CABLE GENERAL REQUIREMENTS

- A. Provide products that comply with requirements of NFPA 70.
- B. Provide products listed, classified, and labeled as suitable for the purpose intended.
- C. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, etc. as required for a complete operating system.
- D. Comply with NEMA WC 70.
- E. Thermoplastic-Insulated Conductors and Cables: Listed and labeled as complying with UL 83.
- F. Thermoset-Insulated Conductors and Cables: Listed and labeled as complying with UL 44.
- G. Conductors for Grounding and Bonding: Also comply with Section 260526.

H. Conductor Material:

- 1. Provide copper conductors only. Aluminum conductors are not acceptable for this project. Conductor sizes indicated are based on copper.
- 2. Copper Conductors: Soft drawn annealed, 98 percent conductivity, uncoated copper conductors complying with ASTM B3, ASTM B8, or ASTM B787/B787M unless otherwise indicated.
- 3. Tinned Copper Conductors: Comply with ASTM B33.

I. Minimum Conductor Size:

- 1. Branch Circuits: 12 AWG.
 - a. Exceptions:
 - 1) 20 A, 120 V circuits longer than 75 feet (23 m): 10 AWG, for voltage drop.
 - 2) 20 A, 120 V circuits longer than 150 feet (46 m): 8 AWG, for voltage drop.
- 2. Control Circuits: 14 AWG.

J. Conductor Color Coding:

- 1. Color code conductors as indicated unless otherwise required by the authority having jurisdiction. Maintain consistent color coding throughout project.
- 2. Color Coding Method: Integrally colored insulation.
 - a. Conductors size 4 AWG and larger may have black insulation color coded using vinyl color coding electrical tape.
- 3. Color Code:
 - a. 208Y/120 V, 3 Phase, 4 Wire System:
 - 1) Phase A: Black.
 - 2) Phase B: Red.
 - 3) Phase C: Blue.
 - 4) Neutral/Grounded: White.
 - b. Equipment Ground, All Systems: Green.

2.03 SINGLE CONDUCTOR BUILDING WIRE

A. Description: Single conductor insulated wire.



- B. Conductor Stranding:
 - 1. Feeders and Branch Circuits:
 - a. Size 10 AWG and Smaller: Solid.
 - b. Size 8 AWG and Larger: Stranded.
 - 2. Control Circuits: Stranded.
- C. Insulation Voltage Rating: 600 V.
- D. Insulation:
 - 1. Copper Building Wire: Type THHN/THWN or THHN/THWN-2, except as indicated below.
 - a. Size 4 AWG and Larger: Type XHHW-2.
 - b. Installed Underground: Type XHHW-2, THHN/THWN, or THHN/THWN-2.

2.04 WIRING CONNECTORS

- A. Description: Wiring connectors appropriate for the application, suitable for use with the conductors to be connected, and listed as complying with UL 486A-486B or UL 486C as applicable.
- B. Connectors for Grounding and Bonding: Comply with Section 260526.
- C. Wiring Connectors for Splices and Taps:
 - 1. Copper Conductors Size 8 AWG and Smaller: Use twist-on insulated spring connectors.
 - 2. Copper Conductors Size 6 AWG and Larger: Use mechanical connectors or compression connectors.
- D. Do not use insulation-piercing or insulation-displacement connectors designed for use with conductors without stripping insulation.
- E. Do not use push-in wire connectors as a substitute for twist-on insulated spring connectors.
- F. Twist-on Insulated Spring Connectors: Rated 600 V, 221 degrees F (105 degrees C) for standard applications and 302 degrees F (150 degrees C) for high temperature applications; pre-filled with sealant and listed as complying with UL 486D for damp and wet locations.
 - 1. Manufacturers:
 - a. 3M: www.3m.com/#sle.
 - b. Ideal Industries, Inc: www.idealindustries.com/#sle.
 - c. NSI Industries LLC: www.nsiindustries.com/#sle.
 - d. Substitutions: See Section 016000 Product Requirements.
- G. Mechanical Connectors: Provide bolted type or set-screw type.
- H. Compression Connectors: Provide circumferential type or hex type crimp configuration.

2.05 ACCESSORIES

A. Electrical Tape:

1. Vinyl Color Coding Electrical Tape: Integrally colored to match color code indicated; listed as complying with UL 510; minimum thickness of 7 mil (0.18 mm); resistant to abrasion, corrosion, and sunlight; suitable for continuous temperature environment up to 221 degrees F (105 degrees C).



- 2. Vinyl Insulating Electrical Tape: Complying with ASTM D3005 and listed as complying with UL 510; minimum thickness of 7 mil (0.18 mm); resistant to abrasion, corrosion, and sunlight; conformable for application down to 0 degrees F (-18 degrees C) and suitable for continuous temperature environment up to 221 degrees F (105 degrees C).
- 3. Rubber Splicing Electrical Tape: Ethylene Propylene Rubber (EPR) tape, complying with ASTM D4388; minimum thickness of 30 mil (0.76 mm); suitable for continuous temperature environment up to 194 degrees F (90 degrees C) and short-term 266 degrees F (130 degrees C) overload service.
- 4. Electrical Filler Tape: Rubber-based insulating moldable putty, minimum thickness of 125 mil (3.2 mm); suitable for continuous temperature environment up to 176 degrees F (80 degrees C).
- 5. Moisture Sealing Electrical Tape: Insulating mastic compound laminated to flexible, all-weather vinyl backing; minimum thickness of 90 mil (2.3 mm).
- B. Heat Shrink Tubing: Heavy-wall, split-resistant, with factory-applied adhesive; rated 600 V; suitable for direct burial applications; listed as complying with UL 486D.

C. Wire Pulling Lubricant:

- 1. Listed and labeled as complying with UL 267.
- 2. Suitable for use with conductors/cables and associated insulation/jackets to be installed.
- 3. Suitable for use at installation temperature.
- D. Cable Ties: Material and tensile strength rating suitable for application.

PART 3 EXECUTION

3.01 PREPARATION

A. Clean raceways thoroughly to remove foreign materials before installing conductors and cables.

3.02 INSTALLATION

A. Circuiting Requirements:

- 1. Unless dimensioned, circuit routing indicated is diagrammatic.
- 2. When circuit destination is indicated without specific routing, determine exact routing required.
- 3. Arrange circuiting to minimize splices.
- 4. Include circuit lengths required to install connected devices within 10 ft (3.0 m) of location indicated.
- 5. Maintain separation of Class 1, Class 2, and Class 3 remote-control, signaling, and power-limited circuits in accordance with NFPA 70.
- 6. Circuiting Adjustments: Unless otherwise indicated, when branch circuits are indicated as separate, combining them together in a single raceway is permitted, under the following conditions:
 - a. Provide no more than six current-carrying conductors in a single raceway. Dedicated neutral conductors are considered current-carrying conductors.
 - b. Increase size of conductors as required to account for ampacity derating.
 - c. Size raceways, boxes, etc. to accommodate conductors.
- B. Install products in accordance with manufacturer's instructions.



- C. Perform work in accordance with NECA 1 (general workmanship).
- D. Installation in Raceway:
 - 1. Tape ends of conductors and cables to prevent infiltration of moisture and other contaminants.
 - 2. Pull all conductors and cables together into raceway at same time.
 - 3. Do not damage conductors and cables or exceed manufacturer's recommended maximum pulling tension and sidewall pressure.
 - 4. Use suitable wire pulling lubricant where necessary, except when lubricant is not recommended by the manufacturer.
- E. Paralleled Conductors: Install conductors of the same length and terminate in the same manner.
- F. Secure and support conductors and cables in accordance with NFPA 70 using suitable supports and methods approved by the authority having jurisdiction. Provide independent support from building structure. Do not provide support from raceways, piping, ductwork, or other systems.
- G. Install conductors with a minimum of 12 inches (300 mm) of slack at each outlet.
- H. Neatly train and bundle conductors inside boxes, wireways, panelboards and other equipment enclosures.
- I. Group or otherwise identify neutral/grounded conductors with associated ungrounded conductors inside enclosures in accordance with NFPA 70.
- J. Make wiring connections using specified wiring connectors.
 - 1. Make splices and taps only in accessible boxes. Do not pull splices into raceways or make splices in conduit bodies or wiring gutters.
 - 2. Remove appropriate amount of conductor insulation for making connections without cutting, nicking or damaging conductors.
 - 3. Do not remove conductor strands to facilitate insertion into connector.
 - 4. Clean contact surfaces on conductors and connectors to suitable remove corrosion, oxides, and other contaminates. Do not use wire brush on plated connector surfaces.
 - 5. Mechanical Connectors: Secure connections according to manufacturer's recommended torque settings.
 - 6. Compression Connectors: Secure connections using manufacturer's recommended tools and dies.
- K. Insulate splices and taps that are made with uninsulated connectors using methods suitable for the application, with insulation and mechanical strength at least equivalent to unspliced conductors.
 - 1. Dry Locations: Use insulating covers specifically designed for the connectors, electrical tape, or heat shrink tubing.
 - a. For taped connections, first apply adequate amount of rubber splicing electrical tape or electrical filler tape, followed by outer covering of vinyl insulating electrical tape.
 - 2. Damp Locations: Use insulating covers specifically designed for the connectors, electrical tape, or heat shrink tubing.
 - a. For connections with insulating covers, apply outer covering of moisture sealing electrical tape.



- b. For taped connections, follow same procedure as for dry locations but apply outer covering of moisture sealing electrical tape.
- 3. Wet Locations: Use heat shrink tubing.
- L. Insulate ends of spare conductors using vinyl insulating electrical tape.
- M. Field-Applied Color Coding: Where vinyl color coding electrical tape is used in lieu of integrally colored insulation as permitted in Part 2 under "Color Coding", apply half overlapping turns of tape at each termination and at each location conductors are accessible.
- N. Install firestopping to preserve fire resistance rating of partitions and other elements, using materials and methods specified in Section 078400.
- O. Unless specifically indicated to be excluded, provide final connections to all equipment and devices, including those furnished by others, as required for a complete operating system.
- 3.03 FIELD QUALITY CONTROL
 - A. See Section 014000 Quality Requirements, for additional requirements.
 - B. Inspect and test in accordance with NETA ATS, except Section 4.
 - C. Perform inspections and tests listed in NETA ATS, Section 7.3.2. The insulation resistance test is required for all conductors. The resistance test for parallel conductors listed as optional is not required.
 - D. Correct deficiencies and replace damaged or defective conductors and cables.

END OF SECTION 260519



SECTION 260526 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Single conductor building wire.
- B. Wiring connectors.
- C. Electrical tape.
- D. Heat shrink tubing.
- E. Wire pulling lubricant.
- F. Cable ties.

1.02 RELATED REQUIREMENTS

- A. Section 078400 Firestopping.
- B. Section 260526 Grounding and Bonding for Electrical Systems: Additional requirements for grounding conductors and grounding connectors.

1.03 REFERENCE STANDARDS

- A. ASTM B3 Standard Specification for Soft or Annealed Copper Wire; 2013 (Reapproved 2018).
- B. ASTM B8 Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft; 2023.
- C. ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire for Electrical Purposes; 2010, with Editorial Revision (2020).
- D. ASTM B787/B787M Standard Specification for 19 Wire Combination Unilay-Stranded Copper Conductors for Subsequent Insulation; 2004 (Reapproved 2020).
- E. ASTM D3005 Standard Specification for Low-Temperature Resistant Vinyl Chloride Plastic Pressure-Sensitive Electrical Insulating Tape; 2017.
- F. ASTM D4388 Standard Specification for Nonmetallic Semi-Conducting and Electrically Insulating Rubber Tapes; 2020.
- G. NECA 1 Standard for Good Workmanship in Electrical Construction; 2023.
- H. NEMA WC 70 Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy; 2021.
- I. NETA ATS Standard For Acceptance Testing Specifications For Electrical Power Equipment And Systems; 2021.
- J. NFPA 70 National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- K. UL 44 Thermoset-Insulated Wires and Cables; Current Edition, Including All Revisions.
- L. UL 83 Thermoplastic-Insulated Wires and Cables; Current Edition, Including All Revisions.



- M. UL 267 Outline of Investigation for Wire-Pulling Compounds; Current Edition, Including All Revisions.
- N.UL 486A-486B Wire Connectors; Current Edition, Including All Revisions.
- O.UL 486C Splicing Wire Connectors; Current Edition, Including All Revisions.
- P. UL 486D Sealed Wire Connector Systems; Current Edition, Including All Revisions.
- Q.UL 510 Polyvinyl Chloride, Polyethylene, and Rubber Insulating Tape; Current Edition, Including All Revisions.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordination:

- 1. Coordinate sizes of raceways, boxes, and equipment enclosures installed under other sections with the actual conductors to be installed, including adjustments for conductor sizes increased for voltage drop.
- 2. Coordinate with electrical equipment installed under other sections to provide terminations suitable for use with the conductors to be installed.
- 3. Notify Architect of any conflicts with or deviations from Contract Documents. Obtain direction before proceeding with work.

1.05 SUBMITTALS

- A. See Section 013000 Administrative Requirements, for submittal procedures.
- B. Field Quality Control Test Reports.

1.06 QUALITY ASSURANCE

A. Comply with requirements of NFPA 70.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Receive, inspect, handle, and store conductors and cables in accordance with manufacturer's instructions.

1.08 FIELD CONDITIONS

A. Do not install or otherwise handle thermoplastic-insulated conductors at temperatures lower than 14 degrees F (-10 degrees C), unless otherwise permitted by manufacturer's instructions. When installation below this temperature is unavoidable, notify Architect and obtain direction before proceeding with work.

PART 2 PRODUCTS

2.01 CONDUCTOR AND CABLE APPLICATIONS

- A. Do not use conductors and cables for applications other than as permitted by NFPA 70 and product listing.
- B. Provide single conductor building wire installed in suitable raceway unless otherwise indicated, permitted, or required.
- C. Nonmetallic-sheathed cable is not permitted.
- D. Underground feeder and branch-circuit cable is not permitted.



- E. Armored cable is not permitted.
- F. Metal-clad cable is not permitted.

2.02 CONDUCTOR AND CABLE GENERAL REQUIREMENTS

- A. Provide products that comply with requirements of NFPA 70.
- B. Provide products listed, classified, and labeled as suitable for the purpose intended.
- C. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, etc. as required for a complete operating system.
- D. Comply with NEMA WC 70.
- E. Thermoplastic-Insulated Conductors and Cables: Listed and labeled as complying with UL 83.
- F. Thermoset-Insulated Conductors and Cables: Listed and labeled as complying with UL 44.
- G. Conductors for Grounding and Bonding: Also comply with Section 260526.

H. Conductor Material:

- 1. Provide copper conductors only. Aluminum conductors are not acceptable for this project. Conductor sizes indicated are based on copper.
- 2. Copper Conductors: Soft drawn annealed, 98 percent conductivity, uncoated copper conductors complying with ASTM B3, ASTM B8, or ASTM B787/B787M unless otherwise indicated.
- 3. Tinned Copper Conductors: Comply with ASTM B33.

I. Minimum Conductor Size:

- 1. Branch Circuits: 12 AWG.
 - a. Exceptions:
 - 1) 20 A, 120 V circuits longer than 75 feet (23 m): 10 AWG, for voltage drop.
 - 2) 20 A, 120 V circuits longer than 150 feet (46 m): 8 AWG, for voltage drop.
- 2. Control Circuits: 14 AWG.

J. Conductor Color Coding:

- 1. Color code conductors as indicated unless otherwise required by the authority having jurisdiction. Maintain consistent color coding throughout project.
- 2. Color Coding Method: Integrally colored insulation.
 - a. Conductors size 4 AWG and larger may have black insulation color coded using vinyl color coding electrical tape.
- 3. Color Code:
 - a. 208Y/120 V, 3 Phase, 4 Wire System:
 - 1) Phase A: Black.
 - 2) Phase B: Red.
 - 3) Phase C: Blue.
 - 4) Neutral/Grounded: White.
 - b. Equipment Ground, All Systems: Green.

2.03 SINGLE CONDUCTOR BUILDING WIRE

A. Description: Single conductor insulated wire.



- B. Conductor Stranding:
 - 1. Feeders and Branch Circuits:
 - a. Size 10 AWG and Smaller: Solid.
 - b. Size 8 AWG and Larger: Stranded.
 - 2. Control Circuits: Stranded.
- C. Insulation Voltage Rating: 600 V.
- D. Insulation:
 - 1. Copper Building Wire: Type THHN/THWN or THHN/THWN-2, except as indicated below.
 - a. Size 4 AWG and Larger: Type XHHW-2.
 - b. Installed Underground: Type XHHW-2, THHN/THWN, or THHN/THWN-2.

2.04 WIRING CONNECTORS

- A. Description: Wiring connectors appropriate for the application, suitable for use with the conductors to be connected, and listed as complying with UL 486A-486B or UL 486C as applicable.
- B. Connectors for Grounding and Bonding: Comply with Section 260526.
- C. Wiring Connectors for Splices and Taps:
 - 1. Copper Conductors Size 8 AWG and Smaller: Use twist-on insulated spring connectors.
 - 2. Copper Conductors Size 6 AWG and Larger: Use mechanical connectors or compression connectors.
- D. Do not use insulation-piercing or insulation-displacement connectors designed for use with conductors without stripping insulation.
- E. Do not use push-in wire connectors as a substitute for twist-on insulated spring connectors.
- F. Twist-on Insulated Spring Connectors: Rated 600 V, 221 degrees F (105 degrees C) for standard applications and 302 degrees F (150 degrees C) for high temperature applications; pre-filled with sealant and listed as complying with UL 486D for damp and wet locations.
 - 1. Manufacturers:
 - a. 3M: www.3m.com/#sle.
 - b. Ideal Industries, Inc: www.idealindustries.com/#sle.
 - c. NSI Industries LLC: www.nsiindustries.com/#sle.
 - d. Substitutions: See Section 016000 Product Requirements.
- G. Mechanical Connectors: Provide bolted type or set-screw type.
- H. Compression Connectors: Provide circumferential type or hex type crimp configuration.

2.05 ACCESSORIES

A. Electrical Tape:

1. Vinyl Color Coding Electrical Tape: Integrally colored to match color code indicated; listed as complying with UL 510; minimum thickness of 7 mil (0.18 mm); resistant to abrasion, corrosion, and sunlight; suitable for continuous temperature environment up to 221 degrees F (105 degrees C).



- 2. Vinyl Insulating Electrical Tape: Complying with ASTM D3005 and listed as complying with UL 510; minimum thickness of 7 mil (0.18 mm); resistant to abrasion, corrosion, and sunlight; conformable for application down to 0 degrees F (-18 degrees C) and suitable for continuous temperature environment up to 221 degrees F (105 degrees C).
- 3. Rubber Splicing Electrical Tape: Ethylene Propylene Rubber (EPR) tape, complying with ASTM D4388; minimum thickness of 30 mil (0.76 mm); suitable for continuous temperature environment up to 194 degrees F (90 degrees C) and short-term 266 degrees F (130 degrees C) overload service.
- 4. Electrical Filler Tape: Rubber-based insulating moldable putty, minimum thickness of 125 mil (3.2 mm); suitable for continuous temperature environment up to 176 degrees F (80 degrees C).
- 5. Moisture Sealing Electrical Tape: Insulating mastic compound laminated to flexible, all-weather vinyl backing; minimum thickness of 90 mil (2.3 mm).
- B. Heat Shrink Tubing: Heavy-wall, split-resistant, with factory-applied adhesive; rated 600 V; suitable for direct burial applications; listed as complying with UL 486D.

C. Wire Pulling Lubricant:

- 1. Listed and labeled as complying with UL 267.
- 2. Suitable for use with conductors/cables and associated insulation/jackets to be installed.
- 3. Suitable for use at installation temperature.
- D. Cable Ties: Material and tensile strength rating suitable for application.

PART 3 EXECUTION

3.01 PREPARATION

A. Clean raceways thoroughly to remove foreign materials before installing conductors and cables.

3.02 INSTALLATION

A. Circuiting Requirements:

- 1. Unless dimensioned, circuit routing indicated is diagrammatic.
- 2. When circuit destination is indicated without specific routing, determine exact routing required.
- 3. Arrange circuiting to minimize splices.
- 4. Include circuit lengths required to install connected devices within 10 ft (3.0 m) of location indicated.
- 5. Maintain separation of Class 1, Class 2, and Class 3 remote-control, signaling, and power-limited circuits in accordance with NFPA 70.
- 6. Circuiting Adjustments: Unless otherwise indicated, when branch circuits are indicated as separate, combining them together in a single raceway is permitted, under the following conditions:
 - a. Provide no more than six current-carrying conductors in a single raceway. Dedicated neutral conductors are considered current-carrying conductors.
 - b. Increase size of conductors as required to account for ampacity derating.
 - c. Size raceways, boxes, etc. to accommodate conductors.
- B. Install products in accordance with manufacturer's instructions.



