

**PROJECT MANUAL
And
TECHNICAL SPECIFICATIONS
For
MOORE FIELD HOUSE – FIRST FLOOR RESTROOM RENOVATIONS – 2019**

BID NUMBER: SBE-19-SCSU-02

PROJECT NUMBERS: SCSU-2019-04

BID OPENING – May 29, 2019

**THIS BID PROPOSAL IS OFFERED ONLY TO CONTRACTORS THAT ARE
REGISTERED WITH THE DEPARTMENT OF ADMINISTRATIVE SERVICES' (DAS),
MINORITY & SMALL BUSINESS SET-ASIDE PROGRAM**



**STATE OF CONNECTICUT
SOUTHERN CONNECTICUT STATE UNIVERSITY
Dr. Joseph A. Bertolino
PRESIDENT**

Prepared By:

*Southern Connecticut State University
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DATE: *April 11, 2019*

FORMS TO BE RETURNED WITH BID

THE FOLLOWING FORMS & INFORMATION MUST BE SUBMITTED WITH YOUR BID PROPOSAL OR YOUR BID PROPOSAL WILL NOT BE CONSIDERED:

1. FORM SCSU-1, CONTRACT PROPOSAL (Must Be Signed)
2. OPM ETHICS FORM 5, CONSULTING AGREEMENT AFFIDAVIT. (Must Be Signed and Notarized)
3. OPM ETHICS FORM 6, AFFIRMATION OF RECEIPT OF STATE ETHICS LAWS SUMMARY (Must be Submitted & Signed By General Contractor if Bid Proposal is \$500,000.00 or more)
4. BID PROPOSAL FORM (Must Be Signed)
5. CHRO CONTRACT COMPLIANCE REGULATIONS NOTIFICATION TO BIDDERS (Must Be Signed)
6. FORM SCSU-4F, BIDDERS QUALIFICATIONS STATEMENT (Must Be Signed and Notarized)
7. CERTIFICATE OF INSURANCE (Must Be Signed)
8. Please submit your current State of Connecticut Certified Small and Minority Owned Business certificate, if applicable to this bid.
9. A statement indicating the number of years your company has been in business.
10. Bid Bond (Signature of one witness for the principal and one witness for the surety must appear on the bond)
11. Bidders are advised that for bids estimated to be in excess of \$500,000.00, a valid Department of Administration Services Prequalification Certificate and Update Statement must accompany the bid. Application for this program can be accessed by going to www.das.state.ct.us/Business_Svs/PreQual/Prequal.asp

Upon award of the contract the following info must be provided to the Purchasing Department:

1. OPM ETHICS FORM 1 - GIFT AND CAMPAIGN CONTRIBUTION CERTIFICATION (Must Be Signed and Notarized)
2. OPM ETHICS FORM 6, AFFIRMATION OF RECEIPT OF STATE ETHICS LAWS SUMMARY (Must be Submitted & Signed By Subcontractor and/or Consultant - When Subcontract is signed if Bid Proposal is \$500,000.00 or more)
3. NONDISCRIMINATION CERTIFICATION (Must be Signed)
4. If the value of the project is \$50,000.00 to \$499,999.00, or if the successful bidder has 50 or more employees, the successful qualified low bidder on this project must submit an Affirmative Action Plan to the Commission on Human Rights and Opportunities (CHRO). The plan must be filed prior to starting work on any project.
5. If the value of the project is \$500,000.00 or more, the successful qualified low bidder on this project must submit an Affirmative Action Plan to CHRO. The plan must be filed and approved by CHRO prior to starting work on any project.
6. Performance Bond (Signature of two witnesses for the principal and two witnesses for the surety must appear on the bond)
7. Payment Bond (Signature of two witnesses for the principal and two witnesses for the surety must appear on the bond)
8. Please provide to SCSU a list of all employees who will be working on the job site, with their Social Security Numbers, and their Driver's License, so that a background check can be done.

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READ CAREFULLY

BID NO.: SBE-19-SCSU-02	BID OPENING DATE: May 29, 2019	BID OPENING TIME: 2:00 PM	SURETY AMOUNT:	DATE ISSUED: April 11, 2019
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COMMODITY CLASS/SUBCLASS AND DESCRIPTION: **Moore Field House – First Floor Restroom Renovations - 2019**
TERM OF CONTRACT/DELIVERY DATE REQUIRED


 Richard Glasson Date
 Purchasing Assistant
 (203) 392-6702
 Email: glassonr1@southernct.edu

AFFIRMATION OF BIDDER: The undersigned bidder affirms and declares:

- That this proposal is executed and signed by said bidder with full knowledge of the standard bid and contract terms and conditions of current issue and in effect on the date of bid issue.
- Your written signature below indicates agreement with the CSUS Standard Terms and Conditions of which are incorporated herein.

Bidder Information

COMPLETE COMPANY NAME (TRADE NAME, DOING BUSINESS AS)		SOCIAL SECURITY OR FEDERAL EMPLOYER IDENTIFICATION NUMBER		
COMPANY ADDRESS	STREET	CITY	STATE	ZIP CODE
CONTACT NAME (TYPED OR PRINTED)		TELEPHONE NUMBER (INCLUDE TOLL-FREE NUMBERS)		FAX NUMBER
WRITTEN SIGNATURE OF PERSON AUTHORIZED TO SIGN BIDS ON BEHALF OF THE ABOVE NAMED COMPANY			DATE EXECUTED	
TYPE OR PRINT NAME OF AUTHORIZED PERSON			TITLED OF AUTHORIZED PERSON	
COMPANY E-MAIL ADDRESS AND/OR COMPANY WEB SITE				
IS YOUR BUSINESS A: <input type="checkbox"/> PROPRIETORSHIP (INDIVIDUAL) <input type="checkbox"/> PARTNERSHIP OR <input type="checkbox"/> CORPORATION (TYPE OF CORPORATION)				
IS YOUR BUSINESS CURRENTLY A DEPARTMENT OF ADMINISTRATIVE SERVICES CERTIFIED SMALL BUSINESS ENTERPRISE: <input type="checkbox"/> YES (ATTACH CERTIFICATE TO BID) <input type="checkbox"/> NO				
IF YOUR BUSINESS IS A PARTNERSHIP, YOU MUST ATTACH THE NAMES AND TITLES OF ALL PARTNERS TO THIS BID WHEN RETURNED.				
IF YOUR BUSINESS IS A CORPORATION, IN WHICH STATE ARE YOU INCORPORATED?				
IF YOU ARE A STATE EMPLOYEE, INDICATE YOUR POSITION, AGENCY & ADDRESS:				
HAS YOUR BUSINESS RECEIVED FUNDING FROM THE SMALL BUSINESS ADMINISTRATION? <input type="checkbox"/> YES <input type="checkbox"/> NO				
IS YOUR BUSINESS REPORTABLE TO THE IRS? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, A 1099/W2 WILL BE MAILED TO YOU AT YEAR END.				
Remittance Information, if different from above				

Connecticut State University System



**Central Connecticut State University
Eastern Connecticut State University
Southern Connecticut State University
Western Connecticut State University
System Office**

STANDARD TERMS AND CONDITIONS

I. DEFINITIONS

The following words, when used herein, shall have the following meanings:

1. "Contract" shall mean any agreement negotiated by and between CSU and the contractor selected by CSU as the result of a request for proposal, request for quotation, or request for bid, including, but not limited to, a personal service agreement or purchase order.
2. "CSU" shall refer to the Connecticut State University System, which is comprised of Central Connecticut State University, Eastern Connecticut State University, Southern Connecticut State University, Western Connecticut State University and the System Office, collectively and individually, as the context requires.
3. "Person" shall mean an individual, partnership, corporation or other business entity, as the context requires.
4. "Proposal" shall mean a response to a request for proposal, request for bid, or request for quotation.
5. "Proposer" shall mean a contractor that submits a response to a request for proposal, request for bid, or request for quotation.
6. "RFP" shall mean a request or invitation for proposal, bid, or quotation, as applicable.

II. TERMS AND CONDITIONS RELATED TO REQUESTS FOR PROPOSALS

A. General Conditions

1. CSU reserves the right to amend or cancel an RFP prior to the date and time for the opening of proposals. CSU, in its sole discretion, reserves the right to accept or reject any and all proposals, in whole or in part, and to waive any technicality in any proposal submitted, and to accept any part of a proposal deemed to be in the best interest of CSU.
2. Proposals received from proposers debarred by the State of Connecticut will not be considered for award.
3. CSU does not commit to specific volumes of activity, nor does it guarantee the accuracy of statistical information provided in the RFP. Such information is supplied to proposers for reference only.
4. All responses to the RFP shall be and remain the sole property of CSU.
5. Each proposer shall bear all costs associated with proposer's response to an RFP, including, but not limited to, the costs of any presentation and/or demonstration required by CSU. In addition, answers or clarifications sought by CSU arising out of or in connection with the proposal shall be furnished by the proposer at the proposer's expense.
6. CSU reserves the right to negotiate, as it may deem necessary, with any or all of the proposers that submit proposals.
7. Any alleged oral agreement or arrangement made by any proposer with CSU or any employee thereof shall not be binding.

B. Submission of Proposals

1. Proposals must be submitted on forms supplied by CSU. Telephone, facsimile, or email proposals will not be accepted in response to an RFP.
2. The time and date proposals are to be received and opened are stated in each RFP issued by CSU. Proposals received in the applicable CSU purchasing department after the date and time specified in the RFP will be returned to the proposer unopened. Proposal amendments received by CSU after the time specified for opening of proposals shall not be considered.
3. All proposals must be addressed to the location designated in the RFP. Proposal envelopes must clearly state the proposal number as well as the date and time of the opening of the proposals, as stated in the RFP. The name and address of the proposer must appear in the upper left hand corner of the envelope.
4. Proposals must be computer prepared, typewritten or handwritten in ink. Proposals submitted in pencil will be rejected.
5. Proposers must answer all the questions set forth in the RFP using the outline and numbering scheme set forth therein. Proposers must furnish all information requested in the RFP and supply all materials required for consideration. Failure of the proposer to answer all questions and supply all information and materials requested may be grounds for rejection of the proposal.
6. All proposals must be signed by a person duly authorized to sign proposals on behalf of the proposer. All signatures on the proposal must be original. Proposals bearing stamp signatures will be rejected. Unsigned proposals will be rejected.
7. Alterations or corrections to the proposal must be initialed by the person signing the proposal or his or her authorized designee. All initials on alterations or corrections to the proposal must be original. In the event that an authorized designee initials an alteration or correction, the proposer must submit a written authorization from the proposal's signatory to the authorized designee, authorizing the designee to make the alteration or correction. Failure to submit such an authorization shall result in rejection of proposal as to those items altered or corrected and not initialed.
8. Conditional proposals are subject to rejection in whole or in part, in the sole discretion of CSU. A conditional proposal is defined as one that limits, modifies, expands or supplements any of the terms and conditions and/or specifications of the RFP.
9. Alternate proposals will not be considered by CSU, unless otherwise noted on the RFP or on the proposal form. An alternate proposal is defined as one that is submitted in addition to the proposer's primary response to the RFP.
10. CSU does not sponsor any one manufacturer's products, but lists equipment by name and model number to designate the quality and performance level desired. Proposers may propose substitutes similar in nature to the

equipment specified. The substitute must, in the sole determination of CSU, be equal in quality, durability, appearance, strength and design to the equipment or product specified in the RFP, or offer a clear advantage to CSU because of improved or superior performance. All proposals including equipment or product substitutes must be accompanied with current descriptive literature on, and data substantiating, the equal or superior nature of the substitute. All final decisions concerning substitutes will be made by CSU prior to any award. The word substitute shall not be construed to permit substantial departure from the detailed requirements of the specifications.

11. Each proposer's prices must be firm for a period up to 120 days from date of the opening of proposals. Prices must be extended in decimal, not fraction, must be net, and must include transportation and delivery charges, fully prepaid by the contractor, to the destination specified in the proposal, and subject only to cash discount.
12. Pursuant to Section 12-412 of the Connecticut General Statutes, the State of Connecticut is exempt from the payment of excise, transportation and sales taxes imposed by the Federal Government and/or the State. Accordingly, such taxes must not be included in proposal prices.
13. If there is a discrepancy between a unit price and an extended price, the unit price will govern.
14. By submitting a proposal, the proposer asserts that the offer and information contained therein is in all respects fair and without collusion or fraud and was not made in connection with any competing proposer's submission of a separate response to the RFP. By submitting a proposal, the proposer further asserts that it neither participated in the formation of CSU's solicitation development process nor had any knowledge of the specific contents of the RFP prior to its issuance, and that no employee of CSU participated directly or indirectly in the preparation of the proposer's proposal.
15. It is the proposer's responsibility to check the website of the State of Connecticut Department of Administrative Services www.biznet.ct.gov/SCP_search/default.aspx?acclast for changes prior to the proposal opening. It is the responsibility of the proposer to obtain all information related to proposal submission including, without limitation, any and all addenda or supplements required.
16. Any person contemplating submitting a proposal who is in doubt as to the true meaning of, or is in need of clarification of, any part of the RFP or the specifications set forth therein, must submit a written request for clarification to CSU. The proposer may rely only upon a response to a request for clarification set forth in writing by CSU.
17. Proposals for the provision of services must include the cost of obtaining all permits, licenses, and notices required by the city or town in which the services is to be provided, and the State and Federal governments..
18. Each proposer must complete and submit with its proposal the following non-discrimination and affirmative action forms: the Notification to Proposers, Contract Compliance, and EEO-1. It shall not be sufficient to declare or state that such forms are on file with the State of Connecticut. Failure to include the required forms shall result in rejection of the proposal.

C. Samples

1. Samples, when required by the RFP, must be submitted strictly in accordance with the requirements of the RFP.
2. Any and all required samples shall be furnished by the proposer at no cost to CSU. All samples, unless

otherwise indicated, will become the property of CSU and will not be returned to the proposer unless the proposer states in the proposal that the sample's return is requested. A sample will be returned on the request of the proposer if the sample has not been rendered useless or beyond its useful life. The proposer must pay the costs associated with the return of any sample. Samples may be held by CSU for comparison with actual product deliveries.

3. The making of chemical and physical tests of samples submitted with proposals shall be made in the manner prescribed by CSU.

D. Bonding Requirements / Guaranty or Surety

1. If required by this RFP, the proposal must be accompanied by a bid bond or a certified check in an amount that is ten percent (10%) of the bid amount. The bid bond must be executed by an insurance company licensed to do business in the State of Connecticut. Certified checks must be made payable to CSU or the appropriate CSU University.
2. The proposal bond must be executed by the proposer as follows:
 - (a) If the proposer is a corporation - must be signed by an official of the corporation above his or her official title, and the corporate seal must be affixed over the signature;
 - (b) If the proposer is a partnership - must be signed by a general partner;
 - (c) If the proposer is an individual - must be signed by the individual and indicate that he or she is "doing business as"
3. The surety company executing the bond or countersigning must be licensed in Connecticut and the bond must be signed by an official of the surety company with the corporate seal affixed over his or her signature. Signatures of two witnesses for both the principal and the surety must appear on the bond.

III. CONTRACT AWARD

1. All proposals properly submitted will be opened and read publicly. Upon award, the proposals are subject to public inspection. CSU will not prepare abstracts of proposals received for distribution, nor will information concerning the proposals received be conveyed by telephone.
2. Award will be made to the lowest responsible qualified proposer who complies with the proposal requirements. Price alone need not be the sole determining factor for an award. Other criteria, listed in the RFP, may be considered by CSU in the award determination.
3. CSU reserves the right to grant an award and/or awards by item, or part thereof, groups of items, or all items of the proposal and to waive minor irregularities and omissions if, in CSU's judgment, the best interests of CSU or the State of Connecticut will be served.
4. CSU reserves the right to correct inaccurate awards resulting from its administrative errors.
5. The Award Notice and Offer (to enter into a formal contract) shall be sent to the awarded proposer by first class certified mail, return receipt requested, to the address provided in the awarded proposal, or by overnight courier. The Notice and Offer shall constitute an offer by CSU to enter into negotiations to come to a formal contract agreement. If the proposer, within ten (10) business days of receipt of said Notice and Offer, declines to begin contract negotiations, then the offer to negotiate a contract may be withdrawn and an offer to negotiate a contract extended to the next lowest responsible qualified proposer, and so on until a contract is negotiated and executed.

6. Each proposal submitted shall constitute an offer by the proposer to furnish any or all of the commodities or services described therein at the prices given and in accordance with conditions set forth in the proposal, the RFP, and these "Standard Terms and Conditions." Acceptance and resulting contract formation shall be in a formal written document authorized by CSU's Purchasing Department and where applicable, approved by the Attorney General, and shall comprise the entire agreement between the proposer and CSU.

IV. TERMS AND CONDITIONS RELATED TO CONTRACT WITH SUCCESSFUL PROPOSER

By submitting a response to the RFP, the proposer agrees that any contract negotiated between it (if the successful proposer), as contractor, and CSU may contain the following provisions, as deemed applicable by CSU:

A. General Conditions

1. Any product developed and accepted by CSU under a contract awarded as a result of an RFP shall be sole property of CSU, unless stated otherwise in the contract.
2. Data collected or obtained by the contractor in connection with the performance of the contract shall not be shared with any third party without the express written approval of CSU.
3. The contractor shall defend, indemnify and hold harmless CSU, its officers and employees, against any and all suits, actions, legal or administrative proceedings, claims, demands, damages, liabilities, monetary loss, interest, attorney's fees, costs and expenses of whatsoever kind or nature arising out of the performance of the agreement, including those arising out of injury to or death of contractor's employees or subcontractors, whether arising before, during or after completion of the services thereunder and in any manner directly or indirectly caused, occasioned or contributed to in whole or in part, by reason of any act, omission, fault or negligence of contractor or its employees, agents or subcontractors. Without limiting the foregoing, the contractor shall defend, indemnify and hold CSU and the State of Connecticut harmless from liability of any kind for the use of any copyright or un-copyrighted composition, secret process, patented or unpatented invention furnished or used in the performance of the contract. This indemnification shall be in addition to the warranty obligations of the contractor and shall survive the termination or cancellation of the contract or any part thereof.
4. The contractor shall: (i) guarantee its products against defective materials and workmanship; (ii) repair damage of any kind, for which it is responsible, to CSU's premises or equipment, to its own work or to the work of other contractors; (iii) obtain and pay for all applicable licenses, permits, and notices; (iv) give all notices and comply with all requirements of the municipality in which the service is to be provided and of the State and federal governments; and (v) carry proper and sufficient insurance to protect the State from loss.
5. The contract shall be interpreted and governed by the laws of the State of Connecticut, without regard to its principles of conflicts of laws.
6. The contractor agrees that it shall be subject to and abide by all applicable federal and state laws and regulations.
7. The contractor agrees that it shall comply with Section 4a-60 of the Connecticut General Statutes and with Executive Orders Nos. 3, 16, 17 and 7C.
8. The contractor agrees that the sole and exclusive means for the presentation of any claim against the State of Connecticut, the Connecticut State University or the Board Of Trustees arising from a contract with CSU, shall be in accordance with the provisions of Chapter 53 of the Connecticut General Statutes (Claims Against the State) and that no additional legal proceedings will be initiated in any state or federal court in addition to, or in lieu of, said Chapter 53 proceedings.
9. The contractor agrees that CSU shall have and retain sole and exclusive right and title in and to the forms, maps, and/or materials produced for CSU pursuant to the contract, including all rights to use, distribute, sell, reprint, or otherwise dispose of same. The contractor further agrees that it shall not copyright, register, distribute, or claim any rights in or to said maps and/or materials or the work produced under the contract.
10. The contractor or subcontractor, as applicable, shall offer and agree to assign to CSU all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act, 15 U.S.C. 15, or under Chapter 624 of the general statutes, arising from the purchase of services, property or intangibles of any kind pursuant to a public purchase contract or subcontract; such assignment shall be made and become effective at the time the contract is executed by the parties, without further acknowledgment by them.
11. The contractor shall not assign or otherwise dispose of the contract or its right, title or interest therein, or its power to execute such contract, to any other person without the prior written consent of CSU.
12. CSU reserves the right to inspect commodities for conformance with proposal specifications. When commodities are rejected by CSU, said commodities shall be removed by the contractor, at the contractor's expense, from the CSU premises within forty-eight (48) hours after notification of such rejection, unless public health and safety require immediate destruction or other disposal of such rejected delivery. Rejected items left longer than forty-eight (48) hours shall be considered abandoned by the contractor and CSU shall have the right to dispose of them as its own property.
13. If any provision, term or condition of the contract is prohibited, invalid, or unenforceable then that provision, term or condition shall be ineffective to the extent of the prohibition, invalidity, or prohibition without invalidating the remaining provisions, terms and conditions unless it materially alters the nature or intent thereof.
14. Should the terms of any purchase order or invoice issued in connection with the contract conflict with the terms of the contract, the terms of the contract shall prevail.
15. Failure of the contractor to deliver commodities or perform services as specified in the contract will constitute authority for CSU to purchase these commodities or services on the open market. The contractor shall promptly reimburse CSU for excess costs incurred by CSU due to these purchases, and these purchases shall be deducted by CSU from the quantities contracted for.
16. No right or duty, in whole or in part, of the contractor under the contract may be assigned or delegated without the prior written consent of CSU. The subcontracting or assignment of any of contractor's obligations under the contract to a subcontractor shall require the prior written approval of CSU.
17. Upon termination of the contract by CSU, the contractor shall both immediately discontinue all services (unless the notice directs otherwise) and

deliver to CSU all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by the contractor in performing its duties under the contract, whether completed or in progress. All such documents, information, and materials shall become the property of CSU.

18. The State of Connecticut shall assume no liability for payment for services under the terms of the contract until the contractor is notified that the contract has been accepted by CSU and, if applicable, approved by the Office of Policy and Management ("OPM") or the Department of Administrative Services ("DAS") and by the Attorney General of the State of Connecticut.

B. Insurance

1. Before commencing to perform services pursuant to the contract, the contractor shall obtain, at its own cost and for the duration of the contract, the following insurance:
 - (a) Commercial General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. Coverage shall include Premises and Operations, Independent Contractors, Products and Completed Operations, Contractual Liability and Broad Form Property Damage coverage. If a general aggregate is used, the general aggregate limit shall apply separately to the project or the general aggregate limit shall be twice the occurrence limit.
 - (b) Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury. Coverage extends to owned, hired and non-owned automobiles. If the contractor does not own an automobile, but one is used in the execution of the contract, then only hired and non-owned coverage is required. If a vehicle is not used in the execution of the contract then automobile coverage is not required.
 - (c) Professional Liability: \$1,000,000 limit of liability.
 - (d) Workers' Compensation and Employers Liability: Statutory coverage in compliance with the laws of the State of Connecticut. Coverage shall include Employer's Liability with minimum limits of \$100,000 each accident, \$500,000 Disease - Policy limit, \$100,000 each employee. An Excess Liability/Umbrella Policy may be used to meet the minimum limit guidelines.
2. The contractor shall provide copies of its Certificates of Insurance to CSU, if requested to do so. The Certificates shall include the following:
 - (a) The certificate shall clearly identify the State of Connecticut, its officers, officials, employees, agents, boards and commissions as Additional Insured. The coverage shall contain no special limitations on the scope of protection afforded to the State.
 - (b) The certificate shall clearly indicate the project name and project number or some easily identifiable reference to the relationship to the State.
3. The Certificates shall be signed by a person authorized by that insurer to execute contracts on its behalf. The certificate Accord Form 25 Certificate shall indicate a minimum thirty (30) day endeavor to notify requirement in the event of cancellation or non-renewal of coverage.
4. The contractor shall assume responsibility for payment of any and all deductibles applicable to the insurance policies described in Section IV.B.1 above.
5. The contractor's insurer shall have no right of recovery or subrogation against the State and the described insurance shall be primary coverage.

6. Each required policy of insurance shall provide that it shall not be suspended, voided, cancelled or reduced except after thirty (30) days' prior written notice sent by certified mail to CSU.
7. "Claims Made" coverage shall be unacceptable, with the exception of Professional Liability.

C. Bonds

The successful proposer shall submit the following bonds, at the request of CSU, within ten (10) days of the date of receipt of the Award Notice and Offer:

1. A Performance Bond in the amount of one hundred percent (100%) of the total proposal price; and
2. A Labor and Material Payment Bond in the amount of one hundred percent (100%) of the total proposal price.

A company authorized to transact business in the State of Connecticut shall execute the bonds. Checks shall be made payable to CSU or the appropriate CSU University.

D. Delivery

1. Unless otherwise specified in the proposal, all products and equipment delivered pursuant to the contract shall be new and shall include any and all manufacturer's warranties.
2. Delivery shall be to the point specified in the contract.
3. All deliveries shall display, in plain sight, any related Purchase Order or Reference/Delivery Number. Failure to display said number may cause the shipment to be rejected and returned at the contractor's expense.
4. All deliveries shall be in compliance with Sections 22a-194 to 22a-194g of the Connecticut General Statutes related to product packaging.
5. Deliveries shall be subject to reweighing on official sealed scales designated by the State and payment shall be made on the basis of net weight of materials received.
6. Payment terms are net forty-five (45) days after receipt of goods or invoice, whichever is later. State of Connecticut certified small or minority contractors are payable under terms net thirty (30) days.
7. Monies owed to CSU or the Department of Revenue Services (DRS) by the contractor shall be deducted from current obligations.

E. Inspection and Tests

1. The inspection of all commodities and the making of chemical and physical tests of samples of deliveries to determine whether or not the contract specifications are being complied with shall be made in the manner prescribed by CSU.
2. Any item that fails in any way to meet the terms or specifications set forth in the contract is subject to be paid for at an adjusted price or rejected, in the discretion of CSU.
3. After delivery and installation of any equipment provided pursuant to the contract, the contractor shall certify to CSU that the equipment has been properly installed and is ready for use. Thereafter, for a test period of sixty (60) days, CSU shall operate the system in accordance with its normal operating practices. The acceptance test shall determine if the equipment's operating characteristics meet the performance standards set forth in the contract.

F. Advertising

Reference by the contractor to sales to CSU for advertising and promotional purposes without the prior approval of CSU shall be expressly prohibited.

INSTRUCTIONS TO BIDDERS

1. Faxed bids will **not** be accepted.
2. **Unsigned bids will not be considered.**
3. The "BIDDERS QUALIFICATIONS" form **MUST BE** completed on both sides and returned with bid along with **all other forms**.
4. Any white-outs, cross outs, markovers or any alterations of price **MUST BE** initialed by person signing bid.
5. Completion date may be a prime consideration in awarding this bid.
6. Bids must be in **SEALED ENVELOPE** with Bidder's Return Address, Bid Number, Opening Date and Hour of Bid Opening on face of envelope.
7. **ALL** Bid Documents **MUST BE** signed in ink.
8. On February 8, 2007, Governor Rell signed into law Public Act 07-1, An Act Concerning the State Contractor Ban and Gifts to State and Quasi-Public Agencies. For all State contracts as defined in P.A. 07-1 having a value in a calendar year of \$50,000 or more or a combination or series of such agreements or contracts having a value of \$100,000 or more, the authorized signatory to this Agreement expressly acknowledges receipt of the State Elections Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice. **See SEEC Form 11.**
9. All bids will be opened at the stipulated time and place and any bidder may attend.
10. If not interested in bidding, kindly return bid form stating "**No Bid**" where dollar amount is indicated. Please print and sign your name.
11. Bonds must meet the following requirements:
 - a. Corporation. The Bond must be signed by an official of the corporation above his official title and the corporate seal must be affixed over his signature.
 - b. Firm or Partnership. The Bond must be signed by all the partners and indicate they are "Doing Business As" (name of firm).
 - c. Individual. The Bond must be signed by the individual owning the business, and indicated as Owner.
 - d. The surety company executing the bond must be licensed to do business in the State of Connecticut or bond must be countersigned by a company so licensed.

- e. The bond must be signed by an official of the surety company and the corporate seal must be affixed over his signature.
 - f. Signatures of two (2) witnesses for both the principal and the surety must appear on the bond.
 - g. Power of Attorney for the official signing the bond for the surety company must be submitted with the bond.
12. Any questions regarding the completion of the bid forms should be directed to:
- Jane Mailhiot, Purchasing Manager
Southern Connecticut State University
Purchasing Department – Wintergreen Building – 1 Wintergreen Avenue
New Haven, Connecticut 06515
(203) 392-6700
13. There will be a **mandatory** pre-bid conference on **Wednesday, May 8, 2019 at 10:00 AM** **[Doors will be locked at 10:05 AM with no exceptions]** in the Facilities Operation Training Room, Room 307, at the Facilities Operations Building, 615 Fitch Street, Hamden, CT. Contractor's not in attendance, and or who have not signed the attendance sheet at the mandatory pre bid meeting, will not be allowed to submit a bid for this project. Immediately following the pre-bid conference, there will be a tour of the site. This is the only time the site will be available for inspection.
14. Questions regarding this project must be received in writing via fax or email at **ALL OF THE FOLLOWING no later than 12:00, Noon, on Wednesday, May 15, 2019:**
- Facilities Planning – Fax: (203) 392-6058
Emails: visentinp1@southernct.edu; forrestd1@southernct.edu
tuckerm1@southernct.edu
- Purchasing – Fax: (203) 392-6712;
Emails: purchasing@southernct.edu;
15. It is the vendor's responsibility to check SCSU's or DAS website for any addendums. This information can be viewed by accessing
Southern Connecticut State University's website at www.southernct.edu/purchasing/bids
or
or DAS: www.biznet.ct.gov/SCP_search/default.aspx?acclast
[Pick 'SCSU' as the organization, then pick "Solicitations"]
16. Prospective Bidders intending on submitting a bid bond in lieu of a certified check as described in #2 of the Notice to Bidders Form, may use any bid bond form issued by bonding companies for public bidding.

CONDITIONS

1. Southern Connecticut State University reserves the right to reject any and all bids, and to waive any informalities in the bids. In case of error in the extension of prices in the bid, the unit price will govern. Telegraphic and telephonic bids will not be accepted under any circumstances.
2. When listed on the Invitation and Bid form, each bidder is required to bid on each Supplemental Bid and is warned that incomplete bidding on the Supplemental Bids may be cause for rejection of the entire bid.
3. In the event of any discrepancy between the amount written in words and the amount written in numerical figures, the amount written in words will be controlling.
4. Acceptance of the bid will be in the form of a Purchase Order.
5. All work is to be completed within the specified number of days from the starting date which is to be established.

INVITATION TO BID
SOUTHERN CONNECTICUT STATE UNIVERSITY
PURCHASING DEPARTMENT
STATE OF CONNECTICUT

BID NUMBER: SBE-19-SCSU-02
PROJECT NUMBER: SCSU-2019-04
DATE OF INVITATION: April 11, 2019

Sealed Proposals, subject to the Conditions attached to the Instructions to Bidders, will be received in the Facilities Operations Training Room, Room 307, at the Facilities Operations Building, 615 Fitch Street, Hamden, CT., until 2:00 p.m. (Local Time), May 29, 2019 for furnishing labor and materials at: Southern Connecticut State University for: Moore Field House - First Floor Restroom Renovations – 2019.

In accordance with bid documents, drawings, and specifications, prepared by the SCSU Office of Facilities Planning and Architectural Services, that are included in these documents.

DATED: April 11, 2019.



Richard Glasson
Purchasing Assistant
(203) 392-6702
Email: glassonr1@southernct.edu

1. Bid Security (Notice to Bidders):

- a). Individual bid bond for an amount not less than ten (10) percent of the total amount of the bid.
- b). Certified check made payable to "Controller, Southern Connecticut State University", for up to ten (10) percent of the bid.

2. Security for Faithful Performance (Notice to Bidders):

Performance Bond and Labor and Material Bond in the amount of 100% of the Purchase Order price must be filed by the successful low bidder prior to the start of construction.

3. Commencement and Completion of Work (Section 01001/1.4, General Requirements):

4. Nondiscrimination and Labor Recruitment:

(A) This project is subject to Connecticut Public Acts 88-351, 89-253 and 91-58 section 16 (See Attachments No. 1 and No. 2).

(B) An award cannot be made until after this form has been reviewed and approved by the Labor Commissioner.



STATE OF CONNECTICUT GIFT AND CAMPAIGN CONTRIBUTION CERTIFICATION

Written or electronic certification to accompany a State contract with a value of \$50,000 or more in a calendar or fiscal year, pursuant to C.G.S. §§ 4-250 and 4-252(c); Governor M. Jodi Rell's Executive Orders No. 1, Para. 8, and No. 7C, Para. 10; and C.G.S. §9-612(g)(2)

INSTRUCTIONS:

Complete all sections of the form. Attach additional pages, if necessary, to provide full disclosure about any lawful campaign contributions made to campaigns of candidates for statewide public office or the General Assembly, as described herein. Sign and date the form, under oath, in the presence of a Commissioner of the Superior Court or Notary Public. Submit the completed form to the awarding State agency at the time of initial contract execution and if there is a change in the information contained in the most recently filed certification, such person shall submit an updated certification either (i) not later than thirty (30) days after the effective date of such change or (ii) upon the submittal of any new bid or proposal for a contract, whichever is earlier. Such person shall also submit an accurate, updated certification not later than fourteen days after the twelve-month anniversary of the most recently filed certification or updated certification.

CHECK ONE: Initial Certification 12 Month Anniversary Update (Multi-year contracts only.)
 Updated Certification because of change of information contained in the most recently filed certification or twelve-month anniversary update.

GIFT CERTIFICATION:

As used in this certification, the following terms have the meaning set forth below:

- 1) "Contract" means that contract between the State of Connecticut (and/or one or more of its agencies or instrumentalities) and the Contractor, attached hereto, or as otherwise described by the awarding State agency below;
- 2) If this is an Initial Certification, "Execution Date" means the date the Contract is fully executed by, and becomes effective between, the parties; if this is a twelve-month anniversary update, "Execution Date" means the date this certification is signed by the Contractor;
- 3) "Contractor" means the person, firm or corporation named as the contractor below;
- 4) "Applicable Public Official or State Employee" means any public official or state employee described in C.G.S. §4-252(c)(1)(i) or (ii);
- 5) "**Gift**" has the same meaning given that term in C.G.S. § 4-250(1);
- 6) "Principals or Key Personnel" means and refers to those principals and key personnel of the Contractor, and its or their agents, as described in C.G.S. §§ 4-250(5) and 4-252(c)(1)(B) and (C).

I, the undersigned, am a Principal or Key Personnel of the person, firm or corporation authorized to execute this certification on behalf of the Contractor. I hereby certify that, no gifts were made by (A) such person, firm, corporation, (B) any principals and key personnel of the person firm or corporation who participate substantially in preparing bids, proposals or negotiating state contracts or (C) any agent of such, firm, corporation, or principals or key personnel who participates substantially in preparing bids, proposals or negotiating state contracts, to (i) any public official or state employee of the state agency or quasi-public agency soliciting bids or proposals for state contracts who participates substantially in the preparation of bid solicitations or request for proposals for state contracts or the negotiation or award of state contracts or (ii) any public official or state employee of any other state agency, who has supervisory or appointing authority over such state agency or quasi-public agency.

I further certify that no Principals or Key Personnel know of any action by the Contractor to circumvent (or which would result in the circumvention of) the above certification regarding **Gifts** by providing for any other Principals, Key Personnel, officials, or employees of the Contractor, or its or their agents, to make a **Gift** to any Applicable Public Official or State Employee. I further certify that the Contractor made the bid or proposal for the Contract without fraud or collusion with any person.

CAMPAIGN CONTRIBUTION CERTIFICATION:

I further certify that, on or after December 31, 2006, neither the Contractor nor any of its principals, as defined in C.G.S. § 9-612(g)(1), has made any **campaign contributions** to, or solicited any contributions on behalf of, any exploratory committee, candidate committee, political committee, or party committee established by, or supporting or authorized to support, any candidate for statewide public office, in violation of C.G.S. § 9-612(g)(2)(A). I further certify that **all lawful campaign contributions** that have been made on or after December 31, 2006 by the Contractor or any of its principals, as defined in C.G.S. § 9-612(g)(1), to, or solicited on behalf of, any exploratory committee, candidate committee, political committee, or party committee established by, or supporting or authorized to support any candidates for statewide public office or the General Assembly, are listed below:

Lawful Campaign Contributions to Candidates for Statewide Public Office:

<u>Contribution Date</u>	<u>Name of Contributor</u>	<u>Recipient</u>	<u>Value</u>	<u>Description</u>

Lawful Campaign Contributions to Candidates for the General Assembly:

<u>Contribution Date</u>	<u>Name of Contributor</u>	<u>Recipient</u>	<u>Value</u>	<u>Description</u>

Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement.

Printed Contractor Name

Printed Name of Authorized Official

Signature of Authorized Official

Subscribed and acknowledged before me this _____ day of _____, 20____.

Commissioner of the Superior Court (or Notary Public)





STATE OF CONNECTICUT CONSULTING AGREEMENT AFFIDAVIT

Affidavit to accompany a bid or proposal for the purchase of goods and services with a value of \$50,000 or more in a calendar or fiscal year, pursuant to Connecticut General Statutes §§ 4a-81(a) and 4a-81(b). For sole source or no bid contracts the form is submitted at time of contract execution.

INSTRUCTIONS:

If the bidder or vendor has entered into a consulting agreement, as defined by Connecticut General Statutes § 4a-81(b)(1): Complete all sections of the form. If the bidder or contractor has entered into more than one such consulting agreement, use a separate form for each agreement. Sign and date the form in the presence of a Commissioner of the Superior Court or Notary Public. **If the bidder or contractor has not entered into a consulting agreement, as defined by Connecticut General Statutes § 4a-81(b)(1):** Complete only the shaded section of the form. Sign and date the form in the presence of a Commissioner of the Superior Court or Notary Public.

Submit completed form to the awarding State agency with bid or proposal. For a sole source award, submit completed form to the awarding State agency at the time of contract execution.

This affidavit must be amended if there is any change in the information contained in the most recently filed affidavit not later than (i) thirty days after the effective date of any such change or (ii) upon the submittal of any new bid or proposal, whichever is earlier.

AFFIDAVIT: [Number of Affidavits Sworn and Subscribed On This Day: _____]

I, the undersigned, hereby swear that I am a principal or key personnel of the bidder or contractor awarded a contract, as described in Connecticut General Statutes § 4a-81(b), or that I am the individual awarded such a contract who is authorized to execute such contract. I further swear that I have not entered into any consulting agreement in connection with such contract, **except for the agreement listed below:**

Consultant's Name and Title

Name of Firm (if applicable)

Start Date

End Date

Cost

Description of Services Provided: _____

Is the consultant a former State employee or former public official? YES NO

If YES: _____
Name of Former State Agency

Termination Date of Employment

Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement.

Printed Name of Bidder or Contractor **Signature of Principal or Key Personnel** **Date**

Printed Name (of above) Awarding State Agency

Sworn and subscribed before me on this _____ day of _____, 20____.

**Commissioner of the Superior Court
or Notary Public**



**STATE OF CONNECTICUT
AFFIRMATION OF RECEIPT OF STATE ETHICS LAWS SUMMARY**

Written or electronic affirmation to accompany a large State construction or procurement contract, having a cost of more than \$500,000, pursuant to Connecticut General Statutes §§ 1-101mm and 1-101qq

INSTRUCTIONS:

Complete all sections of the form. Submit completed form to the awarding State agency or contractor, as directed below.

CHECK ONE:

- I am a person seeking a large State construction or procurement contract. I am submitting this affirmation to the awarding State agency with my bid or proposal. [Check this box if the contract will be awarded through a competitive process.]
- I am a contractor who has been awarded a large State construction or procurement contract. I am submitting this affirmation to the awarding State agency at the time of contract execution. [Check this box if the contract was a sole source award.]
- I am a subcontractor or consultant of a contractor who has been awarded a large State construction or procurement contract. I am submitting this affirmation to the contractor.
- I am a contractor who has already filed an affirmation, but I am updating such affirmation either (i) no later than thirty (30) days after the effective date of any such change or (ii) upon the submittal of any new bid or proposal, whichever is earlier.

IMPORTANT NOTE:

Within fifteen (15) days after the request of such agency, institution or quasi-public agency for such affirmation contractors shall submit the affirmations of their subcontractors and consultants to the awarding State agency. Failure to submit such affirmations in a timely manner shall be cause for termination of the large State construction or procurement contract.

AFFIRMATION:

I, the undersigned person, contractor, subcontractor, consultant, or the duly authorized representative thereof, affirm (1) receipt of the summary of State ethics laws* developed by the Office of State Ethics pursuant to Connecticut General Statutes § 1-81b and (2) that key employees of such person, contractor, subcontractor, or consultant have read and understand the summary and agree to comply with its provisions.

* The summary of State ethics laws is available on the State of Connecticut's Office of State Ethics website.

Signature

Date

Printed Name

Title

Firm or Corporation (if applicable)

Street Address

City

State

Zip

Awarding State Agency

NOTICE TO BIDDERS
STATE OF CONNECTICUT
SOUTHERN CONNECTICUT STATE UNIVERSITY

1. BIDS AND REJECTION OF BIDS

Bids shall be submitted only on the prepared forms furnished for the specific project. In no event will bids or changes in bids made by telephone or telegraph be considered. Any bids showing any omission, alteration of form, additions not called for, and any conditional bids, alternative bids or bids showing irregularities of any kind will be rejected.

Any bid received after the scheduled closing time for the receipt of bids will be returned to the bidder unopened.

Any bid once deposited with the Purchasing Manager may only be withdrawn by letter of request, signed by the depositing bidder and presented to the Purchasing Manager prior to the time of opening of any bid for the project in question.

The Purchasing Manager reserves the right to waive technical defects in the bids; to reject any bids which do not conform to the terms and conditions described herein; to accept or reject any part of any bid, and to reject all bids and again invite bids.

2. BID SECURITY

Each bid must be accompanied by a **BID BOND** in the form described in the Notice To Bidders and having such Surety Company or companies as are acceptable to and approved by the University Representative, and as are authorized to do business in this State, for an amount not less than 10 percent (10%) of the bid; OR the bid may be accompanied by a **CERTIFIED CHECK** or a **CASHIER'S CHECK** drawn upon either a **STATE BANK AND TRUST COMPANY** or a **NATIONAL ASSOCIATION**, to the order of the "Comptroller,-Southern Connecticut State University". All checks and Bid Bonds submitted by unsuccessful bidders shall be returned to them after the bidder to whom the contract has been awarded has filed the required Performance and Labor and Materials bonds.

3. FORFEIT OF BID SECURITY

Failure of the bidder to file the required bonds within the specified time after the award, shall be just cause for the annulment of the award or of the contract, if executed, and it is to be understood by the bidder in the events of the annulment of the award, or of the contract, that the amount of the security deposited with the bid shall be forfeited to the use of Southern Connecticut State University, not as a penalty but for liquidated damages, any part or the whole of which may be used to make up the difference between the bid of the defaulting bidder and the bid of the next highest responsible qualified bidder to whom the work is finally awarded.

4. ADDENDA AND INTERPRETATIONS

No interpretations of the meaning of the plans, specifications or other contract documents will be made orally to any bidder. Every request for such interpretation should be in writing, addressed to the University Representative. To be given consideration, requests must be received by the time and date stated in the Instructions to Bidders. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, **will be posted on SCSU's and DAS websites. This information can be viewed by accessing Southern Connecticut State University's website @ www.southernct.edu/purchasing/bids or DAS @ www.biznet.ct.gov/SCP_search/default.aspx?acclast**

Failure of any bidder to review any such addendum or interpretation shall not release any bidder of any obligations under his bid as submitted.

5. SECURITY FOR FAITHFUL PERFORMANCE

A. Performance Bond

The bidder awarded the contract shall within ten (10) days after the award thereof substitute for the check or bid bond accompanying his bid, an executed Performance Bond, prepared in the form of a Performance Bond, in the amount of 100 percent of the contract price, conditioned upon the faithful Performance of the contract, and having as surety thereto such surety company or companies as are acceptable to and approved by the University Representative and as are authorized to transact business in this state.

B. Labor and Material Bond

At this same time, the bidder awarded the contract shall submit to the University Representative an additional bond, prepared in the form of a Labor and Material Bond, in the sum of not less than 100 percent of the contract price, conditioned that the Contractor will promptly pay for all material furnished and labor supplied or performed in the prosecution of the work, whether or not the material or labor enters into and becomes a component part of the structure or structures to be erected or work to be performed under the contract and having as surety thereto such Surety Company or Companies as are acceptable to and approved by the University Representative and as are authorized to transact business in this State. Such additional bond shall be held by Southern Connecticut State University for the use of each party who, as subcontractor or otherwise, shall have furnished material or supplies or shall have performed labor in the prosecution of the work as herein provided and who has not been paid therefor. Such additional Bond shall provide specifically that any person may bring suit thereon in the name of the person suing, prosecute the same to the final judgment and have execution thereon for such sum or sums as may be justly due. Southern Connecticut State University shall not be liable to furnish counsel nor for the payment of any costs or expenses of any such suit. This bond is to be furnished pursuant to Section 49-41 of the Connecticut General Statutes.

The following Sections of the General Statutes are inserted for information concerning the Bond furnished under Section 49-41:

Section 49-41a

When any public work is awarded by a contract for which a payment bond is required by Section 49-41, the contract for such public work shall require the general or prime contractor, within thirty (30) days after payment to such contractor by the State or a municipality to pay any amount due any subcontractor, whether for labor performed or materials furnished, when such labor or materials furnished, when such labor or materials has been included in a requisition submitted by such contractor and paid by the State or a municipality. If payment is not made by the general or prime contractor within such period, the subcontractor shall set forth a claim against such contractor through notice by registered or certified mail. Ten (10) days after the receipt of such notice, the general or prime contractor shall be liable for interest on the amount due and owing subcontractors written demand will be required to place funds in the amount of such claim, plus interest of one (1) percent (1%), in an interest bearing escrow account in a bank in this state, provided such contractor may refuse to place such funds in escrow on the grounds that such subcontractor shall not have performed the work according to the terms of his or its employment, and provided further that in any litigation or arbitration to determine the validity of the subcontractor's claim, the contractor who so refuses shall pay the subcontractor's counsel fees and the interest herein provided if it shall be determined in any such proceeding that the subcontractor did, in fact perform the work according to the terms of his employment. No payment shall be withheld from a subcontractor for work performed because of a dispute between the general or prime contractor and another contractor or subcontractor. This section shall not be construed to prohibit progress payments prior to final payment of such contract and is applicable to all subcontractors for material whether they have contracted directly with the general or prime contractor or with some other subcontractor on such work.

Section 49-42

Suit On Bond; When and How Brought

- a) Every person who has furnished labor or material in the prosecution of the work provided for in such contract in respect of which a payment bond is furnished under the provisions for in such contract in ninety (90) days after the day on which the last of the labor was done or performed by him or material was furnished or supplied by him for which such claim is made, shall have the right to sue on such payment bond for the amount, or the balance thereof, unpaid at the time of institution of such suit and to prosecute such action to final execution and judgment for the sum or sums justly due him; provided any person having direct contractual relationship with a subcontractor but no contractual relationship express notice to such contractor within ninety (90) days from the date on which such person performed the last of the labor or furnished or supplied the last of the material for which such claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the material was furnished or supplied or for whom the labor was done or performed. Such notice shall be served by mailing the same by Registered or Certified Mail, postage prepaid, in an envelope addressed to the contractor at any address he maintains an office or conducts his business at or his residence.
- b) Every suit instituted under this section shall be brought in the name of the person suing, in the superior court for the country where the contract was to be performed, irrespective of the amount in controversy in such suit but no such suit shall be commenced after the expiration of one (1) year after the day on which the last of the labor was performed or material was supplied by him.
- c) The word "material" as used in Sections 49-41 to 49-43, inclusive, shall be construed to include the rental of equipment used in the prosecution of work provided for in such contract. (Underscore Ours)

6. CONNECTICUT SALES AND USE TAX

In accordance with section 12-412 of the Connecticut General Statutes, the State of Connecticut is exempt from the payment of excise, transportation, and sales taxes imposed by the Federal Government and/or the State. Such taxes must not be included in bid prices.

Non-resident contractor's attention is particularly called to Public Act 75-470 which pertains to bond requirements for purposes of the sales and use tax.

7. CONTRACT TIME LIMITS

For the purposes of this contract, wherever the words "working day" or "calendar" are used herein, the following definition shall apply:

a) Working Day

A working day is hereby defined as each consecutive day, including and following the date set for commencement of work, except Saturdays, Sundays and legal holidays and except those days on which, in the opinion of the University Representative, the contractor is prevented by inclement weather from proceeding with work on the major items under construction at the then current stage of the work for at least six hours with the usual force employed on these major items, provided however, that in the event the Owner directs or permits work to be performed on a Saturday, Sunday or legal holiday, then such day shall be considered a working day.

b) Calendar Day

A calendar day, as the name implies, shall be construed to mean each consecutive day in its order including Saturdays, Sundays, and legal holidays. The time allowed for the work to be done on a project will be computed on the basis of calendar days as defined but actual work will not be performed on Saturdays, Sundays, or legal holidays except by written direction or consent of the Owner.

8. PROHIBITING EMPLOYEE DISCRIMINATION BY CONTRACTOR

The contractor agrees and warrants that in the performance of this contract he will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, sex, mental retardation, or physical disability, including but not limited to, blindness, unless it shown by such contractor that such disability prevents performance of the work involved in any manner prohibited by the laws of the United States or of the State of Connecticut, and further agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission concerning the employment practices and procedures of the contractor as related to the provisions of this article.

9. UNION LABOR

Attention is called to the fact that there may be construction work now being carried on at the site at which construction is contemplated being done. This fact must be kept in mind by all bidders submitting proposals for this work.

10. CERTIFIED PAYROLL

According to State Statue, PA 97-263, effective October 1, 1997, each employer subject to the prevailing wage law must file certified payrolls with the contracting agent including information, including but not limited to, employee names; occupations; hours worked; rates paid; and the employers compliance with various provisions of the law. An employer subject to the prevailing wage law must now file the weekly certified payroll on a monthly basis (rather than weekly) with the contracting agency.

Penalties: There are various civil, criminal, and administrative penalties for violations of the prevailing wage law. Failure to pay the prevailing rate is a crime which may be a felony depending upon the amount of unpaid wages. Knowingly filing a false certified payroll or failure to file a certified payroll is a Class D felony for which an employer may be fined up to five thousand dollars, imprisoned for up to five years, or both. Disregarding obligations under Connecticut General Statute section 31-53 may result in an administrative debarment which may preclude any firm, corporation, partnership, or association in which such person or firms have an interest from receiving an award of a contract until a period of up to three years have elapsed. Additionally, civil penalties of \$300 per violation of law may also be assessed upon the employer.

11. MINORITY & SMALL BUSINESS SET-ASIDE PROGRAM

State of Connecticut Set-Aside Program: The Proposer on this project shall be required to self-perform **not less than 30% of the Contract Value**. In addition, the Proposer shall be required to award not less than **50% of the Remaining Contract Value** - that is the value left after subtracting the value of the self-performed work by the Proposer on this project - to small business contractors and to minority & women owned set-aside contractors, certified by the Department of Administrative Services. These statutory goals represent the minimum values expected to be achieved by this program under Connecticut General Statutes Section 4a-60g. Participating contractor list may be obtained by going to www.das.state.ct.us/purchase/setaside.

12. VIOLENCE IN THE WORKPLACE

Executive Order No. 16 (Violence in the Workplace) is a part of this contract.

OBJECTIVE CRITERIA FOR EVALUATING QUALIFICATIONS OF BIDDERS

SOUTHERN CONNECTICUT STATE UNIVERSITY
OBJECTIVE CRITERIA
ESTABLISHED FOR EVALUATING QUALIFICATIONS OF BIDDERS**THE BIDDER MUST:**

1. Have on its payroll or must be able to prove that it customarily employs supervisory personnel of the type qualified to perform the kind of work called for in the bid specifications.
2. Demonstrate to the satisfaction of the awarding authority that it possesses the ability and capacity to successfully complete the project. If the bidder has satisfactorily performed work of similar size, scope and comparable dollar value to the kind called for in the bid specifications continuously during the past three (3) years, the bidder shall be deemed qualified for the purpose of this paragraph.*
3. Own or possess rented or leased equipment of the type customarily required by contractors in the performance of contract work and that such equipment, if needed, is available for the job bid on.
4. Have purchased materials over the past three (3) years from suppliers who customarily sell same in quantity to contractors.
5. Be financially responsible to perform the work bid on.
6. Be able to furnish references from architects, engineers or owners indicating that it has satisfactorily completed contract work of the nature bid on and in a timely manner, complete with exonerating evidence where delays were evident.
7. Be able to demonstrate expertise in the various types of major trades or work required on the project either through itself or at a minimum at least one supervisory employee (on its payroll).
8. Have adequate physical facilities in which and from which the work can be performed.
9. Demonstrate to the satisfaction of the awarding authority that there exists a previous record of a harmonious relationship with its subcontractors.
10. Demonstrate to the satisfaction of the awarding authority that on previous state projects, if any, the bidder has complied in good faith with the requirements of listing subcontractors as outlined in Section 4b-95 of the Connecticut General Statute on prior work undertaken for the State of Connecticut.

*If the bidder does not have the three (3) years as called for, then the bidder must include in the Bidders Qualifications all the facts that demonstrate the bidder's ability and capacity to perform the work.

Information provided on the Bidder's Qualifications Statement may be used in the evaluation and qualifications of past performances.

OBJECTIVE CRITERIA INTENTION

The intention of the Objective Criteria that is included in the specifications of this project is to assure that the State of Connecticut will secure the "lowest responsible and qualified bidder" who has the ability and capacity to successfully complete the project.

