

SPECIFICATION BOOKLET GREENWICH PUBLIC SCHOOLS

JULIAN CURTISS ELEMENTARY SCHOOL

SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY

2196-18

OWNER: **GREENWICH PUBLIC SCHOOLS** ADDRESS: **290 GREENWICH AVENUE** CITY:

GREENWICH, CT 06830

BOARD OF EDUCATION

BID NUMBER:

FULLER AND D'ANGELO

PROJECT NO: 18313.00

FACILTY NAME: JULIAN CURTISS ELEMENTARY SCHOOL

> **180 EAST ELM STREET** GREENWICH, CT 06830





FULLER AND D'ANGELO, P.C. **ARCHITECTS & PLANNERS** 45 KNOLLWOOD ROAD **ELMSFORD, NEW YORK 10523** (914) 592-4444 <u>www.fullerdangelo.</u>co

THE PROPERTY OF THE PARTY OF TH

DATE ISSUED FOR BID: 4/17/18

SECTION 00010 TABLE OF CONTENTS

PROCUREMENT AND CONTRACTING REQUIREMENTS:

00001 - Project Title Page	
00010 - Table of Contents	
Invitation to Bid	Page 1
Information to Bidders Part 1	Page 1-6 inclusive
and RFI form	Page 7
Information To Bidders Part 2	Page 1-5 inclusive
00 0115 - List of Drawings	1-1
00 2113 – Instructions to Bidders	1-7
00 4100 - Bid Form	1-4
00 4400 - Contractor's Qualification Statement	1-3
Greenwich Front End Documents	
Non-Collusion Form	1-3
Minimum Rates and Classifications (Prevailing Wage Rates) & Bulletins	1-41
Greenwich Public School Documents:	
Award Letter	1-1
Form of Bid Bond	1-2
Certificate as to Corporate Principal	1-1
Performance, Maintenance, and Payment Bond	1-1
Insurance Procedure	1-2
Sample Endorsement Letter	1-1
Certificate of Insurance	1-1
A.M. Best Key Rating Guide Form	1-1
Affirmative Action Compliance Affidavit	1-1
Bid Sheet (Not Used)	1-1
Information for Bidders Part 3	Page 14-18 inclusive
Agreement	Page19-34 inclusive
Consent of Surety	1-1
Affidavit for Final Payment	1-1
Form AU-764 Deposit by a Person Doing Bus. with a Nonresident Contractor	1-2
Form REG-1 Business Taxes Registration Application	1-6
Connecticut Commission on Human Rights and Opportunities	1-9
00 7300 - Supplementary Conditions	1-2

FULLER AND D'ANGELO, PC ARCHITECTS AND PLANNERS

DIVISION 01 – GENERAL CONDITIONS	
01 1000 - Summary of Contract	1-5
01 2000 - Price and Payment Procedures	1-3
01 2100 – Allowances	1-1
01 2300 – Alternates	1-1
01 3000 - Administrative Requirements	1-8
01 3553 - Site Safety and Security Procedures	1-4
01 4000 - Quality Requirements	1-4
01 5000 - Temporary Facilities and Controls	1-5
01 5510 - Traffic and Pedestrian Access	1-2
01 5713 – Temporary Facilities	1-4
01 6000 - Product Requirements	1-5
01 7000 – Execution	1-6
01 7419 - Construction Waste Management	1-3
01 7800 - Closeout Submittals	1-7
DIVISION 03 – CONCRETE	
03 3000 - Cast in Place Concrete	1-6
03 3511 – Concrete Floor Finishes	1-1
DIVISION 04 – MASONRY	
04 0100 - Maintenance and Restoration of Masonry	1-9
04 2000 – Unit Masonry	1-8
DIVISION 05 – METALS	
05 5213 – Pipe and Tube Railings	1-5
DIVISION 06 – NOT USED	
DIVISION 07 – THERMAL AND MOISTURE PROTECTION	
07 9005 – Joint Sealers	1-3
DIVISION 08 – OPENINGS	
08 1433 – Stile and Rail Wood Doors	1-2
08 1613 - Fiberglass Doors and Aluminum Frames	1-9
08 7100 – Door Hardware	1-4

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY TABLE OF CONTENTS

DIVISION 09 – FINISHES	
09 9113 – Exterior Painting	1-5
09 9123 – Interior Painting	1-2
09 9723 - Concrete and Masonry Coatings	1-4
DIVISION 10 – 25 – NOT USED	
DIVISION 26 – ELECTRICAL	
26 0150 – Electrical Specifications	1-8

GREENWICH PUBLIC SCHOOLS

Purchasing Department 290 Greenwich Avenue Greenwich, Connecticut 06830 (203) 625-7411 Fax (203) 625-0109

EUGENE H. WATTS Senior Buyer Invitation to Bidders

APRIL 17, 2018

Dear Sir/Madam:

You are invited to submit a bid to provide: **Select Patio Wall/Door Repairs and ADA Accessibility at the Julian Curtiss Elementary School.** This bid will be a lump sum for your work or material in accordance with the plans and specifications for the work on the following project. The attached bid specifications detail the requirements we are looking for.

Bidders are urged to read all documents carefully and fill out all information requested. Bids which are incomplete, obscure, or conditional, and which contain irregularities of any kind, will be subject to rejection for failure to comply strictly with these conditions.

Bids must be submitted on the schedule form attached hereto. All unit prices must be filled in. Each bid must be submitted with one (1) original, and four (4) copies of the bid. Bidders must submit bids in a clear, concise and legible manner so as to permit proper evaluation of responsive bids. Faxed bids will not be accepted. The original bid and copies must be in a sealed envelope plainly marked: Select Patio Wall/Door Repairs and ADA Accessibility at the Julian Curtiss Elementary School. Project Bid, Opening Date: May 3, 2018 at Opening Time: 11:00 a.m. and Bid # 2196-18.

There will be a mandatory Pre-Bid Meeting on April 24, 2018 at 9:00 am at the Julian Curtiss Elementary School, 180 East Elm Street, Greenwich, CT 06830 – meet at Lobby.

Questions must be submitted on the RFI form contained in the bid documents no later than April 26, 2018 at noon to Email: bid_department@greenwich.k12.ct.us. Questions will be responded to via Addendum by April 30, 2018 at noon posted on the Greenwich Public Schools Website.

Specifications can be viewed and downloaded from the Greenwich Public Schools website: www.greenwichschools.org.

Sealed bids for supplying the above will be received by the Purchasing Department, at the above address until 11:00 a.m. on May 3, 2018 at which time they will be opened and read publicly. All bidders and other interested people are invited to be present at the opening of these bids.

Very truly yours.

Eugene H. Watts

regene to what

Information to Bidders Part 1

The Architect for the project is Fuller D'Angelo P.C. Architects and Planners, 45 Knollwood Road, Elmsford, NY 10523

The contact for the Owner is: Eugene Watts, Senior Buyer, Greenwich Public Schools, Havemeyer Building, 290 Greenwich Avenue, Greenwich, CT.

Contractor(s) whose bid exceeds \$500,000.00 shall hold a current "DAS" Contractor Prequalification Certificate" (not a predetermination letter) from the Department of Administrative Services of the State of Connecticut according to Connecticut General Statutes Section 4a-100, 4b-101 and 4b-91 previously stated as Public Act 03-215 and as amended by Public Act 04-141. Bidders shall submit with their bids, unless noted otherwise, a "DAS Contractor Prequalification Certificate" along with a current "Update (bid) Statement". Failure to submit those items with the bid will result in disqualification of the bidder. If you have any questions regarding these requirements contact the State of CT.DAS, at telephone number 860-713-5280 or visit their web site at www.das.state.ct.us.

BACKGROUND:

The Town of Greenwich, CT is about 30 miles northeast of New York City and has a population of about 60,000 people. The Greenwich Public Schools enjoy a national reputation for excellence and have strong support from the community. Our fifteen public schools have a current enrollment of 9000 students and consist of eleven elementary schools (K-5), three middle schools (6-8), and one comprehensive high school (9-12). Our district also offers some pre-K and alternative high schools programs.

CONTRACT LENGTH:

This Bid is for awarding a contract to cover the period beginning on or about June 26, 2018. Once this Bid is awarded, the bidder must make arrangements to meet with Greenwich Public Schools if required.

OPTION TO EXTEND:

The Board of Education may, at their option and with the approval of the vendor, extend the period of this agreement for the schools. If the Board of Education intends to extend the contract period, the vendor shall be notified in writing by the Purchasing Department at least fourteen (14) calendar days prior to the expiration of the original contract.

BID EVALUATION CRITERIA:

A committee composed of various administrators will evaluate bids. The following criteria guidelines will be used in analyzing and evaluating this bid:

Conformance to the requirements of this Bid, i.e. conformance to Terms, Conditions and Scope of Work.

Proven skills and technical competence.

Background on the firm

For Vendor firm, identification of personnel who will have principal responsibility.

Qualifications Form

5. A NARRATIVE DESCRIBING THE FIRMS APPROACH TO UNDERTAKING THE SCOPE OF THE WORK INCLUDING:

Cost/service fee (overall cost to the Board of Education with all factors considered). Presentation to the selection committee, if requested.

6. AWARD OF CONTRACT:

The contract will be awarded by the Board of Education to the qualified firm or person at compensation determined to be fair and reasonable considering budgetary limitations, scope, complexity and the nature of goods and/or services.

7. PURPOSE:

Greenwich Public Schools is soliciting bids to provide SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY at the JULIAN CURTISS ELEMENTARY SCHOOL for the Greenwich Public School District.

8. OVERVIEW:

Greenwich Public Schools wishes to solicit Request for Bids for SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY at the JULIAN CURTISS ELEMENTARY SCHOOL, including alternates. Companies must be located within a 100-mile radius of the district in order to submit a bid. It is understood that any contract is subject to available funding.

9. THE DETAILED BIDDER SHALL INCLUDE:

An outline of the procedures to be used to provide SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY at the JULIAN CURTISS ELEMENTARY SCHOOL indicated above, and how cost estimates will be calculated.

10. INTENT OF WORK

Fixed price scope of work per plans and specifications for provision of the SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY at the JULIAN CURTISS ELEMENTARY SCHOOL.

11. SCOPE OF SERVICE:

Select door replacement and wood restoration/refinishing, stone stair resetting and repointing, railing replacement, masonry patio wall replacement of drainage improvements, ADA accessible ramps.

12. CONTRACTOR AGREEMENT

1. The contractor shall simultaneously with the signing of the Contract, furnish the Town the executed Performance, Maintenance, and Payment Bond of a surety company authorized to do business in the State of Connecticut, and acceptable to the Town, in the sum of the full amount of the Contract Obligation in the form provided by the Town. A PERFORMANCE BOND will not be required where the total estimated cost of labor and materials under the contract with respect to which such general bid is submitted is less than one-hundred thousand dollars (\$100,000.00). Once a contract exceeds \$100,000.00 the bidder will be responsible for obtaining and paying for all bonds required by Greenwich Public Schools.

- 2. Each bid shall be signed and accompanied by a bid security payable to the Town of Greenwich in the amount of ten (10%) percent of the bid and shall be in the form of a Bid Bond only as issued in the bid documents. Bid Bonds must use the Greenwich Public Schools Bid Bond Form (included within the bid documents), issued by a surety Company listed on the Current U.S. Department of Treasury's Federal Register and be licensed to underwrite bonds in the State of Connecticut.
- 3. Each bid shall be accompanied by a completed copy of the Bidders Qualification Questionnaire included in the bid documents. The Greenwich Public Schools reserve the right to request further information and/or supplemental information with respect to the Qualification Questionnaire at their sole discretion
- 4. Each bidder shall utilize the specified manufacturers. Should the Contractor desire to substitute other articles, materials, apparatus, products or process, then those specified or approved as equal, the Contractor shall apply to the Architect, in writing, for approval of such substitution, per Section 01600 Product Requirements. It should be noted that the Bid shall not be based on a substituted article, material, apparatus, product or process. No substitution reviews shall take place prior to bid.
- 5. Each form of bid contains a section for alternates and/or unit prices. All alternate prices must be completed with a dollar value. Blanks, not applicable (n/a), no effect, etc. in these portions of the form of bid shall be construed to indicate that the particular alternate shall be performed without increase to the contract price as they relate to the scope of the trade package.
- 6. Unit prices which do not affect the work of your trade may be filled in "not applicable (n/a)". "Not applicable or blanks in these portions of the form of bid shall be construed to indicate that the unit price is not applicable as they relate to the scope of the trade package.
- 7. The successful bidder will produce for the Greenwich Public Schools review a current financial statement, which will remain strictly confidential.

EXCEPTIONS.

- 8. Each bid shall be accompanied by a completely filled in and properly executed Non-Collusion Affidavit.
- 9. All work shall be done in accordance with applicable State statutes; conditions of Prevailing Wages shall apply.
- 10. Note: Failure to submit a bid with four copies does not constitute a material defect.
- 11. No Bidder may withdraw their Bid within 90 days after the actual date of Bid Opening.
- 12. Qualifications to the bid are not allowed. If bids are qualified, they may be deemed non-responsive and subsequently rejected.

- 13. If there is a conflict between the Contract Agreement and the General Conditions, the Contract Agreement shall prevail.
- 14. Bid awards must be approved by the Greenwich Public Schools. All contractors shall be required to execute the Greenwich Public Schools standard form of contract and accompanying payment and performance bonds without exception.
 - i. The contract shall be awarded to the lowest responsible and qualified bidder, meaning the bidder whose bid is the lowest of those bidders possessing the skill, ability and integrity necessary to faithful performance of the work based on objective criteria considering past performance and financial responsibility. In considering past performance, the Greenwich Public Schools shall evaluate the skill, ability and integrity of bidders in terms of the bidders' fulfillment of contract obligations and of the bidders' experience or lack of experience with projects of similar size and scope. The Greenwich Public Schools reserves the right to consider as unqualified to do the work required by the bid documents any bidder that does not habitually perform with its own forces the major portion of the work involved in the bid documents. No contract will be awarded to any bidder who is at time of award not qualified under applicable regulations issued by the Secretary of Labor, United States Department of Labor or any applicable State and local laws and regulations.
 - ii. After review of all factors, terms, and conditions, including price, the Greenwich Public Schools reserves the right to reject any and all bids, or any part thereof or waive defects in same.

13. FEE:

Indicate your Bid Fee for all services as described in Part 5. The District reserves the right to provide payment in accordance with completion of services based on the Project Schedule.

14. QUESTIONS:

Questions concerning this bid will be received by email only directed to: Eugene H. Watts, at bid_department@greenwich.k12.ct.us. In the "Subject" line you must put 2196-18 Title: SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY at the JULIAN CURTISS ELEMENTARY SCHOOL by using the RFI form. No questions will be accepted after 7 days prior to the Bid date by noon. All answers will be published by written Bid Notification. It is the responsibility of all bidders to verify that they are current with all.

Failure to comply with these conditions will result in the bidder waiving his right to dispute the bid specifications and conditions. All Addenda will be posted on our website: www.greenwichschools.org up to 72 hours before the bid opens.

15. BID DOCUMENTS:

Specifications can be viewed at the Greenwich Public Schools website: www.greenwichschools.org.

Project Description:

This project involves SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY at the JULIAN CURTISS ELEMENTARY SCHOOL.

Pre-Bid Conference

There will be a pre-bid conference beginning at <u>9:00 a.m.</u> on <u>April 24, 2018</u> at <u>Julian Curtiss Elementary School, 180 East Elm Street, Greenwich, CT 06830 – meet at <u>Lobby</u>. Attendance at the walkthrough is mandatory. Following the conference, interested parties may walk the site at the project.</u>

16. ACCEPTANCE:

The department will make determination of the acceptability of work. Work shall be completed in a responsive and professional manner and in accordance with the specifications.

17. GENERAL TERMS AND CONDITIONS:

Sealed bids for furnishing new SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY at the JULIAN CURTISS ELEMENTARY SCHOOL Greenwich Public Schools, as specified on the attached bid specification sheets, will be received at the time and date previously mentioned. All bidders and other interested persons are invited to be present at the opening of these bids that will take place at the Board of Education.

The Board of Education reserves the right to waive any informality in the bid or reject any or all bids or to accept any bid, which appears to be in the best interest of the Board. Any bid may be withdrawn prior to the opening time and date. Any bid received after the time and date as specified will not be considered.

The Board of Education may consider proximity of vendor's service as a factor in determining lowest responsible bid.

If the Board of Education deems it necessary, the Board of Education may postpone the date for the opening of these bids by notifying each bidder by telephone, mail or the issuing of an addendum through our website.

The Board of Education shall have the right to take such steps as it deems necessary to determine the ability of the bidder to perform the work and the bidder shall furnish the Board of Education with information and data for this purpose as the Board of Education may request. The right is reserved to reject any bid where, on investigation, the evidence or information submitted by such bidders does not satisfy the Board of Education that the bidder is qualified to carry out properly the terms of the contract.

Consumption or use of alcohol and/or drugs is prohibited on school property. Any individual with alcohol or drugs will be removed from said property. Smoking is prohibited in all school buildings and on school grounds.

18. TAX:

No amount shall be added for the Connecticut Sales Tax or Federal Tax. The Greenwich Public School system is exempt from the payment of taxes imposed by the Federal Government and/or State of Connecticut. Taxes must not be included in the bid price.

19. Non-Connecticut Contractors.

Pursuant to Connecticut General Statutes §12-430(7), as amended by Public Act No. 11-61, Section 66 a nonresident contractor shall comply with the State of Connecticut's bonding requirements.

20. COLLUSION AMONG BIDDERS:

More than one offer from an individual, firm, partnership, corporation or association under the same or different name will be rejected. Reasonable grounds for believing that a bidder is interested in more than one bid for the work contemplated will cause rejection of all bids in which the bidder is interested. Any or all bidders will be rejected if there is any reason for believing that collusion exists among the bidders.

Participants in such collusion may not be considered in future offers for the same work. Each bidder, by submitting a bid, certifies that it is not a part to any collusive action.

21. EMPLOYMENT DISCRIMINATION BY CONTRACTOR PROHIBITED:

The successful bidder will not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin, except where religion, sex or national origin is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The successful bidder agrees to post in a conspicuous place, available to employees and applicants for employment, notices setting forth the provision of this nondiscrimination clause. The successful bidder in all solicitation or advertisements for employees, placed by or on behalf of the contractor, will state that such successful Bidder is an Equal Opportunity Employer.

Notices, advertisements, and solicitations placed in accordance with Federal Law, rules or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.

22. The intention of this BID/RFP is to establish a contract with one or more contractors who will, upon request, provide the time with the services, labor, and supplies described in this solicitation.

This is no guarantee as to the amount of services, labor or supplies that the Board of Education may purchase during the term of this contract.

23. Per Connecticut General Statutes CGS § 10-221d, which went into effect July 1, 2016, and 10-222c, all people who are entering into a paid agreement with a school district must submit to a mandatory background check. If you are an individual, you must send me your employment history so that I can do the background check. If you are a company having multiple employees in the schools, you will be responsible for obtaining the background checks on each of your employees.

FULLER AND D'ANGELO P.C. 45 KNOLLWOOD ROAD

ARCHITECTS AND PLANNERS

45 KNOLLWOOD ROAD TEL: 914.592.4444 ELMSFORD, NEW YORK 10523 FAX: 914.592.1717

REQUES	ST FOR INFORMATION NO.					
				Select Pa	Julia tio Wall/Door Re	Greenwich Public Schools n Curtiss Elementary School epairs and ADA Accessibility
Date:						
A/E Proj Bid # 219	ect Number: 18313.00 96-18					
То:	Greenwich Public Schools Mr. Eugene Watts Email: <u>bid_department@gre</u>	enwich.k12.ct.us				
From:		Tele. No.:		Fax		
Subject		Discipline/Trade		Dwg./Spec. Refe	rence	
	_					
QUESTI	ON:					Field Condition Drawing/Spec Discrepancy Owner Change Clarification
						Other
SIGNAT	URE					DATE
FULLER	AND D'ANGELO, P.C. RES	PONSE				
SIGNAT	URE					DATE
CC+C+	mpany Name	Contact Name	Copies	Fax Number	Notes	
CC; C0	шрану глаше	Contact Name	Copies	rax Number	Notes	

Review and any responses to this request for information by the architect/engineer is strictly for design intent only and does not constitute acknowledgement or acceptance of any cost or schedule implications unless specifically presented by the contractor. By submission of this request for information the contractor assumes all responsibility in the absence of an approved change order or work directive

Information to Bidders Part 2

GENERAL TERMS AND CONDITIONS

Sealed bids for furnishing these services to Greenwich Public Schools, as specified on the attached bid specification sheets, will be received on **May 3, 2018 at 11:00 am.** All bidders and other interested persons are invited to be present at the opening of these bids which will take place at the Board of Education. Bidders are urged to read all documents carefully and fill out all information requested. Bids which are incomplete, obscure, or conditional, and which contain irregularities of any kind, will be subject to rejection.

The Board of Education reserves the right to waive any informality in the bid or reject any or all bids or to accept any bid that appears to be in the best interest of the Board. Any bid may be withdrawn prior to the opening time and date. Any bid received after the time and date as specified will not be considered.

The Board of Education will consider proximity of vendor's service as a factor in determining lowest responsible bid. The bidders company must be within a one hundred (100) mile radius of the Greenwich Board of Education.

If the Board of Education deems it necessary, the Board of Education may postpone the date for the opening of this bid by notifying each bidder by telephone, mail or the issuing of an addendum.

The Board of Education shall have the right to take such steps as it deems necessary to determine the ability of the bidders to perform the work and the bidders shall furnish the Board of Education with information and data for this purpose as the Board of Education may request. The right is reserved to reject any bid where, on investigation, the evidence or information submitted by such bidders does not satisfy the Board of Education that the bidders is qualified to carry out properly the terms of the contract.

Consumption or use of alcohol and/or drugs is prohibited on School Property. Any individual with alcohol or drugs will be removed from said property. Smoking is prohibited in all School Buildings and on school grounds.

INSURANCE PROCEDURE

PLEASE NOTE:

THIS PAGE MUST BE RETURNED WITH YOUR BID/RFP. FAILURE TO DO SO MAY RESULT IN YOUR BID/RFP BEING REJECTED.

Please take the insurance requirements of the Contract to your agent/broker immediately upon receipt of the bid documents to determine your existing coverage and any costs for new or additional coverage required for the work noted in this Request for BID/RFP. Any BID/RFP with deficient insurance requirements will be rejected.

S	TΑ	ΓΕΝ	ΊEΝ	ΙT	OF	VE	ND	OR:

	s for this work and have taken the documentation to my
	cost reflects any additional costs relating to insurance
requirements for this work.	
Signature	Date

Insurance Requirement Sheet

<u>Insurance Requirements</u>: Before starting and until final completion and acceptance of the work called for in the Contract and expiration of the guarantee period provided for in the Contract, the Contractor and its subcontractors, if any, shall procure and maintain insurance of the types and amounts checked in paragraphs A through F below for all Contract operations.

\boxtimes	A.	General Liability, with minimum coverages for combined bodily injury and property damage liability of \$2,000,000 general aggregate, \$1,000,000 per occurrence including:
	\boxtimes	1. Commercial General Liability.
	\boxtimes	2. Town as additional insured.
		 Owners and Contractors Protective Liability (separate policy in the name of the Town).
	B.	Comprehensive Automobile Liability, with minimum coverages of \$1,000,000 combined single limit for bodily injury and property damage, including, where applicable, coverage for any vehicle, all owned vehicles, scheduled vehicles, hired vehicles, non-owned vehicles and garage liability.
\boxtimes	C.	Excess Liability, with minimum coverage of \$5,000,000 in umbrella form, or such other form as approved by Town Department Head and Risk Management Director.
\boxtimes	D.	Workers' Compensation and Employer's Liability, with minimum coverages as provided by Connecticut State Statutes.
	E.	Professional Liability (for design and other professionals for Errors and Omissions), with minimum coverage of \$1,000,000. If the policy is on a claims-made basis, coverage shall be continually renewed or extended for three (3) years after work is completed under the Contract.
	F.	Other (Builder's Risk, etc.):
⊠	G.	CERTIFICATE HOLDER: TOWN OF GREENWICH ATTN: BOARD OF EDUCATION. (Also fill in on ACORD Certificate of
Insura	ance)	290 Greenwich Avenue, Greenwich, CT 06830.

The Acord certificate of insurance form must be executed by your insurance agent/broker and returned to this office. Company name and address must conform on all documents including insurance documentation. It is required that the agent/broker note the individual insurance companies providing coverage, rather than the insurance group, on the Acord form. The Contract number (provided to the awarded Contractor), project name and a brief description must be inserted in the "Description of Operations" field. It must be confirmed on the Acord Form that the Town of Greenwich is endorsed as an additional insured by having the appropriate box checked off and stating such in the "Description of Operations" field. A letter from the awarded vendor's agent/broker certifying that the Town of Greenwich has been endorsed onto the general liability policy as an additional insured is also mandatory. This letter must follow exactly the format provided by the Purchasing Department and must be signed by the same individual authorized representative who signed the Acord form. If the insurance coverage required is provided on more than one Acord certificate of insurance, then additional endorsement letters are also required. Contract development will begin upon receipt of complete, correct insurance documentation.

The Contractor shall be responsible for maintaining the above insurance coverages in force to secure all of the Contractor's obligations under the Contract with an insurance company or companies with an AM Best Rating of B+:VII or better, licensed to write such insurance in Connecticut and acceptable to the Risk Manager, Town of Greenwich. For excess liability only, non-admitted insurers are acceptable, provided they are permitted to do business through Connecticut excess line brokers per listing on the current list of Licensed Insurance Companies, Approved Reinsurers, Surplus Lines Insurers and Risk Retention Groups Issued by the State of Connecticut Insurance Department.

ACORD CER	TIFICATE	OF LIAB	ILITY IN	ISURA	NCE	DATE	(MM/DDAYYY)
THIS CERTIFICATE IS ISSUED AS A CERTIFICATE DOES NOT AFFIRMAT BELOW. THIS CERTIFICATE OF IN REPRESENTATIVE OR PRODUCER, A	TIVELY OR NEGAT SURANCE DOES N ND THE CERTIFICA	IVELY AMEND, EX NOT CONSTITUTE NTE HOLDER.	TEND OR ALT A CONTRACT	ER THE CO BETWEEN	VERAGE AFFORDED I THE ISSUING INSURER	BY THE	POLICIES
IMPORTANT: If the certificate holder the terms and conditions of the policy certificate holder in lieu of such endor	, certain policies m	. INSURED, the pol ay require an endo	icy(ies) must be rsement. A sta	e endorsed. tement on th	If SUBROGATION IS V	VAIVED confer r	, subject to ights to the
PRODUCER		CO	NIACI				
		PHI	ONE C, No, Ext):		FAX (A/C, No):		
		ĀD	DRESS:		(4/0,149).		
		PRI CU:	ODUCER STOMER ID #:				
INSURED			INS	SURER(S) AFFOI	RDING COVERAGE		NAIC#
Mauren			URER A:				
			URER 8 :				
		1	URER C : URER D :				
			URER E:				
			URER F :				
	RTIFICATE NUMBE				REVISION NUMBER:		
THIS IS TO CERTIFY THAT THE POLICIES INDICATED. NOTWITHSTANDING ANY RECERTIFICATE MAY BE ISSUED OR MAY EXCLUSIONS AND CONDITIONS OF SUCH MISK!	EQUIREMENT, TERM PERTAIN, THE INSU	OR CONDITION OF RANCE AFFORDED I	ANY CONTRACT BY THE POLICIE EN REDUCED BY	OR OTHER I S DESCRIBEI PAID CLAIMS	DOCUMENT WITH RESPE D HEREIN IS SUBJECT T	CT TO 1	WHICH THIS
LTR TYPE OF INSURANCE	INSR WAYD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	(MM/DD/YYYY)	LOMPT	S	
GENERAL LIABILITY					EACH OCCURRENCE DAMAGE TO RENTED	\$	
COMMERCIAL GENERAL LIABILITY CLAIMS-MADE OCCUR					DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	_
CD4M3-NADE COCOR					MED EXP (Any one person)	\$	
					PERSONAL & ADVINJURY GENERAL AGGREGATE	\$	
GEN'L AGGREGATE LIMIT APPLIES PER:					PRODUCTS - COMP/OP AGG	\$	
POLICY PRO-	L.					\$	
AUTOMOBILE LIABILITY ANY AUTO					COMBINED SINGLE LIMIT (Ea accident)	\$	
ALL OWNED AUTOS					BODILY INJURY (Per person)	\$	
SCHEDULED AUTOS					BODILY INJURY (Per accident) PROPERTY DAMAGE	\$	
HIRED AUTOS				ĺ	(Per accident)	\$	
NON-OWNED AUTOS	! ! !					\$	
UMBRELLA LIAB CCCUIR						\$	
Hrysessua Hoook					EACH OCCURRENCE	ş	
DEDUCTIBLE CLAIMS-MADE	1				AGGREGATE	\$	
RETENTION \$			i i			\$	
WORKERS COMPENSATION		• •			WC STATU- OTH-	•	
ANY PROPRIETORIPARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?	N/A				E.L. EACH ACCIDENT	\$	
(Mandatory in NH) If yes, describe under					E.L. DISEASE - EA EMPLOYEE	\$	
DESCRIPTION OF OPERATIONS below					E.L. DISEASE - POLICY LIMIT	\$	
				İ			
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHIC	LES (Attach ACORD 181,	Additional Remarks Scheo	lule, if more space is	required)			
CERTIFICATE HOLDER			NCELLATION				
		S	HOULD ANY OF T	DATE THE	ESCRIBED POLICIES BE CA REOF, NOTICE WILL E Y PROVISIONS.		
		AUT	HORIZED REPRESEN	NTATIVE			
-	****		© 198	88-2009 ACC	ORD CORPORATION.	All righ	ts reserved

ACORD 25 (2009/09)

The ACORD name and logo are registered marks of ACORD

REFERENCES:

Please list at least three (5) school districts in Connecticut or New York of similar size to Greenwich Public Schools where you or your company has performed these services.
1.
NAME AND ADDRESS
TELEPHONE # FAX # EMAIL
CONTACT PERSON AND TELEPHONE NUMBER
2.
NAME AND ADDRESS
TELEPHONE # FAX # EMAIL
CONTACT PERSON AND TELEPHONE NUMBER
3
NAME AND ADDRESS
TELEPHONE # FAX # EMAIL
CONTACT PERSON AND TELEPHONE NUMBER
4.
NAME AND ADDRESS
TELEPHONE # FAX # EMAIL
CONTACT PERSON AND TELEPHONE NUMBER
5
NAME AND ADDRESS
TELEPHONE # FAX # EMAIL
CONTACT PERSON AND TELEPHONE NUMBER

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY LIST OF DRAWING SHEETS

LIST OF DRAWING SHEETS

PART 1 - GENERAL

1.1 DRAWING INDEX

A. Drawings are listed on Drawing G-1 for all contracts.

PART 2 - PRODUCTS (NOR USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

INSTRUCTIONS TO BIDDERS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Refer to the Invitation to Bids, Information to Bidders and the Agreement for additional information. Any conflicts the Invitation to Bids, Information to Bidders and the Agreement shall supercede this Section.

1.3 DOCUMENT INCLUDES

- A. Invitation
 - 1. Bid Submission
 - 2. Intent
- B. Bid Documents and Contract Documents
 - 1. Definitions
 - 2. Contract Documents Identification
 - 3. Availability
 - 4. Examination
 - 5. Inquiries/Addenda
 - 6. Product/Assembly/System Substitutions
- C. Site Assessment
 - 1. Prebid Conference
- D. Qualifications
 - 1. Qualifications
- E. Bid Submission
 - 1. Bid Depository
 - 2. Submission Procedure
 - 3. Bid Ineligibility
- F. Bid Enclosures/Requirements
 - 1. Security Deposit
 - 2. Consent of Surety
 - 3. Performance Assurance
 - 4. Bid Form Requirements
 - 5. Bid Form Signature
 - 6. Additional Bid Information
 - 7. Selection and Award of Alternates
- G. Offer Acceptance/Rejection
 - 1. Duration of Offer
 - 2. Acceptance of Offer

1.4 RELATED DOCUMENTS

- A. Division 00 Procurment Requirements and Greenwich Public Schools Front End documents as listed in the Table of Contents.
- B. Division 01 General Requirements including:
 - 1. Document 01 1000 Summary of Contract.
 - 2. Document 00 4100 Bid Form.

- 3. Section 00 4400 Contractor's Qualification Statement.
- 4. Document 00 7300 Supplementary Conditions.
- 5. Section 01 2100 Allowances.
- 6. Section 01 2300 Alternates.
- 7. Section 01 6116 Volatile Organic Compound (VOC) Content Restrictions: Requirements for VOC-restricted product categories.

1.5 BID SUBMISSION

- Refer to Invitation to Bids for date and time.
- B. Offers submitted after the stated time shall be returned to the bidder unopened.
- C. Offers will be opened publicly immediately after the time for receipt of bids.

1.6 INTENT

A. The intent of this General Contracting Bid is to request and obtain an offer to perform work to complete the Julian Curtiss ES Select Patio Wall/Door Repairs and ADA Accessibilityat Julian Curtiss Elementary School located within the Greenwich Public Schools for a Stipulated Sum in accordance with the Contract Document.

1.7 LUMP SUM BIDS

- A. Bids will be received for one (1) prime contracts as follows:
 - General Construction .

1.8 WORK IDENTIFIED IN THE CONTRACT DOCUMENTS

A. Work of this proposed Contract comprises the Julian Curtiss ES Select Patio Wall/Door Repairs and ADA Accessibility indicated on drawings and specification..

1.9 CONTRACT TIME

A. The Contractor shall complete its portion of the Project work within such Contract Time as will assure the substantial completion of the Project by all contracts, in accordance with the sequence of work described in Section 01 1000 - Summary of Contract. The attention of the bidders is specifically directed to the provisions of the Agreement and that on no account will the contactor be permitted to assert a claim for damages for delay.

1.10 BID DOCUMENTS AND CONTRACT DOCUMENTS

- A. Definitions: All definitions set forth in the Agreement and Section 01 1000 Summary of Contract are applicable to these Instructions to Bidders.
- B. Contract Documents: Defined in the Agreement including issued Addenda.
- C. Bid, Offer, or Bidding: Act of submitting an offer under seal.
- D. Bid Amount: Monetary sum identified by the Bidder in the Bid Form.

1.11 CONTRACT DOCUMENTS IDENTIFICATION

A. The Contract Documents are identified as Project Number 18313.00, as prepared by Fuller and D'Angelo, P.C. who is located at 45 Knollwood Road, Elmsford, New York 10523, and with contents as identified in the Table of Contents.

1.12 AVAILABILITY

- A. Bid Documents may be viewed at the Facilities office of Greenwich Public Schools which is located at Havemeyer Building 290 Greenwich Avenue, Greenwich CT. Obtainement of Drawings and Specifications is only from online download.
- B. Bid Documents are made available only for the purpose of obtaining offers for this project. Their use does not grant a license for other purposes.

1.13 EXAMINATION

- A. Bid Documents are on display at the offices of the following:
 - 1. Bid Documents can be viewed and downloaded from at the Greenwich Public Schools website: www.greenwichschools.org.
- B. Upon receipt of Bid Documents verify that documents are complete. Notify Eugene Watts Greenwich Public Schools Purchasing Dept. should the documents be incomplete, see e.mail address below.
- C. Immediately notify Eugene Watts Greenwich Public Schools Purchasing Dept. upon finding discrepancies or omissions in the Bid Documents.

1.14 INQUIRIES/ADDENDA

- A. Addenda are written or graphic instruments issued prior to the Bid Date which modify or interpret the bidding documents, including Drawings and Specifications, by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when the Construction Contract is executed
- B. Verbal answers are not binding on any party.
- C. Clarifications requested by bidders must be in writing not later than Noon on April 26, 2018.. The reply will be in the form of an Addendum, if required, a copy of which will be forwarded to known recipients and be distributed online by April 30th at Noon.
- D. Questions: Any and all questions about the interpretation or clarification of the Bid Documents, or about any other matter affecting the Work or pertaining to the bid must be directed in writing to:

Bid_Department@greenwich.k12.ct.us - In the subject line put Bid Number 2196 -18 Attn: Mr. Eugene Watts

E. Answers: The Owner will issue addenda, if necessary, to answer such questions. Bidders shall rely on answers contained in such addenda and shall not rely upon any oral answers given by any employee or agent of the Owner, Architect, Architect's Consultants, and Construction Manager

1.15 PRODUCT/ASSEMBLY/SYSTEM SUBSTITUTIONS

- A. Where the Bid Documents stipulate a particular product bidders shall comply with the specifications, performance and quality of the specification item. The Architect will not review any substitutions during the bidding period. The bidder assumes all responsibility to meet the requirements and the Architect shall be final authority as to a product is equal to the specification.
- B. See Section 01 6000 Product Requirements for additional requirements.
- C. Where the Bid documents stipulate a particular product bidders shall comply with the specifications, and performance and quality of the specification item. The architect will not review any substitutions during the bidding period. The bidder assumes the responsibility to meet the requirements and the architect shall be the final authority as to a product is an equal to the specification.

1.16 PREBID CONFERENCE

- A. A mandatory bidders conference has been scheduled for 9:00 a.m. on the 24th day of April 2018 at the location of Julian Curtiss Elementary School Main Lobby.
- B. Attendance is mandatory.
- C. Representatives of Fuller and D'Angelo, P.C. will be in attendance.
- D. If applicable, information relevant to the Bid Documents will be recorded in an Addendum, issued to Bid Document recipients.

1.17 EVIDENCE OF QUALIFICATIONS

A. Contractors whose bid exceeds \$500,000.00 shall hold a current "DAS Contractor Prequalification Certificate" (not a predetermination letter) from the Department of Administrative Services of the State of Connecticut according to Public Act 03-215 and as amended by Public Act 04-141. These Bidders shall

submit with their bids a "DAS Contractor Prequalification Certificate" along with a current "Update (bid) Statement." Failure to submit these items with the bid will result in disqualification of the bidder per the Public Act. If you have any questions regarding these requirements, contact the State of CT DAS at telephone number (860) 713-5280 or visit their web site at www.das.state.ct.us

- B. **Bidder shall submit with their bid proposal** a properly executed Contractor's Qualification Statement in Section 00 4400.
- C. To be considered qualified, in addition to the qualifications listed in the Contractor's Qualification Statement Section 00 4400, bidder must demonstrate to the Owner's satisfaction:
 - 1. The Corporation, partnership, sole proprietorship or principals of the entity in whose name the bid is submitted has no less than the previous five (5) years performing or coordinating the Work which they are bidding on.
 - 2. The Bidder has to have performed five (3) similar projects.
 - 3. The principal(s) of the bidder have satisfactorily completed no less than five (5) projects of comparable size and type to this project, and not less than a cost of \$600,000.
 - 4. The bidder is not currently involved in bankruptcy proceedings.
 - 5. The bidder is capable of and intends and intends to perform the work with a minimum of 75% of it's own employees.
 - 6. The bidder will perform the work with sufficient personnel as required to comply with the schedule.
 - 7. The bidder or principals of the bidder and each subcontractor must have a minimum of five (5) years experience in the work and/or applicable trade.
 - 8. The Field Superintendent must have at least five (5) years as a working field superintendent and must speak English.
 - 9. All bidders will be required to submit a listing of projects, including addresses, Owner's name, Architect, date work was performed and any other information which would serve to document its ability to perform the work of the character desired and in time required.

1.18 SUBCONTRACTORS/SUPPLIERS/OTHERS

- A. Greenwich Public Schools reserves the right to reject a proposed subcontractor for reasonable cause.
- B. Refer to Agreement
- C. All proposed sub-contractors must be submitted to Owner's Representative, Architect, and Construction Manager for approval.

1.19 BID SUBMISSION PROCEDURE

- A. Bidders shall be solely responsible for the delivery of their bids in the manner and time prescribed. Refer to Invitation to Bid and Information to Bidder.
- B. Submit one (1) original and four (4) copies of the executed offer on the Bid Forms provided in the project manual, signed and sealed with the required security in a closed opaque envelope, clearly identified with bidder's name and:

Greenwich Public Schools Bid No. 2196-18.

Julian Curtiss Elementary School

Julian Curtiss ES Select Patio Wall/Door Repairs and ADA Accessibility

- C. Improperly completed information, irregularities in security deposit, may be cause not to open the Bid Form envelope and declare the bid invalid or informal.
- D. To submit a bid for a bid package, the bidder should photo copy or remove the proposal form for that bid package from the Project Manual. Then the bidder should complete, sign and submit the form as required herein. If a bidder is bidding on more than one bid package, there must be on fully completed and signed form for each package being bid. The bidder should not submit the entire Project Manual with the bid proposal.

- E. All bid prices shall be filled in, both in words and figures. Signatures shall be in ink and in longhand. Proposals which are incomplete, conditional or obscure may be rejected as informal.
 - 1. In case of a discrepancy between the words and figures, the written ward, not the figures, will govern.
- F. Bidder's shall not rely on oral statements made by any employee or agent of the Owner, Architect, Architect's consultants or Owner's Representative. Before submitting a proposal, bidders shall fully inform themselves as to all existing conditions and limitations and shall include in the Proposal a sum to cover the cost of all items included in the Contract
- G. No oral or telephonic proposals or modifications of proposals will be considered.

1.20 BID INELIGIBILITY

- A. Bids that are unsigned, improperly signed or sealed, conditional, illegible, obscure, contain arithmetical errors, erasures, alterations, or irregularities of any kind, may at the discretion of the Greenwich Public Schools, be declared unacceptable.
- B. Bid Forms, Appendices, and enclosures that are improperly prepared may, at the discretion of Greenwich Public Schools, be declared unacceptable.
- C. Failure to provide security deposit, bonding or insurance requirements may, at the discretion of Greenwich Public Schools, invalidate the bid.

1.21 SECURITY DEPOSIT

- A. Bids shall be accompanied by a security deposit as follows:
 - Bid Bond or Certifed Check of a sum no less than 10 percent of the Bid Amount, including allowances, unit costs, and alternates.
- B. Endorse the Bid Bond or Certified Check in the name of the Greenwich Public Schools as obligee, signed and sealed by the principal (Contractor) and surety.
- C. The security deposit(s) will be returned after delivery to the Greenwich Public Schools of the required Performance and Payment Bond(s) by the accepted bidder.
- D. Include the cost of bid security in the Bid Amount.
- E. If no contract is awarded, all security deposits will be returned.

1.22 CONSENT OF SURETY

A. Submit with the Bid: The attorney in fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of his power of attorney indicating the monetary limit of such power.

1.23 PERFORMANCE ASSURANCE

- A. Accepted Bidder: Shall provide a Performance and Payment bond, as described in Intro Letter and Information to Bidders Part 1, Article 12 prior to the execution of the Contract, the bidder to furnish bonds covering the faithful performance of the Contract and the payment of all obligations arising thereunder in such form and amount as the Owner may prescribe and with such sureties secured through the bidder's usual sources as may be agreeable to the parties.
- B. Include the cost of performance assurance bonds in the Bid Amount.
- C. The bidder shall require the attorney in fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of his power of attorney indicating the monetary limit of such power

1.24 INSURANCE

A. There are special insurance requirements on this project. Refer to Greenwich Front End Documents for a summary description of the required coverages. The Owner reserves the right to refuse the award of a Contract to any apparent low bidder who fails to provide the specified insurance certificates at the required time.

The Owner, Architect and Construction Manager shall be listed as "Additionally Insured" on all applicable Insurance policies.

1.25 BID FORM REQUIREMENTS

A. Complete all requested information in the Bid Form, Supplements to Bid and Appendices.

1.26 SALES AND USE TAXES

A. The Owner is a tax exempt entity, so there shall be no charge for sales or use taxes. The Owner will document this status as requested.

1.27 FEES FOR CHANGES IN THE WORK

A. Refer to the Agreement.

1.28 BID FORM SIGNATURE

- A. The Bid Form shall be signed by the bidder, as follows:
 - 1. Sole Proprietorship: Signature of sole proprietor in the presence of a witness who will also sign. Insert the words "Sole Proprietor" under the signature. Affix seal.
 - 2. Partnership: Signature of all partners in the presence of a witness who will also sign. Insert the word "Partner" under each signature. Affix seal to each signature.
 - 3. Corporation: Signature of a duly authorized signing officer(s) in their normal signatures. Insert the officer's capacity in which the signing officer acts, under each signature. Affix the corporate seal. If the bid is signed by officials other than the president and secretary of the company, or the president/secretary/treasurer of the company, a copy of the by-law resolution of their board of directors authorizing them to do so, must also be submitted with the Bid Form in the bid envelope.
 - 4. Joint Venture: Each party of the joint venture shall execute the Bid Form under their respective seals in a manner appropriate to such party as described above, similar to the requirements of a Partnership.

1.29 NONDISCRIMINATION

A. All Contractors and Subcontractors of all tiers and all vendors shall comply with all pertinent provisions of the State, Local and Federal law against discrimination in employment practices. Refer to Agreement.

1.30 PREVAILING WAGES

A. Connecticut State law requires the payment of prevailing wages on the project, as listed in the Project Manual.

1.31 ADDITIONAL BID INFORMATION

- A. Submit the following Supplements concurrent with bid submission:
 - 1. Refer to Greenwich Front End Documents for additional requirements.
 - 2. Section 00 4400 Contractor's Qualification Statement
 - 3. Section 01 2100 Allowances
- B. The bidder by making his bid represents that he has read and understands the bidding documents.
- C. The bidder by making his bid represents that he has visited the site and familiarized himself with the local conditions under which the work is to be performed. Visits to the site shall be arranged through the Architect

1.32 DURATION OF OFFER

A. Bids shall remain open to acceptance and shall be irrevocable for a period of 90 days after the bid closing date.

1.33 ACCEPTANCE OF OFFER

- A. Greenwich Public Schools reserves the right to accept or reject any or all offers.
- B. The bidder acknowledges the right of the Owner to reject any or all bids and to waive any informality or irregularity in any bid received. In addition, the bidder recognizes the right of the Owner, at its discretion

FULLER AND D'ANGELO, PC ARCHITECTS AND PLANNERS

to reject a bid if the bidder fails to furnish any required bid security, or to submit the information required by the bidding documents, including Section 00 4400 - Contractor's Qualification Statement or if the bid is incomplete or irregular.

1.34 POST-BID PROCEDURE

- A. The bid proposal, alternates, unit costs, with the proposed subcontractor(s), the Contractor's Qualification Statement, Information received from owners of other projects all will be considered to determine whether the contractor is the "lowest responsible bidder" in making the award by Greenwich. The Owner and Architect may make such investigation as the Owner deems necessary to determine the responsibility of any bidder or to determine the ability of any bidder to perform the Work. Such investigation shall begin with a review of the Contractor's Qualification Statement (Section 00 4400) and shall include such additional information as shall be required herein, or requested afterward.
- B. The successful bidder will produce for the Greenwich Public Schools review a current financial statement, which will remain strictly confidential, NO EXCEPTIONS. Refer to Information to Bidders.

END OF SECTION

BID FORM

THE PROJECT AND THE PARTIES

TO:

Bids must be submitted to the Greenwich Public School District, Havermeyer Building, 290 Greenwich Avenue, Greenwich, CT 06830, Attention Eugene H. Watts, Sr. Buyer, Purchasing Department on the following form signed by an authorized company officer. Bids will be opened on **May 3rd, 2018** at 11:00 AM.

	(Green	wich F	Public Schools								
	F	Purcha	sing I	Department, Ha	vermeyer I	Building						
	2	290 G1	reewn	ich Avenue								
	(Greenv	wich (CT 06830								
	A	Attenti	on Eu	igene H. Watts,	Sr. Buyer							
	7	Voice:	203.6	525.7411								
	FOF	R :										
	J	ulian	Curtis	s ES Select Pat	io Wall/Do	oor Repai	irs and AI	OA Acce	ssibility			
	(Greenv	wich F	Public Schools E	3id #2196-	-18						
	BID	OPE	NING	GDATE: May	3, 2018 AT	Г 11:00 А	AM.					
	SUB	MIT'	TED 1	BY:						<u> </u>		
				l Name								
		Addres										
	(City, S	tate, Z	Zip								
	F	Phone	#:			Contact 1	Name:					
1.1	OFF	FER										
A.	u F	Contra inders	ct Doo igned, s and	cuments prepare, hereby offer to ADA Accessibi E BID The Base Bio	ed by Fulle enter into ilityfor the d of this Pr	er and D'A a Contra Sums of: coposal fo	Angelo, Pact to perform	C. for thorm Julia	e above in Curtissed by the O	mentioned SES Select	equirements and project, we, the Patio Wall/Door occuments for the ityis as follows:	r
									(\$) DOLL	ARS
	2		CASI	H ALLOWANC								
			a.	Refer to Secti Bid figure an			nces: Add	this am	ount to be	e within (in	clude) in the Bas	se
			b.	The total Cash Fifeteen Thou DOLLARS							s is as follows: 5,000.00)	
В.	Т	OTA	L BAS	SE BID								
_ •	1		The T	Cotal Base Bid o							cuments for Julia d Work is as follo	

			(\$) DOLLARS						
	(The	Total Base Bid is sum of (1.1.A.1.a and	d 1.1.A.2.b)							
C.	mater requi accor comp	undersigned further understands and agreerial, machinery, plant, implements, tools red, and to do and perform all the work redance with the drawings and specification pensation therefore the amount of the Touratives, if any as are accepted by the Own	s, labor, services, skill and other ite necessary under the Contract, to cons and any addenda thereto, and tal Bid stated, modified by such ac	ems of whatever nature omplete the work in to accept in full						
D.	We h	ave included the required security Bid B	Bond as required.							
E.		We have included the cost for the required performance assurance bonds in the Bid Amount as required by the Instructions to Bidders.								
F.	All a	pplicable federal taxes are included and	State of Connecticut taxes are incl	luded in the Bid Sum.						
G.	All C	ash Allowances described in Section 01	2100 - Allowances are included in	n the Bid Sum.						
1.2	ALTER	NATES								
A.	The A	Alternates for this Proposal required by t	the Contract Documents are listed	in Section 01 2300.						
В.	Alter	nate No. 1 - ADA Ramp Cafeteria Patio	to Grade:							
	1.	The Contractor for General Constructi provide, furnish and install all labor, e								
			(\$) DOLLARS						
C.	Alter	nate No. 2 - ADA Ramp Kindergarten Pa The Contractor for General Constructi provide, furnish and install all labor, e	ion shall state the amount to be A	DDED TO the Base Bid to						
			(\$) DOLLARS						
D.	Alten	nate No. 3 - Exterior Wood Doors, in lie	eu of AMP Doors:							
	1.	The Contractor for General Constructi Base Bid to provide, furnish and instal								
			(\$) DOLLARS						
1.3	ACCEP	ΓANCE								
A.	This	offer shall be open to acceptance and is i	irrevocable for ninety (90) days fro	om the bid closing date.						
В.	If this	s bid is accepted by Greenwich Public So	chools within the time period state	ed above, we will:						
	1.	Execute the Agreement within seven d	lays of receipt of Notice of Award	•						
	2.	Furnish the required bonds within seve								
	3.	Failure to do so will constitute a breach the contract agreement, and bid as this								

1.4 REJECTION OF BIDS

C.

A. The undersigned agrees that the Owner shall have the right to accept or reject any or all bids

difference between this bid and the bid upon which a Contract is signed.

1.5 CONTRACT TIME

A. If this Bid is accepted, we will:

If this bid is accepted within the time stated, and we fail to commence the Work or we fail to provide the required Bond(s), the security deposit shall be forfeited as damages to Greenwich Public Schools by reason of our failure, limited in amount to the lesser of the face value of the security deposit or the

Complete all the work covered by this Proposal with a commencement date of NO EARLIER THAN Letter of Award by Owner. Work shall be as indicated in Section 01100 Summary of Contracts Failure to complete each phase of work by dates indicated will result in liquidated damages as stated in the Agreement.

1.6 ADDENDA

A.			nda have been rece all costs are includ			to the Bid l	Documen	ts noted 1	oelow have
	1.	Addendum #	Dated		34:				
	2.	Addendum #	Dated _		34.				
	3.	Addendum #	Dated						
	4.	Addendum#	Dated		<u>_</u> .				
1.7	BID FO	RM SUPPLEM	IENTS						
	701	C 11 ' C 1		4 . 4 . 5					

- A. The following Supplements are attached to this Bid Form and are considered an integral part of this Bid Form:
 - 1. Refer to Greenwich Front End Documents for additional requirements.
 - 2. Section 00 4400 Contractor's Qualification Statement.
 - 3. Section 01 2100 Allowances.

1.8 BIDDER'S FURTHER AFFIRMATION AND DECLARATION

- A. The above name bidder and should this bid be a joint bid each party thereto, further affirm and declares:
 - 1. That said bidder is of lawful age and the only one interested in this bid; and that no other person, firm or corporation, except those herein above named, has any interest in this bid or in the contract proposed to be entered into.
 - 2. That this bid is made without any understanding, agreement or connection with any other person, firm, or corporation making a bid for the same work, and is in all respects fair and without collusion or fraud.
 - 3. That said bidder is not in arrears to the Greenwich Public Schools upon debt or contract, and is not a defaulter, as surety or otherwise upon any obligation to the said Greenwich Public Schools
 - 4. That no member of the Greenwich Public Schools or any officer or employee of the Greenwich Public Schools or person whose salary is payable in whole or in part from the said school district treasury, or the spouse of any foregoing is or shall be or become interested, directly or indirectly, as a contracting party, partner, stockholder, surety or otherwise, in this bid, or in the performance of the Contract, or in the supplies, materials or equipment and work or labor to which it relates, or in any portion of the profits thereof.
 - 5. That he/she has carefully examined the site of the work and that, from his/her own investigations, he/she has satisfied him/herself as to the nature and location of the work, and character, quality and quantity of materials, and all difficulties likely to be encountered, the kind and extent of equipment and other facilities needed for the performance of the work, the general and local conditions, and all other items which may, in any way, affect the work or its performance.
 - 6. That if a corporation, this bid or proposal containing the Non-Collusive Binding Certification and the foregoing Affirmation and Declaration has been authorized by the Board of Directors of such Corporation, which authorization includes the signing and submission of this bid or proposal and the inclusion therein of the said Certificate of Non-Collusion and Affirmation and Declaration as the Act and Deed of the Corporation.

1.9	BID FORM SIGNATURE(S)				
	Signature Corporate Seal				
	The Corporate Seal of				

Company Name:
was hereunto affixed in the presence of:
(Authorized signing officer, Title)
(Seal)
(Authorized signing officer, Title)
If the Bid is a joint venture or partnership, add additional forms of execution for each member of the join venture in the appropriate form or forms as above.
Subscribed and sworn before me this day of 2018
Notary Public:
My Commission Expire:
END OF BID FORM

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY CONTRACTOR'S QUALIFICATION STATEMENT

CONTRACTOR'S QUALIFICATION STATEMENT

ADDRESS:	290 Greewnich Avenue
CITY:	Greenwich CT 06830
Name of Bidder	
Type of Business	s Entity
If the bidder is a	corporation, state the date and place of incorporation of the corporation.
For how many ye	ears has the bidder done business under its present name?
List the persons business.	who are directors, officers, owners, managerial employees or partners in the bidder's
	persons listed in C owned/ operated/been shareholders in any other companies? If so, e of owned/ operated/been shareholders and names of other companies:
If the answer to raffiliations.	number D is in the affirmative, list said persons and the names of their previous
affiliations. Has any director, revoked? If the a	number D is in the affirmative, list said persons and the names of their previous officer, owner or managerial employee had any professional license suspended or nswer to this question is yes, list the name of the individual, the professional license had, whether said license was revoked or suspended and the date of the r evocation or

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY CONTRACTOR'S QUALIFICATION STATEMENT

During the five year period preceding the submissions of this bid, has the bidder been named as a part any lawsuit in an action involving a claim for personal injury or wrongful death arising from perform of work related to any project in which it has been engaged? If the answer to this question is yes, list such lawsuits, the index number associated with said suit and the status of the lawsuit at the time of the submission of this bid.
During the five year period preceding the submission of this bid, has the bidder been the subject of a investigation and/ or proceedings before the Department of Labor for alleged violations of the Labor as it relates to the payment of prevailing wages and/ or supplemental payment requirements? If the at to this question is yes, please list each such instance of the commencement of a Department of Labor proceeding, for which project such proceeding was commenced, and the status of the proceeding at time of the submission of this bid.
During the five year period preceding the bidder's submission of this bid, has the bidder been the su of proceedings involving allegations that it violated the Workers' Compensation Law including but a limited to the failure to provide proof of worker's compensation or disability coverage and/ or any lathereof. If the answer to this question is yes, list each such instance of violation and the status of the claimed violation at the time of the submissions of this bid.
Has the bidder, its officers, directors, owner and/ or managerial employees been convicted of a crim been the subject of a criminal indictment during the five years preceding the submission of this bid? answer to this question is yes, list the name of the individual convicted or indicted the charge agains individual and the date of disposition of the charge.
During the five year period preceding the bidder's submission of this bid, has the bidder been charge with and/ or found guilty of any violations of federal, state, or municipal environmental and/ or heal laws, codes, rules and/ or regulations? If the answer to this question is yes, list the nature of the charge against the bidder, the date of the charge, and the status of the charge at the time of the submission obid.
Has the bidder bid on any projects within the last three years? If the answer to this question is yes, lid last three projects bid on, whether said bid(s) was awarded to the bidder and the expected date of commencement of the work for said project. For those projects listed, if the bidder was not awarded contract, state whether the bidder was the lowest monetary bidder.

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY CONTRACTOR'S QUALIFICATION STATEMENT

	ts on which the bidder is c	of the submission of this bid? If the answer to this currently working, the percentage complete, and		
	ler was terminated, the nat	the owner? If the answer to this question is yes, list ature of the termination (convenience, suspension,		
las the contractor completed similar contracts, at least 5 similar projects contract(s) in which the scope included school building work of which at least (2) have been of the size of more than sf and wo have been over \$ in construction cost value within the last five years. If answers is "yes", in an attached sheet, list projects, quantity of material, time frame to complete project, project name, ocation, owner and architect, with current phone numbers of references				
By:(Signature)				
(Print Name and Title)				
Dated:				
Sworn to before me this	day of			
Notary Public				
	END OF SECTIO	ON		

NON-COLLUSION AFFIDAVIT

GREENWICH PUBLIC SCHOOLS 290 GREENWICH AVE GREENWICH, CONNECTICUT

Sta	ate of:
Co	ounty of:s.s.
l s	tate that I am the of
an dir	(NAME OF MY FIRM) d that I am authorized to make this affidavit on behalf of my firm, and its owners, ectors, and officers. I am the person responsible in my firm for the price(s) and the nount of this bid.
l si	tate that:
(1)	The price(s) and amount of this bid have been arrived at independently and without consultation communication or agreement with any other contractor, bidder/proposer or potential bidder/proposer.
(2)	Neither the price(s) nor the amount of this bid/rfp, and neither the approximate price(s) nor approximate amount of this bid/rfp, have been disclosed to any other firm or person who is a bidder/proposer or potential bidder/proposer, and they will not be disclosed before bid/rfp opening.
(3)	No attempt has been made or will be made to induce any firm or person to refrain from bidding/proposing on this contract, or to submit a bid/proposal higher than this bid/rfp, or to submit any intentionally high or noncompetitive bid/rfp or other form of complementary bid/rfp.
(4)	I fully understand that more than one offer from an individual, firm partnership, corporation or association under the same or different name will be rejected. Reasonable grounds for believing that a bidder/proposer is interested in more than one bid/rfp for the work contemplated may cause rejection of all bids/rfps in which the bidder/proposer is interested. Any or all bidders/proposers will be rejected if there is any reason for believing that collusion exists among the bidders/proposers. Participants in such collusion may not be considered in the future offers for the same work. Each bidder/proposer by submitting a bid/proposal certifies that it is not a part to any collusive action.
(5)	The bid/rfp of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive bid/proposal.
(6)	its affiliates, subsidiaries, officers,
. ,	(NAME OF MY FIRM) directors and employees are not currently under investigation by any governmental agency and have not in the last four years been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding/proposing on any public contract, except as follows:
	I state that understands and acknowledges that
	(NAME OF MY FIRM) the above representations are material and important and will be relied on by Greenwich Public Schools in awarding the bid/proposal for which this is submitted. I understand, and my firm understands, that any misstatement in this affidavit is and shall be treated as

fraudulent concealment from Greenwich Public Schools of the true facts relating to the submission of bids/proposals for this contract.

(7) I agree to furnish and deliver all services on the date and time agreed on by

and the Greenwich Board of Education at

(NAME OF MY FIRM)

The time the purchase order is placed. Furthermore, there will not be any cancellations to the Board of Education. If a bidder/proposer submits a bid/proposer on any item he/she will be responsible for delivering that item at the bid/proposal cost, in accordance with the attached above specifications, which were submitted with this bid/proposal and upon which the bid/proposal was made.

- (8) In submitting this bid/proposal, the undersigned declares that this is made without any connection with any persons making another bid/proposal on the same contract; that the bid/proposal is in all respects fair and without collusion, fraud or mental reservation; and that no official of the Town, or any person in the employ of the Town, is directly or indirectly interested in said bid/proposal or in the supplies or work to which it relates, or in any portion of the profits thereof.
- (9) In submitting this bid, the undersigned further declares that it has not, and will not, induce or attempt to induce any Town of Greenwich employee or officer to violate the Greenwich Code of Ethics in connection with its offer to provide goods or services under, or otherwise in the performance of such contract.
- (10) The undersigned further understands that the above declarations are material representations to the Town of Greenwich made as a condition to the acceptance of the bid/proposal. If found to be false, the Town of Greenwich retains the right to reject said bid/proposal and rescind any resultant contract and/or purchase order and notify the undersigned accordingly, thereby declaring as void said bid/proposal and contract or purchase order.
- (11) The Greenwich Code of Ethics can be found at <u>www.greenwichct.org</u>. Code of Ethics stated as follows:
 - DEFINITION. (1)Indirect interest, without limiting its generality, shall mean and include the interest of any subcontractor in any prime contract with the Town and the interest of any person or his immediate family in any corporation, firm or partnership which as a direct or indirect interest in any transaction with the Town. (2) Substantial financial interest shall mean any financial interest, direct or indirect, which is more than nominal and which is not common to the interest of other citizens of the Town. (3) Town Officer shall mean and include any official, commission, committee, legislative body or other agency of the Town. (4) Transaction shall mean and include the offer, sale or furnishing of any real or personal property, material, supplies otherwise, for the use and benefit of the Town for a valuable consideration, excepting the services of any person as a Town Officer.
 - 2. <u>GIFTS AND FAVORS</u>. No Town Officer or his immediate family shall accept any valuable gift, things, favor, loan or promise which might tend to influence the performance or nonperformance of his official duties.
 - 3. <u>IMPROPER INFLUENCE</u>. No Town Officer having a substantial financial interest in any transaction with the Town or in any action to be taken by the Town shall use is office to exert his influence or to vote on such transaction or action.

VENDOR INF	VENDOR INFORMATION. (Please print the following)			
VENDOR NA	ME			
ADDRESS				-
TELEPHONE		F	AX #	
E-MAIL		w	EB SITE	
AUTHORIZEI	O SIGNATURE	TI	TLE	
attached term Bidders/Propos SIGNATURE SWORN AND S	s, conditions, an ers Employment Di	bidder/proposer und d specifications, in scrimination by the C FORE ME, A NOTAR AND THE S	ncluding Collusi contractor Prohibit Y PUBLIC, IN ANI	on among ed.
	тні	S		
DAY OFNOTARY	, 20°	MY COMMISSIO	N EXPIRES	
	COMPAI	NY INFORMATION		
NAME OF FIRM	STREET	CITY,	STATE, ZIP	
SALES REPRESEI	NTATIVE NAME	TELEPHONE #	<u> </u>	FAX#

Project: Select Patio Walls And Doors And ADA Accessibility At Julian Curtiss Elementary School

Minimum Rates and Classifications for Building Construction

ID#: B 24682

Connecticut Department of Labor Wage and Workplace Standards Division

By virtue of the authority vested in the Labor Commissioner under provisions of Section 31-53 of the General Statutes of Connecticut, as amended, the following are declared to be the prevailing rates and welfare payments and will apply only where the contract is advertised for bid within 20 days of the date on which the rates are established. Any contractor or subcontractor not obligated by agreement to pay to the welfare and pension fund shall pay this amount to each employee as part of his/her hourly wages.