- C. Perform work in accordance with NECA 1 (general workmanship).
- D. Installation in Raceway:
 - 1. Tape ends of conductors and cables to prevent infiltration of moisture and other contaminants.
 - 2. Pull all conductors and cables together into raceway at same time.
 - 3. Do not damage conductors and cables or exceed manufacturer's recommended maximum pulling tension and sidewall pressure.
 - 4. Use suitable wire pulling lubricant where necessary, except when lubricant is not recommended by the manufacturer.
- E. Paralleled Conductors: Install conductors of the same length and terminate in the same manner.
- F. Secure and support conductors and cables in accordance with NFPA 70 using suitable supports and methods approved by the authority having jurisdiction. Provide independent support from building structure. Do not provide support from raceways, piping, ductwork, or other systems.
- G. Install conductors with a minimum of 12 inches (300 mm) of slack at each outlet.
- H. Neatly train and bundle conductors inside boxes, wireways, panelboards and other equipment enclosures.
- I. Group or otherwise identify neutral/grounded conductors with associated ungrounded conductors inside enclosures in accordance with NFPA 70.
- J. Make wiring connections using specified wiring connectors.
 - 1. Make splices and taps only in accessible boxes. Do not pull splices into raceways or make splices in conduit bodies or wiring gutters.
 - 2. Remove appropriate amount of conductor insulation for making connections without cutting, nicking or damaging conductors.
 - 3. Do not remove conductor strands to facilitate insertion into connector.
 - 4. Clean contact surfaces on conductors and connectors to suitable remove corrosion, oxides, and other contaminates. Do not use wire brush on plated connector surfaces.
 - 5. Mechanical Connectors: Secure connections according to manufacturer's recommended torque settings.
 - 6. Compression Connectors: Secure connections using manufacturer's recommended tools and dies.
- K. Insulate splices and taps that are made with uninsulated connectors using methods suitable for the application, with insulation and mechanical strength at least equivalent to unspliced conductors.
 - 1. Dry Locations: Use insulating covers specifically designed for the connectors, electrical tape, or heat shrink tubing.
 - a. For taped connections, first apply adequate amount of rubber splicing electrical tape or electrical filler tape, followed by outer covering of vinyl insulating electrical tape.
 - 2. Damp Locations: Use insulating covers specifically designed for the connectors, electrical tape, or heat shrink tubing.
 - a. For connections with insulating covers, apply outer covering of moisture sealing electrical tape.



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- b. For taped connections, follow same procedure as for dry locations but apply outer covering of moisture sealing electrical tape.
- 3. Wet Locations: Use heat shrink tubing.
- L. Insulate ends of spare conductors using vinyl insulating electrical tape.
- M. Field-Applied Color Coding: Where vinyl color coding electrical tape is used in lieu of integrally colored insulation as permitted in Part 2 under "Color Coding", apply half overlapping turns of tape at each termination and at each location conductors are accessible.
- N. Install firestopping to preserve fire resistance rating of partitions and other elements, using materials and methods specified in Section 078400.
- O. Unless specifically indicated to be excluded, provide final connections to all equipment and devices, including those furnished by others, as required for a complete operating system.
- 3.03 FIELD QUALITY CONTROL
 - A. See Section 014000 Quality Requirements, for additional requirements.
 - B. Inspect and test in accordance with NETA ATS, except Section 4.
 - C. Perform inspections and tests listed in NETA ATS, Section 7.3.2. The insulation resistance test is required for all conductors. The resistance test for parallel conductors listed as optional is not required.
 - D. Correct deficiencies and replace damaged or defective conductors and cables.

END OF SECTION 260526



SECTION 260529 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 RELATED REQUIREMENTS

- A. Section 260519 Low-Voltage Electrical Power Conductors and Cables: Additional requirements for conductors for grounding and bonding, including conductor color coding.
- B. Section 260553 Identification for Electrical Systems: Identification products and requirements.

1.02 REFERENCE STANDARDS

- A. NECA 1 Standard for Good Workmanship in Electrical Construction; 2023.
- B. NEMA GR 1 Grounding Rod Electrodes and Grounding Rod Electrode Couplings; 2022.
- C. NFPA 70 National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- D. UL 467 Grounding and Bonding Equipment; Current Edition, Including All Revisions.

1.03 QUALITY ASSURANCE

A. Comply with requirements of NFPA 70.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Receive, inspect, handle, and store products in accordance with manufacturer's instructions.

PART 2 PRODUCTS

2.01 GROUNDING AND BONDING REQUIREMENTS

- A. Existing Work: Where existing grounding and bonding system components are indicated to be reused, they may be reused only where they are free from corrosion, integrity and continuity are verified, and where acceptable to the authority having jurisdiction.
- B. Do not use products for applications other than as permitted by NFPA 70 and product listing.
- C. Unless specifically indicated to be excluded, provide all required components, conductors, connectors, conduit, boxes, fittings, supports, accessories, etc. as necessary for a complete grounding and bonding system.
- D. Where conductor size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.

E. Grounding Electrode System:

- 1. Provide connection to required and supplemental grounding electrodes indicated to form grounding electrode system.
 - a. Provide continuous grounding electrode conductors without splice or joint.
 - b. Install grounding electrode conductors in raceway where exposed to physical damage. Bond grounding electrode conductor to metallic raceways at each end with bonding jumper.
- 2. Ground Rod Electrode(s):



- a. Provide single electrode unless otherwise indicated or required.
- b. Space electrodes not less than 10 feet (3.0 m) from each other and any other ground electrode.

F. Bonding and Equipment Grounding:

- 1. Provide bonding for equipment grounding conductors, equipment ground busses, metallic equipment enclosures, metallic raceways and boxes, device grounding terminals, and other normally non-current-carrying conductive materials enclosing electrical conductors/equipment or likely to become energized as indicated and in accordance with NFPA 70.
- 2. Provide insulated equipment grounding conductor in each feeder and branch circuit raceway. Do not use raceways as sole equipment grounding conductor.
- 3. Where circuit conductor sizes are increased for voltage drop, increase size of equipment grounding conductor proportionally in accordance with NFPA 70.
- 4. Unless otherwise indicated, connect wiring device grounding terminal to branch circuit equipment grounding conductor and to outlet box with bonding jumper.
- 5. Terminate branch circuit equipment grounding conductors on solidly bonded equipment ground bus only. Do not terminate on neutral (grounded) or isolated/insulated ground bus.
- 6. Provide bonding jumper across expansion or expansion/deflection fittings provided to accommodate conduit movement.

2.02 GROUNDING AND BONDING COMPONENTS

A. General Requirements:

- 1. Provide products listed, classified, and labeled as suitable for the purpose intended.
- 2. Provide products listed and labeled as complying with UL 467 where applicable.
- B. Conductors for Grounding and Bonding, in Addition to Requirements of Section 260526:
 - 1. Use insulated copper conductors unless otherwise indicated.
 - a. Exceptions:
 - 1) Use bare copper conductors where installed underground in direct contact with earth.
 - 2) Use bare copper conductors where directly encased in concrete (not in raceway).

C. Connectors for Grounding and Bonding:

- 1. Description: Connectors appropriate for the application and suitable for the conductors and items to be connected; listed and labeled as complying with UL 467.
- 2. Unless otherwise indicated, use exothermic welded connections for underground, concealed and other inaccessible connections.
- 3. Unless otherwise indicated, use mechanical connectors, compression connectors, or exothermic welded connections for accessible connections.

D. Ground Rod Electrodes:

- 1. Comply with NEMA GR 1.
- 2. Material: Copper-bonded (copper-clad) steel.
- 3. Size: 3/4 inch (19 mm) diameter by 10 feet (3.0 m) length, unless otherwise indicated.



SECTION 260529 HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Perform work in accordance with NECA 1 (general workmanship).
- C. Ground Rod Electrodes: Unless otherwise indicated, install ground rod electrodes vertically. Where encountered rock prohibits vertical installation, install at 45 degree angle or bury horizontally in trench at least 30 inches (750 mm) deep in accordance with NFPA 70 or provide ground plates.
 - 1. Outdoor Installations: Unless otherwise indicated, install with top of rod 6 inches (150 mm) below finished grade.
- D. Make grounding and bonding connections using specified connectors.
 - 1. Remove appropriate amount of conductor insulation for making connections without cutting, nicking or damaging conductors. Do not remove conductor strands to facilitate insertion into connector.
 - 2. Remove nonconductive paint, enamel, or similar coating at threads, contact points, and contact surfaces.
 - 3. Exothermic Welds: Make connections using molds and weld material suitable for the items to be connected in accordance with manufacturer's recommendations.
 - 4. Mechanical Connectors: Secure connections according to manufacturer's recommended torque settings.
 - 5. Compression Connectors: Secure connections using manufacturer's recommended tools and dies.
- E. Identify grounding and bonding system components in accordance with Section 260553.

END OF SECTION 260529



SECTION 260533.13 CONDUIT FOR ELECTRICAL SYSTEMS

SECTION 260533.13 - CONDUIT FOR ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Galvanized steel rigid metal conduit (RMC).
- B. Stainless steel rigid metal conduit (RMC).
- C. PVC-coated galvanized steel rigid metal conduit (RMC).
- D. Galvanized steel electrical metallic tubing (EMT).
- E. Stainless steel electrical metallic tubing (EMT).
- F. Rigid polyvinyl chloride (PVC) conduit.

1.02 RELATED REQUIREMENTS

- A. Section 078400 Firestopping.
- B. Section 260526 Grounding and Bonding for Electrical Systems.
- C. Section 260529 Hangers and Supports for Electrical Systems.

1.03 REFERENCE STANDARDS

- A. ANSI C80.1 American National Standard for Electrical Rigid Steel Conduit (ERSC); 2020.
- B. ANSI C80.3 American National Standard for Electrical Metallic Tubing -- Steel (EMT-S); 2020.
- C. NECA 1 Standard for Good Workmanship in Electrical Construction; 2023.
- D. NECA 101 Standard for Installing Steel Conduits (Rigid, IMC, EMT); 2020.
- E. NECA 111 Standard for Installing Nonmetallic Raceways (RNC, ENT, LFNC); 2017.
- F. NEMA FB 1 Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit, Electrical Metallic Tubing, and Cable; 2014.
- G. NEMA RN 1 Polyvinyl-Chloride (PVC) Externally Coated Galvanized Rigid Steel Metal Conduit and Intermediate Metal Conduit; 2018.
- H. NEMA TC 2 Electrical Polyvinyl Chloride (PVC) Conduit; 2020.
- NEMA TC 3 Polyvinyl Chloride (PVC) Fittings for Use with Rigid PVC Conduit and Tubing; 2021.
- J. NFPA 70 National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- K. UL 6 Electrical Rigid Metal Conduit-Steel; Current Edition, Including All Revisions.
- L. UL 6A Electrical Rigid Metal Conduit-Aluminum, Red Brass, and Stainless Steel; Current Edition, Including All Revisions.
- M. UL 514A Metallic Outlet Boxes; Current Edition, Including All Revisions.



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- N. UL 514B Conduit, Tubing, and Cable Fittings; Current Edition, Including All Revisions.
- O. UL 651 Schedule 40, 80, Type EB and A Rigid PVC Conduit and Fittings; Current Edition, Including All Revisions.
- P. UL 797 Electrical Metallic Tubing-Steel; Current Edition, Including All Revisions.
- Q. UL 797A Electrical Metallic Tubing Aluminum and Stainless Steel; Current Edition, Including All Revisions.
- R. UL 2419 Outline of Investigation for Electrically Conductive Corrosion Resistant Compounds; Current Edition, Including All Revisions.

1.04 SUBMITTALS

- A. See Section 013000 Administrative Requirements for submittals procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets for conduits and fittings.

1.05 QUALITY ASSURANCE

A. Product Listing Organization Qualifications: Organization recognized by OSHA as Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Receive, inspect, handle, and store conduit and fittings in accordance with manufacturer's instructions.

PART 2 PRODUCTS

2.01 CONDUIT APPLICATIONS

- A. Do not use conduit and associated fittings for applications other than as permitted by NFPA 70, manufacturer's instructions, and product listing.
- B. Unless otherwise indicated and where not otherwise restricted, use conduit types indicated for specified applications. Where more than one listed application applies, comply with most restrictive requirements. Where conduit type for particular application is not specified, use galvanized steel rigid metal conduit.

C. Underground:

- 1. Under Slab on Grade: Use PVC-coated galvanized steel rigid metal conduit (RMC) or rigid PVC conduit.
- 2. Exterior, Direct-Buried: Use PVC-coated galvanized steel rigid metal conduit or rigid PVC conduit.
- 3. Exterior, Embedded Within Concrete: Use PVC-coated galvanized steel rigid metal conduit (RMC) or rigid PVC conduit.
- 4. Where rigid polyvinyl chloride (PVC) conduit is provided, transition to galvanized steel rigid metal conduit (RMC) or stainless steel rigid metal conduit (RMC) where emerging from underground.
- D. Interior, Damp or Wet Locations: Use galvanized steel rigid metal conduit (RMC) or stainless steel rigid metal conduit (RMC).



- E. Exposed, Interior, Not Subject to Physical Damage: Use galvanized steel rigid metal conduit (RMC), stainless steel rigid metal conduit (RMC), galvanized steel electrical metallic tubing (EMT), or stainless steel electrical metallic tubing (EMT).
- F. Exposed, Interior, Subject to Physical Damage: Use galvanized steel rigid metal conduit (RMC) or stainless steel rigid metal conduit (RMC).
- G. Exposed, Exterior, Not Subject to Severe Physical Damage: Use galvanized steel rigid metal conduit (RMC) or stainless steel rigid metal conduit (RMC).
- H. Exposed, Exterior, Subject to Severe Physical Damage: Use galvanized steel rigid metal conduit (RMC), stainless steel rigid metal conduit (RMC), or galvanized steel intermediate metal conduit (IMC).
- I. Corrosive Locations Above Ground: Use stainless steel rigid metal conduit (RMC) or PVC-coated galvanized steel rigid metal conduit (RMC).
 - 1. Corrosive locations include, but are not limited to:
 - a. Marine environments.

2.02 CONDUIT - GENERAL REQUIREMENTS

- A. Comply with NFPA 70.
- B. Existing Work: Where existing conduits are indicated to be reused, they may be reused only where they comply with specified requirements, are free from corrosion, and integrity is verified by pulling mandrel through them.
- C. Provide conduit, fittings, supports, and accessories required for complete raceway system.
- D. Provide products listed, classified, and labeled as suitable for purpose intended.
- E. Where conduit size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.

2.03 GALVANIZED STEEL RIGID METAL CONDUIT (RMC)

A. Description: NFPA 70, Type RMC galvanized steel rigid metal conduit complying with ANSI C80.1 and listed and labeled as complying with UL 6.

B. Fittings:

- 1. Nonhazardous Locations: Use fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B or UL 6.
- 2. Material: Use steel or malleable iron.
- 3. Connectors and Couplings: Use threaded type fittings only. Threadless fittings, including set screw and compression/gland types, are not permitted.

2.04 STAINLESS STEEL RIGID METAL CONDUIT (RMC)

A. Description: NFPA 70, Type RMC stainless steel rigid metal conduit complying with ANSI C80.1 and listed and labeled as complying with UL 6A.

B. Fittings:

- 1. Nonhazardous Locations: Use fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B or UL 6A.
- 2. Material: Use stainless steel with corrosion resistance equivalent to conduit.



SECTION 260533.13 CONDUIT FOR ELECTRICAL SYSTEMS

3. Connectors and Couplings: Use threaded type fittings only. Threadless fittings, including set screw and compression/gland types, are not permitted.

2.05 PVC-COATED GALVANIZED STEEL RIGID METAL CONDUIT (RMC)

A. Manufacturers:

- 1. ABB; Ocal: www.electrification.us.abb.com/#sle.
- 2. Calbond, a division of Atkore International www.calbond.com/#sle
- 3. Robroy Industries: www.robroy.com/#sle.
- B. Description: NFPA 70, Type RMC galvanized steel rigid metal conduit with external polyvinyl chloride (PVC) coating complying with NEMA RN 1 and listed and labeled as complying with UL 6.
- C. Exterior Coating: Polyvinyl chloride (PVC), nominal thickness of 40 mil, 0.040 inch (1.02 mm).

D. PVC-Coated Boxes and Fittings:

- 1. Manufacturer: Same as manufacturer of PVC-coated conduit to be installed.
- 2. Nonhazardous Locations: Use boxes and fittings listed and labeled as complying with UL 514A, UL 514B, or UL 6.
- 3. Material: Use steel or malleable iron.
- 4. Exterior Coating: Polyvinyl chloride (PVC), minimum thickness of 40 mil, 0.040 inch (1.02 mm).
- E. PVC-Coated Supports: Furnish with exterior coating of polyvinyl chloride (PVC), minimum thickness of 15 mil, 0.015 inch (0.38 mm).

2.06 GALVANIZED STEEL ELECTRICAL METALLIC TUBING (EMT)

A. Description: NFPA 70, Type EMT galvanized steel electrical metallic tubing complying with ANSI C80.3 and listed and labeled as complying with UL 797.

B. Fittings:

- 1. Description: Fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
- 2. Material: Use steel or malleable iron.
 - a. Do not use die cast zinc fittings.
- 3. Connectors and Couplings: Use compression/gland or set-screw type.
 - a. Do not use indenter type connectors and couplings.

2.07 STAINLESS STEEL ELECTRICAL METALLIC TUBING (EMT)

- A. Description: NFPA 70, Type EMT stainless steel electrical metallic tubing complying with ANSI C80.3 and listed and labeled as complying with UL 797A.
 - 1. Material: Type 304 or 316 stainless steel.

B. Fittings:

- 1. Description: Fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
- 2. Connectors and Couplings: Use compression/gland or set-screw type.
- 3. Damp or Wet Locations, Where Permitted: Use fittings listed for use in wet locations.



SECTION 260533.13 CONDUIT FOR ELECTRICAL SYSTEMS

2.08 RIGID POLYVINYL CHLORIDE (PVC) CONDUIT

A. Description: NFPA 70, Type PVC rigid polyvinyl chloride conduit complying with NEMA TC 2 and listed and labeled as complying with UL 651; Schedule 40 unless otherwise indicated, Schedule 80 where subject to physical damage; rated for use with conductors rated 90 degrees C.

B. Fittings:

- 1. Manufacturer: Same as manufacturer of conduit to be connected.
- 2. Description: Fittings complying with NEMA TC 3 and listed and labeled as complying with UL 651; material to match conduit.

2.09 ACCESSORIES

- A. Conduit Joint Compound: Corrosion-resistant, electrically conductive compound listed as complying with UL 2419; suitable for use with conduit to be installed.
- B. Solvent Cement for PVC Conduit and Fittings: As recommended by manufacturer of conduit and fittings to be installed.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that mounting surfaces are ready to receive conduits.
- C. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Install conduit in accordance with NECA 1.
- C. Galvanized Steel Rigid Metal Conduit (RMC): Install in accordance with NECA 101.
- D. PVC-Coated Galvanized Steel Rigid Metal Conduit (RMC): Install using only tools approved by manufacturer.
- E. Rigid Polyvinyl Chloride (PVC) Conduit: Install in accordance with NECA 111.

F. Conduit Routing:

- 1. Unless dimensioned, conduit routing indicated is diagrammatic.
- 2. When conduit destination is indicated without specific routing, determine exact routing required.
- 3. Conceal conduits unless specifically indicated to be exposed.
- 4. Conduits in the following areas may be exposed, unless otherwise indicated:
 - a. Electrical rooms.
 - b. Within joists in areas with no ceiling.
- 5. Conduits installed underground or embedded in concrete may be routed in shortest possible manner unless otherwise indicated. Route other conduits parallel or perpendicular to building structure and surfaces, following surface contours where practical.
- 6. Arrange conduit to maintain adequate headroom, clearances, and access.



SECTION 260533.13 CONDUIT FOR ELECTRICAL SYSTEMS

- 7. Arrange conduit to provide no more than equivalent of four 90-degree bends between pull points.
- 8. Arrange conduit to provide no more than 150 feet (46 m) between pull points.
- 9. Route conduits above water and drain piping where possible.
- 10. Arrange conduit to prevent moisture traps. Provide drain fittings at low points and at sealing fittings where moisture may collect.
- 11. Maintain minimum clearance of 6 inches (150 mm) between conduits and piping for other systems.
- 12. Maintain minimum clearance of 12 inches (300 mm) between conduits and hot surfaces. This includes, but is not limited to:

G. Conduit Support:

- 1. Secure and support conduits in accordance with NFPA 70 using suitable supports and methods approved by authorities having jurisdiction; see Section 260529.
- 2. Provide independent support from building structure. Do not provide support from piping, ductwork, or other systems.
- 3. Use metal channel/strut with accessory conduit clamps to support multiple parallel surface-mounted conduits.