REVISED 3/89

NONDISCRIMINATION CERTIFICATION

(By corporate or other business entity regarding support of nondiscrimination against persons on account of their race, color, religious creed, age, marital or civil union status, national origin, ancestry, sex, mental retardation, physical disability or sexual orientation.)

I, signer's name, signer's title, of name of entity, an entity lawfully organized and existing under the laws of name of state or commonwealth, do hereby certify that the following is a true and correct copy of a resolution adopted on the ____ day of _____, 20____ by the governing body of name of entity, in accordance with all of its documents of governance and management and the laws of name of state or commonwealth, and further certify that such resolution has not been modified, rescinded or revoked, and is, at present, in full force and effect.

RESOLVED: That name of entity hereby adopts as its policy to support the nondiscrimination agreements and warranties required under Connecticut General Statutes § 4a-60(a)(1) and § 4a-60a(a)(1), as amended in State of Connecticut Public Act 07-245 and sections 9(a)(1) and 10(a)(1) of Public Act 07-142.

WHEREFORE, the undersigned has executed this certificate this ____ day of _____, 20_____.

Signature

Effective June 25, 2007

STATE OF CONNECTICUT
SOUTHERN CONNECTICUT STATE UNIVERSITY
BID PROPOSAL FORM

BID NUMBER: SBE-19-SCSU-02
PROJECT TITLE: MOORE FIELD HOUSE - FIRST FLOOR
RESTROOM RENOVATIONS - 2019
PROJECT NUMBER: SCSU-2019-04
DATE: May 29, 2019

DATE: _____

PROPOSAL OF

BIDDER'S NAME

BIDDER'S ADDRESS

Dear Sir:

- 1.0 In accordance with Chapter 60 Part II of the Connecticut General Statutes, as amended, and pursuant to, and in compliance with your Invitation to Bid, the Notice to Bidders, the Contract, including the conditions thereto, the Bid Security, I (we) propose to furnish the labor and/or materials, installed as required for the project named and numbered on this Bid Proposal Form, submitted herein, furnishing all necessary equipment, machinery, tools, labor and other means of construction, and all materials specified in the manner and at the time prescribed strictly in accordance with the provisions of the Contract including, but not limited to, the specifications and/or drawings together with all addenda issued by our authority and received prior to the scheduled closing time for the receipt of the bids, and in conformity with requirements of the Awarding Authority and any laws or Departmental regulations of the State of Connecticut or of the United States which may affect the same, for and in consideration of the price(s) stated on the said Bid Proposal Form, hereof.
- 2.0 The Lump Sum Base Bid by me (us) on the Bid Proposal Form includes all work indicated on the drawings and/or described in the specifications, except:
- 2.1 Contingent Work covered by the Unit Prices included within the General Requirements.
 - 2.2 Special Unit Prices - NOT APPLICABLE FOR THIS PROJECT.
 - 2.3 Supplemental Bids – NOT APPLICABLE FOR THIS PROJECT.

- 3.0 I (we) acknowledge and agree to the following:
To Use and accept:
- 3.1 To use and accept the Unit Prices in the Bid Form and in Division 01, Section 01 22 19 “Unit Prices Schedule - Alterations”, as provided to the Owner in evaluating either additions to or deductions from the Work.
 - 3.2 Special Unit Prices - NOT APPLICABLE FOR THIS PROJECT.
 - 3.3 Allowances - NOT APPLICABLE FOR THIS PROJECT.
 - 3.4 Supplemental Bids - NOT APPLICABLE FOR THIS PROJECT.
- 4.0 This Bid Proposal Form is submitted to and in compliance with the foregoing and following conditions and/or information:
- 4.1 **AWARD**
 - 4.1.1 All proposals shall be subject to provisions of the Notice to Bidders and for purpose of award, consideration shall be given only to Proposals submitted by qualified and responsible bidders.
 - 4.1.2 The award shall be evaluated using the lowest Total Lump Sum Bid as stated in Section 7.3 of this Bid Proposal Form, and any or all Supplemental Bids as stated in Section 7.5 of this Bid Proposal Form, taken sequentially, as applicable, provided funds are available. The award will also be made based on the “Objective Criteria for Evaluation of Qualifications of Bidders”
 - 4.1.3 In the event of any discrepancy between the amount written in words and the amount written in numerical figures, the amount written in words shall be controlling.
 - 4.2 **COMMENCEMENT AND FINAL COMPLETION OF WORK:(ARTICLE 4 GENERAL CONDITIONS)**
 - 4.2.1 The General Contractor shall commence Work, (Including any or all Supplemental Bids, if accepted) within five calendar (5) days, after issuance of Purchase Order.

4.2.2 The work is to be completed in one (1) phase as noted in the drawings.

A Purchase Order will be issued soon after the winning bid is accepted. It is expected that the **contract will be awarded immediately after the bid is accepted, but work cannot begin at the building until June 10, 2019**, and Substantial Completion for the work at the building for the **Moore Field House – First Floor Restroom Renovations - 2019** shall be no later than **September 20, 2019**.

Substantial Completion means that the work area has been cleaned, the restrooms washed down, and the students can use the restrooms.

4.3 LIQUIDATED DAMAGES: (ARTICLE 8, GENERAL CONDITIONS)

4.3.1 The General Contractor shall be assessed **(\$300.00) Three Hundred Dollars in Liquidated Damages, per day for each calendar day** beyond the Date given for Final Completion of the Contract according to the two Contract Times given above.

4.4 CONTRACTORS INSURANCE REQUIRED:

4.4.1 The limits of liability for the Insurance required for this project shall be those listed in Section 00300, Certificate of Insurance, for projects under \$500,000.000.

4.4.2 SPECIAL HAZARDS INSURANCE REQUIRED:
Type "C" – Collapse
Type "X" – Explosion
Type "U" – Underground

4.4.3 BUILDERS RISK INSURANCE REQUIRED: Fire and Extended Coverage on a percent basis (Completed Value Form) on the insurable portion of the entire project. The policy or policies shall specifically state that they are for the benefit of and payable to, Southern Connecticut State University, the contractor, and all persons furnishing labor or labor and materials for the contract work, as their interests may appear.

- 4.5 The General Contractor on this project shall be required to perform not less than **30%** of the completed Contract Sum of the Work with its own forces.
- 4.5.1 The General Contractor on this project shall be required to award not less than **50 % of the Remaining Contract Value** – that is the value left after subtracting the value of the self-performed work by the General Contractor - to subcontractors who are certified and eligible to participate under The State of Connecticut Set-Aside Program for small contractors – this includes SBE, MBE, and WBE contractors. Note that the percentage of work to be self-performed by the General Contractor cannot be used to accomplish the 50% requirement for SBE/MBE/WBE set-aside subcontractors. Participating contractor list may be obtained by going to www.das.state.ct.us/purchase/setaside.
- 4.5.1.1 This requirement must be met even if the General Contractor is certified and eligible to participate in the Small Business Set-Aside Program. To facilitate compliance with this requirement for set aside subcontractors, apparent low bidder will have ten (10) calendar days from the date of notification within which to submit a list of certified set aside contractors to be used on this project along with the dollar amounts to be paid to each, on the forms provided, and a copy of their current certification must be attached. This information will be considered as part of your Bid Proposal Form and failure to comply with any portion of this requirement within the ten (10) days, including but not limited to failure to list or meet the necessary dollar amount or percentage of the bid price will be cause to reject your bid.

4.5.3 Schedule 4.5.3 & 4.5.4

Certified and Eligible Minority Business Enterprise Subcontractor

NOTE: THIS INFORMATION DOES NOT HAVE TO BE SUBMITTED NOW AS PART OF THE BID FORM. AS NOTED IN SECTION 4.5.2, THE APPARENT LOW BIDDER WILL HAVE TEN (10) CALENDAR DAYS FROM THE DATE OF NOTIFICATION WITHIN WHICH TO SUBMIT THIS INFORMATION. NO CONTRACT WILL BE AWARDED UNTIL THIS INFORMATION HAS BEEN RECEIVED FROM THE LOWEST QUALIFIED BIDDER.

SCHEDULE 4.5.3 – LISTED WOMEN OR MINORITY BUSINESS ENTERPRISES	
1.	<div style="border-bottom: 1px solid black; margin-bottom: 5px; text-align: center;">Name of Subcontractor</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">Address</div> <div style="display: flex; justify-content: space-between; border-bottom: 1px solid black; margin-bottom: 5px;"> Contact Person Phone No </div> <div style="display: flex; justify-content: space-between; border-bottom: 1px solid black; margin-bottom: 5px;"> FEIN No. Fax No. </div> <div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> Amount Dollars \$ <input style="width: 40px;" type="text"/> , <input style="width: 40px;" type="text"/> , <input style="width: 40px;" type="text"/> . <input style="width: 20px;" type="text"/> </div> <p style="text-align: center; font-size: small;">(Place figures in appropriate boxes.)</p> <p style="text-align: right; margin-right: 50px;">DOLLARS</p> <div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> Certification Exp. Date::

2.	<div style="border-bottom: 1px solid black; margin-bottom: 5px; text-align: center;">Name of Subcontractor</div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;">Address</div> <div style="display: flex; justify-content: space-between; border-bottom: 1px solid black; margin-bottom: 5px;"> Contact Person Phone No </div> <div style="display: flex; justify-content: space-between; border-bottom: 1px solid black; margin-bottom: 5px;"> FEIN No. Fax No. </div> <div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> Amount Dollars \$ <input style="width: 40px;" type="text"/> , <input style="width: 40px;" type="text"/> , <input style="width: 40px;" type="text"/> . <input style="width: 20px;" type="text"/> </div> <p style="text-align: center; font-size: small;">(Place figures in appropriate boxes.)</p> <p style="text-align: right; margin-right: 50px;">DOLLARS</p> <div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> Certification Exp. Date::
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3.

Name of Subcontractor

Address

Contact Person

Phone No

FEIN No.

Fax No.

Amount Dollars

\$, , .
(Place figures in appropriate boxes.)

DOLLARS

Certification Exp. Date::

4.

Name of Subcontractor

Address

Contact Person

Phone No

FEIN No.

Fax No.

Amount Dollars

\$, , .
(Place figures in appropriate boxes.)

DOLLARS

Certification Exp. Date::

SCHEDULE 4.5.4 – SET-ASIDE WORKSHEET						
	Subcontractor Name	Class of Work	SBE	MBE/WBE	General Contractor Self-Performing \$\$	Subcontract
1					\$	
2						\$
3						\$
4						\$
5						\$
6						\$
7						\$
8						\$
9	Prime Contractor Total				0	
10	SBE Subtotal	Add SBE subcontract amounts from above list and enter total at right				\$
11	MBE/WBE Subtotal	Add MBE/WBE subcontract amounts from the list and enter total to the right				\$
12	Lump Sum base bid	Enter total lump sum base bid from bid submittal form				\$
13	Prime Contractor % and \$\$\$\$				0	
14	Remaining value subject to SBE/MBE = lump sum line 12 minus General Contractor Total					\$
15	SBE Percentage	Divide line 10 by line 14. Enter % to the right				%
16	MBE/WBE Percentage	Divide line 11 by line 14. Enter % to the right.				%
17	Total SBE/MBE/WBE %	Must = 50% of line 14, add line 15+16 for total %				%
Vendor Company Name _____ Authorized signature _____ Date _____						

- 4.6 BIDDERS' QUALIFICATIONS STATEMENT AND OBJECTIVE CRITERIA FOR EVALUATING QUALIFICATIONS OF BIDDERS:
- 4.6.1 Information in regards to the General Contractors and the Named Subcontractors Bidders Qualification Statements is submitted and is made part of this Bid Proposal Form.
- 4.6.1.1 The General Contractor is required to complete the CHRO Contract Compliance Regulations & Bidder Qualification Statement (SCSU-4F).
- 4.6.1.2 Any Named Subcontractor as listed in schedule 7.5.1 of this Bid Proposal Form is required to complete the CHRO Contract Compliance Regulations & Bidder Qualification Statement (SCSU-4F). To facilitate compliance with this requirement, the apparent low bidder will have ten (10) calendar days, from notification by the University, to submit the completed forms for the Named Subcontractor Bidders. This information will be considered as part of your Bid Proposal Form and failure to comply with any portion of this requirement will be cause to reject your bid.
- 4.6.2 The Objective Criteria For Evaluating Bidders, that are included in the Contract Documents of this project, is to assure that State of Connecticut will secure the "lowest responsible and qualified bidder" who has the ability and capacity to successfully complete the Bid Proposal Form and the Work.
- 4.7 NONDISCRIMINATION AND LABOR RECRUITMENT:
- 4.7.1 I (we) agree that the Contract awarded for this project shall be subject to Executive Orders No. Three & Seventeen, promulgated June 16, 1971 and February 15, 1973 respectively and to the Guidelines and Rules of the State Labor Commissioner implementing Executive Order No. Three and further agree to submit reports of Compliance Staffing on Labor Department Form E.O. 3-1, when and as requested.
- 4.8 FEDERAL & STATE WAGE DETERMINATIONS:
- 4.8.1 The U. S. Secretary of Labor's latest decision, and the State of Connecticut Wage Schedule are all incorporated in the documents. The higher rate (Federal or State) for any given occupation shall prevail if the bid price exceeds \$100,000. At the time of bidding, if the bid price exceeds \$100,000, the bidder agrees to accept the current prevailing wage scale as provided by the Connecticut Department of Labor for work performed at the site.

4.9 CERTIFICATION OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY & NON-SEGREGATED FACILITIES:

4.9.1 The General Contractor and Subcontractors are hereby advised that upon acceptance of their bids they are obligated to fill out within 7 Calendar days the certification required pursuant to Executive Order No. 11246, and agree to certify to the compliance of non-segregated facilities.

4.10 EQUALS AND SUBSTITUTIONS:

4.10.1 All submissions requesting "Equal" and or Substitutions" shall be made by the Contractor in accordance with Article 15 of the General Conditions and Section 01 25 00 of the General Requirements. Bidders must submit requests for equals or substitutions prior to the receipt of the competitive bid. Substitutions will be allowed where the proposed substitute is approved as an equal material or products by the University Representative. All submissions shall contain all the information necessary for the Owner to evaluate the submission and the request. Failure to submit sufficient information to make a proper evaluation, including submittal of data for the first manufacturer listed as well as the data for the Equal and or Substitution proposed, shall result in a rejection of the submission and request.

4.11 **DAS Prequalification Certificate:** The General Contractor is advised that for any proposal price estimated to be in excess of \$500,000.00, a valid Department of Administration Services Prequalification Certificate and Update Statement must accompany this proposal. Application for this program can be accessed by going to www.das.state.ct.us/BusinessSvs/PreQual/Prequal.asp

5.0 ACCOMPANYING THIS PROPOSAL IS:

5.1 A CERTIFIED CHECK drawn to the order of the "Controller, Southern Connecticut State University" in the amount of:

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(Place figures in appropriate boxes.)

DOLLARS

(Written amount)

(A State Bank & Trust Co.) (A National Banking Assoc.)

Located in _____

Address, City & State

which it is understood shall be cashed and the proceeds thereof used so far as may be necessary to reimburse Southern Connecticut State University for losses and damages arising by virtue of my (our) failure to file the required Bonds and execute the required contract in this proposal is accepted by the Awarding Authority.

OR

- 5.2 A BID BOND having as surety thereto a Surety Company or Companies authorized to transact business in the State of Connecticut and made out in the penal sum of 10% of the TOTAL bid, or in the amount of:

\$

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(Place figures in appropriate boxes.)

DOLLARS

(Written amount)

- 6.0 I (we), the undersigned, hereby declare that I am (we are) the only person(s) interested in the Bid Proposal and that it is made without any connection with any other person making any Bid Proposal for the same work. No person acting for, or employed by, the State of Connecticut is directly or indirectly interested in this Bid Proposal, or in any Contract which may be made under it, or in expected profits to arise therefrom. This Bid Proposal is made without directly or indirectly influencing or attempting to influence any other person or corporation to bid or refrain from bidding or to influence the amount of the Bid Proposal of any other person or corporation. This Bid Proposal is made in good faith without collusion or connection with any other person bidding for the same work and this proposal is made with distinct reference and relation to the plans and specifications prepared for this Contract. I (we) further declare that in regard to the conditions affecting the Work to be done and the labor and materials needed, this Bid Proposal is reliance upon any representations of any employee, officer or agent of the State.
- 7.0 Each class of Work set forth in a separate section of the specifications pursuant to this Section shall be a subtrade designated in Schedule 7.5.1 of this Bid Proposal Form and shall be the matter of a subcontract made in accordance with the procedure set forth in this chapter.

- 7.1 The undersigned proposes to furnish all labor and materials required for

Project Numbers: SCSU-2019-04

Project Title: Moore Field House – First Floor Restroom Renovations - 2019

In accordance with the accompanying Plans and Specifications.

Prepared by: Office of Facilities Planning and Architectural Services
Southern Connecticut State University

for the Contract Sums specified in Section 7.3 subject to additions and deductions according to the terms of the specifications.

- 7.2 This Bid Proposal includes Addenda numbered _____.

- 7.2.1 The **Contractor is to fill in item 7.2 above**, acknowledging the number of Addenda that the Contractor is including in the Bid Proposal Form.

7.3 THE PROPOSED CONTRACT SUMS ARE AS FOLLOWS:

Moore Field House – First Floor Restroom Renovations – 2019 - #SCSU-2019-04

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(Place figures in appropriate boxes.)

DOLLARS

(Written Amount)

The Contract Sum must include:

\$3,091.43 Johnson Controls Cost for Modifications to Fire Alarm System.
(See Section 28 31 00 of Project Manual for description of work.)

7.3.1 In accordance with Section 4.5 of this Bid Proposal Form, the amount of Work performed by the General Contractor must be at least **thirty percent (30%)** of the **TOTAL** Proposal Contract Sum.

7.3.2 Bid Prices to be held for ninety (90) days from bid opening.

7.3.3a UNIT PRICE – New Horn & Studs (per occurrence)

When the finish face of the new ceramic tile wall construction prevents the existing waste pipe horn nipple and carrier fixture studs from being reused for the re-connection and hanging of the new toilet.

Remove the existing nipple and studs. Install a new waste pipe horn nipple, and new fixture studs at the existing toilet connection.

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7.3.3b UNIT PRICE – New Horn, Studs, & Carrier (per occurrence)

When the finish face of the new ceramic tile wall construction prevents the existing waste pipe horn nipple and carrier fixture studs from being reused and waste pipe horn nipple and carrier fixture studs cannot be removed from the existing carrier.

Remove the existing nipple and the existing carrier & studs. Install a new waste pipe horn nipple and a new wall carrier (including new fixture studs) at the existing toilet connection. Some wall removal and patching is assumed.

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7.4 **The work to be performed by the General Contractor, with his own forces, for the TOTAL project, is as follows:**

\$

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(Place figures in appropriate boxes.)

7.4.1 By submitting this bid, the contractor accepts and meets the Drawings & Specifications in their entirety. Any exceptions and/or deviations must be listed below.

EXCEPTIONS/DEVIATIONS

7.5 Subcontractors and their price must be listed for the major trades identified in Schedule 7.5.1 below. (As per C. G. S. 4b-93)

NOTE;
THIS INFORMATION DOES NOT HAVE TO BE SUBMITTED NOW AS PART OF THE BID FORM. AS NOTED IN SECTION 4.5.1, THE APPARENT LOW BIDDER WILL HAVE TEN (10) CALENDAR DAYS FROM THE DATE OF NOTIFICATION WITHIN WHICH TO SUBMIT THIS INFORMATION. NO CONTRACT WILL BE AWARDED UNTIL THIS INFORMATION HAS BEEN RECEIVED FROM THE LOWEST QUALIFIED BIDDER.

SCHEDULE 7.5.1 – NAMED SUBCONTRACTORS	
1. (Tile Work)	<div style="border-bottom: 1px solid black; margin-bottom: 5px;">Name of Subcontractor</div>
Address	<div style="border-bottom: 1px solid black; margin-bottom: 5px;">.</div>
Contact Person	Phone No
FEIN No.	Fax No.
Amount Dollars	\$ <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> , <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> , <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> . <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <small>(Place figures in appropriate boxes.)</small>
	DOLLARS
Labor & Material Payment Bond:	<input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> %
Performance Bond:	<input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> %

2. (Carpentry)

Name of Subcontractor

Address

Contact Person

Phone No

FEIN No.

Fax No.

Amount Dollars

\$, , .
(Place figures in appropriate boxes.)

DOLLARS

Labor & Material Payment Bond:

%

Performance Bond:

%

3. (Toilet Partitions)

Name of Subcontractor

Address

Contact Person

Phone No

FEIN No.

Fax No.

Amount Dollars

\$, , .
(Place figures in appropriate boxes.)

DOLLARS

Labor & Material Payment Bond:

%

Performance Bond:

%

4. (Plumbing)	Name of Subcontractor
Address	.
Contact Person	Phone No
FEIN No.	Fax No.
Amount Dollars	\$ <input type="text"/> <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> , <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <small>(Place figures in appropriate boxes.)</small>
	DOLLARS
Labor & Material Payment Bond:	<input type="text"/> <input type="text"/> <input type="text"/> %
Performance Bond:	<input type="text"/> <input type="text"/> <input type="text"/> %

- 7.6 Supplemental Bids – NOT APPLICABLE FOR THIS PROJECT.

- 7.7 The undersigned agrees that, if selected as General Contractor, the General Contractor shall, within five (5) calendar and legal State holidays excluded, after presentation thereof by the awarding authority, execute a Contract in the form of a Purchase Order in accordance with the terms of this Bid Proposal Form and Contract.

- 7.8 The undersigned agrees and warrants that they has made good faith efforts to employ minority business enterprises as Subcontractors and suppliers of materials under such Contract and shall provide the Commission on Human Rights and Opportunities with such information as is requested by the Commission concerning their employment practices and procedures as they relate to the current provisions of the Connecticut General Statutes governing Contract requirements.

- 8.0 A duly authorized representative of the Bidder or Bidder’s partnership, firm, corporation or business organization must sign all Bid Proposals Forms.

(NO FACSIMILE SIGNATURE IS PERMITTED).
ALL INFORMATION BELOW IS TO BE FILLED IN BY THE BIDDER.

Project Number _____

Signed this _____ day of _____ 19 _____

Firm Name _____

Complete Legal Name

Address _____
Street City State

Telephone Number _____

Bidders Signature _____
Duly Authorized Title

END OF SECTION

SEEC FORM 11

NOTICE TO EXECUTIVE BRANCH STATE CONTRACTORS AND PROSPECTIVE STATE CONTRACTORS OF CAMPAIGN CONTRIBUTION AND SOLICITATION BAN

This notice is provided under the authority of Connecticut General Statutes 9-612(g)(2), as amended by P.A. 07-1, and is for the purpose of informing state contractors and prospective state contractors of the following law (italicized words are defined below):

Campaign Contribution and Solicitation Ban

No *state contractor, prospective state contractor, principal of a state contractor or principal of a prospective state contractor*, with regard to a *state contract or state contract solicitation* with or from a state agency in the executive branch or a quasi-public agency or a holder, or principal of a holder of a valid prequalification certificate, shall make a contribution to, or *solicit* contributions on behalf of (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of Governor, Lieutenant Governor, Attorney General, State Comptroller, Secretary of the State or State Treasurer, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee;

In addition, no holder or principal of a holder of a valid prequalification certificate, shall make a contribution to, or solicit contributions on behalf of (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of State senator or State representative, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee.

Duty to Inform

State contractors and prospective state contractors are required to inform their principals of the above prohibitions, as applicable, and the possible penalties and other consequences of any violation thereof.

Penalties for Violations

Contributions or solicitations of contributions made in violation of the above prohibitions may result in the following civil and criminal penalties:

Civil penalties--\$2000 or twice the amount of the prohibited contribution, whichever is greater, against a principal or a contractor. Any state contractor or prospective state contractor which fails to make reasonable efforts to comply with the provisions requiring notice to its principals of these prohibitions and the possible consequences of their violations may also be

subject to civil penalties of \$2000 or twice the amount of the prohibited contributions made by their principals.

Criminal penalties—Any knowing and willful violation of the prohibition is a Class D felony, which may subject the violator to imprisonment of not more than 5 years, or \$5000 in fines, or both.

Contract Consequences

Contributions made or solicited in violation of the above prohibitions may result, in the case of a state contractor, in the contract being voided.

Contributions made or solicited in violation of the above prohibitions, in the case of a prospective state contractor, shall result in the contract described in the state contract solicitation not being awarded to the prospective state contractor, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

The State will not award any other state contract to anyone found in violation of the above prohibitions for a period of one year after the election for which such contribution is made or solicited, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

Additional information and the entire text of P.A 07-1 may be found on the website of the State Elections Enforcement Commission, www.ct.gov/seec. Click on the link to "State Contractor Contribution Ban."

Definitions:

"State contractor" means a person, business entity or nonprofit organization that enters into a state contract. Such person, business entity or nonprofit organization shall be deemed to be a state contractor until December thirty-first of the year in which such contract terminates. "State contractor" does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Prospective state contractor" means a person, business entity or nonprofit organization that (i) submits a response to a state contract solicitation by the state, a state agency or a quasi-public agency, or a proposal in response to a request for proposals by the state, a state agency or a quasi-public agency, until the contract has been entered into, or (ii) holds a valid prequalification certificate issued by the Commissioner of Administrative Services under section 4a-100. "Prospective state contractor" does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Principal of a state contractor or prospective state contractor" means (i) any individual who is a member of the board of directors of, or has an ownership interest of five per cent or more in, a state contractor or prospective state contractor, which is a business entity, except for an individual who is a member of the board of directors of a nonprofit organization, (ii) an individual who is employed by a state contractor or prospective state contractor, which is a business entity, as president, treasurer or executive vice president, (iii) an individual who is the chief executive officer of a state contractor or prospective state contractor, which is not a business entity, or if a state contractor or prospective state contractor has no such officer, then the officer who duly possesses comparable powers and duties, (iv) an officer or an employee of any state contractor or prospective state contractor who has *managerial or discretionary responsibilities with respect to a state contract*, (v) the spouse or a *dependent child* who is eighteen years of age or older of an individual described in this subparagraph, or (vi) a political committee established or controlled by an individual described in this subparagraph or the business entity or nonprofit organization that is the state contractor or prospective state contractor.

"State contract" means an agreement or contract with the state or any state agency or any quasi-public agency, let through a procurement process or otherwise, having a value of fifty thousand dollars or more, or a combination or series of such agreements or contracts having a value of one hundred thousand dollars or more in a calendar year, for (i) the rendition of services, (ii) the furnishing of any goods, material, supplies, equipment or any items of any kind, (iii) the construction, alteration or repair of any public building or public work, (iv) the acquisition, sale or lease of any land or building, (v) a licensing arrangement, or (vi) a grant, loan or loan guarantee. "State contract" does not include any agreement or contract with the state, any state agency or any quasi-public agency that is exclusively federally funded, an education loan or a loan to an individual for other than commercial purposes.

"State contract solicitation" means a request by a state agency or quasi-public agency, in whatever form issued, including, but not limited to, an invitation to bid, request for proposals, request for information or request for quotes, inviting bids, quotes or other types of submittals, through a competitive procurement process or another process authorized by law waiving competitive procurement.

"Managerial or discretionary responsibilities with respect to a state contract" means having direct, extensive and substantive responsibilities with respect to the negotiation of the state contract and not peripheral, clerical or ministerial responsibilities.

"Dependent child" means a child residing in an individual's household who may legally be claimed as a dependent on the federal income tax of such individual.

"Solicit" means (A) requesting that a contribution be made, (B) participating in any fund-raising activities for a candidate committee, exploratory committee, political committee or party committee, including, but not limited to, forwarding tickets to potential contributors, receiving contributions for transmission to any such committee or bundling contributions, (C) serving as chairperson, treasurer or deputy treasurer of any such committee, or (D) establishing a political committee for the sole purpose of soliciting or receiving contributions for any committee. Solicit does not include: (i) making a contribution that is otherwise permitted by Chapter 155 of the Connecticut General Statutes; (ii) informing any person of a position taken by a candidate for public office or a public official, (iii) notifying the person of any activities of, or contact information for, any candidate for public office; or (iv) serving as a member in any party committee or as an officer of such committee that is not otherwise prohibited in this section.

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

(Revised 09/17/07)

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 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 AND OTHER INFORMATION

The following BIDDER CONTRACT COMPLIANCE MONITORING REPORT must be completed in full, signed, and submitted with the bid for this contract. The contract awarding agency and the Commission on Human Rights and Opportunities will use the information contained thereon to determine the bidders compliance to Sections 4a-60 and 4a-60a CONN. GEN. STAT., and Sections 46a-68j-23 of the Regulations of Connecticut State Agencies regarding equal employment opportunity, and the bidder’s □□good faith efforts to include minority business enterprises as subcontractors and suppliers for the work of the contract.

1) **Definition of Small Contractor**

Section 4a-60g CONN. GEN. STAT. defines a small contractor as a company that has been doing business under the same management and control and has maintained its principal place of business in Connecticut for a one year period immediately prior to its application for certification under this section, had gross revenues not exceeding ten million dollars in the most recently completed fiscal year, and at least fifty-one percent of the ownership of which is held by a person or persons who are active in the daily affairs of the company, and have the power to direct the management and policies of the company, except that a nonprofit corporation shall be construed to be a small contractor if such nonprofit corporation meets the requirements of subparagraphs (A) and (B) of subdivision 4a-60g CONN. GEN. STAT.

MANAGEMENT: Managers plan, organize, direct, and control the major functions of an organization through subordinates who are at the managerial or supervisory level. They make policy decisions and set objectives for the company or departments. They are not usually directly involved in production or providing services. Examples include top executives, public relations managers, managers of operations specialties (such as financial, human resources, or purchasing managers), and construction and engineering managers.

BUSINESS AND FINANCIAL OPERATIONS: These occupations include managers and professionals who work with the financial aspects of the business. These occupations include accountants and auditors, purchasing agents, management analysts, labor relations specialists, and budget, credit, and financial analysts.

MARKETING AND SALES: Occupations related to the act or process of buying and selling products and/or services such as sales engineer, retail sales workers and sales representatives including wholesale.

LEGAL OCCUPATIONS: In-House Counsel who is charged with providing legal advice and services in regards to legal issues that may arise during the course of standard business practices. This category also includes assistive legal occupations such as paralegals, legal assistants.

COMPUTER SPECIALISTS: Professionals responsible for the computer operations within a company are grouped in this category. Examples of job titles in this category include computer programmers, software engineers, database administrators, computer scientists, systems analysts, and computer support specialists

ARCHITECTURE AND ENGINEERING: Occupations related to architecture, surveying, engineering, and drafting are included in this category. Some of the job titles in this category include electrical and electronic engineers, surveyors, architects, drafters, mechanical engineers, materials engineers, mapping technicians, and civil engineers.

OFFICE AND ADMINISTRATIVE SUPPORT: All clerical-type work is included in this category. These jobs involve the preparing, transcribing, and preserving of written communications and records; collecting accounts; gathering and distributing information; operating office machines and electronic data processing equipment; and distributing mail. Job titles listed in this category include telephone operators, bill and account collectors, customer service representatives, dispatchers, secretaries and administrative assistants, computer operators and clerks (such as payroll, shipping, stock, mail and file).

BUILDING AND GROUNDS CLEANING AND MAINTENANCE: This category includes occupations involving landscaping, housekeeping, and janitorial services. Job titles found in this category include supervisors of landscaping or housekeeping, janitors, maids, grounds maintenance workers, and pest control workers.

CONSTRUCTION AND EXTRACTION: This category includes construction trades and related occupations. Job titles found in this category include boilermakers, masons (all types), carpenters, construction laborers, electricians, plumbers (and related trades), roofers, sheet metal workers, elevator installers, hazardous materials removal workers, paperhangers, and painters. Paving, surfacing, and tamping equipment operators; drywall and ceiling tile installers; and carpet, floor and tile installers and finishers are also included in this category. First line supervisors, foremen, and helpers in these trades are also grouped in this category..

INSTALLATION, MAINTENANCE AND REPAIR: Occupations involving the installation, maintenance, and repair of equipment are included in this group. Examples of job titles found here are heating, ac, and refrigeration mechanics and installers; telecommunication line installers and repairers; heavy vehicle and mobile equipment service technicians and mechanics; small engine mechanics; security and fire alarm systems installers; electric/electronic repair, industrial, utility and transportation equipment; millwrights; riggers; and manufactured building and mobile home installers. First line supervisors, foremen, and helpers for these jobs are also included in the category.

MATERIAL MOVING WORKERS: The job titles included in this group are Crane and tower operators; dredge, excavating, and lading machine operators; hoist and winch operators; industrial truck and tractor operators; cleaners of vehicles and equipment; laborers and freight, stock, and material movers, hand; machine feeders and offbearers; packers and packagers, hand; pumping station operators; refuse and recyclable material collectors; and miscellaneous material moving workers.

PRODUCTION WORKERS: The job titles included in this category are chemical production machine setters, operators and tenders; crushing/grinding workers; cutting workers; inspectors, testers sorters, samplers, weighers; precious stone/metal workers; painting workers; cementing/gluing machine operators and tenders; etchers/engravers; molders, shapers and casters except for metal and plastic; and production workers.

<p><u>White</u> (not of Hispanic Origin)- All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.</p> <p><u>Black</u>(not of Hispanic Origin)- All persons having origins in any of the Black racial groups of Africa.</p> <p><u>Hispanic</u>- All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.</p>	<p><u>Asian or Pacific Islander</u>- All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes China, India, Japan, Korea, the Philippine Islands, and Samoa.</p> <p><u>American Indian or Alaskan Native</u>- All persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.</p>
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BIDDER CONTRACT COMPLIANCE MONITORING REPORT

PART I - Bidder Information

Company Name Street Address City & State Chief Executive	Bidder Federal Employer Identification Number _____ Or Social Security Number _____
Major Business Activity (brief description)	Bidder Identification (response optional/definitions on page 1) -Bidder is a small contractor. Yes__ No__ -Bidder is a minority business enterprise Yes__ No__ (If yes, check ownership category) Black__ Hispanic__ Asian American__ American Indian/Alaskan Native__ Iberian Peninsula__ Individual(s) with a Physical Disability__ Female__
Bidder Parent Company (If any)	- Bidder is certified as above by State of CT Yes__ No__
Other Locations in Ct. (If any)	- DAS Certification Number _____

PART II - Bidder Nondiscrimination Policies and Procedures

1. Does your company have a written Affirmative Action/Equal Employment Opportunity statement posted on company bulletin boards? Yes__ No__	7. Do all of your company contracts and purchase orders contain non-discrimination statements as required by Sections 4a-60 & 4a-60a Conn. Gen. Stat.? Yes__ No__
2. Does your company have the state-mandated sexual harassment prevention in the workplace policy posted on company bulletin boards? Yes__ No__	8. Do you, upon request, provide reasonable accommodation to employees, or applicants for employment, who have physical or mental disability? Yes__ No__
3. Do you notify all recruitment sources in writing of your company's Affirmative Action/Equal Employment Opportunity employment policy? Yes__ No__	9. Does your company have a mandatory retirement age for all employees? Yes__ No__
4. Do your company advertisements contain a written statement that you are an Affirmative Action/Equal Opportunity Employer? Yes__ No__	10. If your company has 50 or more employees, have you provided at least two (2) hours of sexual harassment training to all of your supervisors? Yes__ No__ NA__
5. Do you notify the Ct. State Employment Service of all employment openings with your company? Yes__ No__	11. If your company has apprenticeship programs, do they meet the Affirmative Action/Equal Employment Opportunity requirements of the apprenticeship standards of the Ct. Dept. of Labor? Yes__ No__ NA__
6. Does your company have a collective bargaining agreement with workers? Yes__ No__ 6a. If yes, do the collective bargaining agreements contain non-discrimination clauses covering all workers? Yes__ No__ 6b. Have you notified each union in writing of your commitments under the nondiscrimination requirements of contracts with the state of Ct? Yes__ No__	12. Does your company have a written affirmative action Plan? Yes__ No__ If no, please explain. 13. Is there a person in your company who is responsible for equal employment opportunity? Yes__ No__ If yes, give name and phone number. _____ _____

1. Will the work of this contract include subcontractors or suppliers? Yes__ No__

1a. If yes, please list all subcontractors and suppliers and report if they are a small contractor and/or a minority business enterprise. (defined on page 1 / use additional sheet if necessary)

1b. Will the work of this contract require additional subcontractors or suppliers other than those identified in 1a. above?

Yes__ No__

PART IV - Bidder Employment Information

Date:

JOB CATEGORY *	OVERALL TOTALS	WHITE (not of Hispanic origin)		BLACK (not of Hispanic origin)		HISPANIC		ASIAN or PACIFIC ISLANDER		AMERICAN INDIAN or ALASKAN NATIVE	
		Male	Female	Male	Female	Male	Female	Male	Female	male	female
Management											
Business & Financial Ops											
Marketing & Sales											
Legal Occupations											
Computer Specialists											
Architecture/Engineering											
Office & Admin Support											
Bldg/ Grounds Cleaning/Maintenance											
Construction & Extraction											
Installation , Maintenance & Repair											
Material Moving Workers											
Production Occupations											
TOTALS ABOVE											
Total One Year Ago											
FORMAL ON THE JOB TRAINEES (ENTER FIGURES FOR THE SAME CATEGORIES AS ARE SHOWN ABOVE)											
Apprentices											
Trainees											

*NOTE: JOB CATEGORIES CAN BE CHANGED OR ADDED TO (EX. SALES CAN BE ADDED OR REPLACE A CATEGORY NOT USED IN YOUR COMPANY)

1. Which of the following recruitment sources are used by you? (Check yes or no, and report percent used)				2. Check (X) any of the below listed requirements that you use as a hiring qualification (X)		3. Describe below any other practices or actions that you take which show that you hire, train, and promote employees without discrimination
SOURCE	YES	NO	% of applicants provided by source			
State Employment Service					Work Experience	
Private Employment Agencies					Ability to Speak or Write English	
Schools and Colleges					Written Tests	
Newspaper Advertisement					High School Diploma	
Walk Ins					College Degree	
Present Employees					Union Membership	
Labor Organizations					Personal Recommendation	
Minority/Community Organizations					Height or Weight	
Others (please identify)					Car Ownership	
					Arrest Record	
					Wage Garnishments	

Certification (Read this form and check your statements on it CAREFULLY before signing). I certify that the statements made by me on this BIDDER CONTRACT COMPLIANCE MONITORING REPORT are complete and true to the best of my knowledge and belief, and are made in good faith. I understand that if I knowingly make any misstatements of facts, I am subject to be declared in non-compliance with Section 4a-60, 4a-60a, and related sections of the CONN. GEN. STAT.

(Signature)	(Title)	(Date Signed)	(Telephone)
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BIDDERS QUALIFICATIONS STATEMENT

PROJECT NUMBER: SCSU-2019-04

All bidders are required to file this form, properly completed, **WITH THEIR PROPOSAL**. Failure of a bidder to answer any question or provide required information may be grounds for the awarding authority to disqualify and reject their bid. If a question or request for information does not pertain to your organization in any way, use the symbol "NA" (Not Applicable). Use additional 8½" x 11" sheets with your letterhead as necessary.

Indicate exactly the name by which this organization is known:

NAME:

How many years has this organization been in business under its present business name?

YEARS:

If this organization has not always been a General Contractor, list the trade(s) that your firm customarily performed prior to the time that you became a General Contractor:

1. _____
2. _____
3. _____

Indicate all other names by which this organization has been known and the length of time known by each name:

1. _____
2. _____
3. _____

This firm is a: _____ Corporation _____ Partnership _____ Sole Proprietorship
 _____ Joint Venture _____ Other (Please Specify)

Attach resumes of all supervisory personnel, such as Principals, Project Managers, and Superintendents who will be directly involved with projects on which you are now a bidder. Indicate the number of years of which they were in a Supervisory capacity.

List all sub-trades which your firm customarily performs with its own employees.

- 1. _____
- 2. _____
- 3. _____

Has your organization ever failed, or has any officer or partner of your organization ever been an officer or partner of another organization that failed to complete a contract? If so, indicate the circumstances leading to the project failure and the name of the company which provided the bonding for the failed contract(s):

List all legal or administrative proceedings currently pending or concluded adversely within the last five years which relate to procurement or performance of any public or private construction contracts. (Exclude OSHA violations which are called for elsewhere in this statement.)

- 1. ATTACHED _____
- 2. N/A _____

List all willful or serious violations of any Occupational Safety and Health Act (OSHA) or of any standard, order or regulation promulgated pursuant to such act, during the three (3) year period preceding the bid, provided such violations were cited in accordance with the provisions of any State Occupational Safety and Health Act or Occupational Safety and Health Act of 1970. Indicate whether these were abated within the time fixed by the citation or whether the citation was appealed. If appealed, what is the status or disposition?

- 1. _____

- 2. _____

- 3. _____

Has your organization had any criminal convictions related to the injury or death of any employee in the three (3) year period preceding the bid? Please list any such convictions below.

1. _____

2. _____

TRADE REFERENCES: Names, addresses, and telephone numbers of several firms with whom your organization has regular business dealings.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Dated at: _____ this _____ day of
_____ 201__.

Name of Organization: _____

Signature: _____

Print Name: _____

Title: _____

NOTARY STATEMENT:

Mr./Mrs./Ms. _____ being duly sworn, deposes and says that
he/she is the _____ of _____,

(Position or Title) (Name of Company/Firm)

and that the answers to the foregoing questions and all statements herein contained are true and correct.

Subscribed and sworn before me this _____ day of _____ 200__.

Notary Public: _____

My Commission Expires: _____ 200__.

BIDDERS QUALIFICATION STATEMENT

All construction projects your organization has completed in the past five (5) years or the twenty (20) projects most recently completed

(Please attach a separate sheet explaining any negative entry in these three columns.)

TITLE AND LOCATION	CONTR. AMOUNT	OWNER	DESIGNER	START DATE	FINISH DATE	ANY COMPLAINT AS TO QUALITY OR MANAGEMENT	NAME AND PHONE OF OWNER'S REP	NAME AND PHONE OF DESIGNER'S REP

BIDDERS QUALIFICATION STATEMENT

All construction projects your organization has completed in the past five (5) years or the twenty (20) projects most recently completed

(Please attach a separate sheet explaining any negative entry in these three columns.)

TITLE AND LOCATION	CONTR. AMOUNT	OWNER	DESIGNER	START DATE	FINISH DATE	ANY COMPLAINT AS TO QUALITY OR MANAGEMENT	NAME AND PHONE OF OWNER'S REP	NAME AND PHONE OF DESIGNER'S REP

ATTACHMENT 1
SOUTHERN CONNECTICUT STATE UNIVERSITY
PURSUANT TO CONNECTICUT PUBLIC ACTS 88-351 AND 89-253

- A. For the purposes of this section, "minority business enterprise" means any small contractor or supplier of materials fifty-one percent or more of the capital stock, if any, or assets of which is owned by 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 CT. General Statutes Section 32-9n; and "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations. "Good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements.
- B. For purposes of this Section, "Commission" means the Commission on Human Rights and Opportunities.
1. The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, mental retardation or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut. The Contractor further agrees to take affirmative action to insure that applicants with job related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, mental retardation, or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved.
 2. The Contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the Commission.
 3. The Contractor agrees to provide each labor union or representative of workers with which such Contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such Contractor has a contract or understanding, a notice to be provided by the Commission, advising the labor union or worker's representative of the Contractor's commitments under this section and to post copies of the notice in conspicuous places available to employees and applicants for employment.
 4. The Contractor agrees to comply with each provision of this section and CT. General Statutes Sections 46a-68e and 46a-68f, inclusive, and with each regulation or relevant order issued by said Commission pursuant to CT. General Statute 46a-56, as amended by Section 5 of Public Act 89-253, 46a-68e and 46a-68f.
 5. The Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor as related to the provisions of this section and section 46a-56. If the contract is a public works contract, the Contractor agrees and warrants that he will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works projects.

- C. Determination of the Contractor's good faith efforts shall include but shall not be limited to the following factors: The Contractor's employment and subcontracting policies, patterns and practices, affirmative advertising, recruitment and training, technical assistance activities and such other reasonable activities or efforts as the Commission may prescribe that are designed to ensure the participation of minority business enterprises in public works projects.
- D. The Contractor shall develop and maintain adequate documentation, in a manner prescribed by the Commission, of its good faith efforts.
- E. The Contractor shall include the provisions of subsection (b) of this section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with CT. General Statute Section 46a-56, as amended by Section 5 of Public Act 89-253; provided if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.
- F. The Contractor agrees to comply with the regulations referred to in this section as they exist on the date of this contract and as they may be adopted or amended from time to time during the term of this Contract and any amendments thereto.

Effective 7/1/89

ATTACHMENT 2
PROVISIONS OF THIS CONTRACT REQUIRED BY
CONNECTICUT PUBLIC ACT 91-58, SECTION 16

- A. The Contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or of the State of Connecticut, and that employees are treated when employed without regard to their sexual orientation.
- B. The Contractor agrees to provide each labor union or representative of workers with which such contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or worker's representative of the Contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment.
- C. The Contractor agrees to comply with each provision of this section and sections 46a-68e and 46a-68f of the general statutes and with each regulation or relevant order issued by said Commission pursuant to sections 46a-56, 46a-68e and 46a-68f of the general statutes.
- D. The Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor as related to the provisions of this section and section 46a-56 of the general statutes.
- E. The Contractor shall include the provisions of subsection (a) of this section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the state and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the commission. The Contractor shall take such action with respect to any such subcontract or purchase offer as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with section 46a-56 of the general statutes; provided, if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the commission, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.

CONNECTICUT DEPARTMENT OF LABOR
WAGE AND WORKPLACE STANDARDS DIVISION

CONTRACTORS WAGE CERTIFICATION FORM

I, _____ of _____
Officer, Owner, Authorized Rep. Company Name

do hereby certify that the _____
Company Name

Street

City

and all of its subcontractors will pay all workers on the

Project Name and Number

Street and City

the wages as listed in the schedule of prevailing rates required for such project (a copy of which is attached hereto).

Signed

Subscribed and sworn to before me this _____ day of _____, 2004.

Notary Public

 Return to:

Connecticut Department of Labor
Wage & Workplace Standards Division
200 Folly Brook Blvd.
Wethersfield, CT 06109

STATE OF CONNECTICUT
CERTIFICATE OF INSURANCE

This is to certify that the Company named below has issued the policies listed below, that these policies are written in accordance with the Company's standard policies and endorsements, except as indicated below or as noted in the attachments hereto, which policies and endorsements will be made available to Southern Connecticut State University upon request, that they provide coverage and limits of liability shown with respect to the insurance indicated that they are in force on this date, that all deductible amounts are indicated below, and that this Certificate is furnished in accordance with and for the purpose of satisfying the requirements of the State of Connecticut, Southern Connecticut State University, in connection with the award and performance of a contract or agreement with the State of Connecticut, Southern Connecticut State University.

1. **Name of Insured:** _____

2. **Address of Insured:**

3. **Location and Description of Work:**

4. **Project Number:** _____

Insurance Chart (See descriptions below chart)

5.	Kind and Type of Insurance	Policy Number	Effective Date	Expiration Date	IN DOLLARS		
					Coverage and Limits of Liability		
					Single Limit	Each Accident	Aggregate
5.1	Contractor's General Liability				1,000,000.	1,000,000.	2,000,000.
5.1a	SPECIAL HAZARD INSURANCE TYPE "C" – Collapse Structural Injury Type "X" – Explosion or Blast				1,000,000.	1,000,000.	2,000,000.

5.	Kind and Type of Insurance (continued)	Policy Number	Effective Date	Expiration Date	IN DOLLARS		
					Coverage and Limits of Liability		
					<u>Single Limit</u>	<u>Each Accident</u>	<u>Aggregate</u>
5.2	Worker's Compensation (If Self insured, then Compensation Commissioner's Certificate Required)				STATUTORY		
5.2a	Contractual Employers Liability (See Items 6 & 7)				(See Description Below)		
5.3	Owners Protective Liability for and in the Name of the State of Connecticut (See Item 6)				1,000,000.	1,000,000.	2,000,000.
5.3a	Contractors Protective Liability				1,000,000.	1,000,000.	2,000,000.
5.3b	TYPE "U" - Underground Damage				N. A.	N. A.	N. A.
5.4	AUTOMOBILE LIABILITY Owned Automobiles Hired Automobiles Non-Owned Automobiles				Each Accident		
					\$1,000,000.		
5.5	BUILDERS RISK INSURANCE (Fire Extended Coverage)				AS DESCRIBED BELOW		
5.10	Umbrella Policy (As Needed)						

Insurance Description

- 5.1 Commercial General Liability: With Respect to the operations he/she performs, the contractor shall carry Commercial General Liability insurance in the amount of \$1,000,000 &
- 5.1a combined single limit per occurrence for bodily injury, personal injury, and property damage. Coverage shall include Premises and Operations, Independent Contractors, Products and Completed Operations, Contractual Liability and Broad Form Property Damage coverage. Additionally, when necessary because of the scope of the project, the policy shall include explosion, collapse and underground coverage. If a general aggregate is used, the general aggregate limit shall apply separately to the project or the general aggregate limit shall be twice the occurrence limit.

- 5.2 Workers' Compensation and Employers Liability: With respect to all contractor operations
& and all those performed for him/her by sub-contractors, the contractor shall carry statutory
5.2a coverage in compliance with the Worker's Compensation laws of the State of Connecticut.
Coverage shall include Employer's Liability with minimum limits of \$100,000 each accident,
\$500,000 Policy Disease Limit, \$100,000 each employee.
- 5.3 Owners and Contractors Protective Liability Insurance: With respect to the operations the
& contractor performs, the contractor shall carry for and in behalf of the State of Connecticut,
5.3a an Owners and Contractors Protective Liability insurance policy for a limit of not less than
\$1,000,000 for all damages arising out of injury to or destruction of property in any one accident or
occurrence and subject to that limit per accident an aggregate limit of \$2,000,000 for all damages
arising out of injury or destruction of property during the policy period.
- 5.4 Automobile Liability: The operation of all motor vehicles, including those owned, hired or non-
owned, used in connection with the contract shall be covered by Automobile Liability insurance in
the amount of not less than \$1,000,000 for all damages arising out of any one accident or
occurrence. If a vehicle is not used in the execution of the contract then automobile coverage is not
required.
- 5.5 Builder's Risk Insurance: At its sole cost and expense, the contractor shall carry Builders' Risk
Insurance including but not limited to, Fire Vandalism, Theft, Lighting, Wind, and All Risk
coverage in the amount of the estimated value of improvement to the existing structure and/or new
building, but at a minimum, not less than the value of the contract. Such insurance should include
coverage for materials stored on the site but not yet made a permanent part of the structure and
property in transit. All deductibles or retentions will be the sole responsibility of the contractor.
The State of Connecticut is listed as a Loss Payee on the coverage.
6. Unless requested otherwise by the State it is agreed that the above named insurance company waives
governmental immunity as a defense and will not use the defense of governmental immunity in the
adjustment of claims or in the defense of any suit brought against the State, and it is further agreed that the
company will bill all premiums and audit charges earned under the protective liability policy to the above
named contractor.
7. The contractor shall at all times indemnify and save harmless the State of Connecticut, Southern
Connecticut State University and their respective officers, agents, and employees, on account of any and
all claims, damages, losses, litigation, expenses, counsel fees and compensation arising out of injuries
(including death) sustained by or alleged to have been sustained by the officers, agents, and employees of
said State or Department, or of the contractor, his subcontractor, or material men and from injuries
(including death) sustained by or alleged to have been sustained by the public, any or all persons on or
near the work, or by any other person or property, real or personal (including property of said State or
Department) caused in whole or in part by the acts, omissions, or neglect of the contractor including but not
limited to any neglect in safeguarding the work or through the use of unacceptable materials in constructing
the work of the contractor, any subcontractor, material man, or anyone directly employed by them or any of
them while engaged in the performance of the contract, including the entire elapsed time from the date
ordered to start work or the actual start whichever occurs first until the completion as certified by the
Southern Connecticut State University.

Such insurance as is herein certified applies to all operations of the insured in connection with the work herein described at the locations stated.

Certificate from insurers must list State of Connecticut as an Additional Insured.

In the event of any restrictive amendment to, any change in or cancellation of any one or more of said policies the _____

(Insurance Company)

will give not less than thirty days written notice to the party to whom the certificate is issued of such amendment, change or cancellation.

Dated this _____ day of _____ 19 _____

Insurance Company

Address

Authorized Agency

By: _____
Authorized Agent

Original to be submitted to:

Richard Glasson
Purchasing Assistant
Southern Connecticut State University
Procurement Services. – Wintergreen Building – 1 Wintergreen Avenue
501 Crescent Street
New Haven, CT 06515
(203) 392-6702

END OF SECTION

General Conditions of the Contract for Construction
Department of Public Works
State of Connecticut
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ARTICLE 1
DEFINITIONS

WHENEVER THE FOLLOWING TERMS, OR PRONOUNS IN PLACE OF THEM, ARE USED THE INTENT AND MEANING SHALL BE AS FOLLOWS:

1.1 ACCEPTANCE: The Owner's acknowledgement of the Work from the Contractor upon certification by the Construction Administrator and Architect or Engineer that all Work has been completed.

1.2 ADDITIONAL OR DELETED WORK: Work required by the Department that, in the judgment of the Commissioner, involves any addition to, deduction from, or modification of the Work required by the Contract Documents.

1.3 AGENCY: The (User) Agency of the State of Connecticut having administrative authority of the facility in which the Work is being performed.