Project Number: Project Town: Greenwich

State#: FAP#:

Project: Select Patio Walls And Doors And ADA Accessibility At Julian Curtiss

Elementary School

CLASSIFICATION	Hourly Rate	Benefits
1a) Asbestos Worker/Insulator (Includes application of insulating materials, protective coverings, coatings, & finishes to all types of mechanical systems; application of firestopping material for wall openings & penetrations in walls, floors, ceilings	38.25	27.96
1b) Asbestos/Toxic Waste Removal Laborers: Asbestos removal and		

encapsulation (except its removal from mechanical systems which are not to be scrapped), toxic waste removers, blasters.**See Laborers Group 7**

1c) Asbestos Worker/Heat and Frost Insulator

39.00

28.76

Project:	Select Patio	Walls And	Doors And	ADA	Accessibility	At Julian	Curtiss Element	ary
J	School							

2) Boilermaker	38.34	26.01
3a) Bricklayer, Cement Mason, Concrete Finisher (including caulking), Stone Masons	33.48	33.09 + a
3b) Tile Setter	34.90	25.87
3c) Terrazzo Mechanics and Marble Setters	31.69	22.35
3d) Tile, Marble & Terrazzo Finishers	26.70	21.75
3e) Plasterer	33.48	32.06

Project: Select Patio Walls And Doors And ADA Accessibility At Julian Curtiss Elementary School		
LABORERS		
4) Group 1: Laborers (common or general), acetylene burners, carpenter tenders, concrete specialists, wrecking laborers, fire watchers.	29.25	19.50
4a) Group 2: Mortar mixers, plaster tender, power buggy operators, powdermen, fireproofer/mixer/nozzleman (Person running mixer and spraying fireproof only).	29.50	19.50
4b) Group 3: Jackhammer operators/pavement breaker, mason tender (brick), mason tender (cement/concrete), forklift operators and forklift operators (masonry).	29.75	19.50
4c) **Group 4: Pipelayers (Installation of water, storm drainage or sewage lines outside of the building line with P6, P7 license) (the pipelayer rate shall apply only to one or two employees of the total crew who primary task is to actually perform the mating of pipe sections) P6 and P7 rate is \$26.80.	29.75	19.50
4d) Group 5: Air track operator, sand blaster and hydraulic drills.	29.75	19.50

Project: Select Patio Walls And Doors And ADA Accessibility At Julian Curtiss Elementary School			
4e) Group 6: Blasters, nuclear and toxic waste removal.	31.00	19.50	
4f) Group 7: Asbestos/lead removal and encapsulation (except it's removal from mechanical systems which are not to be scrapped).	30.25	19.50	
4g) Group 8: Bottom men on open air caisson, cylindrical work and boring crew.	28.38	19.50	
4h) Group 9: Top men on open air caisson, cylindrical work and boring crew.	27.86	19.50	
4i) Group 10: Traffic Control Signalman	16.00	19.50	
5) Carpenter, Acoustical Ceiling Installation, Soft Floor/Carpet Laying, Metal Stud Installation, Form Work and Scaffold Building, Drywall Hanging, Modular-Furniture Systems Installers, Lathers, Piledrivers, Resilient Floor Layers.	Metal Stud Installation, Form Work and Scaffold Building, Drywall Hanging, Modular-Furniture Systems Installers, Lathers, Piledrivers,		

Project: Select Patio Walls And Doors And ADA Accessibility At Julian Curtiss Elementary School		
5a) Millwrights	33.14	25.74
6) Electrical Worker (including low voltage wiring) (Trade License required: E1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	34.50	29.64
7a) Elevator Mechanic (Trade License required: R-1,2,5,6)	51.71	32.645+a+b
LINE CONSTRUCTION		
Groundman	26.50	6.5% + 9.00
Linemen/Cable Splicer	48.19	6.5% + 22.00

Project: Select Patio Walls And Doors And ADA Accessibility At Julian Curtiss Elementary School			
8) Glazier (Trade License required: FG-1,2)	36.28	20.45 + a	
9) Ironworker, Ornamental, Reinforcing, Structural, and Precast Concrete Erection	35.47	33.39 ± a	
OPERATORS			
Group 1: Crane handling or erecting structural steel or stone, hoisting engineer 2 drums or over, front end loader (7 cubic yards or over), work boat 26 ft. and over and Tunnel Boring Machines. (Trade License Required)	39.30	24.05 + a	
Group 2: Cranes (100 ton rate capacity and over); Excavator over 2 cubic yards; Piledriver (\$3.00 premium when operator controls hammer); Bauer Drill/Caisson. (Trade License Required)	38.98	24.05 + a	
Group 3: Excavator; Backhoe/Excavator under 2 cubic yards; Cranes (under 100 ton rated capacity), Grader/Blade; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive power of operation), Rubber Tire Excavator (Drott-1085 or similar); Grader Operator; Bulldozer Fine Grade. (slopes, shaping, laser or GPS, etc.). (Trade License Required)	38.24	24.05 + a	

Project: Select Patio Walls And Doors And ADA Accessibility At Julian Curtiss Elementary School			
Group 4: Trenching Machines; Lighter Derrick; Concrete Finishing Machine; CMI Machine or Similar; Koehring Loader (Skooper).	37.85	24.05 + a	
Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps; Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24" Mandrell)	37.26	24.05 + a	
Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller; Pile Testing Machine.	37.26	24.05 + a	
Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	36.95	24.05 + a	
Group 7: Asphalt roller, concrete saws and cutters (ride on types), vermeer concrete cutter, Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24" and under Mandrell).	36.61	24.05 + a	
Group 8: Mechanic, grease truck operator, hydroblaster; barrier mover; power stone spreader; welding; work boat under 26 ft.; transfer machine.	36.21	24.05 + a	

Group 9: Front end loader (under 3 cubic yards), skid steer loader	35.78	24.05 + a
regardless of attachments, (Bobcat or Similar): forklift, power chipper; andscape equipment (including Hydroseeder).		
Group 10: Vibratory hammer; ice machine; diesel and air, hammer, etc.	33.74	24.05 + a
Group 11: Conveyor, earth roller, power pavement breaker (whiphammer), robot demolition equipment.	33.74	24.05 + a
Group 12: Wellpoint operator.	33.68	24.05 + a
Group 13: Compressor battery operator.	33.10	24.05 + a
Group 14: Elevator operator; tow motor operator (solid tire no rough terrain).	31.96	24.05 + a

Project: Select Patio Walls And Doors And ADA Accessibility At Julian Curtiss Elementary School			
Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	31.55	24.05 + a	
Group 16: Maintenance Engineer/Oiler.	30.90	24.05 + a	
Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	35.21	24.05 + a	
Group 18: Power safety boat; vacuum truck; zim mixer; sweeper; (Minimum for any job requiring a CDL license).	32.79	24.05 + a	
PAINTERS (Including Drywall Finishing)			
10a) Brush and Roller	32.72	20.45	

School		
10b) Taping Only/Drywall Finishing	33.47	20.45
10c) Paperhanger and Red Label	33.22	20.45
10e) Blast and Spray	35.72	20.45
11) Plumber (excluding HVAC pipe installation) (Trade License required:	41.62	30.36
P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2)		
12) Well Digger, Pile Testing Machine	33.01	19.40 + a
Roofer: Cole Tar Pitch	41.00	16.50 + a

Project: Select Patio Walls And Doors And ADA Accessibility At Julian Curtiss Elementary

Project: Select Patio Walls And Doors And ADA Accessibility At Julian Curtiss Elementary School			
Roofer: Slate, Tile, Composition, Shingles, Singly Ply and Damp/Waterproofing	39.50	16.50 + a	
15) Sheetmetal Worker (Trade License required for HVAC and Ductwork: SM-1,SM-2,SM-3,SM-4,SM-5,SM-6)	42.66	41.24	
16) Pipefitter (Including HVAC work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4, G-1, G-2, G-8 & G-9)	41.62	30.36	
TRUCK DRIVERS			
17a) 2 Axle	29.13	22.32 + a	
17b) 3 Axle, 2 Axle Ready Mix	29.23	22.32 + a	

17c) 3 Axle Ready Mix	29.28	22.32 + a
Trey 5 Time Ready Wilk	27.20	22.32 + a
7d) 4 Axle, Heavy Duty Trailer up to 40 tons	29.33	22.32 + a
7e) 4 Axle Ready Mix	29.38	22.32 + a
7f) Heavy Duty Trailer (40 Tons and Over)	29.58	22.32 + a
7g) Specialized Earth Moving Equipment (Other Than Conventional Type	29.38	22.32 + a
on-the-Road Trucks and Semi-Trailers, Including Euclids)	29.00	22.32 · u
0) C : 11 E''	42.02	15.04
8) Sprinkler Fitter (Trade License required: F-1,2,3,4)	43.92	15.84 + a

Project: Select Patio Walls And Doors And ADA Accessibility At Julian Curtiss Elementary

Project: Select Patio Walls And Doors And ADA Accessibility At Jul School	lian Curtiss l	Elementary	
19) Theatrical Stage Journeyman	25.76	7.34	

Project: Select Patio Walls And Doors And ADA Accessibility At Julian Curtiss Elementary School

Welders: Rate for craft to which welding is incidental.

*Note: Hazardous waste removal work receives additional \$1.25 per hour for truck drivers.

**Note: Hazardous waste premium \$3.00 per hour over classified rate

ALL Cranes: When crane operator is operating equipment that requires a fully licensed crane operator to operate he receives an extra \$4.00 premium in addition to the hourly wage rate and benefit contributions:

- 1) Crane handling or erecting structural steel or stone; hoisting engineer (2 drums or over)
- 2) Cranes (100 ton rate capacity and over) Bauer Drill/Caisson
- 3) Cranes (under 100 ton rated capacity)

Crane with 150 ft. boom (including jib) - \$1.50 extra

Crane with 200 ft. boom (including jib) - \$2.50 extra

Crane with 250 ft. boom (including jib) - \$5.00 extra

Crane with 300 ft. boom (including jib) - \$7.00 extra

Crane with 400 ft. boom (including jib) = \$10.00 extra

All classifications that indicate a percentage of the fringe benefits must be calculated at the percentage rate times the "base hourly rate".

Apprentices duly registered under the Commissioner of Labor's regulations on "Work Training Standards for Apprenticeship and Training Programs" Section 31-51-d-1 to 12, are allowed to be paid the appropriate percentage of the prevailing journeymen hourly base and the full fringe benefit rate, providing the work site ratio shall not be less than one full-time journeyperson instructing and supervising the work of each apprentice in a specific trade.

The Prevailing wage rates applicable to this project are subject to annual adjustments each July 1st for the duration of the project.

Each contractor shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.

It is the contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's website.

The annual adjustments will be posted on the Department of Labor's Web page: www.ct.gov/dol. For those without internet access, please contact the division listed below.

The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project.

All subsequent annual adjustments will be posted on our Web Site for contractor access.

Contracting Agencies are under no obligation pursuant to State labor law to pay any increase due to the annual adjustment provision.

Project: Select Patio Walls And Doors And ADA Accessibility At Julian Curtiss Elementary School

Effective October 1, 2005 - Public Act 05-50: any person performing the work of any mechanic, laborer, or worker shall be paid prevailing wage

All Person who perform work ON SITE must be paid prevailing wage for the appropriate mechanic, laborer, or worker classification.

All certified payrolls must list the hours worked and wages paid to All Persons who perform work ON SITE regardless of their ownership i.e.: (Owners, Corporate Officers, LLC Members, Independent Contractors, et. al)

Reporting and payment of wages is required regardless of any contractual relationship alleged to exist between the contractor and such person.

~~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 clause (29 CFR 5.5 (a) (1) (ii)).

Please direct any questions which you may have pertaining to classification of work and payment of prevailing wages to the Wage and Workplace Standards Division, telephone (860)263-6790.

Sec. 31-53b. Construction safety and health course. New miner training program. Proof of completion required for mechanics, laborers and workers on public works projects. Enforcement. Regulations. Exceptions. (a) Each contract for a public works project entered into on or after July 1, 2009, by the state or any of its agents, or by any political subdivision of the state or any of its agents, described in subsection (g) of section 31-53, shall contain a provision requiring that each contractor furnish proof with the weekly certified payroll form for the first week each employee begins work on such project that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53 on such public works project, pursuant to such contract, has completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, has completed a new miner training program approved by the Federal Mine Safety and Health Administration in accordance with 30 CFR 48 or, in the case of telecommunications employees, has completed at least ten hours of training in accordance with 29 CFR 1910.268.

- (b) Any person required to complete a course or program under subsection (a) of this section who has not completed the course or program shall be subject to removal from the worksite if the person does not provide documentation of having completed such course or program by the fifteenth day after the date the person is found to be in noncompliance. The Labor Commissioner or said commissioner's designee shall enforce this section.
- (c) Not later than January 1, 2009, the Labor Commissioner shall adopt regulations, in accordance with the provisions of chapter 54, to implement the provisions of subsections (a) and (b) of this section. Such regulations shall require that the ten-hour construction safety and health courses required under subsection (a) of this section be conducted in accordance with federal Occupational Safety and Health Administration Training Institute standards, or in accordance with Federal Mine Safety and Health Administration Standards or in accordance with 29 CFR 1910.268, as appropriate. The Labor Commissioner shall accept as sufficient proof of compliance with the provisions of subsection (a) or (b) of this section a student course completion card issued by the federal Occupational Safety and Health Administration Training Institute, or such other proof of compliance said commissioner deems appropriate, dated no earlier than five years before the commencement date of such public works project.
- (d) This section shall not apply to employees of public service companies, as defined in section 16-1, or drivers of commercial motor vehicles driving the vehicle on the public works project and delivering or picking up cargo from public works projects provided they perform no labor relating to the project other than the loading and unloading of their cargo.

History: P.A. 08-83 amended Subsec. (a) by making provisions applicable to public works project contracts entered into on or after July 1, 2009, replacing provision re total cost of work with reference to Sec. 31-53(g), requiring proof in certified payroll form that new mechanic, laborer or worker has completed a 10-hour or more construction safety course and adding provision re new miner training program, amended Subsec. (b) by substituting "person" for "employee" and adding "or program", amended Subsec. (c) by adding "or in accordance with Federal Mine

Safety and Health Administration Standards" and setting new deadline of January 1, 2009, deleted former Subsec. (d) re "public building", added new Subsec. (d) re exemptions for public service company employees and delivery drivers who perform no labor other than delivery and made conforming and technical changes, effective January 1, 2009.

Informational Bulletin

THE 10-HOUR OSHA CONSTRUCTION SAFETY AND HEALTH COURSE

(applicable to public building contracts entered into on or after July 1, 2007, where the total cost of all work to be performed is at least \$100,000)

- (1) This requirement was created by Public Act No. 06-175, which is codified in Section 31-53b of the Connecticut General Statutes (pertaining to the prevailing wage statutes);
- (2) The course is required for public building construction contracts (projects funded in whole or in part by the state or any political subdivision of the state) entered into on or after July 1, 2007;
- (3) It is required of private employees (not state or municipal employees) and apprentices who perform manual labor for a general contractor or subcontractor on a public building project where the total cost of all work to be performed is at least \$100,000;
- (4) The ten-hour construction course pertains to the ten-hour Outreach Course conducted in accordance with federal OSHA Training Institute standards, and, for telecommunications workers, a ten-hour training course conducted in accordance with federal OSHA standard, 29 CFR 1910.268;
- (5) The internet website for the federal OSHA Training Institute is http://www.osha.gov/fso/ote/training/edcenters/fact_sheet.html;
- (6) The statutory language leaves it to the contractor and its employees to determine who pays for the cost of the ten-hour Outreach Course;
- (7) Within 30 days of receiving a contract award, a general contractor must furnish proof to the Labor Commissioner that all employees and apprentices performing manual labor on the project will have completed such a course;
- (8) Proof of completion may be demonstrated through either: (a) the presentation of a bona fide student course completion card issued by the federal OSHA Training Institute; or (2) the presentation of documentation provided to an employee by a trainer certified by the Institute pending the actual issuance of the completion card;
- (9) Any card with an issuance date more than 5 years prior to the commencement date of the construction project shall not constitute proof of compliance;

- (10) Each employer shall affix a copy of the construction safety course completion card to the certified payroll submitted to the contracting agency in accordance with Conn. Gen. Stat. § 31-53(f) on which such employee's name first appears;
- (11) Any employee found to be in non-compliance shall be subject to removal from the worksite if such employee does not provide satisfactory proof of course completion to the Labor Commissioner by the fifteenth day after the date the employee is determined to be in noncompliance;
- (12) Any such employee who is determined to be in noncompliance may continue to work on a public building construction project for a maximum of fourteen consecutive calendar days while bringing his or her status into compliance;
- (13) The Labor Commissioner may make complaint to the prosecuting authorities regarding any employer or agent of the employer, or officer or agent of the corporation who files a false certified payroll with respect to the status of an employee who is performing manual labor on a public building construction project;
- (14) The statute provides the minimum standards required for the completion of a safety course by manual laborers on public construction contracts; any contractor can exceed these minimum requirements; and
- (15) Regulations clarifying the statute are currently in the regulatory process, and shall be posted on the CTDOL website as soon as they are adopted in final form.
- (16) Any questions regarding this statute may be directed to the Wage and Workplace Standards Division of the Connecticut Labor Department via the internet website of http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm; or by telephone at (860)263-6790.

THE ABOVE INFORMATION IS PROVIDED EXCLUSIVELY AS AN EDUCATIONAL RESOURCE, AND IS NOT INTENDED AS A SUBSTITUTE FOR LEGAL INTERPRETATIONS WHICH MAY ULTMATELY ARISE CONCERNIG THE CONSTRUCTION OF THE STATUTE OR THE REGULATIONS.

November 29, 2006

Notice

To All Mason Contractors and Interested Parties Regarding Construction Pursuant to Section 31-53 of the Connecticut General Statutes (Prevailing Wage)

The Connecticut Labor Department Wage and Workplace Standards Division is empowered to enforce the prevailing wage rates on projects covered by the above referenced statute.

Over the past few years the Division has withheld enforcement of the rate in effect for workers who operate a forklift on a prevailing wage rate project due to a potential jurisdictional dispute.

The rate listed in the schedules and in our Occupational Bulletin (see enclosed) has been as follows:

Forklift Operator:

- Laborers (Group 4) Mason Tenders operates forklift solely to assist a mason to a maximum height of nine feet only.
- Power Equipment Operator (Group 9) operates forklift to assist any trade and to assist a mason to a height over nine feet.

The U.S. Labor Department conducted a survey of rates in Connecticut but it has not been published and the rate in effect remains as outlined in the above Occupational Bulletin.

Since this is a classification matter and not one of jurisdiction, effective January 1, 2007 the Connecticut Labor Department will enforce the rate on each schedule in accordance with our statutory authority.

Your cooperation in filing appropriate and accurate certified payrolls is appreciated.

Statute 31-55a

You are here: DOL Web Site + Wage and Workplace Standards + Statute 31-55a

- Special Notice -

To All State and Political Subdivisions, Their Agents, and Contractors

Connecticut General Statute 31-55a - Annual adjustments to wage rates by contractors doing state work.

Each contractor that is awarded a contract on or after October 1, 2002, for (1) the construction of a state highway or bridge that falls under the provisions of section 31-54 of the general statutes, or (2) the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project that falls under the provisions of section 31-53 of the general statutes shall contact the Labor Commissioner on or before July first of each year, for the duration of such contract, to ascertain the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of each mechanic, laborer or worker employed upon the work contracted to be done, and shall make any necessary adjustments to such prevailing rate of wages and such payment or contributions paid or payable on behalf of each such employee, effective each July first.

- The prevailing wage rates applicable to any contract or subcontract awarded on or after October 1, 2002 are subject to annual adjustments each July 1st for the duration of any project which was originally advertised for bids on or after October 1, 2002.
- Each contractor affected by the above requirement shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.
- It is the *contractor's* responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's Web Site. The annual adjustments will be posted on the Department of Labor Web page: www.ctdol.state.ct.us. For those without internet access, please contact the division listed below.
- The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project. All subsequent annual adjustments will be posted on our Web Site for contractor access.

Any questions should be directed to the Contract Compliance Unit, Wage and Workplace Standards Division, Connecticut Department of Labor, 200 Folly Brook Blvd., Wethersfield, CT 06109 at (860)263-6790.

←-- Workplace Laws

Published by the Connecticut Department of Labor, Project Management Office Last Updated: April 22, 2010

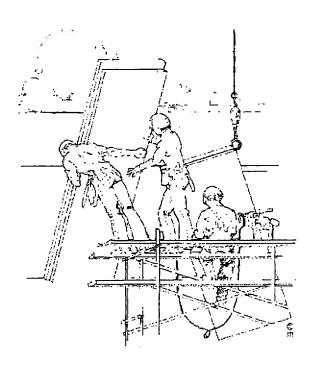
~NOTICE~

TO ALL CONTRACTING AGENCIES

Please be advised that Connecticut General Statutes Section 31-53, requires the contracting agency to certify to the Department of Labor, the total dollar amount of work to be done in connection with such public works project, regardless of whether such project consists of one or more contracts.

Please find the attached "Contracting Agency Certification Form" to be completed and returned to the Department of Labor, Wage and Workplace Standards Division, Public Contract Compliance Unit.

Inquiries can be directed to (860)263-6543.



CONNECTICUT DEPARTMENT OF LABOR WAGE AND WORKPLACE STANDARDS DIVISION CONTRACT COMPLIANCE UNIT

CONTRACTING AGENCY CERTIFICATION FORM

I	, acting in t	my official capacity as,
authorized	representative	title
for	, loc	eated at,
	tracting agency	address
do hereby ce	rtify that the total dollar amoun	t of work to be done in connection with
		, located at
proje	ct name and number	address
shall be \$, which include	es all work, regardless of whether such project
consists of o	ne or more contracts.	
	CONTRACT	TOR INFORMATION
Name:		· · · · · · · · · · · · · · · · · · ·
Approximate	e Starting Date:	
Approximate	e Completion Date:	
		er.
S	ignature	Date
Return To:	Connecticut Department of L Wage & Workplace Standard Contract Compliance Unit 200 Folly Brook Blvd. Wethersfield, CT 06109	
Date Issued:		

CONNECTICUT DEPARTMENT OF LABOR WAGE AND WORKPLACE STANDARDS DIVISION

CONTRACTORS WAGE CERTIFICATION FORM

I,		of	_
Officer, Owner, Authoriz	ed Rep.	Company Name	-
do hereby certify that the			_
		Company Name	
		Street	-
		City	-
and all of its subcontractors wi	ll pay all wor	rkers on the	
Proj	ect Name and	d Number	
St	reet and City	y	-
the wages as listed in the sched is attached hereto).	ule of prevai	iling rates required for such project (a copy of w	hich'
	-	Signed	
Subscribed and sworn to before	e me this	day of,	
fi.		Notary Public	
Return to: Connecticut De Wage & Workp 200 Folly Brool Wethersfield, C	lace Standard Blvd.		
Rate Schedule Issued (Date).			

Certified Payroll Form WWS - CPI

You are here: DOL Web Site * Wage and Workplace Standards * Certified Payroli Form WWS - CPI

In accordance with <u>Connecticut General Statutes</u>, <u>31-53</u> Certified Payrolls with a statement of compliance shall be submitted monthly to the contracting agency.

Note: Once you have downloaded these forms and are ready to print them out, set the print function on your PC to the horizontal print orientation.

Note2: Please download both the Payroll Certification for Public Works Projects **and** the Certified Statement of Compliance for a complete package. The Certified Statement of Compliance appears on the same page as the Fringe Benefits Explanation page.

Announcement: The Certified Payroll Form WWS-CPI can now be completed on-line!

- Certified Payroll Form WWS-CPI (PDF, 727KB)
- Sample Completed Form (PDF, 101KB)

Published by the Connecticut Department of Labor, Project Management Office Last Updated: April 22, 2010

CHECK # AND NET PAY Week-Ending Dates Contractor or Subcontractor Business Name: Ψ. GROSS PAY FOR THIS PREVAILING RATE JOB PAGE NUMBER LIST OTHER TOTAL DEDUCTIONS HOLDING FEDERAL STATE WITH-POLDING WITH. ICA ICA FOR ALL WORK
PERFORMED
THIS WEEK GROSS PAY PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS TYPE OF FRINGE F BENEFITS Per Hour 1 through 6 (see back) NOTICE: THIS PAGE MUST DE ACCOMPANIED BY A COVER PAGE (FORM # WWS-CF!) TOTAL FRINGE BENBEIT PLAN CASH Total ST BASE HOURLY \$ Cash Fringe Cash Fringe Cash Fringe Cash Fringe Cash Fringe RATE Base Rate Base Rate Base Rate Base Rate Base Rate ₩. 69 WEEKLY PAYROLL O-TIME OrT Hours O-TIME S-TIME S-TIME O-TIME 8-TIME S-TIME 8-TIME S-TIME Total HOURS WORKED EACH DAY DAY AND DATE Trade License Type & Number - OSHA 10 Certification Number CLASSIFICATION "IF AUQUIRED FEMALE RACE* MALE AND Weekly Payroll Certification For Public Works Projects (Continued) APPR RATE PERSON/WORKER,
ADDRESS and SECTION 7/13/2009 1V1V8-CF2

[New] In accordance with Section 31-53b(a) of the C.G.S. each contractor shall provide a copy of the OSHA 10 Hour Construction Safety and Health Card for each employee, to be attached to the first certified payroll on the project.

accordance with Connecticut General Statutes, 31-53	necticut General	Statutes, 31-53		PA	ROLL	CERTIF	ICAT101	V FOR P	UBLIC	PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS	ROJECTS				Connecticut	t Departme	Connecticut Department of Labor	
rtifled Payrolls with a statement of compliance	statement of cor	mpliance												>	Vage and WC	ge and Workplace Stan 300 E-II: Beeck Died	Wage and Workplace Standards Division	U01
ill be submitted monthly to the contracting agency.	hly to the contra	cling agency.						WEEK	WEEKLY PAYKOLL	OLL					Vethersfi	Wethersfield, CT 06109	,u, 109	
NTRACTOR NAME AND ADDRESS:	AND ADDRESS.								N N	UBCONTRAC	SUBCONTRACTOR NAME & ADDRESS	ADDRESS		WORKER'S C	OMPENSATI	ION INSURA	WORKERIS COMPENSATION INSURANCE CARRIER	æ
														POLICY#				
YROLL NUMBER	Week-Ending Date	PROJECT NAME & ADDRESS	RESS											EFFECTIVE DATE: EXPIRATION DATE:	DATE:			
ERSON/WORKER	APPR MALE	WORK			DAY AND DATE	DATE			Total ST E	BASE HOURLY	TYPE OF	GROSS PAY	L	TOTAL DEDUCTIONS	NOI	GR	GROSS PAY FOR	
N	RATE	CLA	Σ	H	×	Ħ	ů,	S	_	RATE	_	FOR ALL		FEDERAL STATE	TATE	E	THIS PREVAILING CHECK # AND	CHECK # AN
	% AND RACE*	Trade License Type							Total	TOTAL FRINGE BENEFIT PLAN	Per Hour	WORK PERFORMED THIS WEEK	FICA	WITH-	NITH- 0	LIST	KATE JUB	Ton Ton
		10 Certification Number		HOUR	S WORKE	HOURS WORKED EACH DAY	Y.		-	CASH	_		\neg	HOLDING	HOLDING	-		
									S-TIME	55	1 \$ 2.5				·			
									ш	Base Rate	3, \$							
									O-TIME		\$ 4							
										S Cash Fringe	2 2							
				_	_				S-TIME		\$ 1							
						-			_ н	S. Have Rate	2 2							
									O-TIME		4. \$							
					-					! 69	5. \$							
			+	+	+	+	+	_		Cash Fringe	\$ 5					-		
									- - - -	-	2. \$							
										Base Rate	3. \$	-						
									O-TIME		69 6							
										🕏 Cash Fringe	, s,							
			-						S-TIME	64	1. \$					_		
			•							Base Rate	3. \$	•						
									O-TIME	•	5 .							
										S Cash Fringe	6. \$							
13/2009 WS_CP1	*IF REQUIRED	UIRED] 						*SEE REVERSE SIDE	ESIDE	ı				PAG	PAGE NUMBER	40

OSHA 10 ~ATTACH CARD TO 1ST CERTIFIED PAYROLL

*FRINGE BENEFITS EXPLANATION (P):

Bona fide benefits paid to approved plans, funds or programs, except those required by Federal or State Law (unemployment tax, worker's compensation, income taxes, etc.).

Please specify the type of benefits provided:	A District
Medical or hospital care	
2) Pension or retirement	
3) Life Insurance	_ 6) Other (please specify)
CERȚIFIED STATE	MENT OF COMPLIANCE
For the week ending date of	
I,of	, (hereafter known as
Employer) in my capacity as	(title) do hereby certify and state:
the week in accordance with Connecticut General hereby certify and state the following: a) The records submitted are true and according to the rate of wages paid to each mechan contributions paid or payable on behalf of defined in Connecticut General Statutes of wages and the amount of payment or or wages and the amount of payment or or wages.	curate; nic, laborer or workman and the amount of payment or f each such employee to any employee welfare fund, as s, section 31-53 (h), are not less than the prevailing rate contributions paid or payable on behalf of each such
subsection Connecticut General Statutes, less than those which may also be require	as determined by the Labor Commissioner pursuant to section 31-53 (d), and said wages and benefits are not ed by contract; of the provisions in Connecticut General Statutes,
section 31-53 (and Section 31-54 if appli	icable for state highway construction);
 d) Each such employee of the Employer policy for the duration of his employment contracting agency; 	is covered by a worker's compensation insurance at which proof of coverage has been provided to the
gift, gratuity, thing of value, or compens indirectly, to any prime contractor, prime employee for the purpose of improperly	acks, which means any money, fee, commission, credit, ation of any kind which is provided directly or e contractor employee, subcontractor, or subcontractor obtaining or rewarding favorable treatment in onnection with a prime contractor in connection with a stor; and
f) The Employer is aware that filing a ce felony for which the employer may be fi five years or both.	rtified payroll which he knows to be false is a class D ned up to five thousand dollars, imprisoned for up to
 OSHA~The employer shall affix a copy training completion document to the certified agency for this project on which such employed 	of the construction safety course, program or d payroll required to be submitted to the contracting yee's name first appears.
(Signature)	Title) Submitted on (Date)
Section B: Applies to CONNDOT Projects C That pursuant to CONNDOT contract requir listed under Section B who performed work o wage requirements defined in Connecticut Ge	ements for reporting purposes only, all employees on this project are not covered under the prevailing
(Signature) (Title) Submitted on (Date)
9	

Note: CTDOL will assume all hours worked were performed under Section A unless clearly delineated as Section B WWS-CP1 as such. Should an employee perform work under both Section A and Section B, the hours worked and wages paid must be segregated for reporting purposes.

Weekly Payroll Certification For	on For	_			PAYRO	277	CRTIE	CATIO	NFOR	PUBLI	C WORK	PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS	CIS			Week-Ending Date:	ng Date:		;	
		÷						WEEF	WEEKLY PAYROLL	ROLL						Commission	or Supcon	Contractor of Supecontractor Business Name:		
PERSON/WORKER,	APPR	MALE	WORK			DAYAN	AND DATE		Tot	al ST BAS	Total ST BASE HOURLY	TYPE OF	GROSS PAY	Ĺ	TOTAL DEDUCTIONS	SUCTIONS	r	GROSS PAY FOR	L	Γ
ADDRESS and SECTION	RATE	FEMALE	CLASSIFICATION	s	⊢ Z	≩	Ħ	Ľ.	S Hours	E.	RATE		FOR ALL WORK	Γ	FEDERAL STATE	TATE	Ē	THIS PREVAILING	Ö	# AND
	%	AND										BENEFITS	PERFORMED		•		- F	RATE JOB	NETPAY	٨٨٠
	<u>-</u>	KACE.	1 rade License Type & Number - OSHA						Total		TOTAL FRINGE	Per Hour I through 6	THIS WEEK	FICA WITH-		WITH-	UIS1 OTHER			
	-		10 Certification Number		HOUR	SWORK	HOURS WORKED EACH DAY	DAY	D.	Quir	CASH	(see back)			NG	HOLDING				
					-				Ü	S-TIME		1. \$								
										9 [4			<u> </u>					
									1	_	Base Kate	9								_
								_	o	O-TIME		4. \$			····		_			
-										69		5. 5								
					+	+	\dashv			Cas	Cash Fringe	6. \$					_			
				_	_				5-1	S-TIME		1.5								
										64		Z. \$					_			
					_					Вяз	Base Rate	3. \$							_	
									6	o-TIME		4. 5				-				
		_								643		5. \$								
					_					Cas	Cash Fringe	6. \$								
									6	S-TIME		1. 5								
						<u>. </u>	_			۶.		2. S								
						_				Bas	Base Rate	3. \$								
										O-TIME		4. \$								
									_	۶4		\$ '5								
					+	\dashv	-]		Cas	Cash Fringe	6. \$					_			
	_								.s	S-TIME		1. \$								
	_						_		_	٠,		2. \$							_	
										Bes	Base Rate	3. \$								
									3	8-TIME		4. \$								
				_		_				69		5. 5								
					_		-			Cas	Cash Fringe	6. \$								
									S-1	S-TIME		1. \$								
					_					65		2. \$					-			
										_	Base Rate	J. S								
	_			_					w	S-TIME		4. \$								
				_			_		_	49		5. 3					_			
	_		2			_	_			Cas	Cash Fringe	6, 5					_			
0000/10/10		*IF REQUIRED	UIRED																	
WWS-CP2			NOTICE: THIS PAGE MUST BE ACCOMPANIED BY A COVER PAGE JEDBM # WWS-CP1)	MIS PAG	TEM IST	HE ACC	NYAWO.	IFD RV A	COVERPA	CE CEO	EM WWS.	141					PAGE	PAGE NIMHER	r.	
777			IN ALCE: LI	TATO LA	TO LA COM	DE AC	Company of the Compan	V 10 001	COLEMA	100	ALLE H AT TO	(11)					1900		5	

[New] In accordance with Bection 31-53b(a) of the C.G.S. each contractor shall provide a copy of the OBMA 10 Hour Construction Safety and Health Card for each employee, to be attached to the first certified payroll on the project.

In accordance with Connecticut General Statutes, 31-53	acticut Gene	ral Statutes, 31-53			PAYR	OLL CE	RTHEIC	ATION	FOR PUB	PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS	PROJECTS			/ /	Jonnacticul nga and We	i Departmy orkplace 6	Connectivit Department of Labor Waga and Workplace Standards Dirisha	E .
aball be submitted monthly to the contracting agency-	dy to the con	traciling agency.						F	WREKLY PAYROLL	AYROLL					200 Fully Wethersfl	200 Fully Brook Blvd. Wethersfleld, CT 05109	rd. 1709	
CONTRACTOR NAME AND ADDIUSS: Landon Copposator, 15 Connecteut Ave	Comedicut	SONTKÁCTOR, NAMIE ANIJ ADIDIUSSS: Landon Coiporalion, 19 Connecticut Avenue, Nuthhord, CT 08472	18472			E 5				SUBCONTRACTO XYZ Gorporation 9 Mein Street	SUBCONTRACTOR NAME & ADDRUSSS XYZ Gorporation 9 Meth Street	ADDRESS	2 2	WORKER'S COMPONIATION IN Travelere hisurence Company	AIPBNBATH	ION INSUR. Reany	WORKER'S COMPONDATION INSURANCE CARRIER Tigyelere hiburance Compony Politicy & Goal Parescop	
PAYROLL NUMBER	Weak-Unding Date	FROJECT NAMR & ADDRESS DOT 106-288, Route 82	ADDRESS Ile 82							Yanile, OT 06389	98290		<u>. 4.8</u>	EPERCTIVE DATE: 17/108 EXTRAȚION DATE: 12/3 (/08	TTE: 1/1/06	9 1,000	9	
		11900			15	H WAN A KID IN	Ha ##	-	Total	Total CT DASE HOUSEN	TVI TYPROF	GROSS PAY	101	TOTAL DEDUCTIONS	6NO	NO.	GROSS PAY FOR	
NO	RATE PRIMILE	7	\$/2	M	Ţ		III	L	S Hours	- 1		FOR ALL		FRDRRAL STATE	ATE	Ē	THIS PREVAILING CHECK # AND	CHRCK # AND
	NA AND RACE	Trade Liberine Type.	70	21	77	23	24	28	26 Total	to an		WOLK PERFORMED THIS WREK	PICA	WITH- W.		LIST OTHER	ונייווד	X V I I I I I I I I I I I I I I I I I I
		10 Certification Mamber			HUURS WORKED	ORKER IN	BACH DAY		t/c	Off Bayes CASH.	(nee (nek)			HOLDING HOLDING	I DINC			
Robert Graft 81 Maple Strest Willinsmild, CT 06226	W, G	Encitical Lineman 6-1 1243697 Owner OSHA 123466		5	E D		5	₩.	8-1 0-1	9-TIME 5 30.75 40 Dass Bale O-FIME \$ 9.92	1 \$ 8.00 2 \$ 5 1 \$ 2.01 5 \$ 6	\$1,582,90			£	р-нкки в	\$1,502,80	#123 \$ XXX.XX
Ronald Jones	66% M/B	Electrical		-		-	8	8	ä	IME.		\$1,404.80	XXXX	c xxxxx	XXXX	9-улж	\$1,494.80	#124
212 zim 319881 Norwich, CT 06360		DSHA 234567							₽ δ	O.TIME S 18.03 Cash Pringe	* N N N							\$иии.кк
Franklin T. Smulth 234 Washington Rd. New Landon, GT 06320 SECTION B	MiH	Project Manager			.				# * • •	8- FIME \$ O-TIME \$	2 C C C C C C C C C C C C C C C C C C C	\$1,500.00	xx'xx	XX.XX	אמיא	M-ak.x		#125
									Ġ Ġ	G-TIME S ROIS O-TIME \$ Crash Prints								
7713/2009 19788-CP1	4117	*IF ARQURED				-				*SEE NEVERSE SIDE	RSE SIDE					PAG	PAGBI NUNIBER	7 20

OSHA 10 ~ATTACH CARD TO 1ST CERTIFIED PAYROLL

*FRINGE BENEFITS EXPLANATION (P):

Bona fide benefits paid to approved plans, funds or programs, except those required by Federal or State Law (unemployment tax, worker's compensation, income taxes, etc.).

, , ,	
Please specify the type of benefits provided:	
Medical or hospital care Blue Cross	_ 4) Disability
2) Pension or retirement	
3) Life Insurance thopia	6) Other (please specify)
CERTIFIED STATE	MENT OF COMPLIANCE
For the week ending date of 9/26/09	
	poration
	poration , (hereafter known as
Employer) in my capacity as Owner	(title) do hereby certify and state:
Section A: 1. All persons employed on said project have be the week in accordance with Connecticut General hereby certify and state the following: a) The records submitted are true and accordance with the said accordanc	
contributions paid or payable on behalf or defined in Connecticut General Statutes of wages and the amount of payment or c amployee to any employee welfare fund.	nic, laborer or workman and the amount of payment or f each such employee to any employee welfare fund, as , section 31-53 (h), are not less than the prevailing rate contributions paid or payable on behalf of each such as determined by the Labor Commissioner pursuant to section 31-53 (d), and said wages and benefits are not at by contract;
c) The Employer has complied with all o section 31-53 (and Section 31-54 if applied	of the provisions in Connecticut General Statutes, cable for state highway construction);
d) Each such employee of the Employer policy for the duration of his employmen contracting agency;	is covered by a worker's compensation insurance (which proof of coverage has been provided to the
gift, grantity, thing of value, or compensation indirectly, to any prime contractor, prime employee for the purpose of improperly (cks, which means any money, fee, commission, credit, ution of any kind which is provided directly or contractor employee, subcontractor, or subcontractor obtaining or rewarding favorable treatment in anection with a prime contractor in connection with a cort and
 The Employer is aware that filing a cer felony for which the employer may be fur five years or both. 	tified payroll which he knows to be false is a class D ned up to five thousand dollars, imprisoned for up to
agency for this project on which such employ	payroll required to be submitted to the contracting
listed under Section B who performed work or wage requirements defined in Connecticut Ger	ements for reporting purposes only, all employees this project are not covered under the prevailing neral Statutes Section 31-53.
(Signature)	itle) Submitted on (Date)
,	
Notes CTIVIT will come all bours worked	were performed under Section A unless clearly

Note: CTDOL will assume all hours worked were performed under Section A unless clearly delineated as Section B WWS-CP1 as such. Should an employee perform work under both Section A and Section B, the hours worked and wages paid must be segregated for reporting purposes.

THIS IS A PUBLIC DOCUMENT
DO NOT INCLUDE SOCIAL SECURITY NUMBERS

Occupational Classification Bulletin

You are here: DOL Web Site + Wage and Workplace Standards + Occupational Classification Bulletin

• Informational Bulletin (PDF, 479KB) updated

Published by the Connecticut Department of Labor, Project Management Office Last Updated: April 22, 2010

Information Bulletin Occupational Classifications

The Connecticut Department of Labor has the responsibility to properly determine "job classification" on prevailing wage projects covered under C.G.S. Section 31-53.

Note: This information is intended to provide a sample of some occupational classifications for guidance purposes only. It is not an all-inclusive list of each occupation's duties. This list is being provided only to highlight some areas where a contractor may be unclear regarding the proper classification.

Below are additional clarifications of specific job duties performed for certain classifications:

ASBESTOS WORKERS

Applies all insulating materials, protective coverings, coatings and finishes to all types of mechanical systems.

ASBESTOS INSULATOR

Handle, install apply, fabricate, distribute, prepare, alter, repair, dismantle, heat and frost insulation, including penetration and fire stopping work on all penetration fire stop systems.

BOILERMAKERS

Erects hydro plants, incomplete vessels, steel stacks, storage tanks for water, fuel, etc. Builds incomplete boilers, repairs heat exchanges and steam generators.

 BRICKLAYERS, CEMENT MASONS, CEMENT FINISHERS, MARBLE MASONS, PLASTERERS, STONE MASONS, PLASTERERS. STONE MASONS, TERRAZZO WORKERS, TILE SETTERS

Lays building materials such as brick, structural tile and concrete cinder, glass, gypsum, terra cotta block. Cuts, tools and sets marble, sets stone, finishes concrete, applies decorative steel, aluminum and plastic tile, applies cements, sand, pigment and marble chips to floors, stairways, etc.

CARPENTERS, MILLWRIGHTS. PILEDRIVERMEN. LATHERS. RESILEINT FLOOR LAYERS, DOCK BUILDERS, DIKERS, DIVER TENDERS

Constructs, erects, installs and repairs structures and fixtures of wood, plywood and wallboard. Installs, assembles, dismantles, moves industrial machinery. Drives piling into ground to provide foundations for structures such as buildings and bridges, retaining walls for earth embankments, such as cofferdams. Fastens wooden, metal or rockboard lath to walls, ceilings and partitions of buildings, acoustical tile layer, concrete form builder. Applies firestopping materials on fire resistive joint systems only. Installation of curtain/window walls only where attached to wood or metal studs. Installation of insulated material of all types whether blown, nailed or attached in other ways to walls, ceilings and floors of buildings. Assembly and installation of modular furniture/furniture systems. Free-standing furniture is not covered. This includes free standing: student chairs, study top desks, book box desks, computer furniture, dictionary stand, atlas stand, wood shelving, two-position information access station, file cabinets, storage cabinets, tables, etc.

CLEANING LABORER

The clean up of any construction debris and the general cleaning, including sweeping, wash down, mopping, wiping of the construction facility, washing, polishing, dusting, etc., prior to the issuance of a certificate of occupancy falls under the *Labor classification*.

DELIVERY PERSONNEL

If delivery of supplies/building materials is to one common point and stockpiled there, prevailing wages are not required. If the delivery personnel are involved in the distribution of the material to multiple locations within the construction site then they would have to be paid prevailing wages for the type of work performed: laborer, equipment operator, electrician, ironworker, plumber, etc.

An example of this would be where delivery of drywall is made to a building and the delivery personnel distribute the drywall from one "stockpile" location to further sub-locations on each floor. Distribution of material around a construction site is the job of a laborer/tradesman and not a delivery personnel.

ELECTRICIANS

Install, erect, maintenance, alteration or repair of any wire, cable, conduit, etc., which generates, transforms, transmits or uses electrical energy for light, heat, power or other purposes, including the Installation or maintenance of telecommunication, LAN wiring or computer equipment, and low voltage wiring. *License required per Connecticut General Statutes: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9.

ELEVATOR CONSTRUCTORS

Install, erect, maintenance and repair of all types of elevators, escalators, dumb waiters and moving walks. *License required by Connecticut General Statutes: R-1,2,5,6.

FORK LIFT OPERATOR

Laborers Group 4) Mason Tenders - operates forklift solely to assist a mason to a maximum height of nine (9) feet only.

Power Equipment Operator Group 9 - operates forklift to assist any trade, and to assist a mason to a height over nine (9) feet.

GLAZIERS

Glazing wood and metal sash, doors, partitions, and 2 story aluminum storefronts. Installs glass windows, skylights, store fronts and display cases or surfaces such as building fronts, interior walls, ceilings and table tops and metal store fronts. Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and ironworkers which requires either a blended rate or equal composite workforce.

IRONWORKERS

Erection, installation and placement of structural steel, precast concrete, miscellaneous iron, ornamental iron, metal curtain wall, rigging and reinforcing steel. Handling, sorting, and installation of reinforcing steel (rebar). Metal bridge rail (traffic), metal bridge handrail, and decorative security fence installation. Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and ironworkers which requires either a blended rate or equal composite workforce. Insulated metal and insulated composite panels are still installed by the Ironworker.

INSULATOR

Installing fire stopping systems/materials for "Penetration Firestop Systems": transit to cables, electrical conduits, insulated pipes, sprinkler pipe penetrations, ductwork behind radiation, electrical cable trays, fire rated pipe penetrations, natural polypropylene, HVAC ducts, plumbing bare metal, telephone and communication wires, and boiler room ceilings. Past practice using the applicable licensed trades, Plumber, Sheet Metal, Sprinkler Fitter, and Electrician, is not inconsistent with the Insulator classification and would be permitted.

LABORERS

Acetylene burners, asphalt rakers, chain saw operators, concrete and power buggy operator, concrete saw operator, fence and guard rail erector (except metal bridge rail (traffic), metal bridge handrail, and decorative security fence installation.), hand operated concrete vibrator operator, mason tenders, pipelayers (installation of storm drainage or sewage lines on the street only), pneumatic drill operator, pneumatic gas and electric drill operator, powermen and wagon drill operator, air track operator, block paver, curb setters, blasters, concrete spreaders.

PAINTERS

Maintenance, preparation, cleaning, blasting (water and sand, etc.), painting or application of any protective coatings of every description on all bridges and appurtenances of highways, roadways, and railroads. Painting, decorating, hardwood finishing, paper hanging, sign writing, scenic art work and drywall hhg for any and all types of building and residential work.

LEAD PAINT REMOVAL

Painter's Rate

- 1. Removal of lead paint from bridges.
- 2. Removal of lead paint as preparation of any surface to be repainted.
- 3. Where removal is on a Demolition project prior to reconstruction.

Laborer's Rate

- 1. Removal of lead paint from any surface NOT to be repainted.
- 2. Where removal is on a *TOTAL* Demolition project only.

PLUMBERS AND PIPEFITTERS

Installation, repair, replacement, alteration or maintenance of all plumbing, heating, cooling and piping. *License required per Connecticut General Statutes: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2 S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4.

POWER EQUIPMENT OPERATORS

Operates several types of power construction equipment such as compressors, pumps, hoists, derricks, cranes, shovels, tractors, scrapers or motor graders, etc. Repairs and maintains equipment. *License required, crane operators only, per Connecticut General Statutes.

ROOFERS

Covers roofs with composition shingles or sheets, wood shingles, slate or asphalt and gravel to waterproof roofs, including preparation of surface. (tear-off and/or removal of any type of roofing and/or clean-up of any and all areas where a roof is to be relaid)

SHEETMETAL WORKERS

Fabricate, assembles, installs and repairs sheetmetal products and equipment in such areas as ventilation, air-conditioning, warm air heating, restaurant equipment, architectural sheet metal work, sheetmetal roofing, and aluminum gutters. Fabrication, handling, assembling, erecting, altering, repairing, etc. of coated metal material panels and composite metal material panels when used on building exteriors and interiors as soffits, facia, louvers, partitions, wall panel siding. canopies, cornice, column covers, awnings, beam covers, cladding, sun shades, lighting troughs, spires, ornamental roofing, metal ceilings, mansards, copings, ornamental and ventilation hoods, vertical and horizontal siding panels, trim, etc. The sheet metal classification also applies to the vast variety of coated metal material panels and composite metal material panels that have evolved over the years as an alternative to conventional ferrous and non-ferrous metals like steel. iron, tin, copper, brass, bronze, aluminum, etc. Insulated metal and insulated composite panels are still installed by the Iron Worker. Fabrication, handling, assembling, erecting, altering, repairing, etc. of architectural metal roof, standing seam roof, composite metal roof, metal and composite bathroom/toilet partitions, aluminum gutters, metal and composite lockers and shelving, kitchen equipment. and walk-in coolers.

SPRINKLER FITTERS

Installation, alteration, maintenance and repair of fire protection sprinkler systems. *License required per Connecticut General Statutes: F-1,2,3,4.

TILE MARBLE AND TERRAZZO FINISHERS

Assists and tends the tile setter, marble mason and terrazzo worker in the performance of their duties.

TRUCK DRIVERS

Definitions:

- 1) "Site of the work" (29 Code of Federal Regulations (CFR) 5.2(l)(b) is the physical place or places where the building or work called for in the contract will remain and any other site where a significant portion of the building or work is constructed, provided that such site is established specifically for the performance of the contact or project;
- (a) Except as provided in paragraph (l) (3) of this section, job headquarters, tool yards, batch plants, borrow pits, etc. are part of the "site of the work"; provided they are dedicated exclusively, or nearly so, to the performance of the contract or project, and provided they are adjacent to "the site of work" as defined in paragraph (e)(1) of this section;
- (b) Not included in the "site of the work" are permanent home offices, branch plant establishments, fabrication plants, tool yards etc, of a contractor or subcontractor whose location and continuance in operation are determined wholly without regard to a particular State or political subdivision contract or uncertain and indefinite periods of time involved of a few seconds or minutes duration and where the failure to count such time is due to consideration justified by industrial realities (29 CFR 785.47)
- 2) "Engaged to wait" is waiting time that belongs to and is controlled by the employer which is an integral part of the job and is therefore compensable as hours worked. (29 CFR 785.15)
- 3) "Waiting to be engaged" is waiting time that an employee can use effectively for their own purpose and is not compensable as hours worked. (29 CFR 785.16)
- 4) "De Minimus" is a rule that recognizes that unsubstantial or insignificant periods of time which cannot as a practical administrative matter be precisely recorded for payroll purposes, may be disregarded. This rule applies only where there are uncertain and indefinite periods of time involved of a short duration and where the failure to count such time is due to consideration justified by worksite realities. For example, with respect to truck drivers on prevailing wage sites, this is typically less than 15 minutes at a time.

Coverage of Truck Drivers on State or Political subdivision Prevailing Wage Projects

Truck drivers are covered for payroll purposes under the following conditions:

- Truck Drivers for time spent working on the site of the work.
- Truck Drivers for time spent loading and/or unloading materials and supplies on the site of the work, if such time is not de minimus

- Truck drivers transporting materials or supplies between a facility that is deemed part of the site of the work and the actual construction site.
- Truck drivers transporting portions of the building or work between a site established specifically for the performance of the contract or project where a significant portion of such building or work is constructed and the physical places where the building or work outlined in the contract will remain.

For example: Truck drivers delivering asphalt are covered under prevailing wage while" engaged to wait" on the site and when directly involved in the paving operation, provided the total time is not "de minimus"

Truck Drivers are not covered in the following instances:

- Material delivery truck drivers while off "the site of the work"
- Truck Drivers traveling between a prevailing wage job and a commercial supply facility while they are off the "site of the work"
- Truck drivers whose time spent on the "site of the work" is de minimus, such as under 15 minutes at a time, merely to drop off materials or supplies, including asphalt.

These guidelines are similar to U.S. Labor Department policies. The application of these guidelines may be subject to review based on factual considerations on a case by case basis.

For example:

- Material men and deliverymen are not covered under prevailing wage as long as they are not directly involved in the construction process. If, they unload the material, they would then be covered by prevailing wage for the classification they are performing work in: laborer, equipment operator, etc.
- Hauling material off site is not covered provided they are not dumping it at a location outlined above.
- Driving a truck on site and moving equipment or materials on site would be considered covered work, as this is part of the construction process.

Any questions regarding the proper classification should be directed to:
Public Contract Compliance Unit
Wage and Workplace Standards Division
Connecticut Department of Labor
200 Folly Brook Blvd, Wethersfield, CT 06109
(860) 263-6543

Connecticut Department of Labor Wage and Workplace Standards Division FOOTNOTES

Please Note: If the "Benefits" listed on the schedule for the following occupations includes a letter(s) (+ a or + a+b for instance), refer to the information below.

Benefits to be paid at the appropriate prevailing wage rate for the listed occupation.

If the "Benefits" section for the occupation lists only a dollar amount, disregard the information below.

Bricklayers, Cement Masons, Cement Finishers, Concrete Finishers (including caulking), Stone Masons

(Building Construction) and (Residential-Hartford, Middlesex, New Haven, New London and Tolland Counties)

a. Paid Holiday: Employees shall receive 4 hours for Christmas Eve holiday provided the employee works the regularly scheduled day before and after the holiday. Employers may schedule work on Christmas Eve and employees shall receive pay for actual hours worked in addition to holiday pay.

Bricklayer (Residential-Fairfield County)

a. Paid Holiday: If an employee works on Christmas Eve until noon he shall be paid for 8 hours.

Electricians

Fairfield County: West of the Five Mile River in Norwalk

a. \$2.00 per hour not to exceed \$14.00 per day.

Elevator Constructors: Mechanics

- a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day, plus the Friday after Thanksgiving.
- b. Vacation: Employer contributes 8% of basic hourly rate for 5 years or more of service or 6% of basic hourly rate for 6 months to 5 years of service as vacation pay credit.

a. Paid Holidays: Labor Day and Christmas Day.

Power Equipment Operators

(Heavy and Highway Construction & Building Construction)

a. Paid Holidays: New Year's Day, Good Friday, Memorial day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, provided the employee works 3 days during the week in which the holiday falls, if scheduled, and if scheduled, the working day before and the working day after the holiday. Holidays falling on Saturday may be observed on Saturday, or if the employer so elects, on the preceding Friday.

Ironworkers

a. Paid Holiday: Labor Day provided employee has been on the payroll for the 5 consecutive work days prior to Labor Day.

Laborers (Tunnel Construction)

a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. No employee shall be eligible for holiday pay when he fails, without cause, to work the regular work day preceding the holiday or the regular work day following the holiday.

Roofers

a. Paid Holidays: July 4th, Labor Day, and Christmas Day provided the employee is employed 15 days prior to the holiday.

Sprinkler Fitters

a. Paid Holidays: Memorial Day, July 4th, Labor Day, Thanksgiving Day and Christmas Day, provided the employee has been in the employment of a contractor 20 working days prior to any such paid holiday.

Truck Drivers

(Heavy and Highway Construction & Building Construction)

a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas day, and Good Friday, provided the employee has at least 31 calendar days of service and works the last scheduled day before and the first scheduled day after the holiday, unless excused.

GREENWICH PUBLIC SCHOOLS GREENWICH, CONNECTICUT

Contract Cover Sheet Letter of Intent / Award Letter Invitation To Bid Bid Sheet Contract for Roof Replacement at Riverside School Bid Bond Corporate Principal Performance, Maintenance and Payment Bond Insurance Procedure Insurance Requirement Sheet **Endorsement Letter** Acord Form A.M. Best Key Rating Guide Sheet Affirmative Action Compliance Affidavit Consent of Surety Final Payment

CONTRACT

FOR SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY

AT

JULIAN CURTISS ELEMENTARY SCHOOL

Contract No.

GREENWICH PUBLIC SCHOOLS GREENWICH, CT.

BLANK

AWARD LETTER

FORM OF BID BOND TOWN OF GREENWICH, CONNECTICUT

Date Bond Executed	
BID BOND	
Principal	
Surety	
Penal Sum of Bond (express in words and figures) Date of Bid	
KNOW ALL MEN BY THESE PRESENTS, that we, the principal and surety above named and firmly bound unto the Town of Greenwich, Connecticut, in the penal sum of the amo above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, administrators, and successors, jointly and severally, firmly by these presents. THE CONDITHIS OBLIGATION IS SUCH, that whereas the principal has submitted the accompanying as shown above for (name of bid)	unt stated executors, TION OF

NOW THEREFORE, if the principal shall not withdraw said bid within the period specified therein after the opening of the same, or if no period be specified, within sixty (60) days after said opening, and shall within the period specified therefor, or if no period specified, within ten (10) days after the prescribed forms are presented to him for signature, execute such further contractual documents, if any, as may be required by the terms of the Bid as accepted, and give bonds with good and sufficient surety or sureties as may be required, for the faithful performance and proper fulfillment of the resulting contract, and for the protection of all persons supplying labor and materials in the prosecution of the work provided for in such contract or in the event of the withdrawal of said bid within the period specified, or the failure to enter into such contract and give such bonds within the time specified in said bid and the amount for which said Town may procure the required work, supplies, and services, if the latter amount be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

IN WITNESS WHEREOF the above-bounden parties have executed this instrument under their several seals on the date indicated above. The name and corporate seal (if applicable) of each corporate party being hereto affixed:

Address o Duly Authorized) INDIVIDUAL PRINCIPAL TO TO TO TO TO TO TO TO TO T	(SEAL)(SEAL)(SEAL)(SEAL)
o Duly Authorized) INDIVIDUAL PRINCIPAL TO TO TO TO	(SEAL)(SEAL)(SEAL)(SEAL)
INDIVIDUAL PRINCIPAL TO TO TO *************	(SEAL)(SEAL)(SEAL)(SEAL)
TO TO TO ****************	(SEAL)(SEAL)(SEAL)(SEAL)
TO TO TO ****************	(SEAL)(SEAL)(SEAL)(SEAL)
TOTO	(SEAL)(SEAL)(SEAL)
TO	(SEAL)
TO************	(SEAL)

CORROR ATTE / LL C PI	
	DIGIDA.
CORPORATE / LLC PF	RINCIPAL
BUSINESS ADDRESS	AFFIX CORPORATE
	SEAL
BY– (HEREUNTO DU	JLY AUTHORIZED)
TITLE	
*********	********
CORPORATE SURETY	<u> </u>
BUSINESS ADDRESS	AFFIX
	CORPORATE SEAL
BY – (HEREUNTO DU	LY AUTHORIZED)
TITLE	
	CORPORATE SURETY BUSINESS ADDRESS BY - (HEREUNTO DU

CERTIFICATE AS TO CORPORATE PRINCIPAL

Ι,		certi	fy that	I	am	the
	of the corporation	n named	as principa	al in the	e within	bond;
that	, who signed s	said bond	l on behalf	of the	principa	l, was
then of th	ne corporation; tha	t I know	his signat	ure, and	d his sign	nature
thereto is genuine; and that said bond was	duly signed, seale	ed and at	tested for	and in	behalf o	f said
corporation by authority of its governing bod	ly.					
		(Ce	orporate Se	eal)		-

PERFORMANCE, MAINTENANCE AND PAYMENT BOND

BOND NO.	CONTRACT NO	
KNOW ALL MEN BY THESE PRE	SENTS. That we	
	, as Principal, and	
	ws of the State of and auth cut as Surety, are holden and firmly bound jointly and severally unto the TC ereafter referred to as the Town, a territorial corporation located in the C	
Obligors do	ey, successors or assigns, to which payment well and truly to be made, we irs, executors, administrators, and successors firmly by these presents.	the said
IN WITNESS WHEREOF we ha	ve hereunto set or caused to be set our respective hands, names and s	seals this
	day of20	
certain written contract with the T	LIGATION IS SUCH, That whereas the above named Principal has entered OWN OF GREENWICH, CONNECTICUT, dated the	
	(Description of work	here -
	ng to the plans and specifications prepared by the TOWN OF GREENWIC le a part hereof as fully and to the same extent as if copied at length herein.	H, which
fully indemnify and save harmless the to do, and shall pay for all equipments and contract, and shall indemnify and the Town by reason of any injuries of Principal, his servants or agents, or his of the use of faulty or improper mater any employee of the Principal or his equipment, process, method of consumptions against such defective workmanship, final acceptance of the work, and shall	incipal shall well and faithfully perform said contract according to its provise. Town from all cost and damages which the Town may suffer by reason of it, appurtenances, materials and labor furnished, used or employed in the exert save harmless the Town from all suits or claims of any nature or description damages sustained by any person or persons on account of any act or omissions subcontractors in the construction of the work or in guarding the work, or or itals, or by reason of claims under the Workmen's Compensation Laws or other subcontractors, or by reason of the use of any patented material, machinery truction or design in any way involved in the work, and shall indemnify the material and equipment as may be discovered within one (1) year after complete I make good in such defective workmanship and material as may be discovered gation shall be void, otherwise to remain in full force and effect.	failure so ecution of on against on of said n account er laws by y, device, the Town letion and
contract, or in or to the plans or speci	rees that any modifications, omissions or additions in or to the terms of the fications therefor, or any extension of time, shall in no wise affect the obligation ereby waiving any and all right to any notice of any such modifications, or	ion of the
C	ONTRACTOR	
	BY	
	SURETY	
	DV	

INSURANCE PROCEDURE

PLEASE NOTE:

THIS PAGE MUST BE RETURNED WITH YOUR BID/PROPOSAL. FAILURE TO DO SO MAY RESULT IN YOUR BID/PROPOSAL BEING REJECTED.

Please take the insurance requirements of the Contract to your agent/broker immediately upon receipt of the bid documents to determine your existing coverage and any costs for new or additional coverage required for the work noted in this Request for Bid/Proposal. Any bids/proposals with deficient insurance requirements will be rejected.

STATEMENT OF VENDOR:

I have read the	e insurance require	ements for this w	ork and hav	ve taken the	documentation	ı to my ir	isurance
agent/broker.	The bid/proposal	cost reflects any	additional	costs relatir	ng to insurance	requirem	ents for
this work.							

Signature	Date
Contractor	

<u>Insurance Requirements:</u> Before starting and until final completion and acceptance of the work called for in the Contract and expiration of the guarantee period provided for in the Contract, the Contractor and its subcontractors, if any, shall procure and maintain insurance of the types and amounts checked in paragraphs A through F below for all Contract operations.

- [x] A. General Liability, with minimum coverages for combined bodily injury and property damage liability of \$2,000,000 general aggregate, \$1,000,000 per occurrence including:
 - [x] 1. Commercial General Liability.
 - [x] 2. Town as additional insured.
 - [] 3. Owners and Contractors Protective Liability (separate policy in the name of the Town).
- [x] B. Comprehensive Automobile Liability, with minimum coverages of \$1,000,000 combined single limit for bodily injury and property damage, including, where applicable, coverage for any vehicle, all owned vehicles, scheduled vehicles, hired vehicles, non-owned vehicles and garage liability.
- [x] C. Excess Liability with minimum coverage of \$5,000,000 in umbrella form, or such other form as approved by Town Department Head and Risk Management Director.
- [x] D. Workers' Compensation and Employer's Liability, with minimum coverages as provided by Connecticut State Statutes.
- [] E. Professional Liability (for design and other professionals for Errors and Omissions) with minimum coverage of \$1,000,000. If the policy is on a claims-made basis, coverage shall be continually renewed or extended for three (3) years after work is completed under the Contract.
- [] F. Other (Builder's Risk etc.):_____.
- [x] G. CERTIFICATE HOLDER: TOWN OF GREENWICH, BOARD OF EDUCATION, ATTN: BOARD OF EDUCATION (also fill in on ACORD Certificate of Insurance) 290 Greenwich Avenue, Greenwich, CT 06830.

The Acord certificate of insurance form must be executed by your insurance agent/broker and returned to this office. Company name and address must conform on all documents including insurance documentation. It is required that the agent/broker note the individual insurance companies providing coverage, rather than the insurance group, on the Acord form. The Contract number (provided to the awarded Contractor), project name and a brief description must be inserted in the "Description of Operations" field. It must be confirmed on the Acord Form that the Town of Greenwich is endorsed as an additional insured by having the appropriate box checked off and stating such in the "Description of Operations" field. A letter from the awarded vendor's agent/broker certifying that the Town of Greenwich has been endorsed onto the general liability policy as an additional insured is also mandatory. This letter must follow exactly the format provided by the Purchasing Department and must be signed by the same individual authorized representative who signed the Acord form. If the insurance coverage required is provided on more than one Acord certificate of insurance, then additional endorsement letters are also required. Contract development will begin upon receipt of complete, correct insurance documentation.

The Contractor shall be responsible for maintaining the above insurance coverages in force to secure all of the Contractor's obligations under the Contract with an insurance company or companies with an AM Best Rating of B+:VII or better, licensed to write such insurance in Connecticut and acceptable to the Risk Manager, Town of Greenwich. For excess liability only, non-admitted insurers are acceptable, provided they are permitted to do business through Connecticut excess line brokers per listing on the current list of Licensed Insurance Companies, Approved Reinsurers, Surplus Lines Insurers and Risk Retention Groups issued by the State of Connecticut Insurance Department.

(SAMPLE ENDORSEMENT LETTER)

AGENT/BROKER (LETTERHEAD)

(Date)

Eugene H. Watts, Senior Buyer Purchasing Department Town of Greenwich/Board of Education 290 Greenwich Avenue – Havemeyer Building Greenwich, CT 06830

Re:

Town of Greenwich/Board of Education / Contract #

Dear Mr. Watts:

The undersigned hereby certifies as follows:

- (1) I am a duly licensed insurance agent under the laws of the State of [insert State] and an authorized representative of all companies affording coverage under the Acord form submitted herewith;
- (2) The Town of Greenwich has been endorsed as an additional insured under the general liability policy no. [insert policy number], issued by [insert company affording coverage] to [name of insured];
- The general liability policy referenced in paragraph (2) above meets or exceeds the coverage in Commercial General Liability ISO form CG 00 01 10 01, including contractual liability;
- (4) The policies listed in the Acord form submitted to the Town of Greenwich in connection with the abovereferenced contract have been issued to the insured in the amounts stated and for the periods indicated in the Acord form; and
- (5) Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

Sincerely,

Authorized Representative for all companies listed in the Acord form

A. M. BEST KEY RATING GUIDE FORM

The	is licensed in
The State of Connecticut as per listing in	n the <u>2009</u> edition of the
A.M. Best Key Rating Guide for Propert	y and Casualty, page
Number	
Their reting is	

COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES CONTRACT COMPLIANCE REGULATIONS NOTIFICATION TO BIDDERS

AFFIRMATIVE ACTION COMPLIANCE AFFIDAVIT

The contract to be awarded is subject to contract compliance requirements mandated by Sections 4a-60 and 4a-60a of the Connecticut General Statutes; and, when the awarding agency is the State, Sections 46a-71(d) and 46a-81i(d) of the Connecticut General Statutes. There are Contract Compliance Regulations codified at Section 46a-68j-21 through 43 of the Regulations of Connecticut State Agencies, which establish a procedure for awarding all contracts covered by Sections 4a-60 and 46a-71(d) of the Connecticut General Statutes.

According to Section 46a-68j-30(9) of the Contract Compliance Regulations, every agency awarding a contract subject to the contract compliance requirements has an obligation to "aggressively solicit the participation of legitimate minority business enterprises as bidders, contractors, subcontractors and suppliers of materials." "Minority business enterprise" is defined in Section 4a-60 of the Connecticut General Statutes as a business wherein fifty-one percent or more of the capital stock, or assets belong to a person or persons: "(1) Who are active in the daily affairs of the enterprise; (2) who have the power to direct the management and policies of the enterprise; and (3) who are members of a minority, as such term is defined in subsection (a) of Section 32-9n." "Minority" groups are defined in Section 32-9n of the Connecticut General Statutes as "(1) Black Americans . . . (2) Hispanic Americans . . . (3) persons who have origins in the Iberian Peninsula . . . (4) Women . . . (5) Asian Pacific Americans and Pacific Islanders; (6) American Indians . . ." An individual with a disability is also a minority business enterprise as provided by Section 4a-60g of the Connecticut General Statutes. The above definitions apply to the contract compliance requirements by virtue of Section 46a-68j-21(11) of the Contract Compliance Regulations.

The awarding agency will consider the following factors when reviewing the bidder's qualifications under the contract compliance requirements:

- (a) the bidder's success in implementing an affirmative action plan;
- (b) the bidder's success in developing an apprenticeship program complying with Sections 46a-68-1 to 46a-68-17 of the Administrative Regulations of Connecticut State Agencies, inclusive;
- (c) the bidder's promise to develop and implement a successful affirmative action plan;
- (d) the bidder's submission of employment statistics contained in the "Employment Information Form", indicating that the composition of its workforce is at or near parity when compared to the racial and sexual composition of the workforce in the relevant labor market area; and
- (e) the bidder's promise to set aside a portion of the contract for legitimate minority business enterprises. See Section 46a-68j-30(10)(E) of the Contract Compliance Regulations.

*INSTRUCTIONS: Bidder must sign acknowledgement below and return acknowledgement to Awarding Agency along with bid proposal.

Signature Date

On behalf of:

The undersigned acknowledges receiving and reading a copy of the "Notification to Bidders" form.

SAMPLE COPY – DO NOT USE:

BID SHEET

Bids must be submitted to the Greenwich Public Schools, Havemeyer Building, 290 Greenwich Avenue, Greenwich, Connecticut 06830, Attention Mr. Eugene H. Watts, Senior Buyer, Purchasing Department on the following form signed by an authorized company officer.

Attention Mr. Eugene H. Watts, S	Senior Buyer, Purchasing Department on the following form signed by an author	nzed company officer.
Greenwich Public Schools Havemeyer Building 290 Greenwich Avenue Greenwich, CT 06830	DateRe:	
Gentlemen:		
(I, We)	the undersigned having visited the site of the	School and having
	local conditions affecting the cost of the work and with Contract Document	
Documents, hereby propose to t	furnish all labor, tools, materials, equipment and insurance, to pay all applic	
perform all things as provided in	the Specifications for for the	e following sum:
Base Bid	\$	
Signed_ (Corpo	orate Seal)	
AddressTelephone Number		

INFORMATION FOR BIDDERS

1. Form and Submission of Bid

- a. One copy of this document will be furnished to the bidders. The Bid Sheet shall be completed and returned as part of the bid. The copy submitted by the successful bidder shall be completed in its entirety, executed and retained by the Town of Greenwich, sometimes referred to as the Town. From this executed copy, three other conformed copies will be made, one of which will be sent to the Contractor.
- b. Bid Documents must be enclosed in a sealed opaque envelope plainly marked on the outside with the name and address of the Contractor; addressed to the Purchasing Agent, Greenwich Public Schools, Havemeyer Building, 290 Greenwich Avenue, Greenwich, Connecticut, and shall be labeled as indicated in Invitation to Bidders.
- c. It shall be the responsibility of each Bidder to have his Bid Proposal at the Business Office at the time of Bid Opening; neither the Town of Greenwich nor the Board of Education shall be held in any way for failure of bidder to have his Bid Proposal submitted at such time and Bids arriving after the indicated Bid Opening time will not be accepted. Late bids arriving by mail shall be returned to the sender unopened.

2. Bid Security

Each Bid must be accompanied by Bid Bond prepared on the Form of Bid Bond attached hereto duly executed and acknowledged by the Bidder, as Principal, and by a surety satisfactory to Town as Surety. Bid Bond shall be in the sum of 10% of bid amount and shall be enclosed in the sealed envelope containing the Bid. Each such Bid Bond may be held by the Town as security for the fulfillment of the Bidder's agreements as hereinabove set forth and as set forth in the Bid. Should the Bidder fail to fulfill such agreements, the Bid Bond shall become payable to the Town as liquidated damages; otherwise, the Bid Bond shall become null and void. A BID BOND will not be required where the total estimated cost of labor and materials under the contract with respect to which such general bid is submitted is less than fifty thousand dollars (\$50,000).

3. Withdrawal of Bids

Except as hereinafter in this subsection expressly provided, once his Bid is submitted and received by the Town for consideration and comparison with the other bids similarly submitted, the Bidder agrees that he may not and will not withdraw it within thirty (30) consecutive calendar days after the actual date of the opening of Bids unless extended by addendum.