H. Connections and Terminations:

- 1. Use approved zinc-rich paint or conduit joint compound on field-cut threads of galvanized steel conduits prior to making connections.
- 2. Where two threaded conduits must be joined and neither can be rotated, use three-piece couplings or split couplings. Do not use running threads.
- 3. Use suitable adapters where required to transition from one type of conduit to another.
- 4. Terminate threaded conduits in boxes and enclosures using threaded hubs or double lock nuts for dry locations and raintight hubs for wet locations.
- 5. Provide insulating bushings, insulated throats, or listed metal fittings with smooth, rounded edges at conduit terminations to protect conductors.
- 6. Secure joints and connections to provide mechanical strength and electrical continuity.

I. Penetrations:

- 1. Do not penetrate or otherwise notch or cut structural members, including footings and grade beams, without approval of Structural Engineer.
- 2. Make penetrations perpendicular to surfaces unless otherwise indicated.
- 3. Provide sleeves for penetrations as indicated or as required to facilitate installation. Set sleeves flush with exposed surfaces unless otherwise indicated or required.
- 4. Conceal bends for conduit risers emerging above ground.
- 5. Where conduits penetrate waterproof membrane, seal as required to maintain integrity of membrane.
- 6. Make penetrations for roof-mounted equipment within associated equipment openings and curbs where possible to minimize roofing system penetrations. Where penetrations are necessary, seal as indicated or as required to preserve integrity of roofing system and maintain roof warranty.



- 7. Install firestopping to preserve fire resistance rating of partitions and other elements; see Section 078400.
- J. Conduit Movement Provisions: Where conduits are subject to movement, provide expansion and expansion/deflection fittings to prevent damage to enclosed conductors or connected equipment. This includes, but is not limited to:
 - 1. Where conduits cross structural joints intended for expansion, contraction, or deflection.
 - 2. Where calculated in accordance with NFPA 70 for rigid polyvinyl chloride (PVC) conduit installed above ground to compensate for thermal expansion and contraction.
 - 3. Where conduits are subject to earth movement by settlement or frost.

K. Conduit Sealing:

- 1. Use foam conduit sealant to prevent entry of moisture and gases. This includes, but is not limited to:
 - a. Where conduits enter building from outside.
 - b. Where service conduits enter building from underground distribution system.
 - c. Where conduits enter building from underground.
 - d. Where conduits may transport moisture to contact live parts.
- 2. Where conduits cross barriers between areas of potential substantial temperature differential, use foam conduit sealant at accessible point near penetration to prevent condensation. This includes, but is not limited to:
 - a. Where conduits pass from outdoors into conditioned interior spaces.
 - b. Where conduits pass from unconditioned interior spaces into conditioned interior spaces.
- L. Provide grounding and bonding; see Section 260526.

3.03 FIELD QUALITY CONTROL

- A. See Section 014000 Quality Requirements for additional requirements.
- B. Repair cuts and abrasions in galvanized finishes using zinc-rich paint recommended by manufacturer. Replace components that exhibit signs of corrosion.
- C. Where coating of PVC-coated galvanized steel rigid metal conduit (RMC) contains cuts or abrasions, repair in accordance with manufacturer's instructions.
- D. Correct deficiencies and replace damaged or defective conduits.

3.04 CLEANING

A. Clean interior of conduits to remove moisture and foreign matter.

3.05 PROTECTION

A. Immediately after installation of conduit, use suitable manufactured plugs to provide protection from entry of moisture and foreign material and do not remove until ready for installation of conductors.

END OF SECTION 260533.13



SECTION 265600 - EXTERIOR LIGHTING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Exterior luminaires.

1.02 RELATED REQUIREMENTS

- A. Section 260529 Hangers and Supports for Electrical Systems.
- B. Section 260533.16 Boxes for Electrical Systems.

1.03 REFERENCE STANDARDS

- A. ANSI O5.1 American National Standard for Wood Poles: Specifications and Dimensions; 2022.
- B. NECA 1 Standard for Good Workmanship in Electrical Construction; 2023.
- C. NECA/IESNA 501 Standard for Installing Exterior Lighting Systems; 2000 (Reaffirmed 2006).
- D. NFPA 70 National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- E. UL 1598 Luminaires; Current Edition, Including All Revisions.

1.04 SUBMITTALS

A. See Section 013000 - Administrative Requirements, for submittal procedures.

1.05 QUALITY ASSURANCE

A. Comply with requirements of NFPA 70.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Receive, handle, and store products according to NECA/IESNA 501 and manufacturer's written instructions.
- B. Keep products in original manufacturer's packaging and protect from damage until ready for installation.
- C. Receive, handle, and store wood poles in accordance with ANSI O5.1.

1.07 WARRANTY

- A. See Section 017800 Closeout Submittals, for additional warranty requirements.
- B. Provide 2-year manufacturer warranty for all LED luminaires, including drivers.

PART 2 PRODUCTS

2.01 LUMINAIRE TYPES

A. Furnish products as indicated in luminaire schedule included on the drawings.

2.02 LUMINAIRES

- A. Provide products that comply with requirements of NFPA 70.
- B. Provide products that are listed and labeled as complying with UL 1598, where applicable.



- C. Provide products listed, classified, and labeled as suitable for the purpose intended.
- D. Unless otherwise indicated, provide complete luminaires including lamp(s) and all sockets, ballasts, reflectors, lenses, housings and other components required to position, energize and protect the lamp and distribute the light.
- E. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, hardware, poles, foundations, supports, trims, accessories, etc. as necessary for a complete operating system.
- F. Provide products suitable to withstand normal handling, installation, and service without any damage, distortion, corrosion, fading, discoloring, etc.
- G. Provide luminaires listed and labeled as suitable for wet locations unless otherwise indicated.

PART 3 EXECUTION

3.01 PREPARATION

- A. Provide extension rings to bring outlet boxes flush with finished surface.
- B. Clean dirt, debris, plaster, and other foreign materials from outlet boxes.

3.02 INSTALLATION

- A. Coordinate locations of outlet boxes provided under Section 260533.16 as required for installation of luminaires provided under this section.
- B. Perform work in accordance with NECA 1 (general workmanship).
- C. Install products in accordance with manufacturer's instructions.
- D. Install luminaires in accordance with NECA/IESNA 501.
- E. Provide required support and attachment in accordance with Section 260529.
- F. Install luminaires plumb and square and aligned with building lines and with adjacent luminaires.
- G. Recessed Luminaires:
 - 1. Install trims tight to mounting surface with no visible light leakage.
- H. Install accessories furnished with each luminaire.
- I. Bond products and metal accessories to branch circuit equipment grounding conductor.
- J. Install lamps in each luminaire.

3.03 FIELD QUALITY CONTROL

- A. See Section 014000 Quality Requirements, for additional requirements.
- B. Inspect each product for damage and defects.
- C. Operate each luminaire after installation and connection to verify proper operation.
- D. Correct wiring deficiencies and repair or replace damaged or defective products. Repair or replace excessively noisy ballasts as determined by Architect.



SECTION 265600 EXTERIOR LIGHTING

3.04 CLEANING

A. Clean surfaces according to NECA/IESNA 501 and manufacturer's instructions to remove dirt, fingerprints, paint, or other foreign material and restore finishes to match original factory finish.

END OF SECTION 265600

Providence Parks Department AMPHITHEATER STAGE IMPROVEMENTS AT WATERPLACE PARK

APPENDIX A CRMC MAINTENANCE CERTIFICATION



State of Rhode Island Coastal Resources Management Council Oliver H. Stedman Government Center 4808 Tower Hill Road, Suite 116 Wakefield, RI 02879-1900

(401) 783-3370 Fax (401) 783-2069

September 20, 2024

City of Providence 25 Dorrance Street Providence, RI 02903

RE: CRMC Maintenance Certification M2024-06-058 - The project area includes the stage and surrounding areas at the base of the amphitheater at Waterplace Park in Providence. Maintenance work includes the in-kind replacement of the amphitheater stage. Minor modifications proposed include the addition of an ADA accessible ramp and slight alterations to the stage dimensions to accommodate the ramp. The replacement stage will also be made of wood; however it will have a slightly different footprint.

Site Location: 12 Memorial Boulevard, Providence; Plat(s): 19; Lot(s): 131

Dear Mr./Mrs.:

A site inspection and review of plans submitted to this office for the above cited project indicates it is in conformance with and will have no adverse effect on the plan and program adopted by the Coastal Resources Management Council.

The Coastal Resources Management Council will interpose no objection to the work proposed, as long as all work is done in accordance with plans/and or notice submitted into this office and provided the following stipulations are adhered to.

ADDITIONAL STIPULATIONS

General Stipulations

- A. For the purpose of this permit, the coastal feature shall be the manmade shoreline (concrete and masonry seawall); and the inland edge of the coastal feature shall be inland edge of the manmade shoreline (concrete and masonry seawall).
- B. The approved plan shall be those entitled "Waterplace Park, Amphitheater Stage Project..." dated Feb. 2024, sheets 1-5, by Pare Engineering. Except as stipulated or modified herein, all details and specifications thereon shall be strictly adhered to. Any and all changes require written approval from this office.
- C. Prior to commencement of site alterations, you shall post the CRMC assent card. This assent card must be maintained at the site in a conspicuous location until such time that the project is complete.

City of Providence CRMC Assent M2024-06-058 September 20, 2024 Page Two

Earthwork Stipulations

- A. Prior to conducting earthwork and other land disturbing activities, erosion, runoff, and sediment control measures shall be installed and maintained in accordance with good engineering practices including the applicable details found in the manufacturer's specifications and/or in the Rhode Island Soil Erosion and Sediment Control Handbook (as amended). These measures must be maintained until the site is stabilized through the establishment of vegetative cover and/or construction of the approved facilities (buildings, roadways, parking areas, etc.) has stabilized soils sufficiently to prevent erosion and sedimentation.
- B. There shall be no discharge or disposal of toxic waste, hazardous materials, oil, grease and other lubricants, excess fertilizer, pesticides or other chemicals or controlled materials either on site or in any area which may enter a wetland, watercourse, or groundwater. All spills of such materials shall be reported to the RI Department of Environmental Management for appropriate remediation. All used lubricants, excess chemicals, fertilizers, pesticides, etc., shall be removed from the site for transport, handling and disposal in accordance with all applicable state and federal regulations.

Building Stipulations

- A. The approved plans have been reviewed on a limited basis (to determine whether or not they violate any standards or policies of the Red Book, and they assure that they do not conflict with approved site plans). As per the latest amendment to Red Book Section 1.3.1(C), specific structural review in terms of building code/flood zone construction standards compliance is not performed by this office. Any and all significant changes to the building plans (size, height, type of foundation, decks, adjacent grading, drains, etc.) requires written approval from this office. For any questions on the level of change requiring review, contact CRMC field staff.
- B. All pertinent requirements of the RI State Building Code as administered by the local building official shall be strictly adhered to.

A copy of this certification to perform maintenance work shall be kept on site during construction. All conditions of original CRMC assents that pertain to this property will he adhered to unless otherwise modified by the CRMC.

Applicant agrees that as a condition to the granting of this certification, members of the Coastal Resources Management Council or its staff shall have access to his property to make on-site inspections to insure compliance with the assent.

Licensee shall be fully and completely liable to State, and shall waive any claims against State for contribution or otherwise, and shall indemnify, defend, and save harmless State and its agencies, employees, officers, directors, and agents with respect to any and all liability, damages (including damages to land, aquatic life, and other natural resources), expenses, causes of action, suits, claims, costs (including testing, auditing, surveying, and investigating costs), fees (including attorneys' fees and costs), penalties (civil and criminal), and response, cleanup, or remediation costs assessed against or imposed upon Licensee, State, or the Property, as a result of Licensee's control of the Property, or

City of Providence CRMC Assent M2024-06-058 September 20, 2024 Page Three

Licensee's use, disposal, transportation, generation and/or sale of Hazardous Substances or that of Licensee's employees, agents, assigns, sublicensees, contractors, subcontractors, permittees, or invitees.

All applicable policies, prohibitions, and standards of the RICRMP shall be upheld.

All local, state or federal ordinances and regulations must be complied with.

Please be advised that all work must being permitted must be completed on or before September 20, 2027, (unless written application requesting an extension is received by CRMC sixty (60) days prior to expiration date).

Permits issued by the CRMC confer no property rights, and are valid only with the conditions and stipulations under which they are granted. Permits imply no guarantee of renewal, and may be subject to denial, revocation, or modification.

CAUTION:

The limits of authorized work shall be only for that which was approved by the CRMC. Any activities or alterations in which deviate from this assent or what was detailed on the CRMC approved plans will require a separate application and review. Additionally, if the information provided to the CRMC for this review is inaccurate or did not reveal all necessary information or data, then this permit may be found to be null and void. Plans for any future alteration of the shoreline or construction or alteration within the 200' zone of CRMC jurisdiction or in coastal waters must be submitted for review to the CRMC prior to commencing such activity.

Permits, licenses or easements issued by the Council are valid only with the conditions and stipulation under which they are granted and imply no guarantee of renewal. The initial application or an application for renewal may be subject to denial or modification. If an application is granted, said permit, license and easement may be subject to revocation and/or modification for failure to comply with the conditions and stipulations under which the same was issued or for other good cause.

ATTENTION: ALL STRUCTURES AND FILLED AREAS IN THE TIDAL, COASTAL, OR NAVIGABLE WATERS OF THE STATE OF RHODE ISLAND ARE SUBJECT TO:

- 1. The Superior Property Rights of the State of Rhode Island in the Submerged and Submersible Lands of the Coastal, Tidal, and Navigable Waters;
- 2. The Superior Navigation Servitude of the United States;
- 3. The Police Powers of the State of Rhode Island and the United States to regulate Structures in the Tidal, Coastal, or Navigable Waters.

THE SUBMERGED AND SUBMERSIBLE LANDS OF THE TIDAL, COASTAL, AND NAVIGABLE WATERS OF THE STATE ARE OWNED BY THE STATE AND HELD IN TRUST FOR THE PUBLIC. CONVEYANCE OF THESE LANDS IS ILLEGAL; TITLES PURPORTING TO TRANSFER SUCH LANDS ARE VOID. ASSENTS THAT INVOLVE THE FILLING OR USE OF THE STATES SUBMERGED LANDS ARE GRANTED WITH THE PROVISO THAT IT IS SUBJECT TO THE IMPOSITION OF A

City of Providence CRMC Assent M2024-06-058 September 20, 2024 Page Four

USAGE FEE TO BE ESTABLISHED BY THE COASTAL RESOURCES MANAGEMENT COUNCIL.

The Coastal Resources Management Council wishes to thank you for being given the opportunity to assess and review these plans. If you need additional information, please feel free to contact this office.

Sincerely yours,

Laura Miguel, Deputy Director

Coastal Resources Management Council

/jla

State of Khode Asland

COASTAL RESOURCES MANAGEMENT COUNCIL

MAINTENANCE ASSENT

	THE PERSON OF TH	
CRMC Assent No.: M2024-06-058	M2024-06-058	Date: September 20, 2024
This certifies that has permission to The proportion proportion accompactor footpression to the proportion of the propor	that City of Providence The project area includes the stage and surroundi Providence. Maintenance work includes the in-ki proposed include the addition of an ADA accessi accommodate the ramp. The replacement stage w footprint.	The project area includes the stage and surrounding areas at the base of the amphitheater at Waterplace Park in Providence. Maintenance work includes the in-kind replacement of the amphitheater stage. Minor modification proposed include the addition of an ADA accessible ramp and slight alterations to the stage dimensions to accommodate the ramp. The replacement stage will also be ma of wood, however ii will have a slightly differe footprint.
Project situated at 12 Plat No. 19	Memorial Boulevard	Lot No. 131
Said maintenance op Council and subject City/Town of	Said maintenance operations to be done in accordance with an application on file Council and subject further to all the provisions of the building ordinances of the City/Town of	Said maintenance operations to be done in accordance with an application on file in the Offices of the Coastal Resources Managem Council and subject further to all the provisions of the building ordinances of the : Providence Providen
and to all the applica	able State, Local and Federal provisions. This ass	and to all the applicable State, Local and Federal provisions. This assent shall expire three (3) years from the date of this assent.

THIS CARD MUST BE DISPLAYED IN A CONSPICUOUS PLACE ON THE PREMISES FAILURE TO DISPLAY WILL RESULT IN LEGAL ACTION.

oastal Resources Management Council

fficial Designee

Providence Parks Department AMPHITHEATER STAGE IMPROVEMENTS AT WATERPLACE PARK

APPENDIX B CAPITAL CENTER COMMISSION APPROVAL LETTER



Capital Center Commission



May 20, 2024

David Mitchell
Supervisor of Project Planning
Department of Public Parks
Roger Williams Park
1000 Elmwood Ave
Providence, RI 02905

Re: Waterplace Park Stage Replacement

500 Exchange Street, Plat 19/Lot 102, Capital Center District

Dear Mr. Mitchell:

This letter confirms that the Administrative Officer of the Capital Center Commission (CCC) has approved the proposal to replace (in kind) the existing stage with a new stage in Waterplace Park, as per plans submitted and approved on May 20, 2024.

Please contact me if you have any questions.