1.4 APPLICATION FOR PAYMENT, PARTIAL PAYMENT OR REQUISITION: Contractor's certified request for payment for completed portions of the Work and, if the Contract so provides, for materials or equipment suitably stored pending their incorporation into the Work.

1.5 ARCHITECT OR ENGINEER: A sole proprietor, partnership, firm, corporation or other business organization under Contract with the Owner, commissioned to prepare Contract Drawings and Specifications, to advise the Owner and in certain cases, to perform regular inspections during construction and when authorized to perform the duties of the Construction Administrator.

1.6 AS-BUILT DRAWINGS: Construction Drawings revised by the Contractor to show all significant Modifications made during the construction process.

1.7 BASE BID: Monetary value stated in the Bid Proposal Form as the sum for which the Bidder offers to perform the Work described in the Bidding Documents, exclusive of adjustments for Supplemental Bids.

1.8 BID BOND: Form of Bid Security executed by the Bidder as Principal and by a Surety to guarantee that the Bidder will enter into a Contract within a specified time and furnish any required bond as mandated by Connecticut General Statute Section 4b-92.

1.9 BIDDER: A sole proprietor, partnership, firm, corporation or other business organization submitting a Bid on the Bid Proposal Form for the Work contemplated.

1.10 BIDDING DOCUMENTS: Collectively, the Bidding Requirements and the proposed Contract Documents, including any addenda issued prior to receipt of Bids.

1.11 BID OR BID PROPOSAL FORM: A complete and duly signed proposal to perform Work (or a designated portion thereof) for a stipulated sum submitted in accordance with the Bidding Documents.

1.12 BID SECURITY: Certified check or Bid Bond submitted with Bid Proposal Form, which provides that the Bidder, if awarded the Contract, will execute such Contract in accordance with the requirements of the Bidding Documents.

1.13 BUILDER'S RISK INSURANCE: A specialized form of property insurance which provides coverage for loss or damage to the Work pursuant to the Contract Documents.

1.14 CASH ALLOWANCE: An amount established in the Contract Documents for inclusion in the Contract Sum to cover the cost of prescribed items not specified in detail, and as shown in the Allowance Schedule.

1.15 CERTIFICATE OF ACCEPTANCE: A document issued by the Owner to the Contractor stating that all Work specified in the Certificate of Acceptance has been completed and accepted by the Owner.

1.16 CERTIFICATE OF COMPLIANCE: A document stating that for the portion of the Project completed, either the design portion or the construction portion, has been performed in substantial compliance with all applicable building codes.

1.17 CERTIFICATE OF OCCUPANCY: Document issued by the authority having jurisdiction certifying that all or a designated portion of a building is approved for its designated use.

1.18 CERTIFICATE OF SUBSTANTIAL COMPLETION: A document prepared by the Architect or Engineer and approved by the Owner on the basis of an inspection stating:

1.18.1 that the Work, or a designated portion thereof, is determined to be Substantially Complete;

1.18.2 the date of Substantial Completion;

1.18.3 the responsibilities of the Owner and the Contractor for security maintenance, heat, utilities, damage to the Work and insurance; and

1.18.4 the time within which the Contractor shall complete the remaining Work.

1.19 CHANGE ORDER: Written authorization signed by the Owner, authorizing a modification in the Work, an adjustment in the Contract Sum, or an adjustment in the Contract Time.

1.20 COMMISSIONER: The State of Connecticut, Department of Public Works (DPW) Commissioner acting directly or through specifically authorized DPW personnel or agent(s) having authority to perform duties defined in Article 25.

1.21 CONSTRUCTION ADMINISTRATOR: A sole proprietor, partnership, firm, corporation or other business organization, under Contract or employed by the Owner commissioned and/or authorized to oversee the fulfillment of all requirements of the Contract Documents. The authorized Construction Administrator may be a Department of Public Works Assistant Project Manager, Department of Public Works Project Manager, a Clerk of the Works, an Architect, a Consulting Architect, a Consulting Construction Administrator, a Consulting Engineer etc. or any other designee as authorized and identified by the Owner.

1.22 CONSTRUCTION CHANGE DIRECTIVE: A written authorization signed by the Owner, directing a modification in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum, Contract Time or both. Any Construction Change Directive effecting an adjustment to the Contract Sum or Contract Time shall result in a Change Order.

1.23 CONTRACT DOCUMENTS OR CONTRACT: The Agreement between Owner and Contractor, Conditions of the Contract (General Conditions, Supplementary Conditions, General Requirements and other Conditions), Drawings, Specifications, and Addenda issued prior to execution of the Contract, other documents listed in the Agreement and Modifications issued after execution of the Contract, all of which shall constitute the Contract.

1.24 CONTRACTOR OR GENERAL CONTRACTOR: A sole proprietor, partnership, firm or Corporation, under direct Contract with the Department of Public Works, responsible for performing the Work under the Contract Documents. Whenever the words "Contractor" or "General Contractor" are used it shall be understood to mean Contractor.

1.25 CONTRACTOR'S LIABILITY INSURANCE: Insurance purchased and maintained by the Contractor that insures the Contractor for claims for property damage, bodily injury or death.

1.26 CONTRACT START DATE OR DATE OF COMMENCEMENT OF THE WORK: The date, speci-

fied by the Owner in the Notice to Proceed, on which the Contractor is required to start the Work.

1.27 CONTRACT SUM: The sum stated in the Contract, which is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

1.28 CONTRACT TIME: The period of time allotted in the Contract Documents for Substantial Completion of the Work, including authorized adjustments thereto. The Contract Time is the sum of all Working Days and Non-Working Days as further defined herein and specified in the Contract Documents.

1.29 DAY: Whenever the word Day is used it shall be understood to mean calendar day stated on the Bidding Documents, unless stated otherwise.

1.30 DEPARTMENT OF PUBLIC WORKS (DPW) PROJECT MANAGER: The individual employed by the Owner, designated and authorized by the Commissioner, to be responsible for the overall management and oversight of the Project, and to represent the (User) Agency.

1.31 DIESEL VEHICLE EMISSIONS CONTROL: The reduction of air pollution emissions from diesel powered vehicles through the use of diesel engine emission control technologies.

1.32 EQUAL(S): Any deviation from the Specification which is defined as follows: A replacement for the specified material, device, procedure, equipment, etc., which is recognized and accepted as substantially equal to the first listed manufacturer or first listed procedure specified after review by the Architect/Engineer, and may be rejected or approved at the sole discretion of the Owner. All equals must be substantially equivalent to the first manufacturer or first procedure listed in the Specifications with reference to all of the following areas: the substance and function considering quality, workmanship, economy of operation, durability, and suitability for purposes intended; size, rating, and cost. The equal does not constitute a modification in the scope of Work, the Schedule, or Architect/Engineer's design intent of the specified material, device, procedure, equipment, etc.

1.33 FINAL INSPECTION: Review of the Work by the Architect or Engineer and Owner to determine whether Acceptance has been achieved.

1.34 FINAL PAYMENT: The last payment made by the Owner to the Contractor, made after notice of the Acceptance. Payment shall include the entire unpaid balance of the Contract Sum as adjusted by modifications.

1.35 GENERAL CONDITIONS: The General Conditions of the Contract for Construction, part of Division 00 of the Specifications.

1.36 GENERAL REQUIREMENTS: That part of the Contract Documents entitled General Requirements, which is Division 01 of the Specifications.

1.37 GUARANTEE: See Warranty.

1.38 LIQUIDATED DAMAGES: A sum established in a Contract, usually as a fixed sum per Day, as the predetermined measure of damages to be paid to the Owner due to the Contractor's failure to complete the Work within the Contract Time.

1.39 LUMP SUM: An item or category priced as a whole rather than broken down into its elements.

1.40 MOBILE SOURCE: A source designed or constructed to move from one location to another during normal operation except portable equipment and includes, but is not limited to, automobiles, buses, trucks, tractors, earth moving equipment, hoists, cranes, aircraft, locomotives operating on rails, vessels for transportation on water, lawnmowers, and other small home appliances.

1.41 NON-WORKING DAYS: All Saturdays, Sundays, Legal State Holidays (12), and any other Days identified in the Contract Documents that the Contractor is not permitted to execute the Work. The restriction of Non-Working Days may be suspended upon the approval or direction of the Commissioner.

1.42 NOTICE TO BIDDER: A notice contained in the Bidding Document informing prospective Bidders of the opportunity to submit Bids on a Project.

1.43 NOTICE TO PROCEED: Written notice, issued by the Commissioner or the Commissioner's authorized representative, to the Contractor authorizing the Contractor to proceed with the Work and establishing the date for commencement of the Contract Time.

1.44 OWNER OR DEPARTMENT: The State of Connecticut, Department of Public Works acting through its Commissioner or specifically authorized Department personnel or agent.

1.45 OVERHEAD: Indirect costs including: supervision (any position over the foreman), field and home office expense, insurance, and small tools and consumables.

1.46 PAYMENT, BOND, LABOR BOND OR MATERIAL BOND: A bond in which the Contractor

and the Contractor's surety guarantee to the Owner that the Contractor will pay for labor and materials furnished for use in the performance of the Contract, as required by Connecticut General Statutes Section 49-41.

1.47 PERFORMANCE BOND OR SURETY BOND: A bond in which the Contractor and the Contractor's surety guarantee to the Owner that the Work will be performed in accordance with the Contract Documents, as required by Connecticut General Statutes Section 49-41.

1.48 PERFORMANCE SPECIFICATION: A description of the desired results or performance of a product, material, assembly, procedure, or a piece of equipment with criteria for identifying the standard.

1.49 PLANS OR DRAWINGS: All Drawings or reproductions of Drawings pertaining to the construction of the Work contemplated and its appurtenances.

1.50 PROJECT: The total construction of which the Work performed under the Contract Documents may be the whole or a part.

1.51 PROJECT MANUAL: The set of documents assembled for the Work which includes, but is not limited to, Contract Documents, Bidding Requirements, Sample Forms, Conditions of the Contract, General Requirements, and the Specifications.

1.52 PROPRIETARY SPECIFICATION: A specification that describes a product, procedure, function, material, assembly, or piece of equipment by trade name and/or by naming the manufacturer(s) or manufacturer's procedure, exact model number, item, etc., of those products acceptable to the Owner.

1.53 RETAINAGE: A percentage of each Application for Payment and a percentage of the total Contract Sum retained by the Owner.

1.54 SCHEDULE: A Critical Path Method (CPM) or Construction Schedule as required by the Contract Documents which shall be a diagram, graph or other pictorial or written Schedule showing all events expected to occur and operations to be performed and indicating the Contract Time, start dates, durations and finish dates as well as Substantial Completion and Acceptance of the Work, rendered in a form permitting determination of the optimum sequence and duration of each operation.

1.55 SCHEDULE OF VALUES: A document furnished by the Contractor to the Architect or Engineer and Owner stating the portions of the Contract Sum allocated to the various

portions of the Work, which is to be used for reviewing the Contractor's Applications for Payment.

1.56 SECONDARY SUBCONTRACTOR: A sole proprietor, partnership, firm or Corporation under direct Contract with the Subcontractor to the General Contractor.

1.57 SENSITIVE RECEPTOR SITES: Areas where concentrations of diesel emissions may be harmful to sensitive populations, including, but not limited to, hospitals, school and university buildings being occupied during a student semester, residential structures, daycare facilities, elderly housing, and convalescent facilities.

1.58 SHOP DRAWINGS: Drawings provided to Architect or Engineer and Owner by a Contractor that illustrate construction, materials, dimensions, installation, and other pertinent information for the incorporation of an element or item into the construction as detailed Contract Documents.

1.59 SPECIFICATIONS: The description, provisions and other requirements pertaining to the method and manner of performing the Work and/or to the quantities and quality of materials to be furnished under the Contract.

1.60 SUBCONTRACTOR: A sole proprietor, partnership, corporation or other business organization under direct Contract with the Contractor supplying labor and/or materials for the Work at the site of the Project.

1.61 SUBMITTALS: Documents including, but not limited to, samples, manufacturer's data, Shop Drawing, or other such items submitted to the Owner and Architect or Engineer by the Contractor for the purpose of approval or other action, as required by the Contract Documents.

1.62 SUBSTANTIAL COMPLETION: The stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents.

1.63 SUBSTITUTION: Any deviation from the specified requirements, which is defined as follows: A replacement for the specified material, device, procedure, equipment, etc., which is not recognized or accepted as equal to the first manufacturer or procedure listed in the Specification after review by the Architect/Engineer, and may be rejected or approved by the Owner. The Substitution is not equal to the specified requirement in comparison to the first manufacturer or first procedure listed in the Specifications in one or more of the following areas: the substance and function considering quality, workmanship, economy of operation, durability, and suitability for purposes intended; size, cost, and rating. The Substitution constitutes a modification in the scope of

Work, the Schedule, or the Architect/Engineer's design intent of the specified material, device, procedure, equipment, etc.

1.64 SUPERINTENDENT: The Contractor's representative at the site who is responsible for continuous field supervision, coordination, in, completion of the Work, and, unless another person is designated in writing by the Contractor to the Owner and the Construction Administrator, for the prevention of accidents.

1.65 SUPPLEMENTAL BID: The monetary value stated in the Bid to be added to the amount of the Base Bid if the corresponding Work, as described in the Bidding Documents, is accepted.

1.66 SUPPLEMENTARY CONDITIONS: An extension in the Bid to be added to the amount of the Base Bid if the corresponding Work, as described in the Bidding Documents, is accepted.

1.67 SYSTEMS COMMISSIONING AUTHORITY (SCA): An independent entity under contract directly with the Owner or Owner's Representative responsible for performing the specified commissioning procedures.

1.68 THRESHOLD LIMIT BUILDING: Any proposed (new) structures or additions as defined by the Connecticut General Statutes Section 29-276b.

1.69 UNIT PRICE: The monetary value stated by the Owner or the Contractor, as a price per unit of measurement for materials or services as described in the Contract Documents and/or Bidding Documents.

1.70 WARRANTY: A written, legally enforceable assurance of specified quality or performance of a product or Work or of the duration of satisfactory performance.

1.71 WORK: The construction and services required by the Contract Documents, and including all labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

ARTICLE 2 **CONDITIONS OF WORK**

2.1 The Contractor shall carefully examine and study the conditions under which the Work is to be performed and the site of the Work, and compare the Contract Documents with each other and to information furnished by the Owner including but not limited to the Plans and Specifications, the form of the Contract, General Conditions, Supplementary Condi-

tions, General Requirements, Bonds and all other Contract Documents associated with the Work.

2.2 The Contractor shall report to the Construction Administrator all errors, inconsistencies or omissions discovered. The Contractor shall not be liable to the Owner for damage resulting from errors, inconsistencies or omissions in the Contract Documents unless the Contractor recognized such errors, inconsistencies or omission and failed to report it to the Construction Administrator. If the Contractor performs any actions or construction activity knowing it involves an error, inconsistency or omission in the Contract Documents without notice to the Construction Administrator, the Contractor shall assume responsibility for such performance and related costs for the correction and shall not be allowed to submit any claim related to error, inconsistencies or omission.

2.3 The Contractor shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the Contractor with the Contract Documents before commencing activities. Errors, inconsistencies or omissions discovered shall be reported to the Construction Administrator at once; and it will be assumed that the Contractor has been satisfied as to all requirements of the Contract Documents. Any deterrent conditions at the site of the Work which are obvious and apparent upon examination of the site but are not indicated on the Plans shall be corrected by the Contractor without additional compensation.

2.4 In performing the Work, the Contractor must employ such methods or means as will not cause any interruption of or interference with the Work of any other Contractor, nor any inordinate disruption with the normal routine of the Owner, institution or Agency operating at the site.

2.5 No claims for additional compensation will be considered when additional costs result from conditions made known to, discovered by, or which should have been discovered by, the Contractor prior to Contract signing.

2.6 All Communications from the Contractor concerning proposed changes to the Contract Sum, Contract Time, or Work shall be in writing.

2.7 The Contractor shall perform the Work in accordance with the Contract Documents and approved Submittals pursuant to Article 5.

called for by any one shall be as binding as if called for by all. Where discrepancies of conflict occur in the Contract Documents the following order of precedence shall be utilized:

3.1.1 Amendments and addenda shall take precedence over previously issued Contract Documents.

3.1.2 The Supplementary Conditions take precedence over the General Conditions.

3.1.3 The General Conditions take precedence over the General Requirements.

3.1.4 The Specifications shall take precedence over the Plans.

3.1.5 Stated dimensions shall take precedence over scaled dimensions.

3.1.6 Large-scale detail Drawings shall take precedence over small-scale Drawings.

3.1.7 The Schedules contained in the Contract Documents shall take precedence over other data on the Plans.

3.2 Neither party to the Contract shall take advantage of any obvious error or apparent discrepancy in the Contract Documents. The Contractor shall give immediate written notification of any error or discrepancy discovered to the Construction Administrator, who shall take the necessary actions to obtain such corrections and interpretations as may be deemed necessary for the completion of the Work in a satisfactory and acceptable manner. The Contractor shall then promptly proceed under the direction of the Owner and the provisions of Article 13. The Contractor's failure to provide immediate notice shall mean the Contractor will not be entitled to any additional compensation, either monetary or Contract Time adjustment, with respect to any discrepancy.

3.3 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

3.4 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings, shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

3.5 Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

ARTICLE 3
CORRELATION OF CONTRACT DOCUMENTS

ARTICLE 4
COMMENCEMENT AND PROGRESS OF WORK

3.1 The Contract Documents are complementary, and what is

4.1 The Work shall start upon the date given in the Notice to Proceed. The Contractor shall complete all the Work necessary for Final Payment, including but not limited to Substantial Completion, Contract close-out, testing and demonstration of all systems as required for Acceptance, punchlist Work, training and submission of Record Documents, manuals, Guarantees and Warranties as stated in the Contract Document.

4.2 Time is of the essence with respect to the Contract Time. By executing the Contract, the Contractor confirms and agrees that the Contract Time is a reasonable period to perform the Work. The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time. The Contractor may, at his discretion, plan to complete the Work and achieve Substantial Completion in less time than the Contract Time.

4.3 The Contractor's early completion Schedule notwithstanding, the Owner reserves the right to order Modifications to the Work in accordance with Article 13 at any time during the Contract Time.

4.4 The Contractor shall not be entitled to costs for delay due to Owner ordered Modifications or any other circumstances for the period of time between the Contractor's elected early completion and the end of the Contract Time. Such costs include, but are not limited to, extended home office costs, field office costs, or supervisory and management costs incurred in performance of the Work. Early completion of the Work shall not merit additional compensation.

4.5 If the Contractor is delayed at any time in the progress of Work by acts of God, such as fire or flood or any action, injunction or stop order issued by any court, judge or officer of the court or any other court action beyond the Owner's control, then the Contract Time may be extended by Change Order for such reasonable time as demonstrated by the Contractor's Schedule and as the Owner may determine that such event has delayed the Work. In any event, the granting of an extension of time shall be solely within the discretion of the Owner.

4.6 Except as otherwise may be provided herein, extensions of time shall be the Contractor's sole remedy for such delay. No payment or compensation of any kind shall be made to the Contractor for damages because of hindrance in the orderly progress of Work caused by the aforesaid causes.

4.7 The Contractor acknowledges that the Contract amount includes and anticipates any and all delays, whether avoidable or unavoidable, from said orders, which may issue from any court, judge, court officer, or act of God, and that such delays shall not, under any circumstances, be construed as compensable delays.

4.8 Any extension of the Contract Time shall be by Change Order pursuant to Article 13.

4.9 The Contractor shall employ a competent project manager who shall represent the Contractor. Communications given to the project manager shall be binding as if given to the Contractor. The project manager will be employed full time on the Project and be located and assigned to the Project site during and for the duration of the Work.

4.10 The Contractor shall employ a competent Superintendent and necessary assistants who will be in attendance at the project site during the performance of the Work.

4.11 Upon execution of the Contract, materials may be purchased. No material escalation costs will be valid or compensable unless the Owner directs, in writing, a delay in the procurement.

ARTICLE 5 **SUBMITTALS, PRODUCT DATA, SHOP DRAWINGS AND SAMPLES**

5.1 Contractor shall review, approve, and submit to the Construction Administrator all Submittals including but not limited to, product data, Shop Drawings, and samples, with such promptness as to cause no delay in the Work.

5.2 Correction or approval of such Submittals, Shop Drawings, product data and samples will be made with reasonable promptness by the Architect or Engineer. Approval will be general only and shall not relieve the Contractor from responsibility for errors in dimensions, for construction and field coordination of the Work or for any departure from the Contract Documents, unless such departure has received the Owner's written approval.

5.3 No Work governed by such Shop Drawings, Schedules or samples shall be fabricated, delivered or installed until approved by the Architect or Engineer.

5.4 No damages for delays or time extensions will be granted, even if approvals deviate from the approved Schedule.

ARTICLE 6 **SEPARATE CONTRACTS**

6.1 The Owner reserves the right to perform Work in connection with the Contract with the Owner's own forces, or to let

separate contracts relating to the Contract (Project) site or in connection with Work on adjoining sites. In such cases, the Contractor shall afford such parties reasonable opportunity for storage of materials and equipment and coordinate and connect the Work with the work on adjoining sites or other Projects, and shall fully cooperate with such parties in the matter required under Article 7 herein.

6.2 Contractors working in the same vicinity shall cooperate with one another and, in case of dispute, decision of the Owner shall be final and binding to all Contractors involved, including Contractors under separate Contracts.

6.3 The Contractor shall assume all liability, financial or otherwise, in connection with this Contract and shall protect and hold harmless the Owner from any and all damages or claims that may arise because of inconvenience or delay which the Contractor may cause other Contractors. If the Contractor experiences a loss because of the presence and operations of other Contractors working adjacent to or within the limits of the same Project, then as between the Owner and the Contractor, the Contractor shall bear such loss.

6.4 Insofar as possible, the Contractor shall arrange the Work and shall place and dispose of the materials being used so as not to interfere with the operations of other Contractors adjacent to or within the limits of the same Project. The Contractor shall join its Work with that of others in an acceptable manner, and perform the Work in proper accordance with that of the others.

6.5 In no event shall the Owner be responsible for any claim or damages that are the result of the Contractor's failure to coordinate the Work with any other Contractor or Subcontractor.

ARTICLE 7
COOPERATION OF TRADES

7.1 The Contractor shall be responsible for and shall control all activities of their Subcontractors. The Subcontractors shall consult and cooperate with one another. Each Subcontractor shall furnish all necessary information to other Subcontractors and shall lay out and install their own Work so as to avoid any delays or interference with the Work of others.

7.2 Any cost or changes, cutting and/or repairing, made necessary by the failure to observe the above requirements shall be borne by the party or parties responsible for such failure or neglect or their faulty Work installed.

ARTICLE 8
DAMAGES

8.1 The Liquidated Damages, provided in the Bidding Documents, will be assessed at two distinct times, as follows:

8.1.1 Liquidated Damages – Substantial Completion:

If the Contractor fails to achieve Substantial Completion of the Work by the Substantial Completion Date, and such delay is not otherwise excused under this Contract, then the Contractor agrees to pay to the Owner Liquidated Damages for the dollar amount specified in the Bid Proposal Form for this Project, for each Day beyond Substantial Completion that the Contractor fails to achieve Substantial Completion. The parties to this Contract acknowledge and agree that the actual damages that are to be anticipated as a result of the neglect, failure, or refusal of the Contractor to substantially complete the Project by the established Substantial Completion Date are uncertain in amount or extremely difficult to determine. Accordingly, the parties to this Contract do intend and in fact now agree to liquidate damages in advance and stipulate that the amount set forth in this subparagraph is reasonable and an appropriate remedy and is intended to constitute compensatory damages and does not constitute a penalty of any kind. The parties understand and agree that, by including a provision for Liquidated Damages in this Contract, or in pursuing any relief pursuant to such provision:

.1 the parties do not intend to set a price for the privilege not to perform;

.2 the availability of Liquidated Damages may not be relied upon as a basis for argument that the Owner has an adequate remedy at law; and

3 the remedies available to the Owner under this Agreement are cumulative and not exclusive.

8.1.2 Liquidated Damages – Acceptance:

If the Contractor fails to complete all of the Work required for Acceptance of the Work within ninety (90) Days of Substantial Completion then the Contractor agrees to pay to the Owner Liquidated Damages for the dollar amount specified in the Bid Proposal Form for each Day in excess of ninety (90) Days beyond the Substantial Completion Date that the Contractor fails to achieve Acceptance. The parties to this Contract acknowledge and agree that the actual damages that are to be anticipated as a result of the failure of the Contractor to complete all of the Work required for Acceptance within ninety (90) Days of the established Substantial Completion Date are uncertain in amount or extremely difficult to determine. Accordingly, the parties to this Contract do intend and in fact now agree to liquidate damages in advance and stipulate that the amount set forth in this subparagraph is reasonable and an appropriate remedy and is intended to constitute compensatory damages and does not constitute a penalty of any kind. The parties understand and agree that, by including a

provision for Liquidated Damages in this Contract, or in pursuing any relief pursuant to such provision:

- .1 the parties do not intend to set a price for the privilege not to perform;
- .2 the availability of Liquidated Damages may not be relied upon as a basis for argument that the Owner has an adequate remedy at law; and
- .3 the remedies available to the Owner under this Agreement are cumulative and not exclusive.

8.2 The Liquidated Damages or any portion thereof may be waived at the sole discretion of the Commissioner.

8.3 No payment by the Owner, either partial or final, shall be construed to waive the Owner's right to seek Liquidated Damages.

8.4 In the event a court determines that the Contract herein is null and void for any reason, Contractor agrees that Contractor will not seek or pursue any lawsuit or claim for damages, including, but not limited to, claims for loss of Overhead or anticipated profits, against the Owner and the Owner shall not be liable for any damages which Contractor may incur as a result of such decision. In addition, if the court enjoins the Owner from entering into or proceeding with the Contract herein, the Owner shall not be liable for any damages arising out of or relating to the award of such Contract which Contractor may have incurred as a result of the injunction.

ARTICLE 9
MINIMUM WAGE RATES

9.1 In accordance with the provisions of the Connecticut General Statutes Section 31-53, the following applies:

"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 welfare fund, as defined in subsection (h) of this section, 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 payday."

9.2 Each Contractor who is awarded a Contract on or after October 1, 2002 shall be subject to provisions of the Connecticut General Statutes, Section 31-53 as amended by Pub-

lic Act 02-69, "An Act Concerning Annual Adjustments to Prevailing Wages."

No wage adjustment will be made to the Contract for any wage increase under this Article.

ARTICLE 10
POSTING MINIMUM WAGE RATES

10.1 The Contractor shall post at conspicuous points on the site of the Contract a Schedule showing all determined wage rates for all trades and all authorized deductions, if any, from wages to be paid.

10.2 The Contractor shall provide weekly certified payrolls to the Owner for all persons working on the site.

ARTICLE 11
CONSTRUCTION SCHEDULES

11.1 Unless otherwise specified in the Contract Documents, within twenty-one (21) Days from the Contract Start Date, the Contractor shall submit the following to the Owner for approval:

11.1.1 A comprehensive Schedule of Submittals required by the Specifications. Said Schedule shall include Submittal dates, required approval dates and date material must be on site.

11.1.2 The Contractor shall allow a minimum of 14 Days for the Owner and its agents' review of Submittals. No extension of the Contract Time shall be granted for revisions and resubmission. Further, the Contractor shall allow a minimum of eight weeks for testing and Acceptance of the Work by the Owner.

11.1.3 When the Contract Documents specify a "CPM Schedule" a detailed Critical Path Method Schedule is required using software approved by the Owner and/or Construction Administrator with as many activities as necessary to make the Schedule an effective tool for planning and monitoring the progress of the Work. The Contractor shall show all pertinent activities requiring coordination between trades.

11.1.4 When the Contract Documents specify a "Construction Schedule" a detailed Construction Schedule is required using software approved by the Owner as a horizontal bar chart with a separate bar for each major portion of the Work or operation to make the Schedule an effective tool for planning and monitoring the progress of the Work.

11.2 Unless otherwise specified under the Contract Documents, the Contractor shall provide a monthly update of the CPM Schedule or Construction Schedule in the format required by the Owner as well as a disk of the updated Schedule and program. If, in the opinion of the Owner, the Work is falling behind Schedule, the Contractor shall submit a revised Schedule demonstrating a recovery plan to ensure Substantial Completion of the Work within the Contract Time.

11.3 Overtime, increased manpower, and additional shifts: If ordered by the Owner in writing, the Contractor shall work overtime, and/or add additional manpower and/or shifts:

11.3.1 If the Contractor is not behind Schedule, the Owner will pay the Contractor the actual additional premium portion of the wages for overtime or additional shift work not included in the Contract price, but the Contractor shall not be entitled to Overhead and Profit.

11.3.2 If the Contractor, through its sole or partial fault or neglect is behind Schedule, the Owner may order the Contractor, at the Contractor's expense, to increase its manpower or to work any overtime or additional shifts or take other action necessary to expedite the Work to meet the Project Schedule.

11.3.3 If the Schedule is shown to be more than 21 Days behind in any critical activity, overtime, increase manpower and/or additional shifts shall be implemented immediately regardless of who is at fault. A disagreement over the cause of the impact will not relieve the Contractor from the obligation of complying with this Article. Once liability for the impact is determined, compensation will be determined in accordance with 11.3.1 or 11.3.2.

11.3.4 The Owner reserves the right to suspend activity under Paragraph 11.3. Suspension shall be in writing and at the sole discretion of the Commissioner.

11.4 Requisitions for partial payment will not be processed until the Contractor has complied with this requirement.

ARTICLE 12 **PREFERENCE IN EMPLOYMENT**

12.1 Should this Contract be for the construction or repair of any building, then in the employment of labor to perform the Work specified herein, preference shall be given to citizens of the United States, who are, and continuously for at least three (3) months prior to the date hereof, have been residents of the labor market area, as established by the State of Connecticut Labor Commissioner, 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 (3)

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.

12.2 Should this Contract be for a Public Works Project other than for the construction, remodeling or repairing of public buildings covered by Connecticut General Statutes 31-52, then in the employment of mechanics, laborers or workmen to perform the Work specified herein, preference will be given to residents of the state who are, and continuously for at least six (6) 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.

12.3 The provisions of this Article 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 this Article or regulations related thereto.

ARTICLE 13 **COMPENSATION FOR CHANGES IN THE WORK**

13.1 At any time, without invalidating the Contract and by a written order and without notice to the sureties, the Owner, through the Construction Administrator, may order modifications in the Work consisting of additions, deletions or other revisions. Upon request, the Contractor shall supply the Construction Administrator promptly with a detailed proposal for the same, showing quantities of and Unit Prices for the Work and that of any Subcontractor involved.

13.2 Modifications to the Work will be authorized by a written Change Order, or if necessary to expedite the Work, a written Construction Change Directive, issued by the Owner as provided for in Article 25. Change Orders and Construction Change Directives shall be processed in accordance with the terms of the Contract Documents. Upon receipt of the written Change Order, the Contractor shall proceed with the Work when and as directed.

13.3 If a Change Order makes the Work less expensive for the Contractor, the proper deductions shall be made from the Contract Sum, said deductions to be computed in accordance with the provisions listed in this Article 13.

13.4 The Contractor shall not be entitled to an extension of time if in the opinion of the Owner the Additional Work in conjunction with the Work can be performed without impact on the Contract Time.

13.5 The Contractor may request, and the Owner may grant additional Contract Time when, in the opinion of the Owner,

the Contractor has demonstrated that the Additional Work cannot be performed in conjunction with the Work without impact on the original Substantial Completion and/or Acceptance (if applicable) date.

13.6 The amount of compensation to be paid to the Contractor for any Additional or Deleted Work that results in a Change Order shall be determined in one of the following manners:

13.6.1 AMOUNT OF COMPENSATION FOR CHANGE ORDER COSTS: LABOR, EQUIPMENT, BENEFITS AND MATERIAL:

13.6.1.1 Unit Price: As stated in the Contract Documents.

13.6.1.2 Unit Price: As subsequently agreed upon by the Contractor and Owner

13.6.1.3 Lump Sum: Agreed upon sum by the Owner and the Contractor. The Owner may rely on costs, prices, and documentation provided by the Contractor or Subcontractor in agreeing to a Lump Sum. If the Owner believes that additional information is necessary to substantiate the accuracy of the cost, the Owner reserves the right to request and receive additional information from the Contractor. The Lump Sum must be based upon the following itemized costs:

13.6.1.3.1 Labor: (Contractor's or Subcontractor's own forces) No Change Order Proposal shall be negotiated if the request is solely for the increased labor rate over those originally carried by the Contractor in its original bid. Additional foreman hours shall not be included unless additional crews are added and/or a compensable time extension is granted. Project Executive time shall not be included as a direct cost as it is part of the overhead mark-up allowed. Project manager hours shall not be included unless a compensable time extension is granted.

13.6.1.3.2 Material: (Actual cost to the Contractor or Subcontractor) Cost shall not be based upon list pricing unless it reflects the actual prices being paid and no discounts or other offsets are being received by the Contractor or Subcontractor. No Change Order Proposal shall be negotiated if the request is solely for the escalation of material prices over those originally carried by the Contractor in its original bid.

13.6.1.3.3 Benefits: (The established rates of the following benefit costs inherent to the particular labor involved):

13.6.1.3.3.1 Workers Compensation.

13.6.1.3.3.2 Federal Social Security.

13.6.1.3.3.3 Connecticut Unemployment Compensation.

13.6.1.3.3.4 Fringe Benefits.

13.6.1.4 Rented Equipment (Used directly on the Work and by the Contractor's or Subcontractor's own forces).

13.6.1.5 Owned Equipment (Used directly on the Work and by the Contractor's or Subcontractor's own forces). Daily rate is not to exceed 3% of the monthly rental rate as identified by a nationally recognized construction cost estimating guide or service.

13.6.1.6 SMALL TOOLS:

Include items such as shovels, picks, rakes, ladders, and power tools which are expected to be utilized on a project. Trade related equipment, hand tools, and power tools normally supplied with the labor or are normally expected to be owned in the performance of the typical work for a trade are not compensable. These costs shall not be approved as part of the Direct Cost of a Change Order as they are included in the Contractor's overhead mark-up percentage.

13.6.2 OVERHEAD AND PROFIT PERCENTAGES: (Maximum allowable percentages applied to labor, equipment, and material)

13.6.2.1 Contractor's mark-up for Work performed by its own forces:

Change Order Amount	Overhead and Profit
\$0 to \$ 5,000	20%
\$5,001 to \$15,000	17%
\$15,001 to \$25,000	15%
\$25,000 and greater	12%

13.6.3 OVERHEAD AND PROFIT PERCENTAGES: (Maximum allowable percentages applied to labor, equipment, benefits and material)

13.6.3.1 Contractor's mark-up for Work performed by its Subcontractor's forces and not allowable for any subsidiary in which the Contractor has a majority ownership:

Change Order Amount	Overhead and Profit
\$0 and greater	6%

13.6.4 OVERHEAD AND PROFIT PERCENTAGES: (Maximum allowable percentages applied to labor, equipment, benefits and material)

Subcontractor's mark-up for Work performed by its own forces:

Change Order Amount	Overhead and Profit
\$0 to \$ 5,000	20%
\$5,001 to \$15,000	17%
\$15,001 to \$25,000	15%
\$25,000 and greater	12%

13.6.5 OVERHEAD AND PROFIT PERCENTAGES:
 (Maximum allowable percentages applied to labor, equipment, benefits and material)

13.6.5.1 Subcontractor's mark-up for Work performed by its Secondary Subcontractor's forces. Limited to one level (tier) below the Subcontractor and not allowable for any subsidiary in which the Subcontractor has a majority ownership.

Change Order Amount	Overhead and Profit
\$0 and greater	6%

13.7 BOND COSTS

13.7.1 Actual additional bonding costs associated with the value of the Change Order will be compensable only when supported by written documentation by the bonding company that the Change Order requires an increase to the original Performance, Payment, Labor or Material Bond.

13.7.2 The Contractor shall notify the bonding company at each \$500,000 increase to the contract value as the cumulative result of change orders. A copy of the Consent of Surety must be provided to the Owner prior to the execution of any change order which exceeds each cumulative \$500,000.

13.8 Trade discounts, rebates, and amounts received from the sales by the Contractor of surplus materials and equipment shall accrue to the Owner.

13.9 If the parties cannot agree upon a Lump Sum, then the Commissioner, through the Project Manager, may at the option of the Commissioner take the following action(s):

13.9.1 Issue a Construction Change Directive for the Additional or Deleted Work. The amount of compensation shall be computed by the actual net costs to the Contractor determined by time and material or Unit Prices based upon the same information required in Subparagraphs 13.6.1.3.3.1 through 13.6.1.5:

13.9.1.1 Labor (Contractor's or Subcontractor's own forces)

13.9.1.2 Material (Used by Contractor's or Subcontractor's own forces).

13.9.1.3 Benefits: (The established rates of the following benefit costs inherent to the particular labor involved):

13.9.1.3.1 Workers Compensation.

13.9.1.3.2 Federal Social Security.

13.9.1.3.3 Connecticut Unemployment Compensation.

13.9.1.3.4 Fringe Benefits.

13.9.1.4 Rented Equipment (Used directly on the Work and by the Contractor's or Subcontractor's own forces).

13.9.1.5 Owned Equipment (Used directly on the Work and by the Contractor's or Subcontractor's own forces). Daily rate is not to exceed 3% of the monthly rental rate that can be identified by a nationally recognized construction cost estimating guide or service.

13.9.2 Issue a Change Order adjusting the Contract Sum in the amount as determined by the Commissioner.

13.10 For any Change Order or Construction Change Directive the Contractor shall, when requested, promptly furnish in a form satisfactory to the Construction Administrator and the Owner a complete detailed accounting of all costs relating to the Additional Work, including but not limited to certified payrolls and copies of accounts, bills and vouchers to substantiate actual costs. Further, the Owner reserves the right to access and make copies of the Contractor's records at any time upon written request from the Commissioner.

13.11 Failure of the Contractor to negotiate in good faith issues of time and costs or failure to provide requested documentation within fourteen (14) Days, or a time period accepted by the Commissioner, shall constitute a waiver by the Contractor of any claim. In such cases the Owner may elect to issue a unilateral Change Order in an amount deemed to be fair and equitable by the Commissioner. The provisions hereof shall not affect the power of the Contractor to act in case of emergency, threatened injury to persons, or damage to Work on any adjoining property. In this case the Commissioner, through the Project Manager, shall issue a Change Order for such amount as the Commissioner finds to be reasonable cost of such Work.

ARTICLE 14
DELETED WORK

14.1 Without invalidating any of the terms of the Contract, the Commissioner may order deleted from the Contract any items or portions of the Work deemed necessary by the Commissioner.

14.2 The compensation to be deducted from the Contract Sum for such deletions shall be determined in the manner provided for under the provisions of Article 13 or in the event none of the provisions of Article 13 are applicable then by the value as estimated by the Owner.

ARTICLE 15
MATERIALS: STANDARDS

15.1 Unless otherwise specifically provided for in the Specifications, all equipment, materials and articles incorporated in

the Work are to be new and of the best grade of their respective kinds for the purposes. Wherever in the Contract Documents a particular brand, make of material, device, or equipment is shown or specified, the first manufacturer listed in the specification section is to be regarded as the standard. When the specification is proprietary and only one manufacturer is listed, the Contractor shall use the named manufacturer and no Substitutions or Equals will be allowed.

15.2 Any other brand, make of material, device, equipment, procedure, etc. which is a deviation from the specified requirement is prohibited from use, but may be considered by the Owner for approval as an Equal or Substitution. The Contractor is to adhere to the specific requirements of the Contract Documents. Substitutions are discouraged and are only approved by the Commissioner as an exception.

15.3 Submittals – Equals and Substitution Requests:

15.3.1 Substitution of Materials and Equipment before Bid Opening. The Owner will consider requests for Equals or Substitutions, if made prior to the receipt of the Bid. The information on all materials shall be consistent with the information herein.

15.3.1.1 Statement of Variances – a statement of variances must list all features of the proposed Substitution which differ from the Drawings, Specifications and/or product(s) specified and must further certify that the Substitution has no other variant features. A request will be denied if submitted without sufficient evidence.

15.3.1.2 Substitution Denial – any Substitution request not complying with the above requirements will be denied. Substitution request sent after the deadline established in the Notice to Bidder will be denied.

15.3.1.3 An addendum shall be issued to inform all prospective Bidders of any accepted Substitution in accordance with Owner's addenda procedures.

15.3.2 Substitution of Materials and Equipment After Bid Opening: Subject to the Architect or Engineer's determination, if the material or equipment is Equal to the one specified or pre-qualified and the DPW Project Manager's approval of such determination, Substitution of Material or Equipment may be allowed after the Letter of Award is issued only:

15.3.2.1 If the specified or pre-qualified item is delayed by unforeseeable contingencies beyond the control of the Contractor which would cause a delay in the Project completion;

15.3.2.2 If any specified or pre-qualified item is found to be unusable or unavailable due to a change by the manufacturer or other circumstances; or

15.3.2.3 If the Contractor desires to provide a more recently developed material, equipment, or manufac-

tured model from the same named manufacturer than the one specified or pre-qualified; or

15.3.2.4 If the specified material and/or equipment inadvertently lists only a single manufacturer.

15.4 Contractor shall submit each request for Equal or Substitution to the Architect or Engineer who shall review each request and make the following recommendations to the Owner:

15.4.1 Acceptance or non-acceptance of the adequacy of the submission and required back-up,

15.4.2 Determination of the category of the request for Substitution or Equal, and

15.4.3 Overall recommendation for approval or rejection of the Substitution or Equal. The determination of the category as a Substitution may be grounds for an immediate rejection by the Owner.

15.5 Approval of the Owner for each Equal or Substitution shall be obtained before the Contractor proceeds with the Work. The decision of the Commissioner, in this regard, shall be final and binding on the Contractor.

15.6 No extension of time will be allowed for the time period required for consideration of any Substitution or Equal. No extension of time will be allowed and no responsibility will be assumed by the Owner when a Contractor submits a request for Substitution or Equal, whether such request be approved or denied, and the Contractor shall not be entitled to any claim for damages for delay.

15.7 If the Contractor submits any request for an Equal or a Substitution, he shall bear the burden of proof that such requested Equal or Substitution meets the requirements of the Plans and Specifications.

15.8 The Contractor shall purchase no materials or supplies for the Work which are subject to any chattel mortgage or which are under a conditional sale or other agreement by which an interest is retained by the seller. The Contractor warrants that the Contractor has good title to all materials and supplies used by him in the Work.

15.9 All products and systems supplied to the State as a result of a purchase by a Contractor shall be certified that, to the best of the supplier's knowledge, there are no materials that are classified as hazardous materials being used within the assembly. Hazardous materials include, but are not limited to, products such as asbestos, lead, and other materials that have proven to cause a health risk by their presence.

16.1 The purpose of the inspections will be to assure that the Work is performed in accordance with the Contract Documents. These inspections shall include, but not be limited to, all inspections and testing as required by the Owner, and any authorities have jurisdiction.

16.2 All material and workmanship, if not otherwise designated by the Specifications, shall be subject to inspection, examination and test by the Commissioner at any and all times during manufacture and/or construction and at any and all places where such manufacture and/or construction is carried on. The Contract Documents additionally identify the parties responsible for performing and paying for the required testing and inspections. All required tests performed in a laboratory will be obtained and paid for by the Owner, except when the tests show the Work to be defective. The Contractor shall pay for all the costs associated with re-tests and re-inspections for all tests and inspections which fail. The Owner will issue a deduct Change Order to recover said retesting costs from the Contractor. All other tests, unless otherwise specified, shall be made at the Contractor's expense. Notice of the time of all tests to be made at the site shall be given to all interested parties, including the Owner.

16.3 Without additional cost to the Owner, the Contractor shall promptly furnish facilities, labor and materials necessary to coordinate and perform operational tests and checkout of the Work. The Contractor shall furnish promptly all reasonable facilities, labor, and materials necessary to make all such testing safe and convenient.

16.4 If, at any time before final payment and Acceptance of the Work, the Commissioner considers it necessary or advisable to examine of any portion of the Work already completed by removing or tearing out the same, the Contractor shall, upon request, furnish promptly all necessary facilities, labor, and materials. If such Work is found to be defective in any material respect, as determined by the Owner, because of a fault of the Contractor or any of the Contractor's Subcontractors, or if any Work shall have been covered without the approval or consent of the Commissioner (whether or not it is found to be defective), the Contractor shall be liable for testing costs and all costs of correction, including removal and/or demolition of the defective Work, including labor, material, and testing, including labor, material, re-testing or re-inspecting, services of required consultants, additional supervision, the Commissioner's and the Construction Administrator's administrative costs, and other costs for services of other consultants.

16.5 Cost of Systems Commissioning Retesting: The cost to retest a pre-functional or functional test, if the Contractor is responsible for the deficiency, shall be the Contractor's. If

the Contractor is not responsible, any cost recovery for retesting costs shall be negotiated with the Contractor.

16.5.1 For a deficiency identified, not related to any pre-functional checklist or start-up fault, the following shall apply: The Systems Commissioning Authority (SCA) and Construction Administrator will direct the retesting of the equipment once at no "charge" to the Contractor for their time. However, the Systems Commissioning Authority's and Construction Administrator's time for additional testing will be charged to the Contractor.

16.5.2 The time for the Systems Commissioning Authority and Construction Administrator to direct any retesting required because a specific pre-functional checklist or start-up test item, reported to have been successfully completed, but determined during functional testing to be faulty, will be back charged to the Contractor.

16.5.3 Any required retesting by any Subcontractor shall not be considered a justified reason for a claim of delay or for a time extension by the Contractor.

ARTICLE 17 **ROYALTIES AND PATENTS**

17.1 If the Contractor desires to use any design, device, material or process covered by a patent or copyright, the Contractor shall provide for such use by suitable legal agreement with the holder of said patent or copyright. The Contractor shall furnish a copy of this legal agreement to the Owner.

17.2 The Contractor shall indemnify and hold harmless the Owner and Construction Administrator for any costs, expenses and damage which it may be obliged to pay by reason of any infringement of a patent or a copyright, at any time during the prosecution or after the Final payment of the Work.

ARTICLE 18 **SURVEYS, PERMITS AND REGULATIONS**

18.1 Unless otherwise provided for, the Contractor shall furnish surveys necessary for the execution of the Work. The Owner will furnish the Contractor with two base lines and a benchmark.

18.2 The Contractor shall obtain and pay for permits and licenses necessary for the execution of the Work and the occupancy and use of the completed Work.

18.3 The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations including building and fire safety codes relating to the performance of the Work.

18.4 If underground utilities may be involved in part of the Work the Contractor is required to request "Call-Before-You-Dig" to verify the location of underground utilities at least (3) Working Days, as further defined under Paragraph 1.71 herein, prior to the start of any excavation. The Contractor shall also notify the Owner and Agency at least (3) Working Days prior to the start of any excavation. If "Call-Before-You-Dig" fails or refuses to respond to the Contractor's request, then the Contractor shall obtain the services of a qualified underground utility locating firm, at no additional cost to the Owner, to verify locations of underground utilities prior to the start of any excavation. The Contractor shall be held responsible for providing safety, protecting the Work and protecting workmen as necessary to perform the Work. The Contractor shall be responsible for maintaining and protecting all original utility mark-out at no additional cost to the Owner.

ARTICLE 19
**PROTECTION OF THE WORK,
PERSONS AND PROPERTY**

19.1 The Contractor shall continuously and adequately protect the Work against damage from any cause, and shall protect materials and supplies furnished by the Contractor or Subcontractors, whether or not incorporated in the Work, and shall make good any damage unless it be due directly to errors in the Contract Documents or is caused by agents or employees of the Owner.

19.2 To the extent required by law, by public authority, or made necessary in order to safeguard the health and welfare of the personnel or occupants of any of the state institutions, the Contractor shall adequately protect adjacent property and persons, and provide and maintain all facilities, including but not limited, to passageways, guard fences, lights, and barricades necessary for such protection.

19.3 The Contractor shall take all necessary precautions for the safety of employees on the Work and shall comply with applicable provisions of federal and state safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the premises where the Work is being performed. The Contractor shall also comply with the applicable provisions of the Associated General Contractors' "Manual of Accident Prevention in Construction", the standards of the Connecticut Labor Department and Occupational Safety and Hazard Association (OSHA).

19.4 The Contractor shall erect and properly maintain at all times, as required by the conditions and progress of the Work, all necessary safeguards for the protection of employees of the State and the public, and shall post danger signs warning against any dangerous condition or hazard created

by such things as protruding nails, well holes, elevator hatchways, scaffolding, window openings, excavations, tripping hazards or slipping, stairways and falling materials.

19.5 The Contractor shall designate a qualified and responsible on-site staff person, whose duty shall be the prevention of accidents. The name and position of the designated person shall be reported to the Owner by the Contractor at the commencement of the Contract.

19.6 The Contractor shall at all times protect excavations, trenches, buildings, and all items of Work from damage by rain, water from melted snow or ice, surface water run off and subsurface water usual for the vicinity at the time of operations; and provide all pumps and equipment and enclosures to insure such protection.

19.7 The Contractor shall construct and maintain all necessary temporary drainage and provide all pumping necessary to keep excavation, basements, footings and foundations free of water.

19.8 The Contractor shall remove all snow and ice as may be required for access to the site and proper protection and prosecution of the Work.

19.9 The Contractor shall install bracing, shoring, sheathing, sheet piling, caissons and any other underground facilities as required for safety and proper execution of the Work, and shall remove this portion of the Work when no longer necessary.

19.10 During cold weather the Contractor shall protect all Work from damage. If low temperature makes it impossible to continue operations safely in spite of cold weather precautions, the Contractor may cease Work upon the written approval of the Commissioner.

ARTICLE 20
TEMPORARY UTILITIES

20.1 Unless expressly provided for otherwise in the Contract Documents, the Contractor shall include in the proposed contract bid price as stated on the Bid Proposal Form, the costs of all temporary utilities required for Project completion and protection of the Work. Said temporary utilities include, but are not limited to, lighting, heating, cooling, electrical power, water, telephone, sanitary facilities, and potable water.

ARTICLE 21
CORRECTION OF WORK

21.1 The Contractor shall promptly and without expense to the Owner remove from the premises all materials rejected by or unacceptable to the Commissioner as failing to conform to the Contract Documents, whether incorporated in the Work or not.

21.2 The Contractor shall promptly and without expense to the Owner replace any such materials, which do not conform to the Contract Documents, and shall bear the expense of making good all Work of other Contractors or Subcontractors destroyed or damaged by such removal or replacement.

21.3 If the Contractor, after receipt of notice from the Owner, shall fail to remove such rejected or unacceptable materials within a reasonable time as fixed in said notice, the Owner may remove and store such materials at the expense of the Contractor.

21.4 Such action shall not affect the obligation of the Contractor to replace and complete assembly and installation of the Work and to bear the expenses referred to above. Prior to the correction of rejected or unacceptable Work or if the Commissioner deems it inexpedient or undesirable to correct any portion of the Work which was rejected, deemed unacceptable, or not done in accordance with the Contract Documents, the Contract Sum shall be reduced by such amount as, in the judgment of the Commissioner, shall be equitable.

21.5 No extension of time will be given to the Contractor for correction of rejected or unacceptable Work. All significant punchlist Work shall be completed before Substantial Completion is determined. The remaining minor punchlist Work, as determined by the Commissioner, shall be completed within ninety (90) Days of established Substantial Completion date.

21.6 Final Payment shall not relieve the Contractor of responsibility for the defects in material or workmanship.

21.7 Unless expressly provided for otherwise in the Contract Documents, the Contractor shall remedy any rejected or unacceptable Work, and any Work found to be not conforming to the Contract Documents which is discovered within 18 Months after the date of Substantial Completion. The Contractor shall pay for any damage to other Work caused by such nonconforming Work or any damage created in correcting the nonconforming Work.

ARTICLE 22
GUARANTEES and WARRANTIES

22.1 Unless expressly provided for otherwise in the Contract Documents, the Contractor shall provide a Warranty on the Work for an 18-Month period from the date of Substantial Completion. The Contractor shall warrant that the equipment,

materials and workmanship are of good quality and new, unless permitted elsewhere by the Contract Documents, and that the Work shall be free from defects not inherent in the quality required or permitted and that the Work conforms to the Contract Documents.

22.2 Disclaimers and limitations from manufactures, Subcontractors, suppliers or installers to the Contractor shall not relieve the Contractor of the Warranty on the Work. The Contract Documents detail the related damages, reinstatement of Warranty, replacement cost and Owner's recourse.

ARTICLE 23
CUTTING, FITTING, PATCHING, AND DIGGING

23.1 The Contractor will perform or will cause the Subcontractors to perform all cutting, fitting, or patching of the portion(s) of the Work that may be required to make the several parts thereof joined and coordinated in a manner satisfactory to the Commissioner and in accordance with the Plans and Specifications.

23.2 The responsibility for defective or ill-timed Work shall be with the Contractor, but such responsibility shall not in any way relieve the Subcontractor who performed such Work. Except with the consent of the Commissioner, neither the Contractor nor any of its Subcontractors shall cut or alter the Work of any other Contractor or Subcontractor.

ARTICLE 24
CLEANING UP

24.1 The Contractor shall, on a daily basis, keep the premises free from accumulations of waste material or rubbish.

24.2 Prior to Acceptance of the Work, the Contractor shall remove from and about the site of the Work, all rubbish, all temporary structures, tools, scaffolding, and surplus materials, supplies, and equipment which may have been used in the performance of the Work. If the Commissioner in his sole discretion determines that the Contractor has failed to clean

the work site, the Owner may remove the rubbish and charge the cost of such removal to the Contractor. A deduct Change Order will be issued by the Owner to recover such cost.