Upon proper written request and identification, Bids may be withdrawn only as follows:

- a. At any time prior to the designated time for the opening of bids.
- b. Unless a Bid is withdrawn as provided above, the Bidder agrees that it shall be deemed open for acceptance until the Agreement has been executed by both parties thereto or until the Town notifies a Bidder in writing that his Bid is rejected or that the Town does not intend to accept it. Notice of acceptance of a Bid shall not constitute rejection of any other Bid.

4. <u>Bidders to Investigate</u>

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

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

5. Ability and Experience of Bidder

No award will be made to any Bidder who cannot satisfy the Town that he has sufficient ability and experience in this class of work and sufficient capital and plant to enable him to prosecute and complete the work successfully within the time named or where such time is not named, within a reasonable period of time as is determined by the contracting officer or agency. The Town's decision or judgment on these matters shall be final, conclusive and binding.

The Town may make such investigations as it deems necessary, and the Bidder shall furnish to the Town, under oath if so required, all such information and data for this purpose as the Town may request.

6. <u>Interpretations</u>

Questions Regarding Drawings and Documents. No answer will be given to prospective Bidders in reply to an oral question if the question involves an interpretation of the intent or meaning of the Drawings, if any, or other Contract Documents or the quality or use of products or methods other than those designated or described on the Drawings, if any, and other Contract Documents, including Addenda, as described below, is given informally, for information and the convenience of the Bidder only, and is not guaranteed. The Bidder agrees that such information shall not be used as the basis of nor shall the giving of such information entitle the Bidder to assess any claim or demand against the Town or Board of Education.

To receive consideration, such questions shall be submitted in writing to the Board of Education at least ten (10) calendar days before the established date for receipt of Bids. If the question involves the quality or use of products or methods, it must be accompanied by Drawings, Specifications, or data in sufficient detail to enable the Board of Education to determine the quality or suitability of the products or method. In general, the Board of Education will neither approve nor disapprove particular products prior to the opening of bids; such products will be considered when offered by the Contractor for incorporation into the work.

The Contracting Officer will set forth as addenda, which shall become a part of the Contract Documents, such questions received as above provided as in his sole judgment are appropriate or necessary and his decision regarding each. At least seven (7) days prior to the receipt of Bids, he will send a copy of these addenda to those prospective Bidders known to have taken out sets of the Drawings and other Contract Documents.

The Contractor agrees to use the products and methods designated or described in the specifications or as amended by the addenda.

- a. <u>Bids</u>. The Board of Education reserves the right to reject Bids which in its judgment are either incomplete, conditional, obscure, or not responsible or which contain additions not called for, erasures not properly initialed, alterations or similar irregularities if deemed in the Town's best interest to do so.
- b. <u>Right to Reject or Accept Bids</u>. The Board of Education reserves the right to reject any and all bids not deemed to be in the best interest of the Town of Greenwich. The Board of Education reserves the right to waive any informalities in or reject any or all bids, or any part of any bid.
- c. <u>Execution of Agreement</u>. The Bidder whose Bid is accepted will be required and agrees to duly execute the Agreement and furnish the required Bond within such time as deemed reasonable by the Town or Contracting Officer.

d. Non-Connecticut Contractors 5 % Tax.

Pursuant to Connecticut General Statutes § 12-430(7), as amended by Public Act No11,61, Section 66, a non-resident contractor shall comply with the State of Connecticut's bonding requirements.

7. Bid Bond

- a. The Bid Bond form given on the following pages shall be used.
- b. The surety on the bond may be any corporation authorized to act as surety in the State of Connecticut.
- c. The full name and business or residence address of each individual party to the bond shall be inserted in the space provided therefore, and each party shall sign the bond with his usual signature on the line opposite the scroll seal.
- d. If the principals are partners, their individual names shall appear in the space provided therefore, with the recital that they are partners composing a firm, naming it, and the bond shall be executed by a general partner who has been authorized to act on behalf of the partnership.
- e. If the principal or surety is a corporation, the name of the state in which incorporate shall be inserted in the space provided therefore, and said instrument shall be executed and attested under the corporate seal, the fact shall be stated, in which case a scroll or adhesive seal shall appear following the corporate name.
- f. The official character and authority of the person or persons executing the bond for a corporation shall be certified by a proper officer. In lieu of such certificate, there may be attached to the bond copies of so much of the records of the corporation as will show the official character and authority of the officers signing duly certified by a proper officer, under the corporate seal, to be true copies.
- g. The date of this bond must not be prior to the date of the instrument in connection with which it is given.

8. <u>Minimum Wages and Payment to Subcontractors</u>

- a. The work specified in this contract is subject to prevailing wage rates as fixed by the Labor Commissioner of the State of Connecticut and a schedule of such rates is deemed to be incorporated herein.
- b. A general or prime contractor is required by Connecticut law to pay his subcontractors for labor performed or materials furnished within forty-five (45) days after payment to such general or prime contractor.

c.	The contractor's attention is directed to Section 9 of the Agreement for additional requirements for Employment Preference and Minimum Wage.

AGREEMENT CONTENTS

SECTION	DESCRIPTION	PAGE
1	DEFINITIONS	
2	DESCRIPTION OF WORK	20
3	PAYMENT	21
4	PERFORMANCE, MAINTENANCE & PAYMENT BOND	21
5	TIME OF COMPLETION	21
6	INSURANCE	21-22
7	GUARANTEE	22
8	DEFECTIVE WORK	22
9	EMPLOYMENT PREFERENCE AND MINIMUM WAGE RATES	22-23
10	COMPLIANCE WITH LAWS	23-24
11	INDEMNITY	24
12	PATENTS	24
13	CHANGES	25
14	CLAIMS FOR DAMAGES	25
15	ABANDONMENT OF THE WORK OR OTHER DEFAULT	25-26
16	LIENS	26
17	CLAIMS	26
18	LIABILITY OF TOWN	27
19	PROVISIONS REQUIRED BY LAW DEEMED INSERTED	27
20	PERMITS	27
21	NOT TO SUBLET OR ASSIGN	27
22	EMPLOY COMPETENT WORKERS	27-28
23	EMPLOY SUFFICIENT LABOR AND EQUIPMENT	28
24	INTOXICATING LIQUORS	28
25	ACCESS TO WORK	28
26	EXAMINATION OF WORK	28
27	EXTRA WORK	28
28	CHANGES NOT TO AFFECT BONDS	28
29	PRICES FOR WORK	29
30	MONEYS MAY BE RETAINED	29
31	USE OR PARTIAL PAYMENT NOT ACCEPTANCE	29
32	PREVAILING WAGE RATES: CONSTRUCTION SAFETY	29-30
	AND HEALTH COURSE	
33	NON-CONNECTICUT CONTRACTORS	30
34	FINAL PAYMENT	30
35	RIGHT TO ALTER FORM, QUANTITY, ETC., OF WORK	30-31
36	SAFETY SPECIFICATIONS	31-33

AGREEMENT

This AGREEMENT, executed this 1^{st} day of \underline{July} in the year $\underline{Two\ Thousand\ and}$ (20)
(herein referred to as the "AGREEMENT"), by and between the Town of Greenwich, Connecticut
acting through Board of Education hereunto duly authorized "OWNER," and
acting through
duly authorized. "CONTRACTOR."

WITNESSETH, that the parties to these presents, each in consideration of the undertakings, promises, and agreements on the part of the other herein contained, have undertaken, promised, and agreed and do hereby undertake, promise and agree, the Owner for itself, its successors and assigns, as follows:

1. <u>DEFINITIONS</u>: Wherever the words hereinafter defined or pronouns used in their stead occur in the Contract Documents, they shall have the following meaning:

The word "OWNER" shall mean the Greenwich Board of Education, Town of Greenwich, and shall include its authorized representative, the Assistant Facilities Director.

The words "CONTRACTING OFFICER OR AGENCY" shall mean that official or agency of the Town which awards the contract and executed the Agreement.

The Invitation to Bid, Information for Bidders, the Contractor's Bid as accepted by the Owner, the Agreement, the General Conditions, any special conditions, and the General, Technical and Materials Specifications, the Drawings and all addenda and amendments to any of the foregoing, collectively constitute the Contract Documents, and are sometimes herein referred to as the "Contract".

When instructions such as "provide", "furnish", etc. are used herein, these apply to the General Contractor, unless noted otherwise.

- 2. <u>DESCRIPTION OF WORK</u>: The work under this Contract shall consist of everything set forth in the Specifications and any Drawings and any Addenda to either Specifications or Drawings or both. It shall be understood that the Contractor shall be in strict compliance with all municipal, state and federal statutes.
- 3. <u>PAYMENT</u>: The Contractor shall be paid, in general, upon satisfactory completion of the work as

described under "Final Payment". For certain work of substantial cost the Board of Education will make partial payments for work completed and materials provided. Requirements for partial payments are as stipulated in the Special Conditions.

Each requisition for partial payment must be accompanied with a breakdown showing costs of materials provided and percentage of the work which is completed at the time such request is made. Such payments will be made upon approval of the Assistant Facilities Director.

- 4. <u>PERFORMANCE, MAINTENANCE AND PAYMENT BOND</u>: The Contractor shall simultaneously with the signing of the Contract, furnish the Town the executed Performance, Maintenance, and Payment Bond of a SURETY COMPANY AUTHORIZED TO DO BUSINESS IN THE STATE OF CONNECTICUT, and acceptable to the Town, in the sum of the full amount of the Contract Obligation in the form provided by the Town. A <u>PERFORMANCE BOND</u> will <u>not</u> be required where the total estimated cost of labor and materials under the contract with respect to which such general bid is submitted is less than one hundred thousand dollars (\$100,000.00).
- 5. <u>TIME OF COMPLETION</u>: Where time of completion is an essential and applicable part of this Contract each Bidder will be required to indicate his proposed completion date as set forth on the Proposal Sheet. Where time is of the utmost importance because inconvenience, safety or health of persons affected or for any other valid reason as determined by the Board of Education, the Board will establish the time of completion and reserves the right to establish a time charge against the Contractor for non-compliance with this provision. Conditions for the time charge and related costs will be as set forth in the Specifications if such time charge will be made part of this Contract.

NOTE: The Town, at its discretion, may choose to extend the Contract for additional option years.

Base Contract period is: 2017 through 2018 First option year is: 2018 through 2019 Second option years is: 2019 through 2020

6. <u>INSURANCE</u>: Before starting and until final completion and acceptance of the work called for in the Contract and expiration of the guarantee period provided for in the Contract, the Contractor shall procure and maintain insurance of the types and amounts indicated in paragraphs A through F inclusive, below, and such other insurance as is specified under any special conditions to the Contract. The Town shall be named as an additional insured on each such policy of insurance.

The Contractor shall require each of its subcontractors to procure and maintain, until the final completion of each sub-contractor's work, insurance of the types and amounts specified in paragraphs A through F inclusive, below, which shall be in addition to the obligation of the Contractor to secure and maintain at its

expense, during the life of this Contract, public liability and property damage insurance to protect it, its sub-contractors, if any, and the Town from claims for bodily injury, accidental death or property damage arising from the operations under this Contract (including blasting and the handling and storage of explosives) whether such operations be by the Contractor or by anyone directly or indirectly employed by it.

- 7. <u>GUARANTEE</u>: The Contractor guarantees that the work and services to be performed, furnished, used or installed in the construction of the same shall be free of defects and flaws, and shall be performed and furnished in strict accordance with the Drawings, if any, Specifications, and other Contract Documents, that the strength of all parts of all manufactured equipment shall be adequate and as specified and that the performance test requirements of the Contract shall be fulfilled. This guarantee shall be for a period of one year from and after the date of completion and acceptance of the work as stated in the final estimate. The Contractor shall repair, correct or replace as required, promptly and without charge, all work, equipment and material, or parts thereof, which fail to meet the above guarantee or which in any way fail to be in strict accordance with the terms and provisions and requirements of the Contract during such one year period, and also shall cover maintenance/operation, repair, correct, or replace all damage to the work resulting from such failure.
- 8. <u>DEFECTIVE WORK</u>: The inspection of the work shall not relieve the Contractor of any of his obligations to perform and complete the work as required by the Contract. Defective work shall be corrected and unsuitable materials, equipment, apparatus and other items shall be replaced by the Contractor, notwithstanding that such work, materials, and other items may have been previously overlooked or accepted or estimated for payment. If the work or any part thereof shall be found defective at any time before the final acceptance of the work, the Contractor shall forthwith make good such defect in a manner satisfactory to the Board of Education; if any material, equipment, apparatus, or other items brought upon the site for use or incorporation in the work, or selected for the same, is condemned by the Board of Education as unsuitable or not in conformity with the Specifications or any of the other Contract Documents, the Contractor shall forthwith remove such materials, equipment, apparatus and other items from the site of the work and shall at his own cost and expense make good and replace the same and any material furnished by the Board of Education which shall be damaged or rendered defective by the handling or improper installation by the Contractor, his agents, servants, employees or subcontractors.
- 9. <u>EMPLOYMENT PREFERENCE AND MINIMUM WAGE RATES</u>: In the employment of labor to perform the construction, remodeling or repairing of any public building specified herein, by the State or any of its agents, or by persons contracting therewith, preference shall be given to citizens of the United States, who are, and continuously for at least three months prior to the date hereof have been, residents of the labor market area, as established by the labor commissioner of the State of Connecticut, in which such work is to be done, and if no such qualified person is available, then to citizens who have continuously resided in the county in which the work is to be performed for at least three months prior to the date hereof,

and then to citizens of the state who have continuously resided in the state at least three months prior to the date hereof. In no event shall said provisions be deemed to abrogate or supersede, in any manner, any provision regarding residence requirements contained in a collective bargaining agreement to which the Contractor is a party.

In the employment of mechanics or workmen to perform the work specified herein, in connection with any public works project, including, but not limited to construction, remodeling or repairing of any public facility, structure, except public buildings covered by the preceding paragraph, site preparation or site improvement, appurtenances or highways or in preparation or improvement of any land or waterway on or in which a structure is situated or to be constructed by the state or any of its agents or by persons contracting therewith, preference shall be given to residents of the state who are, and continuously for at least six months prior to the date hereof have been, residents of this state, and if no such person is available then to residents of other states.

The provisions of the two immediately preceding paragraphs of this section shall not apply where the state or any subdivision thereof may suffer the loss of revenue granted or to be granted from any agency or department of the federal government as a result of the two immediately preceding paragraphs of this section or regulative procedures pursuant thereto.

The wages paid on an hourly basis to any mechanic, laborer, or workman employed upon the work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of such employee to any employee welfare fund, as defined in Section 31-53(h) Connecticut General Statutes, shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the Town of Greenwich. Any Contractor who is not obligated by agreement to make payment or contribution on behalf of such employees to any such employee welfare fund shall pay to each employee as part of his wages the amount of payment or contribution for his classification on each pay day.

The provisions of the immediately preceding paragraph shall not apply where the total cost of all work to be performed by all contractors and subcontractors in connection with new construction of any public works project is less than four hundred thousand dollars (\$400,000) or where the total cost of all work to be performed by all contractors and subcontractors in connection with any remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works projects is less than one hundred thousand dollars (\$100,000).

10. <u>COMPLIANCE WITH LAWS</u>: The Contractor shall keep himself fully informed of all existing and future federal, state and local laws, ordinances, rules and regulations affecting those engaged or employed on the work, the materials and equipment used in the work or the conduct of the work and of all orders, decrees and other requirements of bodies or tribunals having any jurisdiction or authority over the same. If any discrepancy or inconsistency is discovered in the Drawings, if any, Specifications or other Contract

documents in relation to any such law, ordinance, rule, regulation, order, decree or other requirement, the Contractor shall at all times observe and comply with, and cause all his agents, servants, employees and subcontractors to observe and comply with all such existing and future laws, ordinances, rules, regulations, orders, decrees and other requirements, and he shall protect, indemnify and save harmless the Town, its officers, agents, servants, and employees, from and against any and all claims, demands, suits, proceedings, liabilities, judgments, penalties, losses, damages, costs, and expenses, including attorneys' fees, arising from or based upon any violation or claimed violation of any such law, ordinance, rule regulation, order, decree or other requirement, whether committed by the Contractor or any of his agents, servants, employees or subcontractors.

11. <u>INDEMNITY</u>: The Contractor shall indemnify and save harmless the Town and its officers, agents, servants and employees, from and against any and all claims, demands, suits, proceedings, liabilities, judgments, awards, losses, damages, costs and expenses, including attorneys' fees, on account of bodily injury, sickness, disease or death sustained by any person or persons or injury or damages to or destruction of any property, directly or indirectly arising out of, relating to or in connection with the work, whether or not due to whole or in part to the active, passive or concurrent negligence or fault of the Contractor, his officers, agents, servants or employees, any of his subcontractors, the owner or any of his respective officers, agents, servants, or employees and whether or not such demands suits or proceedings are just, unjust, groundless, false, or fraudulent; and the Contractor shall and does hereby assume and agrees to pay for the defense of all such claims, demands, suits, and proceedings; and provided that the Contractor shall not be required to indemnify the owner, his officers, agents, servants, or employees, against any such damages occasioned solely by acts or omissions of the owner other than supervisory acts or omissions of the owner in connection with the work.

<u>Indemnity Against Subcontractors' Claims</u>: If any other Contractor or any such other Contractor shall suffer or claim to have suffered loss, damage or delay by reason of the acts or omissions of the Contractor or of any of his subcontractors, the Contractor agrees to assume the defense against any such claim and to reimburse such other Contractor or subcontractor for such loss or damage. The Contractor agrees to and does hereby indemnify and save harmless the Town from and against any and all claims by such other Contractors and subcontractors, alleging such loss, damage, or delay and from and against any and all claims, demands, suits, expenses including attorneys' fees, arising out of, relating to or resulting from such claims.

12. <u>PATENTS</u>: The Contractor shall indemnify and save harmless the Town and all persons acting for or on behalf of the Town from all claims and liability of any nature or kind, and all damages, costs and expenses, including attorneys' fees, arising from or occasioned by an infringement or alleged infringement of any patents or patent rights on any invention, process, materials, equipment, article, or apparatus, or any part hereof, furnished and installed by the Contractor, or arising from or occasioned by the use of manufacture thereof, including their use by the Town.

13. <u>CHANGES</u>: The Board of Education, through its designated Agent, may make changes in the work and in the Drawings, if any, and Specifications therefore by making alterations therein, additions thereto or omissions therefrom. All work resulting from such changes shall be performed and furnished under and pursuant to the terms and conditions of the Contract. If such changes result in an increase or decrease in the work to be done hereunder, or increase or decrease the quantities thereof, adjustment in compensation shall be made therefore. For eliminated or decreased work the Contractor shall allow the Board of Education a reasonable credit as determined by the Parties. Except in an emergency endangering life or property, no change shall be made unless in pursuance of a written order from the Board of Education authorizing the change, and no claim for additional compensation shall be valid unless the change is so ordered.

The Contractor agrees that he shall neither have nor assert any claim for or be entitled to any additional compensation for changes or for loss of anticipated profits on work that is eliminated.

- 14. <u>CLAIMS FOR DAMAGES</u>: If the Contractor makes claim for any damages alleged to have been sustained by breach of contract or otherwise, he shall within ten (10) days after occurrence of the alleged breach or within ten (10) days after such damages are alleged to have been sustained whichever date is the earlier, file with the Assistant Facilities Director and the Contracting Officer a written, itemized statement of the details of the alleged breach and the details and amount of the alleged damages. The Contractor agrees that unless such statement is made and filed as so required, his claim for damages shall be deemed waived, invalid and unenforceable, and that he shall not be entitled to any compensation for any such alleged damages. Within ten (10) days after the timely filing of such statement, the Contracting Officer shall file with the Assistant Facilities Director one (1) copy of the statement, and shall file with the Assistant Facilities Director and the Contractor his determination thereon. The Contractor shall not be entitled to claim any additional compensation for damages by reason of any direction, instruction, determination or decision of the owner or its agents, nor shall any such claims be considered, unless the Contractor shall be complied in all respects with the provisions of this paragraph.
- ABANDONMENT OF THE WORK OR OTHER DEFAULT: If the work shall be abandoned, or any part thereof shall be sublet without previous written consent of the Board of Education, or the Contract or any moneys payable hereunder shall be assigned otherwise than as herein specified or if at any time the Contracting Officer shall be of the opinion, and shall so certify in writing, that the conditions herein specified as to rate of progress are not being complied with, or that the work or any part thereof is being unnecessarily or unreasonably delayed, or that the Contractor has violated or is in default under any of the provisions of the Contract, or if the Contractor becomes bankrupt or insolvent or goes or is put into liquidation or dissolution, either voluntarily or involuntarily, or petitions for an agreement or reorganization under the Bankruptcy Act, or makes a general assignment for the benefit of creditors or otherwise acknowledges insolvency, the happening of any of which shall be and constitutes a default

under the Contract, the Town may notify the Contractor in writing, with a copy of such notice mailed to the surety to discontinue all work or any part thereof; thereupon the Contractor shall discontinue such work or such part thereof as the Town may designate; and the Board of Education may designate; and the Board of Education may, upon giving such notice, by Contract or otherwise as it may determine, complete the work or such part thereof and charge the entire cost and expense of so completing the work, the Town shall be entitled to reimbursement from the Contractor and the Contractor agrees to pay to the Town any losses, damages, costs and expenses, including attorneys' fees, sustained or incurred by the Town by reason of any of the foregoing causes. For the purpose of such completion the Board of Education may for itself or for any Contractors employed by the Board of Education take possession of and use or cause to be used any and all materials, equipment, plant, machinery, appliances, tools, supplies and such other items of every description that may be found or located at the site of the work.

All costs, expenses, losses, damages, attorneys' fees, and any and all other charges incurred by the Board of Education under this subsection shall be charged against the Contractor and deducted and/or paid by the Board of Education out of any moneys due and payable or to become due or payable under the Contract to the Contractor; in computing the amounts chargeable to the Contractor, the Board of Education shall not be held to a basis of the lowest prices for which the completion of the work or any part thereof might have been accomplished, but all sums actually paid or obligated therefore to effect its prompt completion shall be charged to and against the account of the Contractor. In case the costs, expenses, losses, damages, attorneys' fees and other charges, together with all payments theretofore made to or for the account of the Contractor, shall exceed the said sum, the Contractor shall pay the amount of the excess to the Board of Education.

- 16. <u>LIENS</u>: If at any time notices of lien or other legal process are filed for labor performed or materials or equipment manufactured, furnished or delivered to or for the work, the Contractor shall, at its own cost and expense, promptly discharge, removal or disposition, the Board of Education shall have the right to retain any moneys payable hereunder so much thereof as, in its sole judgement, it may deem necessary to settle or otherwise dispose of such claims and to pay the costs and expenses, including attorneys' fees, of defending any actions brought to enforce such claims or incurred in connection therewith or by reason thereof.
- 17. <u>CLAIMS</u>: If at any time there be any evidence of any claims for which the Contractor is or may be liable or responsible hereunder, the Contractor shall promptly settle or otherwise dispose of the same, and until such claims are settled or disposed of, the Board of Education may retain from any moneys which would otherwise settle or otherwise dispose of such claims and to pay the costs and expenses, including attorneys' fees, of defending any actions brought to enforce such claims or incurred in connection therewith or by reasons thereof.

As required by Section 49-41a of the Connecticut General Statutes, within thirty days after payment from the Town for work under this Contract he shall pay any amounts due any subcontractor, whether for labor performed or materials furnished when such labor or materials has been included in a requisition submitted by such Contractor and paid by the Town.

- 18. <u>LIABILITY OF TOWN</u>: No person, firm or corporation, other than the Contractor who signed this Contract as such, shall have any interest herein or rights hereunder. No claim shall be made or be valid either against the Board of Education or any agent of the Board of Education shall be liable for or be held to pay any money, except the final estimate shall operate as and shall be a full and complete release of any and all claims, demands and liabilities of, by or to the Contractor for anything done or furnished for or arising out of or relating to or by reason of the work or for or on account of any act or neglect of the Board of Education or of any agent of the Board of Education for the unpaid balance, if any there be, of the amounts retained as herein provided.
- 19. PROVISIONS REQUIRED BY LAW DEEMED INSERTED: Each and every provision of law and clause required by law to be inserted in the Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though they were included herein. If through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, the Contract shall forthwith be physically amended to make such insertion.
- 20. <u>PERMITS</u>: The Contractor shall, at his own expense, take out and maintain all necessary permits, including sewer and drainage permits from the State, Town or other public authorities; shall give all notices required by law; and shall post all bonds and pay all fees and charges incident to the due and lawful prosecution of the work.
 - Local building officials are required, before issuing any building permit pursuant to 29-263 C.G.S., to require proof of workers' compensation insurance coverage **for all persons** employed or engaged to perform services on the construction site, whenever the TOTAL cost of all work to be performed is \$100,000 or more.
- 21. NOT TO SUBLET OR ASSIGN: The Contractor shall constantly give his personal attention to the faithful prosecution of the work, shall keep the same under his personal control, shall not assign the Contract or sublet the work or any part thereof without the previous written consent of the Board of Education, and shall not assign any of the moneys payable under the Contract, or his claim thereto, unless by and with the like written consent of the Board of Education and the surety on the Contract Bonds. Any assignment or subletting in violation hereof shall be void and unenforceable.
- 22. <u>EMPLOY COMPETENT WORKERS</u>: The Contractor shall employ only competent workers on the project and shall not employ workers or means which may cause strikes, work stoppages, and/or disturbances by workers employed by the Contractor, and subcontractor, the Board of Education, the

Contracting Officer or any other Contractor. Whenever the Contracting Officer notifies the Contractor in writing that in his opinion any worker on the project is incompetent, unfaithful, disorderly, or otherwise unsatisfactory or not employed in accordance with the provisions of the Contract, such worker shall be discharged from the project and shall not again be employed on it, except with the written consent of the Contracting Officer.

- 23. <u>EMPLOY SUFFICIENT LABOR AND EQUIPMENT</u>: If in the sole judgment of the Contracting Officer the Contractor is not employing sufficient labor, plant, equipment or other means to complete the work within the time specified the Contracting Officer may, after giving written notice, require the Contractor to employ such additional labor, plant, equipment and other means as the Contracting Officer deems necessary to enable the work to progress properly.
- 24. <u>INTOXICATING LIQUORS</u>: The Contractor shall not sell and shall neither permit nor suffer the introduction or use of intoxicating liquors upon or about the work.
- 25. <u>ACCESS TO WORK</u>: The Board of Education, the Contracting Officer, and their officers, agents, servants, and employees may at any and all times and for any and all purposes, enter upon the work and the site thereof and the premises used by the Contractor, and the Contractor shall at all times provide safe and proper facilities therefore.
- 26. <u>EXAMINATION OF WORK</u>: The Contracting Officer shall be furnished by the Contractor with every reasonable facility for examining and inspecting the work and for ascertaining that work is being performed in accordance with the requirements and intent of the Contract, even to the extent of requiring the uncovering or taking down portions of finished work by the Contractor.
- 27. <u>EXTRA WORK</u>: The Contractor shall perform any extra work (work in connection with the Contract but not provided for herein) when as ordered in writing by the Contracting Officer, at the unit prices stipulated in the Contract for such work or, if none are stipulated, either (a) at the price agreed upon before such work is commenced and named in the written order for such work, or (b) if the Contracting Officer so elects, by cost, based on determination of reasonable expenditures of labor and materials, as approved by the Contracting Officer, plus an allowance of 10 % of the cost for combined overhead and profit
- 28. <u>CHANGES NOT TO AFFECT BONDS</u>: It is distinctly agreed and understood that any changes made in the work or the Drawings or Specifications therefore (whether such changes increase or decrease the amount thereof or the time required for its performance) or any changes in manner or time of payment made by the Board of Education to the Contractor, or any other modifications of the Contract, shall in no way annul, release, diminish or affect the liability of the surety on the Contract Bonds given by the Contractor, it being the intent hereof that notwithstanding such changes the liability of the surety on said bonds continue and remain in full force and effect.

- 29. <u>PRICES FOR WORK</u>: The Town shall pay and the Contractor shall receive the prices stipulated in the Bid made a part hereof as full compensation for everything performed and furnished and for all risks and obligations undertaken by the Contractor under and as required by the Contract.
- 30. <u>MONEYS MAY BE RETAINED</u>: The Board of Education may at any time retain from any moneys, which would otherwise be payable hereunder, so much thereof as the Board of Education may deem necessary to complete the work hereunder and to reimburse it for all costs, expenses, losses, damages chargeable to the Contractor hereunder.
- 31. <u>USE OR PARTIAL PAYMENT NOT ACCEPTANCE</u>: It is agreed that this is an entire contract for one whole and complete work or result and that neither the Town's entrance upon or use of the work or any part thereof nor any partial payments by the Board of Education shall constitute an acceptance of the work or any part thereof before its entire completion and final acceptance.

32. PREVAILING WAGE RATES: CONSTRUCTION SAFETY AND HEALTH COURSE

Except as noted below, the Contractor shall comply with the current provisions of Section 31-53 of the General Statutes of the State of Connecticut, a part of which is quoted as follows.

"The wages paid on an hourly basis to any person performing the work of any mechanic, laborer or worker on the work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such person to any employee or welfare fund, as defined in subsection (h) of section 31-53 of the General Statutes, shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the town in which such public works project is being constructed. Any contractor who is not obligated by agreement to make payment or contribution on behalf of such persons to any such employee welfare fund shall pay to each mechanic, laborer or worker as part of such person's wages the amount of payment or contribution for such person's classification on each pay day."

All Contractors and subcontractors shall submit certified weekly payrolls, on forms furnished by the Town, for all contracts meeting the aforementioned monetary limits. The certified payrolls shall be submitted with the Contractor's monthly certificate for payment.

Section 31-55a of the General Statutes of the State of Connecticut provides that the prevailing wage rates applicable to any awarded contract or subcontract are subject to annual adjustments each July 1st for the duration of the project.

Each Contractor that is awarded a contract shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.

It is the Contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly

from the Department of Labor's web site. The annual adjustments will be posted on the Department's of Labor web page: www.ctdol.state.ct.us. For those without Internet access, contact the division listed below.

The Contractor shall also furnish proof with the weekly certified payroll for the first week each employee begins work that any person performing the work of a mechanic, laborer or worker has completed a course of at least ten (10) hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration in accordance with Connecticut General Statutes Section 31-53b and regulations adopted by the State of Connecticut Labor Commissioner.

The provisions of this section (4.48) shall not apply where the total cost of all work to be performed by all Contractors and subcontractors in connection with new construction of any public works project is less than four hundred thousand dollars (\$400,000) or where the total cost of all work to be performed by all contractors and subcontractors in connection with any remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project is less than one hundred thousand dollars (\$100,000).

Questions can be directed to the Contract Compliance Unit, Wage and Workplace Standards Division, Connecticut Department of Labor, 200 Folly Brook Blvd., Wethersfield, CT 06109 at 860-263-6790.

33. NON-CONNECTICUT CONTRACTORS:

Pursuant to Connecticut General Statues Section 12-430(7), as amended by Connecticut Public Act #11-61, Section 66, a non-resident contractor shall comply with the State of Connecticut's bonding requirements.

34. <u>FINAL PAYMENT</u>: When the Contractor has completed the work under this Contract he shall submit his bill for final payment to the Assistant Facilities Director for approval. The bill shall be submitted on the Contractor's billhead indicating date, contract number, work performed, and amount of bill along with an executed Affidavit for Final Payment which is part of the Contractor's conformed copy of the Contract.

Receipt of this bill shall in no way obligate the Board of Education to accept the work under this Contract as complete and satisfactory.

Within one week from date of receipt of the bill, the Assistant Facilities Director or his representative will inspect the work and if deficiencies are found the Contractor shall be notified in writing of each deficiency. The final payment shall not be made until the Assistant Facilities Director approves the work as complete, satisfactory and in compliance with the Contract Document.

35. <u>RIGHT TO ALTER FORM, QUANTITY, ETC., OF WORK:</u> The Board of Education further reserves the right to make alterations in the lines, grade, plan, the commencement of work because of the priority restrictions, insufficient funds in appropriations, or other cause. If such alterations diminish the quantity of

the work to be done, they shall not constitute a claim for damage, or for anticipated profits on the work dispensed with, or affect the prices bid for the various classes of work remaining. If they increase the amount of work, such increase shall be paid for according to the quantity actually done and at the price or prices bid for various classes of work, or if not susceptible of classification, to so agree, the Contractor shall do the work as aforesaid as extra work.

36. SAFETY SPECIFICATIONS

<u>Site Conduct</u>: Contractor acknowledges that the Work will be conducted at an operating public school, which may inhibit the operations of Contractor and its Subcontractors and Vendors. Parking for workers, vendors, and visitors will be allowed only at an area designated by Owner.

If necessary, Contractor shall provide transportation for all workers between the Site and such remote parking as will be provided to the Contractor. Contractor shall prohibit, and shall use all reasonable efforts to prevent its, and its Subcontractors' and Vendors', personnel from loitering or wandering in the School. Contractor shall also prohibit, and shall use all reasonable efforts to prevent, on or near the Site, the use or consumption of alcoholic beverages, drugs, or other mind-altering substances, the carrying of firearms or other weapons, fighting, and conduct that is disorderly, or disruptive, in a business setting. Contractor shall promptly terminate, or have terminated, the employment of any person employed by Contractor, or a Subcontractor or Vendor, whose employment Owner designates to be terminated due to violation of any laws or rules applicable to the site or the school.

Safety: The safety of Contractor, Subcontractors, Vendors and their employees, agents, representative and invitees, and any other person who enters the Site for any purpose relating to Contractor's carrying out its obligations under this Agreement (including Owner and its employees, agents, representatives and invitees) shall be Contractor's responsibility. Contractor shall promptly notify Owner, in writing, of any hazardous conditions, property or Equipment at the Site. If Owner requests that Contractor provide certain safeguards required in Owner's reasonable judgment for the protection of persons, or property, on or near the Site and Contractor fails to comply with such request within a reasonable time, Owner may provide such safeguards, and Contractor shall promptly reimburse Owner for the costs thereof. Such provision by Owner shall not relieve Contractor of its obligations or liabilities hereunder, nor shall it make Owner responsible for Site safety or Contractor's means and methods to ensure Site safety. Contractor shall initiate and maintain safety precautions and programs to conform with applicable laws and otherwise to protect against and prevent injury to persons or damage to property on, about, or adjacent to the Site and shall incorporate all such safety precautions and programs (the "Site Safety Program") in a written safety program manual (the "Site Safety Manual"). Contractor shall erect and maintain safeguards for the protection of workers and the public consistent with its obligations under the Agreement. Contractor shall exercise efforts to eliminate. or abate, all reasonably foreseeable safety hazards created by or otherwise resulting from performance of the Work. Contractor shall ensure that it, its employees, agents and invitees and its Subcontractors,

Vendors and their employees, agents and invitees, during performance of any of the Work, comply with (i) all applicable laws relating to health and safety, including the Occupational Safety and Health Act of 1970 (OSHA) and the rules and regulations promulgated thereunder, and (ii) all directions by Owner regarding protective clothing, head covering, eye protection, and the like. Prior to commencing Work, Contractor or designate to Owner (i) one of its employees to act as the Site's safety officer (the "Site Safety Officer") and (ii) certain of its employees to act as the Site's first aid staff, which employees shall be properly trained and qualified. Contractor's Site Safety Officer shall attend and pass Owner's fire watch training session, or a similar session, with advance approval by Owner. Contractor shall not terminate the employment of the Site Safety Officer without Owner's prior written consent. Contractor's Site Safety Officer and first aid staff shall have such responsibilities as Owner and Contractor may from time to time agree. Owner may from time to time designate its own Site safety officer or first aid staff to whom Contractor's Site Safety Officer and staff shall report.

<u>Safety Records</u>: Contractor shall furnish the safety records of Contractor and its Subcontractors, including their experience modification rate, OSHA Injury Index, OSHA Days Away From Work Index.

<u>Hot Work Permits</u>: At least twenty-four (24) hours in advance of performing Work in Hazardous Areas, Contractor's Representative shall notify General Contractor that such

work is necessary, obtain General Contractor's prior written approval to perform such work, and, if approved, provide General Contractor with Hot Work Maps and obtain Hot Work Permits from General Contractor's Representative.

<u>Daily Safe Work Permits</u>: On a daily basis, prior to performing any Work, Contractor shall obtain Daily Safe Work Permits from the Owner.

Differing Site Conditions: Contractor shall, promptly after actual discovery, and before such conditions are disturbed (to the extent reasonably practicable), notify Owner in writing of (i) any subsurface or latent physical conditions at the Site, differing materially from those indicated in, or reasonably inferable from, the Supplied Project Documents that could not have been observed through a reasonable inspection of the Site, prior to commencing Work, or (ii) unknown physical conditions at the Site of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Agreement. After receipt of such notice, Owner shall promptly investigate the conditions. In the event that such conditions do materially differ and actually result in a material increase or decrease in Contractor's cost of, or the time required for performance of, the Work, Contractor may be entitled to additional or a reduction in compensation under Agreement as applicable. No adjustment in compensation shall be allowed under this Paragraph unless Contractor has promptly given the notice required in this Paragraph.

Site Housekeeping: Contractor shall keep the Site free from trash, contamination, refuse, rubbish, scrap

materials, and debris caused, or created by, Contractor or its Subcontractors and shall keep the Site in a reasonably presentable condition given the nature of the Work and in a neat, orderly, and workmanlike apace. Owner may from time to time instruct Contractor to place the Site in such condition. If Contractor fails to do so within a reasonable period of time, Owner may do so and charge Contractor for the actual cost thereof. Contractor shall dispose of trash, refuse, rubbish, scrap material, and debris in an authorized landfill. Contractor shall not burn, or bury, any such items. Contractor shall cause all Contractor generated Hazardous Substances that are transported by Contractor to the Site to be disposed of by licensed transporters in accordance with the requirements of all applicable laws.

Maintenance of Roadways: Contractor shall protect all maintained roads, driveways, and bridges which may be damaged in connection with the work, and shall repair, or replace, them if damaged, at its own expense, to the satisfaction of the governmental authorities or Owner. It is the responsibility of the Contractor to identify the potential for damage and take proper preventative measures to prevent damage to maintained or unmaintained roads, drives, or bridges. Cost of preventative measures shall be submitted to Owner, prior to commencement of work and will be on a reimbursable basis. Contractor shall not block any main thoroughfares in School property without prior approval from Owner. No lug type rigs, bulldozers, or other tract type equipment may be used without prior approval from the Owner. If these rigs are used, appropriate protection must be used to prevent damage to roadways.

<u>Clean-Up</u>: As part of the work included in this Contract, the Contractor shall completely remove and satisfactorily dispose of all temporary buildings placed by the Contractor; shall remove or grade, to the extent directed, all embankments or cofferdams made for construction purposes; shall satisfactorily dispose of all rubbish resulting from the operations under this Agreement; and shall do all work necessary to restore the territory embraced within the site of its operations to at least as good order and conditions at the beginning of the work under this contract. Notwithstanding the foregoing, any work concerning Hazardous Substances shall be performed only in accordance with the contract and all applicable laws.

<u>Training and Operations Manuals</u>: Contractor shall provide, either itself or through its subcontractors or vendors, specific operations and maintenance training to Owner's personnel for the Equipment and systems that Contractor provides. As to such Equipment and systems, Contractor shall provide to Owner final operations manuals, record drawings, specifications, priced spare parts lists and design sheets.

IN WITNESS WHEREOF, the parties of this AGREEMENT have hereunto set their hands and seals the day first above written.

TOWN OF GREENWICH, CONNEC	CTICUT
BYContracting Officer	Benjamin B. Branyan Managing Director of Operations
Date:	_
CONTRACTOR	
BY	-
Date:	
(Corporate Seal)	

CONSENT OF SURETY

The undersigned surety, being	the surety company which issued Bond No	for the Town of
Greenwich Contract No.	hereby consents to release of final payme	nt and all retainages to the
contractor – principal.		
	(Name of Surety)	
	By	
	Its	
	ACKNOWLEDGMENT	
STATE OF		
	ss:	
COUNTY OF		
This is to certify that the above	named signatory who executed this instrument wa	as either known to me or
satisfactorily proven to me to be	e the person whom he purports to be.	
	Notary Public	

AFFIDAVIT FOR FINAL PAYMENT

The u	ndersigned, being duly sworn, depose	es and says:
1.	That he is the	(Title) of the contractor in the project
	hereinafter referred to and is author	rized to execute this affidavit on behalf of the contractor;
2.	In connection with Contract #	for
	(Project Title) it is represented that	all payrolls, bills for services, materials, supplies, equipment and other
	indebtedness have been paid or other	erwise satisfied and that there are no outstanding claims against the
	undersigned by any sub-contractor	or material supplier, or no outstanding claims or intent to file a claim
	against the Town of Greenwich;	
3.	This Affidavit is made at the reque	est of the Town of Greenwich for the purpose of inducing final payment
	and knowing that it will rely upon t	the truth of the representation herein made.
	ribed and sworn to e me this day 2018	
	Notary Public	(Type or print name of person authorized to sign)

Form AU-764

Deposit by a Person Doing Business With a Nonresident Contractor



Purpose: A person doing business with a nonresident contractor uses Form AU-764 to deposit 5% of the total contract price with the Department of Revenue Services (DRS) for a specific project in the state. The deposit ensures all taxes due to the State of Connecticut from the contractor are paid to DRS. Read the instructions on the reverse side before you complete this form. If you need help, call 860-541-3280, Monday through Friday, 8:00 a.m., to 5:00 p.m., and choose Option 7.

Part I: Nonresident C	ontractor Information				
Магле			Connecticut Tax Registration No.		
Address (Street or PO Box	, City, State, and ZIP Code)	s *e	<u> </u>		
Part II: Person Doing	Business With a Nonro	esident Contractor Info	mation	· · · · · · · · · · · · · · · · · · ·	
Name :	397		Connecticut Tax Registra	ation No., Federal ID No., or SSN	
Address (Street or PO Box	, City, State, and ZIP Code)	· 8			
Part III: Project Infor	mation				
Physical Location of Proje	ct (Street, City or Town)		Name of Project		
ommencement Date	Completion Date for Nonresident Contractor	Total Contract Price or Amou		Amount of Deposit	
 The nonresident co The person doing the ensure all taxes that The deposit is made. The deposit will be its records and determined. 	ousiness with the nonresing the come due and owing the within 30 days of the content of the nonreside the manned all taxes, interest the content of the content of the nonreside or the nonreside or the nonreside or the nonreside of the nonreside or the nonreside or the nonreside or the nonreside of the nonreside or the no	a contract related to real dent contractor is deposit g during the period of the completion of the project, ent contractor upon writte t, and penalties due durin	ing 5% of the total corcontract will be paid. In request by the contract the contract the term of the contract.	ntract price with DRS to	
penalty of law that I ha	eve examined Form AU-7 by for willfully delivering a fi	64 and, to the best of my	knowledge and belief i	amed above, declare under the tis true, complete, and correct re than \$5,000, or imprisonmer	
Print Name			Title		
Authorized Signature			Date		
eceipt of Deposit: [amed above as doing	ORS acknowledges receipg business with a nonresid	ot of \$dent contractor related to	real property at the Co	from the person nnecticut location noted above	
Signature of Authorized Di	RS Representative	Tele	phone	Date	

General Instructions

A person doing business with a nonresident contractor working in Connecticut must submit Form AU-764, Deposit by a Person Doing Business With a Nonresident Contractor, with a deposit of 5% of the total contract price, including change orders and add-ons, not later than 30 days after the completion of the contract. This applies to all contracts with nonresident contractors, regardless of the nature of the real property affected or the tax-exempt status of the property owner. For more information, see Special Notice 2003(20), Legislation Affecting Contracts With Nonresident Contractors.

A nonresident contractor is a contractor who does not maintain a regular place of business in this state. A regular place of business means any bona fide office, factory, warehouse, or other space in Connecticut at which a contractor is doing business in its own name in a regular and systematic manner, and which place is continuously maintained, occupied, and used by the contractor in carrying on its business through its employees regularly in attendance to carry on the contractor's business in the contractor's own name. A regular place of business does not include a place of business for a statutory agent for service of process or a temporary office whether or not it is located at the site of construction. A regular place of business also does not include locations used by the contractor only for the duration of the contract, such as short-term leased offices. warehouses, storage facilities, or facilities that do not have full. time staff with regular business hours. An office maintained, occupied and used by a person affiliated with a contractor is not a regular place of business of the contractor.

Specific Instructions

Part I: Enter the name and complete address of the nonresident contractor on whose behalf the deposit is being made. Include the nonresident contractor's Connecticut tax registration number.

Part II: Enter the name and complete address of the person doing business with the nonresident contractor. If the nonresident contractor is the general contractor, enter the name and address of the owner of the property. If the nonresident contractor is a subcontractor, enter the name and address of the general contractor.

Enter the Connecticut tax registration number of the person doing business with the nonresident contractor. If the person doing business with the nonresident contractor does not have a Connecticut tax registration number, enter that person's Federal Employer Identification Number or Social Security Number.

Part III: Enter the name of the project and the complete address, including the street address and the city or town where the project is physically located.

Enter the commencement date of this project. Commencement date is the date the contract is sign or the date the nonresident contractor begins work on the project, but it is never later than the date the nonresident contractor begins work.

Enter the date on which work on this project was completed, which is the date the final periodic billing for the contract was made by the nonresident contractor. Note the final periodic billing may be due before payment of any retainage becomes due. The person making the deposit must attach a copy of the final periodic billing to Form AU-764.

If this is a deposit for a change order occurring after the deposit for the initial contract has been remitted to DRS, enter the additional amount being deposited for the change order and check the box. For a change order made after the final periodic billing for the original contract, the change order is deemed complete when it is billed by the nonresident contractor. Attach a copy of the final billing for the change order.

Enter, in words and figures, the total amount paid to the nonresident contractor under the contract or for the change order. Check the box if the deposit is for a change order.

Multiply the total contract price or the amount of to change order by 5% (.05) and enter the result on this line.

Declaration: An authorized representative of the person doing business with a nonresident contractor must sign and date the declaration. Return Form AU-764, with the copy of the final periodic billing, to:

Department of Revenue Services State of Connecticut Discovery Unit 25 Sigourney Street Hartford CT 06106

Receipt: DRS will acknowledge receipt of the deposit by completing the bottom of Form AU-764 and returning a copy of it to the person making the deposit. Unless indicated otherwise, the person doing business with the nonresident contractor will not be liable for any claim of the nonresident contractor for the amount or for any claim of DRS for any taxes arising from the activities of the nonresident contractor on the project for which the bond deposit was made, once DRS has verified that total deposits represent 5% of the total contract price paid to the nonresident contractor for this project, including any change orders, and that the deposit is made within 30 days of completion of the project.

Instructions for Form REG-1 Business Taxes Registration Application

How to Register

On-line Registration

Save time and register for a Connecticut tax registration number at your convenience when you file Form REG-1, Business Taxes Registration Application, on-line at the Department of Revenue Services (DRS) Web site at www.ct.gov/DRS You will receive your tax registration number in the mail in about six days. If you owe a registration fee, you must pay the fee electronically by entering the account number and routing number for your checking or savings account.

f you are registering for a tax type that requires you attach Addendum B to the REG-1 or if you are registering as a cigarette retailer (included on Addendum A), you may register on-line. If you are registering for another tax type that requires you attach Addendum A, C, D, or E to the REG-1, you must register by mail or in person at any DRS office.

Mail in Registration

Complete Form REG-1 and mail it to DRS at:

Department of Revenue Services PO Box 2937 Hartford CT 06104-2937

In you owe a registration fee, you must include payment by check or money order with the application. You will receive your Connecticut tax registration number in the mail in 5 to 6 weeks.

Walk-in Registration

You may file Form REG-1 in person at any DRS office. You will be issued a Connecticut tax registration number immediately. Bring a photo identification, such as a driver's license, and a check or money order if you owe a registration fee. (Cash is accepted at the Hartford location only.)

DRS offices are located in:

10 Middle St. 203-336-7890	Hamden 3074 Whitney Ave. 203-287-8243	Hartford 25 Sigourney St. 860-297-5962
Norwich 2 Cliff St 860-889-2669	Waterbury 55 West Main St., Su 203-805-6789	ite 100

The application must be signed by the individual owner, partner, officer of the corporation, member of the limited liability company, or another who has written authorization to sign in the form of a Power of Attorney. If anyone other than the owner brings the sir and application to the office and wants to obtain the registration a owner, he or she must have written authorization from the corner to obtain the registration on his or her behalf.

Pugose of Family Ec-

Use Form REG-1 to obtain a Connecticut tax registration number or to register for additional tax types under your current Connecticut tax registration number.

Use Form REG-1 to register for any of these taxes:

- Business entity tax
- · Business use tax
- Corporation business tax (including PIC)
- · Income tax withholding
- Room occupancy tax
- Sales and use taxes
- Unrelated business income tax

In addition to Form REG-1, you must complete and attach the appropriate addendum as noted to Form REG-1 to register for any of these taxes. The forms are available on the DRS Web site at www.ct.gov/DRS

REG-1 Addendum A:

- Cigarette taxes
- Tobacco products tax

REG-1 Addendum B:

- Admissions and dues taxes
- · Dry cleaning surcharge
- Motor vehicle rental surcharge
- Tourism surcharge

REG-1 Addendum C:

- Motor fuels tax
- Petroleum products gross earnings tax

REG-1 Addendum D:

Alcoholic beverages tax

REG-1 Addendum E:

- Community antenna television system companies tax
- Railroad companies tax
- Satellite companies tax
- Solid waste assessment
- Suppliers of natural gas
- Utility companies tax

Review in plot the Barrings

To register for these taxes, use the form listed:

*	Authority to Collect Use Tax	REG-7
	International Fuel Tax Agreement (IFTA)	.CT-IFTA-2
	Motor Carrier Road Tax	REC-3MC

For more information on registering with the Department of Revenue Services (DRS), visit DRS Web site at www.ct.gov/DRS or call 1-800-382-9463 (in-state) or 860-297-5962 (from appropriate)

Mine die opsteele bounde de Bount die St

jusinesses must register with the Connecticut DRS if they:

- Have people working in Connecticut
- Withhold Connecticut income tax
- · Operate a business in Connecticut
- Are required to file an annual report with the Connecticut Secretary of the State and are subject to the business entity tax
- Provide taxable services in Connecticut
- Sell, rent, or lease goods in Connecticut (wholesale or retail)
- Furnish space for storage of tangible personal property
- Have a manufacturing facility in Connecticut
- · Serve meals or beverages in Connecticut
- Purchase taxable goods or services for use in Connecticut
- Provide lodgings in Connecticut subject to the room occupancy tax
- · Carry on a business as a corporation in Connecticut
- · Distribute alcoholic beverages in Connecticut
- Distribute motor fuel used to propel motor vehicles on public highways or roads in Connecticut
- Sell petroleum products in Connecticut
- Operate a place of amusement, entertainment, or recreation in Connecticut
- Operate a social, health, athletic, or sporting club in Connecticut
- Sell or distribute cigarettes or tobacco products in Connecticut
- Own, lease, maintain, operate, manage, or control a community antenna television system in Connecticut
- Provide satellite television services to Connecticut.
- · Operate a railroad in Connecticut on a for-profit basis
- Are a resources recovery facility in Connecticut
- Market natural gas to an end user in Connecticut
- Provide distribution or transmittion services for electricity in Connecticut
- Sell electricity as a municipality to customers in Connecticut
- Manufacture, sell, or distribute gas to be used for light, heat, or power in Connecticut
- · Operate a dry cleaning establishment in Connecticut

Paris Eliment

Sales and use taxes	\$ 50
Room occupancy tax*	\$ 50
Cigarette dealer's license	\$ 25
Cigarette distributor's license	\$ 1,000
Cigarette distributor chain operator	
5 to 14 retail locations	\$ 250
15 to 24 retail locations	\$ 500
25 or more retail locations	\$1,000
Cigarette manufacturer/importer	\$5,000
Distributor of tobacco products	\$100
•	

No fee is required for room occupancy tax if you are registered or are registering for sales and use taxes.

<u> Perone il le dellos de Gelen erenos</u>

Once you are registered with DRS, you may file certain tax forms by Internet or telephone using the DRS Fast-File program. Look for this logo.



Allmara dinamana an

See Informational Publication 2003(28), Getting Started in Business, available on the DRS Web site at www.ct.gov/DRS

For information on other Connecticut licensing requirements, visit: www.ct-clic.com

Visit the DRS Web site at www.ct.gov/DRS and click on Businesses.

Personal assistance is available by telephone or at any DRS office locations, Monday through Friday, during business hours.

CONN-TAX, the DRS telephone information line, is available anytime.

- · 1-800-382-9463 (in-state) or
- 860-297-5962 (from anywhere).

TTY, TDD, and Text Telephone users only may transmit inquianytime by calling 860-297-4911.

Additional forms and publications are available anytime:

- · Internet: Visit the DRS Web site at www.cLgov/DRS
- DRS TAX-FAX: Call 860-297-5698 from the handset attached to your fax machine and select from the menu. Only forms (not publications) are available through TAX-FAX; or
- Telephone: Call 1-800-382-9463 (in-state) and select Option 2 from a touch-tone telephone, or 860-297-4753 (from anywhere).

Andlied bulled tribus

Complete the entire application unless the section instructions indicate otherwise. Answering Yes to any question in Sections 7 through 12 means you may have a Connecticut tax liability for that tax. In each section where you answer Yes to any question, you must indicate the date you first incurred a tax liability in Connecticut for that tax type.

Exceptions:

- Taxpayers with a valid Connecticut tax registration number who wish to register for another tax must complete Sections 1 through 6, Section 14, and the section for the specific tax type(s) for which you wish to register. See the section Purr of Form REG-1 on Page 1 of these instructions to deterrify you have to complete an addendum to Form REG-1.
- Household employers who pay wages to and intend to withhold Connecticut income tax for housekeepers, nannies, health aides, caretakers, etc. – complete Sections 1 through 7 and 14 only.

Department of Revenue Services State of Connecticut PO Box 2937 Hartford CT 06104-2937

Form REG-1 Business Taxes Registration Application

÷v. 11/04)

. Reason for Filing Form F	REG-1	F	DRS Use Only Connecticut Tax Registration Number	
Please check the applicable	box			
Opening a new busines	s, including:	L.		اــ
	e business opening a location in C r, flea market, fair, or other venue ir		selling over the Internet.	
Opening a new location.	Enter your Connecticut Tax Regi	stration No.:		
Registering for additional	I taxes. Enter your Connecticut Taxes	ax Registration N	ło.:	
Reopening a closed bu Enter Connecticut Tax F	siness. Registration No. of the closed bus	iness:		
owner. See Information		or Liability for Sal	e responsible for tax liabilities of the previous les and Use Taxes and Admissions and Dues Tax	r.)
Operating a Passive Inv	estment Company (PIC).			
Changing organization ty	rpe. Enter your current Connection	cut Tax Registrati	ion No.:	
Hiring household employ	yees and intend to withhold Conne	ecticut income tax	x	
Other (explain)	<u> </u>		7.	_
2. Business Information				=
Business Information Type of Organization:	te			
Sole Proprietorship	☐ Limited Liability	Company (LLC)	☐ S Corporation	
D Ook i topitetoramp		ed as a corporation	•	
General Partnership			☐ Corporation	z.
9		ed as a corporation	•	
☐ Limited Partnership	Limited Liability	Partnership (LLP	P) Other (explain):	
			, a , a	_
3. Nature of Business Activi	tv			=
Check the box(es) that best	-		· ·	
☐ Retailer ☐ Wholesa	ler 🛘 Manufacturer 🔲 Service	Provider 🔲	Other (explain):	
4. Major Business Activity			s #	=
Describe your major busine	ss activities:		8	
, ,			:9	-
				_
5. Business Name and Addi	ress			
Organization Name (Enter Name of S	ole Proprietor, Partnership, Corporation, c	or LLC)	FEIN	
Business Trade Name		2*		
Business Location: Enter physical armarket or craft show vendors must en		ox or rural route nur	mber is not acceptable. Home-based businesses and fi	iea
Address Line 1		Address Line 2	N	
City		State	ZIP Code	
ing Address Line 1 (Street or PO	Box)	Address Line 2		
City	N 	State	ZIP Code	
Business Telephone Number	E-mail Address		Bank Name	_

6. List All Owners, Partners, Corpo	rate Officers, or LLC Memi	pers (attach a sepa	rate sheet if needed)	
Name (Last, First, Middle Initial)	ş.	2	Tife	
Home Address Line 1 (Street)	a a	Home Address Line	2	
City	State	ZIP Code	Home Telephone Number	• •
SSN	Date of Birth /	Bank Name	**	
Name (Last, First, Middle Initial)			Title	
Home Address Line 1 (Street)		Home Address Line	₽ 2	
City	State	ZIP Code	Home Telephone Number	
SSN	Date of Birth	Bank Name	I\	
Name (Last, First, Middle Initial)	a a		Title	
Home Address Line 1 (Street)		Home Address Lin	e 2	
City	State	ZIP Code	Home Telephone Number	
SSN	Date of Birth	Bank Name		····
Name (Last, First, Middle Initial)			Title	
Home Address Line 1 (Street)	8 . ·	Home Address Lin	e 2	(
City	State	ZIP Code	Home Telephone Number	:
ean	Date of Birth	Bank Name	*	•
7. Income Tax Withholding				24
Are you an employer that transac Connecticut and intends to pay w	ages?			□ No
If you have a Connecticut tax regist location and intend to file withhold enter that number: and skip to Section 8; otherwise of the state of the s	ling for this new location unde	ng for another er that number, —		3
Are you an out-of-state company		hold Connecticut		
income tax for your Connecticut re	esident employees?	**************		: 🗖 No
Do you intend to withhold Connec				
retirement distributions, or gambli				
Do you pay nonresident athletes:				
Do you only have household emp				
Do you only have agricultural emp				i 🗆 No
If Yes, do you file federal Form 94 and wish to file Form CT-941, Co	3, Employer's Annual Tax Re nnecticut Quarterly Reconcili	itum for Agricultura iation of Withholdir	al Employees, ng, annually? 🏻 Yes	. D No
If you answered Yes to any of the enter the date you will start with	income tax withholding ques holding Connecticut income	tions,		d d V V
If you use a payroll service, enter	7-1			

8. Sales and Use Taxes	e.
Do you sell, or will you be selling, goods in Connecticut (either wholesale or retail)?	Yes No
Do you rent equipment or other tangible personal property to individuals or businesses	_
in Connecticut?	
, Do you serve meals or beverages in Connecticut?	Yes No
Do you provide a taxable service in Connecticut? (See the Informational Publication,	—
Getting Started in Business, for a list of taxable services.)	LI Yes LI No
If you answered Yes to any of the sales and use taxes questions,	
enter the date you will start selling or leasing goods or taxable services:	m m d d y y
9. Room Occupancy Tax	
Do you rent lodging rooms in a hotel, motel, or rooming house in Connecticut	av av
for 30 consecutive days or less?	D Yes D No
If you answered Yes, enter the date you will start to rent rooms	
for lodging purposes in Connecticut:	m m d d y y
10. Business Entity Tax	_
The business entity tax applies to the following business types that are required to	
file an annual report with the Connecticut Secretary of the State:	
 S corporations; Limited liability companies (LLCs or SMLLCs) — any limited liability company 	(19)
that is, for federal income tax purposes, either:	
 Treated as a partnership, if it has two or more members; or 	
 Disregarded as an entity separate from its owner, if it has a single member; 	€
 Limited liability partnerships (LLPs); and 	N.
Limited partnership (LPs).	
Are you a business entity as described above?	Yes No
If you answered Yes to the business entity tax question, enter the date of organization:	
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end:	
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes	
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end:	m m d d y y
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes	m m d d y y
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes Corporation Business Tax Are you a corporation or other association taxed as a corporation?	☐ Yes ☐ No
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes Corporation Business Tax Are you a corporation or other association taxed as a corporation?	☐ Yes ☐ No
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes Corporation Business Tax Are you a corporation or other association taxed as a corporation? Do you have a federal corporate income tax exemption? If Yes, enclose a copy of your Internal Revenue Services (IRS) letter of determination.	Yes □ No
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes Corporation Business Tax Are you a corporation or other association taxed as a corporation? Do you have a federal corporate income tax exemption?	Yes □ No
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes Corporation Business Tax Are you a corporation or other association taxed as a corporation? Do you have a federal corporate income tax exemption? If Yes, enclose a copy of your Internal Revenue Services (IRS) letter of determination. Enter state you are organized under: If not a Connecticut corporation, enter date registered with Connecticut Secretary of the Services.	Yes □ No
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes Corporation Business Tax Are you a corporation or other association taxed as a corporation? Do you have a federal corporate income tax exemption? If Yes, enclose a copy of your Internal Revenue Services (IRS) letter of determination. Enter state you are organized under: Enter date of organization:	Yes □ No
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes Corporation Business Tax Are you a corporation or other association taxed as a corporation? Do you have a federal corporate income tax exemption? If Yes, enclose a copy of your Internal Revenue Services (IRS) letter of determination. Enter state you are organized under: If not a Connecticut corporation, enter date registered with Connecticut Secretary of the Services.	Yes □ No
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end:	Yes □ No
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes Corporation Business Tax Are you a corporation or other association taxed as a corporation? Do you have a federal corporate income tax exemption? If Yes, enclose a copy of your Internal Revenue Services (IRS) letter of determination. Enter state you are organized under: If not a Connecticut corporation, enter date registered with Connecticut Secretary of the Senter the month the corporate year closes: Unrelated Business Income Tax Are you a federally exempt organization that has unrelated business income	Yes No Yes No The No
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes Corporation Business Tax Are you a corporation or other association taxed as a corporation? Do you have a federal corporate income tax exemption? If Yes, enclose a copy of your Internal Revenue Services (IRS) letter of determination. Enter state you are organized under: If not a Connecticut corporation, enter date registered with Connecticut Secretary of the Secretary of the Secretary and the corporate year closes: Unrelated Business Income Tax Are you a federally exempt organization that has unrelated business income attributable to a trade or business in Connecticut? If you approved Yes to the unrelated business income tax question	Yes No The No
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes Corporation Business Tax Are you a corporation or other association taxed as a corporation? Do you have a federal corporate income tax exemption? If Yes, enclose a copy of your Internal Revenue Services (IRS) letter of determination. Enter state you are organized under: If not a Connecticut corporation, enter date registered with Connecticut Secretary of the Secretary of the Secretary and the corporate year closes: Unrelated Business Income Tax Are you a federally exempt organization that has unrelated business income attributable to a trade or business in Connecticut? If you approved Yes to the unrelated business income tax question	Yes No The No
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes Corporation Business Tax Are you a corporation or other association taxed as a corporation? Do you have a federal corporate income tax exemption? If Yes, enclose a copy of your Internal Revenue Services (IRS) letter of determination. Enter state you are organized under: If not a Connecticut corporation, enter date registered with Connecticut Secretary of the Senter the month the corporate year closes: Unrelated Business Income Tax Are you a federally exempt organization that has unrelated business income attributable to a trade or business in Connecticut? If you answered Yes to the unrelated business income tax question, enter the tax liability start date:	Yes No The No
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes Corporation Business Tax Are you a corporation or other association taxed as a corporation? Do you have a federal corporate income tax exemption? If Yes, enclose a copy of your Internal Revenue Services (IRS) letter of determination. Enter state you are organized under: If not a Connecticut corporation, enter date registered with Connecticut Secretary of the Senter the month the corporate year closes: Unrelated Business Income Tax Are you a federally exempt organization that has unrelated business income attributable to a trade or business in Connecticut? If you answered Yes to the unrelated business income tax question, enter the tax liability start date: Passive Investment Company (PIC)	The second of th
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes Corporation Business Tax Are you a corporation or other association taxed as a corporation? Do you have a federal corporate income tax exemption? If Yes, enclose a copy of your Internal Revenue Services (IRS) letter of determination. Enter state you are organized under: If not a Connecticut corporation, enter date registered with Connecticut Secretary of the Senter the month the corporate year closes: Unrelated Business Income Tax Are you a federally exempt organization that has unrelated business income attributable to a trade or business in Connecticut? If you answered Yes to the unrelated business income tax question, enter the tax liability start date:	The second of th
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes Corporation Business Tax Are you a corporation or other association taxed as a corporation? Do you have a federal corporate income tax exemption? If Yes, enclose a copy of your Internal Revenue Services (IRS) letter of determination. Enter state you are organized under: If not a Connecticut corporation, enter date registered with Connecticut Secretary of the Senter the month the corporate year closes: Unrelated Business Income Tax Are you a federally exempt organization that has unrelated business income attributable to a trade or business in Connecticut? If you answered Yes to the unrelated business income tax question, enter the tax liability start date: Passive Investment Company (PIC) Are you a passive investment company as defined in Conn. Gen. Stat §12-213(a)(27)?	Yes No Tyes No
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end:	Yes No Tyes No
If you answered Yes to the business entity tax question, enter the date of organization: Enter the month of your fiscal year end: 11. Corporation and Unrelated Business Taxes Corporation Business Tax Are you a corporation or other association taxed as a corporation? Do you have a federal corporate income tax exemption? If Yes, enclose a copy of your Internal Revenue Services (IRS) letter of determination. Enter state you are organized under: If not a Connecticut corporation, enter date registered with Connecticut Secretary of the Senter the month the corporate year closes: Unrelated Business Income Tax Are you a federally exempt organization that has unrelated business income attributable to a trade or business in Connecticut? If you answered Yes to the unrelated business income tax question, enter the tax liability start date: Passive Investment Company (PIC) Are you a passive investment company as defined in Conn. Gen. Stat §12-213(a)(27)?	The work of the second of the

12.	Busine	ess Use Tax		30			
		re registered for or are registering for sales and use taxes, your this section.	ou do not need to				
£\$.	the pur	ss use tax is due when a business purchases taxable goods or s chase or lease of assets, consumable goods, and promotiona cticut without paying Connecticut sales tax.				Ē	
	_	ube purchasing taxable goods or services for use in Connect Connecticut sales tax?			☐ Yes	□ No	
	If you a	answered Yes to the business use tax question, enter the ta	x liability start da	ite:	m - d	<u>d - y</u>	<u>y</u>
		answered No, you must complete the Business Use Tax Dec				•	·
	that yo	ess Use Tax Declaration: By registering for any of the taxes use may have a business use tax liability. Therefore, based on business use tax unless you complete the following declarate	your application, yo				
•	1,	(na	me of taxpayer o	r authorize	d repres	entative	of
48		er), acknowledge I have read and understand the information liable for business use tax. Please initial here	n concerning the bi	usiness use	tax and d	leclare I w	riK
13.	Regist	ration Fee Schedule					
93	Complete this section after you have reviewed Sections 7 through 12 of this registration application and any applicable addendum. Enter the registration fee amount indicated in the amount due column. You must include the total registration fee due with Form REG-1 or your registration application will not be processed and will be returned. Make your check payable to: Commissioner of Revenue Services. If you are registering by mall, send Form REG-1 with your payment to: Department of Revenue Services, PO Box 2937, Hartford CT 06104-2937						
		* *	5	· .	Amo	unt Due	
а	. If reg	stering for Sales and Use Taxes or Room Occupancy Tax,	* enter \$50.00	a	i.	•	
Ь	. If reg	stering for Cigarette Tax, see Addendum A		Ь	5.		
С	. Total	Registration Fee Due (add Line a and Line b)		с			
	* No fee is required for room occupancy tax if you are registered or are registering for sales and use taxes.						
14.	All Ap	plicants Must Sign the Following Declaration	w.			<u>.</u>	
	-	e under penalty of law that I have examined this application :	and, to the best of	my knowled	ge and be	elief, it is t	rue.
	comple	ete, and correct. I understand the penalty for willfully delivering or imprisonment for not more than five years, or both.					
Kee	an Here	Signature of Owner, Partner, LLC Member, or Corporate Officer	Date	Telephone Nu	ımber		
	or your ecords.	Print Name of Owner, Partner, LLC Member, or Corporate Officer	Title	•			

COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES CONTRACT COMPLIANCE REGULATIONS NOTIFICATION TO BIDDERS

AFFIRMATIVE ACTION COMPLIANCE AFFIDAVIT

The contract to be awarded is subject to contract compliance requirements mandated by Sections 4a-60 and 4a-60a of the Connecticut General Statutes; and, when the awarding agency is the State, Sections 46a-71(d) and 46a-81i(d) of the Connecticut General Statutes. There are Contract Compliance Regulations codified at Section 46a-68j-21 through 43 of the Regulations of Connecticut State Agencies, which establish a procedure for awarding all contracts covered by Sections 4a-60 and 46a-71(d) of the Connecticut General Statutes.