Sincerely,

Christopher J. Ise

CCC Administrative Officer

Providence Parks Department AMPHITHEATER STAGE IMPROVEMENTS AT WATERPLACE PARK

APPENDIX C AVAILABLE EXISTING PLANS

STATE OF RHODE ISLAND DEPARTMENT OF TRANSPORTATION DIVISION OF PUBLIC WORKS

PLAN, PROFILE AND SECTIONS OF PROPOSED

STATE HIGHWAY

MEMORIAL BOULEVARD EXTENSION

RW-13 SECTIO	ONS	×		REINFORCING SCHEDULE SH. 7																
WALL	B-5							-		TTTATTTATA										
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	AND SECTIONS			BORING LOGS 109, 16, 17 & 19 SH. 6		1000							10 T O F I							
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RW-19 FOOTH	ING REINFORCING PLAN			BORING LOGS WF-3, 119, WP-6 SH. 12					CONT	RACI NO. 3										
RW-20 PLANT	UPPER AND LOWER, ELEV. LOW	ER B		BORING LOGS WP-1, WP-5, 117 SH. 13																
RW-21 PLAN I	UPPER AND LOWER, ELEV LOW	ER B	L-14	BORING LOGS 115, 136 & X-56 SH. 14																
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	ING REINFORCING PLAN AND C	ULKPILLS	ECTIONS	ITTROOK 0 1 5 C R 1 P 1 1 0 R	SMIT	QUARTITY				면 - '회계기가입'			111111111111111111111111111111111111111			Catharia in . Inne tim				
	AND SECTIONS							E	STIMATE	WALL QUANTITIES			INDECOR DESCRIPTION	10017	DIANTITY		2012/201		Salaman	
	ATTONS AND SECTIONS			VER DESC LIGHT STANDARD ANCHORAGES	EA .	3.00		-		4			DIRECTOR DEFENTALION	9411	GOART 117	STEMESON BESCRI	/1104	UNIT	QUARTITE	
RW-28 FLAN	AND ELEVATION			- MET. COSEL COMCRETE SUBSTRUCTURE CL. B (AE) 1-1/2"	22	187.00														
RW-29 FOOTI	ING REINFORCING PLAN					200.00	LUMP SUM LITEMS			LIMP SIM TITLES			805 MAGE CONTING FOR STEEL SMEET FILLING	25	9,000.00	107.0200 LIGHT STANDA		t.e.	1.00	
	AND ELEVATION			F0011W0		200 80	CODE 800.9918 - WALL 8-5			CODE 800-9911 - WALL 9-6			AND STEEL WALE SYSTEM			BET. OSEL CONCRETE SUB	STRUCTURE CL. S (AE) 1-L/2*	CT	238.00	
**** . *****	PETER BEECHTSTEEL			MOP. 0505 CONCRETE VANSTRUCTURE CL. 8 (AE) 1-1/2"	Ca	161.00	Extinute De - NOR CITY, SEE STATE			Estimate 02 - 100% Fram.			BOS. 9963 STEEL WALF SYSTEM	185	8,000.00	F0071965				
				WALL STEPS									BOS STEEL PERSONNELL TERRORS AND MENTS	64	9.00	MOT MANY COMMETTE SUR	STRUCTURE CL. & CACO 1-1/2"	CY	12 99	
LUMP SUM LYENS				BOY 1664 PREFORMED JOINT FILLER CORE 1"	18	85.00	THE MODE OF SCHOOL STATE	LWIT	GWATTE:	ITEMEDRE DESCRIPTION	1977	CHARTITY	807-1604 PREFORMED JOINT FILLER CORE 1"	56	46.90	WALL STORY				
CODE 800 9009 - MAL	II. 8-3 UPPER			BOT 1870 POLYUNETHWAE JOINT SCALANT	CI	550.00						Acres 1311	ACT 1670 POLYUNCTHANK JOINT SEALANT	CI	250.00	BET 1864 PROFORMED JO	ONE PROTECTION TOWN IN	10	0.00	
Estimate DA - 50% C	CLTY, SOE STATE			867 1820 CDECRETE SUBFACE FIRESHING	14	420.00	102 9200 LIGHT STANDARD MACHERAGES	256	1.00	857.0501 CONCRETE SUBSTRUCTURE CL. 9 (ALT 1-1/2"	67	76.60	MET 1955 CONCRETE SURFACE FIRESHING.	w	875.00	BOY 1870 PO YERTHMAN		111	160.99	
				DEPOS FACER SED STANDARD			BOS SHOE COATUM FOR STEEL SHEET PILLING	46	1.790.00	(0071MI)		100,000	EXPOSED AGARGATE	-	40.0.00	BOR GOOD STANDARD BAK		1.85	7,300.00	
ITEMEDOE DESCA		(R) 1	TITITAGE	MAT WAS CONCRETE SURFACE FIRESHOWS	58	1,350.00	AND STEEL WALC SYSTEM	557	The second second	BOT OSOS CONCRETE SUBSTRUCTURE CL. 8 (ME) 1-1/2"	CV.	51.00	NOT 1947 CONCRETE SUBSTRUCTURE CLASS XX (AE) 3/4"	CY	79.00	608 0300 FPORY COATES		1.85	9,500.00	
tioner at a con-				CAST ON SAME PLANTED			BUT 1804 PRETENDED JOINT FILLER CORE IT	46	44.00	WALL STEES	44	21.10	SHEETING WALL STON	64	39.90	FOR STRUCTURE		THE	9,000.00	
107 0200 LIBRE STA	ARDARE ANEWERSES	EA	8.00	NOW DOOD STRACKED BARS, GRADE BD	LRS	14,900.00	BOY 1670 POLYUPETHANE JOINT SENLANT	CI	180.00	867 1668 PROFESSED JOINT FILLER CORE 1"	5.0	66.00	NOS. 0300 EPOAY COATES REINFORCEMENT	1.05	3,400.00	808.0800 DRILL AND GR		64	111.00	
	SUBSTRUCTURE CL. B (AE) 1-1/2"	CT.	162.00	BOR DODG TYPENY COATED RETRYORCHMENT	1.85	6,600.00	BEF. 9930 CONCRETE SAFACE FINISHING	16	260 CE	BOT JETO POLYIACTHAME JOINT SERLANT	£1		FOR STRUCTURES	5.00	3,400.00	EUR DESU DETEL AND SAI	TO HE INCOME HAVE DESCRIPTION	C.A.	111.00	
f0011#G1				FOR STRUCTURES			PERFORM AMPRIATE	1.00	240.00		10	220.00	FOR STRUCTURES							
	SUBSTRUCTURE CL. B (AE) 1-1/2*	57	197.00	BIG 2000 WALL DRACKS AT DIAMETER WITH	£#	18.00		100	64.00	BEF. 9931 CONCRETE SURFACE FIRESHING	85	290.00								
WALL STEN			140.40	EIL SOOR BELL SERVICE & BURNELLY BULL	-		BOY WHEE CONCRETE SUBSTRUCTURE CLASS XX (AE) 3/4"	CA	64,00	GRET ON SAND BLASTED										
		tr.	75.00	FILTIN STORE			PEDESTAL			BOB. 0200 STANDARD BARS, GRADE 60	1.83	1,900.00				GMET BOD ITEMS				
	D JOHN FILLER COME I.						BOB. 0300 EPORT COATED BEINFORCEMENT	1.85	4,700.00	BOB 0500 EPGET COMPED REINFORCEMENT	1.8%	4,700.00	SMIT BOD LIDES			CODE MOD HEST - WALL K	-1 appear			
867 1670 POLYURETH		tt	750.00				FOR STRUCTURES			FOR STRUCTURES			CODE MOD 19901 - WALL K-1 LOMEN			Estimate 10 - 100% 578	rr .			
867-1820 CONCRETE	SURFACE FIRITHING	54	250.00										Estimate 10 - 100% Stary							
BUSH NAME	MERED STANDARD			UNIT BID ITEMS												INTERCOR DIACET	erine.	1400077	DUBRTITE	
MEY SHILL COMCRETE	SURFACE FINISHING	54	1,150.00	CIDE 800.9908 - WALL 8-4 IPPER									INDECOR DESCRIPTION	1917	DURNTITY				· marile	
CALT OR S	SAME SLASTED			Extinute 04 - SCS CITY, SCS STATE			UNIT 810 110ML			UNIT BID THOS						604 MW T 5 5 7 10 W	GATION FILES. 20 TON TIMBER	100	7 880 10	
MET 1945 COMCRETE	SUBSTRUCTURE CLASS 22 (AC) 3/4"	E#	E.00				CDDE 800.9910 - WALL 8-5			CODE 800 9911 - WALL 8-5			664,9910 STEEL W. PILE, 12", 744/1907,	LT.	630.00	BOS 1901 STONE MASCAR		CT	300 69	
COLUMNS				STEMESON DESCRIPTION	UNIT	QUARTITY	Estimate OF - SUS CITY, SON STATE			Estimate 02 - 1000 Fram			PURMICH AND DIPPE	**	****	BOT WORD PARAPETS COM		15	110.00	
BOB GIVE STANDARD		1.85	90,008.1				farmer or - nee carry now start.			ENLYMIN OF A TONK LINE			NOS DUCK PERMANENT SHEET FILING FAC	1.85	16,710.00					
BOR DIDE EPERY COA			6,400.00	ena pras. PILE LONG TEST - 100 TOWS	EA	1.00	1184C008 DESCRIPTION	unit:	DUANTITY.	ITEMESSE . D E S C # 1 P T 1 D #		*********		LE.		RIG. 9902 GRANITE VENE		38	365.00	
FOR STREET				AGE 9901 f D & E FOLMOATION PILES - 76 TOM	1.0	410.00	DOMEST PERSON NAMED IN THE		Amenitic.	District ACREATALLIAM	UMST	COMMITTE	815.9824 1704C COPING TYPE 0 12" X 24"	LF.	125.00	905.9941 CS-20 BOLLAN	A MASE	EACH	1 60	10
	to debit attacherine contra	FA	/5.00	DISPLACEMENT			504.5900 STOLL * FILE, 12", 749/5001,	16	705.00	210,7904 COFFERDAM WALL B-4										
	URS 4" DIMETER WITH	EA	27.00	804 9985 F D & 6 FOLMERTISM FILES - 100 TOM	ir	1,950.00	FURNISH AND DIRVE	40		804 9909 DRILL & SHOUT DOWNS (AMCHORAGE FOR	68	1.00								
F11.708 51			44.44	DISPLACEMENT				185			EA	64.00								
attritic re	TOPE.				EACH	1.00	505.99CL PERMANENT SHEET PILLING FAG	1.85	10,880.00	EXISTING PRESTRESSED CONCRETE PILEST			EARTH-ORK PROJECT WIDE LIBRS			EARTHWORK PROJECT WIDE				
				BOT-9914 CERAMIC TILE TIPE A-4	10	215.00				BOS TROIT STONE NASONEY COURSED	ET	47.30	CODE 800.9901 - WALL K-1 LONEK			CODE 800 9907 - WALL K	1 IPPER			
				BOT 9999 PARAPETS COMPLETE IN PLACE	.,	219.00				BIG 9821 STORE COPING TYPE A	1.5	247.00	Extinate 10 - 100% STATE			Estimate 10 - 1005 574	fE.			
				EARTHWORK PROJECT WIDE TTERS																
UNIT BID TITES				CODE 800.9908 - WALL B-4 LPPER			EMPTHADES PROJECT WIDE ITEMS						THE COR BESCRIPTION	10017	DUANTIEF	ITTRESSE D C 1 C R I I	*110.	WHIT	DIMETITY.	
CODE 800.9909 - WAL				Estimate 04 - 50% CCTV, 50% STATE			CDDF 800, 9910 - WALL \$-5													
Extinute 04 - 52% (CITY, NEW STATE						Extinute 04 - 50% CITY, 56% STATE			ENTINORS PROJECT WIDE LITERS			283.0700 PERVIOUS FILL	CY	120.00	203.0400 STRUCTURAL CO	SCHAPTISM (MC) ACCUSTOR	ET	1,660.00	
				ITEMORE BESCHIFTIGH	UMET	CHARTITY				CODE 800.9911 - WALL 8-6				5.0	22.732	263 0790 PERVIOUS FILE		CF	250.00	
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				203 GADO STRUCTURAL ESCAVATION UNCLASSIFIED	61	220.00		-411												
BEF. 9913 CERANIC T	THE TYPE A-3	EACH	1.00	203 0400 FILL GRAVE BORROW LANGER STRUCTURES	CY	490.00	203 0400 STRUCTURAL EXCANATION UNCLASSIFIED	69	145.00	IMMODE DESCRIFTED.	1917									
BET 9999 PARAFETS		15	764.00		67	N50.00	203 0400 STRUCTURAL EXCANATION UNCLASSIVIED 203 0700 PERVIOUS FILL	67	14.00	INMON. DESCRIPTION	PRIL	DUARTITY								
BOD 9501 DATE PART		13	1.00	200,0700 PERVISUS FILL	cr.	ars 0.00	203.0700 PERFIORS FILE	64	14.00	7-22-22-22-22-22-22-22-22-22-22-22-22-22										
no me and ma	man most			LIMP SUM CTEMS						SEC. 6700 COMICH BOKKEN	EV	18:00	944							
				COOK 800.9907 - WALL 8-4 LOWER			FX			293 0700 PERMITOUS FILL	CT.	430.00			*	_			0.00	
				Estimate 64 - 50% CITY, DOE CTARE			-									ſ	RJ. DEPARTMEN	NT OF TR	ANGROPTAT	NO.
					11000	and the same of th	•									ı				, married
EARTHWORK PROJECT				ITEMEDRE DESCRIPTION	(9)11	QUARTETY										ı	DIVISION	CF PUBL	C MONKS	
CODE 800.9909 - WA					552	201020122											Andrew Marketine			
Extinute 04 - 56%	CITY, See STATE			ACC. WEEF COATTING FOR STEEL SHEET PILLING	SF	15,000.00											APPROVED			



Number of Sheet Sw-1

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ASSISTANT DIRECTOR OF TRANSPO	RTATION DAT
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DEPARTMENT OF TRAN	

BOA 9918 STEEL M POLE, 12", 749/1001 FURNISH AND DIRWE BOS 9901 PERMAKRI SHEET PILLING FAD

203 0700 PERVIOUS FILL

44.00

INDEX OF DRAWINGS

RW-1 COVER SHEET AND QUANTITIES RW-1A QUANTITIES

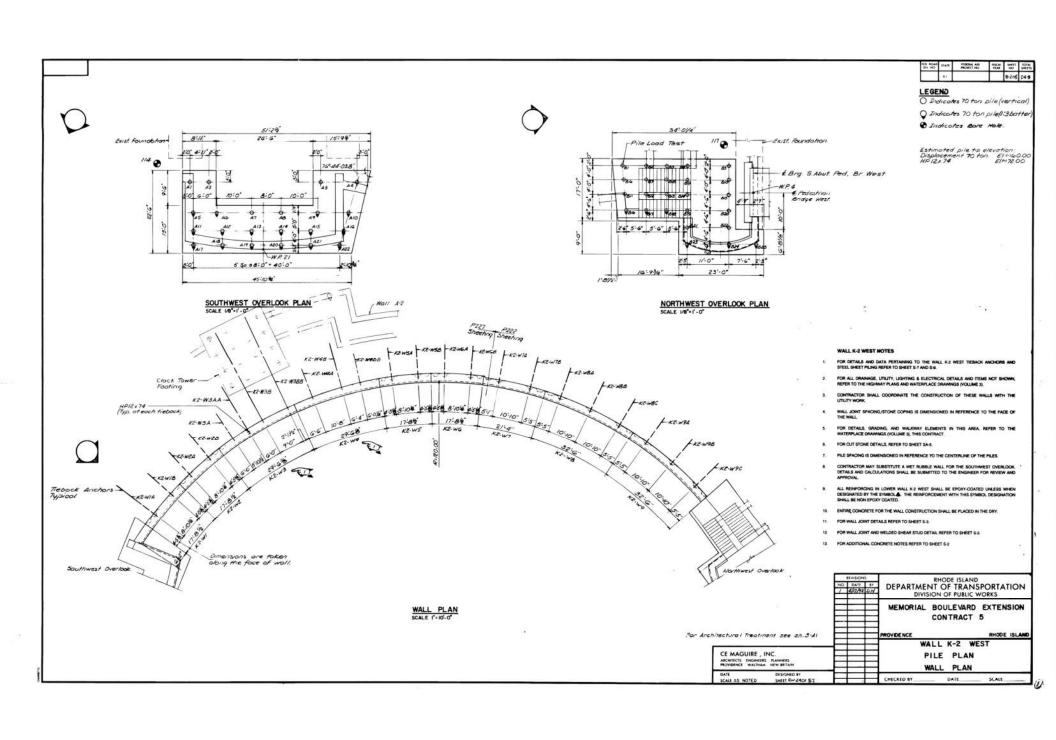
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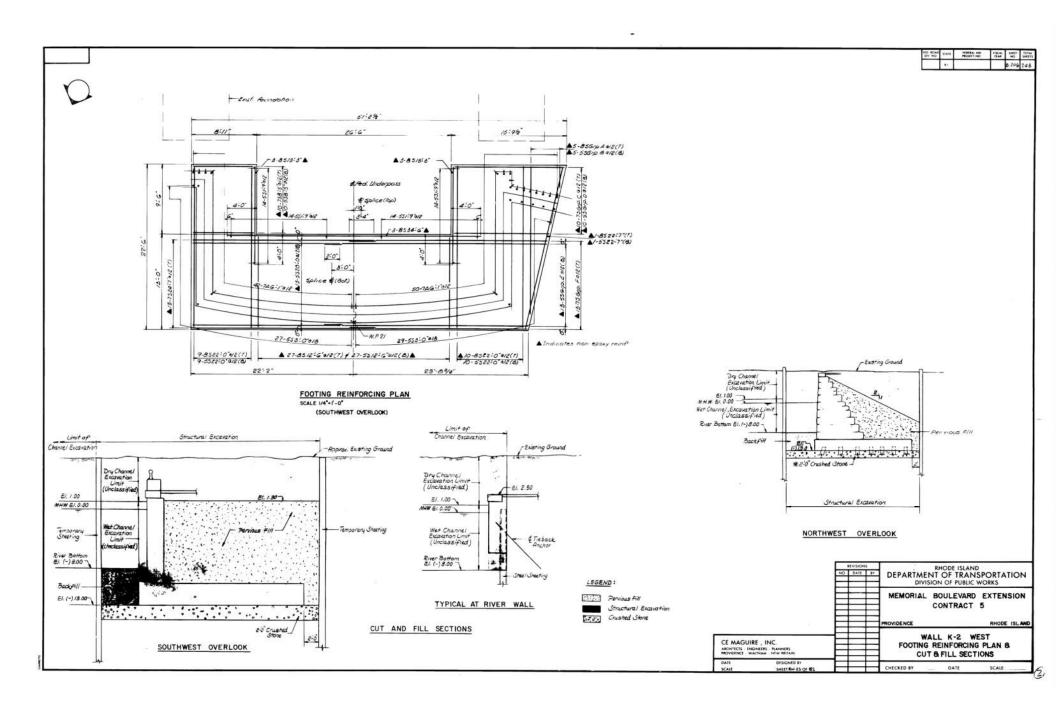
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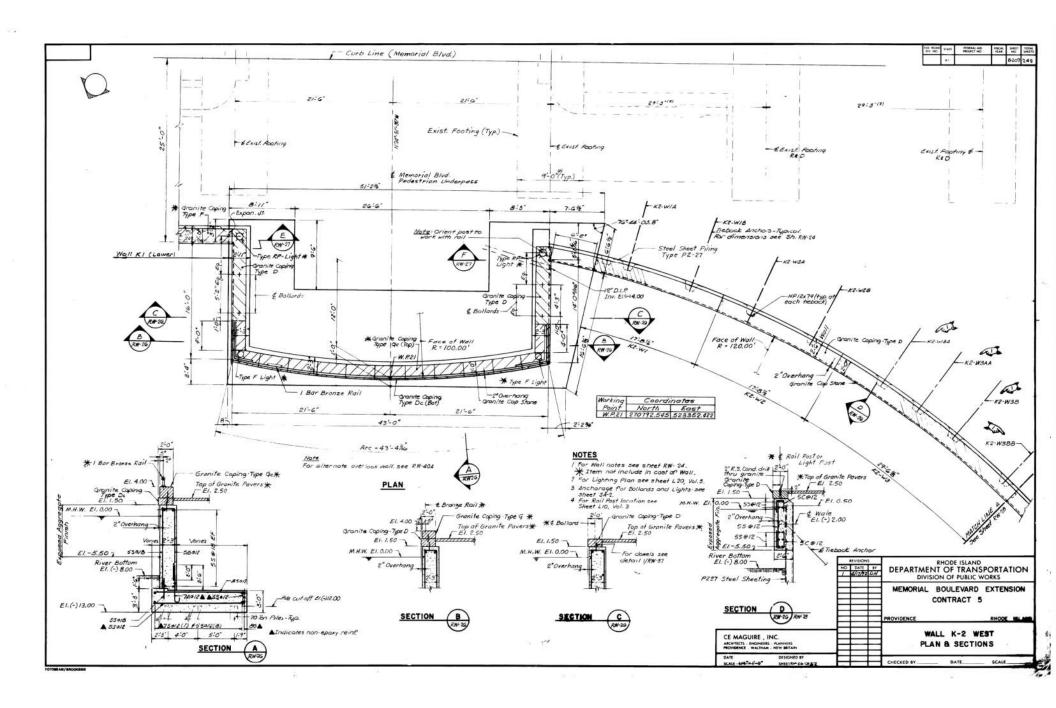
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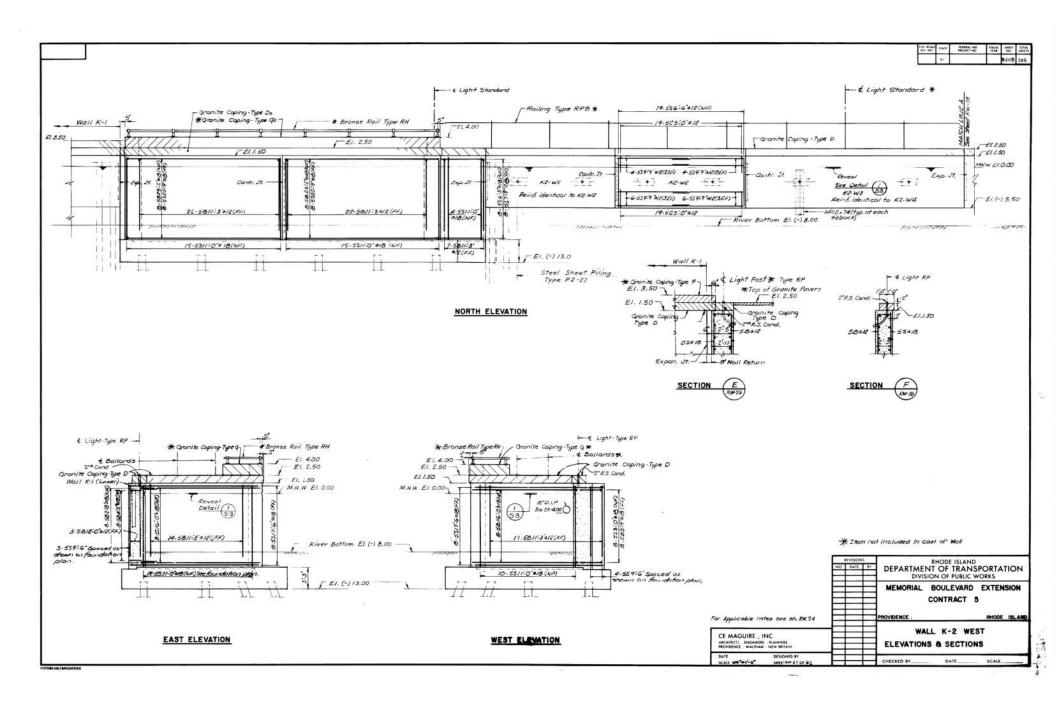
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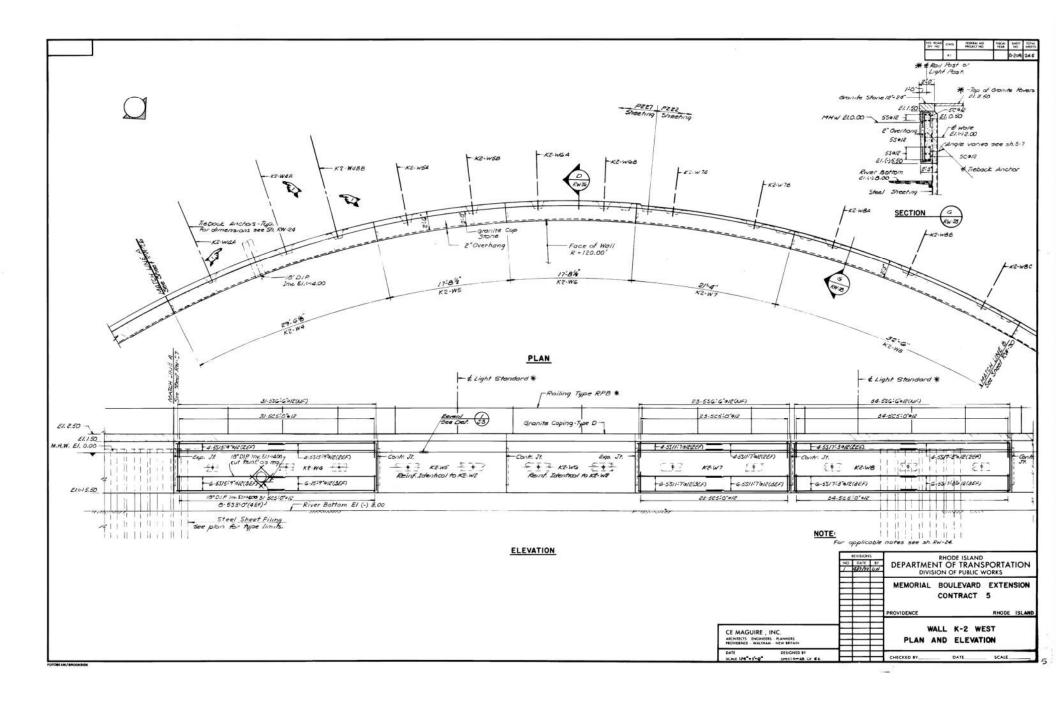
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REPROCECTION SCHEDULE SH: 7











HE FGAD STATE HERBALAD PSCAL SHEET TOTAL SHEET TOTAL SHEET STATE SHEET S Povers 7 6-0-1 (Exponsion) - & Brg South Abut. 34-014" 1.585:6 0G(T)A 1-55/1-5"@G(T) ▲ 1-55/1-3"@G(E) ▲ EL 2.58 (t) EL. 0.00 Pervious Fill-A 56-55 J. 10.0.