ARTICLE 25
ALL WORK SUBJECT TO CONTROL OF THE COMMISSIONER

25.1 The Commissioner hereby declares that the DPW Project Manager is the Commissioner's only authorized repre-

sentative to act in matters involving the Owner's, and/or Architect's or Engineer's, ability to revoke, alter, enlarge or relax any requirement of the Contract Documents; to settle disputes between the Contractor and the Construction Administrator; and act on behalf of the Commissioner. In all such matters, the provisions of Articles 13 and 14 herein shall guide the DPW Project Manager.

25.2 In no event may the Contractor act on any instruction of the Agency without written consent of the Owner. In the event the Contractor acts without such consent, he does so at his own risk and at his own expense, not only for the Work performed, but for the removal of such Work as determined necessary by the Commissioner.

25.3 In the performance of the Work, The Contractor shall abide by all orders, directions, and requirements of the Commissioner at such time and places and by such methods and in such manner and sequence as the Commissioner may require.

25.4 The Commissioner shall determine the amount, quality, acceptability and fitness of all parts of the Work, shall interpret the plans, Specifications, Contract Documents and extra work orders and shall decide all other questions in connection with the Work.

25.5 The Contractor shall employ no plant, equipment, materials, methods, or persons to which the Commissioner objects and shall remove no plant materials, equipment, or other facilities from the site of the Work without the permission of the Commissioner. Upon request, the Commissioner shall confirm in writing any oral order, direction, requirement or determination.

25.6 In accordance with Section 4b-24 of the Connecticut General Statutes, the public auditors of the State of Connecticut and the auditors or accountants of the Commissioner of Public Works shall have the right to audit and make copies of the books of any Contractor employed by the Commissioner.

ARTICLE 26
AUTHORITY OF THE CONSTRUCTION
ADMINISTRATOR

26.1 The Construction Administrator employed by the Commissioner is authorized to inspect all Work for conformance to the Contract Documents. The Construction Administrator is authorized to reject all Work found to be defective, unacceptable and nonconforming to the Contract Documents. Such inspections and rejections may extend to all or any part of the Work, and to the preparation or manufacture of the material to be used.

26.2 The Construction Administrator is not empowered to revoke, alter, enlarge, or relax any requirements of the Contract Documents, or to issue instructions contrary to the Contract Documents. The Construction Administrator shall in no case act as foreman or perform other duties for the Contractor, nor shall the Construction Administrator interfere with the management of the Work by the Contractor. Any advice, which the Construction Administrator may give the Contractor, shall in no way be construed as binding the Commissioner or Owner in any way, nor releasing the Contractor from the fulfillment of the terms of the Contract.

26.3 In any dispute arising between the Contractor and the Construction Administrator with reference to inspection and rejection of the Work, the Construction Administrator may suspend Work on the non-compliant portion of the Work until the dispute can be referred to and decided by the Commissioner.

ARTICLE 27
SCHEDULE OF VALUES,
APPLICATION FOR PAYMENT

27.1 Immediately after the signing of the Contract, the Contractor shall furnish for the use of the Commissioner, as a basis for estimating partial payments, a certified Schedule of Values, totaling the Contract Sum and broken down into quantities and unit costs, as outlined in the Contract Documents and as directed by the Owner. The Schedule of Values must reflect true costs and be in sufficient detail to be an effective tool for monitoring the progress of the Work. Upon request of the Commissioner; the Contractor shall supply copies of signed Contracts, vendor quotations, etc. as back up to the Schedule of Values.

27.2 Approval of the Schedule of Values by the Commissioner is required prior to any payment by the Owner.

27.3 The Schedule of Values shall include a breakdown of the Contractor's general condition costs.

27.3.1 Non-recurring costs, (i.e. Mobilization costs, utility hook-ups, temporary heat) will be paid at the time of occurrence.

27.3.2 Reoccurring costs will be paid in proportion to the percent of completion of the Project.

27.3.3 Further detail can be found in the General Requirements 01.29.76; paragraphs 1.3.B.4 for this project.

27.4 The Schedule of Values shall include a breakdown of Contract closeout costs including systems certification testing and acceptance, training, Warranties, Guarantees, As-Built Drawings and attic stock.

27.5 The Contractor shall make periodic applications for payment, which shall be subdivided into categories corresponding with the approved Schedule of Values and shall be in such numbers of copies as may be designated by the Commissioner.

ARTICLE 28
PARTIAL PAYMENTS

28.1 Commissioner will examine the Contractor's Applications For Payments to determine, in the opinion of the Commissioner, the amounts that properly represent the value of the Work completed and the materials suitably stored on the site.

28.2 In making such Application For Payment for the Work, there shall be deducted seven and one-half percent (7.5%) of the amount of each Application for Payment to be retained by the Owner as Retainage until Final Completion.

28.2.1 The Commissioner has the sole discretion in the determination of reduction in Retainage. At fifty percent (50%) completion of the Work the Owner shall issue a "Contractor's Performance Evaluation". If the Contractor receives a performance evaluation score of "Good" or better, then the Retainage withheld may be reduced to five percent (5%). All subsequent Applications for Payment shall be subject to five percent (5%) Retainage. Upon Substantial Completion, the Retainage may be reduced at the request of the Contractor and recommendation of the DPW Project Manager. In the event of a reduction in Retainage to below five percent (5%), the minimum Retainage withheld shall not be less than the DPW Project Manager's estimate of the remaining Work or two and one-half percent (2.5%), which ever is greater. All requests for Retainage Reduction shall be done on DPW Form 748F_Retainage Reduction Request, which can be found at the end of the General Conditions.

28.2.2 Subsequent to Substantial Completion, in limited circumstances, at the sole discretion of the Commissioner, a reduction of Retainage below Two and one-half percent (2.5%) may be considered.

28.2.3 A "Good" Contractor's Performance Evaluation score shall be defined as a minimum total score of sixty percent (60%).

28.3 The decision of the Commissioner to reduce the Retainage rate will be based upon the Contractor's Performance Evaluation score for completed portions of the Work as set out above and other factors that the Commissioner may find appropriate as follows:

28.3.1 The Contractor's timely submission of an appropriate and complete CPM Schedule or Construction Schedule and Schedule of Values, in compliance with

the Contract requirements and the prompt resolution of the Owner's and/or Architect's or Engineer's comments on the submitted material resulting in an appropriate basis for progress of the Work.

28.3.2 The Contractor's timely and proper submission of all Contract Document required submissions: including, but not limited to, Shop Drawings, material certificates and material samples and the prompt resolution of the Owners and/or Architect's or Engineer's comments on the submitted material, resulting in an appropriate progress of the Work.

28.3.3 The Contractor's provision of proper and adequate supervision and home office support of the Project.

28.3.4 The Work completed to date has been installed or finished in a manner acceptable to the Owner.

28.3.5 The progress of the Work is consistent with the approved CPM Schedule or Construction Schedule.

28.3.6 All approved credit change orders have been invoiced.

28.3.7 All Change Order requests for pricing are current.

28.3.8 The Contractor has and is maintaining a clean worksite in accordance with the Contract Documents.

28.3.9 All Subcontractor payments are current at the time of reduction request.

28.3.10 Contractor is compliant with set-aside provisions of the contract.

28.4 No payments will be made for improperly stored or protected materials or unacceptable Work.

28.5 At his or her sole discretion, the Commissioner may allow to be included in the monthly requisitions payment requests for materials and equipment stored off the site.

28.5.1 In the event the Commissioner allows the Contractor to include in its requisitions payment requests for materials and equipment stored off the site, the Contractor shall also submit any additional bonds and/or insurance certificates relating to off-site stored materials and equipment, and follow such other procedures as may be required by the State to obtain the Commissioner's approval of such requests.

28.5.2 The Architect or Engineer, or Construction Administrator shall have inspected said materials and equipment and recommended payment therefore. The Contractor shall pay for the cost of the Architect's or Engineer's, or Construction Administrator's time and expense in performing these inspection services.

ARTICLE 29
DELIVERY OF STATEMENT SHOWING
AMOUNTS DUE FOR WAGES, MATERIALS, AND
SUPPLIES

29.1 For each Application for Payment under this Contract, the Owner reserves the right to require the Contractor and every Subcontractor to submit a written verified statement, in a form satisfactory to the Owner, showing in detail all amounts then due and unpaid by such Contractor or Subcontractor for daily or weekly wages to all laborers employed by it for the performance of the Work or to other persons for materials, equipment or supplies delivered at the site.

29.2 The term "laborers" as used herein shall include workmen, workwomen, and mechanics.

29.3 Failure to comply with this requirement may result in the Owner withholding the Application for Payment pursuant to Article 28.

ARTICLE 30

SUBSTANTIAL COMPLETION AND ACCEPTANCE

30.1 Substantial Completion:

30.1.1 When the Contractor considers that the Work or a portion thereof is Substantially Complete, the Contractor shall request an inspection of said Work in writing to the Construction Administrator. The request shall certify that the Contractor has completed its own inspection prior to the request and that the Contractor is compliant with all requirements of Section 01 77 00 of the General Requirements. The request must also include a statement that a principal or senior executive of the Contractor is ready, willing and able to attend a walk through inspection with the Architect or Engineer.

30.1.2 Upon receipt of the request, the Architect or Engineer, Construction Administrator and Owner, will make an inspection to determine if the Work or designated portion thereof is Substantially Complete. A principal or senior executive of the Contractor shall accompany the Architect or Engineer during each inspection/re-inspection. If the inspection discloses any item, whether or not included on the inspection list, which is not in accordance with the re-

quirements of the Contract Documents, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item.

30.1.3 The Contractor shall then submit a request for another inspection. The determination of Substantial Completion is solely within the discretion of the Owner. Any costs for re-inspection beyond one, shall be at the expense of the Contractor and such costs will be recovered by issuance of a credit Change Order. When the Work or designated portion thereof is determined to be Substantially Complete, the Contractor will be provided a Certificate of Substantial Completion from the Owner. The Certificate of Substantial Completion shall establish the date when the responsibilities of the Contractor for security, maintenance,

heat, utilities, damage to the Work, and insurance, are transferred to the Owner and shall fix the time within which the Contractor shall finish all items on the inspection list accompanying the Certificate. If the punch list is not complete in 90 Days, the Owner reserves the right to complete the outstanding punch list items with their own forces or by awarding separate contracts and to deduct the cost thereof from the amounts remaining due to the Contractor.

30.1.4 The Certificate of Substantial Completion shall be signed by the Construction Administrator, Owner, and Architect or Engineer. Upon Substantial Completion of the Work or designated portion thereof and upon application by the Contractor and certification by the Construction Administrator and Architect or Engineer, the Owner shall make payment reflecting adjustment in Retainage, if any, for such Work or portion thereof as provided in the Contract Documents.

30.2 Acceptance:

30.2.1 Upon completion of the Work, the Contractor shall forward to the Construction Administrator a written notice that the Work is ready for inspection and Acceptance.-

30.2.2 When the Work has been completed in accordance with terms and conditions of the Contract Document as determined by the Owner a Certificate of Acceptance shall be issued by the Owner.

ARTICLE 31 **FINAL PAYMENT**

31.1 The Owner reserves the right to retain for a period of thirty (30) Days after filing of the Certificate of Acceptance the amount therein stated less all prior payments and advances whatsoever to or for the account of the Contractor.

31.2 All prior estimates and payments, including those relating to extra or additional Work, shall be subject to correction by the Final Payment.

31.3 No Application for Payment, Final or Partial, shall act as a release to the Contractor or the Contractor's sureties from any obligations under this Contract.

31.4 The Architect or Engineer and Construction Administrator will promptly issue the Certificate for Payment, stating that to the best of their knowledge, information and belief, and on the basis of their observations and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in said Final Payment is due and payable.

31.5 Final Payment shall not be released until a Certificate of Acceptance and a Certificate of Compliance have been issued.

31.6 Neither Final Payment nor any Retainage shall become due until the Contractor submits to the Owner the following:

31.6.1 An affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied.

31.6.2 A certificate evidencing that insurance required by the Contract Documents to remain in force after Final Payment is currently in effect and will not be canceled or allowed to expire without at least 30 Days prior written notice to the Owner.

31.6.3 A written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents.

31.6.4 Written consent of surety, if any, to Final Payment.

31.6.5 If required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorney's fees.

ARTICLE 32

OWNER'S RIGHT TO WITHHOLD PAYMENTS

32.1 The Commissioner may withhold a portion of any Payment due the Contractor that may, in the judgment of the Commissioner, be necessary:

32.1.1 To assure the payment of just claims then due and unpaid to any persons supplying labor or materials for the Work.

32.1.2 To protect Owner from loss due to defective, unacceptable or non-conforming Work not remedied by the Contractor.

32.1 To protect the Owner from loss due to injury to persons or damage to the Work or property of other Contractors, Subcontractors, or others caused by the act or neglect of the Contractor or any of its Subcontractors.

32.2 The Owner shall have the right to apply any amount

withheld under this Article as the Owner may deem proper to satisfy protection from claims. The amount withheld shall be considered a payment to the Contractor.

32.3 The Owner has the right to withhold payment if the Contractor fails to provide accurate submissions of Submittals, up date the status including but not limited to the following: As-Built Drawings, request for information (RFI) log, Schedule, submittal log, Change Order log, certified payrolls and daily reports and all other requirement of the Contract Documents.

32.4 If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorney's fees.

ARTICLE 33

OWNER'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

33.1 The Commissioner shall have the authority to suspend the Work wholly or in part, for such period or periods as the Commissioner considers being in the best interests of the State, or in the interests of public necessity, convenience or safety. During such periods the Contractor shall store all materials and equipment, in such a manner to prevent the materials and equipment from being damaged in any way, and the Contractor shall take precautions to protect the Work from damage.

33.1.1 If the Commissioner, in writing, orders the performance of all or any portion of the Work to be suspended or delayed for an unreasonable period of time (i.e. not originally anticipated, customary, or inherent in the construction industry) and the Contractor believes that additional compensation and/or Contract Time is due as a result of such suspension or delay, the Contractor shall submit to the Commissioner in writing a request for a Contract adjustment within 7 Days of receipt of the notice to resume Work. The request shall set forth the specific reasons and support for said adjustment.

33.1.2 The Commissioner shall evaluate any such requests received. If the Commissioner agrees that the cost and/or time required for the performance of the Contract has increased as a result of such suspension and that the suspension was caused by conditions beyond the control of and not the fault of the Contractor, its suppliers, or Subcontractors, and was not caused by weather, then the Commissioner will make a reasonable adjustment, excluding profit, of the Contract terms. The Commissioner will notify the Contractor of the determination as to what adjustments of

the Contract, if any, that the Commissioner deems warranted.

33.1.3 No Contract adjustment will be made unless the Contractor has submitted the request for adjustment within the time prescribed.

33.1.4 No Contract adjustment will be made under this Article to the extent that performance would have been suspended or delayed by any other cause within the Contractor's control or by any factor for which the Contractor is responsible under the Contract; or that such an adjustment is provided for or excluded under other term or condition of this Contract.

33.2 Notwithstanding any provision or language in the Contract to the contrary, the State may terminate the Contract whenever the Commissioner determines at his sole discretion that such termination is in the best interests of the State. Any such termination shall be effected by delivery to the Contractor of a written Notice of Termination specifying the extent to which performance of Work under the Contract is terminated, and the date upon which such termination shall be effective.

33.2.1 In the event of such termination, the Contractor shall be entitled to reasonable compensation as determined by the Commissioner, however, no claim for lost Overhead or profits shall be allowed.

33.2.2 All Work and materials obtained by the Contractor for the Work, that have been incorporated into the Work, inspected, tested as required, accepted by the Commissioner, and paid for by the State, shall become the property of the State.

33.2.3 Materials obtained by the Contractor for the Work that have been inspected, tested as required, and accepted by the Commissioner, and that are not incorporated into the Work, shall, at the option of the Commissioner, be purchased from the Contractor at actual cost as shown by receipted bills. To this cost shall be added all actual costs for delivery at such points of delivery as may be designated by the Commissioner, as shown by actual cost records.

33.2.4 Termination of the Contract shall not relieve the Contractor or its Surety of their responsibilities for the completed Work, nor shall it relieve the Contractor's Surety of its obligations to ensure completion of the Work and to pay legitimate claims arising out of Work.

ARTICLE 34
SUBLETTING OR ASSIGNING OF CONTRACT

34.1 The Contract or any portion thereof, or the Work provided for therein, or the right, title, or interest of the Contractor therein may not be sublet, sold, transferred, assigned, or otherwise disposed of to any person, firm, or corporation without the written consent of the Commissioner.

34.2 No person, firm, or corporation other than the Contractor to whom the Contract was awarded shall be permitted to commence Work at the site of the Contract until such consent has been granted.

ARTICLE 35
CONTRACTOR'S INSURANCE

35.1 The Contractor shall not start Work under the Contract until they have obtained insurance as stated in SECTIONS 00 62 16 CERTIFICATE OF INSURANCE and 00 40 13 BID PROPOSAL FORM, subsections 4.4.2 and 4.4.3, of the Project Manual and until the insurance has been approved by the Owner. The Contractor shall not allow any Subcontractor to start Work until the same insurance has been obtained by the Subcontractor and approved by the Owner or the Contractor's insurance provides coverage on behalf of the Subcontractor. The Contractor shall send Certificates of Liability Insurance to the Bidding and Contracts Unit, Department of Public Works, 165 Capitol Avenue, Room G-35, Hartford, CT 06106 unless otherwise directed in writing. Presented below is a narrative summary of the insurance required.

35.1.1 Commercial General Liability Insurance including contractual liability, products/completed operations, broad form property damage and independent Contractors. The limits shall be no less than \$1,000,000 each occurrence and \$2,000,000 annual aggregate. Coverage for hazards of explosion, collapse and underground (X-C-U) and for asbestos abatement when applicable to this Contract, must also be included when applicable to the Work to be performed. The State of Connecticut, the Department of Public Works, and their respective officers, agents, and employees shall be named as an Additional Insured. This coverage shall be provided on a primary basis.

35.1.2 Owner's and Contractor's Protective Liability insurance providing a total limit of \$1,000,000 for all damages arising out of bodily injury or death of persons in any one accident or occurrence and for all damages arising out of injury or destruction of property in any one accident or occurrence and subject to a total (aggregate) limit of \$2,000,000 for all damages arising out of bodily injury to or death of persons in all accidents or occurrences and out of injury to or destruction of property during the policy period. This coverage shall be for and in the name of the State of Connecticut.

35.1.3 Automobile Liability The operation of all motor vehicles including those owned, non-owned and hired or used in connection with the Contract shall be covered by Automobile Liability insurance providing for a total limit of \$1,000,000 for all damages arising out of bodily injuries to or death of all persons in any one accident or occurrence

and for all damages arising out of injury to or destruction of property in any one accident or occurrence. In cases where an insurance policy shows an aggregate limit as part of the automobile liability coverage, the aggregate limit must be at least \$2,000,000. This coverage shall be provided on a primary basis. Should the Contractor not own any automobiles, the automobile & liability requirement shall be amended to allow the Contractor to maintain only hired and non-owned liability coverage.

35.1.4 Excess Liability (Other than Umbrella Form) insurance in the amount of \$5,000,000 for bids of \$1,000,000 - \$10,000,000 and in the amount of \$10,000,000 for bids of \$10,000,001 - \$20,000,000. Refer to Section 00 92 00 Amendments of the Project Manual for Excess Liability insurance requirements for bids exceeding \$20,000,000.

35.1.5 Workers' Compensation and Employer's Liability as required by Connecticut Law and **Employers' Liability** with a limit of not less than \$100,000 per occurrence, \$500,000 disease policy limit and \$100,000 disease each employee. When Work is on or contiguous to navigable bodies of waterways and ways adjoining, the Contractor shall include the Federal Act endorsement for the U.S. Longshoremen's and Harbor Workers Act.

35.1.6 Special Hazards Insurance, if required, will be stated in SECTION 00 40 13 BID PROPOSAL FORM, subsection 4.4.2 of this Project Manual. This includes coverage for explosion, collapse or underground damage and for asbestos abatement when applicable to this Contract and shall be no less than \$1,000,000 each occurrence.

35.1.7 Builder's Risk Insurance, if required, will be stated in Section 00 40 13 Bid Proposal Form, subsection 4.4.3 of this Project Manual.

35.1.8 Inland Marine/Transit Insurance: With respect to property with values in excess of \$100,000 which is rigged, hauled or situated at the site pending installation, the Contractor shall maintain inland marine/transit insurance provided the coverage is not afforded by a Builder's Risk policy.

35.1.9 When required to be maintained, the Builder's Risk and/or Inland Marine/Transit Insurance policy shall endorse the State of Connecticut as a Loss Payee and the policy shall state it is for the benefit of and payable to the State of Connecticut.

35.2 Satisfying Limits Under an Umbrella Policy: If necessary, the Contractor may satisfy the minimum limits required above for either Commercial General Liability, Automobile Liability, and Employer's Liability coverage under an

Umbrella or Excess Liability policy. The underlying limits may be set at the minimum amounts required by the Umbrella or Excess Liability policy provided the combined limits meet at least the minimum limit for each required policy. The Umbrella or Excess Liability policy shall have an Annual Aggregate at a limit not less than two (2) times the highest per occurrence minimum limit required above for any of the required coverages. The State of Connecticut shall be specifically endorsed as an Additional Insured on the Umbrella or Excess Liability policy, unless the Umbrella or Excess Liability policy provides continuous coverage to the underlying policies on a complete "Follow-Form" basis.

35.3 The Contractor shall, at its sole expense, maintain in full force and effect at all times during the life of the Contract or the performance of Work hereunder, insurance coverage as described herein. Certificates shall include a minimum thirty (30)-day endeavor to notify requirement to the Owner prior to any cancellation or non-renewal.

35.4 The Contractor shall be fully and solely responsible for any costs or expenses as a result of a coverage deductible, coinsurance penalty, or self-insured retention, including any loss not covered because of the operation of such deductible, coinsurance penalty, or self-insured retention.

35.5 The requirement contained herein as to types and limits of insurance coverage to be maintained by the Contractor are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by the Contractor.

35.6 Hold Harmless Provisions: The Contractor shall at all times indemnify and save harmless the State of Connecticut, the Department of Public Works, and their respective officers, agents, and employees, on account of any and all claims, damages, losses, litigation, expenses, counsel fees and compensation arising out of injuries (including death) sustained by or alleged to have been sustained by the officers, agents, and employees of said State or Department, or of the Contractor, his Subcontractor, or materialmen and from injuries (including death) sustained by or alleged to have been sustained by the public, any or all persons on or near the Work, or by any other person or property, real or personal (including property of said State or Department) caused in whole or in part by the acts, omissions, or neglect or the Contractor including, but not limited to, any neglect in safeguarding the Work or through the use of unacceptable materials in constructing the Work of the Contractor, any Subcontractor, materialman, or anyone directly employed by them or any of them while engaged in the performance of the Contract, including the entire elapsed time from the date of the Notice to Proceed or the actual Commencement Of The Work whichever occurs first until its completion as certified by the Department of Public Works.

ARTICLE 36
FOREIGN MATERIALS

36.1 Preference shall be given to articles or materials manufactured or produced in the United States, Canada, and Mexico, (the members of the North American Free Trade Agreement (NAFTA)); and the products shall meet all of the referenced standards and Specifications for conditions of performance, quality, and price with duty being equal.

36.2 Only articles or materials manufactured or produced in the United States, Canada, and Mexico, (the members of the North American Free Trade Agreement (NAFTA)), will be allowed. The foregoing provisions shall not apply to foreign articles or materials required by the Contract Documents.

ARTICLE 37
HOURS OF WORK

37.1 No person shall be employed to work or be permitted to work more than eight (8) hours in any Day or more than forty (40) hours in any week for any Work provided in the Contract, in accordance with Connecticut General Statute Section 31-57.

37.2 The operation of such limitation of hours of work may be suspended during an emergency, upon the approval of the Commissioner, in accordance with Connecticut General Statute Section 31-57.

ARTICLE 38
CLAIMS

38.1 General: When filing a formal claim under Section 4-61 (referred to as "Section 4-61" below) of the Connecticut General Statutes (as revised), either as a lawsuit in the Superior Court or as a demand for arbitration, the Contractor must follow the procedures and comply with the requirements set forth in this Article. This Section does not, unless so specified, govern informal claims for additional compensation which the Contractor may bring before the Department. The Contractor should understand, however, that the Department may need, before the Department can resolve such a claim, the same kinds of documentation and other substantiation that it requires under this Article. It is the intent of the Department to compensate the Contractor for actual increased costs caused by or arising from acts or omissions on the part of the Department that violate legal or contractual duties owed to the Contractor by the Department.

38.2 Notice of Claim: Whenever the Contractor intends to file a formal claim against the Department under Section 4-61, seeking compensation for additional costs, the Contractor shall notify the Commissioner in writing (in strict compliance with Section 4-61) of the details of said claim. Such written notice shall contain all pertinent information described in Paragraph 38.5 below.

Once formal notice of a claim under Section 4-61(b) (as revised) has been given to the Commissioner, the claimant may not change the claim in any way, in either concept or monetary amount, (1) without filing a new notice of claim and demand for arbitration to reflect any such change, and (2) without the minimum period of six months after filing of the new demand commencing again and running before any hearing on the merits of the claim may be held. The only exception to this limitation will be for damages that continue to accrue after submission of the notice, in ways described and anticipated in the notice.

38.3 Record Keeping: The Contractor shall keep daily records of all costs incurred in connection with its Work on behalf of the Department. The daily records shall identify each aspect of the Project affected by matters related to any claim for additional compensation that the Contractor has filed, intends to file, or has reason to believe that it may file against the Department; the specific Project locations where Project work has been so affected; the number of people working on the affected aspects of the Project at the pertinent time(s); and the types and number of pieces of equipment on the Project site at the pertinent time(s). Any potential or anticipated effect on the Project's progress or Schedule which may result in a claim by the Contractor shall be noted contemporaneously with the cause of the effect, or as soon thereafter as possible.

38.4 Claim Compensation: The payment of any claim, or any portion thereof, that is deemed valid by the Department shall be made in accordance with the following provisions of this Article:

38.4.1 Compensable Items: The liability of the Department for claims will be limited to the following specifically identified items of cost, insofar as they have not otherwise been paid for by the Department, and insofar as they were caused solely by the actions or omissions of the Department or its agents (except that with regard to payment for extra work, the Department will pay to the Contractor the Overhead and profit percentages provided for in Article 13.):

38.4.1.1 Additional Project-site labor expenses.

38.4.1.2 Additional costs for materials.

38.4.1.3 Additional, unabsorbed Project-site Overhead (e.g., for mobilization and demobilization).

38.4.1.4 Additional costs for active equipment.

38.4.1.5 For each Day of Project delay or suspension caused solely by actions or omissions of the Department either:

38.4.1.5.1 an additional ten percent (10%) of the total amount of the costs identified in Subparagraphs 38.4.1.1 through 38.4.1.4 above; except that if the delay or suspension period prevented the Contractor from incurring enough Project costs under Subparagraphs 38.4.1.1 through 38.4.1.4 during that period to require a payment by the Department that would be greater than the payment described in Subparagraph 38.4.1.5.2 below, then the payment for affected home office Overhead and profit shall instead be made in the following *per diem* amount :

38.4.1.5.2 six percent (6%) of the original total Contract amount divided by the original number of Days of Contract Time. Payment under either 38.4.1.5.1 or 38.4.1.5.2 hereof shall be deemed to be complete and mutually satisfactory compensation for any unabsorbed home office overhead and any profit related to the period of delay or suspension.

38.4.1.6 Additional equipment costs. Only actual equipment costs shall be used in the calculation of any compensation to be made in response to claims for additional Project compensation. Actual equipment costs shall be based upon records kept in the normal course of business and in accordance with generally- accepted accounting principles. Under no circumstances shall Blue Book or other guide or rental rates be used for this purpose (unless the Contractor had to rent the equipment from an unrelated party, in which case the actual rental charges paid by the Contractor, so long as they are reasonable, shall be used). Idle equipment, for instance, shall be paid for based only on its actual cost to the Contractor.

38.4.1.7 Subcontractor costs limited to, and determined in accordance with, Subparagraphs 38.4.1.1 through 38.4.1.5 above and applicable statutory and case law. Such Subcontractor costs may be paid for by the Department only: (a) in the context of an informal claims settlement; or (b) if the Contractor has itself paid or legally assumed, present unconditional liability for those Subcontractor costs.

38.4.2 Excusable But Not Compensable Items: The Contractor may be allowed Days but the Department will have no liability for the following non-compensable items:

38.4.2.1 Abnormal or unusually severe weather

38.4.2.2 Acts of God

38.4.2.3 Force Majeure

38.4.2.4 Concurrent Delay

38.4.3 Non-Compensable Items: The Department will have no liability for the following specifically-identified non-compensable items:

38.4.3.1 Profit, in excess of that provided for herein.

38.4.3.2 Loss of anticipated profit.

38.4.3.3 Loss of bidding opportunities.

38.4.3.4 Reduction of bidding capacity.

38.4.3.5 Home office overhead in excess of that provided for in Subparagraph 38.4.1.5 hereof.

38.4.3.6 Attorneys fees, claims preparation expenses, or other costs of claims proceedings or resolution.

38.4.3.7 Subcontractor failure to perform

38.4.3.8 Any other consequential or indirect expenses or costs, such as tort damages, or any other form of expense or damages not provided for in these specifications or elsewhere in the Contract.

38.5 Required Claim Documentation: All claims shall be submitted in writing to the Commissioner, and shall be sufficient in detail to enable the Department to ascertain the basis and the amount of each claim, and to investigate and evaluate each claim in detail. As a minimum, the Contractor must provide the following information for each and every claim and sub-claim asserted:

38.5.1A detailed factual statement of the claim, with all dates, locations and items of Work pertinent to the claim.

38.5.2 A statement of whether each requested additional amount of compensation or extension of time is based on provisions of the Contract or on an alleged breach of the Contract. Each supporting or breached Contract provision and a statement of the reasons why each such provision supports the claim must be specifically identified or explained.

38.5.3 Excerpts from manuals or other texts which are standard in the industry, if available, that support the Contractor's claim.

38.5.4 The details of the circumstances that gave rise to the claim.

38.5.5 The date(s) on which any and all events resulting in the claim occurred, and the date(s) on which conditions resulting in the claim first became evident to the Contractor.

38.5.6 Specific identification of any pertinent document, and detailed description of the substance of any material oral communication, relating to the substance of such claim.

38.5.7 If an extension of time is sought, the specific dates and number of Days for which it is sought, and the basis or bases for the extension sought. A critical path method, bar chart, or other type of graphical schedule that supports the extension must be submitted.

38.5.8 When submitting any claim over \$50,000, the Contractor shall certify in writing, under oath and in accordance with the formalities required by the contract, as to the following:

38.5.8.1 That supporting data is accurate and complete to the Contractor's best knowledge and belief;

38.5.8.2 That the amount of the dispute and the dispute itself accurately reflects what the Contractor in good faith believes to be the Department's liability;

38.5.8.3 The certification shall be executed by:

38.5.8.3.1 If the Contractor is an individual, the certification shall be executed by that individual.

38.5.8.3.2 If the Contractor is not an individual, the certification shall be executed by a senior company official in charge at the Contractor's plant or location involved or an officer or general partner of the Contractor having overall responsibility for the conduct of the Contractor's affairs.

38.6 Auditing of Claims: All claims filed against the Department shall be subject to audit by the Department or its agents at any time following the filing of such claim. The Contractor and its Subcontractors and suppliers shall cooperate fully with the Department's auditors. Failure of the Contractor, its Subcontractors, or its suppliers to maintain and retain sufficient records to allow the Department or its agents to fully evaluate the claim shall constitute a waiver of any portion of such claim that cannot be verified by specific, adequate, contemporaneous records, and shall bar recovery on any claim or any portion of a claim for which such verification is not produced. Without limiting the foregoing requirements, and as a minimum, the Contractor shall make available to the Department and its agents the following documents in connection with any claim that the Contractor submits:

38.6.1 Daily time sheets and foreman's daily reports.

38.6.2 Union agreements, if any.

38.6.3 Insurance, welfare, and benefits records.

38.6.4 Payroll register.

38.6.5 Earnings records.

38.6.6 Payroll tax returns.

38.6.7 Records of property tax payments.

38.6.8 Material invoices, purchase orders, and all material and supply acquisition contracts.

38.6.9 Materials cost distribution worksheets.

38.6.10 Equipment records (list of company equipment, rates, etc.).

38.6.11 Vendor rental agreements.

38.6.12 Subcontractor invoices to the Contractor, and the Contractor's certificates of payments to Subcontractors.

38.6.13 Subcontractor payment certificates.

38.6.14 Canceled checks (payroll and vendors).

38.6.15 Job cost reports.

38.6.16 Job payroll ledger.

38.6.17 General ledger, general journal (if used), and all subsidiary ledgers and journals, together with all supporting documentation pertinent to entries made in these ledgers and journals.

38.6.18 Cash disbursements journals.

38.6.19 Financial statements for all years reflecting the operations on the Project.

38.6.20 Income tax returns for all years reflecting the operations on the Project.

38.6.21 Depreciation records on all company equipment, whether such records are maintained by the company involved, its accountant, or others.

38.6.22 If a source other than depreciation records is used to develop costs for the Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents.

38.6.23 All documents which reflect the Contractor's actual profit and overhead during the years that the Project was being performed, and for each of the five years prior to the commencement of the Project.

38.6.24 All documents related to the preparation of the Contractor's bid, including the final calculations on which the total proposed Contract bid price as stated in the Bid Proposal Form was based.

38.6.25 All documents which relate to the claim or to any sub-claim, together with all documents that support the amount of damages as to each claim or sub-claim.

38.6.26 Worksheets used to prepare the claim, which indicate the cost components of each item of the claim, including but not limited to the pertinent costs of labor, benefits and insurance, materials, equipment, and Subcontractors' damages, as well as all documents which establish the relevant time periods, individuals involved, and the Project hours and the rates for the individuals.

38.6.27 The name, function, and pertinent activity of each Contractor's or Subcontractor's official, or employee, involved in or knowledgeable about events that give rise to, or facts that relate to, the claim.

38.6.28 The amount(s) of additional compensation sought and a break-down of the amount(s) into the categories specified as payable under Paragraph 38.4 above.

38.6.29 The name, function, and pertinent activity of each Department official, employee, or agent involved in or

knowledgeable about events that give rise to, or facts that relate to, the claim.

ARTICLE 39
DIESEL VEHICLE EMISSIONS CONTROL

39.1 The Contractor shall be responsible for compliance with the following provisions:

39.1.1 All Contractor and Subcontractor diesel powered non-road construction equipment with engine horsepower (HP) ratings of 60 HP and above, that are on the Project or are assigned to the Contract for a period in excess of 30 consecutive Days, shall be retrofitted with emission control devices in order to reduce diesel emissions. In addition, all motor vehicles and/or construction equipment (both on-highway and non-road) shall comply with all pertinent State and Federal regulations relative to exhaust emission controls and safety.

39.1.2 Retrofit emission control devices shall consist of oxidation catalysts, or similar retrofit equipment control technology that is:

39.1.2.1 Included on the U.S. Environmental Protection Agency (EPA) "Verified Technology List," as may be amended from time to time

<http://www.epa.gov/otaq/retrofit/retroverifiedlist.htm> and

39.1.2.2 Verified by EPA to provide a minimum emissions reduction of 20% particulate matter (PM₁₀), 40% carbon monoxide (CO), and 50% hydrocarbons (HC).

39.1.3 Construction shall not proceed until all diesel powered non-road construction equipment meeting the criteria in provision 39.1.1 have been retrofitted, unless the Commissioner grants a waiver under provision 39.2.

39.1.4 The Contractor shall at least monthly, assess which diesel powered non-road construction equipment are subject to these provisions. The Contractor shall notify the DPW Project Manager of any violations of these provisions.

39.1.5 Idling of delivery and/or dump trucks, or other diesel powered equipment shall be limited to three (3) minutes during non-active use in accordance with the Regulations of Connecticut State Agencies Section 22a-74-18(b)(3)(C), which states, in part:

"[N]o person shall cause or allow a Mobile Source to operate for more than three (3) consecutive minutes when such Mobile Source is not in motion, except as follows:

When a Mobile Source is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control,

When it is necessary to operate defrosting, heating or cooling equipment to ensure the safety or health of the driver or passengers,

When it is necessary to operate auxiliary equipment that is located in or on the Mobile Source to accomplish the intended use of the Mobile Source, (To bring the Mobile Source to the manufacturer's recommended)

When a Mobile Source is in queue to be inspected by U.S. military personnel prior to gaining access to a U.S. military installation."

39.1.6 All Work shall be conducted to ensure that no harmful effects are caused to adjacent Sensitive Receptor Sites. Diesel powered engines shall be located away from fresh air intakes, air conditioners, and windows.

39.1.7 If any diesel powered non-road construction equipment is found to be in non-compliance with these provisions by the DPW Project Manager, the Contractor will be issued a Non-Conformance Notice and given a 24 hour period in which to bring the equipment into compliance or remove it from the Project. The Contractor's failure to comply with these provisions shall be reason to withhold payment as described in Article 33.

39.1.8 Any costs associated with these provisions shall be included in the general cost of the contract. In addition, there shall be no time granted to the Contractor for compliance with these provisions. The Contractor's compliance with these provisions and any associated regulations shall not be grounds for a Change Order.

39.2 The Commissioner reserves the right to waive all or portions of these provisions at his/her discretion. The Contractor may request a waiver to all or portions of these provisions with written justification to the Commissioner as to why the Contractor cannot comply with these provisions. A waiver, to be effective, must be granted in writing by the Commissioner.

END



State of Connecticut



Department of Public Works

Retainage Reduction Request

To: David O'Hearn, P.E., Deputy Commissioner
Room 473B, 165 Capitol Avenue, Hartford, CT 06106

From: (), General Contractor

Subject: Project No. ()
Reduction of Retainage at ()% project completion

In accordance with the General Conditions, Article 28, (type general contractor's name) hereby requests a reduction of retainage to an amount of XX%. The following list of items required under the general conditions is in compliance with the terms of the contract and has been verified by the Contractor.

- Performance Evaluation is a minimum of 60%
- Timely submission of an appropriate and complete CPM Schedule or Construction Schedule and Schedule of Values, in compliance with the Contract requirements and the prompt resolution of the Owner's and/or A-E's comments on the submitted material resulting in an appropriate basis for progress of the Work.
- Timely and proper submission of all Contract Document required submissions: including but not limited to Shop Drawings, material certificates and material samples and the prompt resolution of the Owner's and/or Architect's or Engineer's comments on the submitted material resulting in an appropriate progress of the Work.
- Proper and adequate supervision and home office support of the Project.
- The Work completed to date has been installed or finished in a manner acceptable to the Owner.
- The progress of the Work is consistent with the approved CPM Schedule or Construction Schedule.
- All approved credit Change Orders have been invoiced.
- All Change Order requests for pricing are current.
- The Contractor has and is maintaining a clean worksite in accordance with the Contract Documents.
- All Subcontractor payments are current at the time of reduction request.
- Contractor is compliant with set-aside provisions of the contract.

Contractor Certification

_____	_____	_____
name	signature	date

Project Manager Recommendation

_____	_____	_____
name	signature	date

Approved

Deputy Commissioner David O'Hearn	_____	_____
	signature	date

SUPPLEMENTARY GENERAL CONDITIONS

The following supplements modify the State of Connecticut, "General Conditions of the Contract for Construction,. Where a portion of the General Conditions is modified or deleted by these Supplementary Conditions, the unaltered portions of the General Conditions shall remain in effect.

ARTICLE 1 DEFINITIONS

MODIFY as follows:

1.20 **DELETE** the title and definition "COMMISSIONER". All references to "Commissioner" in the General Conditions shall be replaced by "Owner" See Section 144, for definition of "Owner" Note that Article 25 is modified below by these Supplementary Conditions.

1.44 **DELETE** definition "OWNER OR DEPARTMENT: The State of Connecticut, Department of Public Works, acting through its Commissioner or specifically authorized Department personnel or agent."

ADD the following definition;

OWNER OR DEPARTMENT: Southern Connecticut State University, acting through its University Representative or specifically authorized Construction Administrator, Department personnel, or agent

1.65a **ADD** the following definition;

UNIVERSITY REPRESENTATIVE: The authorized representative for Southern Connecticut State University to act in matters involving revoking, altering, enlarging or relaxing any requirement of the contract documents.

ARTICLE 25 ALL WORK SUBJECT TO CONTROL OF THE COMMISSIONER

MODIFY as follows:

ADD the Following new Title:

ALL WORK SUBJECT TO CONTROL OF THE OWNER

25.1 **DELETE** this section: “The Commissioner hereby declares..... herein shall guide the Project Manager.”

ADD the following section:

“The Owner hereby declares that the University Representative is the Owner’s only authorized representative to act in matters involving the Owner’s or Architect’s ability to revoke, alter, enlarge or relax any requirement of the Contract Documents; to settle disputes between the Contractor and the Construction Administrator; and act on behalf of the Owner. In all such matters, the provisions of Articles 13 and 14 herein shall guide the University Representative.”

25.2 All references to “Commissioner” shall be replaced by “Owner”
thru
25.5:

END OF SECTION

01 00 00	DIVISION 01 GENERAL REQUIREMENTS (Small Projects)
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Section No.	Title	Page No.
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01 10 00	SUMMARY
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- 01 11 00 Summary of Work
- 01 11 13 Work Covered By Contract Documents
- 01 12 16 Work Sequence - Phase(s);
- 01 12 19 Contract Interface
- 01 14 00 Work Restrictions
- 01 14 16 Coordination With Occupants

01 20 00	PRICE AND PAYMENT PROCEDURES
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- 01 22 00 Unit Prices - General
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- 01 26 00 Contract Modification Procedures
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01 30 00	ADMINISTRATIVE REQUIREMENTS
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- 01 31 13 Project Coordination
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01 40 00	QUALITY REQUIREMENTS
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- 01 42 16 Definitions
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01 15 00	TEMPORARY FACILITIES AND CONTROLS
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- 01 51 13 Temporary Electricity And Lighting
- 01 51 16 Temporary Fire Protection
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- 01 51 36 Temporary Water
- 01 52 13 Field Offices And Sheds
- 01 52 19 Temporary Sanitary Facilities
- 01 54 00 Construction Aids
- 01 55 16 Haul Routes
- 01 56 00 Temporary Barriers And Enclosures
- 01 56 43 Temporary Protection
- 01 57 19 Temporary Environmental Controls

01 60 00 PRODUCT REQUIREMENTS

01 60 00 Product Requirements

01 70 00 EXECUTION AND CLOSEOUT PROCEDURES

01 73 29 Cutting and Patching
01 74 13 Progress Cleaning
01 77 00 Closeout Procedures
01 78 30 Warranties And Bonds

01 10 00 SUMMARY

A. **Summary:** Section 01 10 00 Summary contains the following Subsections:

01 11 00 Summary of Work
01 11 13 Work Covered By Contract Documents
01 12 16 Work Sequence - Phase(s);
01 12 19 Contract Interface
01 14 00 Work Restrictions
01 14 16 Coordination With Occupants

01 11 00 SUMMARY OF WORK

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Project Number:** SCSU-2019-04.
- C. **Project Title: Moore Field House - First Floor Restroom Renovations - 2019.**
It is to be completed and ready for use by the Owner and Agency within the Contract Time specified in Division 00, Bid Proposal Form.
- D. **Project Location:** Southern Connecticut State University, located in Hamden & New Haven, Connecticut.
- E. **The Project Description:**
1. Project is for the Men's and Women's Restrooms Renovations (Approximately 630 Sq. Ft.) at the first floor lobby of Moore Field House.
 2. Demolition includes removal of all existing plumbing fixtures and controls, metal stall partitions, ceramic wall tile wainscot and ceramic floor tile, lighting fixtures, restroom accessories and doors and frames. Existing plumbing roughing and carriers will remain – See Unit Price sections on possible removal of plumbing & carriers.
 3. New ceramic wall and floor tile will be installed over existing CMU wall and concrete slab floor construction. New work includes vitreous china plumbing fixtures and solid surface integrated countertop lavatories, sensor activated faucets and valves, electric hand dryers and lighting fixtures, toilet & urinal partitions, and restroom accessories.
 4. In addition, new metal doors and frames will be installed in enlarged masonry openings. Access doors will be installed in existing openings. The existing plaster ceilings, registers and grilles will remain, and they will be painted.
 5. The existing construction is concrete masonry units and steel beams supporting steel floor & roof joists.
 6. This Project **does not Exceed** the Threshold Limits as defined by the Connecticut General Statutes.

01 11 13 WORK COVERED BY CONTRACT DOCUMENTS

- A. Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B.** The Work includes but is not limited to the following:
1. Project is for the Men's and Women's Restrooms Renovations (Approximately 630 Sq. Ft.) at the first floor lobby of Moore Field House.
 2. Demolition includes removal of all existing plumbing fixtures and controls, metal stall partitions, ceramic wall tile wainscot and ceramic floor tile, lighting fixtures, restroom accessories and 0 doors and frames. Existing plumbing roughing and carriers will remain – See Unit Price sections on possible removal of plumbing & carriers.
 3. New ceramic wall and floor tile will be installed over existing CMU wall and concrete slab floor construction. New work includes vitreous china plumbing fixtures and solid surface integrated countertop lavatories, sensor activated faucets and valves, electric hand dryers and lighting fixtures, toilet & urinal partitions, and restroom accessories.
 4. In addition, new metal doors and frames will be installed in enlarged masonry openings. Access doors will be installed in existing openings. The existing plaster ceilings, registers and grilles will remain, and they will be painted.
- C.** The Contractor will include in his bid, all items required in order to carry out the intent of the work as described, shown and implied in the Contract Documents.
- D.** It shall be the Contractor's responsibility upon discovery to immediately notify the Construction Administrator, in writing, of errors, omissions, discrepancies, and instances of noncompliance with applicable codes and regulations within the documents, and of any work which will not fit or properly function if installed as indicated on the Contract Documents. Any additional costs arising from the Contractor's failure to provide such notification shall be borne by the Contractor.
- E.** The Work will be constructed under a single lump sum total price of the individual base Bids and Supplemental Bids.
- F. Examination Of Site:**
1. It is not the intent of the Documents to show all existing conditions. All contractors are advised to visit and examine the site with the Construction Administrator prior to submitting bids.
 2. Contractors should investigate and satisfy themselves as to the conditions affecting the work, including but no restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, uncertainties of weather, roads or similar physical conditions of the ground, the character of equipment, and facilities needed preliminary to and during the prosecution of the Work. The Contractor should further satisfy himself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, as well as from information presented by the Contract Documents. Any failure by the Contractor to acquaint himself with the available information shall not relieve him from the responsibility for estimating properly the difficulty and cost of successfully performing the Work.
 3. **Pre-Bid Conference:**
A Pre-Bid Conference and tour of the site will be conducted as scheduled in the Invitation to Bid. This scheduled conference is the only official opportunity for the bidders to tour the site with the University Representative, Construction Administrator, and Agency.
- G. Project Documents:**
1. The Specifications and Drawings are intended to describe and illustrate the materials and labor necessary for the work of this Project.
- H.** The General Contractor will be given **5 (Five)** sets of the Contract Documents on or about the time of execution of Contract, free of charge. If additional copies are wanted, they will be available at the direct additional cost of their reproduction, to the contractor.

I. Waste Management Goals:

1. The Contractor shall use all means available to divert, to the greatest extent practical and economically feasible, construction waste from landfills and incinerators.
2. Of the inevitable waste that is generated, as many of the waste materials as economically feasible shall be recycled. Waste disposal in landfills shall be minimized.
 - a. A local contractor who will take construction debris for recycling is
Stratford Baling
80 Garfield Avenue
Stratford, CT 06615
(203) 377-7491
3. With regard to these goals, the Contractor shall develop, for the Construction Administrator's review, a Waste Management Plan for this Project. Contractor **will be required** to provide tonnage report from the hauler/waste management company for any recycled material.
4. Take a pro-active, responsible role in management of construction waste and require all subcontractors, vendors and suppliers to participating in the effort. Establish a construction waste management program that includes the following categories:
 - a. Minimizing packaging waste.
 - b. Recycling.
 - c. Disposal.

01 12 16 WORK SEQUENCE - PHASE(S)

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. The entire Project shall be constructed in One Phase. Work shall be substantially complete, ready for occupancy, as noted on the Bid Form.

01 12 19 CONTRACT INTERFACE

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Owner & Agency:** The Owner & Agency is the Southern Connecticut State University, State of Connecticut.
 1. The University Representative is Peter Visentin, AIA, Director, Facilities Planning and Architectural Services, located at 615 Fitch Street, Hamden, CT 06514. Phone: 203-392-6055; Fax: 203-392-6058; E-mail: visentinp1@southernct.edu.
 2. The University Representative is the authorized representative for Southern Connecticut State University to act in matters involving revoking, altering, enlarging or relaxing any requirement of the contract documents.
 3. References in this project manual to Project Manager or Agency Representative means the University Representative as defined above.
- C. **Construction Administrator:** The Construction Administrator is Michael Tucker, and is located at 615 Fitch Street, Hamden, CT, 06514. Phone: (203) 392-6054; Fax: (203) 392-6058. E-mail: tuckerm1@southernct.edu.
 1. The Construction Administrator is referred to in the Contract Documents as "Construction Administrator" or "Construction Manager" or by pronouns which imply it. All communications concerning the project will be directed through the Construction Administrator or a designated representative(s).
 2. As information to the Contractor, the Construction Administrator's status is defined as follows:

- 2.1 The Construction Administrator is the Owner's Agent who will, among other things, monitor the General Contractor's performance, scheduling and construction, process shop drawings, material, and equipment submittals, review and process periodic billings, review and recommend cost changes.
- 2.2 The Construction Administrator will process all requests for information, interpretations and decisions regarding the meaning and intent of the Contract Documents, consulting with appropriate parties prior to rendering the interpretations or decisions to the Contractor. All such requests and replies shall be in writing.

01 14 00 WORK RESTRICTIONS

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- A. The Contractor shall confine his operations, including storage of apparatus, equipment and materials to the contract limit lines as directed by the Construction Administrator.
- B. The areas and/or spaces, including their access, shall be maintained free and clear throughout the contract term.
- C. Parking for Contractor's employees will be limited to an area (or areas) designated by the Construction Administrator. The Contractor may be required to provide identification stickers for employees' cars.

01 14 16 COORDINATION WITH OCCUPANTS

- A. Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Full Agency Occupancy During Construction:** The Agency will occupy the site and existing building during the entire construction period. Cooperate with the Agency during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with the Agency's operations.

 - 1. Provide adequate building and fire code egress from the buildings during the renovation process. The Contractor will be responsible to maintain and protect egress ways during the construction sequence per the design as supplied by the Architect. Contractor shall be responsible for preparing egress plans for Owner approval and for Office of State Building Official and Office of State Fire Marshal for approval if required.
- C. Partial Agency Occupancy:** The Agency reserves the right to occupy and to place and install equipment in completed areas of the building prior to Substantial Completion, provided such occupancy does not interfere with completion of the Work. Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work.

 - 1. Should it become necessary or advisable, as the work nears final completion, for the Agency to occupy a portion of the building prior to final acceptance, the Contractor shall cooperate in completing such areas and making same accessible.
 - 2. The Construction Administrator will determine whether such occupancy or use is possible and, if so, will make arrangements for holding a job inspection with the Project Manager, Agency Representative, Architect and General Contractor.
 - 3. A comprehensive list of items to be completed or corrected as issued by the General Contractor, together with the status of completion and terms of occupancy, will be forwarded to the Project Manager and the Architect by the Construction Administrator. A letter will be issued by the Project Manager and Architect to Construction Administrator granting such occupancy and will state the terms and conditions of occupancy.
 - 4. Prior to partial Agency occupancy, mechanical and electrical systems shall be fully operational. Required inspections and tests shall have been successfully completed. Upon occupancy, the Agency will operate and maintain mechanical and electrical systems serving occupied portions of the building.
 - 5. The Construction Administrator will prepare a "Certificate of Substantial Completion" for each specific portion of the Work to be occupied prior to Agency occupancy. Use the "Certificate of Substantial Completion" form as required by the Owner.
 - 6. The Project Manager will request a signed "Certificate of Compliance" from the , Architect, and Contractor, and forward the Certificate to the Office of State Building Inspector for a Certificate of Occupancy and obtain the same after his review and approval.
 - 7. Upon occupancy, the Agency will assume responsibility for maintenance and custodial service for occupied portions of the building.
 - 8. Work after Partial Agency Occupancy:**

 - 8.1 For all work to complete the area occupied, warranty work, the balancing and commissioning of systems, repair of latent defects and adjustments after partial occupancy, the contractor is responsible for all costs associated with working in occupied buildings.

C. Agency Occupancy:

1. The Construction Administrator will determine whether such occupancy is possible and, if so, will make arrangements for holding a job inspection with the Project Manager, Agency Representative, Architect and General Contractor.
2. A comprehensive list of items to be completed or corrected as issued by the General Contractor, together with the status of completion and terms of occupancy, will be forwarded to the Project Manager and the Architect by the Construction Administrator. A letter will be issued by the Project Manager and Architect to Construction Administrator granting such occupancy and will state the terms and conditions of occupancy.
3. Prior to Agency occupancy, mechanical and electrical systems shall be fully operational. Required inspections and tests shall have been successfully completed. Upon occupancy, the Agency will operate and maintain mechanical and electrical systems serving occupied portions of the building.
4. The Construction Administrator will prepare a "Certificate of Substantial Completion" for the Work to be occupied prior to Agency occupancy. Use the "Certificate of Substantial Completion" form as required by the Owner.
5. The Project Manager will request a signed "Certificate of Compliance" from the Architect, and Contractor, and forward the Certificate to the State Building Inspector a Certificate of Occupancy and obtain the same after his review and approval.
5. Upon occupancy, the Agency will assume responsibility for maintenance and custodial service for occupied portions of the building.
6. **Work after Agency Occupancy:**
 - 6.1 For all work to complete the occupied building, warranty work, the balancing and commissioning of systems, repair of latent defects and adjustments after occupancy, the contractor is responsible for all costs associated with working in occupied buildings.