According to Section 46a-68j-30(9) of the Contract Compliance Regulations, every agency awarding a contract subject to the contract compliance requirements has an obligation to "aggressively solicit the participation of legitimate minority business enterprises as bidders, contractors, subcontractors and suppliers of materials." "Minority business enterprise" is defined in Section 4a-60 of the Connecticut General Statutes as a business wherein fifty-one percent or more of the capital stock, or assets belong to a person or persons: "(1) Who are active in the daily affairs of the enterprise; (2) who have the power to direct the management and policies of the enterprise; and (3) who are members of a minority, as such term is defined in subsection (a) of Section 32-9n." "Minority" groups are defined in Section 32-9n of the Connecticut General Statutes as "(1) Black Americans . . . (2) Hispanic Americans . . . (3) persons who have origins in the Iberian Peninsula . . . (4) Women . . . (5) Asian Pacific Americans and Pacific Islanders; (6) American Indians . . . " An individual with a disability is also a minority business enterprise as provided by Section 4a-60g of the Connecticut General Statutes. The above definitions apply to the contract compliance requirements by virtue of Section 46a-68j-21(11) of the Contract Compliance Regulations.

he awarding agency will consider the following factors when reviewing the bidder's qualifications under the contract compliance requirements:

- (a) the bidder's success in implementing an affirmative action plan;
- (b) the bidder's success in developing an apprenticeship program complying with Sections 46a-68-1 to 46a-68-17 of the Administrative Regulations of Connecticut State Agencies, inclusive;
- (c) the bidder's promise to develop and implement a successful affirmative action plan;
- (d) the bidder's submission of employment statistics contained in the "Employment Information Form", indicating that the composition of its workforce is at or near parity when compared to the racial and sexual composition of the workforce in the relevant labor market area; and
- (e) the bidder's promise to set aside a portion of the contract for legitimate minority business enterprises. See Section 46a-68j-30(10)(E) of the Contract Compliance Regulations.

*INSTRUCTIONS: Bidder must sign acknowledgement below and return acknowledgement to Awarding Agency along with bid proposal.

Agency along w	vith bid proposal.
The undersigned acknowledges receiving	and reading a copy of the "Notification to Bidders" form
Signature	Date
n behalf of:	

CONNECTICUT COMMISSION ON HUMAN RIGHTS & OPPORTUNITIES CONTRACT COMPLIANCE REGULATIONS AND NOTIFICATION TO BIDDERS Sections 462-68j-23 (1)-(10) and 462-68j-24 (a)

<u>CONTRACT COMPLIANCE</u> Sec. 46a-68j-23. Obligations of Contractors:

Every contractor awarded a contract subject to contract compliance requirement shall:

- Comply fully with all federal and state anti-discrimination laws, and shall not discriminate or permit a discriminatory practice to be committed;
- 2) Cooperate fully with the commission;
- 3) Submit periodic reports of its employment and subcontracting practices in such a form, in such a manner and at such a time as may be prescribed by the Commission;
- 4) Provide reasonable technical assistance and training to minority business enterprises to promote the participation of such concerns in state contracts and subcontracts;
- 5) Make a good faith effort, based upon the availability of minority business enterprises in the labor market area, to award a reasonable proportion of all subcontractors to such enterprises;
- 6) Maintain full and accurate support data for a period of two (2) years from the date the record is made or the date the contract compliance form is submitted, whichever is later, provided that this provision shall not excuse compliance with any other applicable record retention, state regulation or policy providing for a period of retention in excess of two (2) years;
- Not discharge, discipline or otherwise discriminate against any person who has filed a complaint, testified or assisted in any proceeding with the commission;
- 8) Make available for inspection and copying any support data requested by the commission, and make available for interview any agent, servant or employee having knowledge of any matter concerning the investigation of a discriminatory practice complaint or any matter related to a contract compliance review;
- 9) Include a provision in all subcontracts with minority enterprises requiring that the minority business enterprise provide the Commission with such information on its structure and operations as the Commission finds necessary to make an informed determination as to whether the standards of Section 4a-60 of the Connecticut General Statutes as amended by Sec. 2 of Public Act 89-253 have been met; and
- 10) Undertake such other reasonable activities or efforts as the Commission may prescribe to ensure the participation of minority business enterprises as state contractors and subcontractors.

Sec 46a-68j-24. Utilization of Minority Business Enterprises:

a) Contractors shall make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on all projects subject to contract compliance requirements.

CONNECTICUT COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES WORKFORCE ANALYSIS

Contractor Name: Address:	·										f CT emp Part ti		
it.									(6)				
											*.	2	
Complete the follo	owing Analy	sis for e	mplovee	s of Co	mecticut	work si	tes who a	ne:					
JOB CATEGORIES	OVERALL TOTALS (SUM OF ALL	77/1 (NO	EITE OT OF PANIC	BI	LACK OT OF SPANIC		PANIC	NIC ASIAN OR AM PACIFIC IND		IND	DIAN OR - W		OPLE ITH
28	COLS MALE & FEMALE)	OR	JGIN)	Ol	ORIGIN)			ISLANDER		ALASKAN NATIVE		DISABILITIES	
OFFICIALS &		MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	PEMALE
MANAGERS PROFESSIONALS								<u> </u>					
		<u> </u>											
TECHNICIANS									<u>. </u>			·	
PARAPROFESSIONAL													
SALES WORKER									1				
OFFICE & CLERICAL													
CRAFT WORKERS					1								
OPERATIVES (Semi-skilled)				İ		,							
LABORERS				-	-		· · ·						
(unskilled) SERVICE WORKERS		 				 -		 		-			
TOTALS				-			• .						
		<u> </u>						ļ				!	
TOTALS ONE YEAR AGO													
	FORMAL, O	N - THI	E JOB TI	RAINE	ES (Enter	figures :	for the sar	ne categ	gories as a	re sbow	n above).		
Apprentices									1				
Trainses							·						
EMPLOYMENT FIGU	res were obt	AINED FR	OM VIS	SUAL CH	ECK:	EMPLOY	MENT REC	ORDS:	. ОТ	HER:			
1. Have you suc	cessfully im	plement	ed an Afi	firmativ	e Action	Plan?	Tes:	Date o	f implem	entatio	1		
Not Applicab	ole:			plain:		12			•				
						*0							
			_										
(a) Pleas	se submit a s	ummary	of your	Affirm	ative Acti	on Plan	-				(A)		
2. Have you suc												-	
of Labor Reg	pulations, incl	usive?	Υe	:a:	ŀ	Va:	. ו	Not App	plicable:			Expla	nation:
3. According to	FFO-1 data	is the c	omnociti	ດຫຼຸດ ຄົນ	me work	forme at	OF DP9F D		AD 60000	oma vi	4h 4ha		
composition	of the workfo	orce in t	he releva	on or y	om work market :	nea?	огисагра Хест	arm's wr	Mv. ren comb	MIEG MI	Explai		cnoer
- June Oblicati		# ### W							· ***	-	- rybiat	ISUUL.	
i.	33												
4. If you plan to	subcontract,	will yo	u set asio	ie a por	rtion of th	e contra	ct for leg	itimate	minority	busines	s enterpr	ises?	
Yes:	. No:		Ex	planati						g = 0	-		
						φ							
Cantara	or's Authoria	nd Cit-											_
· Contract	or s Aumoni	ca sign	аште		a .						Date		

DEFINITIONS FOR WORKFORCE ANALYSIS

RACE/ETHNIC IDENTIFICATION:

You may acquire the race/ethnic information necessary for this report either by visual surveys of the Workforce, or from records as to the identity of employees after the starting date of employment.

Please note that conducting a visual survey and keeping records of the race/ethnic identity of employees is legal in all jurisdictions and under all Federal and State Laws.

Race/ethnic designations as used by the Equal Employment Opportunity Commission do not denote scientific definitions of anthropological origins. For the purpose of this report, an employee may be included in the group to which he or she appears to belong, identifies with, or is regarded in the community as belonging. However, no person should be counted in more than one race/ethnic group.

DESCRIPTION OF JOB CATEGORIES:

Officials and managers: Occupations requiring administrative managerial personnel who set broad policies, exercise overall responsibility for execution of these policies, and direct individual departments or special phases of a firm's operations. <u>Includes</u>: officials, executives, middle management, plan managers, department managers, and superintendents, salaried supervisors who are members of management, purchasing agents and buyers, railroad conductors and yard masters, ship captains, mates and other officers, farm operators and managers, and kindred workers.

<u>Professionals</u>: Occupations requiring either college graduation or experience of such kind and amount as to provide a comparable background. <u>Includes</u>: accountants and auditors, airplane pilots, and navigators, architects, artists, chemists, designers, dietitians, editors, engineers, lawyers, librarians, mathematicians, natural scientists, registered professional nurses, personnel and labor relations specialists, physical scientists, physicians, social scientists, teachers, and kindred workers.

<u>Technicians</u>: Occupations requiring a combination of basic scientific knowledge and manual skill which can be obtained through two (2) years of post-high school education, such as is offered in many technical institutes and junior colleges, or through equivalent on-the-job training. <u>Includes:</u> computer programmers, drafters, engineering aides, junior engineers, mathematical aides, licensed practical or vocational nurses, photographers, radio operators, scientific assistants, surveyors, technical illustrators, technicians (medical, dental, electronic, physical science), and kindred workers.

Sales: Occupations engaging wholly or primarily in direct selling. Includes kindred workers.

Office and clerical: All clerical type work regardless of level of difficulty. <u>Includes kindred workers</u>.

<u>Craft Workers</u>: (skilled) - Manual workers of relatively high skill level having a thorough comprehensive knowledge of the processes involved in their work. Exercise considerable independent judgment and usually receive an extensive period of training. <u>Includes</u> kindred workers.

Operatives: (semiskilled) - Workers who operate machine or processing equipment or perform other factory-type duties of intermediate skill level which can be mastered in a few weeks and require only limited training. <u>Includes kindred workers</u>.

<u>Laborers</u>: (unskilled) - Workers in manual occupations which generally require no special training, perform elementary duties that may be learned in a few days and require the application of little or no independent judgment. <u>Includes kindred workers</u>.

On-the job trainees:

<u>Production</u>: Persons engaged in formal training as a craft worker - when not trained under apprentice programs - operative, laborer and service occupations.

White collar: Persons engaged in formal training for clerical, managerial, professional, technical, sales office and clerical occupations.

CONTRACTOR'S MINORITY BUSINESS ENTERPRISES

UTILIZATION FORM

NAME AND ADDRESS OF AWARDING AGENCY:	I NAW	IE AND ADDRESS OF CONTI	CECE
è	1,,,,,,,	TE AND ADDRESS OF CORT	CACTOR:
	1	¥	
8	1		
		tille om eller til med et e <mark>ller det til til til eller eller blede</mark> til til eller eller blede blede til eller	The last will be a second to the second to t
PROJECT NO:	_		-
W. 1888			
DATE AWARDED:	_		
DATE BID CARRENT		a a	20 20
DATE BID OPENED			
NOTICE TO CONTRACTORS: Under Service 460 681 72 (D - 54	G: 4 4		
NOTICE TO CONTRACTORS: Under Section 46a-681-23(5) of the FAITH EFFORTS to employ Minority Business Enterprises (MBEs) as a to contract compliance remiserable. The contract compliance remiserable.		TOTE OF A CHEMISANT OF MARKAGE A.	-17
to contract compliance requirements. The contract which is referenced ab	ove is sub	pject to contract compliance remin	au projects subject
			**
INSTRUCTIONS: List the name and addresses of all MBEs you have s	elected as	subcontractors and suppliers of m	aterials for this project. If
the MBEs selected as subcontractors and suppliers of materials meet the contractors MUST complete the attached affidavit. If such business are not the contractors wishes the Commission on Human Pichts and Open affidavit.	ਮੀ ਵਿਕਾਸਤ ਨਾਲ	of transferred with the December of a	£7
e du uniceisicieu Moe in incevanization of the contractoris about foith of	Torte con	demonstrates in AT 3CTTT-st- at	1 4
E manage of transport of the party with the fill has seen to the Call	ביוות וו	re i commirance i hai 71 Casadela	
one copy sent to the Awarding Agency; and one copy retained by contract unregistered MBE in its evaluation of the contractor's good faith efforts. In	o affidavi	convector ones not wish the CHR(to consider selection of an
			€
(Attached additional pages if i	necessary	, using some headings.)	
		- - ,	
			a a
NAME AND ADDRESS OF ALL MEE SUBCONTRACTOR(S) OR	. .	**************************************	Check here if MRK is
NAME AND ADDRESS OF ALL MBE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:	<u> </u>	Check here if MBE(s) qualify under Section 4a-60	Check here if MBE is upregistered but wants
NAME AND ADDRESS OF ALL MEE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:	<u> </u>	Check here if MBE(s)	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MEE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:	\tag{\tau}	Check here if MBE(s) qualify under Section 4a-60	unregistered but wants
NAME AND ADDRESS OF ALL MEE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:)E	Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MEE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:	e 35.	Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MEE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:	t se	Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MEE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:		Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MBE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:	8	Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MBE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:	35	Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MEE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:		Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MEE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:		Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MEE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:		Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MEE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:		Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MEE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:		Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MEE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:	35.	Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MBE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:	35.	Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MBE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:		Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MBE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:		Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MBE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:		Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith
NAME AND ADDRESS OF ALL MEE SUBCONTRACTOR(S) OR SUPPLIER(S) OF MATERIALS:		Check here if MBE(s) qualify under Section 4a-60	unregistered but wants consideration for good faith

This form developed pursuant to Section 46a-68j-23(5) of Regulations of Connecticut state Agencies concerning Contract Compliance.

AFFIDAVIT

I,	acting on behalf of	
(Name of person signing of	certification)	
- 10	acalid I and a	
(Contractor)	of which I am the	
a a	# 196	
(Title)	Certify and affirm:	
(Tibe)	≈ ₂ ≈ .	
Check if provision applicable: That the fo	ollowing minority business subcontractors and /or suppliers of	Ī
materials that	has hired for Contract No.	with
(Contractor)		
	meet the criteria for Minority Business Enterprises set	out in
(Awarding Agency)	* e a	
Section 4a-60 of the Connecticut General State	utes:	
	(Lists names of Minority Business Enterprises that qualified under curr	≡ut.
statutory requirements)		
samely requirements,		7/.
	•	
Check if provision applicable: That the	has hired the follo	neina Tuenta
* * * * * * * * * * * * * * * * * * *	(Contractor)	MITTE
minority business subcontractors or suppliers of	of materials for Contract No.	 with
* ×		******
. 201	that are not registered with the Department o	f
(Awarding Agency)		
Economic Development, but which should be o	considered by the Connecticut Commission on Human Rights	and
Oities when evaluating	* A 3 F 1A . FF	
Opportunities when evaluating(Co	the good faith effortune to th	rts:
·		
نا)	ist names or unregistered MBEs)	
r)	6t	
强7.		
	8	2
	e read and understand the contract compliance requirements of	odifie
at Section 4a-60 and Section 46a-7 1 (d) of the	e Connecticut General statutes.	
I find a partify and office that I have	or made and an Arestand the section to the Delivery	•
at Section 46a-68j-2 I through 43 of the Regul	re read and understand the contract compliance Regulations of	odine
at Section 402-00]-21 through 45 of the Regul	adons of Connecticit State Agencies.	
I understand that false statements mad	de herein are punishable by law	
	to notice and parameters by mr.	
8i	(Name of Corporation or Firm)	
		70.
· —	(Cirrothus and Tale of Collins Making & 1884 in	22
	(Signature and Title of Official Making the Affidavit)	
Subscribed and sworn to before me, this	day of 19 .	
9	m w	
		8
Notary Public/Commissioner of the Superior Com		

My Commission Expires

I,			certify	that I am	the Secret	ary of the
Corporation nan	ned in the forego	ing instrument;	that I have been	duly authorize	ed to affix the	e seal of the
Corporation to s	nch papers as req	uire the seal; th	at		·	, who
signed said instr	ument on behalf o	f the Corporati	on was then			
of said Corporat	ion; that said instr	ument was dul	y signed for and i	n behalf of said	Corporation	by authority
of its governing	body and is within	n the scope of i	ts Corporation po	wers.		ğ
72	2	16	(C)	6 5 (m)	4	. 2 2
	. 		±1			
	*(8		10.		3.50
				Fi se	# 00	
727 B	#00 1	€ •	(Signature o	f person Certifying)	1	

(Corporate Seal)

AFFIRMATIVE ACTION POLICY STATEMENT

It has always been the policy and will continue to be the strong commitment of
and all contractors and subcontractors who do business with
opportunities in employment to all qualified persons solely on the basis of job-related skills, ability and merit.
will continue to take affirmative action to ensure that no persons are
discriminated against with regard to their race, color, sex, sexual orientation, national origin, ancestry, religion
age, physical disability, mental retardation, marital status, present or past history of mental disorder, learning
disability or criminal record. Such action includes, but is not limited to, employment, upgrading, demotion or
transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation
and selection for training including apprenticeshipwill continue to
make good faith efforts to comply with all federal and state laws and policies which speak to Equal Employment
Opportunity and Affirmative Action.
Equal Employment Opportunity is essential, but is not enough to guarantee the full and fair employment of
minorities, women or other protected classes. Therefore, Affirmative Action is necessary. Affirmative Action is
results - oriented programs used to address and overcome the present effects of past discrimination.
59 ST
Sexual Harassment, another form of sex discrimination, will not be tolerated in the work place. Therefore,
engaging in acts of sexual harassment or any other forms of unlawful discrimination will constitute grounds for
disciplinary action.
This Policy Statement is based on both the spirit and the letter of state and federal anti discrimination laws,
regulations and executive orders. Accordingly, care is taken to ensure that no person shall be excluded from
participation in, be denied the benefits of, or otherwise be unlawfully discriminated against. Further,
will not knowingly use the services of, patronize or otherwise deal
with any business, contractor, subcontractor or agency that engages in acts of unlawful discrimination.
This Affirmative Action Policy Statement reaffirms my personal commitment to the principles of Equal
Employment Opportunity and Affirmative Action.
a e
SIGNATURE DATED

SUPPLEMENTARY CONDITIONS

PART 1 GENERAL

1.1 SUMMARY

- A. These Supplementary Conditions amend and supplement the Agreement and other provisions of the Contract Documents as indicated below. All provisions that are not so amended or supplemented remain in full force and effect.
- B. The terms used in these Supplementary Conditions that are defined in the Agreement Information for Bidders, have the meanings assigned to them in the Agreement.

1.2 RELATED SECTIONS

A. Section 01 1000 - Summary of Contract for additional definitions.

1.3 MODIFICATIONS TO THE AGREEMENT

- A. Article 1 Definitions
 - 1. Add "Supplements to Bid Form" to list of documents which constitute the "Contract"
- B. Article 20 Permits
 - Delete and substitute the following:
 "Permits: The Owner will obtain and pay for all permits required for this project. Contractor shall provide all insurance certificates to local officials, as required, to activate the permits."
- C. Article 27 Moneys May Be Retained
 - 1. Add the following: 01 2000 Price and Payment Procedures for retainage and other additional requirements."
- D. Insurance Requirement Sheet
 - Paragraph G Acord Certificate Add the Following "Fuller and D'Angelo, P.C. Architects and Planners and their Consultants" "Additional Insured" on all applicable insurance policies.
- E. Agreement P 28
 - 1. Agreement Item 27 Extra Work, Add at the end of the Paragraph, "that no Extra Work, in the form of Change Order Work to the project is to take place without formal written consent from the Owner. The Contractor at the Owners request is to expeditiously obtain pricing both labor and materials and OH+P for the full total amount of additional work and present same to the Owner and Construction Manager for review and approvals of the work prior to executing the work except in the case of emergency as decided by the Contractor, Owner and Construction Management Team. All standard Extra Work performed shall started only after written approval of the formal Change Order by the Owner. Extra Work performed by the Contractor prior to written consent is subject to not being fully and or partially reimbursed to the Contractor if approvals are not acquired prior to performing the work."

F. Agreement P 33

1. Agreement add at end of page 33: Sub-contractor/Vendor Town Review and Approval: The Contractor Prior to awarding a subcontractor or making purchases from a vendor who will be performing the work requires to have their credentials produced for the Towns review.

G. Agreement P 33

Agreement add at end of page 33: Abandonment of Work or other Default: If the work shall be abandoned, or any part thereof shall be sublet without previous written consent of the Town/Board of Education, or the contract or any monies payable hereunder shall be assigned otherwise than as herein specified, or if at any time the Superintendent or designee shall be of the opinion and shall so certify in writing, that the conditions herein specified as to rate of progress are not being complied with, or that the work or any part thereof is being unnecessarily or unreasonably delayed,

FULLER AND D'ANGELO, PC ARCHITECTS AND PLANNERS

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY SUPPLEMENTARY CONDITIONS

or that the Contractor has violated or is in default under any of the provisions of the contract, or if the Contractor becomes bankrupt or insolvent or goes or is put into liquidation or dissolution, either voluntarily or involuntarily, or petitions for an arrangement or reorganization under the bankruptcy act, or makes a general assignment for the benefit of creditors or otherwise acknowledges insolvency, the happening of any of which shall be and constitute a default under the contract, the Town/Board of Education may designate, and the Town/Board of Education may, upon giving such notice, by contract or otherwise as it may determine, complete the work of such part thereof and charge the entire cost and expense of so completing the work, the Town/Board of Education shall be entitled to reimbursement from the Contractor and the Contractor agrees to pay to the Town/Board of Education any losses, damages, costs and expenses, including attorney's fees, sustained or incurred by the Town/Board of Education by reason of any of the foregoing causes. For the purpose of such completion, the Town/Board of Education may for itself or for any Contractors employed by the Town/Board of Education, take possession of and use or cause to be used, any and all materials, equipment, plant, machinery, appliances, tools, supplies and such other items of every description that may be found or located at the site of the work.

All costs, expenses, losses, damages, attorney's fees, and any and all other charges incurred by the Town/Board of Education under this deducted and/or paid by the Town/Board of Education out of any monies due or article shall be charged against the Contractor and deducted and/or paid by the Town/Board of Education out of any monies due to payable or to become due or payable under the Contract to the Contractor. In computing the amounts chargeable to the Contractor, the Town/Board of Education shall not be held to a basis of the lowest prices for which the completion of the work or any part thereof might have been accomplished, but all sums actually paid or obligated therefore to effect is prompt completion shall be charged to and against the account of the Contractor. In case the costs, expenses, losses, damages, attorneys' fees and other charges together with all payments therefore made to and for the account of the Contractor are less than the sum which would have been payable under the contract if the work had been properly performed and completed by the Contractor, the Contractor shall be entitled to receive the difference, and in case such costs, expenses, losses, damages, attorneys' fees and other charges, together with all payments, theretofore made to or for the account of the Contractor shall exceed the said sum, the Contractor shall pay the amount of the excess to the Town/Board of Education.

PART 2 PRODUCTS - NOT USED PART 3 EXECUTION - NOT USED

SUMMARY OF CONTRACT

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 PROJECT

A. Owner's Name: Greenwich Public Schools

290 Greewnich Avenue Greenwich CT 06830

B. Architect's Name: Fuller and D'Angelo, P.C.

45 Knollwood Road Elmsford, NY 10523

1.3 PROJECT DESCRIPTION

1.4 **DEFINITIONS**

- A. General: Refer to Agreement for additional Basic Contract definitions.
- B. Owner: The term "Owner shall mean Greenwich Public Schools and their duly authorized representative.
- C. The word "Owner" and the words "School Board", "City School District", "Board of Education", "Union Free School District", "Central School District", "Town/School Board" etc., shall have the same meaning.
- D. Architect: The term "Architect" or "Engineer" or the words "Architect/Engineer" shall mean the Professional Engineer/Architect responsible for the contract documents Fuller & D'Angelo, P.C. Architects & Planners 45 Knollwood Road, Elmsford, N.Y. 10523.
- E. Owner's Representative: The term Owner's Representative shall mean Daniel Watson, Director of Facilities
- F. Contractor for Construction: The term "Contractor for Construction", "General Contractor", "Mechanical Contractor", "Contractor for General Work", "Construction Contractor", "Plumbing Contractor", "Electrical Contractor", and "Roofing Contractor' shall have the same meaning.
- G. "Approved": The term "approved," when used in conjunction with Architect's action on Contractor's submittals, applications, and requests, is limited to Architect's duties and responsibilities as stated in the Section 01 3000 - Administrative Requirements.
- H. "Directed": Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean directed or requested by Contracting Officer or Agency, and similar phrases.
- I. "Indicated": The term "indicated" refers to graphic representations, notes, or schedules on Drawings; or to other paragraphs or schedules in Specifications and similar requirements in the Contract Documents. Terms such as "shown," "noted," "scheduled," and "specified" are used to help the user locate the reference.
- J. "Regulations": The term "regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.
- K. "Furnish": The term "furnish" means to supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- L. "Install": The term "install" describes operations at Project site including unloading, temporary storage, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- M. "Provide": The term "provide" means to furnish and install, complete and ready for the intended use.

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY SUMMARY OF CONTRACT

- N. "Installer": An installer is Contractor or another entity engaged by Contractor, as an employee, subcontractor, or contractor of lower tier, to perform a particular construction operation, including installation, erection, application, and similar operations.
- O. The term "experienced," when used with the term "installer," means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with the special requirements indicated; and having complied with requirements of authorities having jurisdiction.
 - Using a term such as "carpentry" does not imply that certain construction activities must be
 performed by accredited or unionized individuals of a corresponding generic name, such as
 "carpenter." It also does not imply that requirements specified apply exclusively to trades people
 of the corresponding generic name.
- P. "Project site" is the space available for performing construction activities, either exclusively or in conjunction with others performing other work as part of Project. The extent of Project site is shown on the Drawings and may or may not be identical with the description of the land on which Project is to be built.
- Q. The term "Building Code" shall mean the Building Code of the State of Connecticut including all amendments and reference standards to date.
- R. "Work" Labor, materials, equipment, apparatus, controls, accessories, and all other items customarily furnished and/or required for proper and complete disconnection and reconnection, installation of new work.
- S. "Wiring" Conduit, fittings, wire, junction and outlet boxes, switches, cutouts, and receptacles and all items necessary or required in connection with or relating to such wiring.
- T. "Concealed" Embedded in masonry or other construction, installed behind wall furring, within double partitions, or hung ceilings, in trenches, or in crawl spaces.
- U. "Exposed" Not installed underground or "Concealed" as defined above.

1.5 CONTRACT DESCRIPTION

- A. Contract Type: A single prime contract based on a Stipulated Price as described in the Form of Agreement.
- B. Local custom and trade-union jurisdictional settlements do not control the scope of Work included in each prime contract. When a potential jurisdictional dispute or similar interruption of work is first identified or threatened, the affected prime contracts shall promptly negotiate a reasonable settlement to avoid or minimize the pending interruption and delays.
- C. Liquidated Damages See 01 1000 Article 1.12.

1.6 SUBCONTRACTORS/SUPPLIERS

- A. Submittal of Primary Sub Contractors and Suppliers include but not limited to the following:
- B. General Contractor:
 - 1. Removals
 - 2. Excavation
 - 3. Concrete
 - 4. Metal railings
 - 5. Masonry.
 - 6. Doors and Frames
 - 7. Hardware Supplier and Installer.
 - 8. Painting.
 - 9. Site Sub-Contractor
- C. Electrical Sub-Contractor
 - 1. Electrical Low voltage security/access control

- 2. Replace existing lights
- D. At least 50% of the project Work scope is to be performed by Bidders forces.

1.7 WORK BY OWNER

A. Greenwich Public Schools will be performing other work at the site, coordinate with CM.

1.8 OWNER OCCUPANCY

- A. Greenwich Public Schools intends to occupy the Project upon Substantial Completion. The construction completion date is August 26th, 2018. Close-out documents due by October 15th, 2018 in full.
- B. Cooperate with Greenwich Public Schools to minimize conflict and to facilitate Greenwich Public Schools's operations. Coordinate any shut downs with the District Five (5) days in advance, no shut downs will be permitted without prior authorization.
- C. Schedule the Work to accommodate Owner's occupancy.

1.9 CONTRACTOR USE OF SITE AND PREMISES

- A. Construction Operations: Limited to areas noted on Drawings.
- B. Arrange use of site and premises to allow:
 - 1. Greenwich Public Schools occupancy.
 - 2. Use of site and premises by the public.
- C. Provide access to and from site as required by law and by Greenwich Public Schools:
 - 1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
 - 2. Do not obstruct roadways, sidewalks, or other public ways without Owner permission and coordination.

D. Time Restrictions:

- 1. Limit conduct of especially noisy exterior work to when the building is unoccupied...
- 2. Contractors shall comply with Local Noise Ordinance. Work disrupting the community must be performed with the following hours:
 - a. Monday thru Friday: 8 AM to 8 PM.
 - b. Weekends/ Holidays: 9 AM to 6 PM No Sundays, Saturday work permits to be obtained by contractor from Town.
- 3. Building availability and work times listed in Section 01 1000, Article 1.9
- E. Only materials and equipment, which are to be used directly in the work, shall be brought to and stored on the project site by the Contractor. After equipment is no longer required for the work, it shall be promptly removed from the project site. Protection of construction materials and equipment stored at the project site from weather, theft, damage and all other adversity is solely the responsibility of the Contractors.
- F. Contractor shall ensure that the work, at all times, is performed in a manner that affords reasonable access, both vehicular and pedestrian, to the site of the work and all adjacent areas. The work shall be performed, to the fullest extent reasonably possible, in such a manner that public areas adjacent to the site of the work shall be free from all debris, building materials and equipment likely to cause hazardous conditions. Without limitation of any other provision of the Contract Documents, each contractor shall use its best efforts to minimize any interference with the occupancy or beneficial use of:
 - 1. Any areas and buildings adjacent to the site of the work or;
 - 2. The Building in the event of partial occupancy as more..
- G. Without prior approval of the Owner, the Contractor shall not permit any workers to use any existing facilities at the Project site, including, without limitations, lavatories, toilets, entrances and parking areas other than those designated by the Owner. Without limitation of any other provision of the Contract Documents, the Contractor shall use its best efforts to comply with the rules and regulations promulgated by the Owner in connection with the use and occupancy of the Project Site, and the Building, as amended

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY SUMMARY OF CONTRACT

from time to time. The Contractor shall immediately notify the Owner in writing if during the performance of the Work, the Contractor finds compliance with any portion of such rules and regulations to be impracticable, setting forth the problems of such compliance and suggesting alternatives through which the same results intended by such portions of the rules and regulations can be achieved. The Owner may, in the Owner's sole discretion, adopt such suggestions, develop new alternatives or require compliance with the existing requirements of the rules and regulations. The Contractor shall also comply with all insurance requirements, applicable to use, and occupancy of the Project Site and the Building.

- H. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- I. Lock automotive type vehicles such as passenger cars and trucks and other types of mechanized and motorized construction equipment, when parked and unattended, to prevent unauthorized use. Do not leave such vehicles or equipment unattended with the motor running or the ignition key in place.
- J. Keep public areas such as hallways, stairs, elevator lobbies and toilet rooms free from accumulation of waste material, rubbish or construction debris.
- K. Smoking, drinking of alcoholic beverages or open fires will not be permitted on the project site.

1.10 AVAILABILITY OF EXISTING SITE

- A. The existing building and site work areas for Base Bid and Alternate Work will be available to the Contractors as follows:
 - 1. While school is in session work is permitted:
 - a. 3:00 PM thru 10:00 PM (However disruption to the educational system will not be permitted.) Close coordination with the owner shall be required.
 - b. All work spaces shall be required to be clean and ready for School children the next day.
 - While school is not in session school holidays, summer school recess and weekends work hours Monday through Friday are:
 - a. 7:00 AM thru 10:00 PM
 - 3. Saturday 9am to 5pm with Town permission
 - 4. Sunday No work
 - 5. Follow Town Noise ordinace at all times
- B. Upon request by the Contractor, the building may be made available, at the discretion of the Owner in addition to the above listed hours, before the formal contract date. A request for use during these off-regular hours must be made at least two (2) days before the use. Such off-hours may include Saturdays, and Holidays.
- C. If the Contractor requests the use of the facility for off-hours to maintain the scheduled completion date, the Contractor shall pay all additional costs in connection with opening, providing security and project management expenses incurred with no costs to the Owner. All expenses shall be deducted from the Contractors contract price. Comply with other portions of this Section.
 - 1. Weekend, Holiday and Night Work:
 - a. The contractor shall make no claim for delay for the inability of the Owner to make the site available for off-hours work. Should the Owner make the site available during these hours at the contractor's request, the cost will be borne by the Contractor.
- D. THE CONTRACTOR SHALL BE REQUIRED TO PERFORM SCHEDULED WORK FOR THE PROJECT ONLY DURING THE TIME PERIODS INDICATED AND SHALL INCLUDE IN THE BID ALL COSTS FOR LABOR, MATERIAL, ETC. INCLUDING PREMIUM TIME AND REQUIRED MANPOWER TO PERFORM THE WORK, WITHIN THEOVERALL THE TIME PERIOD.

1.11 WORK SEQUENCE

- A. Letter of Award of Contract.
- B. Start of Construction:

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY SUMMARY OF CONTRACT

1. PHASE 1 ADMINSITRATIVE

- a. Start Date: Letter of Award
 - a) Tasks: Schedule of Values, Progress Schedule, Contracts, Bonds and Insurance, Field verification of existing conditions, and submittals, ordering of equipment.
- b. Completion Date: June 25th, 2018
- 2. PHASE 2 CONSTRUCTION:
 - a. Start Date: June 25th, 2018.
 - a) Tasks: Removals and Installations of all work and selected alternates, if any.
 - b. Completion Date: August 25th, 2018
- 3. PHASE 3 PUNCH LIST
 - START DATE: August 25th, 2018
 - b. COMPLETION DATE: September 1, 2018
- C. Project Close Out paperwork Completion Date: October 15th, 2018
- D. Coordinate construction schedule and operations with Owner and Construction Manager.

1.12 CONTRACT NO. 1 - GENERAL CONSTRUCTION

- A. The work of the Contract includes but not limited to the following: Base Bid, Alternates, and Allowances
 - 1. All front end documentation, schedules, submittals, field measurements and preparation of shop drawings, followed by ordering of materials and equipment.
 - Removals.
 - 3. Excavation/fill.
 - 4. Removal and reinstallation of alarm and security devices.
 - 5. Sealants.
 - 6. Doors and Frames
 - 7. Door Hardware
 - 8. Unit Masonry
 - 9. Metal railings
 - 10. Painting
 - 11. Provision of close out documents, including but not limited to as-builts, operations manuals and warranty /guarantees.

1.13 LIQUIDATED DAMAGES

A. Failure to meet the schedule shall have a \$500 per day penalty applied by the Owner. Should school start and work not be completed per the schedule, this amount increases to \$1000 per day.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Procedures for preparation and submittal of applications for progress payments.
- B. Change procedures.
- C. Procedures for preparation and submittal of application for final payment.

1.3 RELATED REQUIREMENTS

A. Owner's Agreement and Front End documents.

1.4 SCHEDULE OF VALUES

- A. Form to be used: AIA G702/ AIA G703.
- B. Forms filled out by hand will not be accepted.
- C. Submit Schedule of Values in duplicate within 10 days after date Notice of Award.
- D. Format: Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the specification Section.
- E. Revise schedule to list approved Change Orders, with each Application For Payment.
- F. Provide a separate line item for the following: (where applicable)
 - 1. Labor and materials, when payment is anticipated for material not yet installed
 - 2. Each Allowance.
 - 3. Bonds, if required.
 - 4. Each alternates
 - 5. As-built Drawings.
 - 6. Testing.
 - 7. Punch List
 - 8. Final Cleaning
 - 9. Closeout Documents
 - 10. Identify line items being performed by subcontractors.

1.5 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Period: Submit no morethan one (1) payment per month until scheduled completion date.
- B. Forms filled out by hand will not be accepted.
- C. For each item, provide a column for listing each of the following:
 - 1. Item Number.
 - 2. Description of work.
 - 3. Scheduled Value.
 - 4. Previous Applications.
 - 5. Work in Place and Stored Materials under this Application.
 - 6. Total Completed and Stored to Date of Application.
 - 7. Percentage of Completion.
 - 8. Balance to Finish.
 - 9. Retainage.
- D. Execute certification by signature of authorized officer.

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY PRICE AND PAYMENT PROCEDURES

- E. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored Products.
- F. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of Work.
- G. Submit three copies of each Application for Payment.
- H. Include the following with the application:
 - 1. Transmittal letter as specified for Submittals in Section 01 3000.
 - 2. Construction progress schedule, revised and current as specified in Section 01 3000.
 - 3. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's liens from contractor, subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.
 - 4. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 - 5. Submit Final Application for Payment with or preceded by final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
 - 6. Waiver Forms: Submit waivers of lien on forms, acceptable to Owner.
 - 7. Certified Payrolls; All Applications for Payment must be accompanied with certified payrolls for all Contract Work performed. In addition each contractor and sub-contractor shall submit to the Owner each application, a transcript of the original payroll record subscribed and affirmed as true under penalties of perjury. The Owners shall be required to receive and maintain such payroll records. The original payrolls or transcripts shall be preserved for three years from the completion of the work on the awarded project.
 - a. Submit certification that all personnel listed on certified payrolls have successfully completed an OSHA construction safety and health course of at least 10 hours prior to performing any work on the project.
- I. Project record documents as specified in Section 01 7800, shall be available for review by Greenwich Public Schools as a prerequisite for approval of payment.
- J. Affidavits attesting to off-site stored products.
- K. The Owner shall retain Five (5) percent of the amount of each payment.

1.6 INITIAL APPLICATION FOR PAYMENT:

- A. Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 - 1. Names of full time project manager, on site superintendent, and foreman. Refer to the Agreement for addition requirements.
 - 2. List of subcontractors, suppliers and fabricators: Refer to Section 01100 Summary of Contract(s).
 - 3. Schedule of Values.
 - 4. Contractor's Construction Schedule (preliminary if not final).
 - 5. Products list.

1.7 APPLICATION FOR PAYMENT AT SUBSTANTIAL COMPLETION

A. Refer to the Agreement and with Requirements of Section 01 7800 - Closeout Submittals.

1.8 MODIFICATION PROCEDURES

- A. Refer to the Agreement for requirements.
- B. The Contractor shall be responsible for informing others in it's employ, subcontractor's whose work is affected by any modifications.
- C. Computation of Change in Contract Amount:
 - 1. Refer to the Agreement.

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY PRICE AND PAYMENT PROCEDURES

- D. Execution of Change Orders: The Owner will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
- E. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
- F. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
- G. Promptly enter changes in Project Record Documents.

1.9 APPLICATION FOR PAYMENT AFTER SCHEDULED COMPLETION DATE

- A. In the event the work is not completed by the schedule date, listed in Section 01 1000 Summary of Contract, and in addition to the other remedies described, the Architect will not review progress payment requisitions submitted after the construction completion date, and the District will not issue any progress payments after that date, until all work is completed.
 - Only one requisition for work performed after the construction completion date may be submitted, and it may be submitted only when all work is complete and a Punch List inspection is conducted; said requisition may be submitted when the work at 100% complete, less 5% retainage.

1.10 APPLICATION FOR FINAL PAYMENT

- A. Submit Affidavit for Final Payment included in the Project Manual.
- B. Comply with Section 01 7800 Closeout Submittals
- C. It is understood by the Contractor that the maximum payment due the contractor prior to final payment shall be Ninety (95%) of the Contract amount and the final Five (5%) will be due only after the completion and submittal of all requirements of Section 01 7800 Closeout Submittals are met, including completion of all "punch list" items.

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY ALLOWANCES

ALLOWANCES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

A. Cash allowances.

1.3 RELATED REQUIREMENTS

A. Section 01 2000 - Price and Payment Procedures: Additional payment and modification procedures.

1.4 CASH ALLOWANCES

- A. Contractor's costs for products, delivery, installation, labor, insurance, payroll, taxes, bonding, equipment rental, overhead and profit will be included in Change Orders authorizing expenditure of funds from this Cash Allowance.
- B. Fuller and D'Angelo, P.C. Responsibilities:
 - 1. Consult with Architect, for consideration and selection of products, suppliers, and installers.
 - Select products in consultation with Greenwich Public Schools and transmit decision to Contractor.
 - 3. Prepare Change Order.
- C. Contractor Responsibilities:
 - 1. Assist Fuller and D'Angelo, P.C. in selection of products, suppliers, and installers.
 - 2. Obtain proposals from suppliers and installers and offer recommendations.
 - 3. On notification of which products have been selected, execute purchase agreement with designated supplier and installer.
 - 4. Arrange for and process shop drawings, product data, and samples. Arrange for delivery.
 - 5. Promptly inspect products upon delivery for completeness, damage, and defects. Submit claims for transportation damage.
- D. Differences in costs will be adjusted by Change Order.

1.5 ALLOWANCES SCHEDULE

- A. CONTRACT 1 GENERAL CONTRACTOR
 - 1. CASH ALLOWANCE
 - a. Cash Allowance GC-1: Include a allowance of Fifteen Thousand 00/100 (\$15,000.00) DOLLARS for use according to the Owner's instructions.

(Sum of 1.6.A..1 to be inserted on bid form). Section 01 2100 - Allowances to be submitted with bid.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

ALTERNATES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

A. Description of alternates for selection by the Owner, not included in the Base Bid.

1.3 RELATED REQUIREMENTS

- A. Document 00 2113 INSTRUCTIONS TO BIDDERS: Instructions for preparation of pricing for Alternates.
- B. Section 00 4100 Bid Form for listing amount of each alternate.
- C. Document 00 5200 Form of Agreement: Incorporating monetary value of accepted Alternates.

1.4 ACCEPTANCE OF ALTERNATS

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Greenwich Public Schools's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

1.5 SCHEDULE OF ALTERNATES GENERAL CONSTRUCTION

- A. Alternate No. 1 ADA Ramp Cafeteria Patio to Grade:
 - The Contractor for GC work shall state the amount to be ADDED TO the Base Bid to provide, furnish and install all labor, equipment and material required to Construct the ADA Ramp and related Footings, Foundations, Slab and Masonry walls in accordance with the contract documents.
- B. Alternate No. 2 ADA Ramp Kindergaten Patio to Grade and related Patio Rehabilitation Work:
 - The Contractor for GC work shall state the amount to be ADDED TO the Base Bid to provide, furnish and install all labor, equipment and material required to Construct the ADA Ramp and related Footings, Foundations, Slab and Masonry walls in accordance with construction documents.
- C. Alternate No. 3 Exterior Wood Doors:
 - The Contractor for GC work shall state the amount to be DEDUCTED FROM the Base Bid to
 provide, furnish and install all labor, equipment and material required to provide Exterior Grade
 stile and rail Wood doors in lieu of AMP Doors in accordance with Section 08 1433 and as shown
 on the contract drawings.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Preconstruction meeting.
- B. Progress meetings.
- C. Construction progress schedule.
- D. Submittals for review, information, and project closeout.
- E. Number of copies of submittals.
- F. Requests for Interpretation (RFI) procedures.
- G. Submittal procedures.

1.3 RELATED REQUIREMENTS

- A. Section 01 1000 Summary of Contract: Work covered by ...
- B. Section 01 3553 Site Safety and Security Procedures
- C. Section 01 7000 Execution: Additional coordination requirements.
- D. Section 01 7419 Construction Waste Management and Disposal.
- E. Section 01 7800 Closeout Submittals: Project record documents.

1.4 REFERENCE STANDARDS

A. AIA G716 - Request for Information; 2004.

1.5 PROJECT COORDINATION

- A. Project Coordinator: Daniel Watson, Director of Facilities .
- B. During construction, coordinate use of site and facilities through the Project Coordinator.
- Comply with Project Coordinator's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts
- D. Comply with instructions of the Project Coordinator for use of temporary utilities and construction facilities.
- E. Make the following types of submittals to Owner's Representative.
 - 1. Requests for interpretation.
 - Requests for substitution.
 - 3. Shop drawings, product data, and samples.
 - 4. Test and inspection reports.
 - 5. Design data.
 - 6. Manufacturer's instructions and field reports.
 - 7. Applications for payment and change order requests.
 - 8. Progress schedules.
 - 9. Correction Punch List and Final Correction Punch List for Substantial Completion.
 - 10. Closeout submittals.

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY ADMINISTRATIVE REQUIREMENTS

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 PRECONSTRUCTION MEETING

- A. Project Coordinator will schedule a meeting after Notice of Award.
- B. Attendance Required:
 - 1. Greenwich Public Schools.
 - 2. Fuller and D'Angelo, P.C..
 - 3. Construction Manager
 - 4. Contractor and Major Sub- Contractors.

C. Agenda:

- 1. Letter of Award
- 2. Execution of Greenwich Public Schools-Contractor Agreement.
- 3. Submission of executed bonds and insurance certificates within 7 days after LOI.
- 4. Distribution of Contract Documents.
- 5. Submission of list of Subcontractors, schedule of values, and progress schedule within 7 days.
- 6. Designation of personnel representing parties to Contract and Architect.
- 7. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
- 8. Scheduling of the project.
- 9. Use of premises by Greenwich Public Schools and Contractor(s).
- 10. Greenwich Public Schools's requirements and occupancy prior to completion.
- 11. Construction facilities and controls provided by Greenwich Public Schools.
- 12. Temporary utilities provided by Greenwich Public Schools.
- 13. Survey existing facilities prior to staring construction.
- 14. Security and housekeeping procedures.
- 15. Procedures for testing.
- D. Owner's Representative or Architect will record minutes and distribute copies within five days after meeting to all participants. Objections to the Minutes should be submitted in writing within three business days otherwise they will be considered substantially correct. Contactor shall distribute to all entities of the Contractor affected by decisions made.

3.2 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum two week intervals.
- B. Attendance Required:
 - 1. Contractor.
 - 2. Greenwich Public Schools.
 - 3. Fuller and D'Angelo, P.C..
 - 4. Construction Manager
 - 5. Contractor's Superintendent.
 - 6. Major Subcontractors.

C. Agenda:

- 1. Review minutes of previous meetings.
- 2. Review of Work progress.
- 3. Field observations, problems, and decisions.
- 4. Identification of problems that impede, or will impede, planned progress.
- 5. Review of submittals schedule and status of submittals.

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY ADMINISTRATIVE REQUIREMENTS

- 6. Review construction safety programs.
- 7. Review exiting and and separation of construction
- 8. Maintenance of progress schedule.
- 9. Corrective measures to regain projected schedules.
- 10. Planned progress during succeeding work period.
- 11. Coordination of projected progress.
- 12. Maintenance of quality and work standards.
- 13. Effect of proposed changes on progress schedule and coordination.
- 14. Review change Orders, RFI's and Clarification Sketches.
- 15. Other business relating to Work.
- D. Owner's Representative or Architect will record minutes and distribute copies within five days after meeting to all participants. Objections to the Minutes should be submitted in writing within three business days otherwise they will be considered substantially correct. Contactor shall distribute to all entities of the Contractor affected by decisions made.

3.3 WEEKLY COORDIATION MEETINGS

A. The Contractor shall schedule and hold weekly general project coordination meetings with the Owner's Representative, to review the work schedule for the week in order to insure the planned work does not conflict with facility operations.

1.

3.4 CONSTRUCTION PROGRESS SCHEDULE

- A. Responsibility
 - 1. The Contractor shall be responsible for preparing and updating the contract progress schedule.
 - Within 10 days after date of the Notice of Award, the Contractor shall submit preliminary schedule.
 - 3. If preliminary schedule requires revision after review, submit revised schedule within 2 days.
 - 4. Within 1 days after joint review, submit complete schedule.
 - 5. Submit updated schedule with each Application for Payment.

3.5 REQUESTS FOR INTERPRETATION (RFI)

- A. Definition: A request seeking one of the following:
 - 1. An interpretation, amplification, or clarification of some requirement of Contract Documents arising from inability to determine from them the exact material, process, or system to be installed; or when the elements of construction are required to occupy the same space (interference); or when an item of work is described differently at more than one place in the Contract Documents.
 - 2. A resolution to an issue which has arisen due to field conditions and affects design intent.
- B. Whenever possible, request clarifications at the next appropriate project progress meeting, with response entered into meeting minutes, rendering unnecessary the issuance of a formal RFI.
- C. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of the Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.
 - 1. Prepare a separate RFI for each specific item.
 - Review, coordinate, and comment on requests originating with subcontractors and/or materials suppliers.
 - b. Do not forward requests which solely require internal coordination between subcontractors.
 - 2. Prepare in a format and with content acceptable to Greenwich Public Schools.
 - a. Use AIA G716 Request for Information .
 - 3. Combine RFI and its attachments into a single electronic file. PDF format is preferred.

D. Review Time: Fuller and D'Angelo, P.C. will respond and return RFIs to Contractor within two calendar days of receipt. For the purpose of establishing the start of the mandated response period, RFIs received after 12:00 noon will be considered as having been received on the following regular working day.

3.6 SUBMITTAL SCHEDULE

A. Submit to Fuller and D'Angelo, P.C. for review a schedule for submittals in tabular format.

3.7 SUBMITTALS FOR REVIEW

- A. All submittals are the product and the property of the Contractor. The Owner, Owner's Representative, or Architect shall not be responsible for the contractor's construction means, methods or techniques: safety precautions or programs; Acts or admissions; or failure to carry out the work in accordance to the contract documents
- B. Shop Drawing Submittal Log no later than five (5) days after award of contract.
- C. Shop Drawing Submittals shall be submitted no later than fifteen (15) days after Letter of Award of Contract. No further payments will be made to the contractor after forty (40) until all of the following submittals are made:
- D. When the following are specified in individual sections, including but not limited to the following, submit them for review:
 - Product data.
 - 2. Shop drawings.
 - 3. Samples for verification.
 - 4. Design mix formulas.
- E. Submit to Fuller and D'Angelo, P.C. for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- F. Samples will be reviewed only for aesthetic, color, or finish selection.
- G. The Architect shall review and approve or take other appropriate action on the Contractor submittals, such as shop drawings, product data, samples and other data, which the Contractor is required to submit, but only for the limited purpose of checking for conformance with the design concept and the information shown in the Construction Documents. This review shall not include review of the accuracy or completeness of details, such as quantities, dimensions, weights or gauges, fabrication processes, construction means or methods, coordination of the work with other trades or construction safety precautions, all of which are the sole responsibility of the Contractor. The Architect's review shall be conducted with reasonable promptness while allowing sufficient time in the Architect's judgment to permit adequate review. Review of a specific item shall not indicate that the Architect has reviewed the entire assembly of which the item is a component. The Architect shall not be responsible for any deviations from the Construction Documents not brought to the attention of the Architect, in writing, by the Contractor. The Architect shall not be required to review partial submissions or those for which submissions of correlated items have not been received.
- H. Marking or comments on shop drawings shall not be construed as relieving the Contractor from compliance with the contract project plans and specifications, nor departure therefrom. The contractor remains responsible for details and accuracy for conforming and correlating all quantities, verifying all dimensions, for selecting fabrication processes, for techniques of assembly and for performing their work satisfactorily and in a safe manner.
- I. Initial Review: Allow 5 working days for initial review of each submittal. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
- J. Architect will review the original submittal and one (1) re submittal. Additional reviews will be additional services provided to the Owner and charged accordingly. The Owner will back charge the contractor accordingly.

- K. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing.
- L. Deviations: Highlight, encircle, or otherwise identify deviations from the Contract Documents on submittals.

3.8 SUBMITTALS FOR INFORMATION

- A. When the following are specified in individual sections, submit them for information:
 - 1. Design data.
 - 2. Certificates.
 - 3. Test reports.
 - 4. Inspection reports.
 - 5. Manufacturer's instructions.
 - 6. Manufacturer's field reports.
 - 7. Other types indicated.
- B. Submit for Fuller and D'Angelo, P.C.'s knowledge as contract administrator or for Greenwich Public Schools. No action will be taken.

3.9 SUBMITTALS FOR PROJECT CLOSEOUT

A. Refer to Section 01 7800 for requirements.

3.10 NUMBER OF COPIES OF SUBMITTALS

- A. All submittals shall be in electronic PDF formate and conforming to the following:
 - 1. Each item shall be in a separate file.
 - 2. Each file name shall start with the specification section number and contain an abbreviated explanation of what it contains; for example:
 - a. 09 9000 Painting.
 - 3. Add Revision number (Rev2 Rev3, etc) to the file name when resubmitting items, for example:
 - a. 09 9000 Painting Rev 1.
 - 4. Use capital letters and spaces to make the names "readable" do not use special characters, underscores, hyphens, etc.
 - 5. Keep the file names short, no more than 25 characters.
 - 6. Provide a transmittal with each electronic submittal and list each item that's included.
 - 7. Provide a Cover Sheet with each item in the same file as the technical submittal.
 - 8. Do not add dates to the file names, the files are automatically dated when created..
 - 9. Do not zip the files, and do not put the files in Folders.
 - 10. Do not email electronic submittal attachments larger than 5 MB.
 - 11. Do not email multiple electronic submittals- rather bum the submittals on a CD and send the CD via FedEx or other overnight mail.
 - 12. Make all technical submittals at one time per trade- refer to the specification for additional submittal requirements for example:
 - a. Concrete; Masonry; Miscellaneous Fabrications; Roofing; etc.
 - 13. Do not send MSDS with the technical submittals; collate all of the MSDS needed for the entire project in three ring binders, organized by specification section, and submit the binders to the Owner's Representative and maintain one copy at the project site.
- B. Documents for Information: Submit two copies.
- C. Samples: Submit the number specified in individual specification sections; one of which will be retained by Fuller and D'Angelo, P.C..
 - 1. After review, produce duplicates.
 - 2. Approved sample will be retained at the project site.

FULLER AND D'ANGELO, PC ARCHITECTS AND PLANNERS

- 3. Retained samples will not be returned to Contractor unless specifically so stated.
- 4. Submit with each sample, in electronic PDF, data, cuts, photos, color, charts, etc.

3.11 SUBMITTAL PROCEDURES

- A. Shop Drawing Procedures:
 - 1. Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting the Contract Documents and coordinating related Work.
 - 2. Generic, non-project specific information submitted as shop drawings do not meet the requirements for shop drawings.
- B. Transmit each submittal with a copy of approved submittal form.
- C. Transmit each submittal with transmittal.
- D. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
- E. Identify Project, Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
- F. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
 - 1. Contractor's submittal of shop drawings certifies that the contractor has reviewed and coordinated this shop drawing and they are in conformance to the plans, specifications, applicable codes and other provisions of the Contract Documents.
- G. Deliver submittals to Architect at business address.
- H. Schedule submittals to expedite the Project, and coordinate submission of related items.
- I. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
- J. Provide space for and Fuller and D'Angelo, P.C. and consultants review stamps.
- K. When revised for resubmission, identify all changes made since previous submission.
- L. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- M. Submittals not requested will not be recognized or processed.

3.12 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. General: Except for submittals for the record and similar purposes, where action and return on submittals is required or requested, the Architect/Engineer will review each submittal, mark with appropriate "Action".
- C. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:
- D. Final Unrestricted Release: Where the submittals are marked as follows, the work covered by the submittal may proceed provided it complies with the requirements of the contract documents; acceptance of the work will depend upon that compliance.
 - Marking: "No Exceptions Taken"
- E. Final-But-Restricted Release: When the submittals are marked as follows, the work covered by the submittal may proceed provided it complies with both the Architect's/Engineer's notations or corrections

on the submittal and with the requirements of the contract documents; acceptance of the work will depend on that compliance.

- Markings: "Make Correction Noted"
- F. Returned for Re-submittal: When the submittal is marked as follows, do not proceed with the work covered by the submittal, including purchasing fabrication, delivery or other activity. Revise the submittal or prepare a new submittal in accordance with the Architect's/Engineer's notations stating the reasons for returning the submittal; resubmit the submittal without delay. Repeat if necessary to obtain a different action marking. Do not permit submittals with the following marking to be used at the project site, or elsewhere where work is in progress.
 - 1. Marking: "Revise and Resubmit"
- G. Marking: "Rejected".
- H. Other Action: Where the submittal is returned, marked with the Architect/Engineer's explanation, for special processing or other Contractor activity, or is primarily for information or record purposes, the submittal will not be marked.

SUBMITTAL COVERSHEET

		Owner	:					
uller and D'Angelo, P.C.		Greenwich Public Schools						
45 Knollwood Rd. Elmsford, NY 10523 Contractor:		290 Greewnich Avenue Greenwich, CT 06830						
								one:
Facility: Julian Curtiss E								
Type of Submittal:Re-sub	mittal: []No []Yes							
[] Shop Drawings	[] Product Data	[] Schedule	[] Sample					
	[] Certificate							
Submittal Description: _			<u> </u>					
Product Name:								
Manufacturer:								
Subcontractor:								
Supplier:								
Spec. Section No.:	Drawing	No(s):						
Paragraph:	Rm. or Det	tail No(s):						
with job conditions	Statement: These documents and Contract Documents Na	y this office and have been	found to comply with					
with job conditions	and Contract requirements be Contract Documents. Na	y this office and have been	found to comply with					

END OF SECTION

SITE SAFETY AND SECURITY PROCEDURES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. The safety requirements, which must be followed by the Contractor during the execution of this contract.
- B. The Contractor agrees that the work will be completed with the greatest degree of safety and:
 - 1. To conform to the requirements of the Occupational Safety and Health Act (OSHA) and the Construction Safety Act including all standards and regulations that have been or shall be promulgated by the governmental authorities which administer such acts, and shall hold the Owner, Owner's Representative, the Architect, and all their employees, consultants and representatives harmless from and against and shall indemnify each and everyone of them for any and all claims, actions, liabilities, costs and expenses, including attorneys fees, which any of them may incur as a result of non-compliance.
- C. Security measures including entry control, personnel identification, and miscellaneous restrictions.

1.3 REFERENCES:

A. Code of Federal Regulations OSHA Safety and Health.

1.4 RELATED REQUIREMENTS

- A. Section 01 1000 Summary of Contract: Use of premises and occupancy.
- B. Section 01 5000 Temporary Facilities and Controls: Temporary lighting.
- C. Section 10 00250 10 00250
- D. Seaction 01 7000 Execution.

1.5 DEFINITIONS

- Public shall mean anyone not involved with or employed by the contractor to perform the duties of this
 contract.
- B. Site shall mean the limits of the work area.
- Contractor shall mean the contractor, his/her subcontractors and any other person related to the contract
 execution.

1.6 ENTRY CONTROL

- A. The existing building contains a security alarm system maintained and operated by the Owner. Access into the existing building shall not be permitted unless the owner is notified and arrangements made to deactivate the system
- B. Restrict entrance of persons and vehicles into Project site and existing facilities.
- C. Allow entrance only to authorized persons with proper identification.
- D. Greenwich Public Schools will control entrance of persons and vehicles related to Greenwich Public Schools's operations.
- E. Coordinate access of Greenwich Public Schools's personnel to site in coordination with Greenwich Public Schools's security forces.
- F. Traffic Control
 - Contractor shall maintain access for emergency vehicles, fireman and pedestrians and protect from damage all persons and property within the limits of and for the duration of the contract; all in accordance with the plans and specifications.

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY SITE SAFETY AND SECURITY PROCEDURES

- 2. Conduct construction operations so that the traveling public and pedestrian safety is subjected to a minimum of hazard and delay.
- 3. Contractor shall perform the following minimum requirements as directed by Owner's Representative, Owner, or Construction Manager.
 - a. Keep the surface of the traveled way free from mounds, depressions, and obstructions of any type which could present hazards or annoyance to traffic.
 - b. Keep the surface of all pavements used by the public free and clean of all dirt, debris, stone, timber or other obstructions to provide safe traveled ways.
 - c. Control dust and keep the traveled way free from materials spilled from hauling and construction equipment.
 - d. Provide all cones, barricades, signs and warning devices as may be required and/or as ordered by Daniel Watson, Director of Facilities to safely carry out the foregoing. All such signs and devices shall be fabricated and placed in accordance with the latest "Federal Manual on Uniform Control Devices". Use of Open Flares Is Prohibited.
 - e. Contractor shall cover with steel plates all open trenches at the close of each work day. Such plates to abut each other and be wedged at each end of trench to prevent plates from sliding open
- 4. Ingress and Egress
 - a. Contractor shall provide and maintain at all times safe and adequate ingress and egress to and from site at existing or at new access points consistent with work, unless otherwise authorized by the Owner's Representative or Construction Manager
- 5. If, upon notification by Owner's Representative or Construction Manager, and the contractor fails to correct any unsatisfactory condition within 24 hours of being so directed, Owner's Representative and Construction Manager will immediately proceed with adequate forces to properly maintain the project and the entire cost of such maintenance shall be deducted (back charged) from any moneys due the contractor
- 6. All traffic control costs shall include the base bid of furnishing all labor, material and equipment including the cost of any and all incidental required by job conditions as ordered by Greenwich Public Schools

1.7 FIRE PREVENTION AND CONTROL

- A. The Contractor shall provide Fire Extinguishers as follows: Provide type "A" fire extinguishers for temporary offices and similar spaces where there is minimal danger of electrical fires or grease-oil-flammable liquid fires. In other locations provide either type "ABC" dry chemical extinguishers, or a combination of several extinguishers of NFPA recommended types for the exposures in each case.
 - 1. All required exits, fire alarm, security, automatic temperature control, PA, sprinkler and similar systems shall be maintained and operable throughout the entire construction contract.
 - a. Contractor(s) will be back-charged for all fines imposed for false alarms or service calls.
- B. Free access to fire hydrants and standpipe connections shall be maintained at all times during construction operations. Portable fire extinguishers shall be provided by the Construction Contractor and made conveniently available throughout the construction site. Contractor(s) shall notify their employees of the location of the nearest fire alarm box at all locations where work is in progress.
- C. The Contractor shall take all possible precautions for the prevention of fires. Where flame cutting torches, blow torches, or welding tools are required to be used within the building, their use shall be as approved by the Construction Manager at the site. When welding tools or torches of any type are in use, have available in the immediate vicinity of the work a fire extinguisher of the dry chemical 20 lbs. Type. The fire extinguisher(s) shall be provided and maintained by the Contractor doing such work.
- D. Fuel for cutting and heating torches shall be gas only and shall be contained in Underwriters laboratory approved containers.

- E. Storage of gas shall be in locations as approved by the Owner and subject to Fire Department regulations and requirements.
- F. No volatile liquids shall be used for cleaning agents or as fuels for motorized equipment or tools within a building except with the express approval of the Owner and/or Architect and in accordance with local codes. On-site bulk storage of volatile liquids shall be outside the buildings at locations directed by the Owner, who shall determine the extent of volatile liquid allowed within the building at any given time.

1.8 PERSONNEL IDENTIFICATION

- A. Provide identification badge or other approved identification to each person authorized to enter premises.
- B. Maintain a list of accredited persons, submit copy to Greenwich Public Schools on request.

1.9 RESTRICTIONS

 Do not allow cameras on site or photographs taken except by written approval of Greenwich Public Schools.

PART 2 PRODUCTS -

2.1 MATERIALS

- A. Refer to Section 01 5000 Temporary Facilities and Controls for additional barrier requirements.
- B. Signs shall be made of sturdy plywood of 1/2" minimum thickness and shall be made to legible at a distance of 50 feet.

PART 3 EXECUTION

3.1 GENERAL

- A. In the performance of its contract, the Contractor shall exercise every precaution to prevent injury to workers and the public or damage to property.
 - 1. The Contractor shall, at their own expense, provide temporary structures, place watchmen, design and erect barricades, fences and railings, give warnings, display such lights, signals and signs, exercise such precautions against fire, adopt and enforce such rules and regulations, and take such other precautions as may be necessary, desirable or proper or as may be directed.
 - 2. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work to be done under this contract. The Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss including but not limited to:
 - a. All employees working in connection with this contract, and other persons who may be affected thereby.
 - b. All the work materials and equipment to be incorporated therein whether in storage on or off site; and including trees, shrubs, lawns, walks, pavements, facilities not designated for removal, relocation or replacement in the course of construction.
- B. The Contractor's duties and responsibilities for the safety and protection of the work: shall continue until such time as all the work is completed and contractor has removed all workers, material and equipment from the site, or the issuance of the certificate of final completion, whichever shall occur last.
- C. The Contractor shall use only machinery and equipment adapted to operate with the least possible noise, and shall so conduct his operations that annoyance to occupants of the site and nearby homes and facilities shall be reduced to a minimum
- D. It shall be the responsibility of the Contractor to insure that all employees of the contractor and all subcontractors, and any other persons associated with the performance of their contract shall comply with the provisions of this specification.
- E. The Contractor shall clean up the site daily and keep the site free of debris, refuse, rubbish, and scrap materials. The site shall be kept in a neat and orderly fashion. Before the termination of the contract. The

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY SITE SAFETY AND SECURITY PROCEDURES

Contractor shall remove all surplus materials, falsework, temporary fences, temporary structures, including foundations thereof.

F. The Contractor shall follow all rules and regulations put forth in the Code of Federal Regulations (OSHA Safety and Health Standards).

END OF SECTION

QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Submittals.
- B. Testing and inspection agencies and services.
- C. Control of installation.
- D. Mock-ups.
- E. Manufacturers' plant services.
- F. Defect Assessment.

1.3 RELATED REQUIREMENTS

- A. Section 01 2100 Allowances: Allowance for payment of testing services.
- B. Section 01 3000 Administrative Requirements: Submittal procedures.
- C. Section 01 4219 Reference Standards.
- D. Section 01 6000 Product Requirements: Requirements for material and product quality.

1.4 REFERENCE STANDARDS

- A. ASTM C1021 Standard Practice for Laboratories Engaged in Testing of Building Sealants; 2008 (Reapproved 2014).
- B. ASTM C1077 Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation; 2014.
- C. ASTM C1093 Standard Practice for Accreditation of Testing Agencies for Masonry; 2013.
- D. ASTM E543 Standard Specification for Agencies Performing Nondestructive Testing; 2013.

1.5 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Testing Agency Qualifications:
 - 1. Prior to start of Work, submit agency name, address, and telephone number, and names of full time specialist and responsible officer.
 - Submit copy of report of laboratory facilities inspection made by NIST Construction Materials
 Reference Laboratory during most recent inspection, with memorandum of remedies of any
 deficiencies reported by the inspection.
- C. Certificates: When specified in individual specification sections, submit certification by the manufacturer and or installation/application subcontractor to Owner and Fuller and D'Angelo, P.C., in quantities specified for Product Data.
 - 1. Certificates may be recent or previous test results on material or product, but must be acceptable to Owner and Fuller and D'Angelo, P.C..
- D. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, adjusting, and finishing, for the Greenwich Public Schools's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- E. Manufacturer's Field Reports: Submit reports for Fuller and D'Angelo, P.C.'s benefit as contract administrator or for Greenwich Public Schools.

1. Submit report in duplicate within 5 days of observation to Fuller and D'Angelo, P.C. for information.

1.6 REFERENCES AND STANDARDS - See Section 01 4219

A. Should specified reference standards conflict with Contract Documents, request clarification from Fuller and D'Angelo, P.C. before proceeding.

1.7 TESTING AND INSPECTION AGENCIES AND SERVICES

- A. Greenwich Public Schools will employ services of an independent testing agency to perform certain specified testing; in addition to what is required by the contractor if required.
- B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Fuller and D'Angelo, P.C. before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have Work performed by persons qualified to produce required and specified quality.
- F. Perform at least 50% of the work with own forces.
- G. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- H. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.2 TESTING AND INSPECTION

- A. See individual specification sections for testing and inspection required.
- B. Limits on Testing/Inspection Agency Authority:
 - 1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Agency may not approve or accept any portion of the Work.
 - 3. Agency may not assume any duties of Contractor.
 - 4. Agency has no authority to stop the Work.

C. Contractor Responsibilities:

- 1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
- 2. Balancing reports for air and water.
- Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
- 4. Provide incidental labor and facilities:
 - To provide access to Work to be tested/inspected.
 - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
 - c. To facilitate tests/inspections.
 - d. To provide storage and curing of test samples.

- 5. Notify Owner and Fuller and D'Angelo, P.C. and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
- 6. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- 7. Arrange with Greenwich Public Schools's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- D. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by Fuller and D'Angelo, P.C.. Payment for re testing will be charged to the Contractor by deducting testing charges from the Contract Price.

3.3 OWNER'S TESTING AND INSPECTIONS

- A. Owner will engage a qualified testing agency or special inspector (CM) to conduct tests and inspections as the responsibility of and paid for by Contractor from Allowance as follows:
 - 1. Soil bearing capacity and bottom of footings.
 - 2. Slab on grade thickness and reinforcing placement.
 - 3. Concrete samples and compression tests.
 - 4. Placement of anchors.
 - 5. Placement of concealed flashing.
 - 6. Placement of weep holes.
- B. Contractor shall perform the work in an efficient manner consistent with industry standards. Excessive testing resulting from the contractor's inability to perform efficiently will result in back charges to the contractor.
- C. All re-inspections required for work not properly installed shall be paid for by the contractor.
- D. The Owner will not be liable for any costs or delay claims due to the testing agency or special inspector failure to provide inspection without proper and sufficient notification.
- E. All requests by the contractor for inspection that are cancelled and result in charges to the Owner will be back charged to the contractor.