A 56-55 J. 10.0.

A 17-55 G. p. d. o. o. (1.)

A 17-55 G. p. d. o. o. (1.) ▲ 33-556'6'06(7) ▲ 16-5516'6'0(8(8) EL. 45.50) Bridge West 4-7AG-1918 Storwall 19-7AG-1812 Storwa +4-55/5°0°0/8" (2748B)▲ 14-533:008 3611WOII (27,170) SECTION A 15-536-2 06(5) 16-934" 23'-0" ▲Indicates non-epoxy reinfi

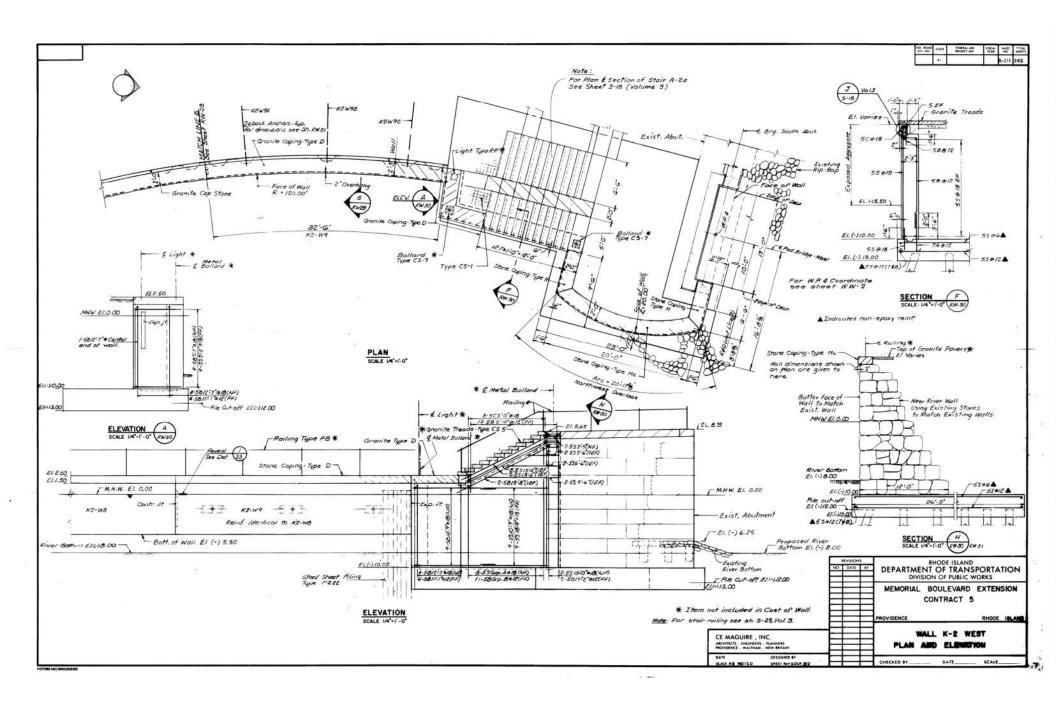
FOOTING REINFORCING PLAN SCALE 1/4"-1'-0"

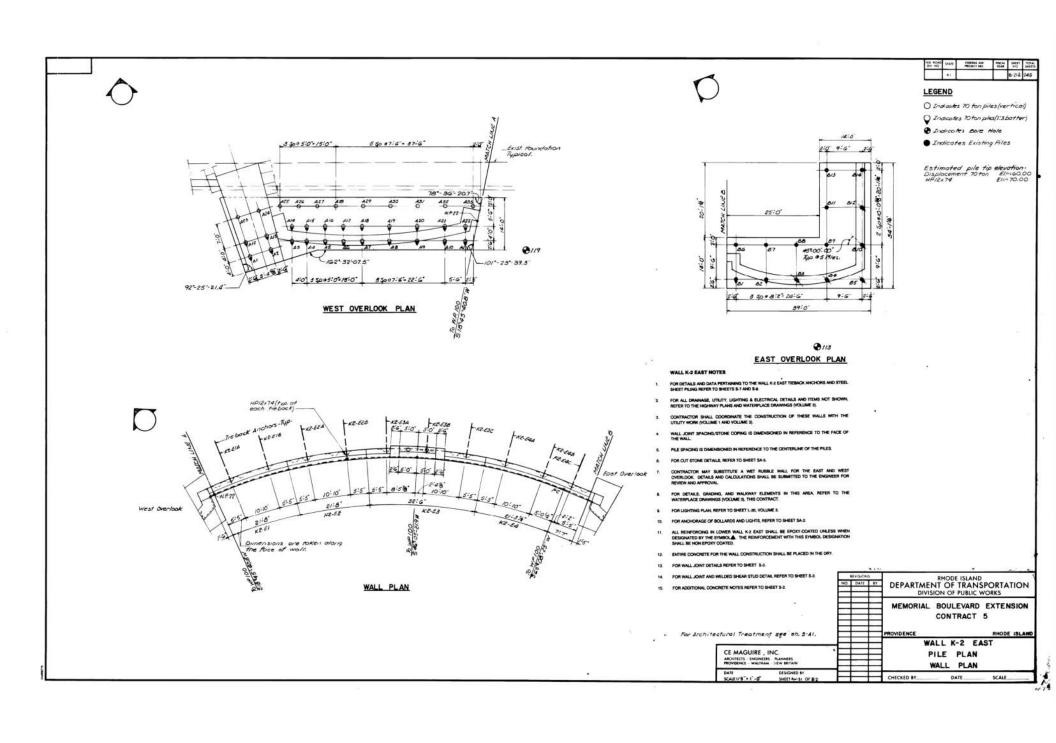
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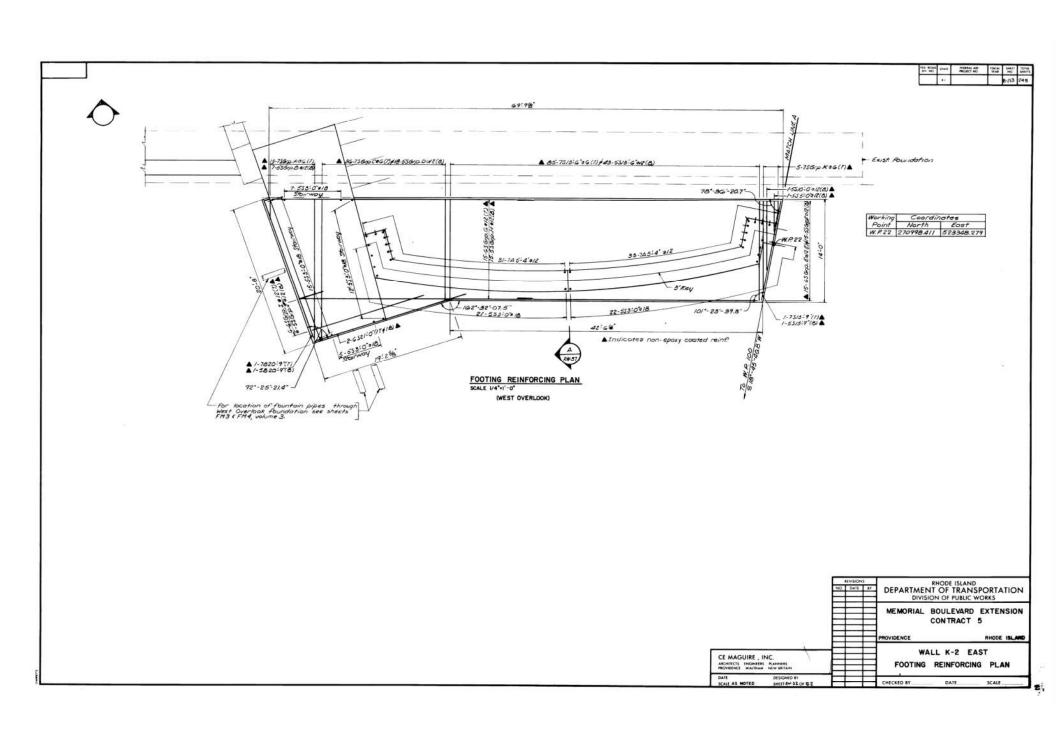
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E , INC. NEERS - PLANNERS JHAM NEW BRITAIN		WALL K-2 WEST FOOTING REINFORCING PLAN				

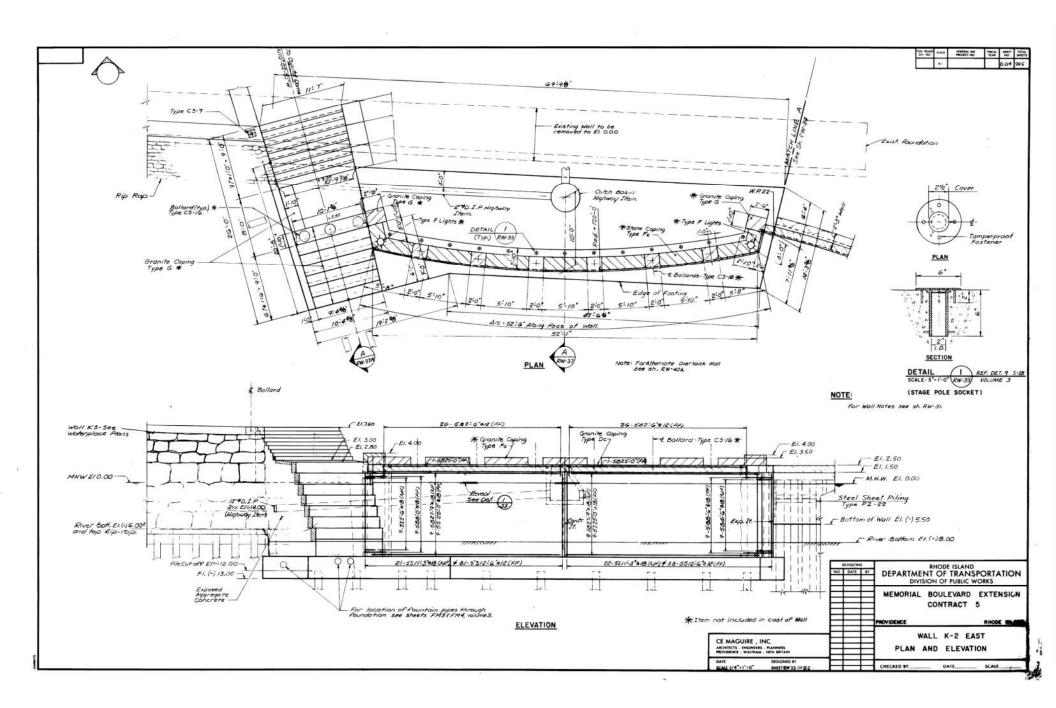
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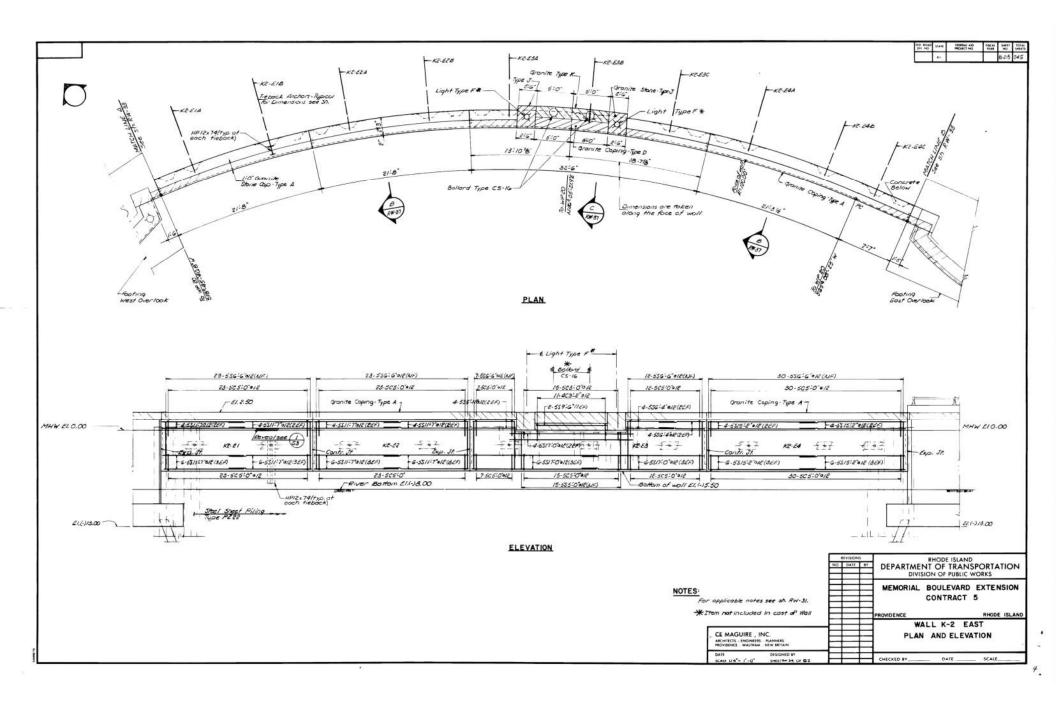
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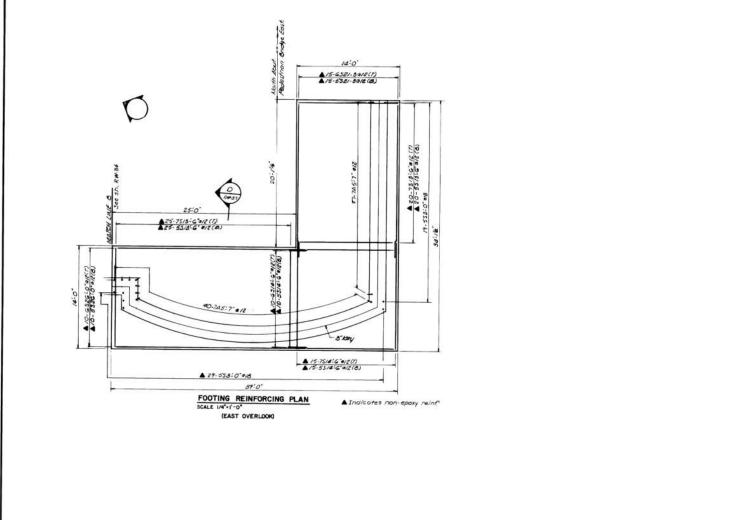










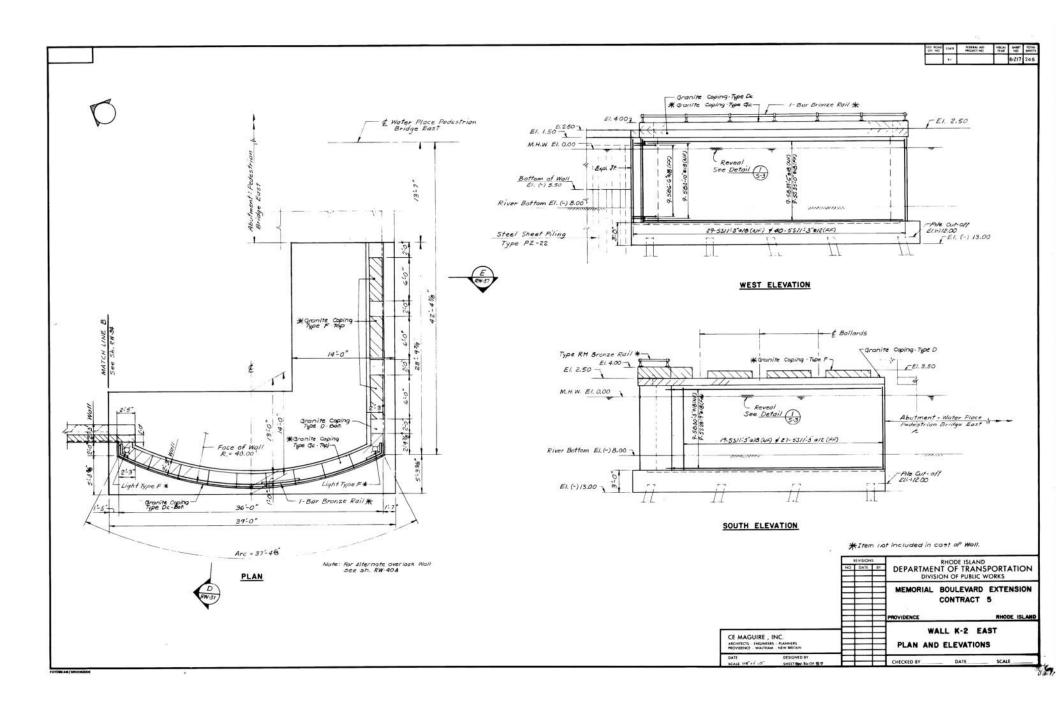


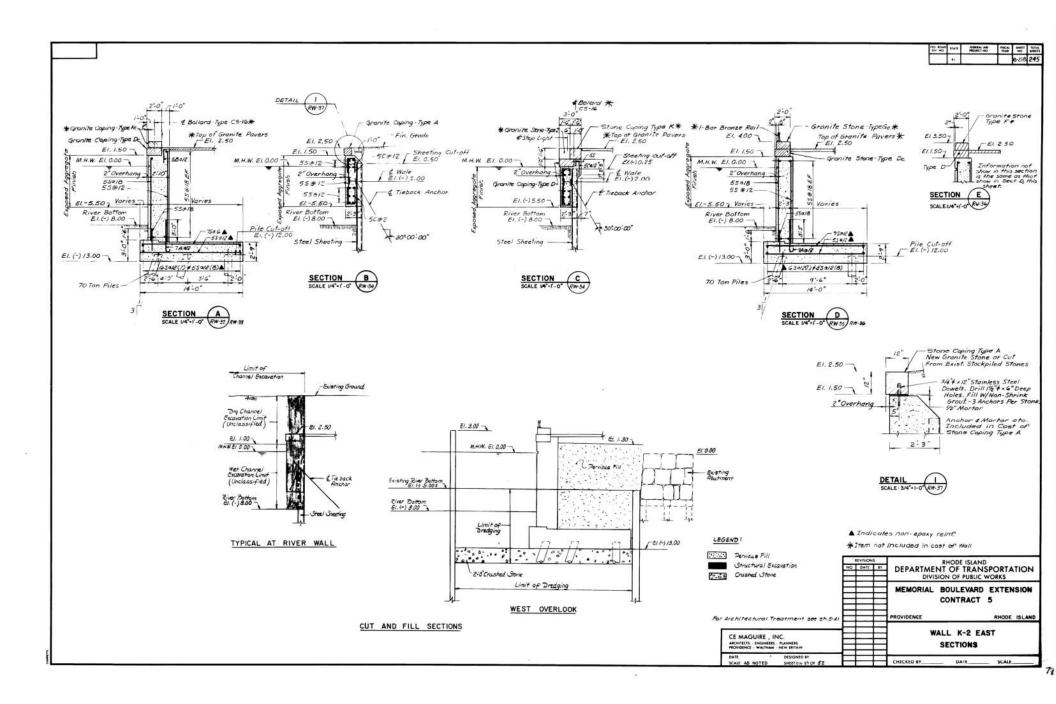
DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS

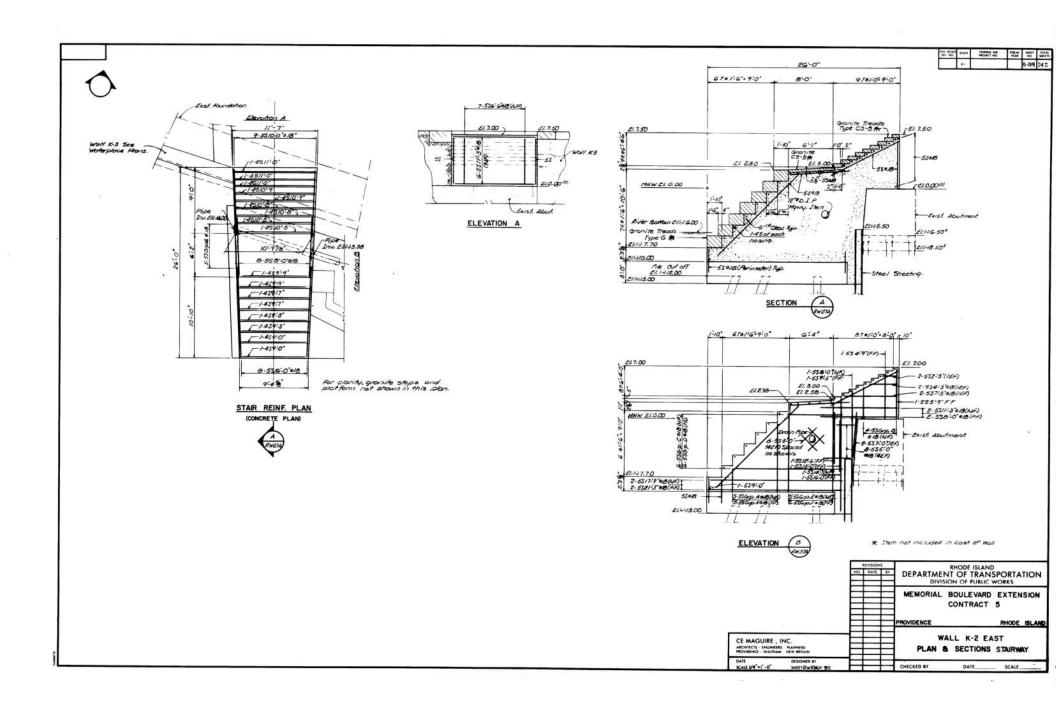
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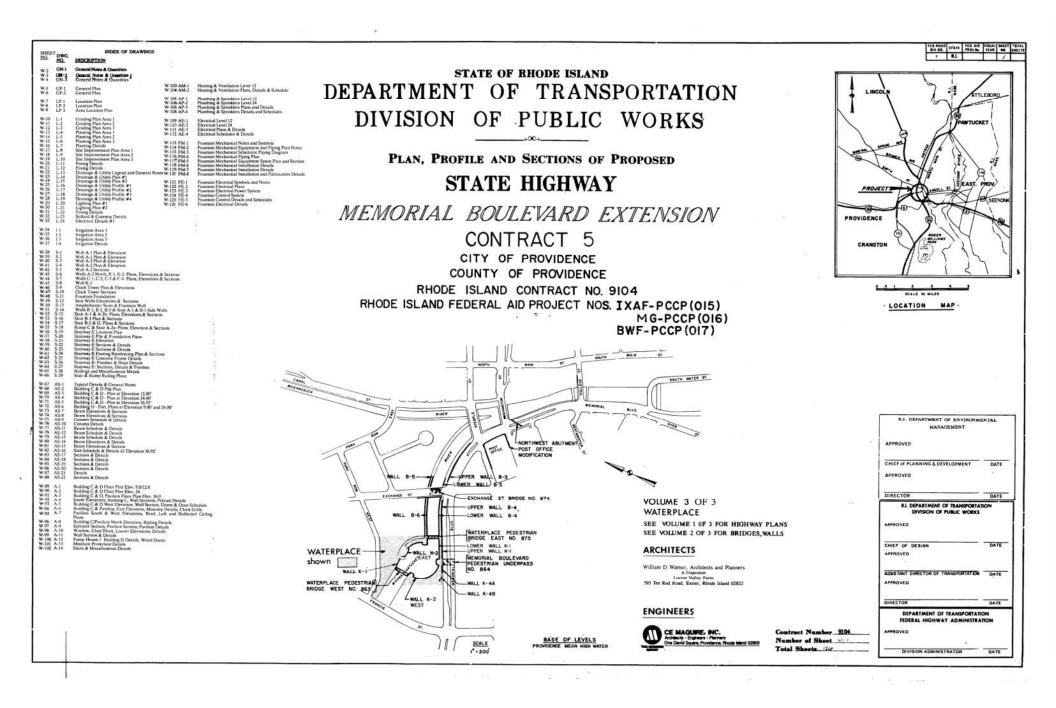
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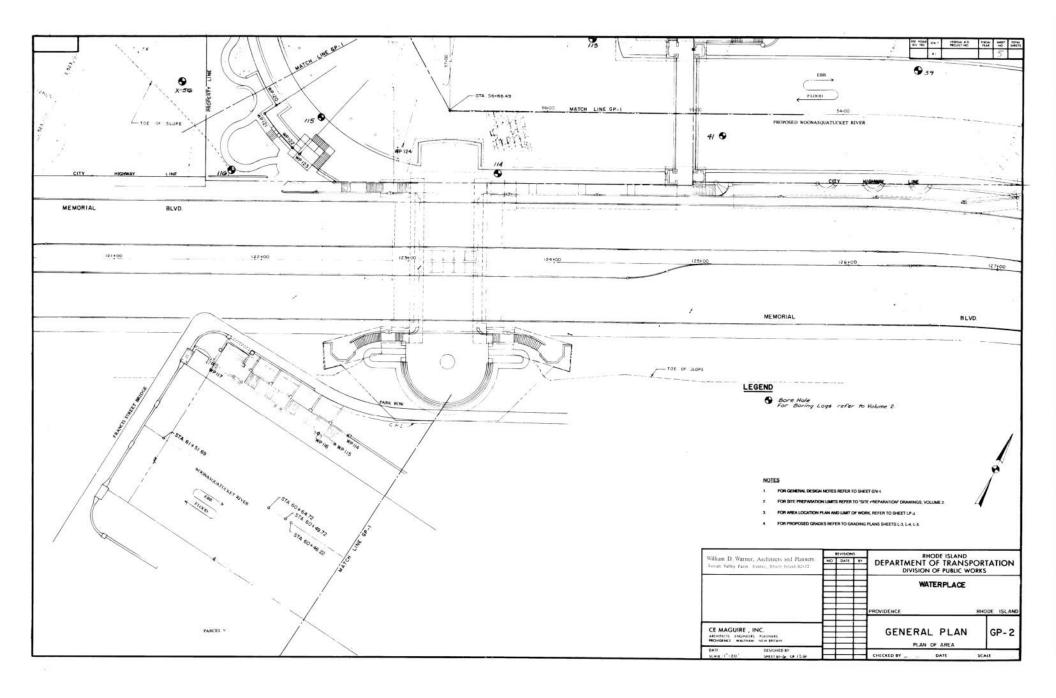
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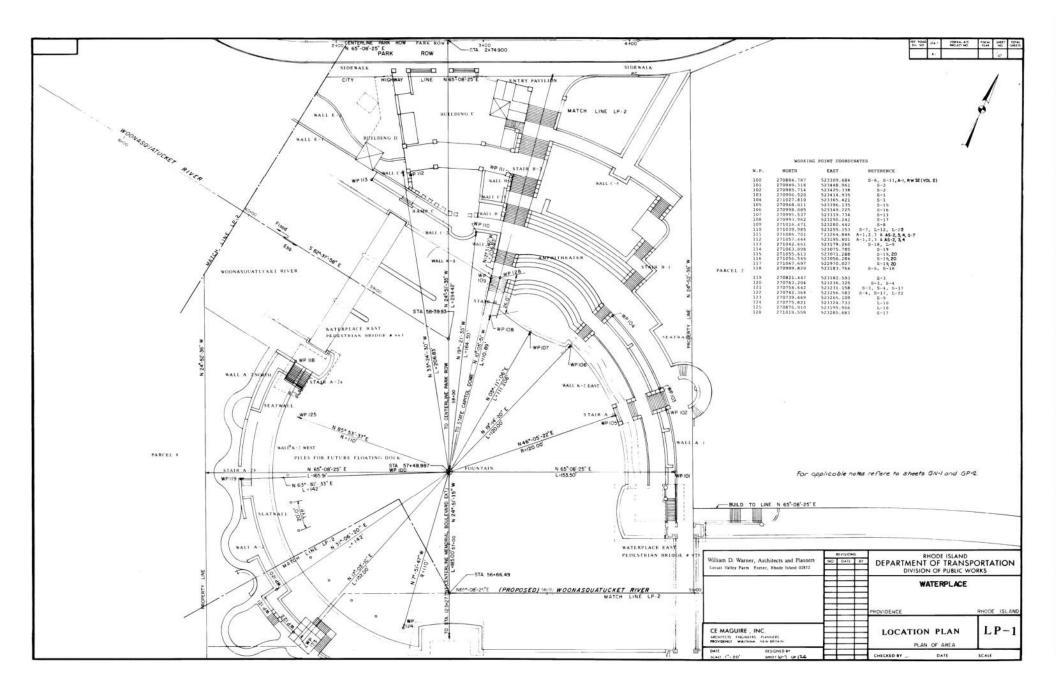