End
Section 01 10 00
Summary

01 20 00 PRICE AND PAYMENT PROCEDURES

A. **Summary:** Section 01 20 00 Price And Payment Procedures contains the following subsections:

- 01 22 00 Unit Prices - General**
- 01 25 00 Substitution Procedures**
- 01 26 00 Contract Modification Procedures**
- 01 29 76 Progress Payment Procedures**

01 22 00 UNIT PRICES - GENERAL

1. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
2. **Definition - Unit Price:** Amount the General Contractor acknowledges in the Bid Proposal Form as a price per unit of measurement for materials or services as described in the Bidding Documents or in the Contract Documents.
3. **Procedures:**
 1. Unit Prices included in the Contract Documents are to be used for determining compensation to the Contractor or Owner for changes to the scope of the work indicated in the Contract Documents, and included in the Lump Sum Contract Price. Special Unit Prices are for items complete, in place, and shall be inclusive of furnishing and installing of all material, labor, trucking, overhead, profit, equipment, hoisting, engineering, scaffolding, power hookups, protection, shop drawings, taxes, permits, appliances, delivery, insurance, supervision, cost of bond, etc. and shall remain in effect until completion of the Contract.
 2. **Unit Price:** Is identified by the Owner as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if the estimated quantities of Work required by the Contract Documents are increased or decreased.
 3. **Increases or Decreases:** Should the amount of the Work required be increased or decreased because of changes in the work ordered in writing by the Project Manager, the Undersigned agrees that the following supplemental UNIT PRICES will be decreased 10% for a reduction of work. Each Unit Price shall include all equipment, tools, labor, permits, fees, etc., incidental to the completion of the work involved. All items marked with an asterisk (*) in the unit price schedules shall include the completion of the excavation, formation and compaction of sub-grade and the disposal of surplus or unsuitable materials in accordance with the Plans and Specifications or as directed by the Construction Administrator.
4. The Owner reserves the right to reject the Contractor's measurement of work-in-place that involves use of established unit prices, and to have this work measured, at the Owner's expense, by an independent surveyor acceptable to the Contractor.
5. **Defect Assessment:** Replace the Work, or portions of the Work, not conforming to the specified requirements, If, in the opinion of the Architect/Engineer it is not practical to remove and replace the work the Architect/Engineer will direct an appropriate remedy or adjust the payment.
6. Unit Price Schedule: See Bid Form for listing of Unit Prices. Specification Sections contain requirements for materials described under each unit price.
7. Unit prices shall be negotiated if there is a change in scope of work.

01 25 00 SUBSTITUTION PROCEDURES

- A. Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Summary**
1. This Section includes administrative and procedural requirements for handling requests for equals and substitutions made after award of the Contract.
 2. Related Sections: The following Sections contain requirements that relate to this Section:
 - 2.1 Division 01 Section 01 33 00 "Submittal Procedures" specifies requirements for submitting the Contractor's Construction Schedule and the Submittal Schedule.
 - 2.2 Division 01 Section 01 42 19 "Reference Standards" specifies the applicability of industry standards to products specified.
 - 2.3 Division 01 Section 01 60 00 "Product Requirements" specifies requirements governing the Contractor's selection of products and product options.
- C. Definitions**
1. Definitions in this Article do not change or modify the meaning of other terms used in the Contract Documents.
 2. **Equals or Substitutions General:** Changes in products, materials, equipment, and methods of construction required by the Contract Documents proposed by the Contractor after award of the Contract.
- D. Submittals**
1. **Equals and Substitution Request Submittals:** The Owner will consider requests for equals or substitutions if made prior to the Receipt of the Competitive Bid. The information on all materials shall be consistent with the information herein. After the contract award, substitutions will be considered for materials or systems specified that are no longer available. It will not be considered if the product was not purchased in a reasonable time after award. The Contractor shall submit all equal and substitutions requests on the "Substitution Request" Form at the end of this Section. See Article 15 in the General Conditions for further refinement and information.
 - 1.1 The Contractor is required to prepare and submit three (3) copies of the required data for the first manufacturer listed or procedure listed in the specifications section with reference to all of the following areas: the substance and function considering quality, workmanship, economy of operation, durability and suitability for purposes intended including the size, rating and cost. All submissions must include all the required data for the first listed manufacturer or procedure as specified, as well as the required data for the proposed Equal or Substitution. This will enable the Owner and Architect to determine that the proposed Equal or Substitution is or is not substantially equal to the first listed manufacturer or procedure.
 2. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers.
 3. Provide complete documentation showing compliance with the requirements for equals or substitutions, and the following information, as appropriate:
 - 3.1 Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and separate contractors that will be necessary to accommodate the proposed Equal or Substitution.
 - 3.2 A detailed comparison chart of significant qualities of the proposed substitution with those of the Work specified. Significant qualities may include elements, such as performance, weight, size, durability, and visual effect.

- 3.3 Product Data, including Shop Drawings and descriptions of products and fabrication and installation procedures.
 - 3.4 Samples, where applicable or requested.
 - 3.5 A statement indicating the effect on the Contractor's Construction Schedule compared to the schedule without approval of the Equal or Substitution. Indicate the effect on overall Contract Time.
 - 3.6 Cost information, broken down, including a proposal of the net change, if any in the Contract Sum.
 - 3.7 The Contractor's certification that the proposed Equal or Substitution conforms to requirements in the Contract Documents in every respect and is appropriate for the applications indicated.
 - 2.8 The Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the Equal or Substitution to perform adequately.
4. **Construction Administrator's Action:** If necessary, the Construction Administrator will request additional information or documentation for evaluation within **seven (7)** Calendar Days of receipt of the original request for equal or substitution request. The Construction Administrator who will notify the Owner of recommended acceptance or rejection of the proposed equal or substitution, within **fourteen (14)** Calendar Days of receipt of the request, or **seven (7)** Calendar Days of receipt of additional information or documentation, whichever is later. The Construction Administrator will give final acceptance or rejection by the Owner not less than **seven (7)** Calendar Days after notification.
- 1.1 Any request deemed an "Equal" and accepted by the Construction Administrator, Owner, and Agency will result in written notification to the Contractor and will not be in the form of a change order for an "Equal".
 - 1.2 Any request deemed a "Substitution" and rejected or approved by Construction Administrator, and Owner may result in written notification to the Contractor and may be in the form of a Change Order if the "Substitution" is approved.

D. Equal Or Substitutions

- 1. **Conditions:** The Construction Administrator will consider the Contractor's request for Equal or Substitution of a product or method of construction when one or more of the following conditions are satisfied, as determined by the Architect. If the following conditions are not satisfied, the Construction Administrator will return the requests to the Construction Administrator without action except to record noncompliance with these requirements.
 - 1.1 The proposed request does not require extensive revisions to the Contract Documents.
 - 1.2 The proposed request is in accordance with the general intent of the Contract Documents.
 - 1.3 The proposed request is timely, fully documented, and/or properly submitted.
 - 1.4 The proposed request can be provided within the Contract Time. However, the Construction Administrator will not consider the proposed request if it is a result of the Contractor's failure to pursue the Work promptly or coordinate activities properly.
 - 1.5 The proposed request will offer the Owner a substantial advantage, in cost, time, energy conservation, or other considerations, after deducting additional responsibilities the Owner must assume. However, if the proposed request requires the Owner to incur additional responsibilities, including but not limited to, additional compensation to the Architect for redesign and evaluation services, increased cost of other construction by the Owner or similar considerations, then the Owner will have just cause to reject the request for Equal or Substitution.
 - 1.6 The proposed request can receive the necessary approvals, in a timely manner, required by governing authorities having jurisdiction.
 - 1.7 The proposed request can be provided in a manner that is compatible with the Work as certified by the Contractor.

- 1.8** The proposed request can be coordinated with the Work as certified by the Contractor.
 - 1.9** The proposed request can uphold the warranties required by the Contract Documents as certified by the Contractor.
- 2.** The Contractor's submission and the Construction Administrator's review of Submittals, including but not limited to, Samples, Manufacturer's Data, Shop Drawings, or other such items, which are not clearly identified as a request for an Equal or Substitution, will not be considered or accepted as a valid request for an Equal or Substitution, nor does it constitute an approval.
- 3.** **Equal or Substitution Produce Request Form** (Example):



Equal or Substitute Product Request



State of Connecticut Pre-Bid Post-Bid. 15.3.2.1 Post Bid. 15.3.2.2 Post-Bid. 15.3.2.3 Department of Public Works

SEE PROCEDURE AND INSTRUCTIONS

To: State of Connecticut
 Department of Public Works

Request No.: _____ **Dated:** _____
 Department of Public Works Project Number: _____
 Project Name and Location: _____

References: Specifications - Section: _____ Paragraph(s): _____
 Drawings - Drawing No.: _____ Detail(s): _____

Contractually Specified Product: _____
 Contractor Proposed Product: _____

Proposed product is an Equal Substitute Product Model Number: _____
 Proposed product is New 2-5 Years Old 5-10 Years Old More than 10 Years

See attached data for both Specified and Proposed Products as required by Specifications for this Project
 Data attached: Drawings Product Data Reports Samples Tests Other: _____

Reason(s) for not providing the Specified Product:

Similar Installation:
 Project: _____ Owner: _____
 Location: _____ Consultant: _____
 Date Installed: _____

Will proposed Substitute Product impact other parts of the Work? No Yes - see attached Explanation
 Will proposed Substitute Product increase the Contract Time? No Yes - by _____ Days

The Undersigned Certifies that the proposed Request for an Equal or Substitute Product conforms to the Specifications for this project,

Request submitted by the General Contractor: _____ name
 By: _____ name title signature date

CONTRACTOR - Send copies to: Supervising Project Manager - Project Manager - Construction Administrator

Consultant's Review - This Substitution Request is:
 Approved Approved as Noted Rejected - Use Specified Material(s).

Review
Issued by: _____ name signature date

Consultant - Send completed copies to: PM C A Other: _____

Approved as noted by Consultant
 _____ Project Manager signature date

Copy: Project File File R2

01 26 00 CONTRACT MODIFICATION PROCEDURES

- A. Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Summary**
1. This Section specifies administrative and procedural requirements for handling and processing contract modifications.
- C. Related Sections:** The following Sections contain requirements that relate to this Section:
1. Division 01 Section 01 25 00 "Substitution Procedures" for administrative procedures for handling requests for substitutions made after award of the Contract.
 2. Division 01 Section 01 29 76 "Progress Payment Procedures" for administrative procedures governing Applications for Payment.
 3. Division 01 Section 01 32 16 "Construction Progress Schedules" for requirements for construction scheduling and reporting progress of work.
 4. Division 01 Section 01 33 00 "Submittal Procedures" for requirements for submittal of the Construction Progress Schedule.
 5. Division 00 General Conditions "Article 13" "Change Orders".
- D. Requests For Information**
1. In the event that the Contractor or subcontractor, at any tier, determines that some portion of the drawings, specifications, or other contract documents requires clarification or interpretation by the Architect, the Contractor shall submit a "Request for Information" in writing to Architect via the Construction Administrator. "Requests for Information" may only be submitted by the Contractor and shall only be submitted on the "Request for Information" forms as required by the Owner.
 - 1.1 In the "Request for Information", the Contractor shall clearly and concisely set forth the issue for which clarification or interpretation is sought and why a response is needed from the Architect.
 - 1.1 In the "Request for Information", the Contractor shall set forth an interpretation or understanding of the requirement along with reasons why such an understanding was reached.
 - 1.2 The Architect and Construction Administrator will review all "Requests for Information" to determine whether they are valid "Requests for Information". If it is determined that the document is not a valid "Request for Information", it will be returned to the Contractor, unreviewed as to content, for resubmittal on the proper form and in the proper manner.
 - 1.3 A "Requests for Information Response" shall be issued within **seven (7)** Calendar Days of receipt of the request from the Contractor unless the Owner determines that a longer time is necessary to provide an adequate response.
 - 1.4 A "Request for Information Response" from the Architect will not change any requirement of the Contract Documents. In the event the Contractor believes that the "Request for Information Response" will cause a change to the requirements of the Contract Documents, the Contractor shall within **seven (7)** Calendar Days give written notice to the Construction Administrator stating that the Contractor believes the "Request for Information Response" will result in a "Change Order" and the Contractor intends to submit a "Change Order Proposal" request. Failure to give such written notice **seven (7)** Calendar Days shall waive the Contractor's right to seek additional time or cost under the requirement these Requirements.

E. Minor Changes In The Work

1. The Architect, through the Construction Administrator, will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or Contract Time, on the "Supplemental Instructions" form as required by the Owner.

F. Proposal Request

1. **Architect/Owner-Initiated Requests For Proposals:** The Architect or Owner will issue a detailed description of proposed changes in the Work via the Construction Administrator that will require adjustment to the Contract Sum or Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications. Such requests shall be on a "Proposal Request" form as required by the Owner.
 - 1.1 "Proposal Request" is issued for information only. Do not consider them as an instruction either to stop work in progress or to execute the proposed change.

G. Change Order Proposal:

1. When either a "Request for Information" from the Contractor or a "Proposal Request" from the Architect or Owner results in conditions that may require modifications to the Contract, the Contractor may propose changes by submitting a request for a "Change Order Proposal" to the Architect via the Construction Administrator on forms as required by the Owner. These forms shall also include "Change Order Proposal Worksheets" as required by the Owner.
2. **"Change Order Request" Forms:** Use "Change Order Proposal" and "Change Order Proposal Worksheets" forms as required by Owner.

H. Construction Change Directive:

1. **"Construction Change Directive":** When the Owner and the Contractor disagree on the terms of a "Change Order Proposal" resulting from either a "Request for Information" or "Proposal Request", then the Architect through the Construction Administrator may issue a "Construction Change Directive" on a "Construction Change Directive" form as authorized by the Owner. The "Construction Change Directive" instructs the Contractor to proceed with a change in the Work, for subsequent inclusion in a "Change Order".
2. **Documentation:** The Contractor shall maintain detailed records on a time and material basis of work required by the "Construction Change Directive".
 - 2.1 After completion of the change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.
 - 2.2 The final value shall be negotiated based on the supporting data to determine the value of the work.
3. **Change Order Procedures:**
 - 3.1 Upon the Owner's approval of a Contractor's "Change Order Proposal", the Construction Administrator will issue a "Change Order" for signatures of the Architect, Owner and the Contractor on a "Change Order" form as required by the Owner.

01 29 76 PROGRESS PAYMENT PROCEDURES

- A. Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Summary:**
1. This Section specifies procedures for preparation and submittal of the Contractor's Applications for Payment.
 2. **Related Sections:** The following Sections contain requirements that relate to this Section.
 - 2.1 **Division 00 Notice to Bidders:** Article 10.
 - 2.2 **General Conditions:** Articles: 27 "Schedule of Values, Application for Payment"; 28 "Partial Payments"; 31 "Final Payment"; and 32 "Owner's Right to Withhold Payments".
 - 2.3 Division 01 Section 01 32 16 "Construction Progress Schedules" for requirements for construction scheduling and reporting progress of work.
 - 2.4 Division 01 Section 01 33 00 "Submittal Procedures".
 - 2.5 Division 01 Section 01 77 00 "Closeout Procedures" for requirements for Final Payment.
- C. Schedule Of Values:**
1. **Coordination:** Coordinate preparation of the "Schedule of Values" with preparation of the Construction Schedule. Use "Schedule of Values" form as required by the Owner.
 - 1.1 Submit the "Schedule of Values" to the Construction Administrator at the earliest possible date but no later than **twenty-one (21)** Calendar Days after Contract Start Date.
 2. **Format and Content:** Use the Project Manual Table of Contents as a guide to establish the format for each "Schedule of Values". Provide at least one line item for each Specification Section.
 - 2.1 Identification: Project identification on the Schedule of Values shall include, but not be limited to, the following:
 - 2.1.1 *Owner;*
 - 2.1.2 *Project Number;*
 - 2.1.3 *Project Name;*
 - 2.1.4 *Project Location;*
 - 2.1.5 *Contractor's name and address.*
 - 2.2 Arrange the "Schedule of Values" in tabular format as required by the Owner, containing separate columns including, but not limited to, the following Items:
 - 2.2.1 *Item Number;*
 - 2.2.2 *Description of Work with Related Specification Section or Division Number;*
 - 2.2.3 *Scheduled Values.*
 - 2.2.4 *Retainage;*
 - 2.2.5 *Contract sum in sufficient detail.*
 3. Percentage of Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
 4. Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual Table of Contents.

5. Round amounts to nearest whole dollar; the total shall equal the Contract Sum.
 6. **Unit-Cost Allowances:** Show the line-item value of unit-cost allowances, as a product of the unit cost, multiplied by the measured quantity. Estimate quantities from the best indication in the Contract Documents.
 7. **General Conditions:** Each item in the Schedule of Values and the Applications for Payment shall be complete. Include the total cost and proportionate share of general overhead and profit margin for each item.
- D. Applications For Payment:**
1. Each of Application for Payment shall be consistent with previous applications and payments as certified by the Architect and Construction Administrator and paid for by the Owner.
 2. **Payment-Application Terms:** The Owner will process monthly progress payments. The Contractor may submit applications for payment on a monthly basis.
 3. **Payment-Application Forms:** Use the "Application for Payment" form as required by the Owner. Present the required information on electronic media printout or Owner approved form; multiple pages should be used if required.
 - 3.1 For each item, provide a column including but not limited to the following items:
 - 3.2 Item Number.
 - 3.4 Description of Work and Related Specification Section or Division.
 - 3.5 Scheduled Value, break down by units of material and units of labor.
 - 3.6 Work Completed from previous application.
 - 3.7 Work Completed this period.
 - 3.7.1 Materials presently stored.
 - 3.7.2 Total Completed and stored to date of application.
 - 3.7.3 Percentage of Completion.
 - 3.7.4 Balance to Finish.
 - 3.7.5 Retainage.
- E. Application Preparation:** Complete every entry on the Application form. At the time of Final Payment only, include an executed Application form by a person authorized to sign legal documents on behalf of the Contractor. The Construction Administrator will return incomplete Applications without action.
1. Entries shall match data on EACH "Schedule of Values".
 2. Include amounts of Change Orders issued prior to the last day of the construction period covered by the application.
- F. Transmittal:** Except for final payment, submit to the Construction Administrator by a method ensuring receipt within **forty-eight (48)** hours. The contractor is encouraged to first submit a 'pencil' copy of each Application electronically for review and comment. **One (1)** complete, signed and notarized original of each Application for Payment, including lien waivers and similar attachments when required.
- G. Applications for Payment:** Administrative actions and submittals, that must precede or coincide with submittal of the first Application for Payment and all subsequent Application for Payments including, but not limited to, the following items:
1. List of subcontractors and suppliers' name, FEIN/Social Security numbers, and Connecticut Tax Registration Numbers;
 2. List of principal suppliers and fabricators;
 3. Schedule of Values;
 4. Contractor's Construction Schedule;
 5. Schedule of principal products;

6. Submittal Schedule (preliminary if not final);
 7. List of Contractor's staff assignments;
 8. List of Contractor's principal consultants;
 9. Copies of all applicable permits;
 10. Copies of authorizations and licenses from governing authorities for performance of the Work;
 11. Proof that subcontractors have been paid amounts included on the Contractor's Application for Payment within thirty (30) days after the Owner has paid the Contractor for the particular Application for Payment in accordance with Connecticut General Statute § 49-41a (a)(1).
 12. Releases of Lien from subcontractors with amounts included on the Contractor's Application for Payment when Contractor has been paid by the Owner for the particular Application for Payment but the subcontractors have not been paid.
 13. Proof that as-built documents are updated as required by Section 01 77 00 "Closeout Procedures."
 14. Initial as-built survey and damage report, if required.
 15. In accordance with CGS § Section 1. Section 42-158j:
Each payment requisition submitted shall include a statement showing the status of all pending construction change orders, other pending change directives and approved changes to the original contract or subcontract. Such statement shall identify the pending construction change orders and other pending change directives, and shall include the date such change orders and directives were initiated, the costs associated with their performance and a description of any work completed. As used in this section, "pending construction change order" or "other pending change directive" means an authorized directive for extra work that has been issued to a contractor or a subcontractor.
- H. Application for Payment at Substantial Completion:** Following issuance of the Certificate of Substantial Completion submit an Application for Payment form; use the form as required by the Owner.
1. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
 2. Administrative actions and submittals that shall precede or coincide with this application include, but are not limited to, the following:
 - 2.1 *Occupancy permits and similar approvals;*
 - 2.2 *Warranties (guarantees) and maintenance agreements;*
 - 2.3 *Test/adjust/balance records;*
 - 2.4 *Maintenance instructions;*
 - 2.5 *Meter readings;*
 - 2.6 *Startup performance reports;*
 - 2.7 *Changeover information related to Owner's occupancy, use, operation, and maintenance;*
 - 2.8 *Final cleaning;*
 - 2.9 *Application for reduction of retainage and consent of surety;*
 - 2.10 *Advice on shifting insurance coverage;*
 - 2.11 *Final progress photographs;*
 - 2.12 *List of incomplete Work, recognized as exceptions to Architect's Certificate of Substantial Completion.*
- I. Final Payment Application:** Administrative actions and submittals that must precede or coincide with submittal of the final Application for Payment include, but are not limited, to the following:
1. *Completion of Project Closeout requirements.*

2. *Completion of list of items remaining to be completed as indicated on the attachment to the Certificate of Substantial Completion.*
3. *Ensure that unsettled claims will be settled.*
4. *Ensure that incomplete Work is not accepted and will be completed in accordance with a schedule prepared by the Contractor which is acceptable to the Owner.*
5. *Transmittal of required Project construction records to the Owner (including as-built documents specified in Section 01 77 00 "Closeout Procedures").*
6. *Certified property survey.*
7. *Proof that taxes, fees, and similar obligations were paid.*
8. *Removal of temporary facilities and services.*
9. *Removal of surplus materials, rubbish, and similar elements (Reference Section 01 74 19 "Construction Waste Management & Disposal").*
10. *Change of door locks to Owner's access.*
11. *The requirements of the General Conditions and Supplementary Conditions for Final Acceptance, Final Completion, Final Inspection, and Final Payment.*
12. *Asbestos, lead or other hazardous material manifests.*
13. *Completion of "Building Contractor Reporting Form" as supplied by Department of Public Works, for all Contractors, Subcontractors, Vendors, Suppliers, etc. who work on the Contract. The form includes the following information:*
 - 13.1 *Contractor/Subcontractor name.*
 - 13.2 *FEIN/Social Security Numbers*
 - 13.3 *Connecticut Tax Registration Numbers*
 - 13.4 *Type of work*
 - 13.5 *Name of business and address*
 - 13.6 *Remittance address.*

End
Section 01 20 00
Price And Payment Procedures

01 30 00 ADMINISTRATIVE REQUIREMENTS

A. **Summary:** Section 01 30 00 Administrative Requirements contains the following Subsections:

- 01 31 13 **Project Coordination**
- 01 31 19 **Project Meetings**
- 01 32 16 **Construction Progress Schedules**
- 01 33 00 **Submittal Procedures**
- 01 35 16 **Alteration Project Procedures**
- 01 35 53 **Security Procedures**

01 31 13 PROJECT COORDINATION

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Related Sections:** The following Sections contain requirements that relate to this section
1. **Section 01 29 76 “Progress Payment Procedures”** submission of Schedule of Values and Applications for payment.
- C. **Construction Administrator:**
1. The Construction Administrator is identified in Division 01 **Section 01 12 19 “Contract Interface”**.
 2. **Construction Mobilization:**
 - 2.1 Cooperate with the Construction Administrator in the allocation of mobilization areas of the site, for field offices and sheds, for agency facility access, traffic, and parking facilities.
 - 2.2 During Construction, coordinate use of site and facilities through the Construction Administrator.
- D. **Administrative Procedures:** Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and assure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
- F. **General Coordination Provisions:**
1. **Inspection of Conditions:** Require the Installer of each major component to inspect both the substrate and conditions under which Work is to be performed and coordinate such inspections with the Construction Administrator and authorities having jurisdictions. If unsatisfactory conditions exist notify the Construction Administrator immediately. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.
 2. The Construction Administrator will meet with the Contractor on all major items of coordination.
 3. See also **Division 00 General Conditions, Article 7 “Cooperation of Trades”**.

01 31 19 PROJECT MEETINGS

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Pre-construction Conference:**
1. The Contractor will attend a Pre-construction Conference before starting construction, as scheduled by the Construction Administrator convenient to the Owner, the Construction Administrator, Architect, and Contractor. If possible, this meeting will take place within **fourteen (14) Calendar Days** after the written Notice to Proceed and before the Contract

Start Date. Hold the conference at the Project Site or another convenient location as directed by the Construction Administrator. The Construction Administrator shall conduct the Pre-construction Conference to review the Contractor and Subcontractor responsibilities and personnel assignments.

2. **Attendees:** Authorized representatives of the Construction Administrator, Owner, Architect, and their consultants; the Contractor and its superintendent; major subcontractors; agency; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
3. **Agenda:** Discuss items of significance that could affect progress, including the following:
 - 3.1 *Tentative construction schedule;*
 - 3.2 *Critical work sequencing;*
 - 3.3 *Progress meeting schedule;*
 - 3.4 *Designation of responsible personnel;*
 - 3.5 *Procedures for processing field decisions and Change Orders;*
 - 3.6 *Procedures for processing Applications for Payment;*
 - 3.7 *Distribution of Contract Documents;*
 - 3.8 *Submittal of Shop Drawings, Product Data, and Samples;*
 - 3.9 *Preparation of record documents;*
 - 3.10 *Use of the premises;*
 - 3.11 *Parking availability;*
 - 3.12 *Office, work, and storage areas;*
 - 3.13 *Equipment deliveries and priorities;*
 - 3.14 *Safety procedures;*
 - 3.15 *First aid;*
 - 3.16 *Security;*
 - 3.17 *Housekeeping;*
 - 3.18 *Working hours;*
 - 3.19 *Coordination with Audio-Visual and Telecommunications.*

C. Progress Meetings:

1. The Construction Administrator will conduct progress meetings, bi-weekly, at the Project Site or at regular intervals as agreed upon at the Pre-construction Conference. The Construction Administrator will notify the Owner, the Architect, and the Contractor of the scheduled Progress Meeting dates. Coordinate dates of Progress Meetings with preparation of Application for Payment requests.
2. **Attendees:** In addition to representatives of the Contractor, Construction Administrator, Owner and the Architect, subcontractor, supplier, or other entity concerned with current progress or involved in planning, coordination, or performance of future activities may be requested to attend these meetings on an as needed basis. All participants at the meeting shall be familiar with the Project and authorized to conclude matters relating to the Work. The Contractor shall include the site superintendent as a minimum.
3. **Agenda:** Progress Meetings shall review and correct or approve minutes of the previous Progress Meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the status of the Project.
4. **Reporting:** The Construction Administrator will distribute minutes of the meeting to each party present, promptly and before the next scheduled meeting, and to parties who should have been present.

5. A schedule of regular Project Meetings will be established at the Pre-construction Conference.

01 32 16 CONSTRUCTION PROGRESS SCHEDULES

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Summary:**
 1. This Section includes administrative and procedural requirements for the preparation, submittal, and maintenance of the Contractor's computerized progress schedule, reporting progress of the Work, and Contract time adjustments.
- C. **Related Documents:** The following Sections contain requirements that relate to this section
 1. Refer to the General Conditions and the Agreement for definitions and specific dates of Contract Time.
- D. **Related Sections:** The following Sections contain requirements that relate to this section
 1. **Section 01 29 76 "Progress Payment Procedures"** submission of Schedule of Values and Applications for payment.
 2. **Section 01 31 19 "Project Meetings"** specifies the requirements for submitting and distributing meeting and conference minutes.
 3. **Section 01 33 00 "Submittal Procedures"** specifies requirements for submitting the preliminary Construction Schedule and the monthly Schedules
 4. **Section 01 45 00 "Quality Control"** specifies requirements for submitting inspection and test reports.
 5. **Section 01 60 00 "Product Requirements"** specifies requirements for submitting the list of products.
- E. **Construction Schedule Format:**
 1. **Format:** Provide a detailed, time-scaled computer generated Project Schedule with activities representing each portion of the Work for the entire Contract Performance Period. If necessary, the Project Schedule should show the Critical Path for the planning, scheduling and reporting of the work to be performed under the contract.
 2. **Maximum Activity Durations:** The Contractor shall prepare schedule utilizing activity durations in terms of days.
 3. **Activity Predecessors and Successors:** Every activity shall have logically assigned predecessors and successors.
 4. **Calendars:** The planning unit for the Work shall be days. The Contractor shall coordinate weekends (Saturdays and Sundays) and State holidays to be observed with the Owner and incorporate them into the schedule as non-working days. The schedule shall be based on a **seven (7)** day week, Sunday through Saturday.
 5. **Weather Days Allowance:** On projects with significant exterior work the Contractor shall include as a separate identifiable activity on the Critical Path, an activity labeled "Weather Days Allowance" inserted at the end of the schedule.
 - 5.1 The duration of the Weather Days Allowance shall be **seven (7)** days per year and shall be prorated for partial years.
- F. **Content**
 1. Show complete sequence of construction by activity with dates showing the beginning and completion of each element of construction.
 2. Identify work of separate phases and other logically grouped activities.

3. On larger projects, Provide separate schedule of submittal dates for shop drawings, product data, and samples. Indicate decision dates for selection of finishes.
4. Indicate critical path with original baseline indicated.
5. Coordinate content with Schedule of Values specified in Section 01 29 76 "Progress Payment Procedures."

G. Schedule Revisions:

1. Either the owner or the Contractor may request a Schedule Revision. Schedule Revisions shall not be made without the written consent of the Owner. Updating the Project Schedule to reflect actual progress shall not be considered revisions to the Project Schedule.
2. A Schedule Revision is considered necessary under the following conditions:
3. Only upon acceptance of a revision to the Schedule by the Construction Administrator shall the revision be reflected in the next Schedule Update.
4. The Construction Administrator reserves the right to accept or reject any schedule revisions proposed by the General Contractor.

I. Contract Time Extensions:

1. Time Extensions will be granted only to the extent that equitable adjustments for the activity or activities affected exceed or exceeded the total or remaining float along the Critical path or activities at the time of the actual delay. Actual delays in activities which do not affect the Critical Path work or which do not move the General Contractor's planned completion date beyond the Contract completion date or current completion date as affected by previous delays, will not be the basis for an adjustment to the Contract time. Time Extensions shall not be granted until a delay occurs that:
 - 1.1 Is beyond control of and without fault of or negligence of the General Contractor and the major Trade Contractors or Suppliers at any time.
 - 1.2 Extends the actual performance of the work beyond the Contract completion date or other specified Interim Milestones.
2. Should a non-compensable excusable delay be concurrent with one or more compensable delays, the General Contractor and Owner agree that the net result is a non-compensable, excusable delay to the extent the delay is caused by the non-compensable event.

J. Review And Acceptance Of Project Schedule Submittals:

1. The Construction Administrator shall review schedule submittals for conformance with the requirements of the Contract Documents.
2. It is the General Contractor's responsibility to ensure that all Project Schedules are in compliance with all of the requirements of the Contract Documents. Non-conforming submittals shall be returned by the Construction Administrator without further review for correction and re-submittal.
2. The General Contractor shall be responsible for all delays due to its failure to submit complete submittals in accordance with the requirements of the Contract Documents.
3. The Schedule submitted will not be considered acceptable until all of the Construction Administrator's comments are incorporated into the schedule to the Construction Administrator's satisfaction.
4. Errors in any Project Schedule accepted by the Construction Administrator, including but not limited to activity durations, relationships between activities, resource allocation or other float suppression techniques that do not accurately reflect the work may be identified at any time and once identified shall be corrected by the General Contractor.

- K. Payment:**
1. Failure of the General Contractor to submit a Baseline Schedule or Revised Baseline Schedule for any portion of the work in accordance with this specification may result in the withholding all Contract payment until the schedule is submitted to, and accepted for compliance with the specification and reasonableness, by the Construction Administrator.
- L. Performance Monitoring:**
1. The Owner may elect throughout, or at any time during, the Project to record the number of workers and construction equipment working on each construction schedule activity in each area of the Project. The Owner's request for this information will be without additional cost to the State. This information will be used by the Owner to evaluate the adequacy of the Contractor's performance and project manpower staffing, as well as any Contractor claims.
- M. Distribution:**
1. Distribute copies of the computer generated schedules to Construction Administrator, Architect, Owner, and other concerned parties.
 2. Instruct recipients to promptly report, in writing, problem anticipated by projections indicated in schedules.

01 33 00 SUBMITTAL PROCEDURES

- A. Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Summary**
1. This Section includes administrative and procedural requirements for submittals required for performance of the Work, including but not limited to the following:
 - 1.1 *Submittal schedule.*
 - 1.2 *Shop Drawings.*
 - 1.3 *Product Data.*
 - 1.4 *Samples.*
 - 1.5 *Quality assurance submittals.*
 - 1.6 *Proposed "Substitutions/Equals".*
 - 1.7 *Warranty samples.*
 - 1.8 *Coordination Drawings.*
 - 1.9 *O & M Manuals*
- C. Administrative Submittals:** Refer to other Division 01 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to, the following:
1. *Permits.*
 2. *Applications for Payment.*
 3. *Performance and payment bonds.*
 4. *Contractor's construction schedule.*
 5. *Daily construction reports.*
 6. *Construction Photographs.*
 7. *Insurance certificates.*
 8. *List of subcontractors.*
 9. *Subcontractors/Suppliers FEIN #'s and Connecticut tax registration #.*

- D. Related Sections:** The following Sections contain requirements that relate to this Section:
1. Division 01 Section 01 25 00 "Substitution Procedures" specifies requirements for submittal of requests for equals and substitutions.
 2. Division 01 Section 01 29 76 "Progress Payment Procedures" specifies requirements for submittal of the Schedule of Values.
 3. Division 01 Section "Project Coordination" 01 31 13 for Project Coordination documents.
 4. Division 01 Section 01 31 19 "Project Meetings" specifies requirements for submittal and distribution of meeting and conference minutes.
 5. Division 01 Section 01 32 16 "Construction Progress Schedules" for requirements for construction scheduling and reporting progress of work.
 6. Division 01 Section 01 32 33 "Photographic Documentation" specifies requirements for submittal of periodic construction photographs.
 7. Division 01 Section 01 45 00 "Quality Control" specifies requirements for submittal of inspection and test reports and mockups.
 8. Division 01 Section 01 77 00 "Closeout Procedures" specifies requirements for submittal of Project Record Documents and warranties at project closeout.
 9. Division 01 Section 01 78 30 "Warranties and Bonds".
- E. Definitions**
1. Coordination Drawings show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or to function as intended and as identified in the Specification Divisions 02 through 49.
 2. Field samples are full-size physical examples erected on-site to illustrate finishes, coatings, or finish materials. Field samples are used to establish the standard by which the Work will be judged.
 3. Mockups are full-size assemblies for review of construction, coordination, testing, or operation; they are not Samples.
- F. Submittal Procedures**
1. **Coordination:** Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
 - 1.1 Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 1.2 Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.
 - 1.2.1 The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.
 - 1.2.2 The Architect reserves the right to reject incomplete submitted packages.
 - 1.3 **Processing:** To avoid the need to delay installation as a result of the time required to process submittals, allow sufficient time for submittal review, including time for re-submittals.
 - 1.3.1 Allow **fourteen (14)** calendar days for initial review. Allow additional time if the Architect must delay processing to permit coordination with subsequent submittals.
 - 1.3.2 If an intermediate submittal is necessary, process the same as the initial submittal.
 - 1.4 Allow **fourteen (14)** calendar days for review of each resubmittal.

- 1.5 No extension of Contract Time will be authorized because of failure to transmit submittals to the Architect sufficiently in advance of the Work to permit processing.
 2. **Submittal Preparation:** Place a permanent label, title block or *8-1/2 inches x 11 inches* cover page approved by the Architect, on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.
 - 2.1 **The submittal shall be submitted electronically or as determined otherwise at the pre-construction conference or by the Construction Administrator.**
 - 2.2 Provide a space approximately *4 inches by 5 inches* on the label, beside the title block or on the cover page on Shop Drawings to record the Contractor's review and approval markings and the action taken.
 - 2.3 Include the following information on the label for processing and recording action taken.
 - 2.3.1 *Project Name and State of Connecticut Project Number.*
 - 2.3.2 *Date.*
 - 2.3.3 *Name and address of the Architect, Construction Administrator, and Owner Representative.*
 - 2.3.4 *Name and address of the Contractor.*
 - 2.3.5 *Name and address of the subcontractor, if appropriate.*
 - 2.3.6 *Name and address of the supplier.*
 - 2.3.7 *Name of the manufacturer.*
 - 2.3.8 *Number and title of appropriate Specification Section.*
 - 2.3.9 *Drawing number and detail references, as appropriate.*
 - 3.10 *Indicate either initial or resubmittal.*
 - 3.11 *Indicate deviations from Contract Documents.*
 - 3.12 *Indicate if "equal" or "substitution".*
 3. Submittal Transmittal: Submit each submittal electronically. Include a transmittal form with each submittal from the Contractor to the Architect. Copy the Construction Administrator on the transmittal. The Architect will return all submittals to the Contractor after action is taken with a complete copy of the submittal package. The Architect will not accept submittals received from sources other than the Contractor.
 - 3.1 On the transmittal, record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.
 4. **Distribution:** Following each response to the a submittal, distribute copies, electronically, to the Construction Administrator, Architect, Owner, subcontractors, and other parties required to comply.
 - 4.1 When revisions are made, distribute to the same parties.
- G. Daily Construction Reports**
1. Prepare a daily construction report recording the following information concerning events at the site, and submit duplicate copies to the Construction Administrator at weekly intervals:
 - 1.1 *List of subcontractors at the site.*
 - 1.2 *Approximate count of personnel at the site.*
 - 1.3 *High and low temperatures, general weather conditions.*
 - 1.4 *Accidents and unusual events.*
 - 1.5 *Meetings and significant decisions.*
 - 1.6 *Stoppages, delays, shortages, and losses.*

- 1.7** *Meter readings and similar recordings.*
- 1.8** *List of equipment on site and identify if idle or in use.*
- 1.9** *Orders and requests of governing authorities.*
- 1.10** *Change Orders received, start and end dates.*
- 1.11** *Services connected, disconnected.*
- 1.12** *Equipment or system tests and startups.*
- 1.13** *Partial Completion's, occupancies.*
- 1.14** *Substantial Completion's authorized.*
- 1.15** *Equals or Substitutions approved or rejected.*

H. Shop Drawings

1. Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not a Shop Drawing.
2. Shop Drawings include fabrication and installation Drawings, setting diagrams, schedules, patterns, templates and similar Drawings. Include the following information:
 - 2.1 Dimensions.
 - 2.2 Identification of products and materials included by sheet and detail number.
 - 2.3 Compliance with specified standards.
 - 2.4 Notation of coordination requirements.
 - 2.5 Notation of dimensions established by field measurement.
 - 2.6 Sheet Size: Except for templates, patterns and similar full-size Drawings, submit Shop Drawings on sheets at least **8-1/2 by 11 inches** but no larger than **36 by 48 inches**.
 - 2.6.1 Submit electronically as directed by the Construction Administrator. The Contractor's submittal shall identify the specification section and/or drawing number applicable to the submittal.
 - 2.6.2 Details shall be large scale and/or full size.
3. The Contractor shall review the Shop Drawings, stamp with this approval, and submit them **electronically** with reasonable promptness and in orderly sequence so as to cause no delay in his Work or in the Work of any subcontractor. Shop Drawings shall be properly identified as specified for item, material, workmanship, and project number. At the submission, the Contractor shall inform the Construction Administrator, in writing of any deviation in the shop drawings from the requirements of the Contract Documents.
4. The Construction Administrator will review and comment on shop drawings with reasonable promptness so as to cause no delay, but only for conformance with the design concept of the project and with the information given in the Contract Documents. Refer to Article 5 of the General Conditions. Shop Drawings received by the Architect that indicate insufficient study of drawings and specifications, illegible portions or gross errors, will be rejected outright. Such rejections shall not constitute an acceptable reason for granting the Contractor additional time to perform the work.
5. The Contractor shall make any corrections required by the Architect and shall resubmit electronically the corrected copies of Shop Drawings until fully reviewed.
6. The Construction Administrator's review and comments on Shop Drawings shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents.
7. Only final reviewed Shop Drawings are to be used on the Project site.
8. The Work installed shall be reviewed in accordance with the Shop Drawings and the drawings and specifications. Final Review of the Shop Drawings by the Construction

Administrator shall constitute acceptance by the State and the Architect of a variation or departure that is **clearly identified**. If the contractor believes notations made by the A/E increases the value or scope of the CD's, the contractor must provide written notice to the CA within 7 days of this issue. Final reviewed Shop Drawings shall not replace or be used as a vehicle to issue or incorporate change orders or substitutions. Substitutions shall be submitted in accordance with Division 01 Section 01 25 00 "Substitution Procedures".

J. Product Data

1. Collect Product Data into a single electronic submittal for each element of construction or system. Product Data includes printed information, schedules, such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams, and performance curves.
 - 1.1 Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products that are not required, mark copies to indicate the applicable information. Include the following information:
 - 1.1.1 *Manufacturer's printed recommendations.*
 - 1.1.2 *Compliance with trade association standards.*
 - 1.1.3 *Compliance with recognized testing agency standards.*
 - 1.1.4 *Application of testing agency labels and seals.*
 - 1.1.5 *Notation of dimensions verified by field measurement.*
 - 1.1.6 *Notation of coordination requirements.*
 - 1.2 Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
 - 1.3 **Preliminary Submittal:** Submit a preliminary single copy of Product Data where selection of options is required.
 - 1.4 **Submittals:** Submit an electronic copy and transmittal of each required submittal; submit **three (3)** 'hard' copies where required for maintenance manuals. The Construction Administrator will electronically return the submittal marked with action taken and corrections or modifications required.
 - 1.4.1 Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
 - 1.5 **Distribution:** Furnish electronic copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.

K. Samples

1. Submit full-size, fully fabricated Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture, and pattern.
 - 1.1 Store, mount or display Samples on site in the manner to facilitate review of qualities indicated. Prepare Samples to match the Architect's sample. Include the following:
 - 1.1.1 *Specification Section number and reference.*
 - 1.1.2 *Generic description of the Sample.*
 - 1.1.3 *Sample source.*
 - 1.1.4 *Product name or name of the manufacturer.*
 - 1.1.5 *Compliance with recognized standards.*
 - 1.1.6 *Availability and delivery time.*

- 1.2 Submit Samples for review of size, kind, color, pattern, and texture. Submit Samples for a final check of these characteristics with other elements and a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
 - 1.2.1 Where variation in color, pattern, texture, or other characteristic is inherent in the material or product represented, submit at least **three (3)** multiple units that show approximate limits of the variations.
 - 1.3 **Submittals:** Except for Samples illustrating assembly details, workmanship, fabrication techniques, connections, operation, and similar characteristics, submit **three (3)** sets. The Architect will return **one (1)** set marked with the action taken.
 - 1.5 Maintain sets of Samples, as returned, at the Project Site, for quality comparisons throughout the course of construction.
 - 1.5.1 Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
 - 2. **Distribution of Samples:** Prepare and distribute additional sets to subcontractors, manufacturers, fabricators, suppliers, installers, and others as required for performance of the Work. Show distribution on transmittal forms.
- L. Quality Assurance Submittals**
- 1. Submit quality-control submittals, including design data, certifications, manufacturer's instructions, manufacturer's field reports, and other quality-control submittals as required under other Sections of the Specifications.
 - 2. **Certifications:** Where other Sections of the Specifications require certification that a product, material, or installation complies with specified requirements, submit a notarized certification from the manufacturer certifying compliance with specified requirements.
 - 2.1 **Signature:** Certification shall be signed by an officer of the manufacturer or other individual authorized to sign documents on behalf of the company.
 - 3. **Inspection and Test Reports:** Requirements for submittal of inspection and test reports from independent testing agencies are specified in Division 01 Section 01 45 00 "Quality Control."
- M. Construction Administrator's Action:**
- 1. Except for submittals for the record or information, where action and return is required, the Construction Administrator will review each submittal, mark to indicate action taken, and return promptly.
 - 1.1 Compliance with specified characteristics is the Contractor's responsibility.
 - 2. **Action Stamp:** The Construction Administrator will stamp each submittal with a uniform, action stamp. The Construction Administrator will mark the stamp appropriately to indicate the action taken.
 - 3. **Unsolicited Submittals:** The Construction Administrator will discard unsolicited submittals without action.

01 35 16 ALTERATION PROJECT PROCEDURES

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Summary**
 - 1. This Section includes administrative and procedural requirements for performing alteration and renovation Work.
 - 2. **Related Sections:** The following Sections contain requirements that relate to this Section:
 - 2.1 Division 01 Section 01 31 13 "Project Coordination" for procedures for coordinating cutting and patching with other construction activities.

- 2.2 Division 01 Section 01 73 29 "Cutting and Patching" for procedures for cutting and patching.
 - 2.3 Refer to other Sections for specific requirements and limitations applicable to performing alteration Work with individual parts of the Work.
 - 2.5 Requirements of this Section apply to mechanical and electrical installations. Refer to Division 21, 22, 23 and 26 Sections for other requirements and limitations applicable to renovation Work by mechanical and electrical installations.
- C. Products For Patching And Extending Work:**
- 1. **New Materials:** As specified in product sections; match existing Products and Work .for patching and extending Work.
 - 2. **Type and Quality of Existing Products:** Determine by inspecting and testing Products where necessary, referring to existing Work as a standard.
- D. Inspection**
- 1. **General:**
 - 1.1 Verify that demolition is complete and areas are ready for installation of new Work.
 - 1.2 Beginning of restoration Work means acceptance of existing conditions.
 - 2. **Project Procedures for Work Involving Lead Containing Material (LBP):**
 - 2.1 Exposure levels for lead in the construction industry are regulated by 29 CFR 1926.62. Construction activities disturbing surfaces containing lead-based paint (LBP) which are likely to be employed, such as sanding, grinding, welding, cutting and burning, have been known to expose workers to levels of lead in excess of the Permissible Exposure Limit (PEL). Conduct demolition and removal Work specified in the technical sections of this specification in conformance with these regulations. In addition, construction debris/waste may be classified as hazardous waste. Disposal of hazardous waste material shall be in accordance with 40 CFR Parts 260 through 271 and Connecticut Hazardous Waste Management Regulations Section 22a-209-1; 22a-209-8(c); 22a-449(c)-11; and 22a-449(c)-100 through 110.
 - 2.2 The Contractor's Work shall be based on a child under the age of six (6) in residence; the Work shall also be in accordance with Connecticut Regulations Section 19a-111-1 through 11.
 - 2.2 This facility was constructed after 1978 and is not likely to have painted surfaces containing lead-based paint.
 - 2.3 Testing for lead-based paint has been conducted at the facility scheduled for renovation, demolition, reconstruction, alteration, remodeling, or repair. Results of the LBP testing are for information purposes only. The testing results are in a separate Volume of this Project Manual. Under no circumstance shall this information be the sole means used by the Contractor for determining the extent of LBP. The Contractor shall be responsible for verification of all field conditions affecting performance of the Work.

3. Project Procedures for Work Involving Asbestos Containing Material (ACM):

- 3.1** The Owner is responsible for abating all ACM that is visible and accessible. This is to be accomplished through a separate project prior to the start of the renovation project. In demolition projects, every attempt will be made by the owner to remove all ACM.
- 3.2** If the Contractor should encounter any material suspect or known to contain ACM, he should immediately notify the Construction Administrator of same. It is the State's responsibility to have the material tested and abated (if necessary). The Owner will respond within *twenty-four (24)* hours after receiving the Contractor's written request to the Construction Administrator for testing the suspect material. The Owner will abate ACM (if necessary) within a reasonable time period, i.e. within **seven (7)** Calendar Days.
- 3.3** Testing for asbestos has been conducted at the facility scheduled for renovation, demolition, reconstruction, alteration, remodeling, or repair. The testing results are in a separate document that is available from the owner should the Contractor require it. The test results are for informational purposes only. Under no circumstances shall this information be the sole means used by the Contractor for determining the extent of Asbestos. The Contractor shall be responsible for verification of all field conditions affecting performance of the Work.
- 3.4** See also **Division 00 General Conditions, Article 23 "Cutting, Fitting, Patching and Digging"**.

E. Preparation:

- 1. Cut, move, or remove items as are necessary for access to alterations and renovation Work. Replace and restore at completion.
- 2. Remove unsuitable material not marked for salvage, such as rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.
- 3. Remove debris and abandoned items from area and from concealed spaces.
- 4. Prepare surface and remove surface finishes to provide for proper installation of new Work and finishes.

F. Installation:

- 1. Coordinate Work of alterations and renovations to expedite completion and if required sequence Work to accommodate Owner occupancy.
- 2. Remove, cut and patch Work in a manner to minimize damage and to provide restoring Products and finishes to original and or specified condition in accordance with **Section 01 73 29 "Cutting and Patching"**.
- 3. Recover and refinish Work that exposes mechanical and electrical Work exposed accidentally during the Work.
- 4. Install Products as specified in individual sections.

G. Transitions:

- 1. Where new Work abuts or aligns with existing, perform a smooth and even transition. Patch work to match existing adjacent Work in texture and appearance.

H. Repair of Damaged Surfaces:

- 1. Patch or replace portions of existing surfaces that are damaged, lifted, discolored, or showing imperfections.
- 2. Repair substrate prior to patching finish.

I. Finishes:

- 1. Finish surfaces as specified in individual Product sections.
- 2. Finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.

- J. Cleaning:**
1. In addition cleaning specified in **Section 01 77 00 "Closeout Procedures"**, clean Agency occupied areas of Work.

01 35 53 SECURITY PROCEDURES

- A. Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B.** Provide a security program and facilities to protect work, existing facilities, and Owner's operations from unauthorized entry, vandalism, and theft. Coordinate with Owner's security program.
- C.** The General Contractor shall be solely responsible for damage, loss, or liability due to theft or vandalism.
- D. Identification Badges for General Contractor's Personnel and Visitors:**
1. The General Contractor shall coordinate on-site identification of his employees with the SCSU Facilities Planning and Operations Office, 615 Fitch Street, (203) 392-6051, to make arrangements prior to commencing work.
 2. Badges are to be worn on outer garment where visible at all times while at the construction site. Any personnel of the General Contractor, or his/her subcontractors, or their representatives, found without badges, will be asked to leave the university..

End
Section 01 30 00
Administrative Requirements

01 40 00 QUALITY REQUIREMENTS

A. **Summary:** Section 01 40 00 Quality Requirements contains the following Subsections:

01 42 16	Definitions
01 42 19	Referenced Standards
01 45 00	Quality Control

01 42 16 DEFINITIONS

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

B. **Definitions**

1. **General:** Basic contract definitions are included in the General Conditions of the Contract for Construction.
2. **"Indicated":** The term "indicated" refers to graphic representations, notes, or schedules on the Drawings, or other paragraphs or Schedules in the Specifications, and similar requirements in the Contract Documents. Terms such as "shown," "noted," "scheduled," and "specified" are used to help the reader locate the reference. Location is not limited to this term.
3. **"Directed":** Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean directed by the Architect, requested by the Architect, and similar phrases.
4. **"Approved":** The term "approved," when used in conjunction with the Architect's action on the Contractor's submittals, applications, and requests, is limited to the Architect's duties and responsibilities as stated in the Conditions of the Contract.
5. **"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.
6. **"Furnish":** The term "furnish" means supply and deliver to the Project Site, ready for unloading, unpacking, assembly, installation, and similar operations.
7. **"Install":** The term "install" describes operations at the Project Site including the actual unloading, unpacking, assembly, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
8. **"Provide":** The term "provide" means to furnish and install, complete and ready for the intended use.
9. **"Installer":** An installer is the Contractor or another entity engaged by the Contractor, either as an employee, subcontractor, or contractor of lower tier, to perform a particular construction activity, including installation, erection, application, or similar operations. Installers are required to be experienced in the operations they are engaged to perform.
 - 9.1 The term "experienced," when used with the term "installer," means having a minimum of **five (5)** 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.
 - 9.2 **Trades:** Using terms 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 tradespersons of the corresponding generic name.
 - 9.3 **Assigning Specialists:** Certain Sections of the Specifications require that specific construction activities shall be performed by specialists who are recognized experts in those operations. The specialists must be engaged for

those activities, and their assignments are requirements over which the Contractor has no option. However, the ultimate responsibility for fulfilling contract requirements remains with the Contractor.

9.3.1 This requirement shall not be interpreted to conflict with enforcing building codes and similar regulations governing the Work. It is also not intended to interfere with local trade-union jurisdictional settlements and similar conventions.

3. **"Project Site"**: Is the space available to the Contractor for performing construction activities, either exclusively or in conjunction, with others performing other Work as part of the Project. The extent of the Project Site is shown on the Drawings and may or may not be identical with the description of the land on which the Project is to be built.
4. **"Testing Agencies"**: A testing agency is an independent entity engaged to perform specific inspections or tests, either at the Project Site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.