3.4 CONTRACTOR'S TESTING AND INSPECTION

- A. Testing and Inspections shall be conducted by a qualified testing agency or special inspector as required by authorities having jurisdiction and as indicated in individual Specification Sections as the contractor's responsibility including:
 - 1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.
 - 2. Notifying Owner's Representative, Contractor, or Architect promptly of irregularities and deficiencies observed in the work during performance of its services.
 - 3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect, through Owner's Representative, with copy to Contractor and to authorities having jurisdiction.
 - 4. Submitting again a final wiring termination report book of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
 - 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 - 6. Retesting and re-inspecting corrected work.

3.5 MANUFACTURERS' FIELD SERVICES

A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, as applicable, and to initiate instructions when necessary.

- B. Submit qualifications of observer to Fuller and D'Angelo, P.C. 10 days in advance of required observations.
 - 1. Observer subject to approval of Greenwich Public Schools.
- C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.6 DEFECT ASSESSMENT

A. Replace Work or portions of the Work not conforming to specified requirements.

END OF SECTION

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of each prime contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Dewatering
- B. Temporary electric power and light.
- C. Temporary sanitary facilities.
- D. Temporary Controls: Barriers, enclosures, and fencing.
- E. Waste removal facilities and services enclosed by fencing.
- F. Construction aids and miscellaneous services and facilities.
- G. Temporary fire protection.

1.3 RELATED REQUIREMENTS

- A. Section 01 3553 Site Safety and Security Procedures
- B. Section 01 3000 Administrative Requirements for Submittals.
- C. Section 01 7000 Execution for Progress cleaning requirements.

1.4 Dewatering

A. Provide temporary means and methods for dewatering all temporary excavations and work areas.

1.5 SITE PLAN

A. Provide site plan indicating exiting, fencing, and staging areas. Coordinate Parking areas for workers on site with CM.

1.6 REPORTS:

A. During the progress of the work, contractor shall submit copies of reports required by governing authorities, or necessary for the installation and efficient operation of temporary services and facilities.

1.7 OUALITY ASSURANCE

- A. Regulations: The contractor shall comply with industry standards and with applicable laws and regulations of authorities having jurisdiction including, but not limited to, the following:
 - 1. Building code requirements.
 - 2. Health and safety regulations.
 - 3. Police, fire department and rescue squad rules.
 - 4. Environmental protection regulations
- B. Standards: The contractor shall comply with NFPA 241 "Standard for Safeguarding Construction, Alterations, and Demolition Operations," ANSI-A10 Series standards for "Safety Requirements for Construction and Demolition," and NECA Electrical Design Library "Temporary Electrical Facilities."

1.8 PROJECT CONDITIONS

- A. General: The Contractor shall provide each temporary service and facility ready for use at each location, when first needed to avoid delays in performance of work. Maintain, expand as required, and modify as needed throughout the progress of the work. Do not remove until services or facilities are no longer needed, or are replaced by the authorized use of completed permanent facilities.
- B. Temporary Use of Permanent Facilities: Regardless of previously assigned responsibilities for temporary services and facilities, the Installer of each temporary service or facility shall assume responsibility for its

- operation, maintenance and protection during use as a construction service or facility prior to the Owner's acceptance and operation of the facility.
- C. Conditions of Use: Operate temporary services and facilities in a safe and efficient manner. Do not overload, and do not permit temporary services and facilities to interfere with the progress of work, or occupancy of existing facility by owner. Do not allow unsanitary conditions, public nuisances or hazardous conditions to develop or persist on the site.
- D. Temporary Utilities: Do not permit freezing of pipes, flooding or intrusion of any water from the elements.
- E. Temporary Construction and Support Facilities: Maintain temporary facilities in a manner to prevent discomfort to users. Take necessary fire prevention measures. Maintain temporary facilities in a sanitary manner so as to avoid health problems.
- F. Security and Protection: Maintain site security and protection facilities in a safe, lawful, publicly acceptable manner. Take measures necessary to prevent site erosion.

1.9 TEMPORARY UTILITIES

- A. Owner wil Provide and pay for all electrical power and water required for construction purposes.
- B. Existing facilities may not be used.
- C. Use trigger-operated nozzles for water hoses, to avoid waste of water.
- D. Provide Porta John for workers.

1.10 DIVISION OF RESPONSIBILITIES

- A. The Contractor is responsible for the following:
 - 1. Installation, operation, maintenance, and removal of each temporary facility usually considered as its own normal construction activity, as well as the costs and use charges associated with each facility.
 - 2. Plug-in electric power cords and extension cords.
 - Supplementary plug-in task lighting, and special lighting necessary exclusively for its own activities.
 - 4. Special power requirements for installation of its own work.
 - 5. Its own tool storage boxes.
 - 6. Collection of general waste and debris and disposing into containers provided by the Contractor.
 - 7. Secure lockup of its own tools, materials and equipment.
 - Construction aids and miscellaneous services and facilities necessary exclusively for its own construction activities.
- B. The Contractor is responsible and shall pay costs for the following:
 - 1. Temporary toilets, including disposable supplies.
 - 2. Containers for non-hazardous waste and debris.
 - 3. Disposal of wastes containers.
 - 4. Barricades, warning signs, and lights.
 - 5. Environmental protection.
 - 6. Temporary Fire Protection
 - 7. Temporary dustproof protection when making dust.
 - 8. Dewatering work areas and drains.
- C. Temporary Electric Power Service: The Owner shall provide and pay all costs to provide a weatherproof, grounded electric power service and distribution system of sufficient size, capacity, and power characteristics to accommodate performance of work during the construction period . .

- Temporary Service: Install service and grounding in compliance with the National Electric Code (NFPA 70). Include necessary meters, transformers, overload protected disconnect and main distribution switch gear.
- 2. Connect temporary service to Owner's existing main in the manner directed by company officials.
- 3. Provide temporary service with an automatic ground-fault interrupter feature, activated from the circuits of the system.
- 4. For power hand tools and task lighting, provide temporary 4-gang outlets at each floor level, spaced so that a 100 foot extension cord can reach each work area. Provide separate 110-120 Volt, 20 Amp circuit for each 4-gang outlet (4 outlets per circuit).

1.11 USE CHARGES

- A. General: Cost or use charges for temporary facilities are not chargeable to the Owner or Architect the Owner's Representative. The Architect and Owner will not accept a prime contractor's cost or use charges for temporary services or facilities as a basis of claim for an adjustment in the Contract Sum or the Contract Time.
 - 1. Water Service Use Charges: Water from the Owner's existing water system may be used without metering, and without payment for use charges.
 - 2. Electric Power Service Use Charges: Electric power from the Owner's existing system may be used without payment of use charges.
 - 3. Temporary Utility Services: Where Owner's existing services is inadequate or would disrupt owners use of the existing facility, contractor shall provide utility services for the temporary use at the project site from the utility company, and pay all costs, including use charges.

1.12 TELECOMMUNICATIONS SERVICES

- A. Provide, maintain, and pay for telecommunications services to field office at time of project mobilization.
- B. Telecommunications services shall include:
 - 1. Cellular phone connection for on site superintendent at minimum.
 - 2. Email: Account/address reserved for project use.
 - 3. Facsimile Service: Fax-to-email software on personal computer.

1.13 TEMPORARY SANITARY FACILITIES

- A. Contractor shall provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. The Contractor shall maintain daily in clean and sanitary condition.
- C. Sanitary Facilities: Sanitary facilities include temporary toilets, wash facilities and drinking water fixtures. Comply with governing regulations including safety and health codes for the type, number, location, operation and maintenance of fixtures and facilities; provide not less than specified requirements. Install in locations which will best serve the project's needs.
 - 1. Supply and maintain toilet tissue, paper towels, paper cups and other disposable materials as appropriate for each facility, including Owner's Representative's temporary offices. Provide covered waste containers for used material.
 - 2. Install self-contained toilets to the extent permitted by governing regulations.

1.14 BARRIERS

A. The Contractor shall, provide Barricades, Warning Signs and Lights: Comply with recognized standards and code requirements for erection of substantial, structurally adequate barricades where needed to prevent accidents and losses. Paint with appropriate colors, graphics and warning signs to inform personnel at the site and the public, of the hazard being protected against. Provide lighting where appropriate and needed for recognition of the facility, including flashing red lights where appropriate

- 1. Sign Materials: For signs and directory boards, provide exterior type, Grade B-B High Density Concrete Form Overlay Plywood conforming to PS-1, of sizes and thickness indicated. Provide exterior grade acrylic-latex-base enamel for painting sign panels and applying graphics.
- B. The Contractor shall, Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations.

1.15 FENCING

- A. The Contractor shall be responsible for its own fencing as required to secure stored material and waste containers.
- B. Construction: Commercial grade chain link fence.
- C. Provide 6 foot high fence around construction waste containers and the work areas on site.
- D. Locate where indicated, or if not indicated, enclosed portions of the site determined to be sufficient to accommodate construction operations. Install in a manner that will prevent people, dogs and other animals from easily entering the site, except through entrance gates.
 - 1. Material:
 - a. Steel fencing: Galvanized Chain Link and galvanized gates (non-climbable size).
 - b. Fabric: No. 9 GA galvanized, steel wire mesh, furnish one-piece fabric widths for fencing up to 6' in height indicated in the Contract Documents.
 - c. Framing and Accessories: End, Corner and Pull posts: 2.375" OD steel pipe.
 - d. Line Posts: Space 10'-0" O.C. maximum. 1.90" steel pipe or 1.875" x 1.625 C-sections.
 - Fence Rails: Locate at top and bottom of fabric. Post brace assembly manufacturer's standard.
 - f. Wire ties: For tying fabric to line posts use wire ties spaced 12" O.C.
 - g. Height: 6'

1.16 INTERIOR DUST PROTECTION AND CONTROL

- A. Where construction operation create dust provide plastic coverings, 6 mil plastic, covering door openings, office computers, racks, cabinetry, shelving and other items not removed from work area. Tape all edges tight.
 - 1. Seal all UV, supply and return registers.
 - 2. Schedule and coordinated with Greenwich Public School District.
 - 3. Refer to 01 7000 Execution for final cleaning requirements.
 - 4. Maintain ventilation systems and HV systems as long as possible, finish work on same as soon as possible and make HV / HVAC systems operate with the understanding that time is of the essence to provide an air circulation atmosphere for the existing system. Schedule and coordinate with Owner so as not to interfere with Owners occupancy requirements.

1.17 SECURITY

- A. The contractor shall secure and protect facilities and services and shall be the responsible for and pay for all costs in their bid.
- B. Provide security and facilities to protect Work, existing facilities, and Greenwich Public Schools's operations from unauthorized entry, vandalism, or theft.
- C. Temporary Fire Protection: The Contractor shall provide Fire Extinguishers as follows:: Provide type "A" fire extinguishers for temporary offices and similar spaces where there is minimal danger of electrical fires or grease-oil-flammable liquid fires. In other locations provide either type "ABC" dry chemical extinguishers, or a combination of several extinguishers of NFPA recommended types for the exposures in each case

D. The existing building contains a security alarm system maintained and operated by the Owner. Access into the existing building shall not be permitted unless the owner is notified and arrangements made to deactivate the system.

1.18 VEHICULAR ACCESS AND PARKING

- A. The contractor shall Coordinate access and haul routes with governing authorities and Greenwich Public Schools.
- B. The contractor shall Provide and maintain access to fire hydrants free of obstructions.
- C. Provide means of removing mud from vehicle wheels before entering streets.
- D. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.

1.19 WASTE REMOVAL

- A. The Contractor shall provide containers, at grade, sufficient for the depositing of non-hazardous/non-toxic waste materials, and shall remove such waste materials from project site as required or directed by the Owner's representative.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Contractors shall not utilize the Owner's bins or dumpsters.
- B. The Contractor shall broom clean the site work area at the end of each work day.
 - 1. If the contractor fails to clean areas at the end of each work day the Owner shall perform the cleaning and back charge the contractor accordingly.
- C. The contractor shall be responsible for daily cleaning up of spillage and debris resulting from its operations and from those of its subcontractors; and shall be responsible for complete removal and disposition of hazardous and toxic waste materials.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Burying or burning of waste materials on the site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- E. Site: The Contractor shall maintain Project site free of waste materials and debris.
- F. Installed Work: Keep installed work clean. The Contractor shall clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

1.20 MISCELLANEOUS PROVISIONS

A. Dewatering Facilities and Drains: General: For temporary drainage and dewatering facilities and operations not directly associated with performance of work included under individual work sections, comply with dewatering requirements of applicable sections. Where feasible, utilize the same facilities. Maintain site excavations and construction free of water.

1.21 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Date of Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing facilities used during construction to original condition.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

FULLER AND D'ANGELO, PC ARCHITECTS AND PLANNERS

TRAFFIC AND PEDESTRIAN ACCESS & CONTROL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of each prime contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Contractor shall maintain traffic for the duration of the contract and protect the traveling public and pedestrians from all damage to persons and property within the limits of and for the duration of the contract; all in accordance with the plans and specifications.
- B. It is specifically noted that while school is in session, there are children playing at recess, walking to outdoor gym classes, etc. Contractor's trucks must be walked from the project site to the main traffic loop and vice versa, with a separate monitoring individual to insure children's safety. See 01 1000 Summary for delivery black out times.

1.3 METHOD OF MAINTAINING AND PROTECTING TRAFFIC

- A. Contractor shall maintain and protect traffic by so conducting his construction operations that the traveling public and pedestrian safety is subjected to a minimum of hazard and delay. In order to adequately maintain and protect traffic, contractor shall perform the following additional minimum requirements as directed by Owner's Representative:
 - 1. Keep the surface of the traveled way free from mounds, depressions, and obstructions of any type which could present hazards or annoyance to traffic.
 - 2. Keep the surface of all pavements used by the public free and clean of all dirt, debris, stone, timber or other obstructions to provide safe traveled ways.
 - 3. Control dust and keep the traveled way free from materials spilled from hauling and construction equipment.
 - 4. Provide all cones, barricades, signs and warning devices as may be required and/or as ordered by the Owner's Representative to safely carry out the foregoing. All such signs and devices shall be fabricated and placed in accordance with the latest "Federal Manual on Uniform Control Devices". Use of Open Flares Is Prohibited.
 - 5. Prepare and submit for approval sketch/drawing showing proposed location and type of signs, barricades and devices as required in above.
 - 6. Contractor shall cover with steel plates all open trenches at the close of each work day. Such plates to abut each other and be wedged at each end of trench to prevent plates from sliding open.
 - 7. Contractor to post temporary construction signs, including construction traffic signs, safety signs, security signs, and no trespassing signs as required.

1.4 INGRESS AND EGRESS

A. Contractor shall provide and maintain at all times safe and adequate ingress and egress to and from site at existing or at new access points consistent with work, unless otherwise authorized by the Owner's Representative. Closing off of areas of work, will be coordinated with the Owner and be properly cordoned off and signs posted to the affect of the closed areas.

1.5 CONTRACTOR'S ATTENTION IS DIRECTED TO

A. If, upon notification by Architect or Owner's Representative, contractor fails to correct any unsatisfactory condition within 24 hours of being so directed, Owner's Representative will immediately proceed with adequate forces to properly maintain the project and the entire cost of such maintenance shall be deducted (back charged) from any moneys due the contractor.

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY TRAFFIC AND PEDESTRIAN ACCESS & CONTROL

1.6 PAYMENT

- A. The lump sum bid price for this item shall include the cost of furnishing all labor, material and equipment including the cost of any and all incidental required by job conditions as ordered by Owner's Representative.
- B. Withholding of Payment
 - 1. No payment will be made under Maintenance and Protection of Traffic for each calendar day during which there are substantial deficiencies in compliance with the specification requirements of any subsection of this section, as determined by the Owner's Representative.
 - 2. If Contractor fails to maintain and protect traffic adequately and safely for a period of 24 hours, the Owner's Representative shall correct the adverse conditions by any means he deems appropriate, and shall deduct the cost of the corrective work from any Monies due the Contractor. The cost of this work shall be in addition to the liquidated damages and nonpayment for Maintenance and Protection of Traffic listed above.
 - 3. However, where major nonconformance with the requirements of this specification is noted by the Owner's Representative and prompt contractor compliance is deemed not to be obtainable, all contract work may be stopped by direct order of the Owner's Representative regardless of whether corrections are made by the Owner's Representative as stated in the paragraph above.

END OF SECTION

TEMPORARY EROSION AND SEDIMENT CONTROL

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of each prime contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Prevention of erosion due to construction activities.
- B. Prevention of sedimentation of waterways, open drainage ways, and storm and sanitary sewers due to construction activities.
- C. Restoration of areas eroded due to insufficient preventive measures.
- D. Compensation to Greenwich Public Schools for fines levied by authorities having jurisdiction due to non-compliance by Contractor.

1.3 RELATED REQUIREMENTS

1.4 REFERENCE STANDARDS

- A. ASTM D4355/D4355M Standard Test Method for Deterioration of Geotextiles by Exposure to Light, Moisture and Heat in a Xenon Arc Type Apparatus; 2014.
- B. ASTM D4491 Standard Test Methods for Water Permeability of Geotextiles by Permittivity; 1999a (Reapproved 2014).
- C. ASTM D4533 Standard Test Method for Trapezoid Tearing Strength of Geotextiles; 2011.
- D. ASTM D4632/D4632M Standard Test Method for Grab Breaking Load and Elongation of Geotextiles; 2015a.
- E. ASTM D4751 Standard Test Method for Determining Apparent Opening Size of a Geotextile; 2012.
- F. ASTM D4873 Standard Guide for Identification, Storage, and Handling of Geosynthetic Rolls and Samples; 2002 (Reapproved 2009).
- G. EPA (NPDES) National Pollutant Discharge Elimination System (NPDES), Construction General Permit; Current Edition.

1.5 PERFORMANCE REQUIREMENTS

- A. Comply with all requirements of U.S. Environmental Protection Agency for erosion and sedimentation control, as specified for the National Pollutant Discharge Elimination System (NPDES), Phases I and II, under requirements for the 2003 Construction General Permit (CGP), whether the project is required by law to comply or not.
- B. Also comply with all more stringent requirements of State of Connecticut Erosion and Sedimentation Control Manual.
- C. Timing: Put preventive measures in place as soon as possible after disturbance of surface cover and before precipitation occurs.
- D. Storm Water Runoff: Control increased storm water runoff due to disturbance of surface cover due to construction activities for this project.
 - 1. Prevent runoff into storm and sanitary sewer systems, including open drainage channels, in excess of actual capacity or amount allowed by authorities having jurisdiction, whichever is less.
 - 2. Anticipate runoff volume due to the most extreme short term and 24-hour rainfall events that might occur in 25 years.
- E. Erosion On Site: Minimize wind, water, and vehicular erosion of soil on project site due to construction activities for this project.
 - 1. Control movement of sediment and soil from temporary stockpiles of soil.

- 2. Prevent development of ruts due to equipment and vehicular traffic.
- 3. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to Greenwich Public Schools.
- F. Erosion Off Site: Prevent erosion of soil and deposition of sediment on other properties caused by water leaving the project site due to construction activities for this project.
 - 1. Prevent tracking of mud onto public roads outside site.
 - 2. Prevent mud and sediment from flowing onto sidewalks and pavements.
 - 3. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to Greenwich Public Schools.
- G. Sedimentation of Waterways On Site: Prevent sedimentation of waterways on the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
 - 1. If sedimentation occurs, install or correct preventive measures immediately at no cost to Greenwich Public Schools; remove deposited sediments; comply with requirements of authorities having jurisdiction.
 - 2. If sediment basins are used as temporary preventive measures, pump dry and remove deposited sediment after each storm.
- H. Open Water: Prevent standing water that could become stagnant.
- I. Maintenance: Maintain temporary preventive measures until permanent measures have been established.

1.6 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Erosion and Sedimentation Control Plan:
 - 1. Submit within 2 weeks after Notice to Proceed.
 - 2. Include:
 - a. Site plan identifying soils and vegetation, existing erosion problems, and areas vulnerable to erosion due to topography, soils, vegetation, or drainage.
 - b. Site plan showing grading; new improvements; temporary roads, traffic accesses, and other temporary construction; and proposed preventive measures.
 - c. Where extensive areas of soil will be disturbed, include storm water flow and volume calculations, soil loss predictions, and proposed preventive measures.
 - d. Schedule of temporary preventive measures, in relation to ground disturbing activities.
 - e. Other information required by law.
 - f. Format required by law is acceptable, provided any additional information specified is also included.
 - 3. Obtain the approval of the Plan by Greenwich Public Schools.
- C. Certificate: Mill certificate for silt fence fabric attesting that fabric and factory seams comply with specified requirements, signed by legally authorized official of manufacturer; indicate actual minimum average roll values; identify fabric by roll identification numbers.

PART 2 PRODUCTS

2.1 MATERIALS

- A. All Materials used on this project are to be of low VOC content.
- B. Bales: Air dry, rectangular straw bales.
 - 1. Cross Section: 14 by 18 inches, minimum.
 - 2. Bindings: Wire or string, around long dimension.
- C. Bale Stakes: One of the following, minimum 3 feet long:
 - 1. Steel U- or T-section, with minimum mass of 1.33 lb per linear foot.
 - 2. Wood, 2 by 2 inches in cross section.

- D. Silt Fence Fabric: Polypropylene geotextile resistant to common soil chemicals, mildew, and insects; non-biodegradable; in longest lengths possible; fabric including seams with the following minimum average roll lengths:
 - Average Opening Size: 30 U.S. Std. Sieve, maximum, when tested in accordance with ASTM D4751.
 - 2. Permittivity: 0.05 sec^-1, minimum, when tested in accordance with ASTM D4491.
 - 3. Ultraviolet Resistance: Retaining at least 70 percent of tensile strength, when tested in accordance with ASTM D4355/D4355M after 500 hours exposure.
 - 4. Tensile Strength: 100 lb-f, minimum, in cross-machine direction; 124 lb-f, minimum, in machine direction; when tested in accordance with ASTM D4632/D4632M.
 - 5. Elongation: 15 to 30 percent, when tested in accordance with ASTM D4632/D4632M.
 - 6. Tear Strength: 55 lb-f, minimum, when tested in accordance with ASTM D4533.
 - 7. Color: Manufacturer's standard, with embedment and fastener lines preprinted.
 - Silt Fence Posts: One of the following, minimum 5 feet long:

PART 3 EXECUTION

E.

3.1 EXAMINATION

A. Examine site and identify existing features that contribute to erosion resistance; maintain such existing features to greatest extent possible.

3.2 PREPARATION

A. Schedule work so that soil surfaces are left exposed for the minimum amount of time.

3.3 SCOPE OF PREVENTIVE MEASURES

- A. In all cases, if permanent erosion resistant measures have been installed temporary preventive measures are not required.
- B. Linear Sediment Barriers: Made of silt fences.
 - 1. Provide linear sediment barriers:
 - a. Along downhill perimeter edge of disturbed areas, including soil stockpiles.
 - 2. Space sediment barriers with the following maximum slope length upslope from barrier:
 - a. Slope of Less Than 2 Percent: 100 feet...
 - Slope Between 2 and 5 Percent: 75 feet.
- C. Storm Drain Curb Inlet Sediment Trap: Protect each curb inlet using one of the following measures:
 - 1. Filter fabric wrapped around hollow concrete blocks blocking entire inlet face area; use one piece of fabric wrapped at least 1-1/2 times around concrete blocks and secured to prevent dislodging; orient cores of blocks so runoff passes into inlet.
 - 2. Straw bale row blocking entire inlet face area; anchor into payement.
- D. Storm Drain Drop Inlet Sediment Traps: As detailed on drawings.
- E. Soil Stockpiles: Protect using one of the following measures:
 - 1. Cover with polyethylene film, secured by placing soil on outer edges.
 - 2. Cover with mulch at least 4 inches thickness of pine needles, sawdust, bark, wood chips, or shredded leaves, or 6 inches of straw or hay.

3.4 INSTALLATION

- A. Silt Fences:
 - 1. Store and handle fabric in accordance with ASTM D4873.
 - 2. Where slope gradient is less than 3:1 or barriers will be in place less than 6 months, use nominal 16 inch high barriers with minimum 36 inch long posts spaced at 6 feet maximum, with fabric embedded at least 4 inches in ground.

- 3. Where slope gradient is steeper than 3:1 or barriers will be in place over 6 months, use nominal 28 inch high barriers, minimum 48 inch long posts spaced at 6 feet maximum, with fabric embedded at least 6 inches in ground.
- 4. Where slope gradient is steeper than 3:1 and vertical height of slope between barriers is more than 20 feet, use nominal 32 inch high barriers with woven wire reinforcement and steel posts spaced at 4 feet maximum, with fabric embedded at least 6 inches in ground.
- 5. Install with top of fabric at nominal height and embedment as specified.
- 6. Do not splice fabric width; minimize splices in fabric length; splice at post only, overlapping at least 18 inches, with extra post.
- 7. Wherever runoff will flow around end of barrier or over the top, provide temporary splash pad or other outlet protection; at such outlets in the run of the barrier, make barrier not more than 12 inches high with post spacing not more than 4 feet.

B. Straw Bale Rows:

- 1. Install bales in continuous rows with ends butting tightly, with one bale at each end of row turned uphill.
- 2. Install bales so that bindings are not in contact with the ground.
- 3. Embed bales at least 4 inches in the ground.
- 4. Anchor bales with at least two stakes per bale, driven at least 18 inches into the ground; drive first stake in each bale toward the previously placed bale to force bales together.
- 5. Fill gaps between ends of bales with loose straw wedged tightly.
- 6. Place soil excavated for trench against bales on the upslope side of the row, compacted.

3.5 MAINTENANCE

- A. Inspect preventive measures weekly, within 24 hours after the end of any storm that produces 0.5 inches or more rainfall at the project site, and daily during prolonged rainfall.
- B. Repair deficiencies immediately.
- C. Silt Fences:
 - 1. Promptly replace fabric that deteriorates unless need for fence has passed.
 - 2. Remove silt deposits that exceed one-third of the height of the fence.
 - 3. Repair fences that are undercut by runoff or otherwise damaged, whether by runoff or other causes.

D. Straw Bale Rows:

- 1. Promptly replace bales that fall apart or otherwise deteriorate unless need has passed.
- 2. Remove silt deposits that exceed one-half of the height of the bales.
- Repair bale rows that are undercut by runoff or otherwise damaged, whether by runoff or other
 causes.
- E. Clean out temporary sediment control structures weekly and relocate soil on site.
- F. Place sediment in appropriate locations on site; do not remove from site.

3.6 CLEAN UP

- A. Remove temporary measures after permanent measures have been installed, unless permitted to remain by Fuller and D'Angelo, P.C..
- B. Clean out temporary sediment control structures that are to remain as permanent measures.
- C. Where removal of temporary measures would leave exposed soil, shape surface to an acceptable grade and finish to match adjacent ground surfaces.

END OF SECTION

PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- General product requirements.
- B. Re-use of existing products.
- C. Transportation, handling, storage and protection.
- D. Product option requirements.
- E. Substitution limitations and procedures.
- F. Maintenance materials, including extra materials, spare parts, tools, and software.

1.3 RELATED REQUIREMENTS

- A. Section 01 4000 Quality Requirements: Product quality monitoring.
- B. Section 01 6116 Volatile Organic Compound (VOC) Content Restrictions: Requirements for VOC-restricted product categories.
- C. Section 01 7419 Construction Waste Management and Disposal: Waste disposal requirements potentially affecting packaging and substitutions.

1.4 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
- B. Named Products: Items identified by manufacturer's product name, including make or model number or other designation, shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
- C. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- D. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.

1.5 SUBMITTALS Refer to Section 01 3000

- A. Proposed Products List: Submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
 - 1. Submit within 7 days after date of Letter of Award.
- B. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- C. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility, HVAC and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- D. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

1.6 ASBESTOS

- A. All products, materials, etc. used in conjunction with this Project shall be Asbestos Free.
 - 1. Contractor shall provide a letter to the Owner stating that no asbestos containing material has been used in this project.

PART 2 PRODUCTS

2.1 EXISTING PRODUCTS

- A. Do not use materials and equipment removed from existing premises.
- B. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Greenwich Public Schools, or otherwise indicated as to remain the property of the Greenwich Public Schools, become the property of the Contractor; remove from site.

2.2 NEW PRODUCTS

- A. Provide all new products.
- B. DO NOT USE products having any of the following characteristics:
 - 1. Made outside the United States, its territories, Canada, or Mexico.
 - 2. Made using or containing CFC's or HCFC's.
 - 3. Containing lead, cadmium, asbestos.

2.3 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named. Submit on form attached and in accordance with Information to Bidders.

PART 3 EXECUTION

3.1 SUBSTITUTION PROCEDURES

- Refer to Instruction to Bidders.
- B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- C. A request for substitution constitutes a representation that the submitter:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Agrees to provide the same warranty for the substitution as for the specified product.
 - 3. Agrees to coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Greenwich Public Schools.
 - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
- D. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.

3.2 TRANSPORTATION AND HANDLING

- A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.
- B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.

- C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- D. Transport and handle products in accordance with manufacturer's instructions.
- E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.
- H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.3 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. Provide off-site storage and protection when site does not permit on-site storage or protection.
- F. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- G. Comply with manufacturer's warranty conditions, if any.
- H. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- I. Prevent contact with material that may cause corrosion, discoloration, or staining.
- J. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- K. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

SUBSTITUTION REQUEST FORM

BSTITUTION REQU	UEST No	_				
(After the Bidding Ph	ase)					
Project: Julian Curtiss	ES Select Patio V	Wall/Door Rej	pairs and AD	Accessibili	ity	
Substitution Request 1	Number:					
From:						
Date:						
A/E Project Number:	*****					
Contract For:						
Specification Title:		Description	ı:			
Section:						
Proposed Substitution						
Manufacturer:		Addr	ess:		Phone:	
model no.:						
Installer:		Addres	ss:		Phone: _	
History:	_New product _	2-5 years	old	5-10 yrs old	More	than 10
years old	tween proposed su					
Similar Installation: Project:			Archite	ect:		
			A malaite	×		
Address:		·	Owner			
Date Installed:						
Proposed substitution	affects other parts	of Work:	_ NoY	es; explain		
Savings to Owner for						
Proposed substitution	changes Contract	Time: N	NoYes	s Add	_Deduct	days.
Supporting Data Attac	hed: Drawi	ings Pro	duct Data _	Samples _	Tests	Reports
The Undersigned certi						
Proposed subst		ılly investigat	ed and detern	mined to be ed	qual or superi	ior in all
respects to spec	_					
	arranty will be fur					
	aintenance service					
	ed substitution will ogress schedule.	nave no adve	rse effect on	other trades a	and will not a	iffect or
· -	ta as stated above:	is complete (Tlaims for a	ditional coete	related to ac	cented
	tion which may su					серіси
	d substitution doe					
	t will be made for					tailing.
	ction costs caused			Ž.	U	٠, ٠

Coor will 1	edination, installation, and changes in the Work as necessary for accepted substitution be complete in all respects.
	· · · · · · · · · · · · · · · · · · ·
Signed by:	
Address:	
Telephone:	
Attachments:	
OWNER/ARCHIT	ECT/CM REVIEW AND ACTION
Substitution a	pproved - Make submittals in accordance with Specification Section 01330
Substitution a	pproved as noted - Make submittals in accordance with Specification Section 01330
Substitution r	ejected - Use specified materials.
Substitution R	Request received too late - Use specified materials.
ē	Date:
Additional Commer	nts: Contractor Subcontractor Supplier Manufacturer A/E

END OF SECTION

EXECUTION

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Inspections prior to start of work.
- B. Examination, preparation, and general installation procedures.
- C. Requirements for replacement work, including selective removals.
- D. Pre-installation meetings.
- E. Field engineering and surveying.
- F. General installation of products.
- G. Progress cleaning.
- H. Protection of installed construction.
- Correction of the Work.
- J. Surveying for laying out the work.
- K. Cleaning and protection.
- L. Final Cleaning.
- M. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.
- N. General requirements for maintenance service.

1.3 RELATED REQUIREMENTS

- A. Section 01 1000 Summary of Contract: Limitations on working in existing building, continued occupancy, work sequence, identification of salvaged materials., and relocated materials.
- B. Section 01 3000 Administrative Requirements: Submittals procedures, Electronic document submittal service.
- C. Section 01 4000 Quality Requirements: Testing and inspection procedures.
- D. Section 01 5000 Temporary Facilities and Controls: Temporary exterior enclosures.
- E. Section 017132 Selective Removals for removals and cutting and patching.
- F. Section 01 7800 Closeout Submittals: Project record documents, operation and maintenance data, warranties.
- G. Individual Product Specification Sections:
 - 1. Advance notification to other sections of openings required in work of those sections.

1.4 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

1.5 PROJECT CONDITIONS

- A. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
- B. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
 - Outdoors: Limit conduct of especially noisy exterior work to hours permitted under the local Noise Ordinance.

C. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.

1.6 COORDINATION

- A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements.
- B. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- C. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- E. Coordinate completion and clean-up of work of separate sections.
- F. After Greenwich Public Schools occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Greenwich Public Schools's activities.
- G. Alterations: Where applicable, requirements of the contract documents apply to alteration work in the same manner as to new construction. Refer to drawings for specific requirements of alteration work. Primarily, alterations can be described as normal architectural, mechanical and electrical alterations. Contractors shall review phasing and scheduling of the work to understand that certain areas of work must be completed and occupied prior to start of other work. This is essential to the Owner in their ability to maintain the educational programs during construction.

1.7 CODES, PERMITS, FEES, ETC.

- A. Refer to Owner Contractor Agreement for additional requirements.
- B. The Owner shall file and obtain and pay for the Building Permit.
- C. The contractor(s) and sub- Contractors shall pick-up the Building Permits at Town Hall, Building Department and submitt all required insurances etc. to same to "pull" permits for each trade required.
- D. The Contractor shall furnish and pay for all permits, fees and other installation costs required for the various installations by governing authorities and utility companies; prepare and file drawings and diagrams required; arrange for inspections of any and all parts of the work required by the authorities and furnish all certificates necessary to the Owner and Construction Manager as evidence that the work installed under this Section of the Specifications conforms with all applicable requirements of the Municipal and State Codes, National Board of Fire Underwriters, National Electric Code, as applicable.
- E. Any items of work specified herein and shown on the drawings which conflict with aforementioned rules, regulations and requirements, shall be referred to the Owner and Construction Manager for decision, which decision shall be final and binding.
- F. The building is to be constructed under the following Rules and Regulations of the Building Codes of the State of Connecticut and consist of the following
 - 1. Current Building Code of State of Connecticut

1.8 MANDATORY OSHA CONSTRUCTION SAFETY AND HEALTH TRAINING

A. All laborers, workers and mechanics working on the site are required to be certified as having successfully completed an OSHA construction safety and health course of at least 10 hours prior to performing any work on the project.

PART 2 PRODUCTS

2.1 PATCHING MATERIALS

A. New Materials: As specified in product sections; match existing products and work for patching and extending work.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Prior to start of construction take photographs, videos or similar documentation as evidence of existing project conditions as follows:
 - 1. Exterior views: Spaces adjacent to all work areas.
- B. Verify that existing substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- C. Examine and verify specific conditions described in individual specification sections.

3.2 PREPARATION

A. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond, for new walls or opening in-fills and for all painting tasks.

3.3 PREINSTALLATION MEETINGS

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Owner and Construction Manager four days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
 - 1. Review conditions of examination, preparation and installation procedures.
 - 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Fuller and D'Angelo, P.C., Greenwich Public Schools, participants, and those affected by decisions made.

3.4 LAYING OUT THE WORK

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify Fuller and D'Angelo, P.C. of any discrepancies discovered.
- C. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- D. Promptly report to Fuller and D'Angelo, P.C. the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- E. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Fuller and D'Angelo, P.C..
- F. Utilize recognized engineering survey practices.
- G. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
- H. Periodically verify layouts by same means.
- I. Maintain a complete and accurate log of control and survey work as it progresses.

3.5 GENERAL INSTALLATION REQUIREMENTS

A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.

- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Make neat transitions between different surfaces, maintaining texture and appearance.

3.6 ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation only.
 - 1. Verify that construction and utility arrangements are as shown.
 - 2. Report discrepancies to Owner's Representative, Construction Manager, and Architect before disturbing existing installation.
 - 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. Remove existing work as indicated and as required to accomplish new work.
 - 1. Remove items indicated on drawings.
 - 2. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary for successful application of new finish.
- C. Protect existing work to remain.
 - 1. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 - 2. Repair adjacent construction and finishes damaged during removal work.
 - 3. Patch as specified for patching new work.
- D. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
 - When existing finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Fuller and D'Angelo, P.C..
- E. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- F. Remove debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- G. Do not begin new construction in alterations areas before removals are complete.
- H. Comply with all other applicable requirements of this section.

3.7 CUTTING AND PATCHING

- A. See Alterations article above for additional requirements.
- B. Perform whatever cutting and patching is necessary to:
 - 1. Complete the work.
 - 2. Fit products together to integrate with other work.
 - 3. Provide openings for penetration of, electrical, and other services.
 - 4. Match work that has been cut to adjacent work.
 - 5. Repair areas adjacent to cuts to required condition.
 - Repair new work damaged by subsequent work.
 - 7. Remove samples of installed work for testing when requested.
 - 8. Remove and replace defective and non-conforming work.
- C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- D. Restore work with new products in accordance with requirements of Contract Documents.
- E. Patching:
 - 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
 - 2. Match color, texture, and appearance.

- 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.
- F. Make neat transitions. Patch work to match adjacent work in texture and appearance. Where new work abuts or aligns with existing, perform a smooth and even transition.

3.8 SECURITY SYSTEM

A. The existing building contains a security alarm system maintained and operated by the Owner. Access into the existing building shall not be permitted unless the owner is notified and arrangements made to deactivate the system.

3.9 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.
- E. The Contractor is responsible for their own daily debris removal into containers provided by the Contractor. Working areas are to be broom swept on a daily basis by the Contractor.
- F. The Contractor is responsible to provide dust protection for their construction-related activities.

3.10 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.

3.11 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.
- B. Balance all systems
- C. Test and adjust BMS systems

3.12 FINAL CLEANING

- A. Final cleaning shall be the responsibility of the Contractor and all costs for final cleaning shall be included in the Base Bid. Final cleaning responsibility shall be limited to all new additions and areas where renovations occur.
- B. Execute final cleaning prior to final project assessment.
- C. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.
- D. Remove labels that are not permanent.
- E. Leave Project clean and ready for occupancy.
- F. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

3.13 CLOSEOUT PROCEDURES Refer to Section 01 7800

3.14 MAINTENANCE

A. Provide service and maintenance of components indicated in specification sections.

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 WASTE MANAGEMENT REQUIREMENTS

- A. Greenwich Public Schools requires that this project generate the least amount of trash and waste possible.
- B. Employ processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
- C. Minimize trash/waste disposal in landfills; reuse, salvage, or recycle as much waste as economically feasible.
- D. Required Recycling, Salvage, and Reuse: The following may not be disposed of in landfills or by incineration:
 - 1. Aluminum and plastic beverage containers.
 - 2. Corrugated cardboard.
 - 3. Wood pallets.
 - 4. Concrete: May be crushed and used as riprap, aggregate, sub-base material, or fill.
 - 5. Metals, including packaging banding, metal studs, sheet metal, structural steel, piping, reinforcing bars, door frames, and other items made of steel, iron, galvanized steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze.
 - 6. Paint.
 - 7. Acoustical ceiling tile and panels.
- E. Contractor shall submit periodic Waste Disposal Reports; all landfill disposal, recycling, salvage, and reuse must be reported regardless of to whom the cost or savings accrues; use the same units of measure on all reports.
- F. The following sources may be useful in developing the Waste Management Plan:
 - 1. State Recycling Department. .
- G. Methods of trash/waste disposal that are not acceptable are:
 - 1. Burying on the project site.
 - 2. Dumping or burying on other property, public or private.
 - 3. Other illegal dumping or burying.
- H. Regulatory Requirements: Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to Federal, state and local requirements, pertaining to legal disposal of all construction and demolition waste materials.

1.3 RELATED REQUIREMENTS

- A. Section 01 3000 Administrative Requirements: Additional requirements for project meetings, reports, submittal procedures, and project documentation.
- B. Section 01 5000 Temporary Facilities and Controls: Additional requirements related to trash/waste collection and removal facilities and services.
- C. Section 01 6000 Product Requirements: Waste prevention requirements related to delivery, storage, and handling.
- D. Section 01 7000 Execution: Trash/waste prevention procedures related to demolition, cutting and patching, installation, protection, and cleaning.

1.4 **DEFINITIONS**

A. Clean: Untreated and unpainted; not contaminated with oils, solvents, caulk, or the like.

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

- B. Construction and Demolition Waste: Solid wastes typically including building materials, packaging, trash, debris, and rubble resulting from construction, remodeling, repair and demolition operations.
- C. Hazardous: Exhibiting the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity or reactivity.
- D. Nonhazardous: Exhibiting none of the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity, or reactivity.
- E. Nontoxic: Neither immediately poisonous to humans nor poisonous after a long period of exposure.
- F. Recyclable: The ability of a product or material to be recovered at the end of its life cycle and remanufactured into a new product for reuse by others.
- G. Recycle: To remove a waste material from the project site to another site for remanufacture into a new product for reuse by others.
- H. Recycling: The process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for the purpose of using the altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- I. Return: To give back reusable items or unused products to vendors for credit.
- J. Reuse: To reuse a construction waste material in some manner on the project site.
- K. Salvage: To remove a waste material from the project site to another site for resale or reuse by others.
- Sediment: Soil and other debris that has been eroded and transported by storm or well production run-off water.
- M. Source Separation: The act of keeping different types of waste materials separate beginning from the first time they become waste.
- N. Toxic: Poisonous to humans either immediately or after a long period of exposure.
- O. Trash: Any product or material unable to be reused, returned, recycled, or salvaged.
- P. Waste: Extra material or material that has reached the end of its useful life in its intended use. Waste includes salvageable, returnable, recyclable, and reusable material.

1.5 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Waste Disposal Reports: Submit at specified intervals, with details of quantities of trash and waste, means of disposal or reuse, and costs; show both totals to date and since last report.
 - 1. Submit updated Report with each Application for Progress Payment; failure to submit Report will delay payment.
 - 2. Submit Report on a form acceptable to Greenwich Public Schools.
 - 3. Landfill Disposal: Include the following information:
 - a. Identification of material.
 - Amount, in tons or cubic yards, of trash/waste material from the project disposed of in landfills.
 - State the identity of landfills, total amount of tipping fees paid to landfill, and total disposal cost.
 - Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
 - 4. Incinerator Disposal: Include the following information:
 - a. Identification of material.
 - b. Amount, in tons or cubic yards, of trash/waste material from the project delivered to incinerators.
 - State the identity of incinerators, total amount of fees paid to incinerator, and total disposal cost.

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

- d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
- 5. Recycled and Salvaged Materials: Include the following information for each:
 - a. Identification of material, including those retrieved by installer for use on other projects.
 - b. Amount, in tons or cubic yards, date removed from the project site, and receiving party.
 - c. Transportation cost, amount paid or received for the material, and the net total cost or savings of salvage or recycling each material.
 - d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
 - e. Certification by receiving party that materials will not be disposed of in landfills or by incineration.
- 6. Other Disposal Methods: Include information similar to that described above, as appropriate to disposal method.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION

3.1 WASTE MANAGEMENT PROCEDURES

- A. See Section 01 3000 for additional requirements for project meetings, reports, submittal procedures, and project documentation.
- B. See Section 01 5000 for additional requirements related to trash/waste collection and removal facilities and services.
- C. See Section 01 6000 for waste prevention requirements related to delivery, storage, and handling.
- D. See Section 01 7000 for trash/waste prevention procedures related to removals cutting and patching, installation, protection, and cleaning.

3.2 WASTE MANAGEMENT PLAN IMPLEMENTATION

- A. Manager: Designate an on-site person or persons responsible for instructing workers and overseeing and documenting results of the Waste Management Plan.
- B. Communication: Distribute copies of the Waste Management Plan to job site foreman, each subcontractor, Greenwich Public Schools, and Fuller and D'Angelo, P.C..
- C. Instruction: Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the project.
- D. Meetings: Discuss trash/waste management goals and issues at:
 - 1. Pre-construction meeting.
 - 2. Regular job-site meetings.
- E. Facilities: Provide specific facilities for separation and storage of materials for recycling, salvage, reuse, return, and trash disposal, for use by all contractors and installers.
 - 1. Provide containers as required.
 - 2. Provide adequate space for pick-up and delivery and convenience to subcontractors.
 - Keep recycling and trash/waste bin areas neat and clean and clearly marked in order to avoid contamination of materials.
- F. Recycling: Separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.

END OF SECTION

CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of each prime Contract, including General Conditions and other Division-1 Specification sections, apply to work of this section.

1.2 SECTION INCLUDES

- Project Record Documents.
- B. Maintenance Data.
- C. Warranties and Bonds.

1.3 RELATED REQUIREMENTS

- A. Agreement.
- B. Section 01 3000 Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- C. Individual Product Sections: Specific requirements for operation and/or maintenance data.
- D. Individual Product Sections: Warranties required for specific products or Work.

1.4 SUBSTANTIAL COMPLETION

- A. Refer to the Agreement for additional requirements.
- B. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion:
 - 1. Prepare a list of items to be completed and corrected, the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise Owner, Architect, and Construction Manager of pending insurance changeover requirements.
 - 3. Obtain and submit releases permitting Owner's Representaive, Architect, and Construction Manager unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
- C. Prior to issuance of the Certificate of Substantial Completion, submit, in writing, a request to the Owner, Owner's Representaive, and Architect a request to perform site inspection for the purpose of preparing a "punch list".
- D. On receipt of request Owner's Representative, Architect, and Construction Manager will prepare a punch list. Certificate of Substantial Completion after completion of all punch list items or will notify Contractor of items, either punch list list or additional items identified by Architect, that must be completed or corrected before certificate will be issued
- E. Certificate of Substantial Completion will be issued after completion of all punch list items. Owner's Representative, Architect, and Construction Manager will notify Contractor of items, either punch list or additional items identified by Architect, that must be completed or corrected before certificate will be issued. After completion of "punch list" items submit the following:
 - 1. Application for Payment showing 100 percent completion for portion of the Work claimed as substantially completed the following:
 - 2. Warranties (guarantees).
 - 3. Maintenance Manuals and instructions.
 - 4. Final cleaning.
 - 5. List of incomplete Work, recognized as exceptions to Architect's "punch list"...
 - 6. Architect's punch list certifying all punch list items have been completed and signed off by the Construction Manager and Contractor.
 - 7. Removal of temporary facilities and services.

- 8. Removal of surplus materials, rubbish and similar elements.
- F. Request re inspection when the Work identified in previous inspections as incomplete is completed or corrected, after one reinspection further architectural charges will be back-charged to the contractor on a T+M basis.
 - 1. If necessary, re inspection will be repeated and the contractor shall pay for all additional inspections.

1.5 FINAL COMPLETION

- A. Refer to the Agreement for additional requirements.
- B. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
 - 1. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Owner's Representative, Architect, and Construction Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will not process a final Certificate for Payment until after the inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
- C. Following Final Inspection acceptance of work submit the following:
 - 1. Submit Owners Affidavit of Final Payment.
 - 2. Submit a final Application for Payment.
 - Submit certified copy of Architect's Substantial Completion punch list items endorsed and dated Contractor and Owner's Representative certifying each item has been completed or otherwise resolved for acceptance.
 - 4. Release of liens from contractor and all entitles of contractor.
 - 5. Consent of Surety to Final Payment.
 - 6. Final Liquidated Damages settlement statement, if applicable.
 - 7. Contractor's Affidavit of Release of Liens (AIA G706A).
 - 8. Contractors Affidavit of Payment of Debts and Claims (AIA G706)
 - 9. Certification of Payment of Prevailing Wage Rates.
 - 10. Contractor's certified statement that no asbestos containing material was incorporated into the project.
 - 11. All items per checklist at end of this section (no retainage reductions will be allowed until all closeout paperwork is received).

1.6 SUBMITTALS

- A. Contractor shall submit all documentation identified in this section within thirty (30) days from the time the Contractor submits the list of items to be corrected, as referred to in the Agreement in addition to other rights of the Owner set forth elsewhere in the Contract Documents, to include but not limited to withholding of final payment. If the documentation has not been submitted within thirty (30) day period, the Owner will obtain such through whatever means necessary. The Contractor shall solely be responsible for all expenses incurred by the Owner, provided the Owner has advised the Contractor of this action thirty 30 days prior to the culmination date and again, seven 7 days prior to the culmination date by written notice
- B. Project Record Documents: Submit documents to Fuller and D'Angelo, P.C. with claim for final Application for Payment.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.

- 2. Specifications.
- 3. Addenda.
- 4. Change Orders and other modifications to the Contract.
- 5. Reviewed shop drawings, product data, and samples.
- 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Greenwich Public Schools.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Field changes of dimension and detail.
 - 2. Details not on original Contract drawings.

3.2 RECORD DRAWINGS

- A. Record Prints: Maintain one set of blue- or black-line white prints of the Contract Drawings and approved Shop Drawings at the project site.
- B. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
 - 1. Accurately, neatly and clearly record information in an understandable drawing technique.
- C. Content: Types of items requiring marking include, but are not limited to, the following:
 - 1. Dimensional changes to Drawings.
 - 2. Locations and depths of underground utilities.
 - 3. Changes made by Change Order or Construction Change Directive.
 - 4. Electrical runs made by contractor
 - 5. Details not on the original Contract Drawings.
- D. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
- E. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- F. Provide final record drawings on CD in PDF format.

3.3 FORMAT

- A. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location. Contractor shall certify and sign. Provide one B+W set on full size set.
- B. Identify Record Drawing as follows:
 - 1. Project name.
 - Date.
 - b. Designation "PROJECT RECORD DRAWINGS."
 - c. Name of Architect and Owner's Representative.
 - d. Name of Contractor.
 - e. Contractor shall certify and sign each drawing

3.4 MAINTENANCE DATA FOR MATERIALS AND FINISHES

A. For Each Product, Applied Material, and Finish:

B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.

3.5 ASSEMBLY OF OPERATION AND MAINTENANCE MANUALS

- A. Assemble operation and maintenance data into durable manuals for Greenwich Public Schools's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.
- B. Where systems involve more than one specification section, provide separate tabbed divider for each system.
- C. Prepare instructions and data by personnel experienced in maintenance and operation of described products.
- D. Prepare data in the form of an instructional manual.
- E. Binders: Commercial quality, 8-1/2 by 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- F. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- G. Project Directory: Title and address of Project; names, addresses, and telephone numbers of Fuller and D'Angelo, P.C., Consultants, Contractorand subcontractors, with names of responsible parties.
- H. Tables of Contents: List every item separated by a divider, using the same identification as on the divider tab; where multiple volumes are required, include all volumes Tables of Contents in each volume, with the current volume clearly identified.
- I. Dividers: Provide tabbed dividers for each separate product and system; identify the contents on the divider tab; immediately following the divider tab include a description of product and major component parts of equipment.
- J. Text: Manufacturer's printed data, or typewritten data on 24 pound paper.
- K. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- L. Arrange content by systems under section numbers and sequence of Table of Contents of this Project Manual.

3.6 WARRANTIES

- A. Obtain warranties executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Greenwich Public Schools's permission, leave date of beginning of time of warranty until the Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties until time specified for submittal.

CHECKLIST FOR PROJECT CLOSEOUT AND PROCESSING OF FINAL PAYMENT

JOB TITLE: - Greenwich Public Schools Julian Curtiss ES Select Patio Wall/Door Repairs and ADA Accessibility Julian Curtiss Elementary School **BOARD OF EDUCATION BID NUMBER; 2054-16 CLOSE-OUT SUBMITTALS: (As Applicable)** [] WAGE & SUPPLEMENTS VERIFICATION FORM (COPY ATTACHED). THREE (3) 3-RING BINDER BROCHURES OF OPERATION AND MAINTENANCE MANUALS FOR ALL EQUIPMENT INSTALLED ON THE PROJECT INCLUDING THE FOLLOWING: TYPED OR PRINTED INSTRUCTIONS COVERING THE CARE AND OPERATIONS OF EQUIPMENT AND SYSTEMS FURNISHED AND INSTALLED. MANUFACTURERS INSTRUCTION BOOKS, DIAGRAMS, SPARE PARTS LISTS COVERING ALL EQUIPMENT. INSTRUCTION OF OWNER'S REPRESENTATIVE IN CARE AND MAINTENANCE OF NEW EQUIPMENT. [] ALL APPROVED SHOP DRAWINGS. [] SPARE PARTS AND MAINTENANCE MATERIALS. (RECEIPT SIGNED BY [] EVIDENCE OF COMPLIANCE WITH REQUIREMENTS OF GOVERNING AUTHORITIES (CERTIFICATES OF INSPECTION ELECTRICAL). [] CERTIFICATES OF INSURANCE FOR PRODUCTS AND COMPLETED OPERATIONS. [] NOTARIZED STATEMENT THAT ONLY NON-ASBESTOS MATERIALS WERE INSTALLED ON THIS PROJECT. | | FULLY EXECUTED CERTIFICATE OF SUBSTANTIAL COMPLETION: AIA G704. [] CONTRACTOR'S WRITTEN TWO-YEAR WARRANTY PROJECT RECORD DOCUMENTS: SECTION 01 7800. 1 AS-BUILT DRAWINGS. EVIDENCE OF PAYMENT AND RELAEASE OF LIEN CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS: AIA G706. [] CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS - AIA G706A PRIME

REFER TO SECTION 017800 PAR 1.4 AND 1.5 FOR ADDITIONAL REQUIREMENTS. FINAL PAYMENT WILL NOT BE PROCESSED UNTIL ALL ITEMS INDICATED ARE RECEIVED IN ACCORDANCE WITH SECTION 01 7800 - CLOSEOUT SUBMITTALS.

CONTRACTORS AND SUBCONTRACTORS.

[]

CONSENT OF SURETY TO FINAL PAYMENT AIA G707.

Greenwich Public Schools Contractor Wage and Supplement Certification

I	I am an officer			
	of(Prime Contractor			
and am duly	authorized to make this at	ffidavit for the Public Contract for the Greenwich Public Schools		
That I fully c	omprehend the terms and	provisions of of the Labor Law.		
That I have b	That I have been issued a copy of the schedule of Wages and Supplements, as specified in the project manual.			
That I agree	to pay the applicable Prev	vailing Wage and will pay or provide the supplements specified.		
Contractor Sig	nature President			
Print Name				
ACKNOWLED	GMENT:			
STATE OF CO	NNECTICUT			
COUNTY OF _	:SS.:			
On this		, 20before me personally came me known and known to me to be the person described in and		
who executed th	e foregoing instrument	and acknowledged that he executed the same.		
Notary Public	0			
County				

Greenwich Public Schools

Subcontractor Wage and Supplement Certification

That I am ar	n officer of	and am duly authorized to make
		ct to
		or the Greenwich Public Schools.
That I fully	comprehend the terms and p	provisions of the Labor Law.
That I have i manual.	been issued a copy of the sc	hedule of Wages and Supplements, as specified in the project
That I agree	to pay the applicable Preva	iling Wage and will pay or provide the supplements specified.
Subcontrac	tor	Signature
Print Name		
Presi	dent	
ACKNOWLEI	DGMENT:	
STATE OF	CONNECTICUT	
	OF:SS.:	
On this	day of	, 20before me personally came
who executed the	ho foressing instrument	ne known and known to me to be the person described in and
who executed the	ne foregoing instrument at	nd acknowledged that he executed the same.
Notary Publi	ic	
County		

END OF SECTION

CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of each prime Contract, including General Conditions and other Division-1 Specification sections, apply to work of this section.

1.2 SECTION INCLUDES

- Cutting new openings in existing concrete walls.
- B. Concrete formwork.
- C. Floors and slabs on grade.
- D. Concrete reinforcement.
- E. Joint devices associated with concrete work.
- F. Concrete curing.
- G. Exterior Ramps
- H. Finishes.
- I. Mix design.
- J. Concrete materials.
- K. Placement procedure.

1.3 RELATED REQUIREMENTS

A. Section 07 9200 - Joint Sealants: Products and installation for sealants for saw cut joints and isolation joints in slabs.

B. REFERENCE STANDARDS

- 1. ACI 301 Specifications for Structural Concrete; 2010 (Errata 2012).
- 2. ACI 304R Guide for Measuring, Mixing, Transporting, and Placing Concrete; 2000.
- 3. ACI 308R Guide to Curing Concrete; 2001 (Reapproved 2008).
- 4. ASTM A185/A185M Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete; 2007.
- 5. ASTM A615/A615M Standard Specification for Deformed and Plain Carbon Steel Bars for Concrete Reinforcement; 2015.
- 6. ASTM A775/A775M Standard Specification for Epoxy-Coated Steel Reinforcing Bars; 2007b (Reapproved 2014).
- 7. ASTM C33/C33M Standard Specification for Concrete Aggregates; 2013.
- 8. ASTM C39/C39M Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens; 2015a.
- 9. ASTM C94/C94M Standard Specification for Ready-Mixed Concrete; 2015.

C. SUBMITTALS

- 1. See Section 01 3000 Administrative Requirements, for submittal procedures.
- 2. Product Data: Submit manufacturers' data on manufactured products showing compliance with specified requirements and installation instructions.
- 3. Mix Design: Submit proposed concrete mix design.
- D. Product Data: For each type of product indicated.
- E. Design Mixtures: For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
 - 1. Indicate amounts of mixing water to be withheld for later addition at Project site.

- Steel Reinforcement Shop Drawings: Placing drawings that detail fabrication, bending, and
 placement. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar
 diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing,
 and supports for concrete reinforcement.
 - a. Include foundation plans and elevations.
 - b. Indicate all penetrations and sleeve location and reinforcing.
- F. Welding certificates.
- G. Qualification Data: For concrete supplier
 - 1. Material Certificates: For each of the following, signed by manufacturers:
 - a. Cementitious materials.
 - b. Form materials and form-release agents.
 - Steel reinforcement and accessories.
 - d. Bonding agents.
 - e. Joint-filler strips.
 - f. Repair materials.

1.4 QUALITY ASSURANCE

- A. Perform work of this section in accordance with ACI 301 and ACI 318.
- B. Follow recommendations of ACI 305R when concreting during hot weather.
- C. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from one source, and obtain admixtures through one source from a single manufacturer.
- D. Welding: Qualify procedures and personnel according to AWS D1.4, "Structural Welding Code--Reinforcing Steel."
- E. WARRANTY
 - 1. See Section 01 7800 Closeout Submittals, for additional warranty requirements.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Steel Reinforcement: Deliver, store, and handle steel reinforcement to prevent bending and damage.
- B. Waterstops: Store waterstops under cover to protect from moisture, sunlight, dirt, oil, and other contaminants.
- C. All packed materials shall be delivered to the site in original unopened containers, clearly indicating manufacturer's name, brand name, and other identifying information.

1.6 PROJECT CONDITIONS

A. Coordinate with the work of all other sections and separate contracts.

PART 2 PRODUCTS

2.1 FORMWORK

- A. Formwork Design and Construction: Comply with guidelines of ACI 347R to provide formwork that will produce concrete complying with tolerances of ACI 117.
- B. Form Materials: Contractor's choice of standard products with sufficient strength to withstand hydrostatic head without distortion in excess of permitted tolerances.
 - 1. Earth Cuts: Do not use earth cuts as forms for vertical surfaces. Natural rock formations that maintain a stable vertical edge may be used as side forms.

2.2 REINFORCEMENT

- A. Reinforcing Steel: ASTM A615/A615M, Grade 60 (60,000 psi).
 - 1. Type: Deformed billet-steel bars.

- 2. Finish: Epoxy coated in accordance with ASTM A775/A775M for exterior applications.
- B. Steel Welded Wire Reinforcement: ASTM A 185/A 185M, plain type.
 - 1. Form: Coiled Rolls.
 - 2. Mesh Size: 6 x 6.
 - 3. Wire Gage: W 6 x W 6.
 - 4. Finish: Epoxy coated in accordance with ASTM A775/A775M for exterior applications.
- C. Reinforcement Accessories:
 - 1. Tie Wire: Annealed, minimum 16 gage, 0.0508 inch.

2.3 CONCRETE MATERIALS

- A. Cement: ASTM C150/C150M, Type I Normal Portland type.
 - 1. Acquire all cement for entire project from same source.
- B. Fine and Coarse Aggregates: ASTM C 33.
- C. Water: Clean and not detrimental to concrete.

2.4 ACCESSORY MATERIALS

- A. Underslab Vapor Retarder: Multi-layer, fabric-, cord-, grid-, or aluminum-reinforced polyethylene or equivalent, complying with ASTM E1745, Class A; stated by manufacturer as suitable for installation in contact with soil or granular fill under concrete slabs. The use of single ply polyethylene is prohibited.
 - 1. Installation: Comply with ASTM E1643.
 - 2. Accessory Products: Vapor retarder manufacturer's recommended tape, adhesive, mastic, prefabricated boots, etc., for sealing seams and penetrations.
 - 3. Products:
 - a. Fortifiber Building Systems Group; Moistop Ultra 10: www.fortifiber.com/#sle.
 - b. Inteplast Group; Barrier-Bac VB-250: www.barrierbac.com/#sle.
 - c. ISI Building Products; Viper VaporCheck II 10-mil (Class A): www.isibp.com/#sle.

2.5 BONDING AND JOINTING PRODUCTS

- A. Epoxy Bonding System:
 - 1. Products:
 - a. Adhesives Technology Corporation; Crackbond SLV-302, Crackbond LR-321, Crackbond LR-321 LPL, Ultrabond 2100 LPL, Ultrabond 2100, Ultrabond 1, Ultrabond 2, or Ultrabond HS200: www.atcepoxy.com/#sle.
 - b. Euclid Chemical Company; DURALFLEX GEL: www.euclidchemical.com/#sle.
 - c. Dayton Superior Corporation; Slow Set Bonding Agent: www.daytonsuperior.com/#sle.
 - d. Types I and II, non-load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.
 - e. Types IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.
- B. Waterstops: PVC, complying with COE CRD-C 572.
 - 1. Configuration: As indicated on the drawings.
 - 2. Products:
 - a. Meadows: W. R. Meadows, Inc..
 - b. Progress Unlimited Inc.
 - Vinylex Corporation.
- C. Slab Isolation Joint Filler: 1/2 inch thick, height equal to slab thickness, with removable top section that will form 1/2 inch deep sealant pocket after removal.
 - 1. Material: ASTM D1751, cellulose fiber.

- 2. Material: Closed-cell, non-absorbent, compressible polyethylene or polymer foam in sheet form.
- D. Slab Construction Joint Devices: Combination keyed joint form and screed, galvanized steel, with minimum 1 inch diameter holes for conduit or rebars to pass through at 6 inches on center; ribbed steel stakes for setting.
 - 1. Provide removable plastic cap strip that forms wedge-shaped joint for sealant installation.
 - 2. Height: To suit slab thickness.
 - 3. Manufacturers:
 - a. Acceptable Products
 - b. Vinylex, Knoxville, TN 37921 (615) 690-2211...

2.6 CURING MATERIALS

- A. Moisture-Retaining Sheet: ASTM C171.
 - Polyethylene film, clear, minimum nominal thickness of 0.0040 inch.

2.7 CONCRETE MIX DESIGN

- A. Concrete Strength: Establish required average strength for each type of concrete on the basis of field experience or trial mixtures, as specified in ACI 301.
 - 1. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch (3 to 6 mm) or coarse sand as recommended by underlayment manufacturer.
 - 2. For trial mixtures method, employ independent testing agency acceptable to Fuller and D'Angelo, P.C. for preparing and reporting proposed mix designs.
 - 3. Compressive Strength: Not less than 4100 psi (29 MPa) at 28 days when tested according to ASTM C 109/C 109M.
- B. Normal Weight Concrete:
 - 1. Compressive Strength, when tested in accordance with ASTM C39/C39M at 28 days: 4,000 psi.
 - 2. Water-Cement Ratio: Maximum 0.45.
 - 3. Total Air Content: 6 percent, determined in accordance with ASTM C173/C173M.
 - 4. Maximum Slump: 4 inches.

2.8 MIXING

A. Transit Mixers: Comply with ASTM C94/C94M.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify lines, levels, and dimensions before proceeding with work of this section.

3.2 PREPARATION

- A. Formwork: Comply with requirements of ACI 301. Design and fabricate forms to support all applied loads until concrete is cured, and for easy removal without damage to concrete.
- B. Verify that forms are clean and free of rust before applying release agent.
- C. Where new concrete is to be bonded to previously placed concrete, prepare existing surface by cleaning with steel brush and applying bonding agent in accordance with manufacturer's instructions.
 - 1. Use epoxy bonding system for bonding to damp surfaces, for structural load-bearing applications, and where curing under humid conditions is required.
- D. In locations where new concrete is doweled to existing work, drill holes in existing concrete, insert steel dowels and pack solid with non-shrink grout.

3.3 INSTALLING REINFORCEMENT AND OTHER EMBEDDED ITEMS

Fabricate and handle epoxy-coated reinforcing in accordance with ASTM D3963/D3963M.

- B. Comply with requirements of ACI 301. Clean reinforcement of loose rust and mill scale, and accurately position, support, and secure in place to achieve not less than minimum concrete coverage required for protection.
- C. Install welded wire reinforcement in maximum possible lengths, and offset end laps in both directions. Splice laps with tie wire.

3.4 PLACING CONCRETE

- A. Place concrete in accordance with ACI 304R.
- B. Place concrete for floor slabs in accordance with ACI 302.1R.
- C. Notify Construction Manager and Fuller and D'Angelo, P.C. not less than 24 hours prior to commencement of placement operations.
- D. Ensure reinforcement will not be disturbed during concrete placement.

3.5 MISCELLANEOUS CONCRETE ITEMS

- A. Patching and Repair: Remove all deteriorated concrete, dirt, oil, grease, and all bond-inhibiting materials from surface. Be sure repair area is not less than 1/4 inch in depth. Preparation work should be done by scabbler or other appropriate mechanical means to obtain an exposed aggregate surface with a minimum surface profile of ±1/8 inch (CSP-6). Saturate surface with clean water. Substrate should be saturated surface dry (SSD) with no standing water during application.
- B. Concrete Substrate: Prime the prepared substrate with a brush or sprayed applied coat of Sika Armatec 110 EpoCem aas recommended by the manufacturer. Alternately, a scrub coat of Sika Repair 223 can be applied prior to placement of the mortar. The repair mortar has to be applied into the wet scrub coat before it dries.
- C. Mix as recommended by the manufacturer.
- D. Apply and cure as recommended by the manufacturer.
- E. If patches are not acceptable to Architect or Owner repour the slabs.

3.6 CONCRETE FINISHING

- A. Repair surface defects, including tie holes, immediately after removing formwork.
- B. Concrete Slabs: Finish to requirements of ACI 302.1R, and as follows:
- C. Broom finish for exterior walks and ramps

3.7 CURING AND PROTECTION

- A. Comply with requirements of ACI 308R. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.
 - 1. Normal concrete: Not less than 7 days.
- C. Surfaces Not in Contact with Forms:
 - Slabs and Floors To Receive Adhesive-Applied Flooring: Curing compounds and other surface coatings are usually considered unacceptable by flooring and adhesive manufacturers. If such materials must be used, either obtain the approval of the flooring and adhesive manufacturers prior to use or remove the surface coating after curing to flooring manufacturer's satisfaction.
 - 2. Final Curing: Begin after initial curing but before surface is dry.
 - a. Moisture-Retaining Sheet: Lap strips not less than 3 inches and seal with waterproof tape or adhesive; secure at edges.

3.8 FIELD QUALITY CONTROL

- A. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of concrete operations.
- B. Compressive Strength Tests: ASTM C39/C39M. For each test, mold and cure three concrete test cylinders. Obtain test samples for every 100 cubic yards or less of each class of concrete placed.

3.9 DEFECTIVE CONCRETE

- A. Repair or replacement of defective concrete will be determined by the Fuller and D'Angelo, P.C.. The cost of additional testing shall be borne by Contractor when defective concrete is identified.
- B. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Fuller and D'Angelo, P.C. for each individual area.
- C. If patching is not acceptable replacement shall be required.