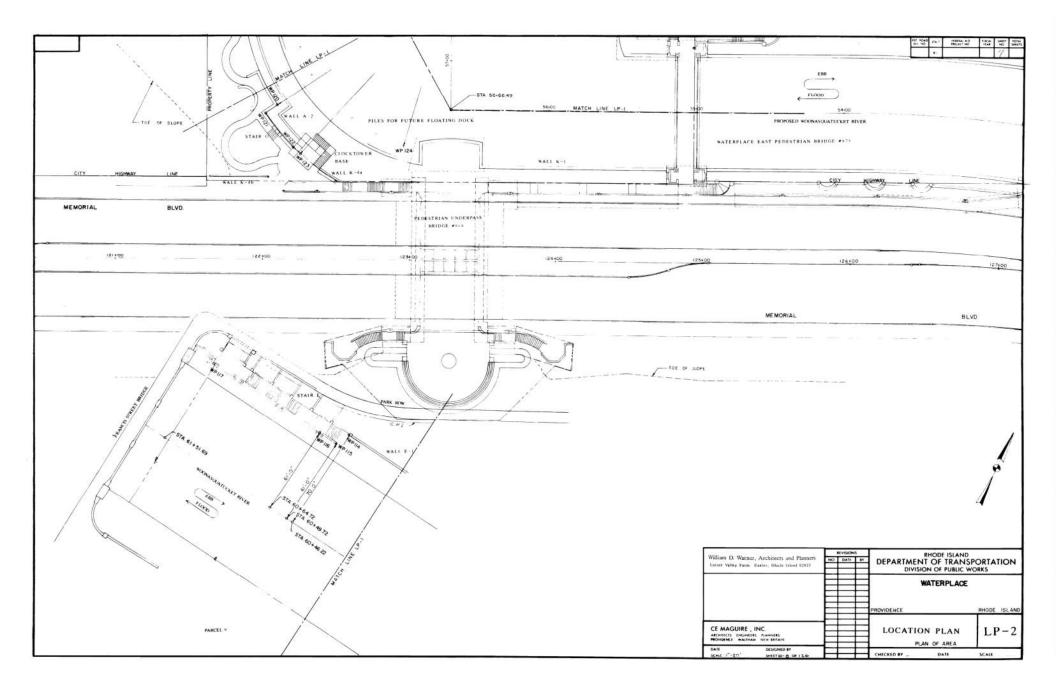


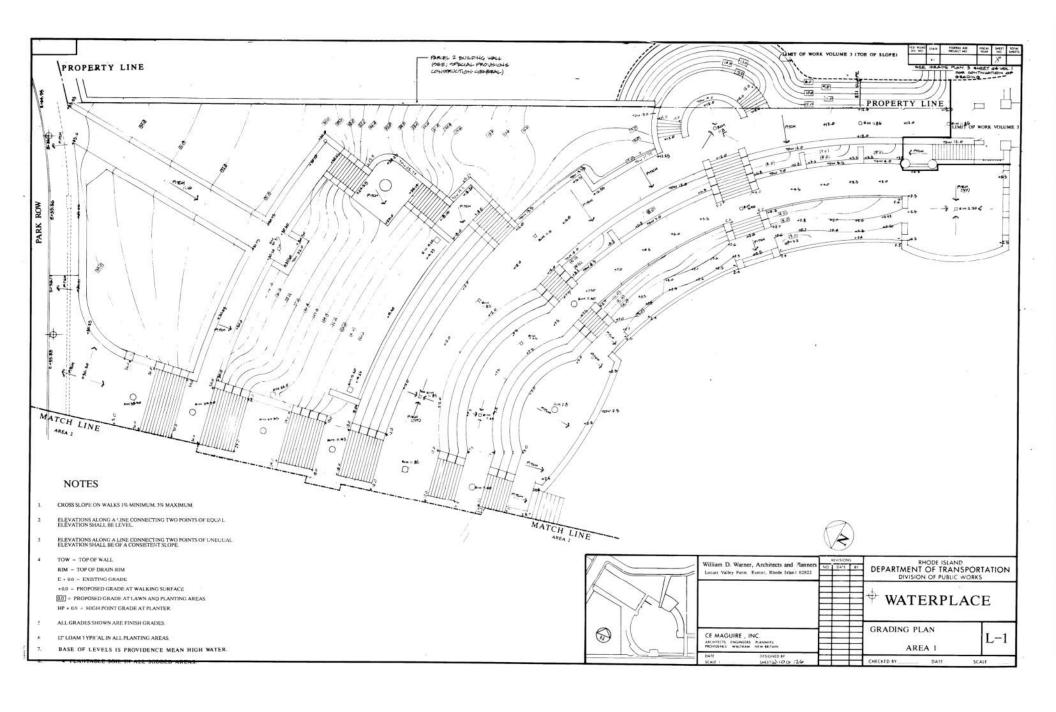


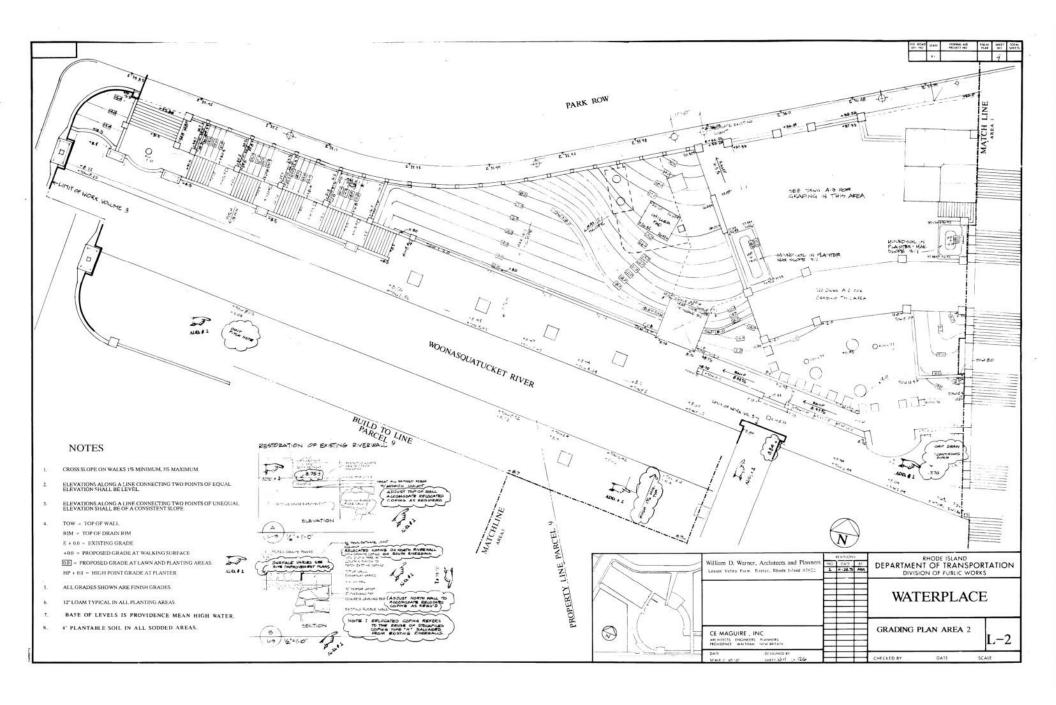


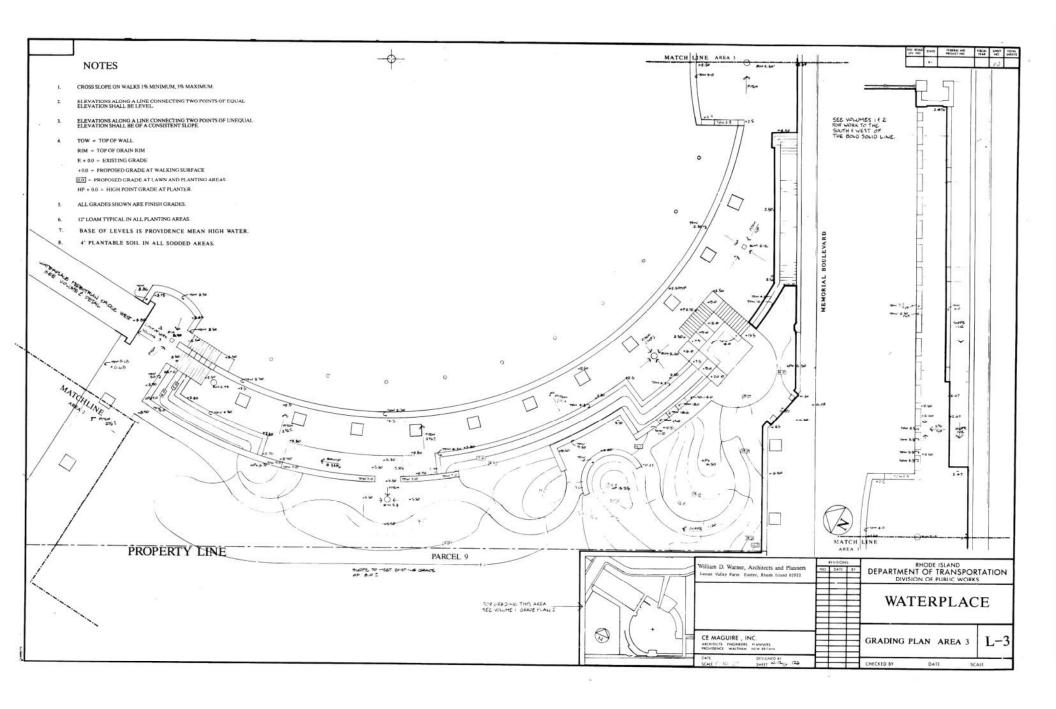


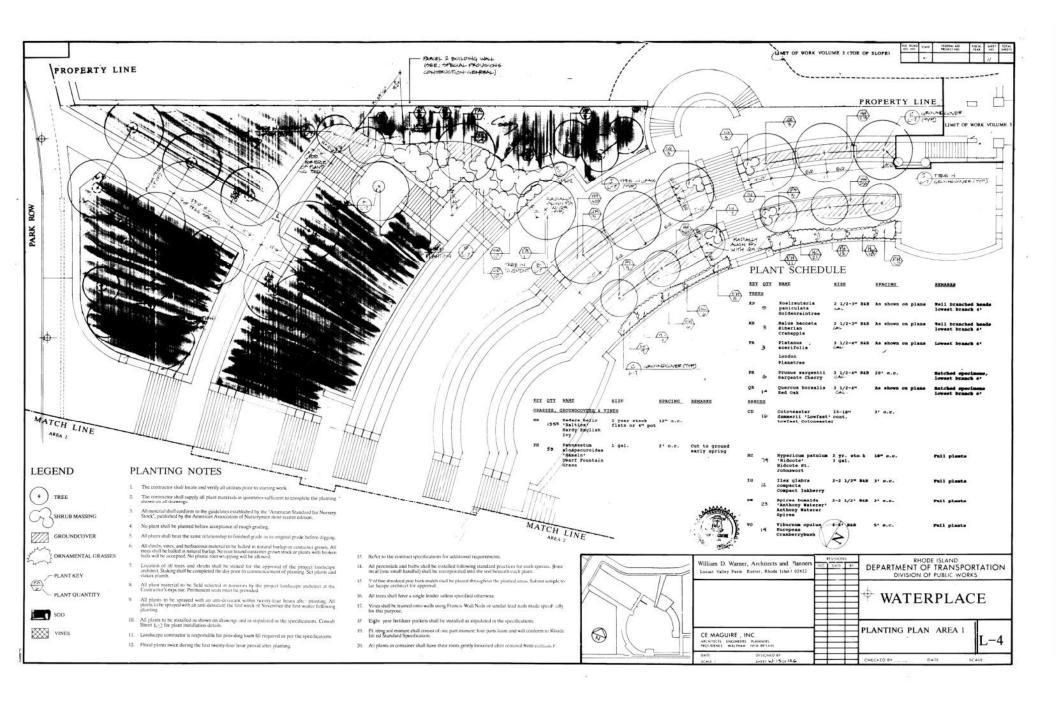


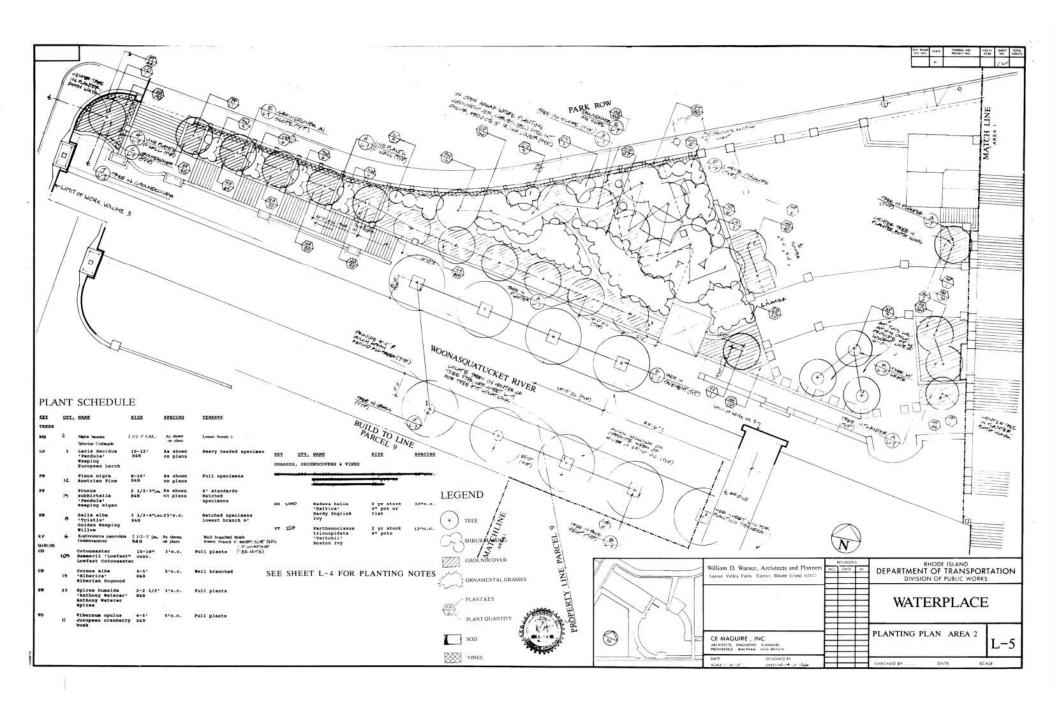


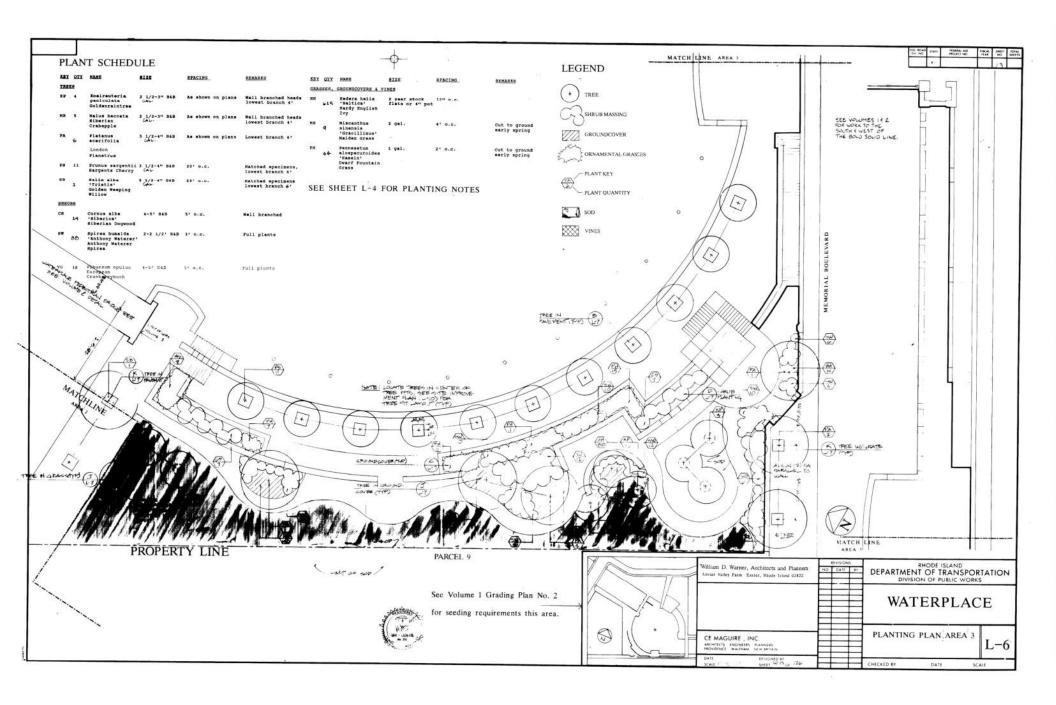


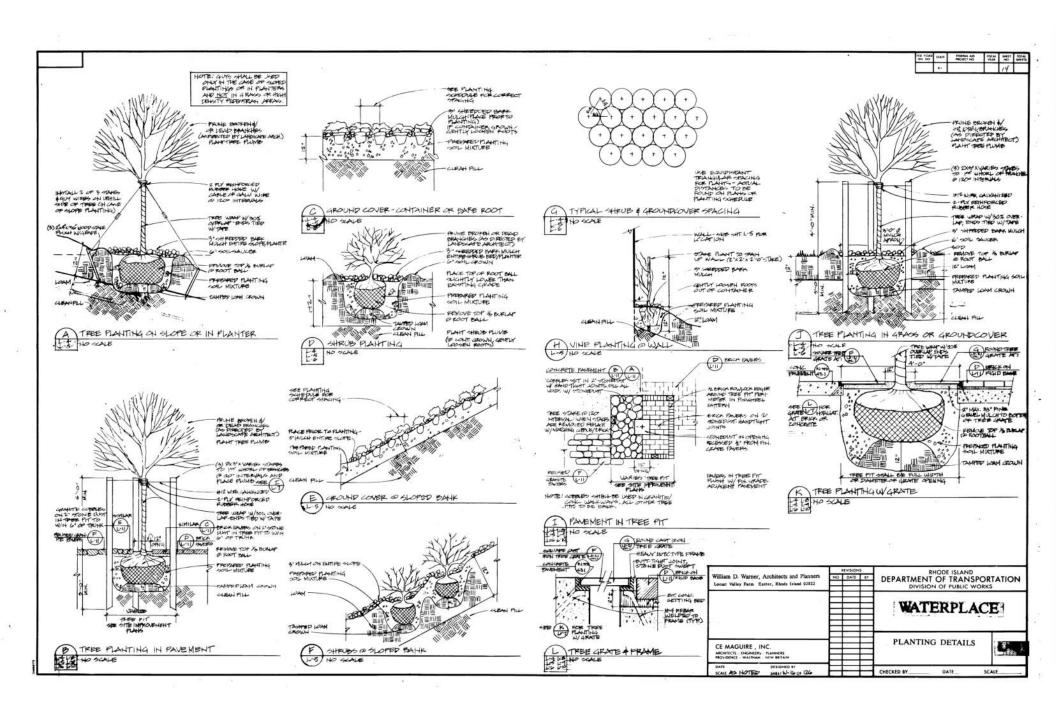


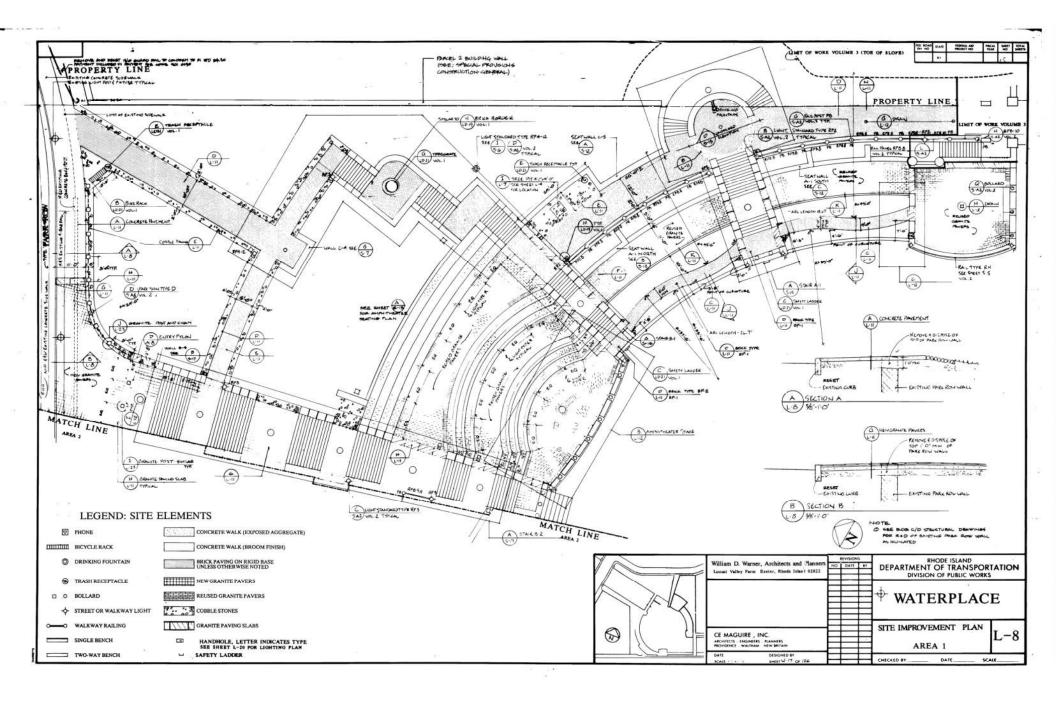


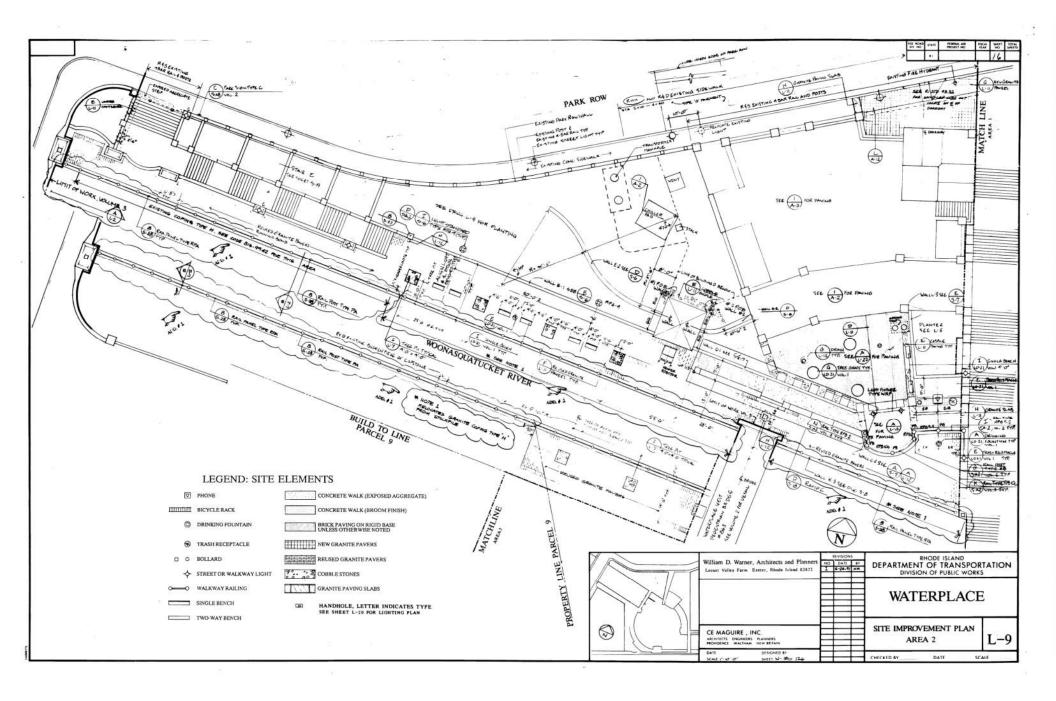


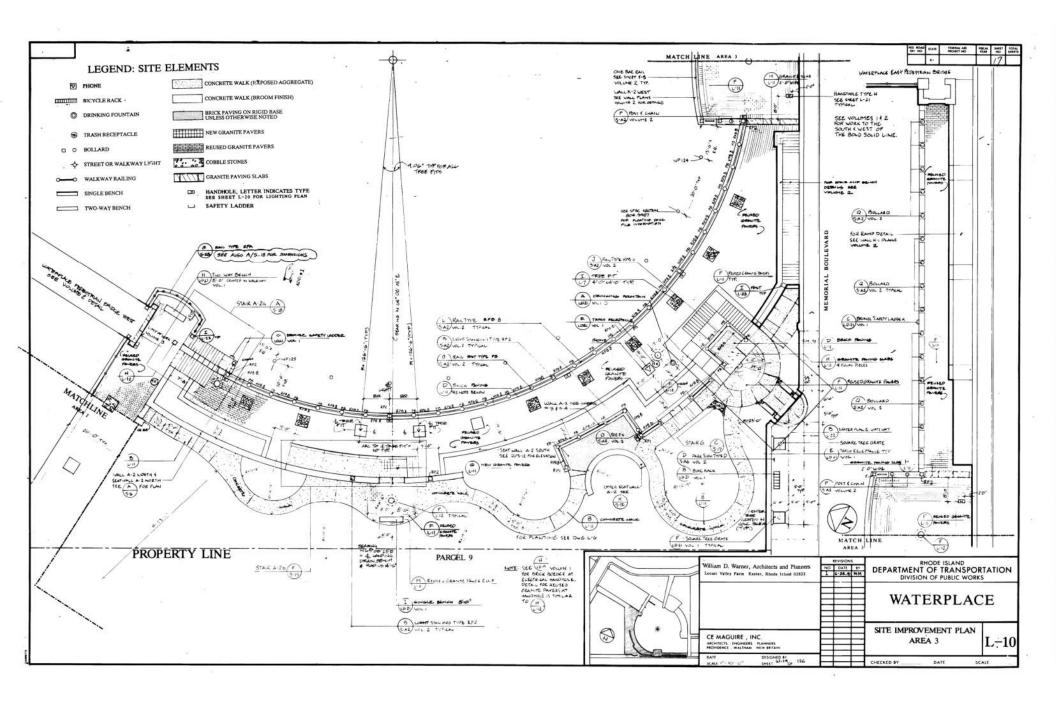


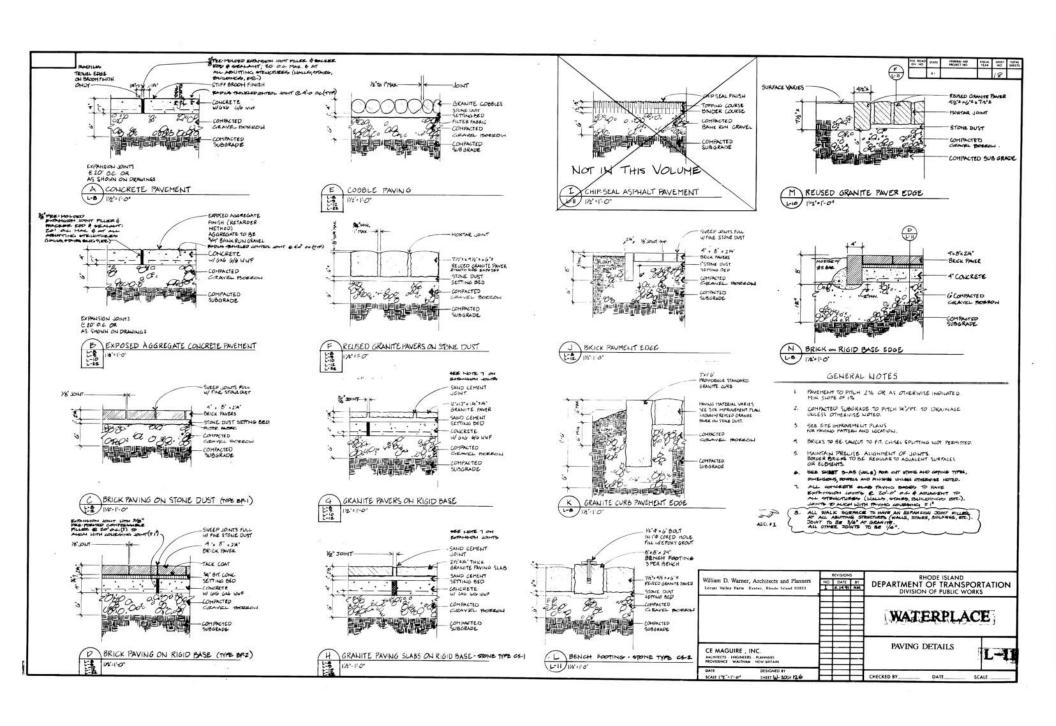


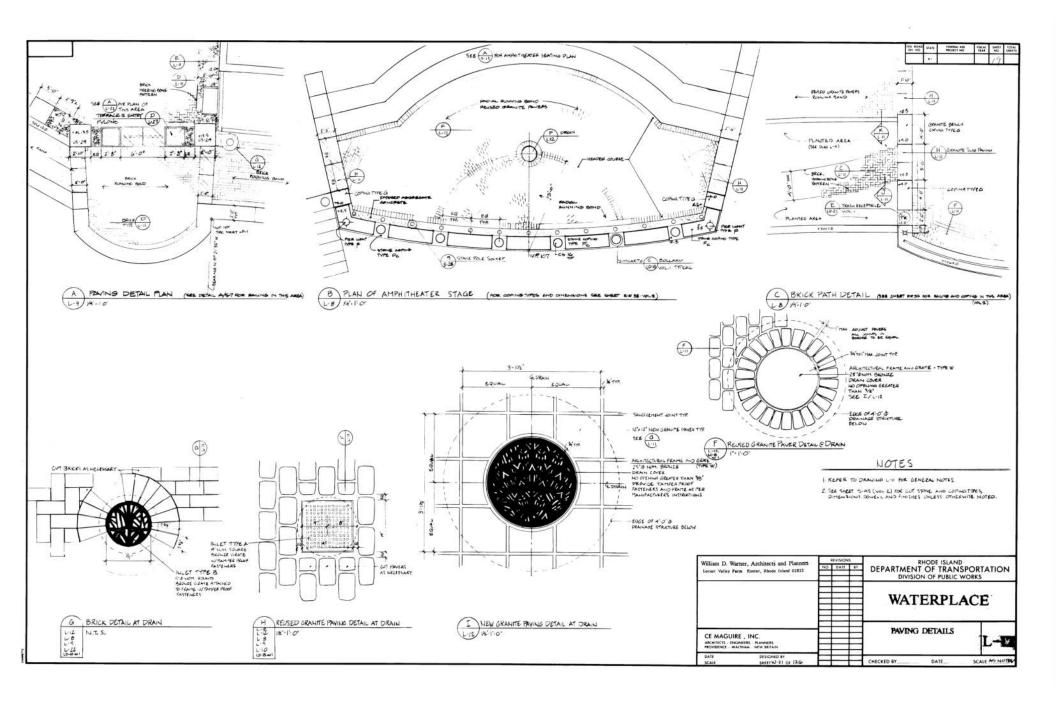












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GENERAL DRAINAGE AND UTILITY NOTES