01 42 19 REFERENCE STANDARDS

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Industry Standards:**
 1. **Applicability of Standards:** Except where the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
 2. **Publication Dates:** Comply with the standards in effect as of the date of the Contract Documents unless a specific date is indicated in the Contract Documents or the governing regulations cited herein.
 3. **Conflicting Requirements:** Where compliance with **two (2)** or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent and highest quality requirement. Request a decision from the Architect before proceeding on requirements that are different but apparently equal, and where it is uncertain which requirement is the most stringent.
 4. **Minimum Quantity or Quality Levels:** The quantity or quality level shown or specified shall be the minimum acceptable. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of the requirements. Request a clarification from the Architect regarding uncertainties before proceeding.
 5. **Copies of Standards:** Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
- A. Where copies of standards are needed to perform a required construction activity, the Contractor shall obtain copies directly from the publication source.
 1. **Abbreviations and Names:** Trade association names and titles of general standards are frequently abbreviated. Where such acronyms or abbreviations are used in the Specifications or other Contract Documents, they mean the recognized name of the trade association, standards-generating organization, authorities having jurisdiction, or other entity applicable to the context of the text provision. Refer to Thompson Gale's "Encyclopedia of Associations," available in most libraries.

01 45 00 QUALITY CONTROL

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

B. Summary

2. This Section includes administrative and procedural requirements for quality-control services.
3. Inspection and testing services may be required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with Contract Document requirements.
4. Requirements of this Section relate to customized fabrication and installation procedures, not production of standard products.
 - 4.1 Specified inspections, tests, and related actions do not limit Contractor's quality-control procedures that facilitate compliance with Contract Document requirements.
 - 4.2 Requirements for Contractor to provide quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

C. Related Sections: The following Sections contain requirements that relate to this Section:

1. Division 01 **Section 01 33 00 "Submittal Procedures"** specifies requirements for development of a schedule of required tests and inspections.
2. Division 01 **Section 01 73 29 "Cutting and Patching"** specifies requirements for repair and restoration of construction disturbed by inspection and testing activities.
3. Division 01 **Section 01 77 00 "Closeout Procedures"**, specific requirements for contract closeout procedures.

B. Responsibilities

1. **Contractor Responsibilities:** Unless otherwise indicated as the responsibility of another identified entity, the Contractor shall provide inspections, tests, and other quality-control services specified elsewhere in the Contract Documents and required by authorities having jurisdiction. All tests required by the individual specification sections are required to be scheduled and notification given to the Construction Administrator **24 / 48** hours in advance of the test/inspection as applicable. Costs for these services are included in the Contract Sum.
 - 1.1 Where individual Sections specifically indicate that certain inspections, tests, and other quality-control services are the Contractor's responsibility, the Contractor shall employ and pay a qualified independent testing agency to perform quality-control services. Costs for these services are included in the Contract Sum.
2. **Retesting:** The Contractor is responsible for retesting where results of inspections, tests, or other quality-control services prove unsatisfactory and indicate noncompliance with Contract Document requirements, regardless of whether the original test was Contractor's responsibility.
 - 2.1 The cost of retesting construction, revised or replaced by the Contractor, is the Contractor's responsibility where required tests performed on original construction indicated non-compliance with Contract Document requirements.
3. **Duties of the Testing Agency:** The independent testing agency engaged to perform inspections, sampling, and testing of materials and construction specified in individual Sections shall cooperate with the Construction Administrator, Architect and the Contractor in performance of the testing agency's duties. The testing agency shall provide qualified personnel to perform required inspections and tests.
 - 4.1 The testing agency shall notify the Construction Administrator and the Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 4.2 The testing agency is not authorized to release, revoke, alter, or enlarge requirements of the Contract Documents or approve or accept any portion of the Work.

- 1.3 The testing agency shall not perform any duties of the Contractor.
5. Contractor will pay for the services of an independent testing agency laboratory to perform inspections, tests and other services required by the Specifications. .
 6. Submit reports of tests that are part of the submittal requirements which indicate compliance or non-compliance with the specified standard.
 7. See also General Conditions Article 16 "Inspections & Tests".
- E. Submittals**
1. The independent testing agency shall submit a certified written report, in duplicate, of each inspection, test, or similar service to the Construction Administrator.
- F. Quality Assurance**
1. **Qualifications for Service Agencies:** Engage inspection and testing service agencies, including independent testing laboratories, that are pre-qualified as complying with the National Voluntary Laboratory Accreditation Program and that specialize in the types of inspections and tests to be performed.
- G. Repair And Protection**
- General: Upon completion of inspection, testing, sample taking and similar services, repair damaged construction and restore substrates and finishes. Comply with Contract Document requirements for Division 01 **Section 01 73 29 "Cutting and Patching."**
1. Protect constructions exposed by or for quality-control service activities, and protect repaired construction.
 2. Repair and protection is Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing, or similar services.

End
Section 01 40 00
Quality Requirements

01 50 00 TEMPORARY FACILITIES AND CONTROLS

A. **Summary:** Section 01 50 00 Temporary Facilities And Controls contains the following subsections:

01 51 13	Temporary Electricity And Lighting
01 51 16	Temporary Fire Protection
01 51 33	Temporary Telecommunications
01 51 36	Temporary Water
01 52 13	Field Offices And Sheds
01 52 19	Temporary Sanitary Facilities
01 54 00	Construction Aids
01 55 16	Haul Routes
01 56 00	Temporary Barriers And Enclosures
01 56 43	Temporary Protection
01 57 19	Temporary Environmental Controls

01 51 13 TEMPORARY ELECTRICITY AND LIGHTING

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Connect to existing service, provide branch wiring and distribution boxes located to provide power and lighting by construction-grade extension cords. Owner will pay cost of energy used. Take measures to conserve energy. Provide lighting for construction operations. At the termination of construction, return the facilities to their original condition.

01 51 16 TEMPORARY FIRE PROTECTION

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. The Contractor, during construction, shall be responsible for loss or damage by fire to the work of the project until Acceptance of the Work. Any fire used within the structure for working purposes shall be extinguished when not in use. Bitumen or tar shall be melted on the ground only. No flammable material shall be stored in the structure in excess of amounts allowed by the authorities. No gasoline shall be stored in or close to the building at any time. The Contractor shall assign a responsible employee to be in charge of fire protection measures.
- C. All Hot Work Permits should be obtained from Lisa Kortfelt, 203-392-7073, kortfelt1@southernct.edu, at the Facilities Operations Building, 615 Fitch Street, Hamden, CT 06515.

01 51 33 TEMPORARY TELECOMMUNICATIONS

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **It is required that the contractor's field supervisor carry a cellular phone at all times.**
- C. Pay phones may be available throughout the campus.

01 51 36 TEMPORARY WATER

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Existing Water Service:** Water for construction purposes may be taken from the existing service. The Contractor shall provide connections, approved backflow prevention device, and pipe to the water main or nearest hydrant, subject to the approval of the University Representative. Upon completion of work, the Contractor shall remove the temporary connections. If new water service is installed before construction is complete, the new system may be used provided it is returned to the Owner in as-new condition. The University shall pay for the water used. The Contractor shall not waste water or use faulty equipment. Contractor to exercise care in the transport of water or any liquids, and shall clean up all spills immediately.

01 52 13 FIELD OFFICES AND SHEDS

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Field Office:**
 - 1. **General:** The University will not be providing a separate room for the contractor to use as a field office.
 - 1.1 The Contractor shall provide and install a 5-lb. ABC fire extinguisher, and an approved first aid kit for the workspaces.
 - 1.2 Contractor to provide a cell phone to their Project Superintendent for immediate phone access by SCSU 24 hours a day, unless a different time span is agreed to.
- C. **Storage Sheds:**
 - 1. Storage sheds for tools, materials and equipment shall be weathertight with heat, lighting and ventilation for products requiring controlled conditions.
 - 2. Remove temporary materials, equipment services and construction before Substantial Completion.
 - 3. Clean and repair damage caused by installation or use of temporary facilities. Restore existing facilities used during construction to be specified or to original condition.

01 52 19 TEMPORARY SANITARY FACILITIES

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Designated existing toilets may be used during construction. It is the responsibility of the Contractor to maintain the facilities in a clean and sanitary condition and return them to their original condition after use. No loitering or smoking will be permitted in these areas.

01 54 00 CONSTRUCTION AIDS

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. The General Contractor shall furnish tools, apparatus and appliances, hoists and/or cranes and power for same, scaffolding, runways, ladders, temporary supports and bracing and similar work or material necessary to insure convenience and safety in the execution of the Contract Documents except where this is otherwise specified in any Technical Specification Section. All such items shall meet the approval of the University, but responsibility for design, strength, and safety shall remain with the General Contractor. All such items shall comply with Federal OSHA regulations and applicable codes, statutes, rules and regulations, including compliance with the requirements of the current edition of the "Manual of Accident Prevention in Construction" published by the A.G.C.

(Associated General Contractors of America) and the standards of the Connecticut Department of Labor (DOL).

- C. Staging/laydown areas, exterior, and interior, required for the execution of the Contract Documents, shall be furnished, erected, relocated if necessary, and removed by the general Contractor. Staging/laydown shall be maintained in a safe condition without charge to the Owner and for the use of all trades as needed.

01 55 16 HAUL ROUTES

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. The General Contractor may use on-site paved roads and parking areas but shall not encumber same or their access. Public highways shall not be blocked by standing trucks, parked cars, material storage, and construction operations or in any other manner.
- C. Public roads and existing paved roads, drives and parking areas on Owner's property shall be kept free from scrap or debris due to construction operations and any damage to their surface caused by the General Contractor shall be repaired by him at his own expense.
- D. If the work of the Contract affects public use of any street, road, highway, or thoroughfare, the General Contractor shall confer with the police authority having jurisdiction to determine if and how many police are needed for public safety in addition to any barriers and signals that may be needed. The General Contractor will be responsible for payment of any needed police services.

01 56 00 TEMPORARY BARRIERS AND ENCLOSURES

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Provide barriers to prevent public entry into construction areas and to protect existing facilities from damage by construction operations.
- C. Before excavation begins, install an enclosure fence with lockable entrance gates. Locate where indicated on the Construction Documents, or enclose the entire construction site or the portion determined sufficient to accommodate construction operations. Install in a manner that will prevent people, dogs, and other animals from easily entering the site, except by the entrance gates.
- D. Provide covered walkways as required by governing authorities for public rights-of-way and for public access to existing buildings.
- E. Provide barriers around **all** trees and plants designated to remain. Protect against vehicular traffic, materials' dumping, chemically injurious materials, puddles, or running water.
- F. Provide temporary, insulated, weathertight closures at openings to the exterior to provide acceptable working conditions and protection for materials, to allow for temporary heating and to prevent entry of unauthorized persons. Provide doors with self-closing hardware and locks.
- G. Barriers and enclosures shall be in conformance with code requirements. Do not block egress from occupied buildings unless necessary to further the work of the Contract. In this case, secure the Department's approval of an alternate egress plan.
 - 1. **BEGINNING IMMEDIATELY, AND FOR THE DURATION OF THE PROJECT, PROVIDE A BARRIER AROUND THE FIRST FLOOR BATHROOMS WITH SIGNAGE DIRECTING PERSONS TO THE SECOND FLOOR BATHROOMS.**
- H. See also **Division 00 General Condition, Article 19 "Protection of the Work, Persons, and Property.**

01 56 43 TEMPORARY PROTECTION

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Protect buildings, equipment, furnishings, grounds, and plantings from damage. Any damage shall be repaired or otherwise made good at no expense to the State.
- C. Provide protective coverings and barricades to prevent damage. The General Contractor shall be held responsible for, and must make good at his own expense, any water, or other type of damage due to improper coverings. Protect the public and building personnel from injury.
- D. Provide temporary protection for installed products. Control traffic in immediate area to minimize damage.
- E. Provide protective coverings for walls, projections, jambs, sills and soffits of openings. Protect finished floors and stairs from traffic, movement of heavy objects and storage. Prohibit traffic and storage on waterproofed and roofed surfaces and on lawn and landscaped areas.
- F. See also **Division 00 General Condition, Article 19 "Protection of the Work, Persons, and Property.**

01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Temporary Environmental Controls:** General Contractor is to provide the following controls.
 - 1. **Rodent and Pest Control:** if necessary, retain a local exterminator or pest control company to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests. Employ this service to perform extermination and control procedures at regular intervals so the Project will be free of pests and their residues at materials.
 - 2. Dust Control (construction and demolition);
 - 3. Noise Control;
 - 4. Erosion and Sediment Control;
 - 5. Pollution Control;
 - 6. Traffic Control.

End
Section 01 50 00
Temporary Facilities And Controls

01 60 00 PRODUCT REQUIREMENTS

- A. **Summary:** Section 01 60 00 Product Requirements contains the following subsections:
- 01 60 00 Product Requirements**

01 60 00 PRODUCT REQUIREMENTS

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Materials and Equipment:** Shall be delivered, stored and handled to prevent intrusion of foreign matter and damage by weather or breakage. Packaged materials shall be delivered and stored in original, unbroken packages.
1. Promptly inspect shipments to assure that products comply with requirements, that quantities are correct and products are undamaged.
 2. Packages, materials and equipment showing evidence of damage will be rejected and replaced at no additional cost to the Owner.
- C. **Storage and Protection:**
1. Store products in accordance with manufacturers' instructions with seals and labels intact and legible. Store sensitive products in weathertight enclosures; maintain within temperature and humidity range required by manufacturer.
 2. For exterior storage of fabricated products, place on sloped supports above ground. Cover products subject to deterioration with impervious sheet covering; provide ventilation to avoid condensation.
 3. Store loose granular material on solid surfaces in a well-drained area; prevent mixing with foreign matter.
 4. Arrange storage to provide access for inspection. Periodically inspect to insure products are undamaged and are maintained under required conditions. Keep log showing date, time and problems, if any.
 5. Stone, masonry units and similar materials shall be stored on platforms or dry skids and shall be adequately covered and protected against damage.
 6. The Contractor shall prepare, as directed by the Owner, one area or space in the building for storage of State-owned equipment.

End
Section
01 60 00 Product Requirements

01 70 00 EXECUTION AND CLOSEOUT REQUIREMENTS

- A. **Summary:** Section 01 70 00 Execution and Closeout Procedures contains the following subsections:
- | | |
|----------|----------------------|
| 01 73 29 | Cutting and Patching |
| 01 74 13 | Progress Cleaning |
| 01 77 00 | Closeout Procedures |
| 01 78 30 | Warranties And Bonds |

01 73 29 CUTTING AND PATCHING

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. It is the responsibility of the Contractor to provide chases, channels or openings where needed.
- C. The Contractor shall install sleeves, inserts, and hangers furnished by the trades needing same.
- D. After installing work into openings, channels, and/or chases, the Contractor shall close same. If finishes are to be restored, the new work shall match the original and shall be done by the trade customarily responsible for the particular kind of work.
- E. Written permission shall be obtained from the Contractor before cutting beams, arches, lintels or other structural members.
- F. Requirements for Structural Work: Do not cut and patch structural elements in a manner that would change their load-carrying capacity or load-deflection ratio.
- G. Do cutting and patching to integrate all elements of the work. Provide penetrations of existing surfaces. Provide samples for testing. Seal penetrations through floors, walls, ceilings, and roofs, as applicable; restore or preserve fire-rated and smoke-barrier construction. Construction and finishes shall match original work.
- H. The Contractor shall verify dimensions for built-in work and/or work adjoining that of other trades before ordering any material or doing any work. Discrepancies shall be submitted to the Construction Administrator before proceeding with the work.
- I. Existing Warranties: Replace, patch, and repair material and surfaces cut or damaged by methods and with materials in such a manner as not to void any warranties required or existing.
- J. Also see Division 00 General Conditions **Article 23 "Cutting, Fitting, Patching, and Digging"**,

01 74 13 PROGRESS CLEANING

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **This Section includes:**
1. Cleaning requirements during construction operations.
 2. Final cleaning prior to turning the project over to the Owner.
- C. **Quality Assurance**
1. Coordinate with **Section 01 57 19 - Environmental Management.**
 2. Coordinate with **Section 01 77 00- Close out Procedures.**
 - 2.1 Contractor shall provide progress cleaning that minimizes sources of food, water, and harborage available to pests.
- D. Utilize non-toxic cleaning materials and methods.
1. Use natural cleaning materials where feasible.
- E. Maintain areas under the General Contractor's control free of waste materials, debris, and rubbish. Maintain in a clean and orderly condition.
- F. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces before closing the space.

- G. Periodically clean interior areas before start of surface finishing and continue cleaning on an as-needed basis.
- H. The General Contractor shall control cleaning operations so that dust and other particulates will not adhere to wet or newly-coated surfaces.
- I. Remove waste materials, debris, and rubbish from site daily and dispose of legally off-site. No scrap/debris shall remain inside the building or anywhere on site upon final acceptance of the project.
- J. **Final Cleaning:**
 - 1. At completion of Work, remove all remaining waste materials, rubbish, tools, equipment, machinery and surplus materials, and clean all exposed surfaces; leave Project clean and ready for occupancy.
 - 1.1 After review of trees to remain by Architect and Owner, remove tree tags.
 - 1.2 Provide final cleaning in accordance with ASTM E1971 and the approved Integrated Pest management (IPM) plan.
- K. See also **Division 00 General Conditions, Article 24 "Cleaning Up"**.

01 77 00 CLOSEOUT PROCEDURES

- A. **Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. **Substantial Completion:**
 - 1. Upon completion of the work, the General Contractor shall submit to the State a Certificate of Substantial Completion wherein the General Contractor certifies that all conditions of the Contract Documents have been met, and that the facility is ready for occupancy by the Agency. Issuance of a Certificate of Substantial Completion by the Owner shall be a pre-condition for payment by the Owner.
 - 1.1 *Preliminary Procedures: Before requesting inspection for Certification of Substantial Completion, complete the following. List exceptions in the request.*
 - 1.2 *In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent (100%) completion for the portion of the Work claimed as substantially complete.*
 - 1.2.1 *Include supporting documentation for completion as indicated in the Contract Documents and a statement showing all accounting of the Contract Documents.*
 - 1.2.3 *If 100 percent (100%) completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the Work is not complete shall be provided as well as a schedule for completion of work.*
 - 1.3 *Advise the Owner of pending insurance changeover requirements.*
 - 1.4 *Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents.*
 - 1.5 *Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.*
 - 1.6 *For Final Payment, submit as-built record drawings, maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.*

- 1.7 *Deliver tools, spare parts, extra stock, and similar items.*
 - a. *Attic Stock:*
 - Ceramic Tile: 1 Carton of Field, 2% of Accent Tiles*
 - Carpet Tile 1 box of carpet tiles*
 - Ceiling Pads: 1 carton of Ceiling Pads*
- 1.8 *Complete final cleanup requirements, including touchup painting.*
- 1.9 *Touch up and otherwise repair and restore marred, exposed finishes.*
- 1.10 *Compliance with other terms as outlined in the Contract Documents.*
- 1.11 *List of all the General Contractor's suppliers, sub-contractors, etc. Include name of firm, address, FEIN number and CT Tax I.D. number.*
- 2. **Inspection Procedures:** The General Contractor shall be ready and prepared when they request a Substantial Completion inspection. If the inspection reveals that the work is not complete, there are extensive punchlist items and as the items listed above are not complete, the Construction Administrator, Owner, and Agency will determine the inspection has failed.
- 3. The General Contractor is responsible for all costs to re-inspect due to a failed inspection.
 - 3.1 The General Contractor will repeat inspection when requested and assured that the Work is substantially complete.
 - 3.2 Results of the completed inspection will form the basis of requirements for Acceptance of the Work.
- C. **Acceptance of the Work**
 - 1. **Preliminary Procedures:** Before requesting a Final Inspection and Certificate of Acceptance and Final Payment, complete the following. List exceptions in the request.
 - 1.1 Submit a copy of the Final Inspection list of items to be completed or corrected, endorsed and dated. The copy of the list shall state that each item has been completed or otherwise resolved for acceptance and shall be endorsed and dated.
 - 1.2 Submit consent of surety to Final Payment.
 - 1.3 Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- D. **Reinspection Procedure:** There will be an inspection of the Work upon receipt of notice from the Construction Administrator that the Work, including inspection list items from earlier inspections, has been completed, except for items whose completion is delayed under circumstances acceptable to the Owner.
- E. Issuance of a Certificate of Acceptance, in accordance with CGS § 4-61(b)(2) as amended, by the Owner does not alter the responsibility of the General Contractor to complete all Work in accordance with the Contract Documents.

- F. General Contractor's As-Built Drawings Submittal:**
1. **General:** The General Contractor shall not use the As-Built Drawings for construction purposes. Protect General Contractor's As-Built Drawings from deterioration and loss in a secure, fire-resistant location. Provide access to the As-Built Drawings for Owner's and Construction Administrator's reference during normal working hours. Keep documents current; do not permanently conceal any work until required information has been recorded. Failure to keep documents current is sufficient cause to withhold progress payments.
 2. **General Contractor's As-Built Drawings:** The General Contractor shall maintain one clean, complete undamaged set of blue or black line white-prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark which drawing is most capable of showing conditions fully and accurately. Where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date. **Failure to keep As-built Documents current is sufficient cause to withhold progress payments.**
 - 2.1 Mark record sets with erasable pencil to distinguish between variations in separate categories of the Work.
 - 2.2 Mark all new information that is not shown on Contract Drawings.
 - 2.3 Note related Agreement Amendments where applicable.
 - 2.4 Organize record drawing sheets into manageable sets. Bind sets with durable-paper cover sheets; print suitable titles, dates, and other identification on the cover of each set.
 - 2.5 Upon completion of the work, the General Contractor shall produce Hard Copy, Record, Drawings.
 - 2.6 Submit electronic format data of all Coordination Drawing drawings as required by the owner.
 - 2.7 Refer to Section **01 45 00 "Quality Control"** Paragraph **8.3.6** for required as-built drawings and specifications for fire alarm systems.
 - 2.8 Upon completion of the work, the General Contractor shall submit Record Drawings to the Architect and/or Engineer for transferring the changes to the Record Drawings.
- G. General Contractor's Record Documents:** Within **thirty (30)** Calendar Days after receipt of the General Contractor's "As-Built Drawings", the Contractor shall convert the General Contractor "As-Built" information into an electronic CADD format as required by the Owner, using the original A/E contract documents as base drawings. The Contractor shall produce "Record Documents" that show all of the significant modifications made during the course of the project.. The Contractor shall produce **two (2)** sets of electronic CADD format "Record Documents" on electronic media as required by the Owner. The Contractor's final "Record Documents" (electronic media) shall be made at the Contractor's expense.
- H. Maintenance Manuals (If Required):** Organize operation and maintenance data into 2 suitable sets of manageable size. Bind properly indexed data in individual, heavy-duty, **2-inch, 3-ring**, vinyl-covered binders, with pocket folders for folded sheet information. Mark appropriate identification on front and spine of each binder according to Section **01 78 23 "Operation and Maintenance Data"**.

I. Final Cleaning:

1. **General:** The Contract Documents require general cleaning during construction. Regular site cleaning is included in **Section 01 74 13 "Progress Cleaning"**.
2. Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Comply with manufacturer's instructions. Complete the following cleaning operations before requesting inspection for Certification of Substantial Completion and Certification of Occupancy.
3. **Exterior:**
 - 3.1 Clean the site, including landscape development areas, of rubbish, litter, and other foreign substances. Sweep paved areas broom clean; remove stains, spills, and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth, even-textured surface.
 - 3.2 Clean exposed exterior hard-surfaced finishes to a dust-free condition, free of stains, films, and similar foreign substances
 - 3.3 Remove waste and surplus materials, rubbish and construction equipment and facilities from the site, and deposit it legally elsewhere.
 - 3.4 Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Remove paint spots; wash and polish glass.
4. **Pest Control:** Engage an experienced, licensed exterminator to make a final inspection and rid the work of rodents, insects, and other pests.
5. **Removal of Protection:** Remove temporary protection and facilities installed for protection of the Work during construction.
6. **Compliance:** Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Agency's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from the site and dispose of lawfully.
 - 6.1 Where extra materials of value remain after completion of associated Work, they become the Agency's property. Dispose of these materials as directed by the Construction Administrator.
 - 6.2 Leave building clean and ready for occupancy. If the Design Builder fails to clean up, the Owner may do so, with the cost charged to the Developer.

01 78 30 WARRANTIES AND BONDS

- A. Related Documents:** Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section..

- B. Summary:** This Section includes administrative and procedural requirements for warranties required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.
 - 1. Refer to the General Conditions for terms of the General Contractor's period for correction of the Work.

Related Sections: The following Sections contain requirements that relate to this Section:

- 1. Division 01 Section **01 33 00 "Submittal Procedures"** specifies procedures for submitting warranties.
 - 2. Division 01 **Section 01 77 00 "Closeout Procedures"** specifies contract closeout procedures.
 - 3. The Divisions 02 through 49 Sections for specific requirements for warranties on products and installations specified to be warranted.
 - 4. Certifications and other commitments and agreements for continuing services to Owner are specified elsewhere in the Contract Documents.
- M.**
- D. Disclaimers and Limitations:** Manufacturer's disclaimers and limitations on product warranties do not relieve the General Contractor of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve the suppliers, manufacturers, and subcontractors required to countersign special warranties with the General Contractor.
 - E. Related Damages and Losses:** When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.
 - F. Reinstatement of Warranty:** When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
 - G. Replacement Cost:** Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The General Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
 - H. Owner's Recourse:** Expressed warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights, or remedies.
 - 1. **Rejection of Warranties:** The Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents.

Where the Contract Documents require a special warranty, or similar commitment on the Work or part of the Work, the Owner reserves the right to refuse to accept the Work, until the General Contractor presents evidence that entities required to countersign such commitments are willing to do so.

- J. The General Contractor shall warranty all materials and workmanship for a period of eighteen months from the date of Acceptance of the Work. In addition, the Contractor shall furnish the warranties listed below. Submit four copies of each to the Architect in the supplier's standard form or in the form given below if there is no standard form available.
- K. The General Contractor shall warranty all materials and workmanship for a period of **eighteen (18)** months from the date of Acceptance of the Work. In addition, the General Contractor shall furnish the warranties listed below. Submit four copies of each to the Architect in the supplier's standard form or in the form given below if there is no standard form available.
- L. **Specification/Warranty Table:** The General Contractor shall provide for all warranties as shown in the Specification/Warranty table:

Specification / Warranty Table		
Item No.	Section No.	Specification Product/Warranty
1.	06	<u>10 years</u> Solid Surface Fabrications: Against defects in materials Labor & material to repair or replace defective materials.
2.	08	<u>10 years</u> Closers, Locksets, Exit Bolts: Longest term offered by manufacturer for grade/class of particular item, material and workmanship. 10 years on 11 Line locksets.
3.	08	Grain-Tech Metal Doors: Lifetime for interior doors. <u>5</u> year for exterior doors.
3.	10	<u>15 years</u> Mirrors: Against silver spoilage.
4.	26	<u>5 years</u> Lighting: Materials and Installation.

- M. Submit certification that finish materials are fire rated as specified.
- N. Form of Warranty: Warranties shall be submitted in following format:

Warranty

*Peter Visentin, AIA
 Facilities Planning and Architectural Services
 Southern Connecticut State University
 615 Fitch Street
 Hamden, Connecticut 06514*

Project Number: SCSU-2019-04
Project Title: Moore Field House – First Floor Restrooms Renovations - 2019

I (We) hereby warranty

the _____ work on the referenced project for a period of 18 months
 from _____, 20 _____ against failures of workmanship and materials in accordance
 with the requirements of Section _____, Page _____, Paragraph _____, of the Specifications.

Installer | Subcontractor | Vendor/Suppliers | Manufacturer

**Installer or Subcontractor or
 Vendor/Suppliers or Manufacturer Name:** _____

**Installer or Subcontractor or
 Vendor/Suppliers or Manufacturer
 Signature:** _____

General Contractor's Name _____

General Contractor's Signature: _____

or

**General Contractor's
 Authorized Agent Signature:** _____

- O. Submittals:**
1. Submit written warranties prior to the date certified for Substantial Completion. If the General Contractor's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Owner.
 2. Forms for special warranties are included in this Section. Prepare a written document utilizing the appropriate form, ready for execution by the General Contractor's, and by the General Contractor's subcontractor or vendor/supplier, or manufacturer. Submit a draft to the Owner, through the Construction Administrator, for approval prior to final execution.
 - 2.1 Refer to the Divisions 02 through 48 Sections for specific content requirements and particular requirements for submitting special warranties.
 3. **Form of Submittal:** At Acceptance of the Work compile **two (2)** copies of each required warranty properly executed by the General Contractor, and by the General Contractor's subcontractor or vendor/supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.

4. Bind warranties and bonds in heavy-duty, commercial-quality, durable 3-ring, vinyl-covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive **8-1/2-inch by 11-inch (115-by-280-mm)** paper.
 - 4.1 Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address, and telephone number of the Installer.
 - 4.2 Identify each binder on the front and spine with the typed or printed title "WARRANTIES," DPW Project Number, Project Title, name of the General Contractor, and name of General Contractor's subcontractor or vendor/supplier, or manufacturer.
- 4.3 When warranted construction requires operation and maintenance manuals, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

End
Section 01 70 00
Execution and Closeout Procedures

And

Division 01
General Requirements
Small Projects

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. The extent of demolition, removals, cutting and patching work is generally shown on the Drawings. Note miscellaneous electrical removals as shown on the drawings. Demolition may also include Items that are not shown on drawings, but are required to be removed for reinstallation of new equipment, ceilings, walls, finishes etc.
 - a. Note removal of GWB, brick, and CMU at door to allow for installation of a wider door. Carefully remove masonry so that edge in-fill can be solidly done for attachment of new hollow metal door frame. Provide temporary support for existing masonry walls before installation of lintels. Tooth in old masonry with new masonry.
 - b. See Demolition Plan 1/A1, for specific information on treatment of various walls behind the existing tile wainscot. Note that, in most cases, these walls still have to be properly prepped for application of cement board, and in some cases, must be taken down to bare CMU with a grinder.
 - c. Note the Unit Prices which may involve some removal of the CMU wall at the plumbing chases.
- B. General site access and protection and safety procedures.
- C. Periodic and final clean up requirements.
- D. Remove and legally dispose of demolished materials off site.

1.02 JOB CONDITIONS

- A. Conditions existing at the time of inspection for bidding purposes will be maintained insofar as practicable; however, minor variations within the structure may occur.
- B. Provide safe passage for persons around the work area. Conduct operations to prevent damage to adjacent spaces, buildings, structures, finishes and other facilities that are to remain.
- C. Protect all work to remain and use care in demolition to minimize damage to work to remain. Promptly repair damage caused to adjacent facilities by demolition operations at no cost to Owner. Remove or cut back all existing materials as required to permit new work and reconstruction work to proceed. Coordinate demolition and cutting work with new work.

1.03 QUALITY ASSURANCE

- A. Comply with governing codes and regulations. Use experienced workmen.

1.04 RELATED WORK

- A. The General and Supplementary Conditions of the Contract pertain to the work of this Section.

PART 2 - EXECUTION

2.01 COORDINATION

- A. Contractor shall do, or cause to be done under his supervision, altering, and refinishing of construction and finishes, as required by the operations of all trades and subcontractors, so as to leave all construction and finishes complete and in a condition satisfactory to Owner and ready to receive new work and new finishes.
- B. Contractor shall be responsible for coordinating work with other outside contractors and in-house university staff. The following is a list of possible contracts which will be performed simultaneously with the work of this contract. Coordination will include this list but not be limited to:
 - 1. SCSU Facilities Operations
 - 2. Asbestos Abatement Contractor

Any unresolved conflicts with the work of this contract and work being performed by other contractors on the job site shall be brought to the immediate attention of the University Representative.

2.02 WORKMANSHIP

- A. Demolition, removal, and alteration work shall be as indicated on the drawings or as required by work. Perform such work required with due care, including shoring, bracing, and so on. Be responsible for any damage that may be caused by such work to any part or parts of the existing structures or items designated for reuse. Perform restoration, and new work in accordance with applicable sections of the specifications.
- B. Materials or items designated to be moved and reinstalled shall be as shown on the drawings or as required by work. Remove such items with care, under the supervision of the trade responsible for reinstallation; protect and store until installed. Replace materials or items damaged during removal with similar new construction of equal quality.

2.02 WORKMANSHIP (CONT.)

- C. Materials or items demolished and not designated as the property of the Owner or to be reinstalled shall become the property of the Contractor and shall be removed from the Project.
- D. Execute the work in an orderly and careful manner, with the least possible disturbance to the public, adjacent properties, and Owner.
- E. Where alterations occur or new work and old work join, cut, remove, patch, repair, or refinish adjacent surfaces as required by job conditions, and leave as in condition equal to or better than condition prior to the commencing of the work. The materials and workmanship employed in the alterations, unless otherwise shown or specified, shall be equal in quality to that of the original work. Alteration work shall be performed by the various respective trades that normally perform that particular item of work.
- F. Where existing equipment and/or fixtures are indicated to be reinstalled, repair such equipment and/or fixtures and refinish or rework as necessary to leave in perfect working order and to University Representatives satisfaction.
- G. Cut out imbedded anchorage, supports and attachment items as required to properly provide for patching and repair of the respective finishes. In particular, cut out all anchorage, supports, and any hanging attachment items not in use above all new suspended ceilings.
- H. Contractor shall be responsible for any damage that may be caused by such work to any part or parts of the existing structures or items designated for reuse. Perform restoration and new work in accordance with applicable sections of the specifications.
- I. Do not damage building elements and improvements indicated to remain. Items of salvage value not included on schedule of salvage items to be returned to Owner may be removed from the site. Storage or sale of items at project site is prohibited.
- J. Do not close or obstruct streets, walks, drives or other occupied or used spaces or facilities without the written permission of the Owner and the authorities having jurisdiction. Do not interrupt utilities serving occupied or used facilities without the written permission of the Owner and authorities having jurisdiction. If necessary, provide temporary utilities.
- K. Cease operations if public safety or remaining structures are endangered. Perform temporary corrective measures until operations can be continued properly.

2.03 CLEANING

- A. General Contractor shall be responsible for general cleaning and maintenance of premises and job site and for coordination and direction of clean-up work of all trades and contracts. General Contractor shall require that each trade and subcontractor shall clean and maintain his portion of work as required and as directed by Contractor. If premises and job site are not maintained properly, Owner may have any accumulations of waste materials or trash removed and charge cost to appropriate Contractor as University Representative shall determine to be just.
- B. Under no circumstances shall any rubbish or waste be dropped or thrown from one level to another.
- C. Care shall be taken by workmen not to mark, soil, or otherwise deface any finished surfaces. In event that any finished surface becomes defaced in any way by mechanics or workmen, Contractor shall clean and restore such surfaces to their original condition.
- D. Each subcontractor engaged in work shall bear his full responsibility in cleaning up immediately upon completion of his work in accordance with all provisions under this heading and he shall cooperate with Contractor of his responsibility for leaving all work in a clean and proper condition, satisfactory to University Representative.
- E. Periodic Cleaning: Contractor shall at all times, during the progress of work, keep site free from accumulation of waste matter or rubbish and shall confine his apparatus, materials, and operations of his workmen to limits prescribed herein, except as may be extended with the approval of University Representative. All waste material shall be removed daily from construction site to designated dumpster location. Dumpsters shall be emptied as necessary and at least weekly.
- F. Final Clean-Up: Upon completion of the work covered by Contract, contractor shall leave the completed Project ready for use and occupancy without the need of further cleaning of any kind and with all work in new condition and perfect order. In addition, upon completion of all work, Contractor shall remove from the vicinity of the work all plant, rubbish, unused and other materials belonging to him or used under his direction during construction or impairing the use or appearance of the property and shall restore such areas affected by the work to their original condition.
- G. Any planer differences between adjacent walls after removals shall be minimized – extend patching to both sides of removal a minimum of 2’ if necessary. Provide patching at all removals including any holes at walls, floor, and metal frames.

END OF SECTION 02 40 00

PART 1 –GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section includes unit masonry assemblies consisting of the following:
 - 1. Concrete Masonry Units
 - 2. Mortar and grout.
 - 3. Masonry joint reinforcement (if required).
 - 4. Ties and anchors (If required).
 - 5. Miscellaneous masonry accessories.

1.03 DEFINITIONS

- A. Reinforced Masonry: Masonry containing reinforcing steel in grouted joints.

1.04 SUBMITTALS

- A. Product Data: For each different masonry unit, accessory, and other manufactured product specified.
- B. Samples for Initial Selection – since all CMU is not exposed, samples will not be required, except as required below.
- C. Coordination with Door Jamb and Steel Lintel Design:
 - 1. The design and the work of the hollow metal frame, the CMU in-fill, and the steel lintel will have to be coordinated.
 - 2. The GC is responsible for the design of the new steel lintels at the wider door openings. The size and type of CMU infill will quite likely be determined by the structural design of the steel lintel and supports.
 - 3. It has been assumed that the new infill at the door jamb will be 8” (nominal) CMU both for solid support of the lintel above, and for solid attachment of the hollow metal door frame into the solid grouted core of the 8” CMU.
 - 4. Provide submittals for the CMU work and for any accessories embedded in the masonry.

1.04 SUBMITTALS (CON'T)

- D. Material Test Reports: From a qualified testing agency indicating and interpreting test results of the following for compliance with requirements indicated:
1. Each type of masonry unit required.
 - a. Include test results, measurements, and calculations establishing net-area compressive strength of masonry units.
 2. Mortar complying with property requirements of ASTM C 270.
 3. Grout mixes complying with compressive strength requirements of ASTM C 476. Include description of type and proportions of grout ingredients.
- E. Material Certificates: Signed by Manufacturers certifying that each of the following items complies with requirements:
1. Each type of masonry unit required.
 - a. Include test data, measurements, and calculations establishing net-area compressive strength of masonry units.
 2. Each cement product required for mortar and grout, including name of manufacturer, brand, type, and weight slips at time of delivery.
 3. Each combination of masonry unit type and mortar type. Include statement of net-area compressive strength of masonry units, mortar type, and net-area compressive strength of masonry determined according to Tables 1 and 2 in ACI 530.1/ASCE 6/TMS 602.
 4. Each type and size of joint reinforcement.
 5. Each type and size of anchor, tie, and metal accessory.

1.05 QUALITY ASSURANCE

- A. Source Limitations for Masonry Units: Obtain exposed masonry units of a uniform quality, through one source from a single manufacturer for each product required.
- B. Source Limitations for Mortar Materials: Obtain mortar ingredients of a uniform quality, from one manufacturer for each cementitious component, and from one source or producer for each aggregate.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Store masonry units 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.
- B. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
- C. Deliver preblended, dry mortar mix in moisture-resistant containers. Store preblended, dry mortar mix in delivery containers, under cover, and in a dry location.
- D. Store masonry accessories, including metal items, to prevent corrossions and accumulation of dirt and oil.

1.07 PROJECT CONDITIONS

- A. Protection of Masonry: Cover partially completed masonry when construction is not in progress.
- B. Stain Prevention:
 - 1. Protect surfaces of window and door frames, as well as similar products with painted and integral finishes, from mortar droppings.
- C. Hot-Weather Requirements: Protect unit masonry work when temperature and humidity conditions produce excessive evaporation of water from mortar and grout. Comply with hot-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602, Section 1.8D.

PART 2 – PRODUCTS

2.01 CONCRETE MASONRY UNITS

- A. General: Provide shapes indicated and as follows:
 - 1. Provide special shapes for lintels, corners, jambs, headers, bonding, and other special conditions.

2.01 CONCRETE MASONRY UNITS (CON'T)

- B. Modular Concrete Masonry Units: ASTM C 55 and as follows:
 - 1. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 3000 psi (20.7 MPa), unless otherwise indicated.
 - 2. Grade N
 - 3. Weight Classification: Normal weight.
 - 4. Size (Width): Manufactured to the following dimensions:
 - a. 4 inches (102 mm) nominal; 3-5/8 inches (93 mm) actual.
 - b. 6 inches (152 mm) nominal; 5-5/8 inches (143 mm) actual.
 - c. 8 inches (203 mm) nominal; 7-5/8 inches (194 mm) actual.

2.02 BRICK

- A. General: Although the demolition at the wider door opening at the corridor will require the removal of some existing brick units, it is assumed that all of the subsequence in-fill will be with CMU units.

2.03 MORTAR AND GROUT MATERIALS

- A. Portland Cement: ASTM C 150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Portland Cement-Lime Mix: Packaged blend of Portland cement complying with ASTM C 150, Type I or Type III, and hydrated lime complying with ASTM C 207.
- D. Aggregate for Mortar: ASTM C 144; except for joints less than ¼ inch thick, use aggregate graded with 100 percent passing the No. 16 sieve.
- E. Aggregate for Grout: ASTM C 404.
- F. Mortar Pigments: Natural and synthetic iron oxides and chromium oxides, compounded for use in mortar mixes. Use only pigments with a record of satisfactory performance in masonry mortar.
- G. Water: Potable.

2.04 MASONRY JOINT REINFORCEMENT (IF REQUIRED)

- A. General ASTM A 951 and as follows:
 - 1. Hot-dip galvanized, carbon-steel.
 - 2. Wire Size for Side Rods: W1.7 or 0.148-inch diameter.
 - 3. Wire Size for Cross Rods: W1.7 or 0.148-inch diameter.
 - 4. Provide in lengths of not less than 10 feet

2.05 TIES AND ANCHORS, GENERAL (IF REQUIRED)

- A. General: Provide ties and anchors, specified in subsequent articles, made from materials that comply with this Article, unless otherwise indicated.
- B. Hot-Dip Galvanized Carbon-Steel Wire: ASTM A 82; with ASTM A 153, Class B-2 coating.
- C. Galvanized Steel Sheet: ASTM A 653/A 653M, G60, commercial-quality, steel sheet zinc coated by hot-dip process on continuous lines before fabrication.
- D. Steel Sheet, Galvanized after Fabrication: ASTM A 366/A 366M cold-rolled, carbon-steel sheet hot-dip galvanized after fabrication to comply with ASTM A 153.
- E. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.

2.06 MISCELLANEOUS MASONRY ACCESSORIES (IF REQUIRED)

- A. Compressible Filler: Premolded filler strips complying with ASTM D 1056, Grade 2A1; compressible up to 35 percent; of width and thickness indicated; formulated from neoprene.
- B. Bond-Breaker Strips: Asphalt-saturated, organic roofing felt complying with ASTM D 226, Type I (No. 15 asphalt felt).
- C. Masonry Veneer Anchors and Reinforcing system:
 - 1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
 - a. DW-10HS with seismic clip system interlock system Hohmann & Barnard, Inc.
 - b. Clip 12 gauge
 - c. Tie 3/16" standard
 - d. Finish Hot Dip galvanized
 - e. Continuous reinforcing wire 9 gauge galvanized

2.07 MORTAR AND GROUT MIXES

- A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures, unless otherwise indicated.
 - 1. Do not use calcium chloride in mortar or grout.
- B. Preblended, Dry Mortar Mix: Furnish dry mortar ingredients in the form of a preblended mix. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.
 - 1. Limit cementitious materials in mortar to portland cement and lime.
 - 2. For reinforced masonry and where indicated use Type N.
 - 3. For exterior, above-grade, load bearing and non-load bearing walls and parapet walls; for interior load-bearing walls; for interior non-load-bearing partitions; and for other applications where another type is not indicated, use Type N.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.

3.02 INSTALLATION GENERAL

- A. Thickness: Build single-wythe walls to the actual widths of masonry units, using units of widths indicated.
- B. Cut masonry units with motor-driven saws to provide clean, sharp, unchipped edges. Cut units as required to provide a continuous pattern and to fit adjoining construction. Where possible, use full-size units without cutting. Allow units cut with water-cooled saws to dry before placing, unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.

3.03 CONSTRUCTION TOLERANCES

- A. Comply with tolerances in ACI 530.1/ASCE 6/TMS 602 and the following:
- B. For vertical alignment of exposed head joints, do not vary from plumb by more than ¼ inch in 10 feet, nor ½ inch maximum.
- C. For exposed bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to ½ inch. Do not vary from bed-joint thickness of adjacent courses by more than 1/8 inch.

3.04 MORTAR BEDDING AND JOINTING

- A. Lay masonry units with completely filled bed and head joints; butter ends with sufficient mortar to fill head joints and shove into place. Do not deeply furrow bed joints or slush head joints.
- B. Tool exposed joints slightly concave when thumbprint hard, using a joint larger than the joint thickness, unless otherwise indicated.

3.05 MASONRY JOINT REINFORCEMENT (IF REQUIRED)

- A. General: Provide masonry joint reinforcement as called for below and as required by the contractor's design for in-fill around wider door opening to support new steel lintel, and to provide solid attachment for hollow metal frame.
- B. Install entire length of longitudinal side rods in mortar with a minimum cover of 5/8 inch on exterior side of walls, 1/2 inch elsewhere. Lap reinforcement a minimum of 6 inches.
 - 1. Space reinforcement not more than 16 inches o.c.
 - 2. Space reinforcement not more than 8 inches o.c. in foundation walls and parapet walls.
 - 3. Provide reinforcement not more than 8 inches above and below wall openings and extending 12 inches beyond openings.
 - a. Reinforcement above is in addition to continuous reinforcement.
- C. Cut or interrupt joint reinforcement at control and expansion joints, unless otherwise indicated.

3.8 REPAIRING, POINTING, AND CLEANING

- A. Remove and replace masonry units that are loose, chipped, broken, or otherwise damaged.
- B. 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.
- C. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.

3.9 REPAIRING, POINTING, AND CLEANING (CON'T)

- D. 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. Protect adjacent surfaces from contact with cleaner by covering them with liquid strippable masking agent, polyethylene film, or waterproof masking tape.
 3. Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing the surfaces thoroughly with clear water.
 4. If necessary, clean masonry with a proprietary acidic cleaner applied according to manufacturer's written instructions.

3.10 MASONRY WASTE DISPOSAL

- A. Unless otherwise indicated, excess masonry materials are Contractor's property. At completion of unit masonry work, remove from Project site.

END OF SECTION 48 20 00

PART 1 –GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section includes the following:
 - 1. New steel lintels in existing brick/masonry walls.
 - a. It is assumed that the typical construction at the corridor door is 4” brick with 4” CMU backup.
 - b. The construction at the interior vestibule door is 6” CMU
 - c. The suggested patching at the door jamb demolition is 8” CMU.
- B. Related Sections include the following:
 - 1. Section 02 40 00, “Demolition” for removal of brick/masonry walls for larger door openings.
 - 2. Section 04 20 00, “Unit Masonry Assemblies” for masonry infill around new door openings.

1.03 SUBMITTAL

- A. Structural design: Provide engineer’s stamped drawings or manufacturer’s engineered design for lintel schedule and details, including bearing plates and grouting, including door frame attachment method at jamb.
- B. Product Data: Include construction details, material descriptions, and finishes for steel lintels.
- C. Shop Drawings: Provide a schedule of standard steel lintels using same reference numbers for door openings as those shown on the drawings;

1.04 QUALITY ASSURANCE

- A. Steel lintels shall conform to the ASTM Standard Specifications for Structural Steel for Buildings
- B. Installer Qualifications: The mason shall be the installer of the steel lintels.
- C. Source Limitations: Obtain steel lintels through one source from a single manufacturer.
- D. Pre-installation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section “Project Management and Coordinator.”

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Free from defects impairing strength, durability, or appearance. Of the best commercial quality for the purpose specified.
- B. Steel shall have the structural properties to sustain safely the strains and stresses to be expected from the loading of the existing masonry.
- C. Steel shall be true to detail, clean, straight, with smooth finished surfaces.

2.02 FINISHES

- A. Factory Priming: Apply rust inhibitive shop primer immediately after surface preparation and pretreatment. Apply a smooth coat of even consistency to provide a uniform dry film thickness of not less than 0.7 mils (0.018 mm).
 - 1. Shop Primer: Manufacturer's standard, fast-curing, lead and chromate-free primer complying with ANSI A250.10 acceptance criteria; recommended by primer manufacturer for substrate; compatible with substrate.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas and conditions with Installer present, for compliance with requirements for installation tolerances and other conditions.
 - 1. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. General: Provide adequate support and bracing of existing wall prior to installing lintels.
- B. Provide grouting and base plates as determined by contractor's engineer.
- C. Provide bracing as necessary for installed lintels until surrounding masonry in-fill is completed and secured.
- D. Prime-Cut Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying primer.

END OF SECTION 05 10 00

PART 1 - GENERAL

1.1 SECTION/WORK INCLUDES

- A. Tapable extruded aluminum edge trim for furred drywall.
- B. See Access Panels Specification, Section 08 31 00, for new access doors.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Tapable Extruded Aluminum Edge Trim
 - 1. “L” Trim, manufactured by:
 - a. Fryreglet.
800-237-9773
www.fryreglet.com
 - b. 2 ½” leg, Trim Depth
 - 2. All trim shall consist of a fin, tapered, grooved, prepunched for screw attachment and to accept bonding agent.
 - 3. Surface coated with a protective film compatible with spackle, latex, polyurethane epoxy, enamel, etc.
 - 4. Extruded aluminum, alloy 6063, temper T-5 tensile strength 31 KSI

2.2 FABRICATION

- A. Verify dimensions at the site prior to ordering material.

2.3 FINISHING

- A. Clean surfaces of rust, scale, grease and foreign matter prior to installing.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install metal trim pieces as shown on drawings.
- B. Provide continuous blocking behind tapable trim piece as shown on drawings.
- C. Install items plumb and level, accurately fitted, free from distortion or defects.
- D. After installation, protect surfaces until space is turned over to University. Touch-up any scratched or damaged surface.

END OF SECTION 05 58 00

PART 1 - GENERAL

1.1 SUMMARY

- A. The extent of work under this section includes all labor, materials, equipment, services, and operations required to provide and complete all rough carpentry and related work including, but not necessarily limited to the following:
 - 1. All rough framing lumber, nailers, sleepers, plywood, wood grounds, nailing strips, blocking, shims, wedges, plates, required for permanent and temporary wood construction for securing work of this Section and all other Sections of Specifications.
 - 2. Rough hardware to properly erect, anchor, and plumb all carpentry related items.
 - 3. Provide wood blocking, plywood stiffeners, and other miscellaneous blocking as noted on the drawings, and as required to complete the work.

1.2 QUALITY ASSURANCE

- A. Perform Work in accordance with the following agencies:
 - 1. Lumber grading: Certified by ALSC
 - 2. Plywood grading: Certified by APA

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Lumber, General:
 - 1. Nominal sizes are indicated, except as shown by detail dimensions.
 - 2. Provide seasoned lumber with 15% maximum moisture content at time of dressing for all permanent wood construction.
- B. Nailers & Blocking:
 - 1. Utility, Douglas Fir, Hem-Fir, White Pine, or Southern Pine, in sizes and strengths suitable to application.

PART 3 - EXECUTION

3.1 BLOCKING INSTALLATION

- A. Provide nailers, blocking and grounds where required, to accommodate the work. Set work plumb, level and accurately cut.
- B. All hardware wall stops shall be backed up with solid blocking for each fastener at a new wall.
- C. All blocking shall be effectively fastened to CMU walls to resist applied loads.

END OF SECTION 06 10 00

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. This Section includes the following horizontal and trim solid surface product types:
1. Counter tops with integral sink bowls
 2. Backsplash & sidesplash
- B. Related Sections include the following:
1. Section 06 10 00, "Rough Carpentry"
 3. Section 04 20 00, "Unit Masonry Assemblies"
 2. Section 15400, "Plumbing"

1.3 DEFINITION

- A. Solid surface is defined as nonporous, homogeneous material maintaining the same composition throughout the part with a composition of acrylic polymer, aluminum trihydrate filler and pigment.

1.4 REFERENCES

- A. REFERENCE STANDARDS: In addition to requirements, comply with applicable provisions of following for design, materials, fabrication, and installation of component parts:
1. ISSFA-2, "Classification And Standards Publication of Solid Surfacing Material".
 2. ANSI Z124-3 for vanities and Z124-6 for kitchen sinks.
 3. NSF Standard 51 for use in both splash and food service areas.
 4. New York City MEA for gas toxicity.
 5. Canadian Standards Association (CSA).
 6. ASTM G21 "Fungal Resistance," Method [A] [B], no growth.
 7. ASTM G22 "Bacterial Resistance," no growth.
 8. Stain Resistance, ANSI Z124-6-5.2 1997.

1.5 DESIGN REQUIREMENTS

- A. DESIGN LOAD: Deflection limited to 1/360.
- B. Design items with sufficient strength for handling stresses.

1.6 SUBMITTALS

- A. Product data:
 - 1. For each type of product indicated.

- B. Shop drawings:
 - 1. Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices and other components.
 - a. Show full-size details, edge details, thermoforming requirements, attachments, etc.
 - b. Show locations and sizes of furring, blocking, including concealed blocking and reinforcement specified in other Sections.
 - c. Show locations and sizes of any required cutouts in the solid surface for sinks, faucets and waste receptacles.

- C. Samples:
 - 1. For each type of product indicated.
 - a. Submit minimum 6-inch by 6-inch sample in specified gloss.
 - b. Cut sample and seam together for representation of inconspicuous seam.
 - c. Indicate full range of color and pattern variation.

 - 2. Approved samples will be retained as a standard for work.

- D. Product data:
 - 1. Manufacturer's technical literature indicating physical properties and performance criteria for solid surfacing materials and related components.

- E. Product certificates:
 - 1. For each type of product, signed by product manufacturer.

- F. Maintenance data:
 - 1. Submit manufacturer's care and maintenance data, including repair and cleaning instructions.
 - a. Maintenance kit for finishes shall be submitted.