END OF SECTION

CONCRETE FLOOR FINISHES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Surface treatments for existing concrete slabs.

1.2 ADMINISTRATIVE REQUIREMENTS

A. Coordinate the work with the existing concrete ramp and product surface prep and curing.

1.3 MOCK-UP

- A. Mock-Up Size: 4 feet square.
- B. Locate where directed.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in manufacturer's sealed packaging, including application instructions.

1.5 FIELD CONDITIONS

A. Maintain ambient temperature of 50 degrees F minimum.

PART 2 PRODUCTS

2.1 CONCRETE FLOOR FINISH APPLICATIONS

- A. Liquid Polymerized Cementitious Protective Coating:
 - 1. Use at following locations: Exisiting Handicapped Ramp.

2.2 COATINGS

- A. Concrete Floor Topping with Aggregate: Pre-mixed blend Sika FLex Coat and ATC Acrylic Top Coat
 - Product:
 - a. Sika . Two Component Cementitious Protective Coating SIKAUSA.COM
 - b. Sika ATC Acrylic Top Coat SIKAUSA.COM
 - c. Provide non-slip aggregate

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that floor surfaces are acceptable to receive the work of this section.
- B. Verify that flaws in concrete have been patched and joints filled with methods and materials suitable for further finishes.

3.2 GENERAL

A. Apply materials in accordance with manufacturer's instructions.

3.3 COATING APPLICATION

- A. Verify that surface is free of previous coatings, sealers, curing compounds, water repellents, laitance, efflorescence, fats, oils, grease, wax, soluble salts, residues from cleaning agents, and other impediments to adhesion.
- B. Powerwash the exisiting ramp to prepare same to Mfg. requirements for placemnt of material coatings.
- C. Protect adjacent non-coated areas from drips, overflow, and overspray; immediately remove excess material.
- D. Apply coatings in accordance with manufacturer's instructions, matching approved mock-ups for color, special effects, non-slip surface sealing and workmanship.

END OF SECTION

MAINTENANCE AND RESTORATION OF MASONRY

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Dust control.
- B. Removal and Replacement of patio pavers units.
- C. Removal and rebuilding of exterior Patio Masonry Walls units where indicated on drawings.
- D. Paint cleaning of Kindergarten Patio Masonry Wall surfaces. ALTERNATE
- E. Repointing mortar joints where indicated.
- F. Patching and coating existing concrete base, see 09 9723
- G. Remove and reset existing cast stone where shown on drawings.
- H. Repointing and Restoration of existing stone landings and stone stairs as indicated on drawings.
- I. Concealed flashings.
- J. Joint Fillers and Accessories.
- K. Anchors.
- L. Rebar

1.3 RELATED REQUIREMENTS

- A. Section 01 2100 Allowances.
- B. 01 2300 Alternates
- C. Section 01 5000 Temporary Facilities and Controls.
- D. Section 04 2000 Unit Masonry: Brick masonry units.
- E. Section 04 2000 Unit Masonry: Mortar and grout.
- F. Section 07 9005 Joint Sealers.

1.4 REFERENCE STANDARDS

- A. ACI 530/530.1/ERTA Building Code Requirements and Specification for Masonry Structures and Related Commentaries; 2011.
- B. ACI 530.1/ASCE 6/TMS 602 Specification for Masonry Structures; American Concrete Institute International; 2008.
- C. IMIAWC (CW) Recommended Practices & Guide Specifications for Cold Weather Masonry Construction; International Masonry Industry All-Weather Council; 1993.
- D. IMIAWC (HW) Recommended Practices & Guide Specifications for Hot Weather Masonry Construction; International Masonry Industry All-Weather Council; current edition.
- E. New York State Parks, Recreation & Historic Preservation Brief #2 Guidelines.

1.5 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on cleaning compounds and all material, including recommended installation procedures.
- C. Samples: Submit four samples of face brick units to illustrate matching color, texture and extremes of color range.

- 1. For each type of mortar provide 6 inch long by 1/2 inch wide sample strips set in metal or plastic channels.
- D. Manufacturer's Instructions: For cleaning materials, indicate special procedures, conditions requiring special attention.
- E. Test reports and certifications substantiating compliance with specification requirements.
- F. Material Safety Data Sheets.

1.6 QUALITY ASSURANCE

- A. Contractor Qualification: The contractor shall be a restoration specialist, with a minimum of five years experience, experienced masonry restoration and cleaning firm to perform work of this Section. Firm shall have completed work similar in material, design, and extent to that indicated for this Project with a record of successful in-service performance.
 - 1. Submit a reference list which shall include at a minimum, the completion date, a description of the work performed, the Owner's name contact person phone number and address and the Architect's name contact person and phone number
 - 2. Field Supervision: Restoration specialist firms shall maintain experienced full-time supervisors on Project site during times that clay masonry restoration and cleaning are in progress. Supervisors shall not be changed during Project except for causes beyond the control of restoration specialist firm.
 - 3. Restoration Worker Qualifications: Persons who are experienced and specialize in restoration work of types they will be performing.
 - 4. The installer shall directly employ the personnel performing the work of this section.
 - a. Installer certification: All repairs shall be performed by a trained installer holding a Training Workshop Certificate from Cathedral Stone Products, Inc.. Contractor shall maintain proof of this credential for each installer at the site at all times
- B. Source Limitations: Obtain each type of material for masonry restoration (face brick, cement, sand, etc.) from one source with resources to provide materials of consistent quality in appearance and physical properties.
- C. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect the substrate before application of each product and to instruct applicator on the product and application method to be used.

1.7 MOCK-UP

- A. For repointing provide 4 foot square mockups to show how the joints will be cut, and 4 foot square mockups to show new pointing
 - 1. Joint repointing shall be performed within 10 days of the award of contract in order to permit maximum drying time for mortar.
- B. The purpose of each mock up is to establish the minimum acceptable standard of materials and workmanship and to assure that completed installations based on the mock ups will be fully functional and serve the purpose for which they have been designed
- C. Clean a 10 ft by 10 ft panel of wall to determine extent of cleaning.
 - 1. Repeat, using different cleaning methods for up to three different panels.
- D. Locate where directed.
- E. Allow samples to cure at least three days (or longer, if possible) before obtaining Owner's approval for color match. Mortar colors will continue to lighten as they cure and are exposed to the weather, so samples should be installed as far in advance as possible. Samples should be viewed from a minimum distance of 12 feet.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Deliver material to the site in the Manufacturer's original and unopened containers and packaging, bearing labels which identify the type and names of the products and Manufacturers. Unload and handle to prevent chipping and breakage.

1.9 FIELD CONDITIONS

- A. Maintain materials and surrounding air temperature to minimum 40 degrees F prior to, during, and 48 hours after completion of masonry work.
- B. Maintain materials and surrounding air temperature to maximum 90 degrees F prior to, during, and 48 hours after completion of masonry work.
- C. Prevent mortar from staining the face of surrounding masonry and other building surfaces, immediately remove any which falls or spills. Protect sills, ledges and projections from mortar droppings.
- D. Coordinate masonry removal and restoration with the installation of new metal and membrane flashings.

1.10 GUARANTEE

- A. Provide a Contractor's written Guarantee which warrants that all work will remain free of material and workmanship defects and in a watertight condition for a two year period beginning upon Final Completion:
 - 1. Defective work includes but is not limited to the following types of failure: leakage, delamination, lifting, loosening, splitting, cracking, and undue expansion.
 - 2. The Contractor's Guarantee shall provide that the Contractor will make the repairs and modifications necessary to enable the work to perform as warranted at his own expense:
- B. The Contractor's Guarantee shall be issued no more than 30 days before the satisfactory completion of punch list work.
- C. The Contractor's Surety Company may add a rider to the Performance Bond which clarifies that Bond Coverage expires two years after Final Completion; i.e., Performance Bond Coverage does not run for the entire five year term of the Contractor's Guarantee

PART 2 PRODUCTS

2.1 CLEANING MATERIALS

- A. Cleaning Agent:ProSoCo; Sure Klean Light-Duty Restoration Cleaner Cathedral Stone.Syra G. by Cathedral Stone® Products, Inc
 - 1. Application: General Cleaning of existing masonry units.
- B. Paint and Graffiti Removal: ProSoCo EnviroKlean Saf Strip
 - 1. Application: Removal of paint and graffiti areas
- C. Paint and Graffiti Removal: Diedrich 505 Special Coatings Sripper, www.diedrichtechnologies.com.
 - 1. Application: Removal of graffiti areas.

2.2 MASONRY MATERIALS

- A. Brick: Section 04 2000.
- B. Granite Stone to match existing
- C. Blue Stone to match exisitng

2.3 MATERIALS

- A. Provide units with colors, surface texture, and physical properties to match existing units in size and shape.
 - 1. For sample that exhibits a range of colors, provide brick that matches that range rather than brick that matches an individual color within that range.
 - 2. Provide special shapes as indicated and required to match existing.

- B. Brick shall be clay or shale, ASTM C216, Type FBS. Brick shall be tested for efflorescence in accordance with ASTM Test Methods C67 and the rating shall be "Not Effloresce".
- C. Setting Mortar, Repointing Mortar and Pointing Mortar:
 - 1. Pre Blended:
 - a. Type N for setting mortar.
 - 2. Aggregate for Mortar: ASTM C 144; except for joints less than 1/4 inch thick, use aggregate graded with 100 percent passing the No. 16 sieve.
 - 3. Aggregate for Grout: ASTM C 404.
 - 4. Coloring Pigment: ASTM C979.
- D. Paver Joint Repair: Mixture of sand and additives designed for paving stone joints.
 - 1. Product: Paver Set Sand as manufactured by Sakrete Companies 866.725.7383

2.4 MASONRY ANCHORS

- A. Restoration Anchors: Friction Pinning Anchor for anchoring existing brick to backup masonry, stainless steel, 5/16" x 7-3/4".
 - 1. #DA508 by Duro-Wall Masonry Accessories.
- B. Dowels: Round stainless-steel bars complying with ASTM A 276, Type 304, 1/2-inch diameter.
 - 1. Heckmann #177
- C. Joint Reinforcement: #120 H & B. single wythe stainless steel

2.5 ACCESSORIES

- A. Sealant Refer to Section 07 9005 Joint Sealers.
- B. Plastic Shims: Copolymer plastic material. No.185-P by Heckman Building Products. Size and thickness as required.
- C. Weep vents: Cellular, honeycomb design, polypropylene weep vents for embedding in masonry wall mortar joints;
 - 1. Material: High density polyethylene and impervious to water and resistant to UV degradation.
 - 2. Mortar Maze Weep Vent System as manufactured by Advanced Building Products, Inc :
 - 3. High Impact polystyrene MTI Cavity Weep #CV5010.
- D. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 deformed bars
- E. Joint Filler: Closed cell polyvinyl chloride; oversized 50 percent to joint width; self expanding; 3/4" inch wide x 3" high by maximum lengths available.
 - 1. Manufacturers:
 - a. Hohmann & Barnard, Inc; Product MS: www.h-b.com.
 - b. Substitutions: See Section 01 6000 Product Requirements.
- F. Polyethylene Backer Rod: Closed-cell extruded low density polyethylene foam.

2.6 EMBEDDED FLASHING MATERIALS

- A. Flashing: For flashing not exposed to the exterior, use the following, unless otherwise indicated:
 - 1. Sheet Copper Flashing: Type: 5 layers, flexible flashing consisting of copper sheet bonded on both sides to asphalt coated glass fabric; Advanced Copper Fabric as manufactured by Advanced Building Products, Inc.
 - a. Characteristics: Waterproof, flexible, high tensile strength, resistant to mortar acid and alkali action, allowing minimum thermal cold flow through structure, and textured surface promoting mortar joint bonding.
 - b. Copper sheet: Full, single copper sheet weighing 5 ounces per square foot and complying with ASTM B370.

- c. Coating: Asphalt bonded to copper and covered with coarsely woven, heavy glass fabric reinforcing.
- d. Flashing mastic: Fibrated, trowel grade mastic consisting of asphalt, mineral stabilizers, and complying with ASTM D2822, Type 1; Cop-R-Tite Flashing Mastic as manufactured by Advanced Building Products, Inc.

2.7 MORTAR MIXES

- A. Comply with ASTM C 270, Proportion Specification
 - 1. Setting mortar, use Type N.
 - 2. Pointing mortar Type N.
 - a. Verify strength of existing mortar. New mortar shall not exceed strength of existing mortar
- B. Measurement and Mixing: Measure cementitious materials and sand in a dry condition by volume or equivalent weight. Do not measure by shovel; use known measure. Mix materials in a clean, mechanical batch mixer
 - Mixing Pointing Mortar: Thoroughly mix cementitious materials and sand together before adding
 any water. Then mix again adding only enough water to produce a damp, unworkable mix that will
 retain its form when pressed into a ball. Maintain mortar in this dampened condition for 15 to 30
 minutes. Add remaining water in small portions until mortar reaches desired consistency. Use
 mortar within one hour of final mixing; do not retemper or use partially hardened material
- C. Do not use admixtures of any kind in mortar, unless otherwise indicated.
- D. Mortar Proportions: Mix mortar materials in the following proportions
 - 1. Pointing Mortar for Terra Cotta: Comply with manufacturer's requirements and ASTM C 270.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that surfaces to be cleaned and restored are ready for work of this section.

3.2 PREPARATION

- A. Protect surrounding elements from damage due to restoration procedures.
- B. Carefully remove and store removable items located in areas to be restored, including copings, paver units and stone treads; reinstall upon completion.
- C. Separate areas to be protected from restoration areas using means adequate to prevent damage.
- D. Cover existing landscaping with tarpaulins or similar covers.
- E. Mask immediately adjacent surfaces with material that will withstand cleaning and restoration procedures, including:
 - 1. Windows.
 - 2. Soft joints and sealants.
 - 3. Door frames.
 - 4. Vents, louvers and grills
- F. When using cleaning methods that involve water or other liquids, install drainage devices to prevent runoff over adjacent surfaces unless those surfaces are impervious to damage from runoff.
- G. Do not allow cleaning runoff to drain into sanitary or storm sewers.

3.3 BRICK REMOVAL AND REPLACEMENT

- A. Cut out or remove damaged, leaning and deteriorated masonry with care in a manner to prevent damage to any adjacent remaining materials.
- B. Support structure as necessary in advance of cutting out units.
- C. The Contractor is responsible for performing Work in a safe manner. Provide temporary shoring or other supports as required to prevent displacement of existing masonry that is to remain. Perform the removal

FULLER AND D'ANGELO, PC ARCHITECTS AND PLANNERS

Work with such care as may be required to prevent failure of the masonry or damage to adjoining masonry that is to remain.

- D. Cut away loose or unsound adjoining masonry and mortar to provide firm and solid bearing for new work. Bearing is to be on exsiting concrete foundation.
- E. Use power tools only after test cuts determine no damage to masonry units will result. Provide vacuum attachment for all grinding/cutting equipment for dust control purposes.
- F. Do not damage masonry units.
- G. When cutting is complete, remove dust and loose material brushing and with air jet.
- H. Build in new units following procedures for new work.
- I. Mortar Mix: Colored and proportioned to match existing work.
- J. Ensure that anchors, ties, reinforcing, and flashings are correctly located and built in.
- K. Install built in masonry work to match and align with existing, with joints and coursing true and level, faces plumb and in line. Build in all openings, accessories and fittings. Use a motor driven diamond blade saw to cut bricks with clean, sharp, unchipped edges.
- L. Install through wall flashings properly connected to the existing wall as indicated. before installing the new bricks
- M. Wet brick which have initial rates of absorption (suction) of more than 30 grams per 30 square inches per minute, (in accordance with ASTM C 67), to ensure the bricks are nearly saturated with water, but surface dry when laid
- N. Lay replacement brick with completely filled bed, head, and collar joints. Butter ends with sufficient mortar to fill head joints and shove into place. Wet both replacement and surrounding bricks that have ASTM C 67 initial rates of absorption (suction) of more than 30 g/30 sq. in. per min. Use wetting methods that ensure that units are nearly saturated but surface is dry when laid. Maintain joint width for replacement units to match existing joints
- O. Install metal wall ties as indicated.
- P. Rake out mortar used for laying brick before mortar sets and point new mortar joints in repaired area to comply with requirements for repointing existing masonry, and at same time as repointing of surrounding area
- Q. Tool exposed mortar joints in repaired areas to match joints of surrounding existing brick work

3.4 REPOINTING

- A. Perform test mock-up in area directed by the Architect. Contractor shall not proceed until mock-up and methods are approved.
- B. Perform repointing prior to cleaning masonry surfaces.
- Cut out loose or disintegrated mortar in joints to minimum 3/4 inch depth or until sound unweathered mortar is reached.
 - 1. Test mock-up shall be performed in area directed by the Architect. Contractor shall not proceed until mock-up and methods are approved.
 - 2. Use power tools only after test cuts determine no damage to masonry units will result.
 - 3. Provide vacuum attachment for all grinding/cutting equipment for dust control purposes.
- D. Do not damage masonry units.
- E. When cutting is complete, remove dust and loose material with air jet.
- F. Pack tightly in maximum 1/4 inch layers. Form a smooth, compact joint to match existing.
- G. Slightly recess pointing mortar from the faces of the masonry units where the units have rounded edges. Do not spread mortar on the edges or faces of the masonry. Do not featheredge the mortar.

- H. Tool repointed joints to match the appearance of adjoining joints when the mortar is thumbprint hard. Remove excess mortar from the edges of the joints with a soft bristle brush.
- I. Moist cure for 72 hours.
- J. Clean repointed area minimum 24" each side of repointed joints.
 - Immediately after the mortar has fully hardened, thoroughly clean exposed masonry surfaces of
 excess mortar and foreign matter using stiff nylon or bristle brushes and clean water, spray applied
 at low pressure.
 - 2. Do not use metal scrapers or brushes. Do not use acid or alkali cleaning agents

3.5 STONE LANDING AND TREAD REMOVAL AND REPLACEMENT

- A. Carefully remove the existing stones and mortar setting beds from landings and stair treads as indicated. Mark, save and set the stones aside for reuse.
- B. Remove and reset loose stones adjacent to those removed. Fill voids in setting bed.
- C. Reset stones to match original placement and layout.
- D. Perform Repointing and Pointing with mortar for landing and treads as indicated
- E. Wash and clean down areas.
- F. Provide Mortar, filled joints between all coping sections

3.6 SETTING CAST STONE IN MORTAR

- A. Set cast stone as indicated on Drawings. Set units accurately in locations indicated with edges and faces aligned according to established relationships and indicated tolerances.
 - 1. Install anchors, supports, fasteners, and other attachments indicated or necessary to secure units in place.
 - 2. Shim and adjust anchors, supports, and accessories to set cast stone in locations indicated with uniform joints.
 - 3. Set cast stone supported on clip or continuous angles on resilient setting shims. Use material of thickness required to maintain uniform joint widths. Hold shims back from face of cast stone a distance at least equal to width of joint.
 - 4. Wet joint surfaces thoroughly before applying mortar or setting in mortar.
 - 5. Drench units with clear water just before setting.
- B. Set units in full bed of mortar with full head joints, unless otherwise indicated. Build anchors and ties into mortar joints as units are set.
 - 1. Set dowels with epoxy grout.
 - 2. Fill collar joint solid as units are set.
 - 3. Build concealed flashing into mortar joints as units are set.
 - 4. Install weeps as manufacturer's instructions.
 - Keep head joints in coping and other units with exposed horizontal surfaces open to receive sealant.
 - 6. Keep joints at shelf angles open to receive sealant.
- C. Rake out joints for pointing with mortar to depths of not less than ¾ inch (19 mm). Rake joints to uniform depths with square bottoms and clean sides. Scrub faces of units to remove excess mortar as joints are raked.
- D. Point mortar joints by placing and compacting mortar in layers not greater than 3/8 inch (10 mm). Compact each layer thoroughly and allow it to become thumbprint hard before applying next layer.
- E. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness, unless otherwise indicated.
 - 1. For coping joints provide backer rod and sealant for all joints as indicated...

F. Fill anchor holes with epoxy grout.

3.7 CONCRETE PATCHING AND RESURFACING

- A. Remove all existing loose concrete.
- B. Patch existing holes and surface as required.
- C. Apply resurfacing material in accordance with manufacturer's instruction.

3.8 STONE JOINT REPAIR

- A. Remove existing joint material minimum 1" deep.
- B. Surface shall be cleaned and dry.
- C. Pour material on clean, dry surface.
- D. Sweep polymeric sand into joints, filling completely.
- E. Compact sand in joints.
- F. Remove excess sand from surface before wetting.
- G. Use blower and remove fine dust particles.
- H. Spray using a mist (avoid spraying into joints or flooding).
- I. Repeat spraying a minimum of 4 applications at 10-20 minute intervals

3.9 PREPARATION AND RECAULKING

- A. Carefully remove existing sealant and back up material from within masonry control / expansion joints to a minimum depth of 1-1/2 inches, and from the surface of the masonry at the edges of the joints.
 - 1. Use hand tools and work to avoid damage to the adjoining masonry.
 - 2. Replace adjoining masonry damaged during sealant removal work.
- B. Install new backer rod without puncturing or tearing it, to snuggly fill the joint, at a depth to yield a sealant joint twice as wide as it is deep.
- C. Do not twist backer rods, or install multiple pieces of undersized rod, when the correct rod is not on-site.
- D. Mask the edges of all joints prior to installing sealant.
- E. Push sealant into the joint to completely fill it, tool the sealant to produce a slightly concave, neat recessed joint, and remove joint masking before excess sealant sets

3.10 CLEANING EXISTING BRICK MASONRY

- A. Preliminary Cleaning: Before beginning general cleaning, remove extraneous substances that are resistant to cleaning methods being used. Extraneous substances include paint, calking, asphalt, and tar
- B. Test surface for cleaning effectiveness.
- C. Cleaning Detergent: Brush clean masonry surfaces at locations with cleaning agent in accordance with the manufacturer's instructions. Saturate masonry with clean water and flush loose mortar and dirt.
- D. Masonry Washing: Apply 400-1000 psi pressure, water flow rate of 6-8 gallons per minute, to masonry surfaces, maintaining uniform depth and surface texture throughout. Use 15-45 degree fan spray. If required heat water to 150-180 degree.
- E. Application: Work from bottom to top, pre wetting surfaces
 - 1. Let dwell 5 to 15 minutes. Do not let let cleaner dry on the surface.
 - 2. Work from bottom to top and rinse
 - 3. Repeat steps as required.

3.11 CLEANING NEW BRICK MASONRY

- A. Verify mortar is fully set and cured.
- B. Test surface for cleaning effectiveness.

- C. Clean surfaces and remove large particles with wood scrapers, brass or nylon wire brushes.
- D. Scrub walls with cleaning agent solution using stiff brush. Thoroughly rinse and wash off cleaning solution, dirt and mortar crumbs using clean, pressurized water.
- E. Protect area below cleaning operation and keep masonry soaked with water and flushed free of acid and dissolved mortar continuously for duration of cleaning.
- F. Before solution dries, rinse and remove acid solution and dissolved mortar, using clean, pressurized water.
 - 1. Apply 400-1000 psi pressure, water flow rate of 6-8 gallons per minute, to masonry surfaces, maintaining uniform depth and surface texture throughout. Use 15-45 degree fan spray. If required heat water to 150-180 degree.
 - 2. Let dwell 3 to 5 minutes. Do not let let cleaner dry on the surface. Fresh water rinse the surfaces below areas being cleaned to prevent streaking.
 - 3. Repeat steps as required

3.12 EXPANSION JOINTS

- A. At existing expansion joints remove existing material to a minimum of 2" depth.
- B. Install closed cell backer rod.
- C. Install continuous bead of sealant.
- D. Tape for neat appearance.
- E. Tool to provide tight bond.

3.13 FIELD QUALITY CONTROL

- A. Inspectors: Owner will engage qualified inspectors to perform inspections and prepare test reports. Allow inspectors use of lift devices and scaffolding, as needed, to perform inspections.
- B. Notify Architect and Owner in advance of times when lift devices and scaffolding will be relocated. Do not relocate lift devices and scaffolding until inspectors have had reasonable opportunity to make inspections and observations of work areas at lift device or scaffold location.

3.14 CLEANING

- A. Immediately remove stains, efflorescence, or other excess resulting from the work of this section.
- B. Remove excess mortar, smears, and droppings as work proceeds and upon completion.
- C. Clean surrounding surfaces.

END OF SECTION

UNIT MASONRY

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Concrete Block.
- B. Clay Facing Brick.
- C. Reinforcement and Anchorage.
- D. Flashings.
- E. Accessories.

1.3 RELATED REQUIREMENTS

- A. Section 04 0511 Mortar and Masonry Grout.
- B. Section 07 1300 Sheet Waterproofing
- C. Section 07 9200 Joint Sealants: Sealing control and expansion joints.

1.4 REFERENCE STANDARDS

- A. TMS 402/602 Building Code Requirements and Specification for Masonry Structures; 2016.
- B. ASTM A82/A82M Standard Specification for Steel Wire, Plain, for Concrete Reinforcement; 2007.
- C. ASTM A153/A153M Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.
- D. ASTM A580/A580M Standard Specification for Stainless Steel Wire; 2015.
- E. ASTM A615/A615M Standard Specification for Deformed and Plain Carbon Steel Bars for Concrete Reinforcement; 2015.
- F. ASTM C67 Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile; 2014.
- G. ASTM C90 Standard Specification for Loadbearing Concrete Masonry Units; 2014.
- H. ASTM C129 Standard Specification for Nonloadbearing Concrete Masonry Units; 2011.
- ASTM C140/C140M Standard Test Methods of Sampling and Testing Concrete Masonry Units and Related Units; 2014.
- J. ASTM C144 Standard Specification for Aggregate for Masonry Mortar; 2011.
- K. ASTM C150/C150M Standard Specification for Portland Cement; 2015.
- L. ASTM C207 Standard Specification for Hydrated Lime for Masonry Purposes; 2006 (Reapproved 2011).
- M. ASTM C216 Standard Specification for Facing Brick (Solid Masonry Units Made From Clay or Shale); 2014.
- N. ASTM C270 Standard Specification for Mortar for Unit Masonry; 2014a.
- O. ASTM C404 Standard Specification for Aggregates for Masonry Grout; 2011.
- P. BIA Technical Notes No. 7 Water Penetration Resistance Design and Detailing; 2005.
- Q. BIA Technical Notes No. 28B Brick Veneer/Steel Stud Walls; 2005.
- R. BIA Technical Notes No. 46 Maintenance of Brick Masonry; 2005.

1.5 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

- B. Product Data: Provide data for masonry units, fabricated wire reinforcement, mortar, and masonry accessories.
- C. Samples: Submit four samples of facing brick units to illustrate color, texture, and extremes of color range.
- D. Manufacturer's Certificate: Certify that masonry units meet or exceed specified requirements.

1.6 QUALITY ASSURANCE

- Comply with provisions of ACI 530/530.1/ERTA, except where exceeded by requirements of the contract documents.
- B. Installer Qualifications: Company specializing in performing work of the type specified and with at least five years of documented experience in work of similar size, scope and complexity.
- C. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum five (5) years of documented experience.
- D. Source Limitations for Masonry Units: Obtain exposed masonry units of a uniform texture and color, or a uniform blend within the ranges accepted for these characteristics, through one source from a single manufacturer for each product required

1.7 MOCK-UP

- A. Locate where directed.
- B. Mock-up may remain as part of the Work.
- C. Build mockup of typical wall area as directed by Architect.
- D. Build mockups for the following types of masonry in sizes approximately 96 inches long by 72 inches high by full thickness, including face and backup wythes and accessories. Include a sealant-filled joint at least 16 inches long in each mockup.
 - 1. Each type of exposed unit masonry construction.
 - 2. Typical exterior wall with lower corner of window opening framed with stone trim at upper corner of mockup. Make opening approximately 12 inches wide by 16 inches high. Show jamb construction, special coursing and bands.
 - 3. Typical exterior wall with through-wall flashing installed for a 24-inch length in corner of mockup approximately 16 inches down from top of mockup, with a 12-inch length of flashing left exposed to view (omit masonry above half of flashing).
 - 4. Typical steel stud framing or masonry backup..
 - 5. Show cavity insulation, joint reinforcing, drainage board, mortar net and weeps.
 - 6. Typical interior unit masonry wall, where exposed.
- E. Clean exposed faces of mockups with masonry cleaner as indicated.
- F. Where masonry is to match existing, erect mockups adjacent and parallel to existing surface.
- G. Notify Architect seven days in advance of dates and times when mockups will be constructed.
- H. Protect accepted mockups from the elements with weather-resistant membrane.
- I. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
- J. Approval of mockups is for color, texture, and blending of masonry units; relationship of mortar and sealant colors to masonry unit colors; tooling of joints; and aesthetic qualities of workmanship.
 - 1. Approval of mockups is also for other material and construction qualities specifically approved by Architect in writing.
 - 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups, unless such deviations are specifically approved by Architect in writing.
- K. Demolish and remove mockups when directed

1.8 PRE-INSTALLATION MEETING

A. A pre-installation meeting will be held as part of a job meeting with contractor and masonry sub-contrator.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, handle, and store masonry units by means that will prevent mechanical damage and contamination by other materials.
- B. Store masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry.
- C. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- D. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
- E. Deliver pre blended, dry mortar mix in moisture-resistant containers designed for lifting and emptying into dispensing silo. Store pre blended, dry mortar mix in delivery containers on elevated platforms, under cover, and in a dry location or in a metal dispensing silo with weatherproof cover.
- F. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil
- G. Protection of Masonry: During construction, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work. Cover partially completed masonry when construction is not in progress.
 - 1. Extend cover a minimum of 24 inches down both sides and hold cover securely in place.
 - 2. Where one wythe of multi wythe masonry walls is completed in advance of other wythes, secure cover a minimum of 24 inches down face next to un constructed wythe and hold cover in place.
- H. Do not apply uniform floor or roof loads for at least 12 hours and concentrated loads for at least 3 days after building masonry walls or columns.
- I. Stain Prevention: Prevent grout, mortar, and soil from staining the face of masonry to be left exposed or painted. Immediately remove grout, mortar, and soil that come in contact with such masonry.
 - 1. Protect base of walls from rain-splashed mud and from mortar splatter by coverings spread on ground and over wall surface.
 - 2. Protect sills, ledges, and projections from mortar droppings.
 - 3. Protect surfaces of window and door frames, as well as similar products with painted and integral finishes, from mortar droppings.
 - 4. Turn scaffold boards near the wall on edge at the end of each day to prevent rain from splashing mortar and dirt onto completed masonry.
- J. Hot-Weather Requirements: Protect unit masonry work when temperature and humidity conditions produce excessive evaporation of water from mortar and grout. Provide artificial shade and wind breaks and use cooled materials as required.
 - When ambient temperature exceeds 100 deg F, or 90 deg F with a wind velocity greater than 8 mph, do not spread mortar beds more than 48 inches ahead of masonry. Set masonry units within one minute of spreading mortar.
 - a. Verify moister content in brick. If dry wet bricks prior to installation.
 - a) Comply with the requirements of IMIAC
- K. Under no circumstances shall masonry installation cease or delayed due to the weather conditions. Installation shall continue using procedures listed above.

PART 2 PRODUCTS

2.1 CONCRETE MASONRY UNITS

A. Concrete Block: Comply with referenced standards and as follows:

- 1. Size: Standard units with nominal face dimensions of 16 by 8 inches and nominal depths as indicated on the drawings for specific locations.
- 2. Load-Bearing Units: ASTM C90, normal weight.
 - a. Hollow block, as indicated.
 - b. Exposed Faces: Paint will be applied and smototh texture, is required.

2.2 BRICK UNITS

- A. Facing Brick: ASTM C216, Type FBS Smooth, Grade SW.
 - 1. Color and texture to match Fuller and D'Angelo, P.C.'s sample.
 - 2. Nominal size: As indicated on drawings.
 - 3. Special shapes: Molded units as required by conditions indicated, unless standard units can be sawn to produce equivalent effect.
 - 4. Compressive strength: 14,000 psi, measured in accordance with ASTM C67.
 - 5. Initial Rate of Absorption: Less than 15 g/30 sq. in. per minute when tested per ASTM C 67.
 - 6. Efflorescence: Provide brick that has been tested according to ASTM C 67 and is rated "not effloresced."
 - 7. Surface Coloring: Brick with surface coloring, other than flashed or sand-finished brick, shall withstand 50 cycles of freezing and thawing per ASTM C 67 with no observable difference in the applied finish when viewed from 10 feet

2.3 REINFORCEMENT AND ANCHORAGE

- A. Manufacturers:
 - 1. Hohmann & Barnard, Inc; 130 Tri Mesh: www.h-b.com/sle.
 - 2. WIRE-BOND: www.wirebond.com.
- B. Reinforcing Steel: ASTM A615/A615M, Grade 40 (40,000 psi), deformed billet bars; galvanized.
- C. Multiple Wythe Joint Reinforcement: Truss type; fabricated with moisture drip; stainless steel wire conforming to ASTM A 580/A 580M Type 304; 0.1875 inch side rods with 0.1875 inch cross rods; width as required to provide not more than 1 inch and not less than 1/2 inch of mortar coverage on each exposure. Flush weld all keys.
 - 1. Hohmann & Barnard #170L.
- D. Strap Anchors: Bent steel shapes configured as required for specific situations, 1-1/4 in width, 0.105 in thick, lengths as required to provide not more than 1 inch and not less than 1/2 inch of mortar coverage from masonry face, corrugated for embedment in masonry joint, stainless steel.
 - 1. Use Notched Column # 345 BT Flex Tie Homann & Barnard where required
- E. Masonry Veneer Anchors: 2-piece anchors that permit differential movement between masonry veneer and structural backup, stainless steel.
 - 1. Anchor plates: Not less than 0.105 inch thick, designed for fastening to structural backup through sheathing by two fasteners; provide design with legs that penetrate sheathing and insulation to provide positive anchorage.
 - 2. Wire ties: Manufacturer's standard shape, 0.1875 inch thick.
 - 3. Vertical adjustment: Not less than 2 inches.
- F. Spring Load Dowel: 3/8" x 3", stainless steel rod witn 3-1/2: stainsess steel spring.
 - 1. #355 Heckmann Building Products.
- G. Top pinning coping Dowel
 - 1. Provide vertical anchor pins, 3'OC 1/4" stainless steel imbed into masonry and bluestone

2.4 FLASHINGS

A. Flexible Flashing with Elvaloy KEE: Solid-phase plasticizer and flexibilizer added to membrane flashing.

- 1. Surface adhered composite membrane flashing: 40 mil. Polymeric, reinforced membrane with Elvaloy KEE. Use only where flashing is fully concealed in masonry.
 - a. Available Products:
 - a) Hyload, Inc.; Hyload Flashing Membrane, color-Tan.
 - b) Provide adhesives, preformed shapes for outside, inside and end dams. as recommended by the manufacturer.
 - c) Verify sealants specified in 07900 compatable with flashings.
 - d) Use at top of wall leave short of exterior.
- B. Flexible Flashing Membrane For Steel Lintel Flashing if required
 - 1. Suface Adhered composite flashing, 40-mil thick membrane polyester scrim reinforced formulated with Elvaloy® Kee.
 - Provide primers, adhesives, pre-formed inside and outside corners and dams as recommended by the manufacturer.
 - 3. Verify sealants specified in Section 07 9005 Joint Sealers are compatable with flashing.
 - 4. Termination Bars: 1/8" Stainless steel.
 - 5. Manufacturers:
 - a. Hohmann & Barnard, Inc; Flex-Flash, with Foam-Tite Seal.: www.h-b.com/sle.
 - Product

2.5 ACCESSORIES

- A. Preformed Control Joints: Rubber material. Provide with corner and tee accessories, fused joints.
 - 1. Manufacturers:
 - a. Hohmann & Barnard, Inc; RS Series as needed: www.h-b.com/sle. RS- 12
- B. Joint Filler: Closed cell polyvinyl chloride; oversized 50 percent to joint width; self expanding; _____ inch wide by maximum lengths available.
- C. Type: Molded PVC grilles, insect resistant.
 - 1. Manufacturers:
 - a. CavClear/Archovations, Inc: www.cavclear.com.
 - b. Heckman Building Products:Inc.: Core/Cavity Vent Weep System..
 - a) Location: Bed joints of cast stone. Between brick and CMU units.
- D. Epoxy-Coated Reinforcing Bars: ASTM A 615/A 615M, Grade 60 deformed bars epoxy coated, with less than 2 percent damaged coating in each 12-inch (300-mm) bar length. For Vertical Wall reinforcement 24" OC
- E. Cleaning Solution: Non-acidic, not harmful to masonry work or adjacent materials.
 - 1. Prepare 1 set of prisms for testing at 7 days and 1 set for testing at 28 days.
 - a. Dimensional Stability: 2.0 as per ASTM D-2126.
 - b. Linear Coefficient of thermal expansion: 2.7 x 105
 - c. Flame Spread: 5 as per ASTM E-84.
 - d. Smoke Developed: 45-175 as per ASTM E-84.
 - e. Oxygen Index: 24 Min. as per ASTM D-2863
- F. Reinforcing Bar Positioners: Wire units designed to fit into mortar bed joints spanning masonry unit cells with loops for holding reinforcing bars in center of cells. Units are formed from 0.142-inch steel wire, hot-dip galvanized after fabrication.
 - 1. Provide units with either two loops or four loops as needed for number of bars indicated.
 - a. Hohmann & Barnard, Inc. #RB Rebar Positionerl
 - b. Hohmann & Barnard, Inc. #RB-Twin Rebar Positioner
- G. Mortar Grout Screen: 1/4" square screen high strength non-corrosive polypropylene polymers.

MSG Hohmann & Barnard, Inc.l

2.6 MASONRY CLEANERS

- A. Manufacturer's standard-strength cleaner designed for removing mortar/grout stains, efflorescence, and other new construction stains from new masonry without discoloring or damaging masonry surfaces. Use product expressly approved for intended use by cleaner manufacturer and manufacturer of masonry units being cleaned.
 - 1. Products: :
 - a. Cleaners for Red and light-colored Brick Not Subject to Metallic Staining with Mortar Not Subject to Bleaching:
 - a) Diedrich Technologies, Inc. 202 New Masonry Detergen
 - b) ProSoCo, Inc.Sure Klean No. 600 Detergent
 - b. Cleaners for Red and Dark-Colored Brick Not Subject to Metallic Staining:
 - a) Diedrich Technologies, Inc 200 Lime Solv.
 - b) ProSoCo., Inc Sure Klean No. 101 Lime Solvent.
 - c. Cleaners for Brick Subject to Metallic Staining:
 - a) Diedrich Technologies, Inc 202V Vana-Stop.
 - b) ProSoCo, Inc Sure Klean Vana Trol.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive masonry.
- B. Verify that related items provided under other sections are properly sized and located.
- C. Verify that built-in items are in proper location, and ready for roughing into masonry work.

3.2 PREPARATION

- A. Direct and coordinate placement of metal anchors supplied for installation under other sections.
- B. Provide temporary bracing during installation of masonry work. Maintain in place until building structure provides permanent bracing.

3.3 COURSING

- A. Establish lines, levels, and coursing indicated. Protect from displacement.
- B. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.
- C. Align courses to fit Reinforcing
- D. Concrete Masonry Units:
 - 1. Bond: Running.
 - 2. Coursing: One unit and one mortar joint to equal 8 inches.
 - 3. Mortar Joints: Flush.
- E. Brick Units:
 - 1. Bond: Running.
 - 2. Coursing: Three units and three mortar joints to equal 8 inches.
 - 3. Mortar Joints: Concave.

3.4 PLACING AND BONDING

- A. Lay solid masonry units in full bed of mortar, with full head joints, uniformly jointed with other work.
- B. Lay hollow masonry units with face shell bedding on head and bed joints.
- C. Buttering corners of joints or excessive furrowing of mortar joints is not permitted.
- D. Remove excess mortar and mortar smears as work progresses.

- E. Do not shift or tap masonry units after mortar has achieved initial set. Where adjustment must be made, remove mortar and replace.
- F. Perform job site cutting of masonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.
- G. Isolate masonry partitions from vertical structural framing members with a control joint as indicated.

3.5 WEEPS/CAVITY VENTS

A. Install cavity vents in veneer walls at 32 inches on center horizontally near top of walls.

3.6 REINFORCEMENT AND ANCHORAGE - GENERAL

- A. Unless otherwise indicated on drawings or specified under specific wall type, install horizontal joint reinforcement 24 inches on center.
- B. Place masonry joint reinforcement in first and second horizontal joints above and below openings. Extend minimum 16 inches each side of opening.
- C. Place continuous joint reinforcement in first and second joint below top of walls.
- D. Lap joint reinforcement ends minimum 6 inches.
- E. Fasten anchors to structural framing and embed in masonry joints as masonry is laid. Unless otherwise indicated on drawings or closer spacing is indicated under specific wall type, space anchors at maximum of 36 inches horizontally and 24 inches vertically.

3.7 REINFORCEMENT AND ANCHORAGES - MULTIPLE WYTHE UNIT MASONRY

- A. Install horizontal joint reinforcement 24 inches on center.
- B. Place masonry joint reinforcement in first and second horizontal joints above and below openings. Extend minimum 16 inches each side of opening.
- C. Place continuous joint reinforcement in first and second joint below top of walls.
- D. Lap joint reinforcement ends minimum 6 inches.
- E. Support and secure reinforcing bars from displacement. Maintain position within 1/2 inch of dimensioned position.

3.8 MASONRY FLASHINGS

- A. Whether or not specifically indicated, install masonry flashing to divert water to exterior at all locations where downward flow of water will be interrupted.
 - 1. Extend flashings full width at such interruptions and at least 6 inches, minimum, into adjacent masonry or turn up at least 8 inches, minimum, to form watertight pan at non-masonry construction.
 - 2. Remove or cover protrusions or sharp edges that could puncture flashings.
 - 3. Seal lapped ends and penetrations of flashing before covering with mortar.
- B. Extend plastic and EPDM flashings to within 1/4 inch of exterior face of masonry.
- C. Lap end joints of flashings at least 6 inches, minimum, and seal watertight with flashing sealant/adhesive.
- D. Install flashing o minimum of 6" above cavity mortar drainage system.

3.9 CONTROL AND EXPANSION JOINTS

- A. Do not continue horizontal joint reinforcement through control or expansion joints.
- B. Install preformed control joint device in continuous lengths. Seal butt and corner joints in accordance with manufacturer's instructions.
- C. Size control joint in accordance with sealant for satisfactory performance.
- D. Form expansion joint as detailed on drawings.

3.10 TOLERANCES

- A. Maximum Variation from Plane of Wall: 1/4 inch in 10 ft and 1/2 inch in 20 ft or more.
- B. Maximum Variation from Plumb: 1/4 inch per story non-cumulative; 1/2 inch in two stories or more.
- C. Maximum Variation from Level Coursing: 1/8 inch in 3 ft and 1/4 inch in 10 ft; 1/2 inch in 30 ft.
- D. Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 inch.
- E. Maximum Variation from Cross Sectional Thickness of Walls: 1/4 inch.

3.11 FIELD QUALITY CONTROL

- A. An independent testing agency will perform field quality control tests, as specified in Section 01 4000 Quality Requirements.
- B. Inspecting installation of anchors, joint reinforcing, cavity insulation, cavity mortar net, weep holes etc.
 - Weep holes shall be tested by placing water (by bucket or hose) into cavity.

3.12 CLEANING

- A. Remove excess mortar and mortar droppings.
- B. Replace defective mortar. Match adjacent work.
- C. Clean soiled surfaces with cleaning solution.
- D. Use non-metallic tools in cleaning operations.
- E. Remove and replace masonry units that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Install new units to match adjoining units; install in fresh mortar, pointed to eliminate evidence of replacement.
- F. Pointing: During the tooling of joints, enlarge voids and holes, except weep holes, and completely fill with mortar. Point up joints, including corners, openings, and adjacent construction, to provide a neat, uniform appearance. Prepare joints for sealant application.
- G. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.
- H. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:
 - 1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
 - 2. Test cleaning methods on sample wall panel; leave one-half of panel un cleaned for comparison purposes. Obtain Architect's approval of sample cleaning before proceeding with cleaning of masonry.
 - 3. Protect adjacent stone and non masonry surfaces from contact with cleaner by covering them with liquid strippable masking agent, polyethylene film, or waterproof masking tape.
 - 4. Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing the surfaces thoroughly with clear water.
 - 5. Clean masonry with a proprietary acidic cleaner applied according to manufacturer's written instructions.

3.13 PROTECTION

A. Without damaging completed work, provide protective boards at exposed external corners that are subject to damage by construction activities.

3.14 MASONRY WASTE DISPOSAL

A. Excess Masonry Waste: Remove excess, clean masonry waste that cannot be used as fill, as described above, and other masonry waste, and legally dispose of off Owner's property

END OF SECTION

PIPE AND TUBE RAILINGS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

A. Wall mounted handrails.

1.3 RELATED REQUIREMENTS

- A. Section 03 3000 Cast-in-Place Concrete: Placement of anchors in concrete.
- B. Section 04 2000 Unit Masonry: Placement of anchors in masonry.
- C. Section 05 5100 Metal Stairs: Attachment plates for handrails specified in this section.
- D. Section 09 9113 Exterior Painting: Paint finish.

1.4 REFERENCE STANDARDS

- A. ADA Standards Americans with Disabilities Act (ADA) Standards for Accessible Design; 2010.
- B. ASTM A500/A500M Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes; 2013.
- C. ASTM E935 Standard Test Methods for Performance of Permanent Metal Railing Systems and Rails for Buildings; 2013.
- D. ASTM E985 Standard Specification for Permanent Metal Railing Systems and Rails for Buildings; 2000 (Reapproved 2006).

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Arrange for all railings and handrails specified in this Section to be fabricated and installed by the same firm.
- B. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of metal stairs (including handrails and railing systems) that are similar to those indicated for this Project in material, design, and extent.
- C. Fabricator Qualifications: A firm, with a minimum of five (5) years experience in producing metal stairs & railings similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Source Limitations: Obtain each type of railing through one source from a single manufacturer.
- E. Welding: Qualify procedures and personnel according to the following:
 - 1. AWS D1.1, "Structural Welding Code--Steel."

1.6 DESIGN CRITERIA

- A. General: In engineering railings to withstand structural loads indicated, determine allowable design working stresses of railing materials based on the following:
 - 1. Steel: 72 percent of minimum yield strength.
- B. Structural Performance of Handrails and Railings: Provide handrails and railings capable of withstanding structural loads required by ASCE 7 without exceeding the allowable design working stress of materials for handrails, railings, anchors, and connections.
- C. Structural Performance of Handrails and Railings: Provide handrails and railings capable of withstanding the following structural loads without exceeding the allowable design working stress of materials for handrails, railings, anchors, and connections:

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY PIPE AND TUBE RAILINGS

- 1. Handrails Not serving as Top Rails:
 - a. Uniform load of 50 lbf/ ft. applied in any direction.
 - b. Concentrated load of 200 lbf applied at any point and in any direction.
 - c. Uniform and concentrated loads need not be assumed to act concurrently.
- 2. Top Rails of Guards and Railings:
 - a. Uniform load of 50 lbf/ ft. applied horizontally and concurrently with 100 lbf/ ft. applied vertically downward.
 - b. Concentrated load of 200 lbf applied in any direction.
- 3. Load above need not be assumed to act concurrently with loads on top rails in determining stress on guards.
- D. Thermal Movements: Provide exterior railings that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of connections, and other detrimental effects. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
 - 1. Temperature Change (Range): 120 deg F, ambient; 180 deg F, material surfaces.
- E. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

1.7 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Indicate profiles, sizes, connection attachments, anchorage, size and type of fasteners, and accessories.
- C. Samples: Submit two, 12 inch long samples of handrail. Submit two samples of elbow, wall bracket, and end stop.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Welded Pipe Rails, Hangars and end Caps -Steves Custom Ironworks, 176 Main Street Norwalk, CT 203 226 0612

2.2 RAILINGS - GENERAL REQUIREMENTS

- A. Design, fabricate, and test railing assemblies in accordance with the most stringent requirements of ASTM E985 and applicable local code.
- B. Design railing assembly, wall rails, and attachments to resist lateral force of 200 lbs at any point without damage or permanent set and concentrated load of 200 lbf applied in any direction. Test in accordance with ASTM E 935.
- C. Allow for expansion and contraction of members and building movement without damage to connections or members.
- D. Dimensions: See drawings for configurations and heights.
 - 1. Top Rails: $1-1/2 \times 1-1/2$ inch round.
 - 2. Posts: 1-1/2 inches round.
- E. Provide anchors and other components as required to attach to structure, made of same materials as railing components unless otherwise indicated; where exposed fasteners are unavoidable provide flush countersunk fasteners.
 - 1. For anchorage to concrete, provide inserts to be cast into concrete, for bolting anchors.
 - 2. For anchorage to masonry, provide brackets to be embedded in masonry, for bolting anchors.
- F. Provide welding fittings to join lengths, seal open ends, and conceal exposed mounting bolts and nuts, including but not limited to elbows, T-shapes, splice connectors, flanges, escutcheons, and wall brackets.

FULLER AND D'ANGELO, PC ARCHITECTS AND PLANNERS

2.3 STEEL RAILING SYSTEM

- A. Steel Tube: ASTM A500/A500M, Grade B cold-formed structural tubing.
- B. Exposed Fasteners: Flush countersunk screws or bolts; consistent with design of railing.
- C. Straight Splice Connectors: Steel concealed spigots.

2.4 BRACKETS, CONECTORS AND MISCELLANEOUS ITEMS

- A. Wall Brackets: Provide wall brackets as follows:
 - 1. Universal Weld Bracket as manufactured by Wagner Company.
 - a. Model 1980ST for steel railings.
- B. Expansion Connector: Model 3393 as manufactured by Wagner Company.
- C. Wedge-Lock Welding Connector: Wagner steel connector to align railings. Weld all joints.
- D. Wall Returns: Wagner steel wall return with two (2) holes.
- E. Base Flanges: Wagner heavy flush base flanges.

2.5 MISCELLANEOUS MATERIALS

- A. Shop Primers: Provide primers that comply with Division 9 painting Sections.
 - 1. Use primer with a VOC content of 420 g/L (3.5 lb/gal.) or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- B. 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.
- C. 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.
- D. Shop Primers: Provide primers that comply with Division 9 painting Sections.
 - 1. Use primer with a VOC content of 420 g/L (3.5 lb/gal.) or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- E. 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.
- F. 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.

2.6 FABRICATION

- A. Provide complete assemblies including handrails, railings, clips, brackets other components necessary to support and anchor stairs and platforms on supporting structure.
 - 1. Join components by welding, unless otherwise indicated.
 - 2. Use connections that maintain structural value of joined pieces
- B. Shop Assembly: Pre-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.
- C. Accurately form components to suit specific project conditions and for proper connection to building structure.
- D. Fit and shop assemble components in largest practical sizes for delivery to site.
- E. Fabricate components with joints tightly fitted and secured. Provide spigots and sleeves to accommodate site assembly and installation.

- F. Ease exposed edges to a radius of approximately 1/32 inch, unless otherwise indicated. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work
- G. Welded Joints:
 - 1. Exterior Components: Continuously seal joined pieces by continuous welds. Drill condensate drainage holes at bottom of members at locations that will not encourage water intrusion.
 - 2. Interior Components: Continuously seal joined pieces by continuous welds.
 - 3. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.
- H. Close exposed ends of railing members with prefabricated end fittings.
- I. 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.
- J. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors to interconnect railing members to other work
 - 1. At brackets and fittings fastened to plaster or gypsum board partitions, provide fillers made from crush-resistant material, or other means to transfer wall loads through wall finishes to structural supports and prevent bracket or fitting rotation and crushing of substrate.
 - 2. Connect railing posts to stair framing by direct welding.
 - 3. For nongalvanized handrails and railings, provide nongalvanized ferrous metal fittings, brackets, fasteners and sleeves..
- K. For railing posts set in concrete, provide steel sleeves not less than 6 inches long with inside dimensions not less than 1/2 inch greater than outside dimensions of post, with steel plate forming bottom closure.

2.7 STEEL AND IRON FINISHES

- A. Preparation for Shop Priming: Prepare uncoated ferrous-metal surfaces to comply with minimum requirements indicated below for SSPC surface preparation specifications and environmental exposure conditions of installed railings:
 - 1. Exterior Railings (SSPC Zone 1B): SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
- B. Apply shop primer to prepared surfaces of railings, unless otherwise indicated. Comply with requirements in SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting. Primer need not be applied to surfaces to be embedded in concrete or masonry.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive work.

3.2 PREPARATION

- A. Clean and strip primed steel items to bare metal where site welding is required.
- B. Supply items required to be cast into concrete or embedded in masonry with setting templates, for installation as work of other sections.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install components plumb and level, accurately fitted, free from distortion or defects, with tight joints.
- C. Install railings in compliance with ADA Standards for accessible design at applicable locations.
- D. Anchor railings securely to structure.
- E. Field weld anchors as indicated on shop drawings. Touch-up welds with primer. Grind welds smooth.
- F. Conceal anchor bolts and screws whenever possible. Where not concealed, use flush countersunk fastenings.

3.4 TOLERANCES

- A. Maximum Variation From Plumb: 1/4 inch per floor level, non-cumulative.
- B. Maximum Offset From True Alignment: 1/4 inch.
- C. Maximum Out-of-Position: 1/4 inch.

END OF SECTION

JOINT SEALERS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- Sealants and joint backing.
- B. This Section includes joint sealants for the applications indicated in the following applications:
 - 1. Interior joints in the following vertical surfaces and horizontal nontraffic surfaces:
 - a. Vertical joints on exposed surfaces of interior unit masonry and concrete walls and partitions.
 - b. Vertical joints of intersecting wall, metal enclosures, windows and similar exposed masonry.
 - c. Joints between UV Cabinets and adjoining walls, floors, and counters.
 - d. Other joints as indicated.

1.3 RELATED REQUIREMENTS

- A. Section 08 8000 Glazing: Glazing sealants and accessories.
- B. Section 09900 Painting
- C. Section 09 5100 Acoustical Ceilings.

1.4 REFERENCE STANDARDS

- A. ASTM C920 Standard Specification for Elastomeric Joint Sealants; 2014.
- B. ASTM D1667 Standard Specification for Flexible Cellular Materials--Poly(Vinyl Chloride) Foam (Closed-Cell); 2005 (Reapproved 2011).
- C. ASTM D2628 Standard Specification for Preformed Polychloroprene Elastomeric Joint Seals for Concrete Pavements; 1991 (Reapproved 2011).
- D. SCAQMD 1168 South Coast Air Quality Management District Rule No.1168; current edition.

1.5 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data indicating sealant chemical characteristics, performance criteria, substrate preparation, and color availability.
- C. Samples: Submit two samples, 2" in size illustrating sealant colors for selection.
- D. Manufacturer's Installation Instructions: Indicate special procedures.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer, with a minimum of 5 years experience, who has specialized in installing joint sealants similar in material, design, and extent to those indicated for this Project and whose work has resulted in joint-sealant installations with a record of successful in-service performance.
- B. Source Limitations: Obtain each type of joint sealant through one source from a single manufacturer.

1.7 MOCK-UP

- A. Construct mock-up with specified sealant types and with other components noted.
- B. Mock-up may remain as part of the Work.

1.8 FIELD CONDITIONS

A. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Gunnable and Pourable Sealants:
 - 1. Sika Corporation: www.usa-sika.com.
 - 2. MONO.
 - 3. Unicrylic.
- B. EXTERIOR
- C. Polyurethane Sealants:
 - 1. SikaFlex -la Sika Corporation; Product 1a: www.sika.com.
 - 2. Sonneborn; Product NP-1: www.sonneborn.com.
 - 3. Grade ASTM C920 Grade NS Class 25 Uses M+G

D. INTERIOR

Acrylic Emulsion Latex Sealants:

- 1. MONO; Product 555: www.mono.com
- 2. Unicrylic; Product 60+: www.unicrylic.com.
- 3. Grade ASTM C834 minus 18 degrees celcius

2.2 SEALANTS

- A. Sealants and Primers General: Provide only products having lower volatile organic compound (VOC) content than required by South Coast Air Quality Management District Rule No.1168.
- B. Types Listed above

2.3 ACCESSORIES

- A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- B. Joint Backing: Round foam rod compatible with sealant; ASTM D 1667, closed cell PVC; oversized 30 to 50 percent larger than joint width.
- C. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that substrate surfaces are ready to receive work.
- B. Verify that joint backing and release tapes are compatible with sealant.

3.2 PREPARATION

- A. Remove loose materials and foreign matter that could impair adhesion of sealant.
- B. Clean and prime joints in accordance with manufacturer's instructions.
- C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
- D. Protect elements surrounding the work of this section from damage or disfigurement.

3.3 INSTALLATION

- A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Perform installation in accordance with ASTM C1193.
- C. Install bond breaker where joint backing is not used.

- D. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- E. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- F. Tool joints concave for exterior applications.

3.4 CLEANING

A. Clean adjacent soiled surfaces.

3.5 PROTECTION

A. Protect sealants until cured.

END OF SECTION

STILE AND RAIL WOOD DOORS

PART 1 GENERAL

1.1 SECTION INCLUDES - ALTERNATEFOR WOOD EXTERIOR DOORS

- A. Wood doors, stile and rail design; non-fire rated and Exterior grade.
- B. Panels of wood.

1.2 REFERENCE STANDARDS

A. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; 2014.

1.3 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data: Indicate stile and rail core materials and construction; veneer species, type and characteristics.
- C. Specimen warranty.
- D. Shop Drawings: Illustrate door opening criteria, elevations, sizes, types, swings, undercuts required, special beveling, special blocking for hardware, factory machining criteria, factory finishing criteria.
- E. Manufacturer's Installation Instructions: Indicate special installation instructions.
- F. Warranty, executed in Greenwich Public Schools's name.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.
- B. Installer Qualifications: Company specializing in performing work of the type specified in this section, with not less than three years of documented experience.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Package, deliver, and store doors in accordance with quality standard specified.
- B. Protect doors with resilient packaging sealed with heat shrunk plastic. Do not store in damp or wet areas; or in areas where sunlight might bleach veneer. Seal top and bottom edges with tinted sealer if stored more than one week. Break seal on site to permit ventilation.

1.6 WARRANTY

- A. See Section 01 7800 Closeout Submittals, for additional warranty requirements.
- B. Include coverage for delamination of veneer, warping beyond specified installation tolerances, defective materials, and telegraphing core construction.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Stile and Rail Wood Doors:
 - 1. Eggers Industries; Aspiro: www.eggersindustries.com.
 - 2. Masonite Architectural Doors www.Masonite.com authentic stile and rail
 - 3. Substitutions: See Section 01 6000 Product Requirements.

2.2 DOORS

- A. Quality Level: Custom Grade, Standard Duty performance, in accordance with AWI/AWMAC/WI (AWS).
- B. Exterior Doors: 1-3/4 inches thick unless otherwise indicated; solid lumber construction; mortise and tenon joints; water repellent treated. Painted finish where indicated on drawings.
- C. Design Style/Pattern: Traditional. To Match Existing

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY STILE AND RAIL WOOD DOORS

D. Transom Panels: Existing to remain and be refurbished.

2.3 DOOR CONSTRUCTION

- Panels: Raised, solid wood.
- B. At exterior doors, provide aluminum flashing at the top and bottom rail for full thickness and width of door.
- Factory machine doors for finish hardware in accordance with hardware requirements and dimensions.
 Do not machine for surface hardware.
- D. Factory fit doors for frame opening dimensions identified on shop drawings, with edge clearances in accordance with specified quality standard.

2.4 FACTORY FINISHING

A. Wood Primer to be factory applied, in order to receive Field Painted Finish.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify that opening sizes and tolerances are acceptable.
- C. Do not install doors in frame openings that are not plumb or are out of tolerance for size or alignment.

3.2 INSTALLATION

- A. Install doors in accordance with manufacturer's instructions and specified quality standards.
- B. Field-Finished Doors: Trimming to fit is acceptable.
- C. Adjust width of non-rated doors by cutting equally on both jamb edges.
- D. Trim door height by cutting bottom edges to a maximum of 3/4 inch.
- E. Machine cut for hardware.
- F. Coordinate installation of doors with installation of frames and hardware.
- G. Handicapped Door to be offset dimensionally.

3.3 TOLERANCES

- A. Conform to specified quality standard for fit, clearance, and joinery tolerances.
- B. Maximum Width Distortion (Cup): 1/8 inch measured with straight edge or taut string, edge to edge, over an imaginary 36 x 84 inch surface area.

3.4 ADJUSTING

- A. Adjust doors for smooth and balanced door movement.
- B. Adjust closers for full closure.
- C. Install Owners security hardware
- D. Install panic Bars and Rods
- E. Install continuous roton extend type hinges
- F. Install other door hardware as specified.

3.5 SCHEDULE - See Drawings

END OF SECTION

FIBERGLASS DOORS AND ALUMINUM FRAMES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Acrylic Modified Polyester (AMP) Doors
- B. Aluminum Frames for AMP doors.
- C. Snap trim.
- D. Factory installed Finish Hardware
- E. Foam door seal.
- F. Door hardware.
- G. Glazing.

1.3 RELATED REQUIREMENTS

- A. Section 07 9005 Joint Sealers.
- B. Section 08 7100 Door Hardware.
- C. Section 09 9113 Exterior Painting: Field painting.
- D. Section 09 9123 Interior Painting: Field painting.

1.4 REFERENCE STANDARDS

- A. ASTM B 209 Aluminum and Aluminum-Alloy Sheet and Plate.
- B. ASTM B 221 Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- C. ASTM D 543 Evaluating the Resistance of Plastics to Chemical Reagents
- D. ASTM D 570 Water Absorption of Plastics
- E. ASTM D 638 Tensile Properties of Plastics
- F. ASTM D 790 Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
- G. ASTM D 1621 Compressive Properties of Rigid Cellular Plastics
- H. ASTM D 1623 Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics
- I. ASTM D 2126 Response of Rigid Cellular Plastics to Thermal and Humid Aging
- J. ASTM D 2583 Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor
- K. ASTM D 5420 Impact Resistance of Flat Rigid Plastic Specimens by Means of a Falling Weight.
- L. ASTM D 6670-01 Standard Practice for Full-Scale Chamber Determination of Volatile Organic Emissions from Indoor Materials/Products
- M. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials; 2015a.
- N. UL 10C Standard for Positive Pressure Fire Tests of Door Assemblies; Current Edition, Including All Revisions.
- O. NFPA 252 Fire Tests of Door Assemblies.
- P. UBC Std 7-2 Fire Tests of Door Assemblies: 1997.
- Q. ASTM E 283 Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.

- R. ASTM E 330 Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
- S. ASTM F 476 Security of Swinging Door Assemblies.
- T. ASTM F 1642-04 Standard Test Method for Glazing Systems Subject to Air blast Loading.
- U. NWWDA T.M. 7-90 Cycle Slam Test Method
- V. SFBC PA 201 Impact Test Procedures.
- W. SFBC PA 203 Criteria for Testing Products Subject to Cyclic Wind Pressure Loading.
- X. SFBC 3603.2 (b)(5) Forced Entry Resistance Test.

1.5 PERFORMANCE REQUIREMENTS

- A. General: Provide door assemblies that have been designed and fabricated to comply with specified performance requirements, as demonstrated by testing manufacturer's corresponding standard systems.
- B. Air Infiltration: For a single door 3'-0" x 7'-0", test specimen shall be tested in accordance with ASTM E 283 at pressure differential of 6.27 psf. Door shall not exceed 0.58 cfm/ft2.
- C. Water Resistance: For a single door 3'-0" x 7'-0", test specimen shall be tested in accordance with ASTM E 331 at pressure differential of 7.50 psf. Door shall not have water leakage.
- D. Hurricane Test Standards, Single Door:
 - 1. Uniform Static Load, ASTM E 330: Plus or minus 195 pounds per square foot.
 - 2. Forced Entry Test, 300 Pound Load Applied, SFBC 3603.2 (b)(5): Passed.
 - 3. Cyclic Load Test, SFBC PA 203: Plus or minus 53 pounds per square foot.
 - 4. Large Missile Impact Test, SFBC PA 201: Passed.
- E. Hurricane Test Standards, Pair of Doors with single point latching:
 - 1. Uniform Static Load, ASTM E 330: Plus or minus 112.5 pounds per square foot.
 - 2. Forced Entry Test, 300 Pound Load Applied, AAMA 1304: Passed.
 - 3. Cyclic Load Test, ASTM E 1886: Plus or minus 75 pounds per square foot.
 - 4. Large Missile Impact Test, ASTM E 1886: Passed.
- F. Blast Test, Doors and Frames, ASTM F 1642-04, 6 psi / 41 psi-msec; Minimal Hazard.
- G. Swinging Door Cycle Test, Doors and Frames, ANSI A250.4: Minimum of 25,000,000 cycles.
- H. Cycle Slam Test Method, NWWDA T.M. 7-90: Minimum 5,000,000 Cycles.
- I. Swinging Security Door Assembly, Doors and Frames, ASTM F 476: Grade 40.
- J. Salt Spray, Exterior Doors and Frames, ASTM B 117: Minimum of 500 hours.
- K. Sound Transmission, Exterior Doors, STC, ASTM E 90: Minimum of 25.
- L. Thermal Transmission, Exterior Doors, U-Value, AAMA 1503-98: Maximum of 0.29 BTU/hr x sf x degrees F. Minimum of 55 CRF value.
- M. Chemical Resistance, ASTM D 543. Excellent rating.
 - 1. Acetic acid, Concentrated.
 - 2. Ammonium Hydroxide, Concentrated.
 - 3. Citric Acid, 10%.
 - 4. Formaldehyde.
 - 5. Hydrochloric Acid, 10%
 - 6. Sodium hypochlorite, 4 to 6 percent solution.
- N. AMP DOORS AND PANELS

- 1. General: Provide door assemblies that have been designed and fabricated to comply with specified performance requirements, as demonstrated by testing manufacturer's corresponding standard systems
- 2. Indoor air quality testing per ASTM D 6670-01: GREENGUARD Environmental Institute Certified including GREENGUARD for Children and Schools Certification
- 3. Impact Strength, AMP Doors and Panels, Nominal Value, ASTM D 256: 3.9 for AMP Wood Grain Doors foot-pounds per inch of notch
- Tensile Strength, AMP Doors and Panels, Nominal Value, ASTM D 638: 7,900 psi fro AMP Wood Grain Doors.
- 5. Flexural Strength, AMP Doors and Panels, Nominal Value, ASTM D 790: 18,100 psi for AMP Wood Grain Doors.
- Water Absorption, AMP Doors and Panels, Nominal Value, ASTM D 570: 0.63 percent after 24 hours.
- 7. Indentation Hardness, AMP Doors and Panels, Nominal Value, ASTM D 2583: 38.
- 8. Abrasion Resistance, Face Sheet, Taber Abrasion Test, 25 Cycles at 1,000 Gram Weight with CS-17 Wheel: Maximum of 0.022 average weight loss percentage.
- 9. Compressive Strength, Foam Core, Nominal Value, ASTM D 1621: 79.9 psi.
- 10. Compressive Modulus, Foam Core, Nominal Value, ASTM D 1621: 370 psi.
- 11. Tensile Adhesion, Foam Core, Nominal Value, ASTM D 1623: 45.3 psi.
- 12. Thermal and Humid Aging, Nominal Value, 158 Degrees F and 100 Percent Humidity for 14 Days, ASTM D 2126: Minus 5.14 percent volume change.
- O. Doors shall comply with fire resistance and flammability regulations as interpreted by governing authorities, and as follows:
 - 1. Face sheets tested in accordance with ASTM E84 shall have the following ratings:
 - a. Smoke Developed:
 - a) Not greater than 320 Interior Skins (Class A).
 - b. Flame Spread:
 - a) Not greater than 10 Interior Skins (Class A)

1.6 SYSTEM PERFORMANCE:

- A. Provide Door assemblies that have been designed and fabricated to comply with requirements for system performance characteristics listed below, as demonstrated by testing manufacturer's corresponding stock systems according to test methods designated.
- B. Thermal Transmission (Exterior Doors): U-value of not more than 0.09 (BTU/Hr. x sf x degrees F.) per AAMA 1503.1.