- THE CONTRACTOR SHALL CHECK AND VERIEV THE LOCATION OF ALL EXISTING UTILITIES. BOTH UNDERGROUND AND OVERHALD, IN ACCORDANCE WITH 105 SAFE PROGRAM LAW ENACTED BY PHODE ISLAND LEGISLATURE BILL NO. 795-391, WHICH BECAME EFFECTIVE JULY 1. 1972. ANY DAMAGE TO EXISTING ACTIVE UTILITIES WHICH ARE SHOWN FROM THE PROVIDENCY OF THE PROPRIEM OF THE PROPRIEM OF THE PROPRIEM OF THE PLANT OF LOCATED BY DIG SAFE AND ASSOCIATED SERVICE CONNECTIONS, WILL BE PLOT FOR BY THE DEPARTMENT. THE LOCATION OF ALL UTILITIES AS SHOWN ON THE PLANT SAFE APPROXIMATE AND ITS THE PLANT OF TH
- ALL REINFORCED CONCRETE PIPE SHALL BE CLASS III WITH MORTAR JOINTS, UNLESS OTHERWISE NOTED.
- ALL DUCTILE IRON SEWER AND/OR DRAIN PIPES SHALL BE ANSI CLASS 52 WITH MECHANICAL JOINTS. ALL DUCTILE IRON WATER PIPE SHALL BE CEMENT LINED, WITH JOINTS AS SPECIFIED.
- 4. DIE TO THE POSSIBILITY OF KINTION FROM ESCAPHIG GAS DURING CONSTRUCTION AND THE PRESENCE OF OTHER TYPES OF POTENTIALLY OF A CONSTRUCTION AND THE PRESENCE OF OTHER TYPES OF POTENTIALLY OF A CONSTRUCTION AND THE CONTRACTOR SHALL HAVE ON HAND, AND SHALL UTILIZE A CONTRACTOR SHALL HAVE ON HAND, AND SHALL UTILIZE SEFORE AND WHILE WORKING IN THESE APREAS. THE COST OF FURNISHING AND USING GAS DETECTION DEVICES SHALL BE INCLUDED AS PART OF THE TEMP OF WHICH THE EXCHANGING IS REQUESTED.
- EACH UTILITY COMPANY IS TO BE CONSULTED BEFORE ANY WORK IMPACTING THEIR UTILITIES BEGINS, ESPECIALLY REMOVAL AND DISPOSAL OF EXISTING ITEMS.
- G CATCH BASINS STD 4.21, AND MANINCLES STD 4.22, SHALL HAVE TYPE W ANCHITECTURAL FRAMES AND GRATES, UNLESS OTHERWISE NOTED, WHICH SHAUL BE PAID FOR SEPARATELY SEE SPECIAL PROVISIONS THE CODE 702.9982; FRAMES AND COVERS FOR SANTARY SEWER MANHOLES SHALL BE INCLUDED WITH THE STRUCTURE FRAMES AND GRATES FOR INLET TYPE A WALKWAY DRAWS SHALL BE INCLUDED WITH THE STRUCTURE FRAMES AND GRATES FOR INLET TYPE A WALKWAY DRAWS SHALL BE INCLUDED WITH THE STRUCTURE.
- WHEN A CATCH BASIN, DROP INLET OR MANHOLE IS REMOVED AND DISPOSED, THE COST OF PLUGGING THE PIPES SHALL BE INCLUDED IN THE COST OF THE REMOVAL FOR THE APPLICABLE STRUCTURE.
- 8. ALL CATCH BASIN SUMPS AND MANHOLE INVERTS SHALL BE WATERTIGHT.
- WHEN EXISTING PIPES AND/OR CONDUITS ARE IN AREAS OF TRENCH EXCAVATION, NO SEPARATE PAYMENT WILL BE MADE FOR THEIR REMOVAL AND DESPOSAL. PAYMENT FOR THIS WORK SHALL BE INCLUDED UNDER THE APPLICABLE UTILITY INSTALLATION ITEMS.
- 10. THE CONTRACTOR IS FOREWARNED THAT DUE TO THE NECESSARY SEQUENCING AND SCHEDULING OF THE PROPOSED WORK, TEMPORARY DRAINAGE PROVISIONS MAY BE REQUIRED. SEE THE SPECIAL PROVISIONS FOR THE ITEM FOR "CONTROL AND DIMERSION OF SURFACE AND SUBSURFACE WATER" FOR MICH INFORMATION.
- 11. TELEPHONE CONDUITS SHALL BE CONCRETE ENCASED AND CONSTRUCTED TO THE FORMATIONS INDICATED ON THE PLANS AND AS CALLED FOR IN THE SPECIAL PROVISIONS AND THE AMERICAN TELEPHONE AND TELEGRAPH BELL SYSTEMS PRACTICES.
- 1... SEE VOLUME 1 FOR RHODE ISLAND STANDARD DETAILS.
- SEE SITE IMPROVEMENT PLANS AND GRADING PLANS FOR LOCATIONS OF DRAINAGE STRUCTURES.
- 14. 12 INCH DIAMETER STEEL SLEEVES ARE TO BE PROVIDED WHERE 8 INCH PVC PIPE GOES THROUGH STARIWAY FOOTING STEMS. THE COST OF THE SLEEVES IS TO BE INCLUDED IN THE COST OF BUILDING THE STARIWAY. THE MATERIAL SHALL "CONFORM TO SECTION 701.9921 C" : IE SPECIAL PROVISION.

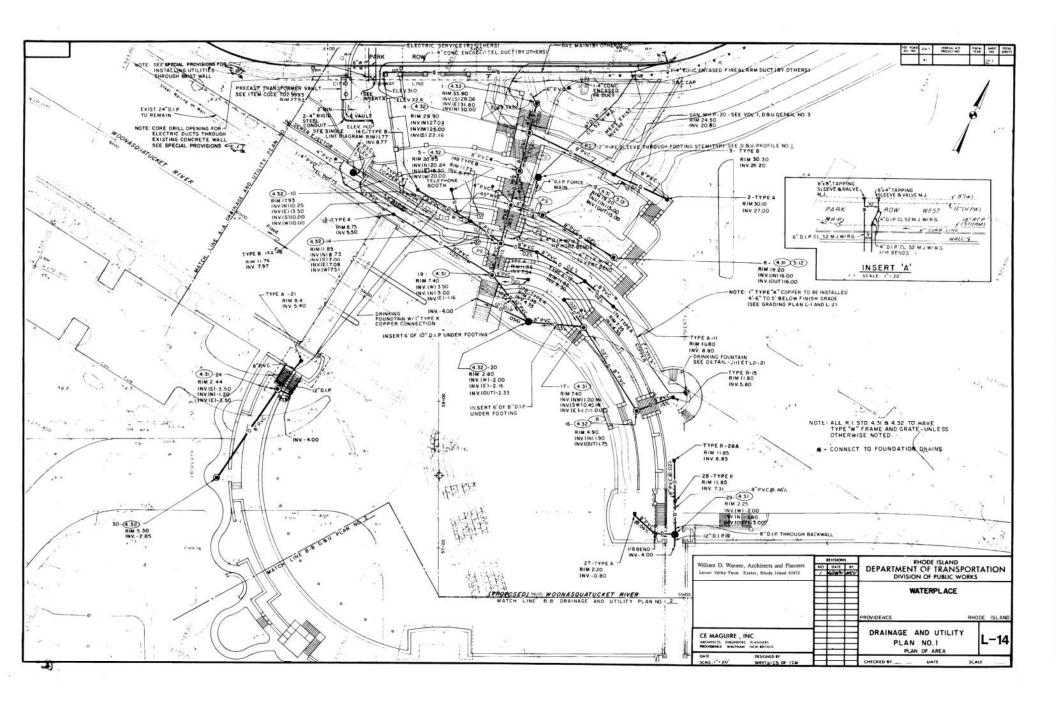
LEGEND

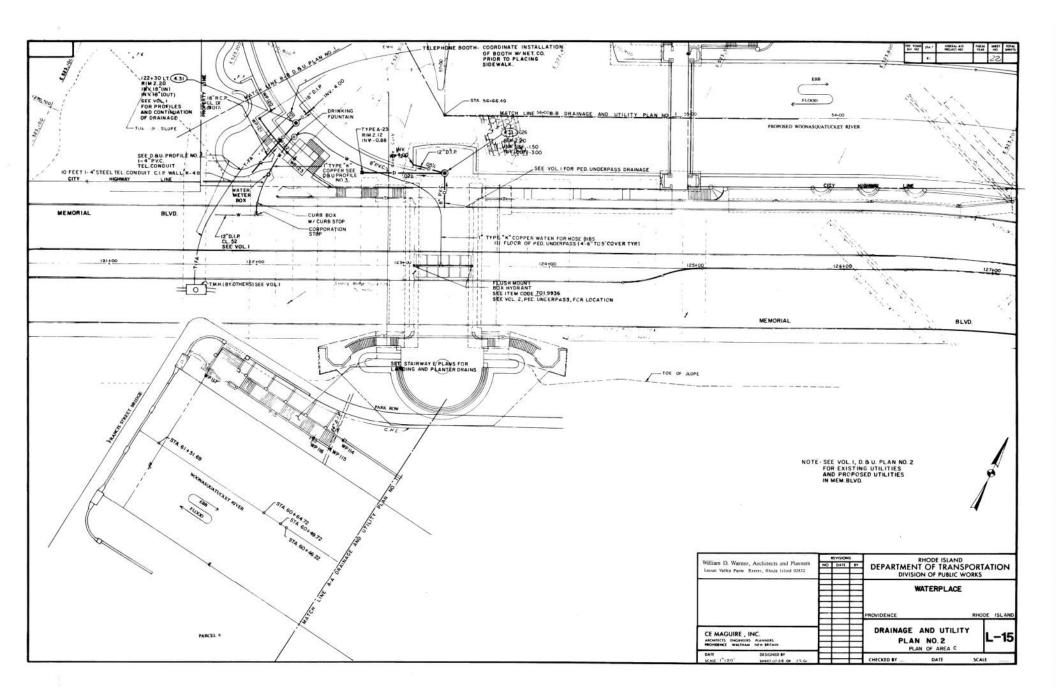
EXISTING		PROPOSED	PROPOSED BY OTHERS
	GAS FLECTRIC	—	E KE E E E E
	7ELEPHONE	;_	*** 7 ***
	FIRE ALARM		EER FALLS
	SANITARY SEWER	1.0	
==	STORM DRAIN	p p	
	COMBINED SEWER		
	WATER	_ w	
	HIGH SERVICE WATER		
	TRAFFIC SIGNAL (PROP. 3" RIGID	—тѕ——	
——,;	HYDRANT ST'L. GLV. (ONDUIT)	←	
os .	BRIDGE SCUPPER		
C3 61	GUTTER INLET		
100	DROP INLET		
@ cs	CATCH BASIN W/FRAME AND GRATE	• _	
(O)C8	CATCH BASIN W/FRAME AND COVER	_ •	
SMH, OMH (O) CSMH	SEWER, DRAIN OR COMBINED SEWER MANHOLE		
EMH [] E 000	ELECTREC HAMHOLE	● EMH	THE EMH
TMH [6] 7 000	TELEPHONE MANHOLE	■ TMH	THE TMH
-0 C3	CURB STOP W/BOX		CLIP
o wv	WATER GATE M/BOX	-	
ogr	GAS GATE W/BOX		
***	ABANDON LINE		
NH O HONN	HANDHOLE/HEAVY DUTY HANDHOLE		
-0-	UTILITY POLE		
*	STREET LIGHT		
→ 75	TRAFFIC SIGNAL		
EZ CC	TRAFFIC SIGNAL CONTROL CABINET		
o Sign	SIGN		
o Alarm	POLICE/FIRE ALARM CALL BOX		
o PM	PARKING METER		
	STREET LIGHT (PROP.2" RIGID ST'L. GLY. COMOUIT)	st	

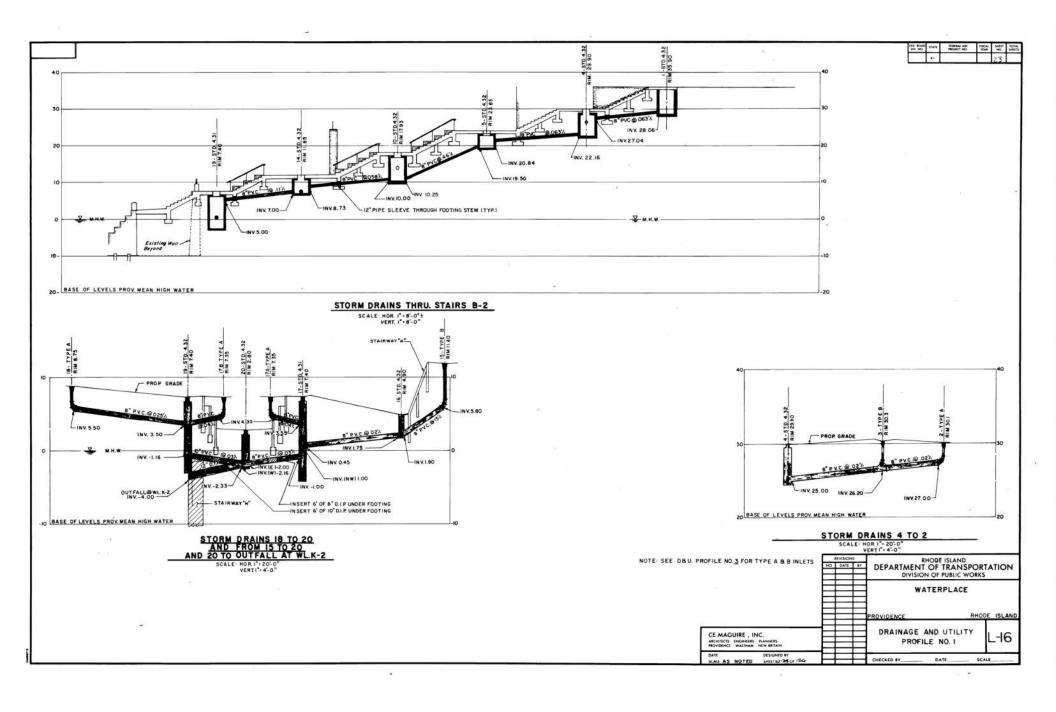
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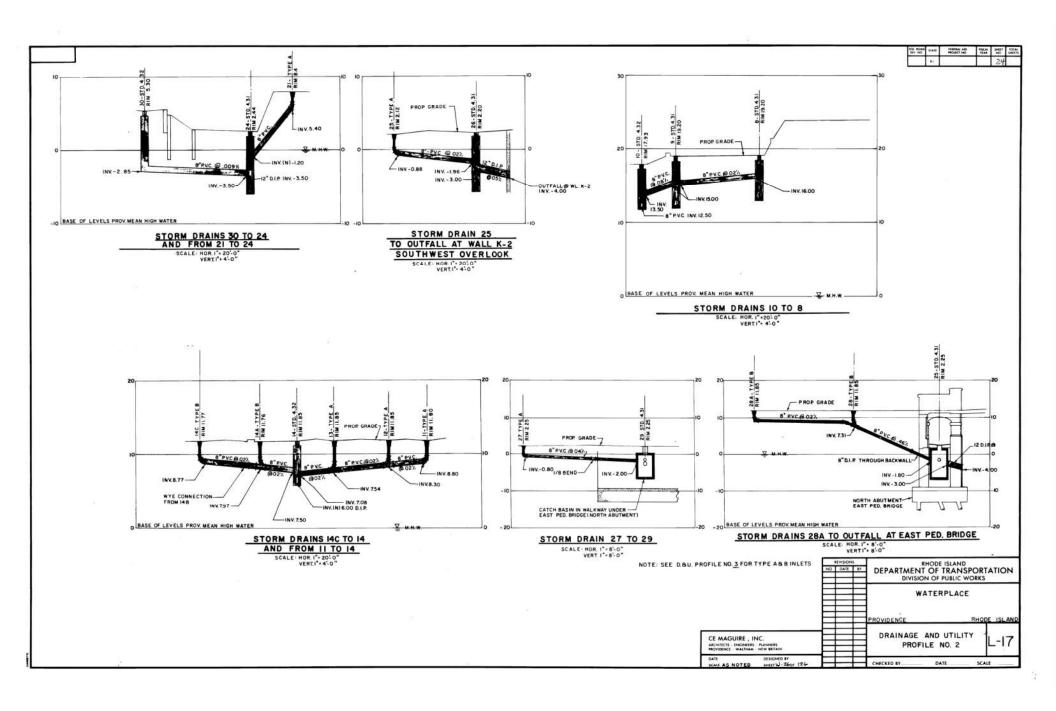
4.31	CATCH BASIN R.I. STD. 4.31	
4.32	PRECAST MANHOLE - 4" DIAMETER R.I. STD. 4:32	
5.12	FRAME AND GRATE R.I. STD. 5-12	
C.I.P.	CAST IN PLACE	
CL 52	CLASS 52	
D.I.P.	DUCTILE IRON PIPE	
H.P.W.	HIGH PRESSURE WATER	
MH-P	SANITARY MANHOLE, PROVIDENCE STANDARD	
P.V.C.	POLYVINYL-CLORIDE PIPE	
R.C.P.	REINFORCED CONCRETE PIPE	
T-FA	TELEPHONE AND/OR FIRE ALARM CONDUIT	
TYPE A	WALKWAY DRAIN INLET TYPE A (SEE DETAIL)	
В	TYPE B ARCHITECTURAL FRAME AND GRATE	

NO DATE 8	RHODE ISLAND
	DEPARTMENT OF TRANSPORTATION DIVISION OF PUBLIC WORKS
	WATERPLACE
	PROVIDENCE RHODE ISLANI
CE MAGUIRE , INC. REMITCES - (ROCK-168) - (DRAINAGE & UTILITY

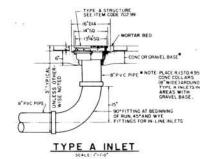


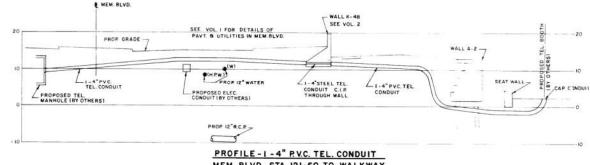




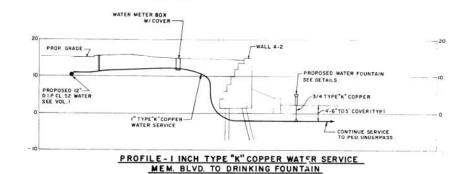


110 MOND 311 W.7	51417	MICHELL M.	1000	200	200
				mer.	



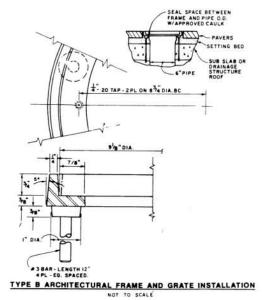


MEM. BLVD. STA. 121+60 TO WALKWAY SCALE: HOR. I" - 8'-0" VERT I" - 8'-0"



SCALE: HOR. I* 8-0" VERT I* 8-0"

SCALE AS NOTED



4" AND 6" D.I.P CL 52 M.J. W/R.G. Exist 12 M.P.W.) I/16 BEND VERT MJ.W/RG Exist. 18" Drain - O SEE SHEET AP-I FOR CONSTRUCTION IN BLDG. D I/8 BEND VERT M.J.W/R.G.-NOTE: PROFILE IS SIMILAR FOR BOTH 6" FIRE SERVICE AND 4" BUILDING SERVICE DOMESTIC WATER SERVICES

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
DIVISION OF PUBLIC WORKS WATERPLACE DRAINAGE AND UTILITY CE MAGUIRE , INC. PROFILE NO. 3 ARCHITECTS - ENGINEERS - PLANNERS PROVIDENCE - WALTHAM NEW BRITAIN WITH DETAILS

CHECKED BY