 - 2. Include in project closeout documents.

1.7 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Shop that employs skilled workers who custom fabricate products similar to those required for this project and whose products have a record of successful in-service performance.

- B. Fabricator/installer qualifications:
 - 1. Work of this section shall be by a certified fabricator/installer, certified in writing by the manufacturer.

- C. SOURCE LIMITATIONS: Obtain solid surfacing fabrications through one source.

1.7 QUALITY ASSURANCE (Con't)

- C. Applicable standards:
 - 1. Standards of the following, as referenced herein:
 - a. American National Standards Institute (ANSI)
 - b. American Society for Testing and Materials (ASTM)
 - c. NSF International
 - 2. Fire test response characteristics:
 - a. Provide with the following Class A (Class I) surface burning characteristics as determined by testing identical products per UL 723 (ASTM E84) or another testing and inspecting agency acceptable to authorities having jurisdiction:
 - 1) Flame Spread Index: 25 or less.
 - 2) Smoke Developed Index: 450 or less.
- D. Pre-installation conference:
 - 1. Conduct conference at project site to comply with requirements in Division 1

1.8 DELIVERY, STORAGE AND HANDLING

- A. Deliver no components to project site until areas are ready for installation.
- B. Store components indoors prior to installation.
- C. Handle materials to prevent damage to finished surfaces.
 - 1. Provide protective coverings to prevent physical damage or staining following installation for duration of project.

1.9 PROJECT CONDITIONS

- A. ENVIRONMENTAL LIMITATIONS: Do not deliver or install solid surfacing fabrications until wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at design levels during the remainder of the construction period.
- B. FIELD MEASUREMENTS: Verify that field measurements are as indicated on Shop Drawings.

1.10 SEQUENCING

- A. Sequence work to permit installation of adjacent affected construction, plumbing rough-in.
- B. Coordinate sizes and locations of plumbing, cut-outs, and other related work specified in other sections to ensure that interior architectural woodwork can be supported and installed as indicated.

1.11 WARRANTY

- A. Provide manufacturer's warranty against defects in materials.
 - 1. Warranty shall provide material and labor to repair or replace defective materials.
 - 2. Damage caused by physical or chemical abuse or damage from excessive heat will not be warranted.
- B. Manufacturer's warranty period:
 - 1. Ten years from date of substantial completion.

1.12 MAINTENANCE

- A. Provide maintenance requirements as specified by the manufacturer.

PART 2 — PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers:
 - 1. Formica Solid Surfacing, Formica Corp., Cincinnati, OH.
 - 2. Intergral Sink; Corian from the DuPont Company (basis of sink design)
 - 3. or approved equal.

2.2 MATERIALS

- A. Solid polymer components
 - 1. Solid Surface Material:
 - 2. Non-porous, homogeneous material maintaining the same composition throughout the part with a composition of acrylic polymer, aluminum trihydrate filler and pigment; not coated, laminated or of composite construction complying with ISSFA-2; meeting following criteria:
 - a. Flammability: Class 1 and A when tested to UL 723.
 - b. Superficial damage to a depth of 0.010 inch (.25 mm) shall be repairable by sanding and/or polishing.
- B. Thickness:
 - 1. 1/2 inch
- C. Edge treatment:
 - 1. Bullnose, build up 1 1/2" nosing at edges of counter.
- D. Backsplash & Sidesplash:
 - 1. Applied as appropriate & as shown on drawings at wall.

2.2 MATERIALS (Con't)

- E. Integral Sink:
 - 1. Corian: Model Number: 816 with side overflow
 - 2. Color: White
 - 3. Mounting: Seamed undermount
 - 4. Sink/Bowl Mounting Hardware: Manufacturer's approved bowl clips, brass inserts and fasteners for attachment of undermount sinks/bowls.

- F. Integral Sink (Enhanced Reach Range):
 - 1. See Detail 1/A5

2.3 ACCESSORIES

- A. Joint adhesive:
 - 1. Manufacturer's standard one- or two-part adhesive kit to create inconspicuous, nonporous joints.

- B. Sealant:
 - 1. Manufacturer's standard mildew-resistant, FDA-compliant, NSF 51-compliant (food zone — any type), UL-listed silicone sealant in colors matching components.

- C. VOC Limits for Installation Adhesives and Glues: Use installation adhesives that comply with the limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

2.4 FACTORY FABRICATION

- A. Shop assembly
 - 1. Assemble work at shop indicated, in accordance with approved shop drawings and manufacturer's printed instructions and technical bulletins. Deliver to job ready for installation. Manufacture in largest practical pieces for handling and shipping without seams.

 - 2. Form joints between components using manufacturer's standard joint adhesive without conspicuous joints.

 - 3. Grade: AWI, Custom.

 - 4. Fabricate work square and to required lines.

 - 5. Recess and conceal fasteners, connections, and reinforcing.

 - 6. Design construction and installation details to allow for expansion and contraction of materials. Properly frames material with tight, hairline joints held rigidly in place.

 - 7. Fabricate countertops and vanities with back splash and side splash pieces to profiles and sizes indicated.

2.4 FACTORY FABRICATION (Con't)

8. Fabricate items to profiles shown with connections and supports as indicated or as required for complete installation in accordance with manufacturer's written instructions and approved submittals.
9. Provide cut-outs for plumbing fixtures and trim, washroom accessories, appliances, and related items. Confirm layout with manufacturer's cut-out templates before beginning work. Round corners of cut-outs and sand edges smooth.
10. Do not exceed manufacturer's recommended unsupported overhang distances.
11. Finish exposed surfaces smooth and polish to low sheen.
12. VANITY TOPS WITH UNDER-MOUNTED SINKS:
 - a. Solid Surfacing, edge details and back splash as indicated, with under-mount sink.
13. TOLERANCES:
 - a. VARIATION IN COMPONENT SIZE: Plus/Minus 1/4 inch.
 - b. LOCATION OF OPENINGS: Plus/Minus 1/4 inch from indicated location.

2.5 FINISHES

- A. Select from the manufacturer's standard color chart.
 1. Color:
 - a. Counter Men's Restroom – Formica Classics
"Coastal Mosaic #655"
 - b. Counter Women's Restroom – Formica Signatures
"Federal Cornerstone #714"
- B. Finish:
 1. Provide surfaces with a uniform finish.
 - a. Matte, gloss range of 5-20

PART 3 — EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with fabricator present for compliance with requirements for installation tolerances and other conditions affecting performance of work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.
- C. Take field measurements

3.2 INSTALLATION

- A. Install components plumb, level and rigid, scribed to adjacent finishes, in accordance with approved shop drawings and product data.
1. Provide product in the largest pieces available – preferably single pieces.
 2. Form field joints using manufacturer’s recommended adhesive, with joints inconspicuous in finished work.
 - a. Exposed joints/seams shall not be allowed.
 3. Reinforce field joints with solid surface strips extending a minimum of 1 inch on either side of the seam with the strip being the same thickness as the top.
 4. Cut and finish component edges with clean, sharp returns.
 5. Rout radii and contours to template.
 6. Anchor securely to wall, where appropriate.
 7. Align adjacent countertops and form seams to comply with Manufacturer’s written recommendations using adhesives in color to match countertop.
 8. Carefully dress joints smooth, remove surface scratches and clean entire surface.
 9. Install countertops with no more than 1/8 inch (3 mm) sag, bow, or other variation from a straight line.
 10. TOLERANCES:
 - a. Maximum Variation From True Dimension: 1/8 inch.
 - b. Maximum Offset From True Position: 1/8 inch.
- B. Applied backsplashes and sidesplashes:
1. Install applied backsplashes & sidesplashes to wall using manufacturer’s standard color-matched silicone sealant.
 2. Install applied backsplashes & sidesplashes to countertops using manufacturer’s standard color-matched silicone sealant.
- C. Integral Sink Bowl:
1. Provide solid surface materials sink bowels (with overflows) in locations shown on the drawings.
 2. Secure sink bowels to tops using manufacturer’s recommended sealant, adhesive, and mounting hardware to maintain warranty.

3.3 REPAIR

- A. Repair or replace damaged work which cannot be repaired to architect's satisfaction.

3.4 CLEANING AND PROTECTION

- A. Clean tops and splashes in accordance with manufacturer's recommendations.
- B. Promptly remove excessive mastic, seam adhesive and other stains.
- C. Keep components clean during installation.

END OF SECTION 06 61 16

PART 1 –GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Standard hollow-metal steel frames.
- B. Related Sections include the following:
 - 1. Section 04 20 00, “Unit Masonry Assemblies” for building anchors into and grouting standard steel frames in masonry construction.
 - 2. Section 08 70 00 for door hardware for metal doors.
 - 3. Section 09 91 00, “Painting”, for field painting steel frames.

1.03 DEFINITION

- A. Minimum Thickness: Minimum thickness of base metal without coatings.

1.04 SUBMITTAL

- A. Product Data: Include construction details, material descriptions, core descriptions, label compliance, fire-resistance and temperature-rise ratings, and finishes for each type of steel door and frame specified.
- B. Shop Drawings: In addition to requirements below, provide a schedule of standard steel doors and frames using same reference numbers for details and openings as those shown on the drawings;
 - 1. Frame details for each frame type, including dimensioned profiles.
 - 2. Details and locations of reinforcement and preparations for hardware.
 - 3. Details of each different wall opening condition.
 - 4. Details of anchorages, accessories, joints and connections.
- C. Coordination Drawings: Drawings of each opening, including wood door and steel frame, drawn to scale and coordinating door hardware.

1.04 SUBMITTAL (CON'T)

- D. Product Test Reports: Based on evaluation of comprehensive fire tests performed by a qualified testing agency, for each type of standard steel door and frame.

1.05 QUALITY ASSURANCE

- A. Steel doors & frames shall conform to the following:
 - 1. S.D.I. 100-85, Recommended Specifications for Standard Steel Doors and Frames.
 - 2. S.D.I. 105-87, Recommended Installation Instructions for Steel Frames.
 - 3. S.D.I. 106, Recommended Standard Door Type Nomenclature
 - 4. ANSI DHI A115-IG, Installation Guide for Doors and Hardware
 - 5. Handicapped: ANSI A117.1
 - 6. NFPA 80
 - 7. ANSI A 250.8 & A250.6
- B. Installer Qualifications: An employer of workers trained and approved by manufacturer.
- C. Source Limitations: Obtain standard steel frames through one source from a single manufacturer.
- D. Pre-installation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordinator."

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and frames palletized, wrapped, or crated to provide protected during transit and Project-site storage. Do not use non-vented plastic.
- B. Deliver welded frames with two removable spreader bars across bottom of frames, tack welded to jambs and mullions.
- C. Store frames under cover at Project site. Place units in a vertical position with heads up, spaced by blocking, on minimum 4-inch (102-mm) high wood blocking. Avoid using non-vented plastic or canvas shelters that could create a humidity chamber.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Metal Frame Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but not limited to the following:
 - 1. Amweld Building Products, LLC.
 - 2. Ceco Door Products; an ASSA ABLOY Group Company.
 - 3. CURRIES Company; an ASSA ABLOY Group Company.
 - 4. Kewanee Corporation (The).
 - 5. Pioneer Industries, Inc.
 - 6. Republic Builders Products Company.
 - 7. Steelcraft; an Ingersoll-Rand Company.

- B. Metal Door Manufacturer: Subject to compliance with requirements, provide standard metal doors by one of the following:
 - 1. Steelcraft Manufacturing Co.
 - 2. Curries Company
 - 3. Ceco corp.

2.02 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1-008M, Commercial Steel (CS), Type B; suitable for exposed applications.

- B. Hot-Rolled Steel Sheet: ASTM A 1011/A 1011M, Commercial Steel (CS), Type B; free of scale, pitting or surface defects; pickled and oiled.

- C. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B, with minimum A40 (ZF180) zinc-iron-alloy (galvannealed) coating designation.

- D. Electrolytic Zinc-Coated Steel Sheet: ASTM A 591/A 591M, Commercial Steel (CS), Class B coating; mill phosphatized.

- E. Supports and Anchors: After fabricating, galvanize units to be built into exterior walls according to ASTM A 153/A 153M, Class B.

- F. Inserts, Bolts and Fasteners: Provide items to be built into exterior walls, hot-dip galvanized according to ASTM A 153/A 153M.

2.02 MATERIALS (CON'T)

- G. Grout: Comply with Division 4 Section “Unit Masonry Assemblies.”
- H. **Bituminous Coating:**
 - 1. If the frames are filled with grout for the attachment system, apply coating at interior of frame before filling frame with grout.
 - 2. Coat-applied asphalt mastic, SSPC-Paint 12, compounded for 15-mil (0.4-mm) dry film thickness per coat. Provide inert-type non-corrosive compound free of asbestos fibers, sulfur components and other deleterious impurities.

2.03 STANDARD STEEL FRAMES

- A. General: Comply with ANSI A250.8 and with detail indicated for type and profile.
- B. Interior Frames: Fabricated from cold-rolled steel sheet, unless otherwise indicated to comply with exterior frame requirements.
 - 1. Fabricated frames with mitered or coped and welded face corners and seamless face joints. **Note 4” head face dimension.**
 - 2. Interior Frames: 0.060-inch-(16 gauge) thick steel sheet.
- C. Hardware Reinforcement: Fabricate reinforcement plates from same material as frames to comply with the following minimum sizes:
 - 1. Hinges: Minimum 0.135 inch (10 gauge) thick by 1-1/2 inches wide by 6 inches longer than hinge, secured by not less than 6 spot welds.
 - 2. Pivots: Minimum 0.167 inch (8 gauge) thick by 1-1/2 inches wide by 6 inches longer than hinge, secured by not less than 6 spot welds.
 - 3. Lock Face Closers and Concealed Holders: Minimum 0.075 inch (14 gauge) thick.
 - 4. All Other Surface-Mounted Hardware: Minimum 0.075 inch (14 gauge) thick.
- D. Hardware Preparation: Factory prepare standard steel frames to receive templated mortised hardware; include cutouts, reinforcement, mortising, drilling and tapping, according to the Door Hardware Schedule and templates furnished as specified in Division 8 Section “Door Hardware.”
 - 1. Reinforce doors and frames to receive nontemplated mortised and surface-mounted door hardware.
 - 2. Comply with applicable requirements in ANSI A250.6 and ANSI/DHI A115 Series specifications for door and frame preparation for hardware. Locate hardware as indicated on Shop Drawings or, if not indicated, according to ANSI A250.8.
- E. Supports and Anchors: Fabricated from electrolytic zinc-coated or metallic-coated steel sheet.

2.03 STANDARD STEEL FRAMES (Con't)

- F. Jamb Anchors:
1. Masonry Type: Adjustable strap-and-stirrup or T-shaped anchors to suit frame size, not less than 0.042 inch (1.0 mm) thick, with corrugated or perforated straps not less than 2 inches (50 mm) wide by 10 inches (250 mm) long; or wire anchors not less than 0.177 inch (4.5 mm) thick.
 - a. Two anchors per jamb up to 60 inches (1524 mm) in height.
 - b. Three anchors per jamb from 60 to 90 inches (1524 to 2286 mm) in height.
 - c. Four anchors per jamb from 90 to 120 inches (2286 to 3048 mm) in height.
 - d. Four anchors per jamb plus 1 additional anchor per jamb for each 24 inches (610 mm) or fraction thereof more than 120 inches (3048 mm) in height.
 2. Stud-Wall Type: Designed to engage stud, welded to back of frames; not less than 0.048 inch (18 gauge) thick.
 3. Post-installed Expansion Type for In-Place Concrete or Masonry: Minimum 3/8-inch- (9.5-mm-) diameter bolts with expansion shields or inserts. Provide pipe spacer from frame to wall, with throat reinforcement plate, welded to frame at each anchor location.
- G. Floor Anchors: Formed from same material as frames, not less than 0.048 inch (18 gauge) thick and as follows:
1. Monolithic Concrete Slabs: Clip-type anchors, with two holes to receive fasteners.
 2. Separate Topping Concrete Slabs: Adjustable-type anchors with extension clips, allowing not less than 2-inch (50-mm) height adjustment. Terminate bottom of frames at finish floor surface.
- H. Fabricate concealed stiffeners and hardware reinforcement from either cold- or hot-rolled steel sheet.
- I. General: Fabricate standard steel frames to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for thickness of metal. Where practical, fit and assemble units in manufacturer's plant. To ensure proper assembly at Project site, clearly identify work that cannot be permanently factory assembled before shipment.
- J. Standard Steel Frames: Where frames are fabricated in sections due to shipping or handling limitations, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.
1. Welded Frames: Weld flush face joints continuously; grind, fill, dress and make smooth, flush and invisible.
 2. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners, unless otherwise indicated.
 3. Plaster Guards: Weld guards to frame at back of hardware mortises in frames installed in concrete or masonry.

2.03 STANDARD STEEL FRAMES (Con't)

4. Door Silencers: Except on weather-stripped doors, drill stops to receive door silencers as follows. Provide plastic plugs to keep holes clear during construction.
 - a. Single-Door Frames: Drill stop in strike jamb to receive three door silencers.
 - b. Double-Door Frames: Drill stop in head jamb to receive two door silencers.

2.04 STOPS AND MOLDINGS

- A. Fixed Frame Moldings: Formed integral with standard steel frames, minimum 5/8 inch (16 mm) high, unless otherwise indicated.

2.05 STEEL FINISHES

- A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
 1. Finish standard steel frames after assembly.
 2. Galvanizing Repair Paint: High-zinc-dust-content paint for regalvanizing welds in steel, complying with SSPC-Paint 20.
- B. Metallic-Coated Steel Surface Preparation: Clean surfaces with non-petroleum solvent so surfaces are free of oil and other contaminants. After cleaning, apply a conversion coating suited to the organic coating to be applied over it. Clean welds, mechanical connections and abraded areas and apply galvanizing repair paint specified below to comply with ASTM A 780.
- C. Steel Surface Preparation: Clean surfaces to comply with SSPC-SP 1, "Solvent Cleaning"; remove dirt, oil, grease, or other contaminants that could impair paint bond. Remove mill scale and rust, if present, from uncoated steel; comply with SSPC-SP 3, "Power Tool Cleaning," or SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
- D. Factory Priming for Field-Painted Finish: Apply shop primer specified below immediately after surface preparation and pretreatment. Apply a smooth coat of even consistency to provide a uniform dry film thickness of not less than 0.7 mils (0.018 mm).
 1. Shop Primer: Manufacturer's standard, fast-curing, lead and chromate-free primer complying with ANSI A250.10 acceptance criteria; recommended by primer manufacturer for substrate; compatible with substrate and field-applied finish paint system, indicated and providing a sound foundation for field-applied topcoats despite prolonged exposure.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas and conditions with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of standard steel doors and frames.
 - 1. Examine roughing-in for embedded and built-in anchors to verify actual locations of standard steel frame connections before frame installation.
 - 2. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of work.
 - 3. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Remove welded-in shipping spreaders installed at factory.
- B. Prior to installation and with installation spreader in place, adjust and securely brace standard steel door frames for squareness, alignment, twist, and plumb to the following tolerances:
 - 1. Squareness: Plus or minus 1/16 inch (1.6 mm), measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
 - 2. Alignment: Plus or minus 1/16 inch (1.6 mm), measured at jambs on a horizontal line parallel to plane of wall.
 - 3. Twist: Plus or minus 1/16 inch (1.6 mm), measured at opposite face corners of jambs on parallel lines and perpendicular to plane of wall.
 - 4. Plumbness: Plus or minus 1/16 inch. (1.6 mm), measured at jambs on a perpendicular line from head to floor.
- C. Drill and tap frames to receive nontemplated mortised and surface-mounted door hardware.

3.03 INSTALLATION

- A. General: Provide frames of sizes, thickness and designs indicated. Install standard steel frames plumb, rigid, properly aligned, and securely fastened in place; comply with Drawings and manufacturer's written instructions.

3.03 INSTALLATION (CON'T)

- B. Standard Steel Frames: Install standard steel frames for doors, sidelights and borrowed lights and other openings, of size and profile indicated. Comply with SDI 105.
1. Set frames accurately in position; plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.
 - a. At fire-protection-rated openings, install frames according to NFPA 80.
 - b. Where frames are fabricated in sections due to shipping or handling limitations, field splice at approved locations by welding face joint continuously; grind, fill, dress, and make splice smooth, flush, and invisible on exposed faces.
 - c. Install door silencers in frames before grouting.
 - d. Remove temporary braces necessary for installation only after frames have been properly set and secured.
 - e. Check plumb, squareness, and twist of frames as walls are constructed. Shim as necessary to comply with installation tolerances.
 - f. Apply bituminous coating to backs of frames that are filled with mortar, grout and plaster containing antifreezing agents.
 2. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor and secure with post-installed expansion anchors.
 - a. Floor anchors may be set with powder-actuated fasteners instead of postinstalled expansion anchors if so indicated and approved on Shop Drawings.
 3. Masonry Walls:
 - a. If using strap anchors, coordinate installation of frames to allow for solidly filling space between frames and masonry with mortar as specified in Section 04 20 00 "Unit Masonry Assemblies."

OR

 - b. If using In-Place Concrete or Masonry Construction: Secure frames in place with post-installed expansion anchors into grouted core of CMU. Countersink anchors, and fill and make smooth, flush, and invisible on exposed faces.

3.03 INSTALLATION (CON'T)

4. Installation Tolerances: Adjust standard steel door frames for squareness, alignment, twist, and plumb to the following tolerances:
 - a. Squareness: Plus or minus 1/6 inch (1.6 mm), measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
 - b. Alignment: Plus or minus 1/16 inch (1.6 mm), measured at jambs on a horizontal line parallel to plan of wall.
 - c. Twist: Plus or minus 1/16 inch (1.6 mm), measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
 - d. Plumbness: Plus or minus 1/16 inch (1.6 mm), measured at jambs at floor.

- C. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including standard steel doors or frames that are warped, bowed, or otherwise unacceptable.

- D. Clean grout and other bonding material off standard steel doors and frames immediately after installation.

- E. Prime-Cut Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying primer.

END OF SECTION 08 11 13

PART 1 –GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Hollow-metal door.
- B. Related Sections include the following:
 - 1. Section 04 20 00, “Unit Masonry Assemblies” for building anchors into and grouting standard steel frames in masonry construction.
 - 2. Section 08 70 00 for door hardware for metal doors.
 - 3. Section 09 91 00, “Painting”, for field painting steel frames.

1.03 DEFINITION

- A. Minimum Thickness: Minimum thickness of base metal without coatings.

1.04 SUBMITTAL

- A. Product Data: Include construction details, material descriptions, core descriptions, label compliance, fire-resistance and temperature-rise ratings, and finishes for each type of steel door specified.
- B. Shop Drawings: In addition to requirements below, provide a schedule of steel door(s) using same reference numbers for details and openings as those shown on the drawings;
 - 1. Details and locations of reinforcement and preparations for hardware.
 - 2. Details of anchorages, accessories, joints and connections.
 - 3. Indicate door elevations, internal reinforcement, closure method, and cutouts for glass lights and louvers.
 - 4. Submit manufacturer’s installation instructions, including a current copy of ANSI A250.11 as part of the shop drawing submittal
 - 5. Provide evidence of manufacturer’s membership in the Steel Door Institute.

1.04 SUBMITTAL (CON'T)

- C. Product Test Reports: Based on evaluation of comprehensive fire tests performed by a qualified testing agency, for each type of steel door.

1.05 QUALITY ASSURANCE

- A. Steel door(s) shall conform to the following:
 - 1. SDI 105 - Recommended Erection Instructions for Steel frames.
 - 2. SDI 111 - Recommended Details and Guidelines for Standard Steel Doors and Frames and Accessories.
 - 3. SDI 122 - Installation and Troubleshooting Guide for Standard Steel Doors and Frames.
 - 4. ANSI/DHI A115 - Specifications for Hardware Preparations in Standard Steel Doors and Frames.
 - 5. ANSI/DHI A115.IG - Installation Guide for Doors and Hardware.
 - 6. ANSI A156.7 - Hinge Template Dimensions.
 - 7. ANSI A250.4 – Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors and Hardware Reinforcing.
 - 8. ANSI A 250.8 - SDI-100 Recommended Specifications for Standard Steel Doors and Frames.
 - 9. ANSI A 250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames.
 - 10. NFPA 80 - Standard for Fire Doors and Other Opening Protectives.
 - 11. Handicapped: ANSI A117.1

- B. Door(s): conform to applicable codes for fire ratings. It is the intent of this specification that door hardware and its application comply or exceed the standards for labeled openings. In case of conflicts in required fire protection ratings, provide fire ratings as required by NFPA and UL.

- C. Installer Qualifications: An employer of workers trained and approved by manufacturer.

- D. Conform to requirements of the referenced standards. Submit test reports upon request by the Owner or Architect.

1.05 QUALITY ASSURANCE (CON'T)

- E. Underwriters' Laboratories and Intertek Testing Services / Warnock Hersey, labeled fire doors and frames:
 - 1. Label fire doors and frames listed in accordance with Underwriters Laboratories standard UL10C, and Positive Pressure Fire Tests of Door Assemblies.
 - 2. Construct and install doors and frames to comply with applicable issue of ANSI/NFPA 80.
 - 3. Manufacture Underwriters' Laboratories labeled doors and frames under the UL factory inspection program and in strict compliance to UL procedures, and provide the degree of fire protection, heat transmission and panic loading capability indicated by the opening class.
- F. Source Limitations: Obtain steel doors through one source from a single manufacturer.
- E. Pre-installation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordinator."

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver doors palletized, wrapped, or crated to provide protected during transit and Project-site storage. Do not use non-vented plastic.
- B. Store doors under cover at Project site.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Metal Door Manufacturer: Subject to compliance with requirements, provide standard metal doors by one of the following:
 - 1. Steelcraft, Cincinnati, Ohio
 - 2. Curries, Mason City, Iowa

2.02 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1-008M, Commercial Steel (CS), Type B; suitable for exposed applications.
- B. Hot-Rolled Steel Sheet: ASTM A 1011/A 1011M, Commercial Steel (CS), Type B; free of scale, pitting or surface defects; pickled and oiled.

2.02 MATERIALS (CON/T)

- C. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B, with minimum A40 (ZF180) zinc-iron-alloy (galvannealed) coating designation.
- D. Electrolytic Zinc-Coated Steel Sheet: ASTM A 591/A 591M, Commercial Steel (CS), Class B coating; mill phosphatized.

2.03 HOLLOW METAL DOOR

- A. **Grain-Tech**, Factory Finished Doors: L or 'T' Series, 1 3/4" thick, grade 2, Heavy Duty
 - 1. 18 gage
 - 2. Commercial quality sheet steel, cold-rolled, annealed, and free from scale, pitting, rust, and other defects.
 - 3. Interior doors shall have manufacturer's standard honeycomb, polyurethane, polystyrene, unitized steel grid, vertical steel stiffeners, or rigid mineral fiber core with internal sound deadener on inside of face sheets where appropriate in accordance with SDI standards, and as appropriate for fire-rated and acoustic-rated assemblies.
 - 4. Provide 'B' Label, 1 1/2 Hour, rated door if noted on door schedule. Meeting fire-rating requirements of ASTM E152
- B. Fabrication
 - 1. Fabricate doors with hardware reinforcement welded in place.
 - a. Hinge reinforcements for full mortise hinges: minimum 7 gage [0.180" (4.7mm)].
 - b. Lock reinforcements: minimum 16 gage [0.053" (1.3mm)].
 - c. Closer reinforcements: minimum 14 gage [0.067" (1.7mm)], 20" long.
 - d. Galvannealed doors: include galvannealed hardware reinforcements.
 - e. Projection welded hinge and lock reinforcements to the edge of the door.
 - f. Provided adequate reinforcements for other hardware as required.
 - 2. Flush doors shall be full flush type, with seams finished so as to be invisible. Provide bevel on swing side.
 - 3. Prepare for hardware specified. Provide reinforcing for hardware.
 - a. Provide non-removable stops on secure side of interior doors for glass and other panels in door.
 - b. Provide screw applied removable glazing beads on inside of glass, louvers, and other panels in doors.
 - 4. Exposed fasteners: Unless otherwise indicated, provide countersunk flat or oval heads for exposed screws and bolts. Fasteners shall have tamper resistant type heads.
 - 5. Welded Vertical Edges (W): Continuous vertical mechanical interlocking joint; edge seams welded, epoxy filled, and ground smooth.
 - 6. Bevel hinge and lock door edges 1/8 inch (3 mm) in 2 inches (50 mm). Square edges on hinge and/or lock stiles are not acceptable.
 - 7. Reinforce top and bottom of doors with galvannealed 14 gage, welded to both panels.

2.04 DOOR FINISHES

- A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
 - 1. Finish standard steel frames after assembly.
 - 2. Galvanizing Repair Paint: High-zinc-dust-content paint for regalvanizing welds in steel, complying with SSPC-Paint 20.

- B. Metallic-Coated Steel Surface Preparation: Clean surfaces with non-petroleum solvent so surfaces are free of oil and other contaminants. After cleaning, apply a conversion coating suited to the organic coating to be applied over it. Clean welds, mechanical connections and abraded areas and apply galvanizing repair paint specified below to comply with ASTM A 780.

- C. Steel Surface Preparation: Clean surfaces to comply with SSPC-SP 1, "Solvent Cleaning"; remove dirt, oil, grease, or other contaminants that could impair paint bond. Remove mill scale and rust, if present, from uncoated steel; comply with SSPC-SP 3, "Power Tool Cleaning," or SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."

- D. Factory Priming for Field-Painted Finish: Apply shop primer specified below immediately after surface preparation and pretreatment. Apply a smooth coat of even consistency to provide a uniform dry film thickness of not less than 0.7 mils (0.018 mm).
 - 1. Shop Primer: Manufacturer's standard, fast-curing, lead and chromate-free primer complying with ANSI A250.10 acceptance criteria; recommended by primer manufacturer for substrate; compatible with substrate and field-applied finish paint system, indicated and providing a sound foundation for field-applied topcoats despite prolonged exposure.

- E. **GrainTech® Doors:** Fabricated from steel that has an embossed wood grain pattern extending the full height and width of the door. Provide doors with continuous vertical mechanical inter-locking joints at lock and hinge edges with visible edge seams. The wood grain embossment minimum .005" deep. The wood grain face sheets must be cleaned, phosphatized and prime painted with a stain absorbing primer. Vertical edges must be stained using conventional stains to achieve a color,
 - 1. Owner will select from one of standard colors:
ash, birch, mahogany, maple, oak, walnut.
 - 2. After staining, the door must be clear coated with UV inhibitors. Applied grain pattern or material will not be permitted Acceptable products:
 - a. Steelcraft GrainTech
 - b. Curries: Curristain

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas and conditions with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of standard steel doors and frames.
 - 1. Examine roughing-in for embedded and built-in anchors to verify actual locations of standard steel frame connections before frame installation.
 - 2. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of work.
 - 3. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Drill and tap doors to receive nontemplated mortised and surface-mounted door hardware.

3.03 INSTALLATION

- A. Install doors in accordance with Steel Door Institute's recommended erection instructions for steel frames ANSI A250.11.
- B. Install label doors in accordance with NFPA-80.
- C. Apply hardware in accordance with hardware manufacturers' instructions and Section 08710 FINISH HARDWARE of these Specifications. Install hardware with only factory-provided fasteners. Adjust door installation to provide uniform clearance at head and jambs, to achieve maximum operational effectiveness and appearance.
- D. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including doors that are warped, bowed, or otherwise unacceptable.
- E. Clean grout and other bonding material off standard steel doors and frames immediately after installation.

3.03 PROTECTION

- A. Provide protective measures required throughout the construction period to ensure that door and frame units will be without damage or deterioration, other than normal weathering, at time of acceptance.

END OF SECTION 08 11 13

PART 1 – GENERAL

RELATED DOCUMENTS

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

1.01 WORK INCLUDED

- A. Large flush face stainless steel access panel to be set in ceramic tile wall.
- B. Access panel with recessed face to hold ceramic tile – to be set in ceramic tile wall.

1.02 RELATED WORK

- A. Section 09 28 00 – Cementitious Backer Board
- B. Section 09 91 00 – Painting and Coating

1.03 WARRANTY

- A. Five years against defects in material or workmanship.

1.04 SHOP DRAWINGS AND PRODUCT DATA

- A. Submit shop drawings and product data under provisions of General Conditions and Section 01 30 00.
- B. Indicate frame configuration, anchor spacing's, anchor types and location of cutouts for hardware and reinforcement.
- C. Submit manufacturer's installation instructions under provisions of General Conditions and Section 01 30 00.

1.05 DELIVERY, STORAGE AND PROTECTION

- A. Protect products under provisions of General Conditions and Section 01 60 00.

PART 2 – PRODUCTS

2.01 MANUFACTURER ACCESS PANELS

- A. Acudor or approved equal.

2.02 MATERIALS AND PRODUCTS

- A. Flush Face Access Panel, UF-5000 24x36 ACSS, door size, verify in the field.
1. Door: 14 gauge steel, flush to frame, rounded safety corners
 2. Frame: One-piece outer frame welded to mounting frame, 16 gauge steel with 1” flange.
 3. Finish: Stainless steel
 4. Hinge: Continuous, concealed.
 5. Latches: Stainless Steel Allen head cam latch.
- B. Recessed Face Access Panel, AP-5010, 12”W x 12”H door size, verify in the field.
1. Door: 14 gauge stainless steel, recessed 5/8” (for ceramic tile inserts) and lined with self-furring galvanized lath
 2. Frame: 14 gauge stainless steel frame mounting frame, Expansion casing bead with 3” wide galvanized lath, recessed 3/4” to receive tile and setting bed.
 3. Finish: Stainless Steel.
 4. Hinge: Continuous, exposed piano hinge, stainless steel.
 5. Latches: Stainless Steel Allen head cam latch.
 6. Provide access panels as shown on drawings.

PART 3 – EXECUTION

3.01 INSTALLATION

1. Coordinate with requirement of wall opening.
2. Verify that the opening is the proper size and the anchoring conditions are ready to accept the door.
3. Install according to manufacturer's requirements.

3.02 ADJUSTING AND CLEANING

- A. Adjust for smooth and balanced door movement.

END OF SECTION 08 31 00

PART 1 –GENERAL

1.01 SUMMARY

A. Section Includes:

1. Finish hardware for doors as specified and as listed in "Hardware Groups" and required by actual conditions.
2. Include screws, special screws, bolts, special bolts, expansion shields, and other devices for proper application of hardware. Installation of hardware with proper factory supplied fasteners is mandatory.
3. Sample door hardware matrix and door numbering criteria.

B. Related Sections:

1. Section 01 25 00 – Equals and Substitutions.
2. Section 06 10 00 – Rough Carpentry.

1.02 GENERAL REQUIREMENTS

- A. Provide items, articles, materials, operations and methods listed, mentioned or scheduled herein or on drawings, in quantities as required to complete project. Provide hardware that functions properly. Prior to furnishing hardware, advise Architect of items that will not operate properly, are improper for conditions, or will not remain permanently anchored.

1.03 SUBMITTALS

- A. Hardware Schedule: Electronically submit copies of hardware schedule in vertical format as illustrated by the Sequence of Format for the Hardware Schedule as published by the Door and Hardware Institute. Schedules, which do not comply, will be returned for correction before checking. Hardware schedule shall clearly indicate architect's hardware group and manufacturer of each item proposed. The schedule shall be reviewed prior to submission by a certified Architectural Hardware Consultant (AHC).
1. Provide illustrations from manufacturers catalogs and data in brochure form for all products, including model, function, design, finishes, and options.
 2. Check specified hardware for suitability and adaptability to details and surrounding conditions. Indicate unsuitable or incompatible items and proposed substitutions in hardware schedule.
 3. Provide listing of manufacturer's template numbers for each item of hardware in hardware schedule.
 4. Furnish other Contractors and Subcontractors concerned with copies of final approved hardware schedule. Submit necessary templates and schedules as soon as possible to hollow metal, wood door, and aluminum door fabricators in accordance with schedule they require for fabrication.
 5. Samples: Lever design or finish sample: Provide 3 samples if requested by architect.
- B. Riser and Wiring Diagrams: Provide complete and detailed system operation and elevation diagrams specially developed for each opening requiring electrified hardware, except openings where only magnetic hold-opens or door position switches are specified. Provide these diagrams with hardware schedule submittal for approval. Provide detailed wiring diagrams with hardware delivery to jobsite.
- C. Installation Instructions: Provide manufacturer's written installation and adjustment instructions for finish hardware. Send installation instructions to site with hardware.
- D. Templates: Submit templates and final approved hardware schedule to door and frame supplier and others as applicable to enable proper and accurate sizing and locations of cutouts and reinforcing.

1.03 SUBMITTALS (CON'T)

- E. Closeout Submittals: Comply with Section 01 77 00 including specific requirements indicated.
 - 1. Operating and maintenance manuals: Submit 3 sets containing the following:
 - a. Complete information in care, maintenance, and adjustment, and data on repair and replacement parts, and information on preservation of finishes.
 - b. Catalog pages for each product.
 - c. Name, address, and phone number of local representative for each manufacturer.
 - d. Parts list for each product.
 - 2. Copy of final approved hardware schedule, edited to reflect "As installed".
 - 3. Copy of final keying schedule.
 - 4. As installed "Wiring Diagrams" for each opening connected to power, both low voltage and 110 volts.
 - 5. One complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.
 - 6. Copy of all warranties taken from manufacturer's catalog pages. Non-cataloged letters of warranty are not acceptable without written authorization from owner. Including all appropriate reference numbers for manufacturers to identify the project.

1.04 QUALITY ASSURANCE

- A. Manufacturer: Obtain each type of hardware (i.e. latch and locksets, hinges, closers) from single manufacturer, although several may be indicated as offering products complying with requirements. Locksets and exit device trim shall be have aesthetic design compatibility.
- B. All hardware shall be considered stock material by manufacturer and not require machining, special order, or standard factory lead times for replacement, allowing for the prompt repair and maintenance of hardware as required. Only manufacturer's fasteners can be used on locksets, fire rated exit devices, and door closers. No altering of cylindrical keyways.
- C. Where doors are scheduled to be prepared for the future application of electronic hardware, furnish mechanical hardware that will require no additional door preparation when future conversion to electrical function takes place.
- D. Where free-wheeling lockset or exit device trim is specified, "shear pin" or "break away" style trims shall not be used.

1.04 QUALITY ASSURANCE (CON'T)

- E. Supplier: Recognized architectural finish hardware supplier, with warehousing facilities, who has been providing hardware for period of not less than 3 years. The supplier shall be, or employ, a certified Architectural Hardware Consultant (AHC), who is registered in the continuing education program as administered by the Door and Hardware Institute. The hardware schedule shall be prepared and signed by a certified AHC.
- F. Installer: Firm with 3 years experience in installation of similar hardware to that required for this project, including specific requirements indicated. Installation must be of high quality. Such practices as grinding strike plates will not be tolerated.
- G. Regulatory Label Requirements: Provide nationally recognized testing agency label or stamp on hardware for labeled openings. Where UL requirements conflict with drawings or specifications, hardware conforming to UL requirements shall be provided. Conflicts and proposed substitutions shall be clearly indicated in hardware schedule.
- H. Handicap Requirements: Doors to stairs (other than exit stairs), loading platforms, boiler rooms, stages and doors serving other hazardous locations shall have knurled or other similar approved marking of door lever handles or cross bars in accordance with local building codes.
- I. Pre-Installation Conference: Prior to the installation of hardware, manufacturer's representatives for locksets, closers, and exit devices shall arrange and hold a jobsite meeting to instruct the installing contractor's personnel on the proper installation of their respective products. A letter of compliance, indicating when this meeting is held and who is in attendance, shall be sent to the Architect and Owner.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver hardware to jobsite in manufacturer's original packaging, marked to correspond with approved hardware schedule. Do not deliver hardware until suitable locked storage space is available. Check hardware against reviewed hardware schedule. Store hardware to protect against loss, theft or damage.
- B. Deliver hardware required to be installed during fabrication of hollow metal, aluminum, wood, or stainless steel doors prepaid to manufacturer.

1.06 WARRANTY

- A. Guarantee workmanship and material provided against defective manufacture. Repair or replace defective workmanship and material appearing within period of one year after Substantial Completion.
- B. Provide ten year factory warranty on door closer body against defects in material and workmanship from date of occupancy of project.
- C. Provide five year factory warranty on exit devices against defects in material and workmanship from date of occupancy of project.
- D. Cylindrical grade one through-bolted locksets supplied as equivalent to Sargent 10 Line shall have a five year factory warranty. Mortise locksets shall have a five year factory warranty from date of occupancy. All warranties shall be against defects in material or workmanship from date of occupancy of project.
- E. All power supplies and electronic hardware shall be by the same manufacturer to insure compatibility, proper function and warranty compliance. Field manufactured power supplies are not acceptable.
- F. All products furnished equivalent to HES electric strike model 1003 and 9600 shall have a 10 year warranty against defects in material or workmanship, compliant with “E” above.
- G. All products furnished as equivalent to Securitron products shall have a warranty similar to Securitron’s MAGNACARE Lifetime Replacement Warranty. Securitron Magnalock Corporation warrants that it will replace at customer’s request, at any time for any reason, products manufactured and branded by Securitron. Refer to Securitron’s warranty to insure compliance.
- H. Replace shortages and incorrect items with correct material at no additional cost to Owner.
- I. At completion of project, a qualified factory representative shall inspect hardware installation and door closer adjustments. After this inspection, letter shall be sent to Architect reporting on conditions, verifying that hardware and closers have been properly installed and adjusted.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturers listed have been chosen to establish a standard of quality, design, and function.
- B. Manufacturers have been approved only for the category or item listed. **The first manufacturer listed is the preferred manufacturer for each product**, and the submittal of any of manufacturer, even the 1st and 2nd equal, or a manufacturer not listed for any product, is not necessarily acceptable for use and must follow the submittal procedures as outlined in Specification Section 01631 – Equals and Substitutions.
- C. Manufacturer information:
1. The following is an alphabetical list of approved manufacturers, address, and website (if available). This information is being supplied for reference only and in no way implies product acceptance. Only the products listed in the respective category are considered to be acceptable for this project.

1) ABH	Elk Grove, IL	www.abhmfg.com
2) Dor-o-matic	Harwood Heights, IL	www.doromatic.com
3) Folger Adam	Lemont, IL	www.folgeradamsecurity.com
4) Glynn-Johnson	Indianapolis, IN	www.glynnjohnson.com
5) Hager	St. Louis, MI	www.hagerhinge.com
6) HES	Phoenix, AZ	www.hesinnovations.com
7) Key Control	Katy, TX	www.key-control-inc.com
8) LCN	Princeton, IL	www.lcnclosers.com
9) Locknetics	Forestville, CT	www.locknetics.com
10) Lund	Bath, OH	www.lundkeycab.com
11) McKinney	Scranton, PA	www.mckinneyhinge.com
12) National Guard	Memphis, TN	www.ngpinc.com
13) Norton	Monroe, NC	www.yalesecurity.com
14) Pemko	Memphis, TN	www.pemko.com
15) Precision	Romulus, MI	www.precisionhardware.com
16) Quality	Los Angeles, CA	www.trimcobbw.com
17) Reese	Rosemont, MN	www.reeseusa.com
18) Rixson	Monroe, NC	www.yalesecurity.com
19) Rockwood	Altoona, PA	www.rockwoodmfg.com
20) Roton	St. Louis, MI	www.hagerhinge.com

2.01 MANUFACTURERS (CON'T)

21) Sargent	New Haven, CT	www.sargentlock.com
22) Schlage	Colorado Springs, CO	www.schlage.com
23) Securitron	Sparks, NV	www.securitron.com
24) Sentrol	Tualatin, OR	www.sentrol.com
25) Stanley	New Britain, CT	www.stanleyworks.com
26) Telkee	Dover, DE	www.telkee.com
27) Von Duprin	Indianapolis, IN	www.vonduprin.com

2.02 BUTTS AND HINGES

A. Acceptable Manufacturers and Products:

Type	Manufacturer	Equal Mfg. 1
	McKinney	Stanley
Type 1	T4A3795	CB268
Type 2	TCA2714	CB179
Type 3	TCA2314	CB191
Type 4	TCA3786	CB168
Type 5	TCA3386	CB199

- B. Drill 5/32 inch hole and use No. 12, 1-1/4 inch steel threaded to the head wood screws for hinges on wood doors.

2.03 LOCKSETS – HEAVY DUTY CYLINDRICAL

A. Acceptable Manufacturers and Products:

1. The criteria listed below are performance requirements and specifications for a heavy duty cylindrical lever lockset. Also see Section 01361 – Equals and Substitutions.

- B. Provide lock series and functions as specified in Hardware Groups, with the provisions below.

2.03 LOCKSETS – HEAVY DUTY CYLINDRICAL (CON’T)

1. Cylinders: Refer to keying requirements.
2. Backsets: 2-3/4 inches.
3. Strikes: Provide wrought boxes and curved lip strikes with proper lip length to protect trim but not to project more than 1/8 inch beyond trim, frame or inactive leaf. Where required, provide open back strike and protected to allow practical and secure operation.
4. Locksets shall be able to withstand 2400 inch pounds of torque applied to the locked outside lever without gaining access.
5. Locksets shall be cycle tested per ANSI/BHMA A156.2, to two million cycles without any visible sag.
6. Locksets shall be able to fit a standard 2-1/8” inch (55 mm) diameter bore without the use of thru-bolts. Standard rose size shall be 2-3/4 inches (70 mm) in diameter.
7. Locksets levers shall be made of solid material with no plastic fillers. Latchbolt head shall be one piece stainless steel
8. Latchbolt assemblies must be encased within the lock body.
9. Locksets shall have a seven year limited warranty.
10. Doors to stairs (other than exit stairs), loading platforms, boiler rooms, stages and doors serving other hazardous locations shall have knurled or other similar approved marking of door lever handles or cross bars in accordance with local building codes.

C. Acceptable Manufacturers and Products:

Manufacturer		
Sargent		
11 Line LL		

- D. Locksets must be compatible with cylinders required to maintain existing keying system. See Section 1.4B

2.04 KEYING

- A. Provide Sargent factory masterkeyed cylinders keyed to existing Sargent Restricted Masterkey System. Key system on file at Sargent factory. NO SUBSTITUTIONS will be allowed.
- B. Provide manufacturers standard cylinders (non removable core type – removable core cylinders will not be accepted and will be replaced at supplier’s cost if furnished)
- C. Factory key all cylinders with manufacturer retaining permanent keying records.
- D. Submit proposed keying schedule to Architect. Meet with Owner and Architect to review schedule.

2.04 KEYING (CON'T)

- E. All cylinders, unless noted otherwise, shall be Grand Master Keyed as directed by owner.
- F. All cylinders shall be keyed in alike or different sets as noted by their respective key set number. Allow for fifty (50) change keys under each of the above master keys.
- G. All keys are to be cut on Restricted key blanks in accordance with existing Sargent Restricted Masterkey System. Provide keys as follows:
 - 1. Do not issue Grand Master Keys
 - 2. Ten (10) Master Keys (each set)
 - 3. Five (5) Change Keys (each cylinder)
 - 4. Five (5) Construction Master Keys
- H. Visual key control:
 - 1. All keys shall be stamped with their respective key set number and stamped "DO NOT DUPLICATE".
 - 2. Master keys shall be stamped with their respective key set letters.
 - 3. Do not stamp any cylinders with key set on face (front) of cylinder.
- I. All keyblanks, master and grandmaster keys shall be shipped directly from the factory to the University via registered mail, confidential, or, per the University's instructions, delivered directly to the University by the hardware supplier who shall obtain a receipt for delivery of same.

There is to be NO construction keying for this building. The locks will be keyed at the factory according to a keying system layout that is to be determined at the keying meeting. The GC will be given an agreed number of master keys that the GC will use to lock & unlock doors in the building during construction.

At the end of construction, ALL master keys that were given to the GC must be returned and accounted for. If any of the master keys are lost by the GC, the GC will be responsible for re-keying the entire building.

2.05 DOOR CLOSERS

A. Acceptable Manufacturers and Products:

	Manufacturer	Equal Mfg. 1	Equal Mfg. 2
Type	Sargent	LCN	Norton
Stop Arm	281-CPS	4111S-CUSH	UNI-8500-BF
Stop/Holder Arm	281-CPSH	4111H-CUSH	UNI-8500BF-H
Regular Arm	281-O	4011	8500BF
HD Parallel Arm	281-P10	4111EDA	PR8500BF

- B. Provide all closers on exterior openings with a stop arm, unless noted otherwise.
- C. Provide all closers on interior openings with a parallel arm, unless noted otherwise.
- D. Provide non-sized closers, adjustable to meet maximum opening force requirements of ADA.
- E. Provide drop plates, brackets, or adapters for arms as required to suit details.
- F. Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors. Closers shall not be visible in corridors, lobbies and other public spaces unless necessary.
- G. Provide back-check for closers.
- H. Provide hold-open arms where indicated.
- I. Provide delayed action where indicated.
- J. Provide closers for doors as noted in Hardware Groups and, in addition, provide closers for labeled doors whether or not specifically noted in group.
- K. Provide closers meeting the requirements of UBC 7-2 and UL 10C positive pressure tests.
- L. Provide sex bolt attachments or blocking for mineral core door application as directed by Architect and/or door specifications.
- M. Provide complete hardware sets for each opening specified with bi-folding door hardware.
 - 1. Include track, hangers, fasteners, guides, and all hardware required for a complete installation.

2.06 OVERHEAD STOPS

A. Acceptable Manufacturers and Products:

	Manufacturer	Equal Mfg. 1	Equal Mfg. 2
Type	Sargent	ABH	Glynn Johnson
Surface, med. duty	1540	3300	450
Concealed, med. duty	1530	3000	410
Surface, heavy duty	590	9000	900
Concealed, heavy duty	690	1000	100

- B. Provide 1540 Series overhead stops for doors equipped with regular arm surface type closer that swing more than 140 degrees before striking wall, and for doors that open against equipment, casework, sidelights, other objects that would make wall stops inappropriate.
- C. Provide sex bolt attachments or blocking for mineral core door application as directed by Architect and/or door specifications.

2.07 DOOR TRIM

A. Acceptable Manufacturers and Products:

	Manufacturer	Equal Mfg. 1
Type	Rockwood	Hager
Push Plate	70	30S
Pull	BF111	H4J
Kick Plate	K1050 B4E	194S

- B. Kick Plates and Armor Plates: Minimum of 0.050 inch thick, beveled 4 edges.
1. At single doors provide width 1-1/2 inch less than door width on stop side and one inch less than door width on face side.
 2. At pairs of doors provide width one inch less than door width on either sides.
 3. Provide Height:
 - a. Mop Plates: 4 inches, unless otherwise indicated.
 - b. Kick Plates: 16 inches, unless otherwise indicated.
 - c. Armor Plates: 34 inches, unless otherwise indicated.
- C. Push Plates:
1. Rockwood #70, provide 4 inches by 16 inch unless otherwise indicated.
 2. Where width of door stile prevents use of 4 inch wide plate, provide push plate 3 1/2 inches wide.

2.07 DOOR TRIM (Con't)

D Pulls:

1. Rockwood #BF111, unless otherwise indicated.
2. Where required, mount back to back with push bar.

E. Pull Plate:

1. Rockwood #BF111 pull x #70 plate, provide plate 4 inches by 16 inch unless otherwise indicated.
2. Where width of door stile prevents use of 4 inch wide plate, provide push plate 3 1/2 inches wide.

2.08 STOPS AND HOLDERS

A. Acceptable Manufacturers and Products:

	Manufacturer	Equal Mfg. 1
Type	Rockwood	Hager
Wall, convex	406	232W
Wall, concave	409	236W

2.09 SILENCERS

A. Acceptable Manufacturers and Products:

	Manufacturer	Equal Mfg. 1
Type	Rockwood	Hager
Hollow Metal Frame	608	307D
Wood Frame	609	308D

2.10 FASTENERS

- A. Including, but not limited to, wood or machine screws, bolts, nuts, anchors, etc. of proper type, material, and finish required for installation of hardware.
- B. Use phillips head for exposed screws. Do not use aluminum screws to attach hardware.
- C. Provide self-tapping (TEC) screws for attachment of sweeps and stop-applied weatherstripping.
- D. Install all hardware with only fasteners provided by the Manufacturer for use with the specific product and according to the Manufacturers written instructions.

2.11 TYPICAL FINISHES AND MATERIALS

- D. Finishes, unless otherwise specified:
 - 1. Butts: Interior Doors
 - a. US26D (BHMA 652) on Steel
 - 2. Locks and Latches:
 - a. US26D (BHMA 626) on Brass or Bronze
 - 3. Kick Plates, Armor Plates, and Edge Guards:
 - a. US32D (BHMA 630) on Stainless Steel
 - 4. Latch Protectors:
 - a. US32D (BHMA 630) on Stainless Steel
 - 5. Miscellaneous Hardware:
 - a. US26D (BHMA 626) on Brass or Bronze

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Examine doors, frames, and related items for conditions that would prevent the proper application of finish hardware. Do not proceed until defects are corrected.
- B. Field verify existing doors, frames, hardware, and conditions prior to scheduling hardware.

3.02 INSTALLATION

- A. Install finish hardware in accordance with reviewed hardware schedule and manufacturer's printed instructions. Prefit hardware before finish is applied, remove and reinstall after finish is completed. Install hardware so that parts operate smoothly, close tightly and do not rattle.
- B. Installation of hardware shall comply with NFPA 80 and NFPA 101 requirements.
- C. Set units level, plumb and true to line and location. Adjust and reinforce attachment to substrate as necessary for proper installation and operation.
- D. Drill and countersink units that are not factory-prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.
- E. Set thresholds for exterior doors in full bed of butyl-rubber or polyisobutylene mastic sealant, forming tight seal between threshold and surface to which set. Securely and permanently anchor thresholds, using countersunk non-ferrous screws to match color of thresholds (stainless steel screws at aluminum thresholds).