1.7 ADMINISTRATIVE REQUIREMENTS

A. Coordination: Obtain hardware templates from hardware manufacturer prior to starting fabrication.

1.8 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's standard details, installation instructions, hardware and anchor recommendations.
- C. Shop Drawings: Indicate layout and profiles; include assembly methods.
 - 1. Indicate product components, including hardware reinforcement locations and preparations, accessories, finish colors, patterns, and textures.
 - 2. Indicate wall conditions, door and frame elevations, at 1/2" scale, half-sized detail sections, materials, gages, finishes, location of door hardware by dimension, and details of openings; use same reference numbers indicated on Drawings to identify details and openings. expansion

provisions, and other components not included in the manufacturer's standard data. Include glazing details

- D. Selection Samples: Submit two complete sets of color chips, illustrating manufacturer's available finishes, colors, and textures.
 - 1. Where normal color and texture variations are expected, include two or more units in each sample to show the range of such variations.
- E. Architect reserves the right to require samples of typical fabricated section, showing joints, exposed fastenings (if any), quality of workmanship, hardware and accessory items, before fabrication of the work proceeds.
- F. Door Corner Sample: Submit corner cross sections, 10 inch by 10 inch in size, illustrating construction, finish, color, and texture.
- G. Manufacturer's Qualification Statement.
- H. Installer's Qualification Statement.
- I. Maintenance Data: Include instructions for repair of minor scratches and damage.
- J. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Greenwich Public Schools's name and registered with manufacturer; include detailed terms of warranty.

1.9 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products of the type specified in this section, with not less than 20 years of documented experience.
 - 1. Door and frame components from same manufacturer.
 - 2. Evidence of a compliant documented quality management system.
- B. Standards: Comply with the requirements and recommendations in applicable specifications and standards by NAAMM, AAMA, and AA, including the terminology definitions, and specifically including the "Entrance Manual" by NAAMM, except to the extent more stringent requirements are indicated.
- C. All materials, equipment and operation supplied shall conform to all Code requirements including Accessibility for the Handicapped.
- D. Installer Qualifications: Company specializing in installing products of the type specified in this section with not less than five (5) years of documented experience, and approved by the manufacturer.
- E. The manufacturer shall provide a factory trained technition to visit this project and instruct the installers in the proper installation of the door and frame assemblies and submit written report.

1.10 FIELD MEASUREMENT:

A. Verify field measurements prior to fabrication of doors and frames to insure proper fitting of assemblies. Successful bidders are expected to field verify all dimensions, sizes, quantities and the material required to complete this project. Failure to do so will not relieve the successful contractor from the necessity of furnishing any and all materials that my be required, without any additional costs to the Owner.

1.11 DELIVERY, STORAGE, AND HANDLING

- A. Mark doors with location of installation, door type, color, and weight.
- B. Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact. Materials shall be inspected for damage, and the manufacturer shall be advised immediately of any discrepancies. Unsatisfactory materials are not to be used
- C. Store materials in original corrugated packaging, under cover, protected from exposure to harmful weather conditions and from direct contact with water.
 - 1. Doors shall be "floated" within cartons, with no portion of the door having contact with the outer shell of the container.
 - 2. Store at temperature and humidity conditions recommended by manufacturer.
 - 3. Do not use non-vented plastic or canvas shelters.

FULLER AND D'ANGELO, PC ARCHITECTS AND PLANNERS

- 4. Immediately remove wet wrappers.
- 5. Store in position recommended by manufacturer, elevated minimum 4 inch above grade, with minimum 1/4 inch space between doors.

1.12 FIELD CONDITIONS

- A. Do not install doors until structure is enclosed.
- B. Maintain temperature and humidity at manufacturer's recommended levels during and after installation of doors.

1.13 SPECIAL PROJECT WARRANTY:

- A. See Section 01 7800 Closeout Submittals, for additional warranty requirements.
- B. Provide a written warranty signed by Manufacturer, Installer and Contractor, agreeing to replace, at no cost to the Owner, any doors or frames that fail in materials or workmanship, within the time period of acceptance, as indicated below. Failure of materials or workmanship includes excessive deflection, faulty operation of entrances, deterioration of finish, or construction, in excess of normal weathering, and defects in hardware, weather stripping, and other components of the work. In addition the manufacturer further certifies that they have factory installed all hardware and such hardware is also guaranteed not to come loose during the guarantee period.
- C. Warranty Time Period: Ten Years from substantial completion.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturer: Subject to compliance with requirements, provide products of one of the following:
 - 1. Acrlic Modified Polyester Monumental Raised Panel Doors (AMP) Match existing panel configuration
 - a. Special-Lite, Inc. Decatur, Michigan or approved equal by
 - 2. Substitutions: See Section 01 6000 Product Requirements.

2.2 ALUMINUM DOOR FRAMES

- A. Materials and Acessories
 - 1. Aluminum Members: Provide alloy and temper as recommended by manufacturer for strength, corrosion resistance, and application of required finish and control of color; ASTM B 221 for extrusions, ASTM B 209 for sheet/plate, with a minimum wall thickness of 0.125".
 - 2. All materials shall be of the same manufacturer. No splitting of Door and Frame components will be permitted for aluminum frames.
 - 3. Fasteners: Provide Aluminum, non-magnetic stainless steel or other non-corrosive metal fasteners, guaranteed by the manufacturer to be compatible with the doors, frames, stops, panels, hardware, anchors, and other items being fastened. For exposed fasteners (if any), provide Phillips head flat head screws with finish matching the item to be fastened.
 - 4. Do not use exposed fasteners, except where unavoidable for the assembly of units, or unavoidable for the fastening of hardware. Provide only concealed screws in glazing stops.
 - 5. Reinforcement and Brackets: Manufacturer's standard formed or fabricated steel units, of shapes, plates, of bars, with 2.0 ounce hot-dip zinc coating, complying with ASTM A 123, applied after fabrication.
 - 6. Expansion Anchor Devices: Lead shield or toothed steel, drillin expansion bolt anchors.
 - 7. Bituminous Coating: Cold applied asphalt mastic complying with SSPC-PS 12, compounded for 30-mil thickness per coat.
 - 8. Sealants and Gaskets: Provide sealants and gaskets in the fabrication, assembly and installation of the work, which are recommended by the manufacturer to remain permanently elastic, non-shrinking, non-migrating and weatherproof.
- B. Door Perimeter Framing

C. Insert Full Framing System:

- 1. Model: Series Special Lite 10-30 with SL-1030 Continuos Gear hinge extended model 1032
- 2. Insert frame as indicated on the Drawings, using integral stop fitted with weatherstripping.
- 3. Corner joints of miter design, secure with furnished aluminum clips, and screw into place.
- 4. Hardware: Refer to Section 08710
 - a. Premachine and reinforce insert frame members for hardware in accordance with manufacturer's standards and hardware schedule.
 - b. Factory install hardware.
- 5. Door Pulls: Custom Hardware Exterior Loop Pulls decorative with cylinder
- 6. Anchors:
 - a. Anchors of suitable type to fasten insert framing to existing frame materials.
 - b. Minimum of 5 anchors on jambs up to 7'-4" height, 3 anchors on headers, and 1 additional anchor on jambs for each additional foot of frame
- 7. Frame Capping:
 - a. Model: SL-70.
 - b. Extruded Capping: With insert frame as indicated on the Drawings.
 - c. Finish: Match framing
 - d. Add 1/4 round wood trim to camaflouge aluminum, paint to match adjacent areas.

2.3 ACRYLIC MODIFIED POLYESTER MONUMENTAL DOORS (AMP)

- A. Model: Monumental Raised Panel to match with acrylic modified polyester (AMP) face sheets.
- B. Construction:
 - 1. Door Thickness: 1-3/4 inches.
 - 2. Stiles and Rails: Aluminum Alloy 6063-T5, minimum of 2-5/16-inch depth.
 - 3. Corners: Mitered.
 - 4. Panels: to match existing, WXHXDepth
 - 5. Provide joinery of 3/8-inch diameter full-width tie rods through extruded splines top and bottom as standard tubular shaped stiles and rails reinforced to accept hardware as specified.
 - 6. Securing Internal Door Extrusions: 3/16-inch angle blocks and locking hex nuts for joinery. Welds, glue, or other methods are not acceptable.
 - 7. Furnish extruded stiles and rails with integral reglets to accept face sheets. Lock face sheets into place to permit flush appearance.
 - 8. Rail caps or other face sheet capture methods are not acceptable.
 - 9. Extrude top and bottom rail legs for interlocking continuous weather bar.
 - 10. Meeting Stiles: Pile brush weatherseals. Extrude meeting stile to include integral pocket to accept pile brush weatherseals.
 - 11. Bottom of Door: Install bottom weather bar with nylon brush weatherstripping into extruded interlocking edge of bottom rail.
 - 12. Glue: Use of glue to bond sheet to core or extrusions is not acceptable
- C. Face Sheet:
 - 1. Material: AMP, 0.120-inch thickness, painted surface finish.
 - 2. Texture: Colonial Woodgrain
 - 3. Color:White
- D. Core:
 - 1. Core is to be of Urethane foam of 5 lb. per cubic foot density. All doors are to be properly reinforced for hardware prior to Urethane core foaming in door.
 - a. Submit evaluation report that the doors do not require thermal barrier for non rated doors.

2.4 FINISH HARDWARE:

- A. Provide and factory install finish hardware for each door leaf as specified in Section 08 7100 Door Hardware.
 - 1. Hardware shall be fire rated for fire rated doors.
 - Premachine doors in accordance with templates from specified hardware manufacturers and hardware schedule.
- B. Pull
 - 1. Custom Exterior Loop Pull handles to match existing Doors
 - 2. Interior: Panic Devices with electric strikes, contrls to connect to existing system
- C. Gaskets and Seals supplied by manufacturer:
 - 1. Gaskets: Pemko S88.
 - 2. Smoke Seals: Pemko HSS2000, 1/2-inch wide.
 - 3. Smoke Seals, Pair Doors, Meeting Stile: Pemko S77.
- D. Special-Lite SL-301 Concealed adjustable brush. Install door manufacturer's multidirectional adjustable bottom with double nylon brush weatherstripping. Door bottom must be concealed and adjust to accommodate irregular tapered floor conditions.
- E. Concealed Adjustable Meeting Stile Astragal at Pairs of Doors. Install door manufacturer's adjustable astragal with double pile weather seal weatherstripping.
- F. Receive Hardware supplied in accordance with this Section, and coordinate with the Hardware requirements of this section. Report discrepancies (in writing) to the Architect immediately.
- G. Reinforce, cut, drill and tap doors and frames as required to receive Hardware, except do not drill and tap for surface mounted closers and holders, which will be applied at the jobsite. Comply with Hardware manufacturer's instructions and template requirements. Use concealed fasteners wherever possible.
- H. Install all Hardware, except surface mounted closers, holders, gaskets and sealsat the fabrication plant. Remove only Hardware as required for final finishing or delivery to jobsite. Package and identify such Hardware and ship with doors and frames for installation at the project site.
- I. Painting: All existing surfaces to remain exposed, and all disturbed areas shall be painted to match existing surfaces.

2.5 FABRICATION:

- A. Sizes and Profiles: The required sizes for door and frame units, and profiles requirements are shown on the drawings.
- B. The details shown are based upon standard details by one or more manufacturers. It is intended that similar details by other manufacturers will be accepted, provided they comply with size requirements, and with minimum/maximum profile requirements as shown.
- C. Co-ordination of Fabrication: Check the actual frame or door openings in the construction work by accurate field measurements before fabrication, and show recorded measurements on final shop drawings. Coordinate fabrication schedule with construction progress, as directed by Contractor, and avoid delays of the work.
- D. Assembly
 - 1. Complete the cutting, fitting, forming, drilling and grinding of all metal work prior to the cleaning, finishing, treatment and application for coatings.
 - 2. Remove burrs from cut edges, and ease edges and corners to a radius of approximately 1/64"
- E. No Welding of joints will be accepted.
- F. Conceal fasteners, wherever possible, except as otherwise noted.
- G. Maintain continuity of line and accurate relation of planes and angles.

- H. Provide secure attachments and support at mechanical joints, with hairline fit at contacting members.
- I. Reinforce the work as necessary for performance requirements, and for support to the structure. Separate dissimilar metals with bituminous paint or preformed separators which will prevent corrosion. Separate metal surfaces at moving joints with non-metallic separators to prevent "freeze-up" of joints.

2.6 ACCESSORIES

- A. Foam window and door seal.
 - Fill all exterior joint between windows, transoms and doors soild in accordance with manufacture's instructions.
 - 2. Cut back to permit application of joint sealant.
 - 3. Insulating-Foam Sealant: Dow Great Stuff Window & Door.
- B. Stops for Glazing: Fiberglass, unless otherwise indicated or required by fire rating; provided by door manufacturer to fit factory made openings, with color and texture to match door; fasteners shall maintain waterproof integrity.
 - 1. Exterior Doors: Provide non-removable stops on exterior side with continuous compression gasket weatherseal.
 - 2. Glazed Openings: Provide removable stops on interior side.
 - 3. Opening Sizes and Shapes: As indicated on drawings.
- C. Snap Trim as required. Match door and frame finish. Cover with wood 1/4 round paint white to match
- D. Door Stops (gasketing): Pemko 350CR.
- E. Glazing:
 - 1. Laminated safety glass, 1/4 inch thick, with minimum 0.030 inch thick interlayer, clear.
- F. Lite Kits:
 - 1. Non Rate Doors: Provide and factory install a Special-Lite FL-Securelite, thru bolted to the door with snap cover (1" glass bite) extruded aluminum Class I Clear Anodized Lite Kit. Provide sizes as shown on drawings.
 - 2. Provide ½" wide Extruded Aluminum Internal Muntins Pattern (White) between the Lites of Glass in the Insulated Unit as per the drawings. If needed to match existing doors.

2.7 FINISHES

- A. Class I Natural Finish or Anodized Plus Natural Anodized 2-step Finish:
 - Class I Natural Anodized Finish: AAMA 611 AA-M12C22A41 Clear anodic coating not less than 0.7 mils thick. for all Aluminum Extrusions including the Door Edge, Lite Kit, Continuous Hinge and Framing.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify actual dimensions of openings by field measurements before door fabrication; show recorded measurements on shop drawings.
- B. Do not begin installation until substrates have been properly prepared.

3.2 PREPARATION

- A. Remove existing doors and frames, and dispose of all removed materials in accordance with local authorities having jurisdiction.
- B. Salvage items as needed.
- C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- D. Ensure openings to receive frames are plumb, level, square, and in tolerance.

- E. Clean and prepare substrate in accordance with manufacturer's directions.
- F. Protect adjacent work and finish surfaces from damage during installation.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions; do not penetrate frames with anchors.
- B. Install new insert frames and clean exposed wood to receive new primer and paints, leave as much decorative trim as possible, after frame placement, cover frame with 1/4 round to hide frame as much as psosible.
- C. Install gaskets and seals to doors in accordance with manufacturer's instructions.
- D. Set thresholds in continuous bed of sealant.
- E. Set units plumb, level and true to line, without warp or rack of doors or frames. Anchor securely in place. Separate Aluminum, and other corrodible metal surfaces, from sources of corrosion or electrolytic action at points of contact with other materials, with bituminous coatings, or other means as approved by Architect.
- F. Set saddles in a bed of compound.
- G. Separate aluminum and other metal surfaces from sources of corrosion of electrolytic action at points of contact with other materials.
- H. Install perimeter foam seal in accordance with requirements specified in Section 07 9005.
 - 1. Fill all exterior spaces and joint between windows and doors solid with foam in accordance with manufacture's instructions.
 - 2. Cut back to permit application of joint sealant.
- I. Repair or replace damaged installed products.
- J. Remove and replace damaged components that cannot be successfully repaired as determined by Architect.

3.4 ADJUSTING

- A. Lubricate, test, and adjust doors to operate easily, free from warp, twist or distortion, and to fit watertight for entire perimeter.
- B. Adjust hardware for smooth and quiet operation.
- C. Adjust doors to fit snugly and close without sticking or binding.
- D. Set all door control devices to original access settings, install electic strike controls and new relay if required.

3.5 CLEANING

- A. Clean installed products in accordance with manufacturer's instructions prior to owner's acceptance.
- B. Do not use harsh cleaning materials or methods that would damage finish.

3.6 PROTECTION

- A. Protect installed products from damage until Date of Substantial Completion.
- B. Protect installed doors to ensure that, except for normal weathering, doors will be without damage or deterioration at time of substantial completion.
- C. Provide protective treatment and other precautions required through the remainder of the construction period, to ensure that the doors and frames will be without damage or deterioration (other than normal weathering) at the time of acceptance.

END OF SECTION

DOOR HARDWARE

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of each prime contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Hardware for wood and AMP doors. Wood Doors -ALTERNATE
- B. Hardware for exterior doors.
- C. Thresholds.
- D. Weatherstripping, seals and door gaskets.

1.3 REFERENCE STANDARDS

- A. ANSI/ICC A117.1 American National Standard for Accessible and Usable Buildings and Facilities; International Code Council; 2003.
- B. BHMA A156.1 American National Standard for Butts and Hinges; 2013.
- C. BHMA A156.2 American National Standard for Bored and Preassembled Locks & Latches; 2011.
- D. BHMA A156.4 American National Standard for Door Controls Closers; 2013.
- E. BHMA A156.6 American National Standard for Architectural Door Trim; 2010.
- F. BHMA A156.7 American National Standard for Template Hinge Dimensions; 2014.
- G. DHI A115 Series Specifications for Steel Doors and Frame Preparation for Hardware; Door and Hardware Institute; 2000.
- H. DHI A115W Series Specifications for Wood Door and Frame Preparation for Hardware; Door and Hardware Institute: 2000.
- DHI (LOCS) Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames; 2004.
- J. DHI WDHS.3 Recommended Locations for Architectural Hardware for Flush Wood Doors; 1993; also in WDHS-1/WDHS-5 Series, 1996.
- K. NFPA 80 Standard for Fire Doors and Other Opening Protectives; 2016.
- L. UL (DIR) Online Certifications Directory; current listings at database.ul.com.

1.4 ADMINISTRATIVE REQUIREMENTS

- Coordinate the manufacture, fabrication, and installation of products that door hardware will be installed upon.
- B. Convey Greenwich Public Schools's keying requirements to manufacturers.
- C. Preinstallation Meeting: Convene a preinstallation meeting one week prior to commencing work of this section; require attendance by all affected installers.

1.5 SUBMITTALS

- A. Samples: Prior to preparation of hardware schedule:
- B. Keys: Deliver with identifying tags to Greenwich Public Schools by security shipment direct from hardware supplier.
- C. Warranty: Submit manufacturer's warranty and ensure that forms have been completed in Greenwich Public Schools's name and registered with manufacturer.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum 10 years of documented experience.
- B. Hardware Supplier Qualifications: Company specializing in supplying commercial door hardware with 10 years of experience.

1.7 COORDINATION

A. Coordinate the work with other directly affected sections involving manufacture or fabrication of internal reinforcement for door hardware.

1.8 WARRANTY

A. Provide five year warranty for door closers and .

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Allegion Brands; Ives, LCN, Schlage, Steelcraft, or Von Duprin: www.allegion.com/us.

2.2 MANUFACTURERS - BASIS OF DESIGN

2.3 DOOR HARDWARE - GENERAL

- A. Provide hardware specified or required to make doors fully functional, compliant with applicable codes, and secure to the extent indicated.
- B. Provide items of a single type of the same model by the same manufacturer.
- C. Provide products that comply with the following:
 - 1. Applicable provisions of federal, state, and local codes.
 - 2. Accessibility: ADA Standards and ICC A117.1.
 - 3. ANSI/ICC A117.1, American National Standard for Accessible and Usable Buildings and Facilities.
 - 4. Applicable provisions of NFPA 101, Life Safety Code.
- D. Function: Lock and latch function numbers and descriptions of manufactures series as listed in hardware schedule.
- E. Finishes: Provide door hardware of the same finish unless otherwise indicated.
 - 1. Primary Finish: Satin oxidized bronze, oil rubbed, on bronze base metal, 613 (approx US10B).

2.4 LOCKS AND LATCHES

- A. Locks: Provide a lock for every door, unless specifically indicated as not requiring locking.
 - 1. Hardware Sets indicate locking functions required for each door.
 - 2. Trim: Provide lever handle or pull trim on outside of all locks unless specifically stated to have no outside trim.
 - 3. Lock Cylinders: Provide key access on outside of all locks unless specifically stated to have no locking or no outside trim.

2.5 HINGES

A. Hinges - Basis of Design: Roton Extended type hinges, bronze finish...

2.6 FLUSHBOLTS AND COORDINATORS

A. Coordinators - Basis of Design: LCN.

2.7 ELECTRIC STRIKES

A. Electric Strikes - Basis of Design: Existing to be removed and replaced.

2.8 EXIT DEVICES

A. Exit Devices - Basis of Design: Von Duprin.

- B. Manufacturers Exit Devices: With external Rods, bronze finish
 - 1. Von Duprin, an Allegion brand: www.allegion.com/us.

2.9 CLOSERS

- A. Closers Basis of Design: LCN.
- B. Manufacturers Surface Mounted Closers:
 - Surface Door Closers: Full rack and pinion type with removable non-ferrous cover. Provide sex bolts at all wood doors. Place closers inside building and rooms. Closers shall be non-handed, non-sized and adjustable.
 - a. Provide multi-size 1 through 6 at all doors rated or not.
 - b. Flush transom offset brackets shall be used where parallel arm closers are listed for doors with fixed panels over.
 - c. Provide metal covers for all closures. Bronze color
 - LCN, an Allegion brand: www.allegion.com/us.

2.10 STOPS AND HOLDERS

2.

- A. Stops and Holders Basis of Design:
- B. Wall Stops: Glynn Johnson.
- C. Manufacturers Wall and Floor Stops/Holders:
 - 1. Glynn-Johnson.

2.11 GASKETING AND THRESHOLDS

- A. Thresholds Basis of Design: Zero.
- B. Thresholds: Complying with BHMA A156.21.
 - 1. At each exterior door, provide a threshold unless otherwise indicated.
 - 2. Field cut threshold to frame for tight fit.
- C. Fasteners At Exterior Locations: Non-corroding.
- D. Manufacturers Thresholds:
 - 1. Zero International, Inc: www.zerointernational.com.

2.12 FINISHES

USB10DARK BRONZEANY METAL

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that doors and frames are ready to receive work; labeled, fire-rated doors and frames are present and properly installed, and dimensions are as indicated on shop drawings.
- B. Verify that electric power is available to power operated devices and of the correct characteristics.
- C. Coordinate all existing security, airphone and buzzer related functions work prior to removal and resetting on new doors.

3.2 INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions and applicable codes.
- B. Do not install surface mounted items until finishes applied to substrate are complete.
- C. Mounting heights for hardware from finished floor to center line of hardware item:shall conform to ADA requirements unless indicated otherwise.

3.3 FIELD QUALITY CONTROL

A. Field inspection and testing will be performed under provisions of Section 01 4000.

B. Provide an Architectural Hardware Consultant to inspect installation and certify that hardware and installation has been furnished and installed in accordance with manufacturer's instructions and as specified.

3.4 ADJUSTING

- A. Adjust hardware for smooth operation.
- B. Adjust gasketing for complete, continuous seal; replace if unable to make complete seal.

3.5 CLEANING

A. Clean adjacent surfaces soiled by hardware installation. Clean finished hardware per manufacturer's instructions after final adjustments has been made. Replace items that cannot be cleaned to manufacturer's level of finish quality at no additional cost.

3.6 PROTECTION

A. Do not permit adjacent work to damage hardware or finish.

3.7 SCHEDULE -

HARDWARE SETS

END OF SECTION

EXTERIOR PAINTING

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and and other Division 1 Specification Sections, apply to this Section.

Conditions

1.2 SECTION INCLUDES

- A. Surface preparation.
- B. Field application of paints. Door Alcoves
- C. Scope: Finish exterior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated, including the following:
 - 1. Wood doors trim and side wall panels (not factory finished).

1.3 RELATED REQUIREMENTS

- A. Section 01 6116 Volatile Organic Compound (VOC) Content Restrictions.
- B. Section 32 3113 Chain Link Fences and Gates.

1.4 **DEFINITIONS**

A. Conform to ASTM D16 for interpretation of terms used in this section.

1.5 REFERENCE STANDARDS

- A. 40 CFR 59, Subpart D National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency; current edition.
- B. ASTM D16 Standard Terminology for Paint, Related Coatings, Materials, and Applications; 2014.
- C. ASTM D4442 Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Base Materials; 2007.
- D. MPI (APL) Master Painters Institute Approved Products List; Master Painters and Decorators Association; current edition, www.paintinfo.com.
- E. MPI (APSM) Master Painters Institute Architectural Painting Specification Manual; Current Edition, www.paintinfo.com.
- F. SSPC-SP 1 Solvent Cleaning; 2015.
- G. SSPC-SP 2 Hand Tool Cleaning; 1982 (Ed. 2004).
- H. SSPC-SP 3 Power Tool Cleaning; 1982 (Ed. 2004).
- I. SSPC-SP 6 Commercial Blast Cleaning; 2007.

1.6 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide complete list of products to be used, with the following information for each:
 - 1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
 - 2. MPI product number (e.g. MPI #47).
 - 3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.
 - 4. Manufacturer's installation instructions.
- C. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.
 - 1. Where sheen is specified, submit samples in only that sheen.

- 2. Where sheen is not specified, discuss sheen options with Fuller and D'Angelo, P.C. before preparing samples, to eliminate sheens definitely not required.
- D. Manufacturer's Instructions: Indicate special surface preparation procedures.
- E. Maintenance Materials: Furnish the following for Greenwich Public Schools's use in maintenance of project.
 - 1. See Section 01 6000 Product Requirements, for additional provisions.
 - 2. Extra Paint and Finish Materials: 1 gallon of each color; from the same product run, store where directed.
 - 3. Label each container with color in addition to the manufacturer's label.

1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified, with minimum five (5) years documented experience.
- B. Applicator Qualifications: Company specializing in performing the type of work specified with minimum five (5) years experience.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.9 FIELD CONDITIONS

- A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.
- C. Do not apply exterior paint and finishes during rain or snow, or when relative humidity is outside the humidity ranges required by the paint product manufacturer.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Provide paints and finishes from the same manufacturer.
- B. Paints:
 - 1. Base Manufacturer: Benjamin Moore & Co.
- C. Substitutions: See Section 01 2500 Substitution Procedures

2.2 PAINTS AND FINISHES - GENERAL

- A. Prepare exterior paint areas with straight belt sanding machiones or stripper. PEEL AWAY or EQUAL
- B. Paints and Finishes: Ready mixed, unless required to be a field-catalyzed paint.
 - 1. Where MPI paint numbers are specified, provide products listed in Master Painters Institute Approved Product List, current edition available at www.paintinfo.com, for specified MPI categories, except as otherwise indicated.
 - Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly
 dispersed to a homogeneous coating, with good flow and brushing properties, and capable of
 drying or curing free of streaks or sags.
 - 3. Supply each paint material in quantity required to complete entire project's work from a single production run.

- 4. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.
- C. Volatile Organic Compound (VOC) Content: Comply with Section 01 6116.
- D. Flammability: Comply with applicable code for surface burning characteristics.
- E. Colors: To be selected from manufacturer's full range of available colors.
 - 1. Selection to be made by Architect after award of contract.

2.3 PAINT SYSTEMS - EXTERIOR

- A. Paint WE-OP-2A Wood, Opaque, Alkyd, 2 Coat:
 - 1. One coat of alkyd primer sealer. See primer below.
 - 2. Eggshell: Two Coats of alkyd enamel; White PPG or BM to match.
- B. Ferrous Metals, Unprimed, Latex, 3 Coat:
 - One coat of latex primer.
 - Semi-gloss: Two coats of latex enamel; P29.
- C. Ferrous Metals, Primed, Alkyd, 2 Coat:
 - 1. Touch-up with rust-inhibitive primer recommended by top coat manufacturer.
 - 2. Semi-gloss: Two coats of alkyd enamel; P29.

2.4 PRIMERS

- Primers: Provide the following unless other primer is required or recommended by manufacturer of top coats.
 - 1. Alkyd/Oil Primer for Exterior Wood; MPI #5.
 - a. Products:
 - a) PPG Paints Seal Grip Interior/Exterior Alkyd Universal Primer Sealer, 17-941NF Series. (MPI #5)
 - b) Rodda Exterior Control Primer, 701501. (MPI #5)
 - c) Substitutions: See Section 01 2500 Substitution Procedures

2.5 ACCESSORY MATERIALS

- A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.
- B. Patching Material: Latex filler.
- C. Fastener Head Cover Material: Latex filler.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin application of paints and finishes until substrates have been properly prepared.
- B. Strip all wood to accept new primer, use straight belt sanding machines, or stripper.
- C. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
- D. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.
- E. Test shop-applied primer for compatibility with subsequent cover materials.
- F. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
 - 1. Exterior Wood: 15 percent, measured in accordance with ASTM D4442.

3.2 PREPARATION

A. Clean surfaces thoroughly and correct defects prior to application.

- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Sand all existing door trims to smooth finish
- D. Use safe lead practices
- E. Remove or repair existing paints or finishes that exhibit surface defects.
- F. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces for finishing.
- G. Seal surfaces that might cause bleed through or staining of topcoat.
- H. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- I. Ferrous Metal:
 - 1. Solvent clean according to SSPC-SP 1.
 - 2. Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces. Re-prime entire shop-primed item.
 - 3. Remove rust, loose mill scale, and other foreign substances using using methods recommended in writing by paint manufacturer and SSPC-SP 3. Protect from corrosion until coated.
- J. Exterior Wood Surfaces to Receive Opaque Finish: Remove dust, grit, and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes with tinted exterior calking compound after prime coat has been applied. Back prime concealed surfaces before installation.
- K. Wood Doors to be Field-Finished: Seal wood door top and bottom edge surfaces with tinted primer. ALTERNATE

3.3 APPLICATION

- A. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.
- B. Exterior Wood to Receive Opaque Finish: If final painting must be delayed more than 2 weeks after installation of woodwork, apply primer within 2 weeks and final coating within 4 weeks.
- C. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".
- D. Where adjacent sealant is to be painted, do not apply finish coats until sealant is applied.
- E. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- F. Apply each coat to uniform appearance.
- G. Sand metal surfaces lightly between coats to achieve required finish.
- H. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- I. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.4 FIELD QUALITY CONTROL

A. See Section 01 4000 - Quality Requirements, for general requirements for field inspection.

3.5 CLEANING

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.6 PROTECTION

A. Protect finishes until completion of project.

B. Touch-up damaged finishes after Substantial Completion. **END OF SECTION**

INTERIOR PAINTING

PART 1 GENERAL

1.1 SECTION INCLUDES

- Surface preparation.
- B. Field application of paints.
- C. Painting Interior vestibules and window transoms
- D. Painting Interior metal grilles
- E. Scope: Finish interior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.
- F. Do Not Paint or Finish the Following Items:
 - Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
 - 2. Items indicated to receive other finishes.
 - 3. Items indicated to remain unfinished.
 - 4. Fire rating labels, equipment serial number and capacity labels, bar code labels, and operating parts of equipment.
 - 5. Floors, unless specifically indicated.
 - 6. Glass.

1.2 REFERENCE STANDARDS

A. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual; Current Edition, www.paintinfo.com.

1.3 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

PART 2 PRODUCTS

2.1 PAINTS AND FINISHES - GENERAL

- A. Paints and Finishes: Ready mixed, unless intended to be a field-catalyzed paint.
 - 1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
 - 2. Supply each paint material in quantity required to complete entire project's work from a single production run.
 - 3. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

2.2 PAINT SYSTEMS - INTERIOR

- A. All Interior surfaces indicated to be painted, unless otherwise indicated; Including gypsum board, concrete masonry and shop primed steel.
 - 1. Two top coats and one coat primer for new surfaces.
 - 2. One top coat and one coat primer for existing surfaces.
 - 3. Primer(s): As recommended by manufacturer of top coats.
- B. Concrete/Masonry, Opaque, Latex, 3coat: (New surfaces)
 - 1. One coat of block filler. Super Craft No. 285
 - 2. Semi-gloss: Two coats of latex enamel. Super spec Moore: # 276
- C. Concrete/Masonry, Opaque, Latex, 2 coat: (Existing surfaces)
 - 1. One coat of latex primer sealer.

- 2. Semi-gloss: One coat of latex enamel. Super spec Moore: # 276
- D. Ferrous metals, primed, Alkyd, 2 coat:
 - 1. Touch up with alkyd primer.
- E. Ferrous metals, primed, Acrylic Latex, 2 coat:
 - 1. Touch up with latex primer.
 - 2. Semi-gloss: 2 coats of Super Spec HP DTM Acrylic (P29),
 - 3. or 2 coats of Super Spec Interior Latex (276)
- F. Gypsum Board/Plaster, Latex, 3 coat: (New Surfaces)
 - 1. One coat of Moore Super Spec Latex Enamel Undercoater & Primer Sealer.(253)
 - 2. Semi-Gloss: 2 coats of Latex Enamel; Moore Super Spec Interior Latex (276)
 - 3. Eggshell: 2 coats of Latex Enamel; Moore Super Spec Interior Latex # C274
 - 4. Flat: 2 coats of Latex Enamel, Moore Super Spec Interior Latex (275)
- G. Gypsum Board/Plaster, Latex, 2 coat: (Existing Surfaces)
 - One coat of Alkyd Primer sealer, Moore Super Spec Latex Enamel Undercoater & Primer Sealer.(253)
 - 2. Semi-Gloss: 1 coats of Latex Enamel; Moore Super Spec Interior Latex (276)
 - 3. Eggshell: 1 coats of Latex Enamel; Moore Super Spec Interior Latex # C274
- H. Concrete Floor Surface, Urethane modified alkyd resin, 1 coat (Existing surfaces)
 - 1. High Gloss: 1 coat of Moore Porch & Floor Enamel, # C112.

PART 3 EXECUTION

3.1 PREPARATION

- A. Clean surfaces thoroughly and correct defects prior to application.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.
- D. Seal surfaces that might cause bleed through or staining of topcoat.
- E. Gypsum Board: Fill minor defects with filler compound. Spot prime defects after repair.

3.2 APPLICATION

- A. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".
- B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- C. Apply each coat to uniform appearance in thicknesses specified by manufacturer.
- D. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- E. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.3 SCHEDULE - PAINT SYSTEMS

END OF SECTION

CONCRETE AND MASONRY COATINGS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and other Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Application of two component Cementitious Protective Coating for Ramp concrete surfaces. With cement aggregage blend for slip resistance.
- B. ADA Ramp at Gym Entrance
- C. CMU side of ADA Ramp at Cafeteria and Kindergarten

1.3 RELATED REQUIREMENTS

A. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions.

1.4 REFERENCE STANDARDS

- A. ASTM B117 Standard Practice for Operating Salt Spray (Fog) Apparatus; 2011.
- B. ASTM D2247 Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity; 2015.
- C. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials; 2015a.
- D. ASTM E96/E96M Standard Test Methods for Water Vapor Transmission of Materials; 2014.
- E. ASTM G153 Standard Practice for Operating Enclosed Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials; 2013.

1.5 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data indicating coating materials.
- C. Samples: Submit two samples 12 by 12 inch in size illustrating colors available for selection.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- E. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.
- F. Maintenance Data: Include cleaning procedures and repair and patching techniques.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum ten (10) years documented experience.
 - 1. Manufacturer shall be ISO 9001:2000 Certified.
- B. Applicator Qualifications: Company specializing in performing the work of this section with minimum five (5) years documented experience.
 - 1. Shall be acceptable to product manufacturer.
 - 2. Successful completion of a minimum of 5 projects of similar size and complexity to specified Work.
- C. Performance Requirements: Sikagard FLEX COAT: With cement aggregate blend for slip resistance
 - 1. Resistance to Wind-Driven Rain, Federal Specification TT-C-555B: Meets requirement. No water penetration.
 - 2. Accelerated Weathering, ASTM G23 No visible degredation
 - 3. Visual Color Change, ASTM D1729, 5,000 hours: Passes.
 - 4. Chalking, ASTM D4214, 5,000 hours: Passes.

- 5. Compressive Strenght 2,440 psi
- 6. Tensile strenght 430 psi
- 7. Freeze/Thaw Resistance, DOT Methods A and B, 50 cycles: Passes.
- 8. Water-Vapor Permeance, ASTM D1653: 13 perms.
- 9. Moisture Resistance, Federal Specification TT-C-555B: Meets requirement. No blistering, loss of adhesion, or discoloration.
- 10. Salt Spray (Fog) Resistance, ASTM B117, 300 hours: Passes.
- 11. Carbon-Dioxide Diffusion, PR EN 1062-6:
 - a. R (equivalent air-layer thickness): 1,318 feet (402 m).
 - b. Sc (equivalent concrete thickness): 39 inches (100 cm).
- 12. Flexibility, ASTM D1737, 1-inch mandrel: No cracking.
- 13. Dirt Pick-Up, ASTM D3719, after 6 months exposure: 92.02 percent. Passes.
- 14. Sand Abrasion Resistance, ASTM D968, Method A, at 3,000 L: Passes.
- 15. Impact Resistance, ASTM D2794, at 30 in-lbs: Passes.
- 16. Fungus Resistance, ASTM D3273: No growth. Meets requirement.
- 17. Mildew Resistance, Federal Specification TT-P-29 (Federal Standard 141, Method 6152 and 6271.1):
 - a. Aspergillus Oryzae, 7 days: No growth.
 - b. Aspergillus Niger, 21 days: No growth.
- 18. Flash point, Greater than 200 degrees F (93 degrees C) ASTM D 56 Tag Closed Tester
- 19. Approximate Coverage Rate: Will vary to attain finish Mill thickness
- 20. Wet Film Thickness (WFT):
 - a. Coarse: 60 mils
- 21. Colors: As selected by the Architect. Gray
- 22. Texture:
 - a. Coarse, with sand

1.7 MOCK-UP

- A. Provide mock-up, three (3) feet long by three (3) feet wide, illustrating coating, color, and surface sheen.
- B. Locate where directed.
- C. Apply material in accordance with manufacturer's written application instructions
- D. Manufacturer's representative or designated representative will review technical aspects; surface preparation, repair, and workmanship
- E. Maintain field sample during construction for workmanship comparison.
- F. Do not alter, move, or destroy field sample until Work is completed and approved by Architect
- G. Maintain field sample during construction for workmanship comparison.
- H. Do not alter, move, or destroy field sample until Work is completed and approved by Owner's representative .
- I. Maintain field sample during construction for workmanship comparison.
- J. Do not alter, move, or destroy field sample until Work is completed and approved by Owner's representative
- K. Mock-up may remain as part of the Work.

1.8 FIELD CONDITIONS

- A. Do not install materials when temperature is below forty (40) degrees F or above 90 degrees F.
- B. Maintain this temperature range, 24 hours before, during, and 72 hours after installation of coating.

- C. Do not apply material if rain is expected within 24 hours of application.
- D. Perform adhesion test in accordance with ASTM D3359, Method A. Minimum adhesion rating of 4A required on 0 to 5 scale.
- E. Do not apply to horizontal traffic-bearing surfaces
- F. Restrict traffic from area where coating is being applied or is curing.

1.9 WARRANTY

- A. See Section 01 7800 Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a five year period after Date of Substantial Completion.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Concrete and Masonry Coatings:
 - 1. Sika Gard Flex Coat with Acrylic topcoats Cememtitious Coating System
 - 2. Substitutions: Section 01 6000 Product Requirements.

2.2 CONCRETE AND MASONRY COATINGS

- A. Provide high-build, weather resistant coating systems that meet the following minimum performance criteria, unless more stringent criteria are specified:
 - 1. Salt Spray Resistance: Passes when tested according to ASTM B117 for 2000 hours.
 - 2. Surface Burning Characteristics: Flame spread/Smoke developed index of 0/0, maximum, when tested in accordance with ASTM E84.
 - 3. Accelerated Outdoor Exposure: Passes when tested according to ASTM G153 for 5,000 hours.

2.3 MATERIALS

- A. Cementitious Coating System.
 - 1. Acceptable Product: Sika Sikagard Sika Flexwith acrylic Topcoats
- B. Coatings General: Provide complete systems formulated and recommended by manufacturer for the applications indicated, in the thicknesses indicated.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify that substrate surfaces are ready to receive work as instructed by the coating manufacturer. Obtain and follow manufacturer's instructions for examination and testing of substrates.
- C. Masonry: Verify masonry joints are struck flush.

3.2 PREPARATION

- A. Remove substances that would bleed through finished coatings.
- B. Protection: Protect adjacent Work areas and finish surfaces from damage during coating application.
- C. Prepare surfaces in accordance with manufacturer's instructions.
- D. Ensure that substrate is sound, clean, dry, and free of dust, dirt, oils, grease, laitance, efflorescence, mildew, fungus, biological residues, and other contaminants that could prevent proper adhesion.
- E. Repair holes and spalled and damaged concrete with repair materials approved by coating manufacturer.
- F. Remove protruding concrete accessories and smooth out irregularities.
- G. When chemical cleaners are used, neutralize compounds and fully rinse surface with clean water. Allow surface to dry before proceeding.

- H. Remove blisters or delaminated areas and sand edges to smooth rough areas and provide transition to existing paint areas.
- Check adhesion of existing paint in accordance with ASTM D3359, measuring adhesion by Tape Method A.
- J. Treat cracks greater than 1/32 inch (0.8 mm) with knife-grade or brush-grade patching compound.
- K. Treat cracks greater then 1/4 inch (6 mm) as expansion joints and fill with sealant approved by coating manufacturer.
- L. Protect adjacent surfaces and materials not receiving coating from spatter and overspray; mask if necessary to provide adequate protection. Repair damage.

3.3 PRIMING

- Use primer approved by coating manufacturer.
- B. Apply primer to all surfaces, unless specifically not required by coating manufacturer. Apply in accordance with coating manufacturer's instructions.
- C. Concrete and Masonry: Prior to priming, patch holes and indentations and fill cracks with manufacturer's recommended crack repair material.

3.4 MIXING

- A. Mix coating in accordance with manufacturer's instructions to ensure uniform color and aggregate disbursement and to minimize air entrapment.
- B. In multi-pail applications, mix contents of each new pail into partially used pail to ensure color consistency and smooth transitions from pail to pail.

3.5 COATING APPLICATION

- A. Apply coatings in accordance with manufacturer's instructions, to thicknesses specified.
- B. Apply coating as a 2-coat system, with 2 coat topcoat.
- Maintain proper uniform wet-film thickness during application to ensure performance characteristics desired
- D. Apply in uniform thickness coats, without runs, drips, pinholes, brush marks, or variations in color, texture, or finish. Finish edges, crevices, corners, and other changes in dimension with full coating thickness.

3.6 CLEANING

- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.
- B. Clean surfaces immediately of overspray, splatter, and excess material.
- C. After coating has cured, clean and replace finish hardware, fixtures, and fittings previously removed.

3.7 PROTECTION

A. Protect finished work from damage.

END OF SECTION

ELECTRICAL SPECIFICATIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of each prime contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This section covers the general requirements for electrical work; examine all contract drawings and all other sections of the specifications for additional work related to the work of this section.
- B. Work includes the providing of labor, materials, equipment and services necessary for a complete and safe installation in accordance with the contract documents and with the national electrical code, state and local codes but not limited to the following:
 - 1. Removals.
 - 2. Wire systems
 - 3. Low voltage distribution systems
 - 4. Power, control and alarm wiring systems
 - 5. Grounding and bonding systems
 - 6. Lighting fixtures and controls
 - 7. Testing
 - 8. Access control removal and resetting
 - 9. Airphone / Intercom removal and resetting
- C. The data indicated in these drawings and specifications are as exact as could be secured. But their absolute accuracy is not guaranteed. Do not scale drawings. Exact locations, distances, levels and other conditions will be governed by the building. Use the drawings and specifications for guidance and secure the engineer's approval of changes in locations. Circuits, where shown on an electrical drawings, are so indicated primarily for the purpose of indicating the general circuit plan and do not necessarily indicate the exact location of routing of the raceways unless specifically indicated. Circuits shall be run in suit conditions considering structural features, other trades,
- D. Construction methods and good installation practice.
 - 1. The contractor shall visit the site and become thoroughly familiar with all existing conditions under which the work and work of other trades will be installed. This contract includes all necessary offsets, transitions, modifications and relocation required to install all new.
 - 2. Equipment in new or existing spaces. Contractor shall include any modifications required in existing electrical equipment for installation of new electrical equipment and new equipment of other trades. (Lighting fixtures, devices, conduit wiring, etc.) All new and existing equipment and systems shall be fully operational under this contract before the project is considered complete.
 - 3. The contractor shall be held responsible for any assumptions that are made, any omissions or errors made as a result of failure to visit the site and become thoroughly familiar with the existing conditions and the contract documents of all trades.

1.3 RELATED REQUIREMENTS

- A. Section 01 1000 Summary of Contract: Contract descriptions, description of alterations work, work by others, future work, occupancy conditions, use of site and premises, work sequence.
- B. Section 01 2000 Price and Payment Procedures: Applications for payment, Schedule of Values, modifications procedures, closeout procedures.
- C. Section 01 2100 Allowances: Cash
- D. Section 01 3000 Administrative Requirements: Submittal procedures, project meetings, progress schedules and documentation, reports, coordination.
- E. Section 01 3553 Site Safety and Security Procedures.

- F. Section 01 4000 Quality Requirements: Procedures for testing, inspection, mock-ups, reports, certificates; use of reference standards.
- G. Section 01 5000 Temporary Facilities and Controls.
- H. Section 01 7000 Execution: Examination, preparation, and general installation procedures; preinstallation meetings; cutting and patching; cleaning and protection; starting of systems; demonstration and instruction; closeout procedures except payment procedures; requirements for alterations work.
- I. Section 01 7800 Closeout Submittals: Project record documents, operation and maintenance (O&M) data, warranties and bonds.
- J. Section 01 7900 Demonstration and Training: Detailed requirements.

1.4 **DEFINITIONS**

A. Refer to Section 01 4216 - Definitions.

1.5 CODES, REGULATIONS AND STANDARDS

- A. Refer to Section 01 4100 Regulatory Requirements for additional requirements
- B. All electrical work shall be performed in accordance with the following approved codes:
 - 1. UL Underwriters Laboratories
 - 2. EPA Environmental Protection Agency
 - 3. IEEE Institute of Electrical And Electronic Engineers
 - 4. NEMA National Electrical Manufacturers Association

1.6 PERMITS, FEES ANP INSPECTIONS

A. The contractor shall give all necessary notices, and obtain all permits, and pay for all government fees. The Owner shall file all drawings, complete all documents and the Electricain shall obtain all necessary approvals and show insurance to pull permit from proper authorities or agency having jurisdiction. Obtain all required certificates of inspection covering work. The contractor shall see that all required inspections and tests are made and shall cooperate to make these tests as thorough and as readily made as possible.

1.7 MATERIALS AND WORKMANSHIP

- A. Refer to Section 01 4000 Quality Requirements for additional requirements.
- B. All work shall be of a quality consistent with good trade practice and shall Be installed in a neat, workmanlike manner. The engineer/owner reserves the right to reject any work which, in his opinion, has been installed in a substandard, dangerous or in a unserviceable manner. The contractor shall replace rejected work in a satisfactory manner at no extra cost to the owner.

1.8 GUARANTEE

A. All workmanship and materials shall be fully guaranteed for a period of two year after acceptance of the entire installation covered by this contract. Should any defects occur during the guaranteed period, the contractor shall repair and/or replace all defective equipment, material and/or work at no extra charge to the owner.

1.9 RECORD DRAWINGS

- A. Refer to Section 01 7800 Closeout Submittals for additional requirements.
- B. Maintain, at the job site, a set of electrical drawings indicating all changes in location of the equipment, panels, devices, etc. From the original layout. Clearly mark in red all changes on the drawings. At the completion of the project the contractor shall turn over the record drawings to the engineer/owner.

1.10 COORDINATION

A. All work shall be carried out in conjunction with other trades and full cooperation shall be given in order that all work may proceed with a minimum of delay and interfierence.

1.11 SHOP DRAWING

- A. Refer to Section 01 3000 Administrative Requirements for additional requirements.
- B. Submit one copy in PDF format for review, detailed shop drawings of all equipment and material specified. The contractor shall review all shop drawings prior to submission to the architect/engineer for review. No material or equipment may be delivered to the job site or installed until contractor has in their possession, approved shop drawings for the particular material or equipment. Shop drawings shall be specific with items submitted for approval clearly identified.
- C. The following, but not limited to, electrical items that must be submitted for review:
 - 1. Devices (receptacles, toggle switches, occ. Sensors, fire alarm notification, Etc.)
 - 2. Lighting

1.12 OPERATING INSTRUCTIONS

- A. Refer to Section 01 7800 Closeout Submittals for submittal and additional requirements.
- B. The contractor shall furnish to the architect/engineer instructions for operating and maintaining all systems and equipment.
 - 1. Manufacturer's advertising literature or catalogs will not be acceptable for operating and maintenance instructions
- C. The contractor, in the above- mentioned instructions, shall include the maintenance schedule for the principal items of equipment furnished under this division.
- D. An authorized manufacturer's representative shall attest in writing that his equipment has been properly installed prior to startup. These letters will be bound into operating and maintenance books.

1.13 MANUFACTURER'S INSTRUCTION

A. Install all equipment in accordance with manufacturer's instructions or requirements for proper operation and maintenance.

1.14 CUTTING, PATCHING, REPAIRING AND PAINTING

- A. Refer to Section 01 7000 Execution for additional requirements.
- B. The general contractor shall perform all cutting, patching, repairing and painting for all electrical items and equipment called for under this contract.

1.15 TEMPORARY LIGHT AND POWER

- A. Refer to Section 01 5000 Temporary Facilities and Controls for additional requirements.
- B. Furnish and install temporary electrical power and lighting for use by all Trade contractors during the course of construction. All temporary work shall be done in compliance with all applicable articles in the national electrical Code, OSHA and with all requirements of any authority having jurisdiction.

1.16 DRAWING AND INTENT

A. Drawings are intended as working drawings for general layout of the various items of equipment. However layout of accessories, specialties, equipment and piping systems are diagrammatic unless specifically dimensioned, and do not necessarily indicate every required, fittings, junction or pull box, offsets or similar items required for the installation to be complete

1.17 CONTINUITY OF EXISTING SYSTEM:

A. Maintain continuity of the existing lighting, devices to the areas not affected by the alteration.

1.18 SCAFFOLDING, RIGGING AND HOISTING:

A. Unless otherwise specified, contractor shall furnish all scaffolding, rigging, hoisting, and services necessary for the erection and delivery into the premises of any equipment and apparatus furnished. This will apply to any equipment that is being removed from the premises.

1.19 COORDINATION DRAWINGS

A. Coordination drawings shall indicate all MEP equipment, ducts and pipes. Mounting heights shall be noted on the coordination drawings.

1.20 EQUIPMENT SUBSITITUTIONS

A. Refer to Section 01 6000 - Product Requirements

PART 2 - PRODUCTS

2.1 MATERIALS

A. All materials and equipment provided under this section shall be new, first grade, best of their respective kinds and in no way shall they be less than the quality and intent set forth under this section. They shall meet the requirements of all standards set up to govern the manufacturer of electrical materials and comply with all applicable codes and standards

2.2 WIRE

- A. Conductors shall be UL listed, 600 volts, 90 deg. C., and single conductor type thwn/thhn. 98% conductivity, annealed uncoated copper with PVC insulation covered with nylon sheath jacket. Tested in accordance with the requirements of underwriter's laboratories standard 83. Wire shall be identified by surface
- B. Marking indicating manufacturer's identification conductor size and metal, voltage rating, UL symbol and type designation. Conductors shall be stranded. Minimum size shall be #12 AWG unless otherwise indicated. Manufactured by Rome Cable Triangle Wire & Cable, General Cable Or Essex Wire & Cable.

2.3 METAL CLAD CABLE (MC)

- A. Metal clad cable shall be interlocking galvanized steel armor construction. Color coded thermoplastic/nyl on insulation thhn, 90 degree c., 600 volts, copper conductors and internal insulated equipment copper ground conductor.
- B. Marker tape and cable tape over minimum size #12 AWG unless otherwise indicated. Manufactured By American Flexible Conduit, Triangle Wire And Cable, General Cable Or Standard Cable.

2.4 FITTINGS

- A. Insulation bushings shall be high impact thermoplastic phenolic with 150 deg. C. Ul temperature rating.
- B. Insulated grounding bushings shall be malleable iron zinc plated with molded on phenolic insulation and lay-in grounding lug.
- C. Conduit locknuts shall be heavy nut stock steel-zinc plated.
- D. Offset nipples shall be malleable iron zinc plated w1ith rigid conduit threading and 3/4" offset.
- E. Connectors and couplings for electrical metallic tubing (EMT) shall be heavy steel-zinc plated with pre-set/pre-shaked set screws.
- F. Conduit straps shall be snap-type, double ribbed steel-zinc plated.
- G. Metal clad cable and flexible metallic conduit connectors shall be malleable iron-zinc plated, male hub threads with locknut.
- H. Conduit fittings shall be manufactured by O/Z Gedney, Crouse- Hinds or Appleton.

2.5 SUPPORT FITTINGS

A. Support channel shall be roll-formed #12 gauge steel, solid base or bolt hole base - hot dip galvanized finish. Complete with angle fittings, spring nuts, conduit supports, 3/8" or 1/2" threaded rods (size required for load). Etc.

2.6 OUTLET BOXES

A. Outlet boxes shall be galvanized steel, flush or surface mounted and of proper type and size as required for the particular application. Size and type dictated by the number of devices (2 gang minimum with

single gang plaster ring for single device locations). Number of conductors and wiring method utilized. Boxes shall be adequate size for the installation of conductors without excessive bending or crimping of the conductors and damaging of conductor insulation. Manufactured by Steel City Or Raco.

- B. Outlet boxes shall be secured firmly in place to the building structure and set true and square. Provide suitable means to support outlet box to take the weight of the lighting fixture or device. Outlet boxed or box extension rings shall be set flush to the finished wall or ceiling. Boxes must be attached that they will not 'rock', 'shift' or 'move in and out' when devices are used. In no case shall boxes be installed back-to-back in a common wall dividing two spaces.
- C. Where more than one outlet is shown or specified to be the same elevation or one above the other, align them exactly on center lines horizontally or vertically.

2.7 WIRING DEVICES

- A. All devices shall be commercial specification grade, UL. listed, self-grounding,
- B. Ground lug, side/back wired. Color shall be selected by architect or owner unless otherwise indicated. Manufactured by Hubbel, Leviton, Or Pass &: Seymour.
- C. Receptacles that have a power feed thru (feed in feed-out) arrangement shall be pigtailed. Feed thru feature on duplex receptacles use is not acceptable.

1.	Receptacles:	20a	125v	Hubbell
2.	Receptacles: duplex receptacle			Hubbell 5362
3.	Duplex receptacle - GFCI			GFST20
4.	Switches:	20a	125v	Hubbell
5.	Key-operated switch	20a	125v	Hubbell 1221L

- D. Wall plates for switches and receptacles shall be stainless steel.
- E. Wall plates for switches and receptacles shall have panelboard and circuit designation engraved at top of plate.

2.8 OCCUPANCY SENSORS

A. Occupancy sensor switches shall be rated for 120/277 volt and be capable of switching zero to 1000 watts of electronic ballast loads with time delay settings from 4 minutes to 30 minutes. Manufactured by WATTSTOPPER, INC. Color selected by architect. Install, test, and set time delays per manufacturer's requirements. See detail on drawing e-001 for additional information

2.9 LIGHTING FIXTURES

- A. Furnish and install all lighting fixtures as specified below and on drawings, complete with all accessories, louvers, lamps and mounting hardware. The fixtures shown are marked as type a, b, c, etc. Provide lamps for all fixtures of wattages and types indicated.
- B. EXTERIOR FIXTURE: LUMINIS NAUTILUX LED NT80YRLIW 30 120 WHITE K35 PC6 with Drivers as required to make fixtures operational.
- C. Furnish and install new lamps during the course of construction up to and including the date of final completion of the project.
- D. Clean and remove all paint, stickers, dirt, smudges and fingerprints from lighting fixtures after final building clean- up.
- E. Lay-in troffers and pendant light fixtures shall have a 12 gauge safely wire fastened from building structure to all fixture corners.
- F. Recessed downlights shall be supported to the building structure using channel and bar hangers. A 12-gauge safety wire shall be fastened from building structure to fixture at two locations opposite from each other.

2.10 EMERGENCY LIGHTING AND EXIT LIGHTING SYSTEM

A. Furnish and install where shown on plans, a system of units so arranged that in case of power failure, these lights will automatically illuminate the egress and exit areas. Unit shall be u.l listed and shall meet the requirements of the N.E.C., N.F.P.A. 101 Life Safely Code. Connect emergency battery pack to local lighting branch circuit ahead of switching device (constant power). And to local switch for fixture control. Emergency battery pack shall be self-diagnostic type and circuited for two lamp operation. Emergency exit sign battery packs shall be self-diagnostic, and connected to non-switched side of local lighting circuit.

2.11 PENETRATION SEALANT

- A. Refer to Section 07 9200 Joint Sealants for additional requirements.
- B. All penetrations shall be sealed with 3M Intumescent Fire Barrier Ppenetration Sealant, applied per manufacturer's and UL guidelines.

2.12 FIRE STOPS AND SEALS

- A. Refer to Section 07 8400 Firestopping for additional requirements.
- B. Penetrations through fire-rated walls, ceiling or floors in which cables or conduits pass shall be ruled solidly by UL. approved fire-stop materials, classified for an hour rating equal to the fire rating of the wall, ceiling or floor. Provide to 3M Fire Barrier CP25WB caulk or approved equivalent.
- C. Sealing bushings shall be used on conduit and cable ends to effectively prevent the intrusion of water, a damp or corrosive atmosphere, draft or dust.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that existing conditions are acceptable prior to starting instalations..
- B. Preinstallation Testing: Test substrate for existing fire alarms system prior to modifications.

3.2 PREPARATION

- A. Removal: Removing existing equipment, devices, wiring as required to reinistall with new doors and frames..
- B. Measure indicated mounting heights to bottom of unit for suspended items and to center of unit for wall-mounting items.
- C. Headroom Maintenance: If mounting heights or other location criteria are not indicated, arrange and install components and equipment to provide maximum possible headroom consistent with these requirements.

3.3 INSTALLATION

- A. Contractor shall maintain continuity of circuitry for existing equipment and devices that are to remain. Where outlets are removed and are not at the circuit dead end, extend circuitry as required to maintain integrity of original circuit. Where wiring device is to be removed and the wall is to remain, the contractor shall disconnect the branch wiring from the source and fill in outletbox. Blank plates will not be permitted.
- B. The contractor shall remove and/or replace/reinstall any existing electrical work which interferes with the new installation. All exposed abandoned conduit and wiring shall be removed. The contractor shall cut back all abandoned conduit and wiring to the floor, wall or hung ceiling. This work may not be represented on the drawings, but shall be taken into account by the contractor intheir proposal.
- C. Circuit breakers shall match existing and shall be UL listed and certifie to be used in panel in which it is installed.

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY ELECTRICAL SPECIFICATIONS

- D. Equipment: Install to facilitate service, maintenance, and repair or replacement of components of both electrical equipment and other nearby installations. Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity.
- E. Right of Way: Give to piping systems installed at a required slope.
- F. All work, materials and manner of installing same shall be in strict accordance with the latest requirements of the national electric code.
- G. Unless otherwise indicated all wiring may be installed exposed using wire mold (2000 series or equal) conduit where installed on masonry wall and in all finished spaces.

3.4 WIRING

- A. Provide wiring to all outlets, equipment, apparatus and other specialties under this division that which furnished or provided under other divisions or by the owner. If esisting is not being reused.
- B. The term 'wiring' shall be considered to be comprised of the conduit, conductors, connections, etc.
- C. All wiring on drawings is sized for type thwn/thhn copper conductors.
- D. Minimum size wire shall be #12 unless otherwise indicated. All wiring shall be color coded.
- E. Exercise caution in pulling conductors into raceways so as not to damage the insulation. Cable pulling lubricant shall be used to assist in pulling.
- F. Conductor within panelboards, junction boxes, other equipment where concentrations of conductors are enclosed, shall be neatly arranged and tied with cable ties.
- G. Circuits shall be so connected to the panelboards that the total load is distributed as neatly as possible, equally between each line and neutral. 10% will be considered a reasonable and allowable unbalance.
- H. Common neutral for multiple branch circuits is not acceptable, provide separate neutral for each branch circuit.
- I. Wiring in outlet boxes, junction boxes, cabinet panelboards or equipment shall have
- J. A minimum of eight (8") inches length leaps for connecting wiring devices to make up circuit splices.
- K. Provide flexible metal conduit for lighting, and other vibrating equipment connections. Length of flexible metal conduit do not exceed three feet (3').
- L. Install copper green insulated grounding conductor in all conduits and raceways. Splicing
- M. Splicing shall be done with insulated or non-insulated connectors of appropriate types and current-carrying capacity. Non-insulated connectors shall be wrapped with insulating tape to the thickness of the insulation of the conductors being
- N. Spliced. Electrical tape shall be 3m or super 88 scotch vinyl flame-retardant, cold and weather resistant.
- O. Splices for conductors, sizes #10 AWG or smaller shall be made with UL listed spring-type connectors or appropriate current carrying capacity.
- P. Splices, taps and terminals for conductors #8 AWG or larger shall be made with UL listed bolted pressure connectors of bronze or copper construction, of
- Q. Appropriate current carrying capacity. Equal to O/Z Gedeny, Burndy or Blackburn.

3.5 GROUNDING

- A. All electrical work shall be grounded and bonded in full conformance with the latest approved edition of the national electrical code and local requirements.
- B. Provide grounding conductor in all raceways unless otherwise specified.
- C. Ground connections with the grounding conductors shall be made at each outlet box, light fixture, motor and other equipment components by means of a positively secured grounding clamp, screw or cup.
- D. Bonding shall be provided to assure electrical continuity and the capacity to safely conduct any fault current likely to be imposed.

GREENWICH PUBLIC SCHOOLS JULIAN CURTISS ELEMENTARY SCHOOL SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY ELECTRICAL SPECIFICATIONS

- E. All devices (switches, receptacles, etc.). Shall be grounded to conduit system with
- F. Six (6) inch solid copper #12 AWG insulated wire (green) connected to ground screw in device and fastened to back box with 10-32x3/8" slotted hexagon head washer face ground with green dye finish.

3.6 ADJUSTING

- A. Repair or remove and replace defective work, as directed by (Architect/Owner) upon completion of installation.
- B. Adjust doors, drawers, hardware, fixtures and other moving or operating parts to function smoothly.

3.7 CLEANING AND PROTECTING

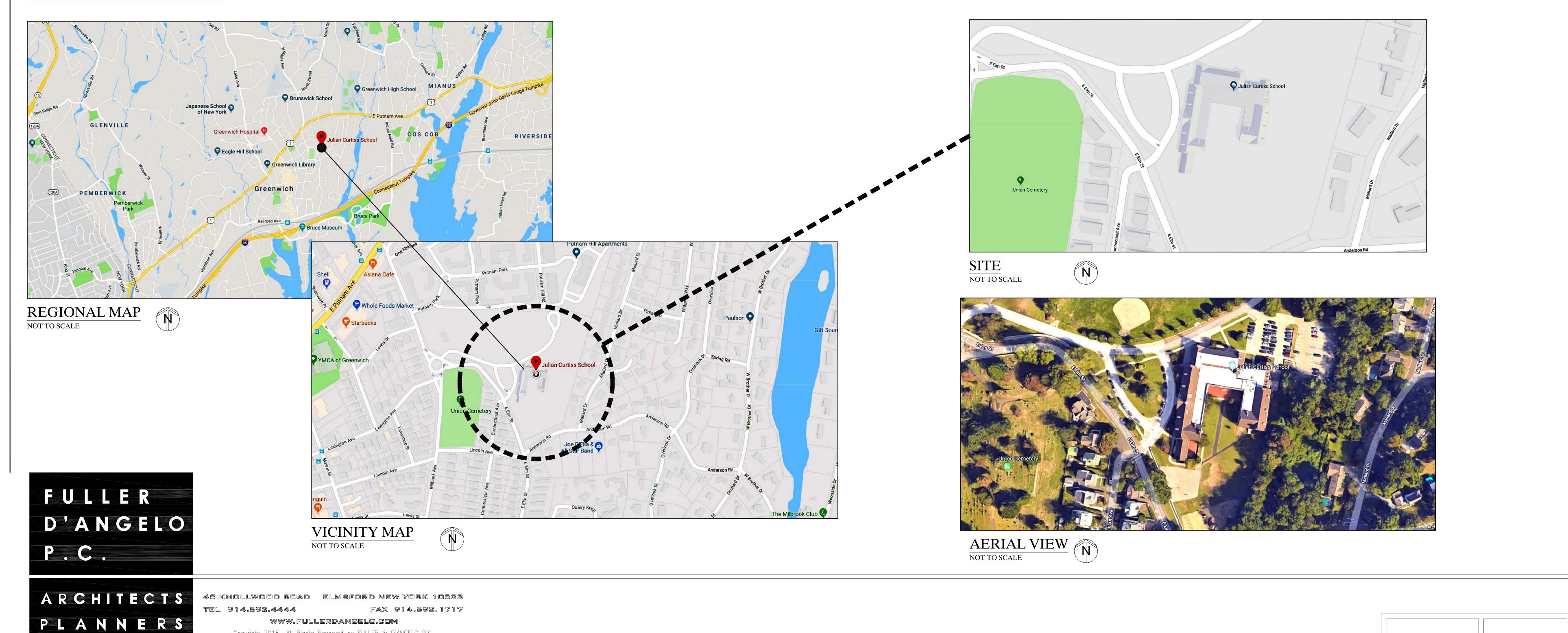
- A. Thoroughly clean all electrical equipment, devices and enclosures upon completion of all work. Repaint any equipment whose finish is damaged or rusted. Match manufacturer's original finish.
- B. Clean finished surfaces, touch up as required, and remove or refinish damaged or soiled areas to match original factory finish, as approved by Architect.
- C. Properly and completely protect against all damage, all apparatus, equipment, etc., included in this contract. The contractor will be held responsible for any damage to furnished apparatus, equipment, etc., until final acceptance.
- D. The contractor shall take whatever means necessary and/or required to protect owner's properly within the working areas from dust, debris and other matter generated by the work. No work shall commence in areas where protection is required until approval has been given to the contractor by the owner.

END OF SECTION

SELECT PATIO WALL/DOOR REPAIRS AND ADA ACCESSIBILITY JULIAN CURTISS SCHOOL



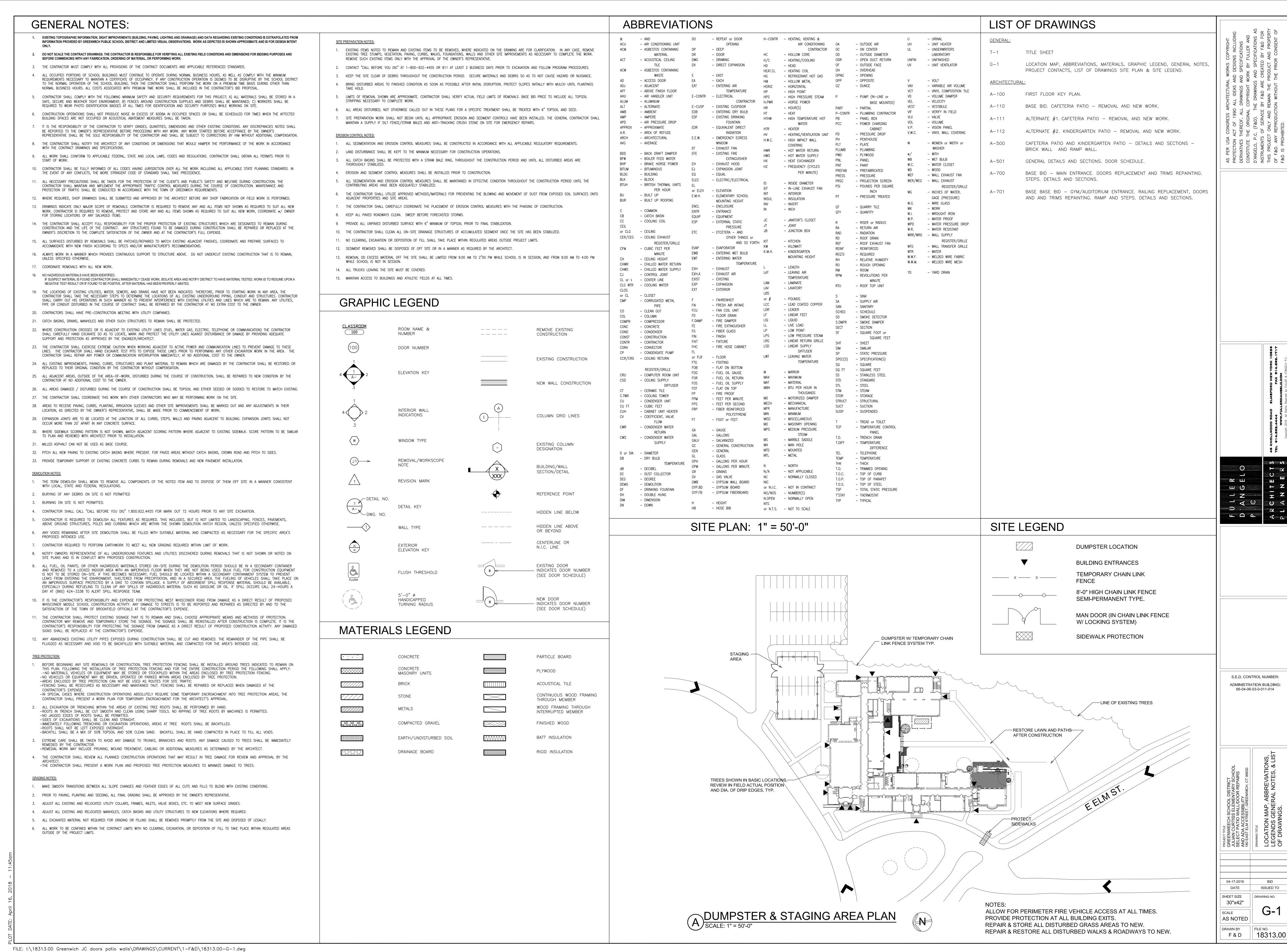
180 EAST ELM STREET, GREENWICH, CT 06830 BID NO. 2196 - 18

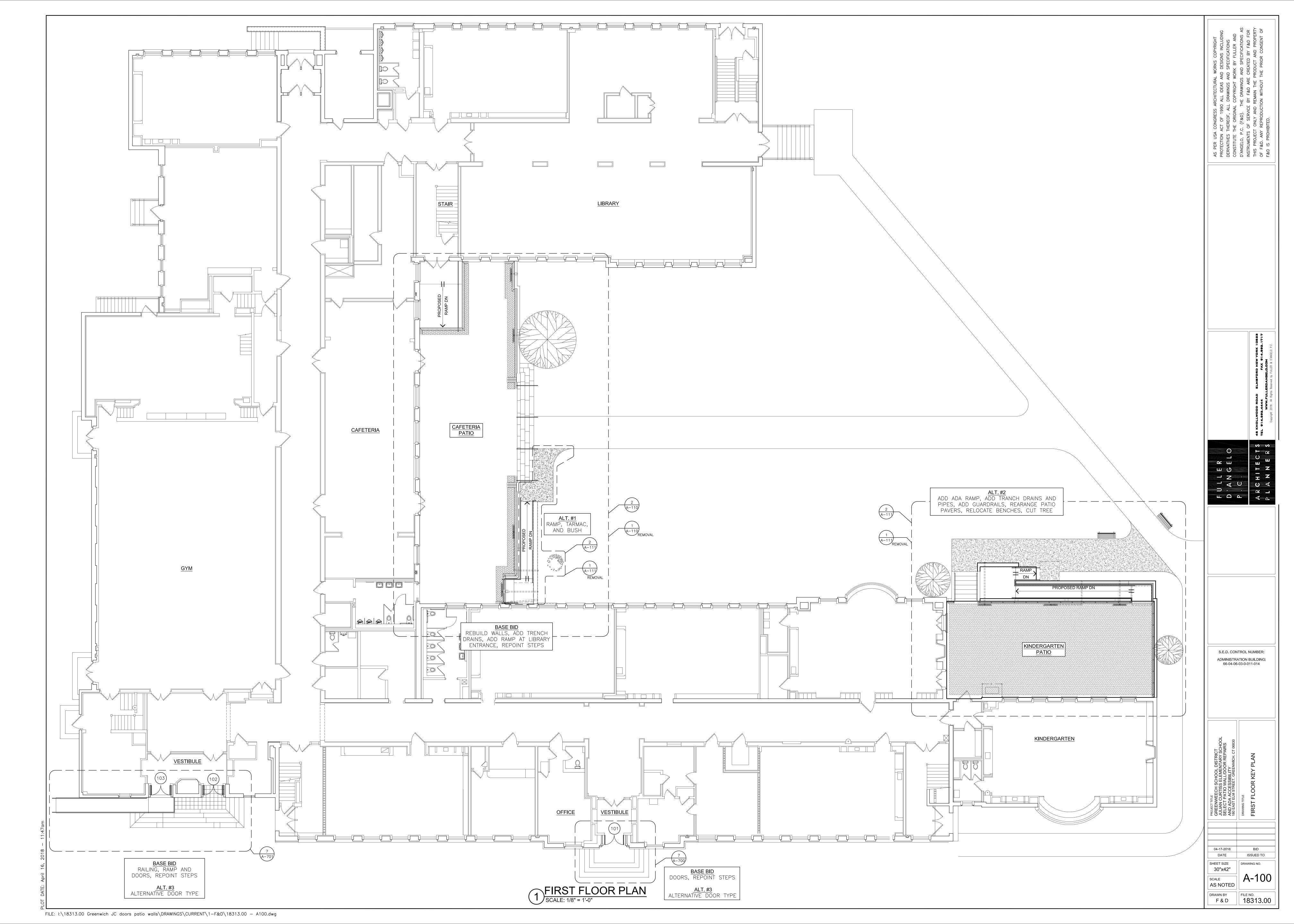


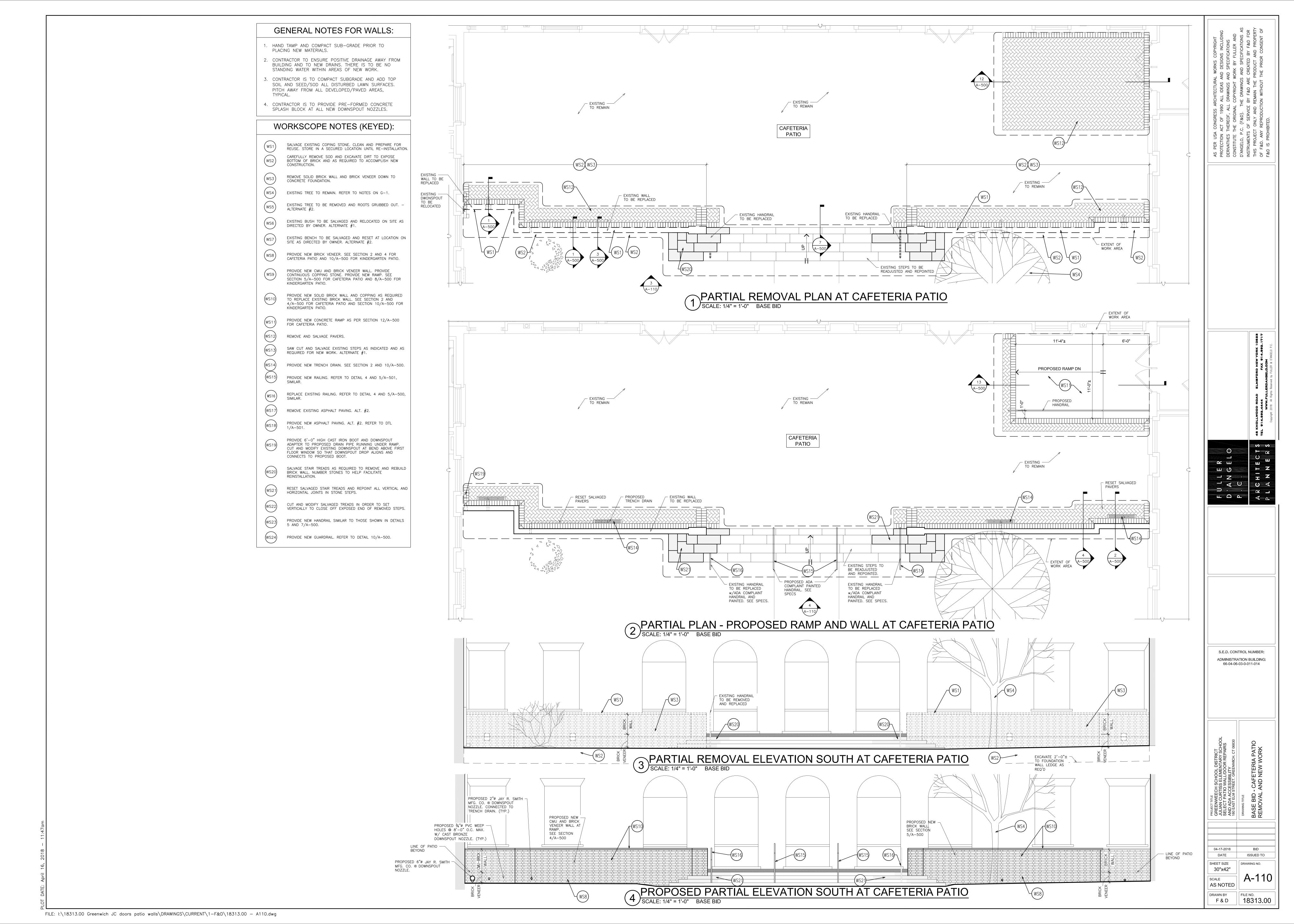
CONSULTANTS:

T-1 04-17-2018 SCHEMATIC REVIEW 18313.00 ISSUED TO

Copyright 2018 All Rights Reserved by FULLER & D'ANGELO P.C.







GENERAL NOTES FOR WALLS:

- HAND TAMP AND COMPACT SUB-GRADE PRIOR TO PLACING NEW MATERIALS.
- CONTRACTOR TO ENSURE POSITIVE DRAINAGE AWAY FROM BUILDING AND TO NEW DRAINS. THERE IS TO BE NO STANDING WATER WITHIN AREAS OF NEW WORK.
 CONTRACTOR IS TO COMPACT SUBGRADE AND ADD TOP SOIL AND SEED/SOD ALL DISTURBED LAWN SURFACES. PITCH AWAY FROM ALL DEVELOPED/PAVED AREAS,
- 4. CONTRACTOR IS TO PROVIDE PRE-FORMED CONCRETE SPLASH BLOCK AT ALL NEW DOWNSPOUT NOZZLES.

WORKSCOPE NOTES (KEYED):

- WS1)

 SALVAGE EXISTING COPING STONE. CLEAN AND PREPARE FOR REUSE. STORE IN A SECURED LOCATION UNTIL RE-INSTALLATION.

 CAREFULLY REMOVE SOD AND EXCAVATE DIRT TO EXPOSE BOTTOM OF BRICK AND AS REQUIRED TO ACCOMPLISH NEW CONSTRUCTION.
- REMOVE SOLID BRICK WALL AND BRICK VENEER DOWN TO CONCRETE FOUNDATION.
- WS4) EXISTING TREE TO REMAIN. REFER TO NOTES ON G-1.
- S5) EXISTING TREE TO BE REMOVED AND ROOTS GRUBBED OUT. ALTERNATE #2.
- WS6 EXISTING BUSH TO BE SALVAGED AND RELOCATED ON SITE AS DIRECTED BY OWNER. ALTERNATE #1.
- WS7 EXISTING BENCH TO BE SALVAGED AND RESET AT LOCATION ON SITE AS DIRECTED BY OWNER. ALTERNATE #2.
- WS8) PROVIDE NEW BRICK VENEER. SEE SECTION 2 AND 4 FOR CAFETERIA PATIO AND 10/A-500 FOR KINDERGARTEN PATIO.
- PROVIDE NEW CMU AND BRICK VENEER WALL. PROVIDE CONTINUOUS COPPING STONE. PROVIDE NEW RAMP. SEE SECTION 5/A-500 FOR CAFETERIA PATIO AND 8/A-500 FOR KINDERGARTEN PATIO.
- PROVIDE NEW SOLID BRICK WALL AND COPPING AS REQUIRED TO REPLACE EXISTING BRICK WALL. SEE SECTION 2 AND 4/A-500 FOR CAFETERIA PATIO AND SECTION 10/A-500 FOR KINDERGARTEN PATIO.
- PROVIDE NEW CONCRETE RAMP AS PER SECTION 12/A-500 FOR CAFETERIA PATIO.
- WS12 REMOVE AND SALVAGE PAVERS.
- SAW CUT AND SALVAGE EXISTING STEPS AS INDICATED AND AS REQUIRED FOR NEW WORK. ALTERNATE #1.
- WS14) PROVIDE NEW TRENCH DRAIN. SEE SECTION 2 AND 10/A-500.

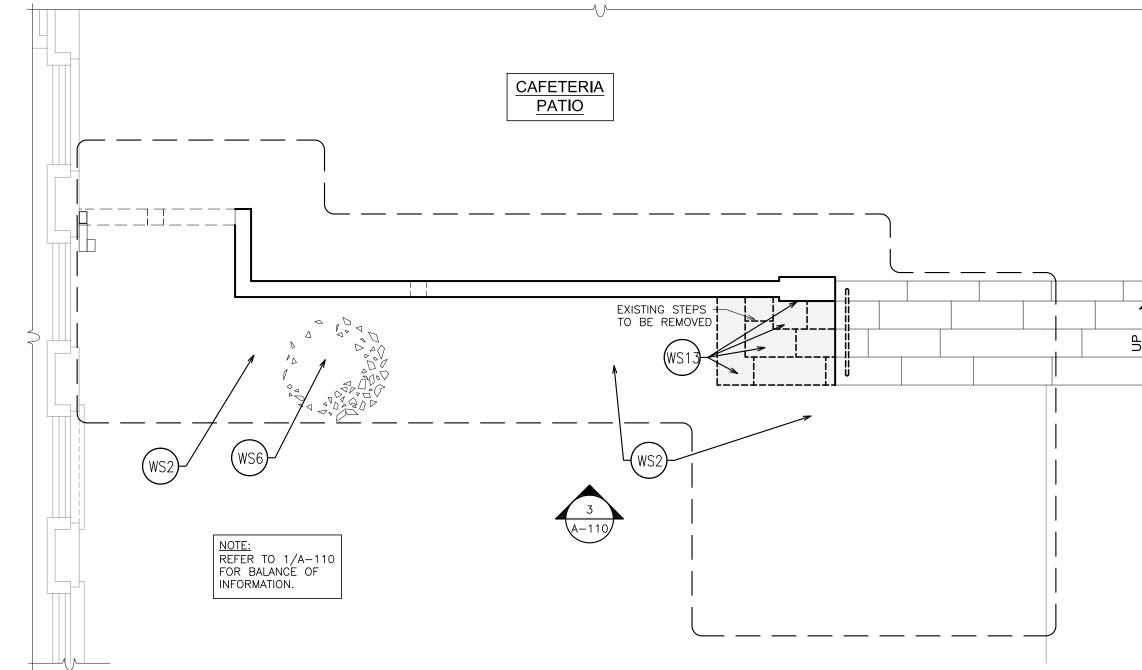
 WS15) PROVIDE NEW RAILING. REFER TO DETAIL 4 AND 5/A-501, SIMILAR.
- WS16 REPLACE EXISTING RAILING. REFER TO DETAIL 4 AND 5/A-500, SIMILAR.
- WS17 REMOVE EXISTING ASPHALT PAVING. ALT. #2.
- PROVIDE NEW ASPHALT PAVING. ALT. #2. REFER TO DTL 1/A-501.
- PROVIDE 6'-0" HIGH CAST IRON BOOT AND DOWNSPOUT
 ADAPTER TO PROPOSED DRAIN PIPE RUNNING UNDER RAMP.
 CUT AND MODIFY EXISTING DOWNSPOUT AT BEND ABOVE FIRST
 FLOOR WINDOW SO THAT DOWNSPOUT DROP ALIGNS AND
 CONNECTS TO PROPOSED BOOT.
- WS20 SALVAGE STAIR TREADS AS REQUIRED TO REMOVE AND REBUILD BRICK WALL. NUMBER STONES TO HELP FACILITATE
- REINSTALLATION.
- HORIZONTAL JOINTS IN STONE STEPS.

RESET SALVAGED STAIR TREADS AND REPOINT ALL VERTICAL AND

- CUT AND MODIFY SALVAGED TREADS IN ORDER TO SET VERTICALLY TO CLOSE OFF EXPOSED END OF REMOVED STEPS.

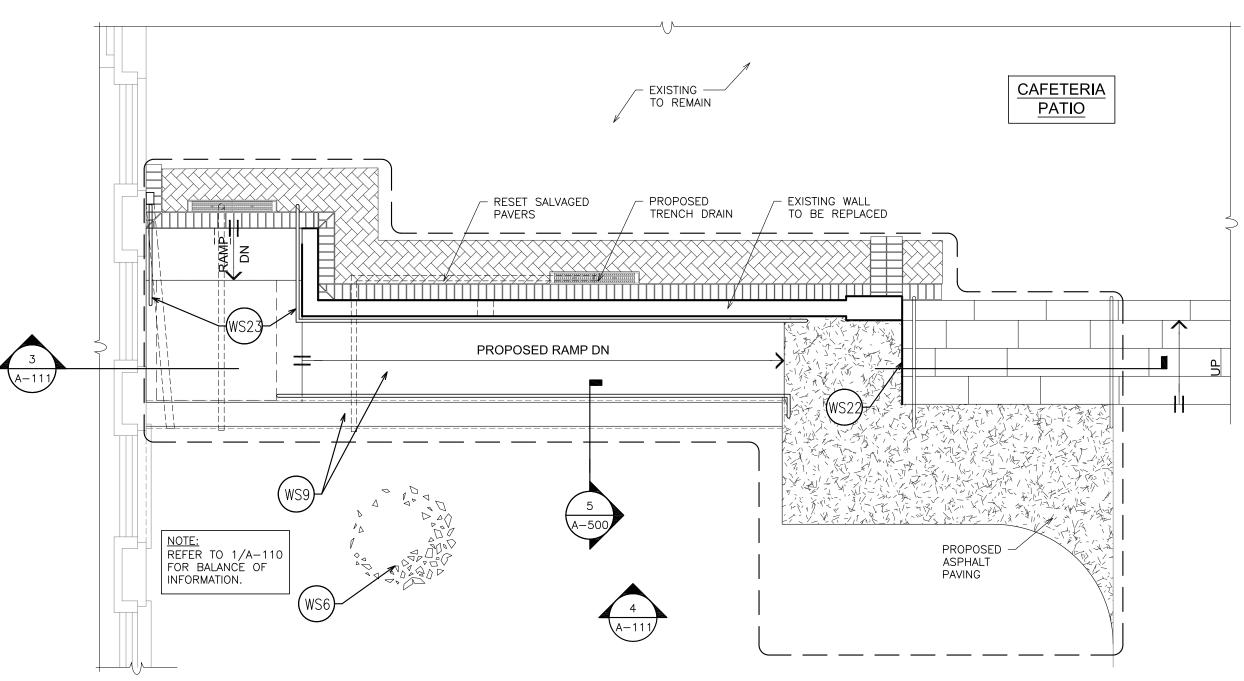
 PROVIDE NEW HANDRAIL SIMILAR TO THOSE SHOWN IN DETAILS
- PROVIDE NEW GUARDRAIL. REFER TO DETAIL 10/A-500.

5 AND 7/A-500.



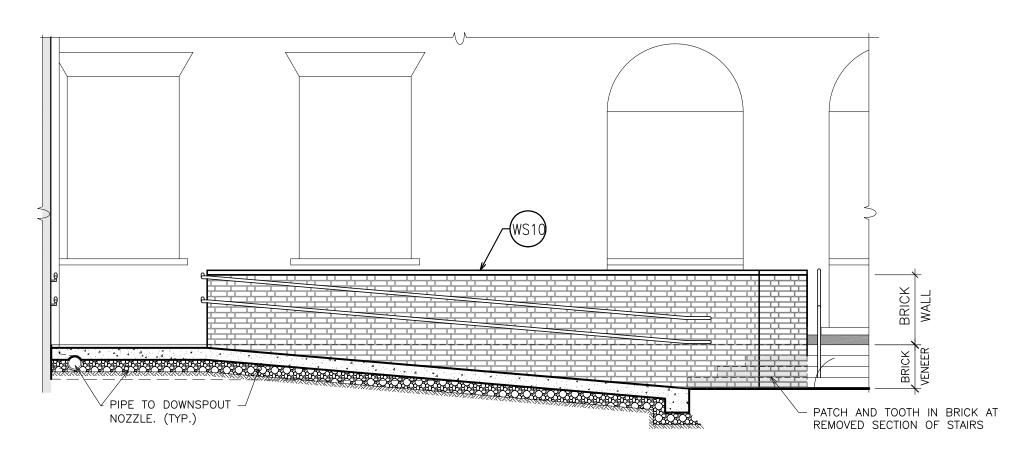
PARTIAL REMOVAL PLAN AT CAFETERIA PATIO

SCALE: 1/4" = 1'-0" ALTERNATE #1



PARTIAL PLAN - PROPOSED RAMP AND WALL AT CAFETERIA PATIO

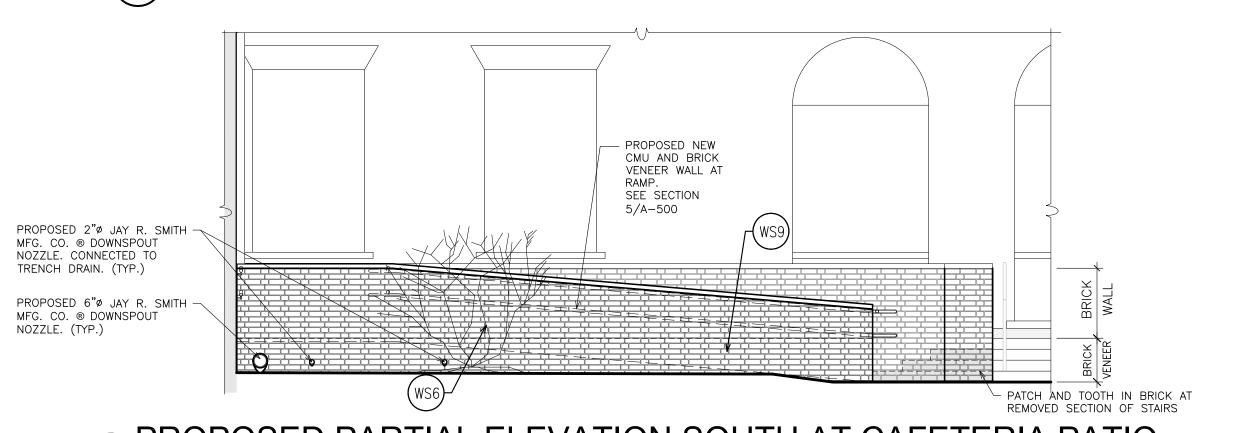
SCALE: 1/4" = 1'-0" ALTERNATE #1



PROPOSED PARTIAL SECTION-ELEVATION

AT CAFETERIA PATIO RAMP

SCALE: 1/4" = 1'-0" ALTERNATE #1



PROPOSED PARTIAL ELEVATION SOUTH AT CAFETERIA PATIO SCALE: 1/4" = 1'-0" ALTERNATE #1

.TE: April 16, 2018 — 11:48am

리 L FILE: I:\18313.00 Greenwich JC doors patio walls\DRAWINGS\CURRENT\1-F&D\18313.00 - A111.dwg

AS PER USA CONGRESS ARCHITECTURAL WORKS COPYRIGHT PROTECTION ACT OF 1990 ALL IDEAS AND DESIGNS INCLUDING DERIVATIVES THEREOF, ALL DRAWINGS AND SPECIFICATIONS CONSTITUTE THE ORIGINAL COPYRIGHT WORK BY FULLER AND D'ANGELO, P.C. (F&D). THE DRAWINGS AND SPECIFICATIONS AS INSTRUMENTS OF SERVICE BY F&D ARE CREATED BY F&D FOR THIS PROJECT ONLY AND REMAIN THE PRODUCT AND PROPERTY OF F&D. ANY REPRODUCTION WITHOUT THE PRIOR CONSENT OF

S.E.D. CONTROL NUMBER:
ADMINISTRATION BUILDING:

66-04-06-03-0-011-014

04-17-2018 DATE

SHEET SIZE

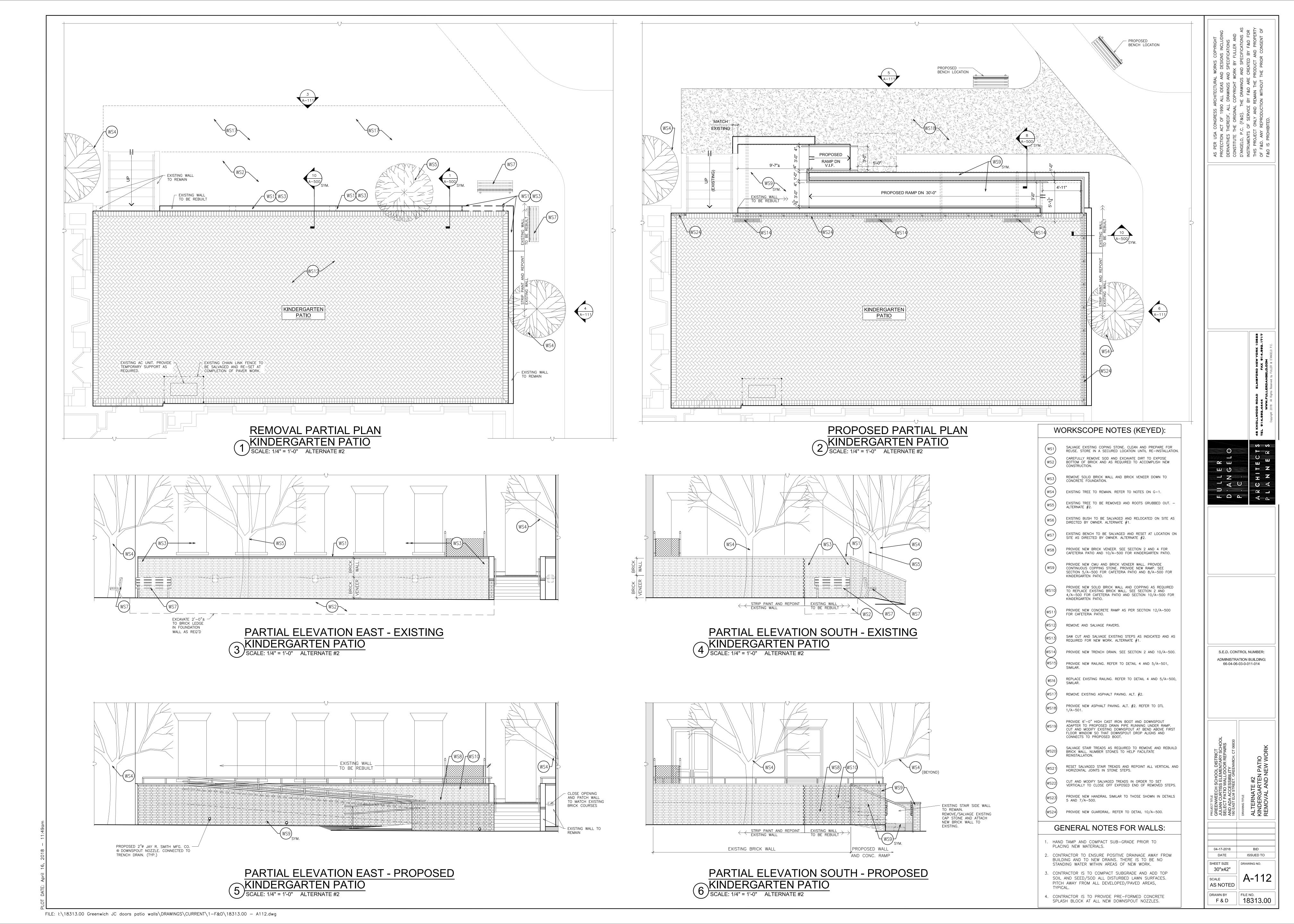
30"x42"

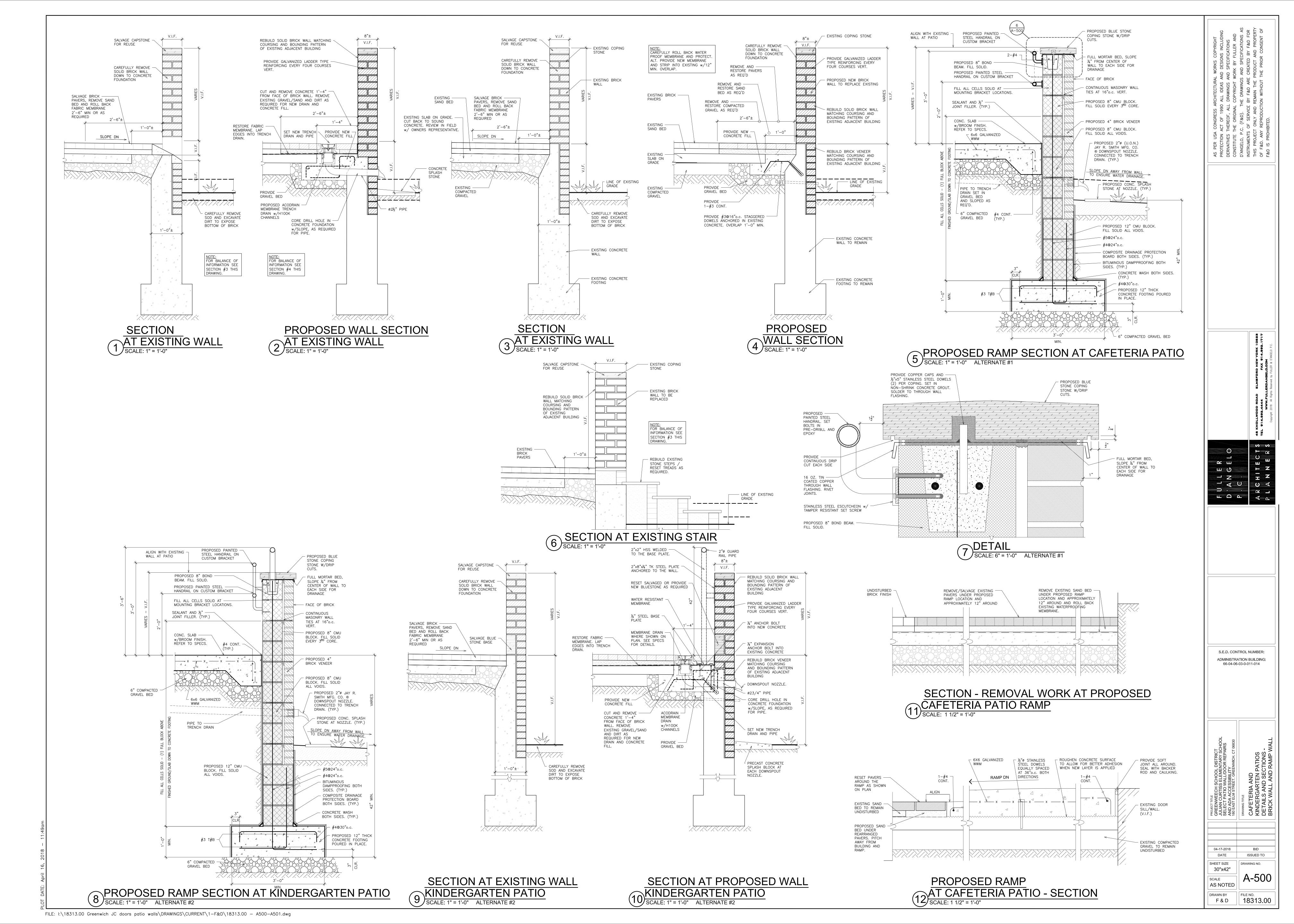
SCALE
AS NOTED

DRAWN BY
F & D

ISSUED TO

FILE NO. 18313.00





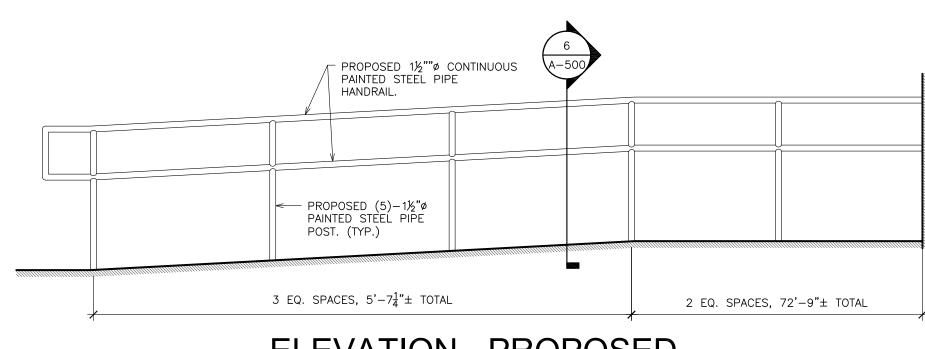
ADMINISTRATION BUILDING - DOOR SCHEDULE																									
				DOOR				FRAME			FIRE RATING (MINUITES)		HARDWARE						INDICATES REQUIRED WORK						
				SIZE					DETAIL				(WINVOILS)		FIRE CODE				REG	SECURITY		TY	O INDICATES EXISTING		
LINE	DOOR NUMBER	DRAWING NUMBER	ROOM / SPACE NAME	5'-0" x 7'-0"		DOOR TYPE	DOOR MATERIAL	FRAME TYPE	HEAD DETAIL	JAMB DETAIL	SADDLE DETAIL	180 MINUTES	90 MINUTES	60 MINUTES	PANIC RELEASE LATCH	LATCHING CLOSER (DELAYED	OPEN	UND SEALS	REMOVABLE MULLION	LEVER, U-HANDLE	KICK PLATE TACTILE WARNING ADA CONFIRMING ACCESSIBLE THRESHOLD	RECESS PULL (BY DOOR MANUFACTURERO	USH PLAI	HARDWARE SET NO.	FRAMED WITH WINDOW SYSTEM FRP FIBERGLASS REINFORCED POLYESTER AL ALUMINUM HM HOLLOW METAL WD WOOD GT WOOD GRAIN STEEL SD SEE DRAWINGS E EXISTING REMARKS
1	101	A100	MAIN ENTRANCE			3/A-700	FRP	AL	4/A-700	5/A-700				•		• •							€	01	COORDINATE w/ EXISTING SECURITY
2	102	A100	GYM/AUDITORIUM ENTRANCE			SIM.	FRP	AL	4/A-701	5/A-701						• •								01	
3456	103	A100	GYM/AUDITORIUM HANDICAP ENTRANCE			3/A-70	1 FRP	AL	4/A-701	5/A-701														01	2'-0"± AND 3'-0"± DOOR LEAFS
	3	1 101 2 102 3 103 4 5	1 101 A100 2 102 A100 3 103 A100 4 5	ROOM / SPACE NAME 1 101 A100 MAIN ENTRANCE 2 102 A100 GYM/AUDITORIUM ENTRANCE 3 103 A100 GYM/AUDITORIUM HANDICAP ENTRANCE 4 5	DOC SIZE	DOOR SIZE DOOR SIZE DOOR SIZE DOOR SIZE BBW SIZE S		SIZE DOOR FRAME SIZE DETAIL SIZE DETAIL SADDLE SADDLE STALL SADDLE STALL STALL SADDLE STALL SADDLE STALL SADDLE STALL SADDLE STALL SADDLE SADDLE DOOR FRAME FRAME SIZE DETAIL Normal N		Note Note	DOOR FRAME FIRE RATING (MINUTES)	Part Part	PRAME PRAM	Part Part		PRAME PRAM									

GENERAL DOOR NOTES:

- DOOR HARDWARE SHALL COMPLY TO ALL APPLICABLE HANDICAPPED CODES. CLOSERS SHALL COMPLY TO STANDARDS REGARDING CLOSING SPEED AND OPENING FORCE.
- 2. ALL DOOR AND FRAME SIZES SHALL BE FIELD VERIFIED.
- THERE SHALL BE NO PROJECTIONS BETWEEN 34" AND 80" ABOVE THE FLOOR OR GROUND. PROJECTIONS BETWEEN 34" AND 80" ABOVE THE FLOOR OR GROUND SHALL NOT EXCEED 4".
 REFER TO SPECIFICATIONS FOR DOOR HARDWARE SETS.
- 5. THE DOOR SURFACE WITHIN 10" OF THE FLOOR MEASURED VERTICALLY SHALL BE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING FULL WIDTH OF DOOR.

DOOR HARDWARE:

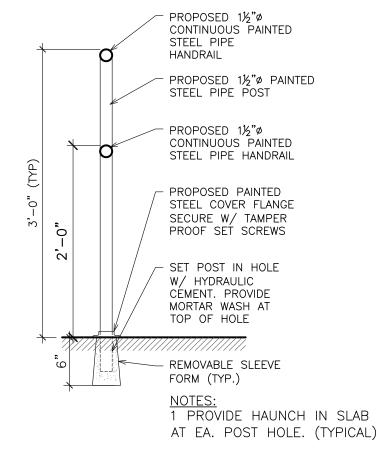
- HARDWARE SET 01: (2) 90 DEG. CONTINUOUS ROTON HINGE
-) WALL STOPS
) EXIT DEVICES w/TOP AND BOTTOM VERTICAL RODS w/RECEIVERS
) RECESS PULL
- (2) KICK PLATES
 (1) ALUMINUM SILL
 (1) AIR/NOISE GASKET SET



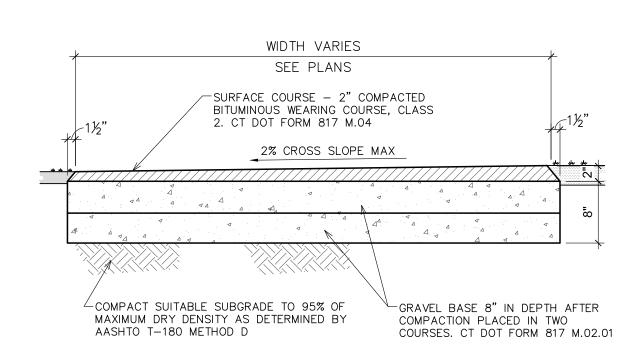
ELEVATION - PROPOSED

RAILING AT RAMP - CAFETERIA PATIO

SCALE: 1" = 1'-0" ALTERNATE #2

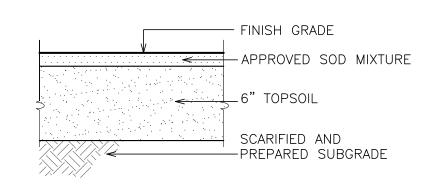


DETAIL @ FREE-STANDING HANDRAIL 5) SCALE: 1" = 1'-0" ALTERNATE #1



NOTE: SIDMATERIALS, METHODS OF INSTALLATION, CURING, TESTING, SHALL BE CONFORM TO "STATE OF CT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FORM 817 SECTIONS 4.06 AND 9.22 OR CURRENT SPECIFICATION FOR SUCH WORK.

1 BITUMINOUS CONCRETE SIDEWALK SCALE: N.T.S.



<u>NOTE:</u> THIS WORK APPLIES TO ALL GRASS AREAS DISTURBED BY NEW WORK.

2 TOP SOIL AND SOD SECTION SCALE: N.T.S.

TREE PROTECTION NOTES:

1. BEFORE BEGINNING ANY SITE REMOVALS OR CONSTRUCTION, TREE PROTECTION FENCING SHALL BE INSTALLED AROUND TREES INDICATED TO REMAIN ON THIS PLAN. FOLLOWING THE INSTALLATION OF TREE PROTECTION FENCING AND FOR THE ENTIRE CONSTRUCTION PERIOD THE FOLLOWING SHALL APPLY:

-NO MATERIALS, VEHICLES OR EQUIPMENT MAY BE STORED OR STOCKPILED WITHIN THE AREAS ENCLOSED BY TREE PROTECTION FENCING.

-NO VEHICLES OR EQUIPMENT MAY BE DRIVEN, OPERATED OR PARKED WITHIN AREAS ENCLOSED BY TREE PROTECTION.

-AREAS ENCLOSED BY TREE PROTECTION CAN NOT BE USED AS ROUTES FOR SITE TRAFFIC

-FENCING SHALL BE RESECURED AS NECESSARY AND MAINTAINED TAUT. FENCING SHALL BE REPAIRED OR REPLACED WHEN DAMAGED AT THE CONTRACTOR'S EXPENSE.

-IN SPECIAL CASES WHERE CONSTRUCTION OPERATIONS ABSOLUTELY REQUIRE SOME TEMPORARY ENCROACHMENT INTO TREE PROTECTION AREAS, THE CONTRACTOR SHALL PRESENT A WORK PLAN FOR TEMPORARY ENCROACHMENT FOR THE ARCHITECT'S

APPROVAL.

2. ALL EXCAVATION OR TRENCHING WITHIN THE AREAS OF EXISTING TREE ROOTS SHALL BE PERFORMED BY HAND.

-ROOTS IN TRENCH SHALL BE CUT SMOOTH AND CLEAN USING SHARP TOOLS. NO RIPPING OF TREE ROOTS BY MACHINES IS PERMITTED.

-NO JAGGED EDGES OF ROOTS SHALL BE PERMITTED.

RIPPING OF TREE ROOTS BY MACHINES IS PERMITTED.

-NO JAGGED EDGES OF ROOTS SHALL BE PERMITTED.

-SIDES OF EXCAVATIONS SHALL BE CLEAN AND STRAIGHT.

-IMMEDIATELY FOLLOWING TRENCHING OR EXCAVATION OPERATIONS, AREAS AT TREE ROOTS SHALL BE BACKFILLED.

-ROOTS SHALL NOT BE LEFT EXPOSED OVERNIGHT.

-BACKFILL SHALL BE A MIX OF 50% TOPSOIL AND 50% CLEAN SAND.

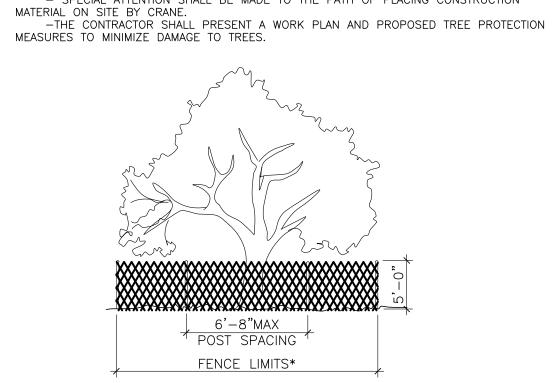
-BACKFILL SHALL BE HAND COMPACTED IN PLACE TO FILL ALL VOIDS.

3. EXTREME CARE SHALL BE TAKEN TO AVOID ANY DAMAGE TO TRUNKS, BRANCHES AND ROOTS. ANY DAMAGE CAUSED TO TREES SHALL BE IMMEDIATELY REMEDIED BY THE CONTRACTOR.

-REMEDIAL WORK MAY INCLUDE PRUNING, WOUND TREATMENT, CABLING OR ADDITIONAL MEASURES AS DETERMINED BY THE ARCHITECT.

4. THE CONTRACTOR SHALL REVIEW ALL PLANNED CONSTRUCTION OPERATIONS THAT MAY RESULT IN TREE DAMAGE FOR REVIEW AND APPROVAL BY THE ARCHITECT.

- SPECIAL ATTENTION SHALL BE MADE TO THE PATH OF PLACING CONSTRUCTION



* - THE CONTROLLING FACTORS FOR THE FENCE LIMITS ARE:

1. EDGE OF TREE DRIPLINE AND,

2. TREE PROTECTION ZONE (TPZ)=10 x DBH (DIAMETER OF TRUNK MEASURED 4.5' ABOVE THE GROUND).

NOTE: THE MOST STRICT MEASUREMENT SHALL APPLY

TREE PROTECTION FENCE

SCALE: N.T.S.

AS PER USA CONGRESS ARCHITECTURAL WORKS COPYRIGHT PROTECTION ACT OF 1990 ALL IDEAS AND DESIGNS INCLUDING DERIVATIVES THEREOF, ALL DRAWINGS AND SPECIFICATIONS CONSTITUTE THE ORIGINAL COPYRIGHT WORK BY FULLER AND D'ANGELO, P.C. (F&D). THE DRAWINGS AND SPECIFICATIONS A INSTRUMENTS OF SERVICE BY F&D ARE CREATED BY F&D FOR THIS PROJECT ONLY AND REMAIN THE PRODUCT AND PROPERT OF F&D. ANY REPRODUCTION WITHOUT THE PRIOR CONSENT O F&D IS PROHIBITED.

S

0

ш О ш

шФ

S.E.D. CONTROL NUMBER:
ADMINISTRATION BUILDING:
66-04-06-03-0-011-014

ROJECT TITLE
SREENWEECH SCHOOL DISTRICT
ULIAN CURTISS ELEMENTARY SCHOOL
SELECT PATIO WALL/DOOR REPAIRS
AND ADA ACCESSIBILITY
80 EAST ELM STREET, GREENWICH, CT 06830
SAMING TITLE
SENERAL DETAILS AND SECTIONS
SOOR SCHEDULE

04-17-2018 BID
DATE ISSUED TO

SHEET SIZE
30"x42"

SCALE
AS NOTED

DRAWN BY
F & D

F & D

F & D

TO SHEET SIZE
1 SOURCE TO

DRAWING NO.

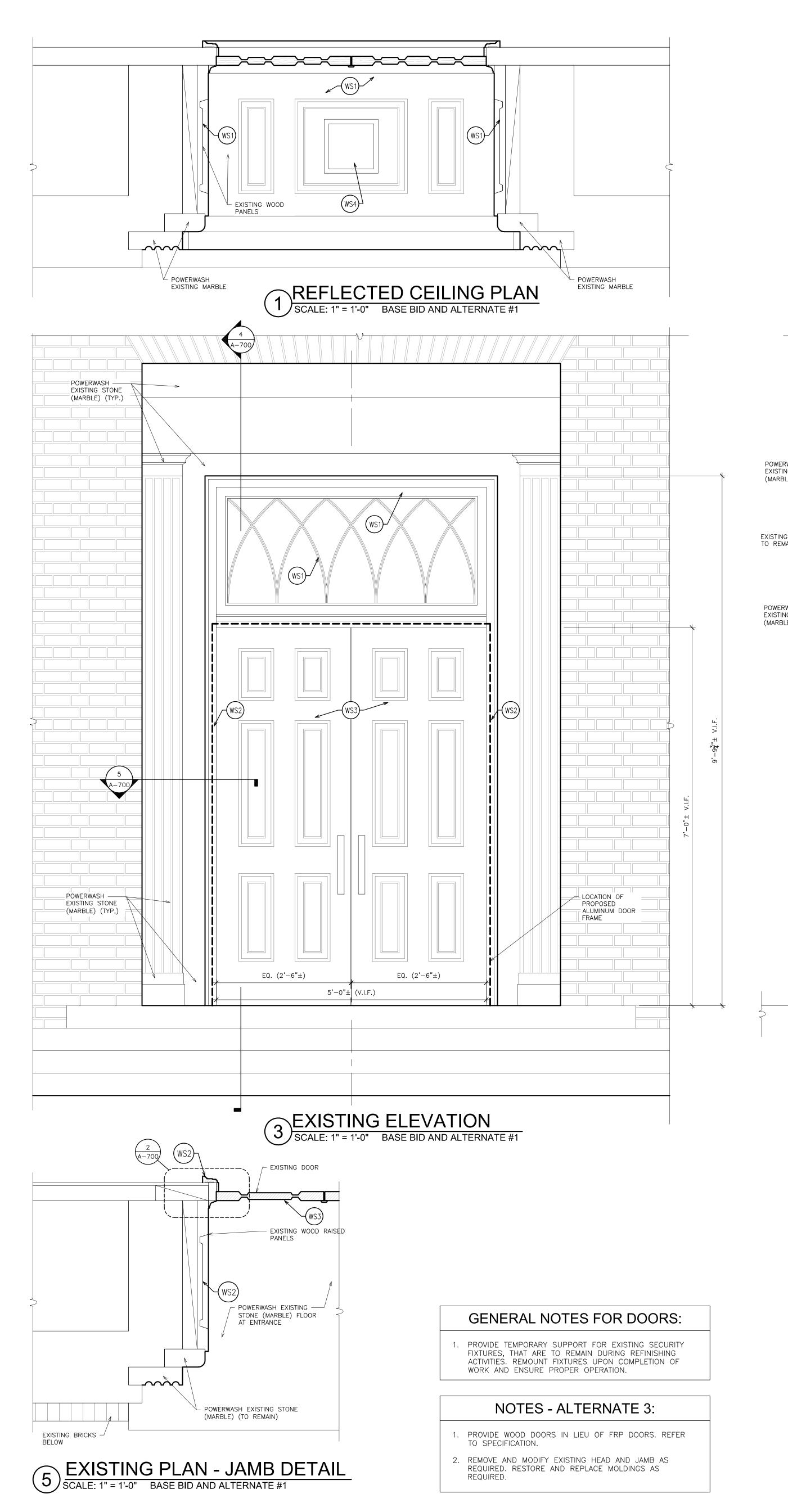
A-501

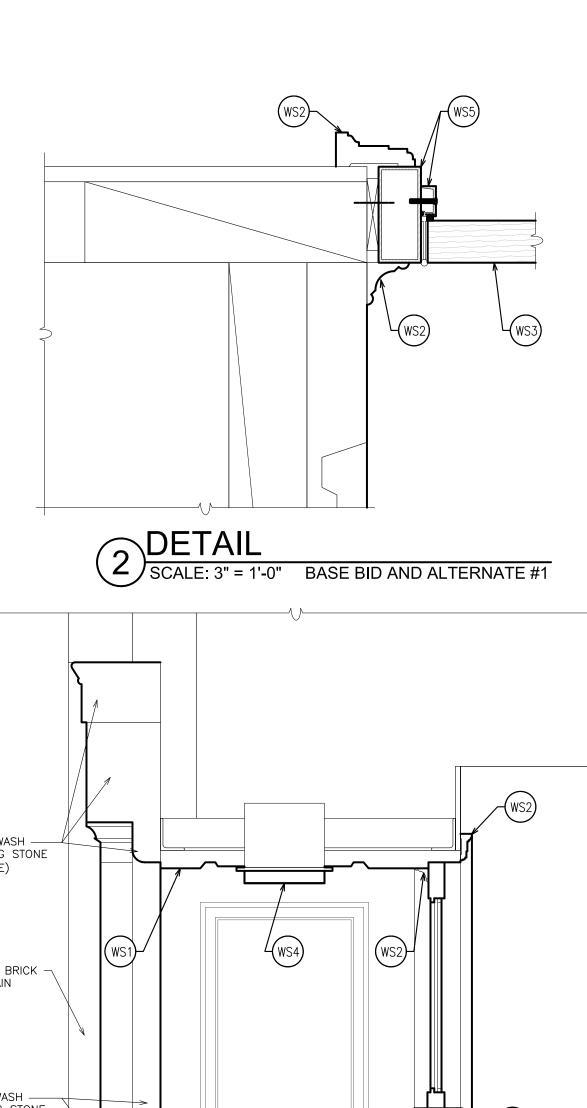
A-501

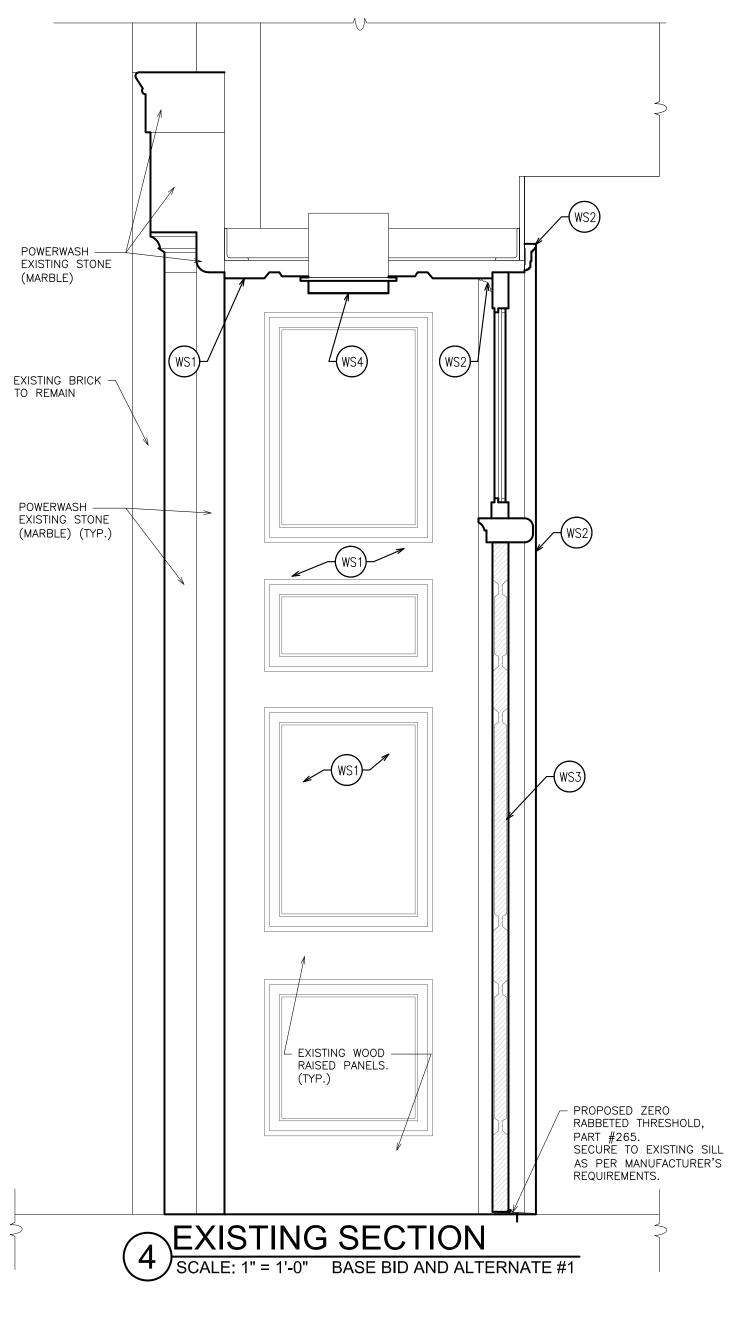
TO SHEET SIZE
1 SOURCE TO

DRAWING NO.
18313.00

FILE: I:\18313.00 Greenwich JC doors patio walls\DRAWINGS\CURRENT\1-F&D\18313.00 - A500-A501.dwg









- STRIP EXISTING PAINT. FIX/PATCH ALL DISTURBED WOOD SURFACES AS REQUIRED TO RESTORE PROFILE. PAINT AND FINISH TO MATCH EXISTING. REFER TO SPECS.
- SALVAGE EXISTING MOLDING/TRIM AS REQUIRED TO INSTALL NEW WORK. STRIP EXISTING PAINT. FIX/PATCH DISTURBED SURFACES AS REQUIRED TO RESTORE PROFILE. PAINT AND FINISH TO MATCH EXISTING. REFER TO SPECS.
- REPLACE EXISTING DOOR WITH NEW AMP DOOR BY
 SPECIAL-LITE. PAINT AND FINISH TO MATCH EXISTING. PROVIDE
 ROTON HINGE. REFER TO SPECS.
- EXISTING LIGHT FIXTURE TO BE REPLACED WITH LUMINIS, SEMI-RECESSED NAUTILUX-LED, MODEL
- #NT804R-LIW30-120V-WHT-K35-PC6. CONNECT TO EXISTING CIRCUIT AND MODIFY AND PATCH EXISTING OPENING AS REQ'D.

 PROPOSED 4"X1¾" ALUMINUM TUBE W/ 1¼"X¾" ALUMINUM

DOOR STOP, BY SPECIAL-LITE.

- RAKE OUT AND REPOINT ALL VERTICAL JOINTS IN RISERS.
 PROVIDE BACKER ROD AND SEALANT AT ALL INTERSECTIONS
 AND ABUTMENTS W/ DIFFERENT MATERIALS AND SURFACES.
- REMOVE CAULK. RAKE OUT AND REPOINT ALL VERTICAL AND HORIZONTAL JOINTS AT LANDINGS, STEPS AND RISERS. RESET PAVERS AS REQUIRED TO ALIGN AND LEVEL LANDING, 12 PAVERS MINIMUM.

 PROVIDE BACKER ROD AND SEALANT AT ALL INTERSECTIONS

AND ABUTMENTS w/ DIFFERENT MATERIALS AND SURFACES.

- WS8) POWER WASH MARBLE AT MAIN ENTRANCE.

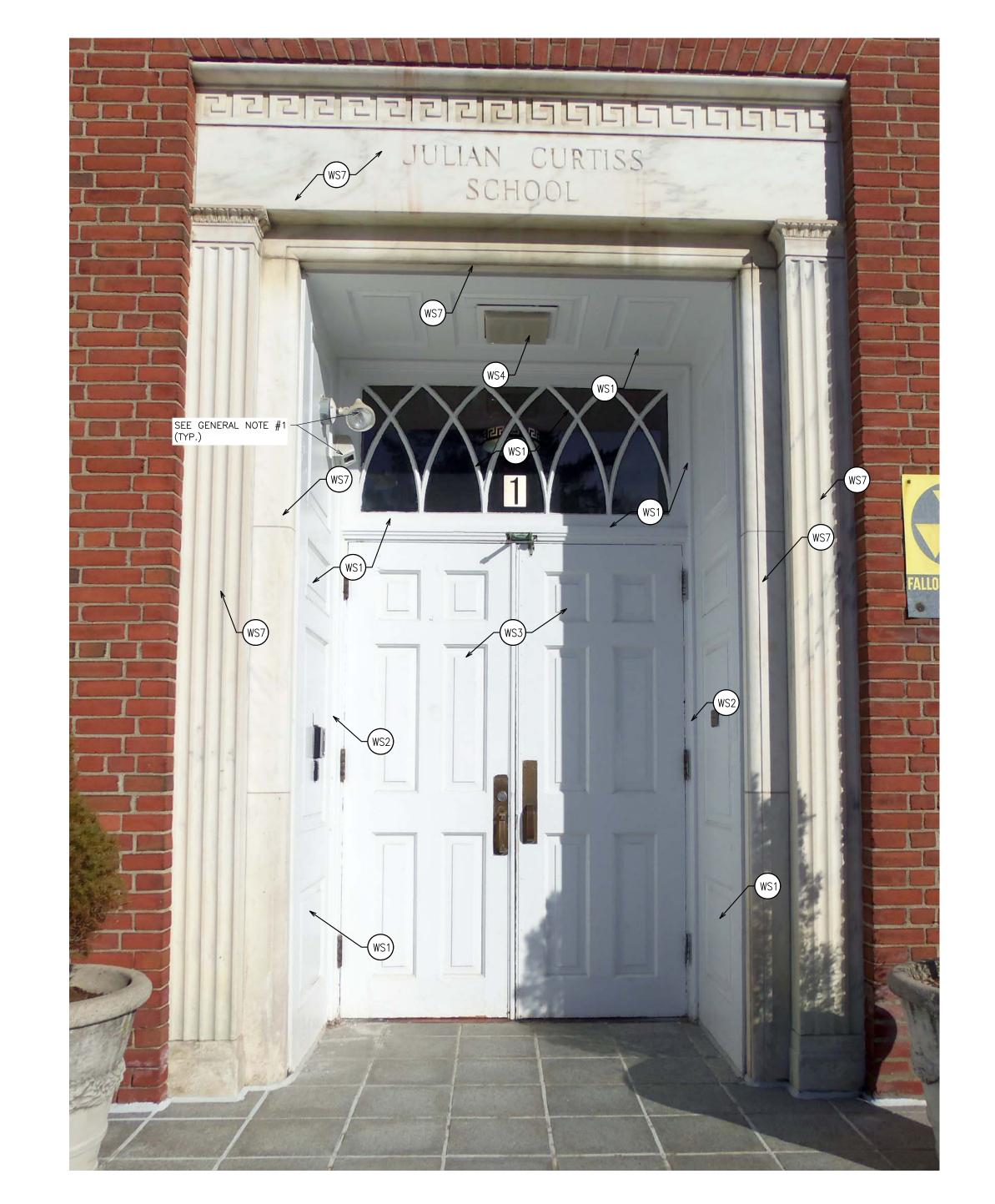
 PROVIDE NON-SLIP FINISH COAT TO RAMP. REFER TO
- WS9 SPECIFICATIONS. CLEAN AND PREPARE CONCRETE RAMP AS PER MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.

 EXISTING RAILING ALONG RAMP THAT IS SECURED TO BRICK IS TO BE EITHER MODIFIED OR REPLACED. RAIL IS TO CONTINUE
- EXTENSION AT END. PROVIDE AT LEAST (2) VERTICAL POSTS, ONE AT EACH END OF RAMP AND ONE AT MIDPOINT.

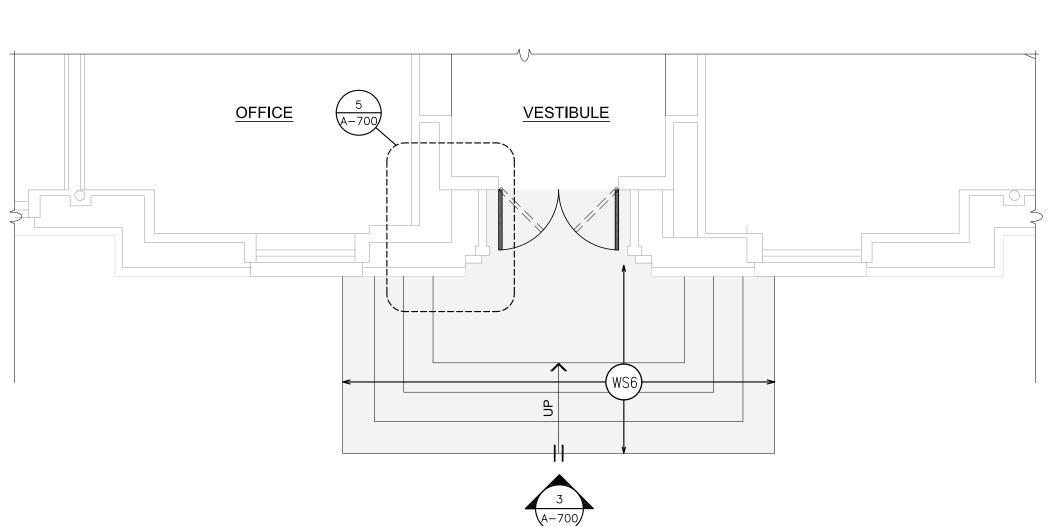
 CAREFULLY REMOVE OUTSIDE RAILING AND REPLACE IN KIND. CHIP AND/OR DRILL OUT EXISTING CUPS FOR REUSE. REFER

TO DETAIL -/A-700.

BEYOND WALL TO BOTTOM OF RAMP W/ ADA COMPLIANT



6 MAIN ENTRANCE - VIEW SCALE: N.T.S. BASE BID AND ALTERNATE #1



PARTIAL PLAN AT MAIN ENTRANCE

SCALE: 1/4" = 1'-0" BASE BID AND ALT. #3

FILE: I:\18313.00 Greenwich JC doors patio walls\DRAWINGS\CURRENT\1-F&D\18313.00 - A700-A701.dwg

AS PER USA CONGRESS ARCHITECTURAL WORKS COPYRIGHT PROTECTION ACT OF 1990 ALL IDEAS AND DESIGNS INCLUDING DERIVATIVES THEREOF, ALL DRAWINGS AND SPECIFICATIONS CONSTITUTE THE ORIGINAL COPYRIGHT WORK BY FULLER AND D'ANGELO, P.C. (F&D). THE DRAWINGS AND SPECIFICATIONS AS INSTRUMENTS OF SERVICE BY F&D ARE CREATED BY F&D FOR THIS PROJECT ONLY AND REMAIN THE PRODUCT AND PROPERTY OF F&D. ANY REPRODUCTION WITHOUT THE PRIOR CONSENT OF

P. C. HITECTS 45 KNOLLWOOD ROAD 1
P. A. N. W. F. L. STANDLLWOOD ROAD 1
WWW.FULLE WWW.FULLE WWW.FULLE

S.E.D. CONTROL NUMBER:
ADMINISTRATION BUILDING:
66-04-06-03-0-011-014

GREENWEECH SCHOOL DISTRICT
JULIAN CURTISS ELEMENTARY SCHOOL
SELECT PATIO WALL/DOOR REPAIRS
AND ADA ACCESSIBILITY
180 EAST ELM STREET, GREENWICH, CT 06830
DRAWING TITLE
BASE BID - MAIN ENTRANCE
DOORS REPLACEMENT AND
TRIMS REPAINTING. STEPS.
DETAILS AND SECTIONS

04-17-2018 BID
DATE ISSUED TO

SHEET SIZE
30"x42"

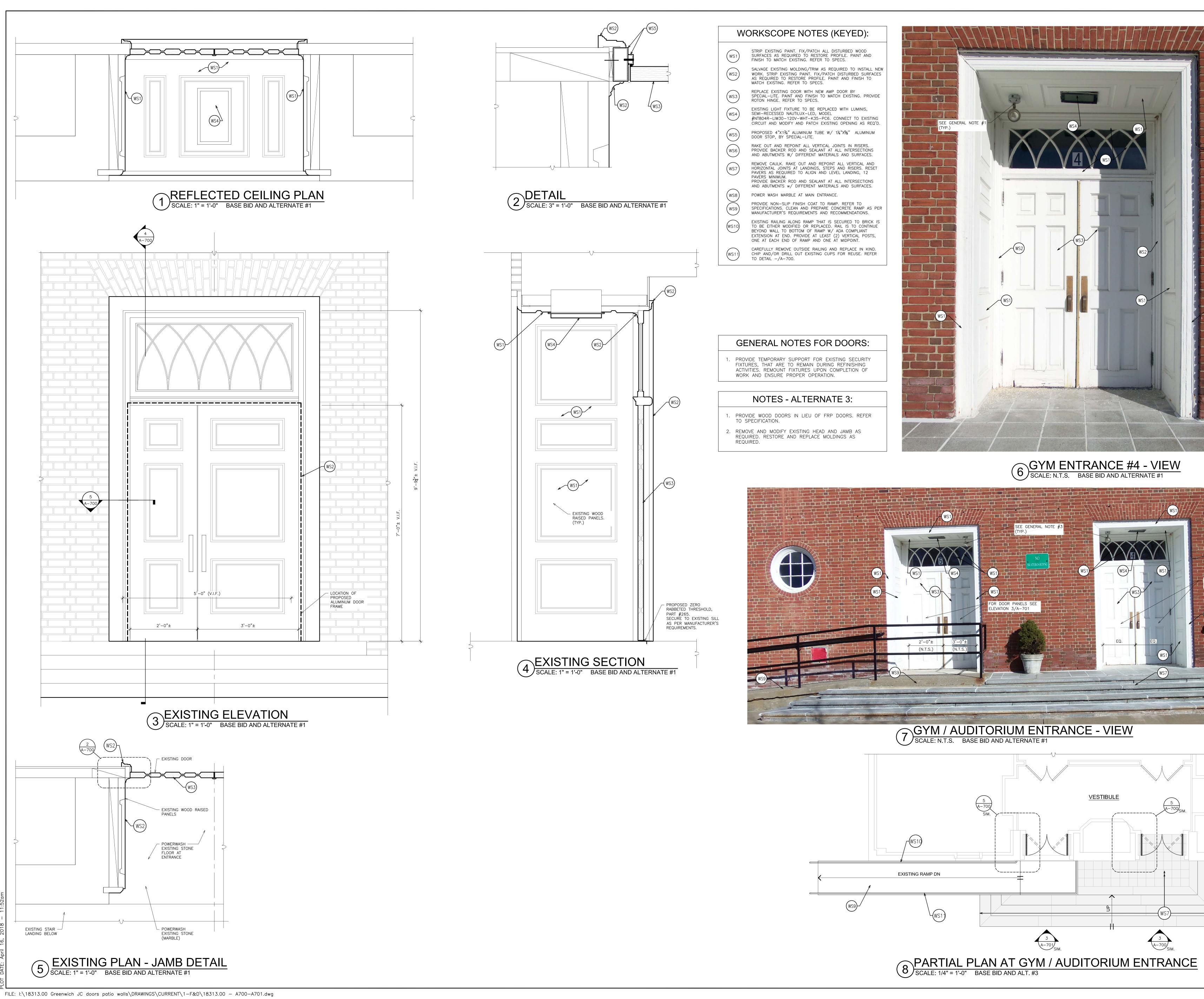
SCALE
AS NOTED

DRAWN BY

FILE NO.

F&D

18313.00





S.E.D. CONTROL NUMBER: ADMINISTRATION BUILDING: 66-04-06-03-0-011-014

ц О L

04-17-2018 DATE ISSUED TO SHEET SIZE 30"x42" SCALE AS NOTED DRAWN BY FILE NO. 18313.00 F & D