3.03 FIELD QUALITY CONTROL

- A. After installation has been completed, a qualified person from the hardware supplier is to check the Project to determine proper application of finish hardware according to schedule. Also check operation and adjustment of all hardware items.
- B. Installer shall deliver to owner, upon completion, one set of installation and maintenance instructions and specialty tools for all hardware items.
- C. Upon owners request, hardware consultant shall inspect application, installation and adjustment of hardware for proper installation.

3.04 ADJUSTING AND CLEANING

- A. At completion, hardware shall be left clean and free from disfigurement. Make adjustment to door closers and other items of hardware. Where hardware is found defective repair or replace or otherwise correct as directed.
- B. Adjust door closers to meet opening force requirements of Uniform Federal Accessibility Standards.
- C. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
- D. Adjustment: Wherever hardware installation is made more than one month prior to acceptance or occupancy of space or area, return to work during week prior to acceptance or occupancy, and make/ check adjustments of hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors.
- E. Final Adjustment: Installer shall return six months after substantial completion to make final adjustments of all hardware items.
- F. Installer shall instruct Owner's personnel in proper adjustment and maintenance of door hardware and hardware finishes.
- G. Clean adjacent surfaces soiled by hardware installation.

3.05 PROTECTION

- A. Provide for proper protection of items of hardware until Owner accepts Project as complete.

3.06 HARDWARE GROUPS AND SUFFIXES

- A. The following schedule of hardware groups shall be considered a guide only, and the supplier is cautioned to refer to general conditions, special conditions, and the preamble to this section. It shall be the hardware supplier's responsibility to furnish all required hardware.
- B. Refer to the door schedule for special hardware notes, applications, and/or requirements.
- C. Manufacturers abbreviations:
 - 1. AR – Adams Rite
 - 2. MK – McKinney
 - 3. SA – Sargent
 - 4. RO-Rockwood

Hardware Sets

NOTE: Set Numbering is based on SCSU Hardware Standards Set Numbering.

Set: G22a

All New Door in New Metal Frame
Door: D100A
Push/Pull w/ Deadbolt

3 Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Push Plate	70	US32D	RO
1 Pull	BF111	US32D	RO
1 Deadbolt	487	US26D	SA
1 Door Closer (surface w/stop arm)	TB 281 CPS	EN	SA
3 Silencer	608		RO
1 Wall Stop	409	US32D	RO

Set: G22b

All New Door in New Metal Frame
Door: D100AA
Push/Pull

3 Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Push Plate	70	US32D	RO
1 Pull	BF111	US32D	RO
1 Door Closer (surface w/stop arm)	TB 281 CPS	EN	SA
3 Silencer	608		RO
1 Wall Stop	409	US32D	RO

Set: G22c

All New Door in Existing Metal Frame
Door: D100C
Push/Pull w/ Dead Bolt

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Push Plate	70	US32D	RO
1	Pull	BF111	US32D	RO
1	Deadbolt	487	US26D	SA
1	Door Closer (surface w/stop arm)	TB 281 CPS	EN	SA
3	Silencer	608		RO
1	Wall Stop	409	US32D	RO

Set: G22d

All New Door in Existing Metal Frame
Door: D100CA
Push/Pull

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Push Plate	70	US32D	RO
1	Pull	BF111	US32D	RO
1	Door Closer (surface w/stop arm)	TB 281 CPS	EN	SA
3	Silencer	608		RO
1	Wall Stop	409	US32D	RO

Set: G46

All New Door in Existing Metal Frame
Door: D100B (1 ½ Hr Rating)
Privacy Function

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Mortise Lock (privacy)	28 8265 LL GG MK	US26D	SA
1	Door Closer (surface w/stop arm)	TB 281 CPS	EN	SA
3	Silencer	608		RO
1	Wall Stop	409	US32D	RO

END OF SECTION 08 70 00

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Furring for new walls
- B. Gypsum board, including Abuse Resistant gypsum board, with taped and sanded joint treatment.
- C. Miscellaneous accessories for dealing with special construction issues on this job.
- D. See Section 05 58 00, METAL FABRICATIONS, for special tapable edge trim for furred walls.

1.2 SUBMITTALS

- A. Provide product information on all items specified.

PART 2 - PRODUCTS

2.1 GYPSUM BOARD SYSTEM

- A. Manufacturers:
 - 1. Gypsum Board: U S Gypsum.
 - 2. Steel Studs and Furring: Unimast, Dietrich.
 - 3. Accessories: U S Gypsum, UNISTRUT
 - 4. See Section 05 58 00, METAL FABRICATIONS, for special tapable edge trim for furred walls.
- B. Furring Type:

7/8" hat-shaped furring channel, roll-formed, with corrosion-resistant coating,
20 Ga., Furring and Accessories: ASTM C645.
- C. Screws:

Corrosion resistant, as specified in ASTM C840.
Type S screws are to be used with abusive resistant gypsum board.
- D. Gypsum Board Types:
 - 1. Walls:
 - a. 5/8" as noted on drawings
 - b. 'Sheetrock' brand, abuse-resistant gypsum interior panels,
AR Firecode X Panels.

2.2 ACCESSORIES

- A. Joint Treatment: USG Perf-A-Tape joint tape, USG All-Purpose Ready-Mixed joint compound.
 - 1. Joint Treatment:
 - USG Perf-A-Tape joint tape (do not use fiberglass tape),
 - USG setting-type joint compound (Durabond) for 1st coat,
 - USG All-Purpose, Ready-Mixed joint compound for 2nd & 3rd coats.

PART 3 - EXECUTION

3.1 INSTALLATION - METAL STUDS & FURRING

- A. Install studding and furring in accordance with Manufacturer's instructions.
- B. Metal Stud and Furring Spacing: 16 inches o.c. .
- C. Provide other wood blocking, where required, to accommodate the work. All hardware stops shall be backed up with solid blocking. All blocking shall be effectively fastened to stop walls to resist applied loads.

3.2 INSTALLATION - GYPSUM BOARD

- A. Install gypsum board in accordance with manufacturer's instructions.
- B. Fasten gypsum board to furring or framing with drywall screws, maximum spacing: 12" o.c. At curved wall, fasten according to manufacturer's specifications.

3.3 JOINT TREATMENT – GYPSUM BOARDS

- A. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
- B. Feather (3) coats onto adjoining surfaces so that camber is maximum 1/32.

3.4 TOLERANCES

- A. Maximum Variation from True Flatness: 1/8 inch in 10 feet in any direction.

END OF SECTION 09 20 00

PART 1 – GENERAL

RELATED DOCUMENTS

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

1.01 WORK INCLUDED

- A. Cementitious Backer Board and Accessories.

1.02 RELATED WORK

- A. Section 08 31 00 – Access Panels
- B. Section 09 30 13 – Ceramic Tile

1.03 REFERENCE

- A. American National Standards Institute (ANSI):
 - 1. A108.00, American National Standard for Interior Installation of Cementitious Backer Units.
 - 2. A118.1, American National Standard Specifications for Dry-Set Portland Cement Mortar.
 - 3. A118.4, American National Standard Specifications for Latex-Portland Cement Mortar.
 - 4. A118.9, Test Methods and Specifications for Cementitious Backer Units.
 - 5. A136.1, American National Standard Specifications for Organic Adhesives for Installation of Ceramic Tile.

- B. American Society for Testing and Materials (ASTM):
 - 1. C 473, Test Methods for Physical Testing of Gypsum Panel Products.
 - 2. C 1325, Specification for Fiber-Mat Reinforced Non-Asbestos Cement Interior Substrate Sheets.
 - 3. C 1002, Specification for Steel Drill screws for the Application of Gypsum Panel Products for Metal Plaster Bases.
 - 4. D 2394, Methods for Simulated Service Testing of Wood and Wood-Based Finish Flooring.

1.04 SUBMITTALS

- A. Submit under provisions of General Conditions and Supplemental General Conditions.
- B. Submit framing details depicting fastener type, quantity, location and other information to assure proper installation.
- C. Submit technical literature prepared by the framing manufacturer.

1.05 SYSTEM DESCRIPTION

- A. Size components to withstand design loads as follows:
 - 1. Vertical Assembly: 50 psf
 - 2. Horizontal Assembly: Min. 100 Psf live and dead loads
- B. Maximum allowable Deflection: 1/360 span.
- C. Design wall system to provide for movement of components without damage, failure of joint seals, undue stress on fasteners, or other detrimental effects when subject to seasonal or cyclic day/night temperature ranges.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Packaging and Shipping: Have materials shipped in manufacturer's original packages showing manufacturer's name and project brand name.
- B. Storage and Protection: Store materials inside and protected from damage by the elements. Protect ends, edges and faces of cement boards from damage.

PART 2 – PRODUCTS

2.01 CEMENTITIOUS BACKER BOARD

- A. Cementitious backer board shall be one of the following products:
1. HardiBacker 500 Cement Board by – JamesHardie International.
 2. DUROCK Cement Board by U.S. Gypsum Company
 3. PermaBase Cement Board by National Gypsum Company
 - a. Thickness: 1/2 in.
 - b. Width: 3 ft., or 4 ft.
 - c. Length: 4 ft., 6 ft., or 8 ft.
 - d. Edges: Tapered.
 - e. Compressive Strength: Not less than 2250 lbs. per sq. in. when tested in accordance with ASTM D 2394.
 - f. Water Absorption: Not greater than 8 percent when tested for 24 hours in accordance with ASTM C 473.

2.02 CEMENTITIOUS BACKER BOARD ASSESSORIES

1. Fasteners:
 - a. Tapcon Brand Fasteners-Screws: Stainless steel.
 - b. Fasteners to be installed 18” on center in the field of the board.
 - c. Fasteners to be installed 12” on center around the perimeter of the board.
2. Joint Treatment:
 - a. Tape: Alkali-resistant fiberglass mesh tape for joint reinforcement for use with cement board, 2” wide.
3. Bonding Materials:
 - a. Mortar: Dry-set (thin-set) Portland cement mortar in accordance with ANSI A118.4. Apply with a ¼” x ¼” notched trowel.

PART 3 – EXECUTIVE

3.01 INSTALLATION

- A. General: In accordance with the following reference standards and manufacturer's recommendations: ANSI A108.11.
- B. Install cementitious backer units in a bed of thin set and hold the board to the CMU wall with stainless steel tapcon fasteners. Prepare CMU substrate to accept polymer-fortified thin-set setting bed as required by TCA Handbook and setting bed manufacturers.
- C. Embed glass fiber mesh tape in a skim coat of mortar.

END OF SECTION 09 28 13

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Ceramic tile floor and wall using the “thinset” application method.
- B. Ceramic tile wall and base finish using the “thinset” method over cementitious board over existing masonry units that have been ground down to bare CMU.
- C. Tile grouting.
- D. Marble threshold.
- E. The work of this Section shall include all required labor and materials to completely furnish and install the work indicated. The Contractor shall furnish all required related and accessory materials and labor required to integrate the work of this Section into the entire project to create a complete construction ready for use and occupancy by the Owner.
- F. Membrane Waterproofing.

1.2 RELATED SECTIONS

- A. Section 02 40 00 – Demolition
- B. Section 08 31 00 – Access Panels
- C. Section 09 28 13 – Cementitious Backer Board

1.3 REFERENCES

- A. ANSI/TCA A118.3 – Epoxy Grout.
- B. ANSI/TCA A137.1 - Specifications for Ceramic Tile.
- C. ANSI A118.10 - Waterproofing Membrane
- E. TCA (Tile Council of America) - Handbook for Ceramic Tile Installation - latest edition.

1.4 SUBMITTALS

- A. Product Data: Provide material specifications, characteristics, and instructions for using mortars and grouts.
- B. Submit manufacturer's installation instructions under provisions of general Conditions and Section 01 30 00
- C. Samples: Submit samples for each tile type, shape and selected colors.
- D. Maintenance Instructions: Include recommended cleaning methods, cleaning materials and stain removal methods.

1.5 QUALITY ASSURANCE

- A. Conform to ANSI/TCA A137.1 and ANSI 108 Standards.
- B. Conform to TCA Handbook for Ceramic Tile Installation - latest edition.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in the manufacture of products specified in this Section with minimum ten years documented experience.
- B. Installer: Company specializing in applying the work of this Section with minimum ten years documented experience approved by product manufacturer.

1.7 PRE-INSTALLATION CONFERENCE

- A. Convene one week prior to commencing work.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in original containers with seals unbroken and labels intact until time of use.
- B. Store and protect products.
- C. Protect adhesives from freezing or overheating in accordance with manufacturer's instructions.
- D. Comply with requirements of ANSI A137.1 for labeling sealed tile packages.

1.9 ENVIRONMENTAL REQUIREMENTS

- A. Do not install tile work in a closed, unventilated environment.
- B. Maintain 50°F during installation of mortar materials and for a minimum of seven days afterwards.

1.10 EXTRA MATERIALS

- A. Provide 5% extra stock of each size, color, and surface finish of ceramic tile specified.
- B. Deliver extra stock to a location directed by the Owner.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. American Olean (**No Substitution Accepted**)

2.2 MATERIALS

- A. FLOOR TILE
Manufacturer: American Olean (No Substitutions Accepted)
Colorbody Porcelain Tile, 'St Germain' Series, '**Gris SE67**'
Floor Tile Grout: Laticrete 'Spectralock Pro' Epoxy Grout, Color to be selected.
Moisture Absorption: .1% - .5%
Size: 12" x 12" x 5/16" thick (Note manufacturer's recommended grout joint of 3/16")
(Except nominal 6 x 6 tile at sloped floor areas around floor drains.)
Edge: Cushion Cut
Surface Finish: Matte, Coefficient of Friction, Wet: > 0.60

B. WALL TILE

American Olean, Ceramic Tile, 'Bright and Matte'

Moisture Absorption: .1% - .5%

Size: 4 1/4" x 4 1/4" x 5/16" thick

Edge: Cushion Cut

Surface Finish: Glazed

Colors:

Field Tile F: #0091, 'Biscuit'

Accent Tile G: #0040, 'Storm Gray'

Accent Tile H: #0072, 'Pomegranate'

Accent Tile J: #0070, 'Sapphire Sky'

C. WALL COVE BASE

American Olean, Ceramic Tile, 'Bright and Matte', #A-3401,

(#ACRL-3401 at outside corner)

Moisture Absorption: .1% - .5%

Size: 4 1/4" x 4 1/4" x 5/16" thick

Edge: Cushion Cut

Surface Finish: Glazed

Colors: #0091, 'Biscuit'

D. TILE SETTING MATERIALS

1. Polymer-Fortified Thin-Set: Laticrete 254 Platinum with Microban antimicrobial protection.

E. GROUT MATERIALS

1. Grout: Chemical resistant type, consisting of epoxy resin, hardener and colored sand admixture, meeting performance requirements of ANSI A118.3-1999. SpectraLOCK PRO by Laticrete.
2. Color Sand Admixture: Color as selected by Architect from manufacturer's full line of product. Contractor shall assume that each separate color of tile shall have a separate color grout.
3. Mix and proportion grout materials in accordance with manufacturer's instructions.

G. WATERPROOFING MEMBRANE

1. Provide waterproofing membrane at all ceramic tile floors. Turn up membrane at bottom of all room walls a minimum of 12". Extend membrane 12" out along floor from bottom corner. Follow membrane manufacturer's installation instructions.
2. Waterproof Membrane: Laticrete Hydroban.

H. SEALANT AROUND FLOOR DRAIN & AT INSIDE CORNERS OF TILE

1. Seal the joint at the inside corner of the wall tile, and at the joint around the existing floor drain (at the joint with the floor tile), with Laticrete 'Latasil'

- J. MARBLE THRESHOLD (At all doors)
 - 1. One piece, solid material, White Honed Italian Marble.
 - 2. Full width of door frame x 4 ½” depth.
 - 3. Grade A, First Quality.
 - 4. Free from cracks, chips, stains, and defects.
 - 5. Beveled edges, ¼”, both sides. Material thickness such that the overall thickness above finish floor shall not exceed ½” - maximum.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that surfaces are flat and ready to receive work. Floor tolerance: 1/4 inch in 10 feet; Wall tolerance: 1/8 inch in 10 feet.
- B. Beginning of installation means installer accepts condition of existing substrate.

3.2 PREPARATION

- A. Protect surrounding work from damage or disfiguration.
- B. Vacuum clean existing substrate and damp clean.
- C. Substrate Preparation:
 - 1. At floors, after removal of existing floor tiles, patch all of existing flat and sloping in-fill substrate with compatible subfloor filler
 - 2. See Demolition Plan 1/A1 for specific information on treatment of various walls behind existing tile wainscot and nosing. Note that, in most cases, these walls still have to be properly prepped for application of cement board, and, in some cases, must be taken down to bare CMU with a grinder for installation of wall tile.
- D. Apply conditioner to surfaces if recommended by adhesive manufacturer.
- E. Layout work to eliminate tiles cut to less than one half full width, except at top of wall.
- D. Install waterproofing membrane in conformance with manufacturer’s recommendations, specifications, and drawing details.

3.3 INSTALLATION OF CERAMIC FLOOR TILE

- A. Install tile and grout in accordance to TCA Handbook for Ceramic Tile Installation, latest. Prepare existing concrete substrate to accept mortar setting beds or bond coats as required by TCA Handbook and setting bed manufacturers. Install tile in accordance with ANSI A118.4. Install grout in accordance with ANSI A118.6.
- B. Lay tile to pattern if indicated on drawings. Do not interrupt tile pattern through openings. Coordinate installation with adjacent materials. Terminate work neatly at obstructions, edges, and corners without disrupting tile pattern or joint alignments.
- C. Place ceramic tile and marble thresholds in setting bed materials.
- D. Cut and fit tile tight to penetrations through tile. Form corners and bases neatly. Align floor joints with base and wall joints. Extend tile into recesses and behind or under equipment or plumbing fixtures.
- E. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size – **note manufacturer’s recommendation for 3/16” grout joint at 12 x 12 floor tile.** Make joints watertight, without voids, cracks, excess mortar, or excess grout.
- F. Sound tile after setting. Replace hollow sounding units.
- G. Allow tile to set for a minimum of 48 hours prior to grouting.
- H. Grout tile joints.
- I. Follow Epoxy Grout manufacturer’s requirements for cleaning residual haze from grouted tile.

3.4 INSTALLATION OF CERAMIC WALL TILE ON CEMENTITIOUS BACKER UNITS

- A. Install tile and grout in accordance to TCA Handbook for Ceramic Tile Installation.
- B. Install cementitious backer units under ceramic wall tile. Prepare cementitious backer substrate to accept polymer-fortified thin-set setting bed as required by TCA Handbook and setting bed manufacturers. Apply with a 1/4” x 1/4” notched trowel. See Specification 09280 for installation notes for cementitious backed board.
- C. Backed board specifications call for glass fiber mesh tape embedded in a skim coat of mortar at joints.
- D. Install tile in accordance with ANSI A108.5.
- E. Install grout in accordance with ANSI A108.10.

- F. Lay tile to pattern if indicated on Drawings. Do not interrupt tile pattern through openings. Coordinate installation with adjacent materials.
- G. Build in related materials and components as required..
- H. Cut and fit tile tight to penetrations through tile. Form corners and bases neatly. Align wall joints with base and floor joints.
- I. Place tile joints uniform in width, subject to the variance in tolerance allowed in tile size. Make joints watertight, without voids, cracks, excess mortar, or excess grout.
- J. Sound tile after setting. Replace hollow sounding units.
- K. Allow tile to set for a minimum of 48 hours prior to grouting.
- L. Grout tile joints. Provide a soft joint at inside corners, using 'Latasil'.

3.6 CLEANING

- A. Clean work according to manufacturer's recommendations.
- B. Cleaning: Upon completion of placement and grouting, clean all tile surfaces so they are free of foreign matter.
- C. Unglazed tile may be cleaned with acid solutions only when permitted by tile and grout manufacturer's printed instructions, but no sooner than 14 days after installation. Protect metal surfaces, cast iron and vitreous plumbing fixtures from effects of acid cleaning. Flush surface with clean water before and after cleaning.
- D. Finished Tile Work: Leave finished installation clean and free of cracked, chipped, broken, unbonded, or otherwise defective tile work. Polish surface of tile work with a soft cloth after grout is cured.

3.7 PROTECTION

- A. Protect finished installation.
- B. Protection: When recommended by tile manufacturer, apply a protective coat of neutral protective cleaner to completed tile walls and floors. Protect installed tile work with undyed construction paper or other heavy covering during construction period to prevent staining, damage and wear.
- C. Prohibit foot and wheel traffic from using tiled floors for at least 7 days after grouting is completed.
- D. Before final inspection, remove protection coverings and rinse neutral cleaner from tile surfaces.
- E. Place large flat fire-treated plywood sheeting in walkways and wheelways for 7 days where use of newly tiled floors with cement type grout is unavoidable. Provide transition strips, fillers etc. to ensure plywood sheeting does not present a tripping hazard.

END OF SECTION 09 30 13

PART 1 –GENERAL

1.01 SUMMARY

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, and Division 1 Specification Sections, apply to this Section.
- B. This section specifies:
 - 1. Painting of all new & existing metal frames.
 - 2. Painting of all existing plaster and GWB ceilings.
 - 3. Painting of all existing hot water convector covers.
 - 4. Painting of all existing exposed CMU at Room 100B
 - 5. Painting of existing metal access doors & frames at ceiling.
 - 6. Painting of existing exhaust grilles at ceiling.

1.02 SUBMITTALS

- A. Before beginning work, submit a shop drawing showing a layout of the reflected ceiling showing all items in the ceiling.
- B. Provide product information on all items specified. Provide material specifications, characteristics, and instructions for using any adhesives.
- C. Samples:
 - 1. Samples: Submit two (2) samples, 5" x 9" in size illustrating range of paint colors and textures available for each surface finishing product scheduled. Colors to be selected by the University Representative.
 - a. Field apply selected colors in a 4'-0" x 4'-0" sample area as directed by University Representative.
- D. Maintenance Instructions: Include recommended cleaning methods, cleaning materials, stain removal methods and polishes and waxes.

PART 2 – PRODUCTS

2.01 PAINTING

- A. Scope of work: Surface preparation and field application of paints and coatings. Manufacturers:
 - 1. Benjamin Moore
 - 2. Sherwin Williams
 - 3. Pittsburg Paints
 - 4. Devoe Paints
 - 5. ICI

2.01 PAINTING (CON'T)

- B. Coatings: Ready mixed except field catalyzed coatings of good flow and brushing properties, capable of drying or curing free of streaks or sags.
- C. Accessory Materials: Linseed oil, shellac, turpentine, paint thinners and other materials required to achieve the finishes specified.
- D. Finishes
 - 1. Steel – Primed or Exist Paint:
 - a. Touch-up with compatible primer.
 - b. Two (2) coats of oil-based, semi-gloss.
 - 2. Gypsum Board, and Plaster Walls (New & Existing):
 - a. Touch-up with compatible primer (existing walls).
 - b. Two (2) coats of latex enamel, eggshell.
 - 3. C. M. U. (Existing):
 - a. Existing : Touch-up with compatible primer
 - b. Two (2) coats of latex enamel, eggshell.

2.02 ACCESSORIES

- A. Provide all accessories required for a complete job and as required to install all of the Division 9 items.

PART 3 – EXECUTION

3.01 SURFACE CONDITIONS

- A. Correct conditions detrimental to timely and proper completion of work. Do not begin installation of any items until all conditions are correct.

3.02 INSTALLATION - PAINTING

- A. Verify that substrate conditions are ready to receive work. Verify compatibility of paint specified with existing finishes.
- B. Remove loose and peeling paint. Remove any existing paint showing signs of not adhering to substrate. Sand surfaces and correct any unevenness.
- C. Correct minor defects and clean surfaces which affect work in this section.

3.02 INSTALLATION – PAINTING (Con’t)

- D. Remove or mask electrical plates, hardware, light fixture trim, escutcheons and fittings prior to preparing surfaces or finishing.
- E. Shop Primed and Previously Painted Steel Surfaces: Sand and scrape to remove loose primer, paint, and rust; hand power tool clean; clean surfaces with solvent. Prime bare steel surfaces.
- F. Application:
 - 1. Apply products in accordance with manufacturer’s instructions.
 - 2. General, all metal frames are to be painted at all spaces where work is performed. All unfinished fixed items remaining should be painted unless noted otherwise. If there are any questions about painting items, the University Representative will resolve them in the field.
 - 3. As work proceeds, promptly remove finishes where spilled, splashed, or spattered.

3.03 CLEANING

- A. Remove excess adhesive and grout from surfaces without damage.
- B. Clean, seal, and wax surfaces at all areas in accordance with manufacturer’s instructions.

END OF SECTION 09 91 00

PART 1 –GENERAL

1.01 SECTION INCLUDES

- A. Open top waste receptacle

1.02 SUBMITTALS

- A. Product Data: Provide data on product and accessories.

PART 2 – PRODUCTS

2.01 SEE DRAWING A-1 FOR OTHER RESTROOM ACCESSORIES.

2.02 WASTE RECEPTACLE

1. Manufacturer: Rubbermaid Commercial Products LLC, 3124 Valley Avenue, Winchester, VA 22601 Email: cseast@rubbermaidcommercial.com Tel: (540) 667-8700 Fax: (540) 542-8770
2. 2 piece, 30” high, 16” square, 20 gallon capacity, 11.5” square disposal opening.
3. Style: #FG1630SQT. ‘Open Top’.
4. Color; To be selected from manufacturer’s standard colors.
5. Vinyl edge trim
6. Includes rigid plastic liner (PL) in addition to the Retainer bands to hold poly bag securely in place.

PART 3 - INSTALLATION

3.01 INSTALLATION

- A. Provide 2 waste receptacles – one at each restroom.

END OF SECTION 10 00 00

PART 1 –GENERAL

1.01 SECTION INCLUDES

- A. Toilet compartments and urinal screens as shown on drawings.
- B. Hardware, etc. for stalls
- C. Shop drawings

1.02 RELATED SECTIONS

- A. Section 48 20 00 – Unit Masonry Assemblies
- B. Section 90 30 13 – Ceramic Tile
- C. Section 22 00 00 - Plumbing
- D. See Drawing A-1 for Restroom Accessories

1.03 SUBMITTALS

- A. Submit (1) set of pdf shop drawings, including partition plan and elevation views, dimensions, details of supports, door swings, and a sample of each item of hardware for architect's approval.
- B. Provide drawings showing location for adequate steel reinforcements or wood blocking in walls to be provided by others for proper securement of the finished work.
- C. Furnish 2 sets of color samples for use of the architect.
- D. Furnish documentation on panel construction, hardware, headrail, pilasters, and continuous wall bracket to meet specification as outlined.
- E. Submit manufacturer's installation instructions.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Santana Solid Plastic Products
- B. Capitol Partitions Inc.
- C. Comtec Industries.
- D. Other quality manufacturers with High Density Polyethylene partition system products that meet or exceed NFPA 101 – 6.6.1 through 7 /1997

2.02 TOILET PARTITIONS & URINAL SCREENS

- A. Toilet compartment shall be floor-mounted, overhead-braced, with non-corrosive doors, panels and pilasters similar and equal to Poly-Mar HD® or Poly-Granite HD® compartments as manufactured by Scranton Products Inc. , Hidey Hider Series, Scranton, PA, or **an approved equal**.
- B. There shall be two types of urinal screens, both based on the Hidey Hider design by Scranton Products Inc., Scranton, PA or an approved equal. The urinal screen next to the lavatories is to be 24” wide. The urinal screen between the handicapped urinal and the next urinal is to be 18” wide. Both screens are 55” high, floor supported.
- C. Panels, doors and pilasters shall be fabricated from High Density Polyethylene (HDPE) containing minimum of 10% recycled material which is waterproof, non-absorbent and has a self-lubricating surface that resist marking with pens, pencils or other writing utensils. All panels, doors and pilasters to arrive at job-site with special protective plastic covering.
- D. Characteristics
 - 1. High Density Polyethylene (HDPE) of Poly-Mar HD® or Poly-Granite HD® virgin resin materials in colors that extend throughout the surface; the panels, doors, and pilasters shall have combined recycled and/or virgin material (HDPE).
 - 2. Doors, panels and pilasters shall be a minimum of 1” thick and all edges machined to a radius of .250” and all exposed surfaces to be free of saw marks.

2.02 TOILET PARTITIONS & URINAL SCREENS (CON'T)

E. Fabrication

1. Dividing panels shall be 55” high and mounted at 14” above finished floor.
2. Doors shall be 55” and mounted at 14” above finished floor.
3. Pilasters shall be 82” high, mounted with a one-piece stainless steel shoe with star-head security pin, stainless steel barrel bolts.
4. Finish of doors, panels, and pilasters shall be similar and equal to Scranton Products, Inc., Hidey Hider Series, Orange Peel finish.
5. Color of doors, panels and pilasters;
 - a. Men’s Room: ‘Blueberry’
 - b. Women’s Room: ‘Burgundy’.
6. Aluminum edging strips to be fastened to the bottom edge of all doors and panels using vandal-proof “T” barb heat sinc.

F. Technical Data

1. Scranton Plastic Products to be independently certified in writing by the manufacturer indicating compliance to appropriate building codes governing the project as it applies to the “use of plastic in a commercial building.”

G. Manufacturer to supply a written warranty covering all plastic components and plastic hardware against breakage, corrosion and delamination for a period of 15 years.

2.03 HARDWARE

A. Door hardware shall be as follows:

1. Hinges shall be integral hinge system.. Pilaster to be machined to accept door and hinge mechanism. Hinge mechanism consists of a 2 piece ½” diameter nylon pin with “Cam Action” and a 3/16” stainless steel pin inserted into lower portion of pilaster and door. A one-piece ½” diameter, 4” long nylon pin to be inserted into the top portion of the pilaster and door.
2. Each door to be furnished with one coat hook/bumper of heavy chrome plated zamak. Each ambulatory door to include: (1) door pull (1) wall stop.
3. Door strike and keeper shall be fabricated from heavy aluminum extrusion (6463-T5 Alloy) with bright-dipped anodized finish with wrap around flange surface mounted and thru-bolted to pilaster with star-head security pin, stainless steel barrel bolts. Size of strike shall be 6” in length.
4. Door latch housing shall be fabricated from heavy aluminum extrusion (6463-T5 Alloy) with bright dipped anodized finish, surface mounted and thru-bolted to door with star-head security pin, stainless steel barrel bolts. Slide bolt and button shall be heavy aluminum with “Tuff-Coat Black” anodized finish.

B. Pilaster shoes shall be 3” high (Type 304, 20 gauge) stainless steel, and shall be anchored to finished floor with plastic anchors and #14 x 1-1/2” star-head security pin, stainless

steel screws. Shoes shall be secured to the pilaster with stainless steel tamper resistant torx head sex bolt.

2.03 HARDWARE (CON'T)

- C. Full length continuous plastic wall brackets weighing not less than .822 lbs. per linear foot. Brackets shall be used for all panels to pilaster, pilasters to wall and panel to wall connections. Wall brackets shall be thru-bolted to panels and pilasters with star-head security pin, stainless steel barrel bolts. Attachment of brackets to adjacent wall construction shall be accomplished #14 x 1-1/2" star-head security pin, stainless steel screws anchored directly behind the vertical edge of panels and pilasters at 13" intervals along the full length of bracket and at each 13" interval alternately spaced between anchor connections.

- D. Headrail shall be heavy aluminum extrusion (6463-T5) with bright-dipped anodized finish in anti-grip configuration weighing not less than 1.188 lbs. per linear foot as manufactured by Scranton Products Inc. Headrail shall be fastened to tops of pilasters and headrail brackets by thru bolting with star-head security pin, stainless steel barrel bolts (no cadmium plated bolts allowed).

- E. Headrail brackets shall be 18-gauge stainless steel.

PART 3 – EXECUTION

3.01 INSPECTION

- A. Verify that site conditions are ready to receive work, and that opening dimensions are as indicated on shop drawings.

- B. Verify correct spacing of plumbing fixtures.

- C. Verify correct location of built-in blocking, framing, anchorage, and bracing where required.

- D. Beginning of installation means acceptance of existing surfaces and substrate.

3.02 INSTALLATION

- A. Erection of partitions, etc., shall be in accordance with the manufacture's standard recommendations and the following:
- B. All parts shall be erected in a substantial manner, straight, level, and plumb.
- C. No evidence of drilling, cutting, or patching shall be visible in the finished work.
- D. Clearance at vertical edges of doors shall be uniform top to bottom and shall not to exceed ¼".
- E. Maintain 3/8" to ½" space between wall and panels, and between wall and end pilasters.
- F. Attach panel brackets securely to walls using anchor devices.
- G. Attach panel and pilasters to bracket with through sleeve tamper proof bolts and nuts. Locate head rail joints at pilaster centerlines.
- H. Provide adjustment for floor variation with screw jack through steel saddles integral with pilaster. Conceal floor fastenings with pilaster shoes.
- I. Equip each door with two hinges, one door latch, and coat hook & bumper.
- J. Finished surfaces shall be cleaned after installation and left free of imperfections.
- K. Authorized factory installers to be utilized.

END OF SECTION 10 21 13

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Pipe and pipe fittings, valves.
- B. Installation of new plumbing fixtures and equipment.

1.2 SUBMITTALS

- A. Product Data: Provide specification sheets for all plumbing specialties, fixtures, and equipment.

1.3 REGULATORY REQUIREMENTS WARRANTY

- A. The installation of all systems shall be in accordance with the International Plumbing Code, current adopted edition and State of Connecticut Building Code Supplement.

PART 2 - PRODUCTS

2.1 PLUMBING FIXTURES TYPES (Provide items Specified or Approved Equal)

- A. See Drawing A3 for Plumbing Fixture Types and Controls.

2.2 PIPE AND TUBE MATERIALS

- A. Drawn Temper Copper Tubing: ASTM B88, Type L.

2.3 FITTINGS

- A. Wrought-Copper Fittings: ANSI B16.22, streamlined pattern.

2.4 JOINING MATERIALS

- A. Solder Filler Metals: ASTM B32, 95-5 Tin-Antimony, Lead Free.
- B. Press fit copper fittings.

2.5 LAVATORY VALVES, TRAPS AND TRIM

- A. Lavatory supplies: chrome plated brass angle stops with loose key operator. Chrome plated supply nipples. Offset grid drain. 1 ¼" x 1 ½" x 17 gauge chrome plated brass trap with cleanout plug. Provide chrome escutcheons at all piping wall penetrations.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Verify all dimensions by field measurements. Verify that all water distribution piping may be installed in accordance with pertinent codes and regulations, the original design and referenced standards.
- B. Examine rough-in requirements for plumbing fixtures and other equipment having water connections to verify actual locations of piping connections prior to installation.
- C. Do not proceed until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Ream pipe and tube ends. Remove burrs.
- B. Remove scale and dirt, on inside and outside piping before assembly.
- C. Prepare piping connections to equipment with flanges or unions.
- D. Review shop drawings. Confirm location and size of fixtures and openings before rough-in and installation.
- E. Verify adjacent construction is ready to receive rough-in work of this Section.
- F. Remove items as indicated on the demolition drawings. Clean all existing items that are to be reinstalled.
- G. Prepare existing piping for new sink connections.
- H. Prepare mock-up of installed toilet as noted above.
- I. Field verify all toilet rough-in plumbing dimensions. Extend or modify supply piping as necessary for new flush valve.
- C. Cap existing plumbing lines as indicated on plans.
- D. Snake, clean and flush drain lines at all existing fixture locations.

3.3 FIXTURE CONNECTIONS

- A. Piping stub-outs to Fixtures: Extend existing hot and cold water supply piping stub-outs to fixtures as necessary using the existing sizes, but, in no case smaller than required by the Plumbing Code
- B. Extend water closet and urinal water supply as required for new flush valve roughing dimensions.
- C. Extend urinal waste piping as necessary for proper installation of new urinals.
- D. New wall finish line at water closets may require that the waste horn nipple length be extended as well as the closet mounting studs, see Unit Prices in Bid Form. If existing waste horn nipple and rod studs cannot be removed from existing carrier, due to rust and corrosion, a new carrier will be installed and connections made to existing waste piping in the pipe chase, see Unit Prices in Bid Form.

3.4 PLUMBING FIXTURE INSTALLATION

- A. Install plumbing fixtures level and plumb, in accordance with fixture manufacturer's written instructions, rough-in drawings, and pertinent codes and regulations, the original design, and referenced standards.
- B. Comply with the installation requirements of ANSI 117.1 and ADA with respect to plumbing fixtures for the physically handicapped.
- C. Fasten plumbing fixtures securely to supports or building structure. Secure supplies to provide rigid installation.
- D. Install toilet manufacturer's recommended neoprene gasket at closet outlet to provide a gas and watertight seal.
- E. Install escutcheons at each wall penetration in exposed finished locations.
- F. Apply sealant to gap between vitreous china fixtures and finished wall.
- G. Install rigid preformed glass fiber insulation, 3 1/2 lb. minimum density with white factory applied vapor jacket composed of foil kraft laminate common name "All Service Jacket" (ASJ). Flame spread rating not to exceed 25, smoke developed rating not to exceed 50 on concealed new piping or existing piping involved in the work.
- H. Install exposed insulation at lavatory piping below countertop, see Drawing A3.

3.5 FLOOR DRAINS AND CLEAN-OUTS

- A. Existing floor drains will remain and existing adjustable strainer heads removed for new tile floor finish. Remove and clean existing strainer heads for re-installation.
- B. Existing floor clean-outs will remain and adjustable head/covers removed for new tile floor finish. Remove and clean existing head/cover for re-installation. Provide new cover gasket.
- C. Existing wall clean-outs to remain.

3.6 FIELD QUALITY CONTROL

- A. Test fixtures to demonstrate proper operation upon completion of installation and after units are water pressurized. Replace malfunctioning units, then retest.
- B. Inspect each installed unit for damage. Replace damaged fixtures.
- C. Inspect valves and faucets for cross flow and replace malfunctioning units.
- D. Purge potable water piping of deleterious matter and disinfect and flush.

3.7 ADJUSTING

- A. Clean fixtures, trim, and strainers using manufacturer's recommended cleaning methods and materials

END OF SECTION 22 00 00

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data.
- B. Coordinate Arrangement, Mounting, and Support of Electrical Equipment:
 - 1. Provide maximum possible headroom unless specific mounting heights that reduce headroom are indicated.
 - 2. Provide for ease of disconnecting the equipment with minimum interference to other installations.
 - 3. Allow right of way for piping and conduit installed at required slope.
 - 4. Ensure that connecting raceways, cables, wireways, cable trays, and busways are clear of obstructions and of the working and access space of other equipment.
- C. Coordinate installation of required supporting devices and set sleeves in cast-in-place concrete, masonry walls, and other structural components as they are constructed.
- D. Coordinate location of access panels and doors for electrical items that are behind finished surfaces or otherwise concealed. Access doors and panels are specified in Division 8 Section "Access Doors and Frames."
- E. Where required, provide seismic support for electrical raceways and equipment per the Connecticut Basic Building Code.

PART 2 - PRODUCTS

2.1 RACEWAYS AND CONDUCTORS

- A. Raceways:
 - 1. EMT: ANSI C80.3, zinc-coated steel, with set-screw or compression fittings.
 - 2. FMC: Zinc-coated steel.
 - 3. IMC: ANSI C80.6, zinc-coated steel, with threaded fittings.
 - 4. LFMC: Zinc-coated steel with sunlight-resistant and mineral-oil-resistant plastic jacket.
 - 5. Raceway Fittings: Specifically designed for raceway type used in Project.

B. Conductors:

1. Conductors, No. 10 AWG and Smaller: Solid or stranded copper.
2. Conductors, Larger Than No. 10 AWG: Stranded copper.
3. Insulation: Thermoplastic, THHN/THWN, rated at 75 deg C minimum.
4. Multiconductor Cable: Metal-clad cable, Type MC with ground wire.
5. Wire Connectors and Splices: Units of size, ampacity rating, material, type, and class suitable for service indicated.

2.2 METAL WIREWAYS

A. Manufacturers:

1. Hoffman.
2. Square D.
3. Lee

B. Material and Construction: Sheet metal sized and shaped as indicated, NEMA 1 or 3R.

C. Fittings and Accessories: Include couplings, offsets, elbows, expansion joints, adapters, hold-down straps, end caps, and other fittings to match and mate with wireways as required for complete system.

D. Provide features, unless otherwise indicated, as required to complete wiring system and to comply with NFPA 70.

E. Wireway Covers: Screw-cover type or as indicated.

F. Finish: Manufacturer's standard enamel finish.

2.3 SURFACE RACEWAYS

A. Surface Metal Raceways: Galvanized steel with snap-on covers. Finish with manufacturer's standard prime coating with white finish coat.

1. Manufacturers:
 - a. Thomas & Betts Corporation.
 - b. Wiremold Company (The); Electrical Sales Division.

B. Types, sizes, and channels as indicated and required for each application, with fittings that match and mate with raceways.

2.4 BOXES, ENCLOSURES, AND CABINETS

- A. Manufacturers:
1. Cooper Crouse-Hinds; Div. of Cooper Industries, Inc.
 2. Emerson/General Signal; Appleton Electric Company.
 3. Erickson Electrical Equipment Co.
 4. Hoffman.
 5. Hubbell, Inc.; Killark Electric Manufacturing Co.
 6. O-Z/Gedney; Unit of General Signal.
 7. RACO; Division of Hubbell, Inc.
 8. Scott Fetzer Co.; Adalet-PLM Division.
 9. Spring City Electrical Manufacturing Co.
 10. Thomas & Betts Corporation.
 11. Walker Systems, Inc.; Wiremold Company (The).
- B. Sheet Metal Outlet and Device Boxes: NEMA OS 1.
- C. Cast-Metal Outlet and Device Boxes: NEMA FB 1, Type FD, with gasketed cover.
- D. Small Sheet Metal Pull and Junction Boxes: NEMA OS 1.
- E. Cast-Metal Pull and Junction Boxes: NEMA FB 1, cast aluminum with gasketed cover.
- F. Hinged-Cover Enclosures: NEMA 250, Type 1, with continuous hinge cover and flush latch.
1. Metal Enclosures: Steel, finished inside and out with manufacturer's standard enamel.
- G. Cabinets: NEMA 250, Type 1, galvanized steel box with removable interior panel and removable front, finished inside and out with manufacturer's standard enamel. Hinged door in front cover with flush latch and concealed hinge. Key latch to match panelboards. Include metal barriers to separate wiring of different systems and voltage and include accessory feet where required for freestanding equipment.

2.5 FACTORY FINISHES

- A. Finish: For raceway, enclosure, or cabinet components, provide manufacturer's standard prime-coat finish ready for field painting.

2.6 ELECTRICAL IDENTIFICATION MATERIALS

- A. Raceway Identification Materials:
 - 1. Snap-around, color-coding bands; flexible, pre-printed, color-coded acrylic.
 - 2. Self-adhesive, color-coding vinyl tape; flexible, pre-printed, self-adhesive vinyl.
- B. Conductor Identification Materials:
 - 1. Color-Coding Conductor Tape: Self-adhesive vinyl tape 1 to 2 inches wide.
- C. Tape Markers for Wire: Vinyl, self-adhesive, wraparound type with pre-printed numbers and letters.
- D. Warning Labels and Signs: Baked-enamel, pre-printed signs, punched or drilled for fasteners; with colors, legend, and size required for application.
- E. Equipment Identification Labels: Engraved, laminated acrylic or melamine label; punched or drilled for screw mounting. White letters on a dark-gray background; red letters for emergency systems.
 - 1. Fasteners: Self-tapping, stainless-steel screws or stainless-steel machine screws with nuts and flat and lock washers.

2.7 SUPPORT AND ANCHORAGE COMPONENTS

- A. Steel Slotted Support Systems: MFMA-3, factory-fabricated components for field assembly.
- B. Raceway and Cable Supports: As described in NECA 1.
- C. Conduit and Cable Support Devices: Steel and malleable-iron hangers, clamps, and fittings.
- D. Pipe Sleeves: Schedule 40, galvanized steel, plain ends.

- E. Mounting, Anchoring, and Attachment Components:
1. Powder-Actuated Fasteners: Threaded-steel stud.
 2. Expansion Anchors: Steel, insert-wedge type, for use in concrete.
 3. Concrete Inserts: Steel or malleable-iron slotted-support-system units.
 4. Clamps for Attachment to Steel Structural Elements: MSS SP-58, type suitable for attached structural element.
 5. Through Bolts: Structural type, hex head, high strength; comply with ASTM A 325.
 6. Toggle Bolts: All-steel springhead type.
 7. Hanger Rods: Threaded steel.

2.8 SEISMIC-RESTRAINT COMPONENTS

- A. Rated Strength, Features, and Application Requirements for Restraint Components: As defined in reports by an agency acceptable to authorities having jurisdiction.
1. Structural Safety Factor: Strength in tension, shear, and pullout force of components used shall be at least five times the maximum seismic forces to which they will be subjected.
- B. Angle and Channel-Type Brace Assemblies: Steel angles or steel slotted-support-system components; with accessories for attachment to braced component at one end and to building structure at the other end.
- C. Cable Restraints: ASTM A 603, zinc-coated, steel wire rope attached to steel or stainless-steel thimbles, brackets, swivels, and bolts designed for restraining cable service.
1. Seismic Mountings, Anchors, and Attachments: Select to resist seismic forces.
 2. Hanger Rod Stiffener: Steel slotted-channel support clamped to hanger rod.
 3. Bushings for Floor- and Wall-Mounted Equipment Anchors: Neoprene units designed for seismically rated rigid equipment mountings.
- D. Sleeve Seals: Modular, to fill annular space between sleeve and raceway or cable; EPDM interlocking links with pressure plates, and connecting bolts and nuts.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Sleeve and Sleeve Seals: Use type and number of sealing elements recommended by manufacturer; comply with NECA 1.

3.2 RACEWAY APPLICATION

- A. Outdoor Installations:
 - 1. Exposed or Concealed: IMC.
 - 2. Connection to Vibrating Equipment: LFMC.
 - 3. Boxes and Enclosures: Metallic, NEMA 250, Type 3R or Type 4.
- B. Indoor Installations:
 - 1. Concealed: EMT.
 - 2. Exposed: surface metal raceway similar to Wiremold type 700 with matching boxes and accessories. Color shall be white.
 - 3. Branch Circuits Concealed in Ceilings, Walls, and Partitions: Type THHN-THWN, single conductors in raceway or, for lighting circuits only, Metal-clad cable, Type MC after first fixture.
 - 4. Fire Alarm Circuits: Type THHN-THWN, in raceway.
 - 5. Connection to Vibrating Equipment: FMC; in wet or damp locations, use LFMC.
 - 6. Damp or Wet Locations: IMC.
 - 7. Boxes and Enclosures: Metallic, NEMA 250, Type 1, unless otherwise indicated.

3.3 RACEWAY AND CABLE INSTALLATION

- A. Conceal raceways and cables, unless otherwise indicated, within finished walls, ceilings, and floors.
- B. Install raceways and cables at least 6 inches away from parallel runs of flues and steam or hot-water pipes. Locate horizontal raceway runs above water and steam piping.

- C. Install exposed raceways parallel or at right angles to nearby surfaces or structural members and follow surface contours as much as possible.
 - 1. Run parallel or banked raceways together on common supports.
 - 2. Make parallel bends in parallel or banked runs. Use factory elbows only where elbows can be installed parallel; otherwise, provide field bends for parallel raceways.
- D. Join raceways with fittings designed and approved for that purpose and make joints tight.
 - 1. Use insulating bushings to protect conductors.
- E. Tighten set screws of threadless fittings with suitable tools.
- F. Terminations:
 - 1. Where raceways are terminated with locknuts and bushings, align raceways to enter squarely and install locknuts with dished part against box. Use two locknuts, one inside and one outside box.
- G. Where raceways are terminated with threaded hubs, screw raceways or fittings tightly into hub so end bears against wire protection shoulder. Where chase nipples are used, align raceways so coupling is square to box; tighten chase nipple so no threads are exposed.
- H. Surface Raceways: Install a separate, green, ground conductor in raceways from junction box supplying raceways to receptacle or fixture ground terminals.
- I. Install pull wires in empty raceways.
- J. Install telephone and signal system raceways, 2-inch trade size and smaller, in maximum lengths of 150 feet and with a maximum of two 90-degree bends or equivalent.
- K. Connect motors and equipment subject to vibration, noise transmission, or movement with a 72-inch maximum length of flexible conduit. Install LFMC in wet or damp locations.

3.4 WIRING METHODS FOR POWER, LIGHTING, AND CONTROL CIRCUITS

- A. Branch Circuits: Type THHN/THWN insulated conductors in raceway.

- B. Remote-Control Signaling and Power-Limited Circuits: Type THHN/THWN insulated conductors in raceway for Classes 1, 2, and 3, unless otherwise indicated.

3.5 APPLICATION OF IDENTIFICATION MATERIALS

- A. Accessible Raceways and Cables of Auxiliary Systems: Identify the following systems with color-coded, self-adhesive color coding tape-in bands:
 - 1. Fire Alarm System: Red.
 - 2. Security System: Blue and yellow.
 - 3. Telecommunication System: Green and yellow.
- B. Power-Circuit Conductor Identification: For No. 3 AWG conductors and larger, at each location where observable, identify phase using color-coding conductor tape.
- C. Warning Labels for Enclosures for Power and Lighting: Comply with 29 CFR 1910.145; identify system voltage with black letters on an orange background. Apply to exterior of door, cover, or other access.
- D. Equipment Identification Labels:
 - 1. Labeling Instructions: Provide a single line of text with 1/2-inch- high letters on 1-1/2-inch high label.
 - 2. Equipment to Be Labeled:
 - a. Panelboards.
 - b. Electrical switchboards.
 - c. Transformers.
 - d. Motor starters.
 - e. Push-button stations.
 - f. Contactors.

3.6 INSTALLATION OF IDENTIFICATION MATERIALS

- A. Verify identity of each item before installing identification products.
- B. System Identification Color Banding for Raceways and Cables: At 50-foot maximum intervals in straight runs, and at 25-foot maximum intervals in congested areas.

- C. Color-Coding for Phase and Voltage Level Identification, 600 V and Less: Service, feeder, and branch-circuit conductors.
 - 1. 208/120-V Circuits:
 - a. Phase A: Black.
 - b. Phase B: Red.
 - c. Phase C: Blue.
 - d. Neutral: White
 - 2. 480/277-V Circuits:
 - a. Phase A: Brown.
 - b. Phase B: Orange.
 - c. Phase C: Yellow.
 - d. Neutral: White
 - 3. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches from terminal points.

3.7 INSTALLATION OF SUPPORTS

- A. Multiple Raceways or Cables: Install on trapeze-type supports fabricated with steel slotted channel.
- B. Install seismic-restraint components using methods approved by the evaluation service providing required submittals for component.
- C. Strength of Support and Seismic-Restraint Assemblies: Where not indicated, select sizes of components so strength will be adequate to carry present and future static and seismic loads within specified loading limits.

3.8 SEISMIC REQUIREMENTS

- A. Installation Of Seismic-Restraint Components:
 - 1. Install bushing assemblies for anchor bolts for wall- and floor-mounted equipment, arranged to provide resilient media between anchor bolt and mounting hole in substrate.

2. Attachment to Structure: If specific attachment is not indicated, anchor bracing to structure at flanges of beams, upper truss chords of bar joists, or at concrete members.

- B. Accommodation of Differential Seismic Motion: Make flexible connections in runs of raceways, cables, wireways, cable trays, and busways where they cross expansion and seismic-control joints, where adjacent sections or branches are supported by different structural elements, and where they terminate with connection to electrical equipment that is anchored to a different structural element than the one supporting them as they approach equipment.

3.9 FIRESTOPPING

- A. Apply firestopping to electrical penetrations of fire-rated floor and wall assemblies to restore original fire-resistance rating of assembly. Firestopping materials and installation requirements are specified in Division 7 Section "Through-Penetration Firestop Systems."

END OF SECTION 26 00 00

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data.
- B. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 DEVICES

- A. General: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. Color: White, unless noted otherwise..
- C. Receptacles: Heavy-Duty grade, NEMA WD 1, NEMA WD 6, DSCC W-C-596G, and UL 498.
- D. Ground-Fault Circuit Interrupter Receptacles: Non-feed-through type, heavy-duty grade, with integral duplex receptacle complying with UL 498 and UL 943; for installation in a deep outlet box without an adapter.
- E. Snap Switches: Key operated, heavy-duty, quiet type, DSCC W-C-8896F and UL 20.
- F. Wall Plates, Finished Areas: Smooth, high-impact white thermoplastic, fastened with metal screws having heads matching plate color.
- G. Wall Plates, Unfinished Areas: Satin finish stainless steel with metal screws.
- H. Wall Plates, Wet Locations: Cast aluminum with spring-loaded lift cover, and listed and labeled for use in wet locations.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install devices and assemblies plumb, level, and square with building lines.
- B. Mount devices flush, with long dimension vertical, and grounding terminal of receptacles on top, unless otherwise indicated. Group adjacent devices under single, multi-gang wall plates.

END OF SECTION 26 05 00

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data for each luminaire, including lamps.
- B. Fixtures, Emergency Lighting Units, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- C. Coordinate ceiling-mounted luminaires with ceiling construction, mechanical work, and security and fire-prevention features mounted in ceiling space and on ceiling.

PART 2 - PRODUCTS

2.1 LUMINAIRES

- A. Provide fixtures as listed in the "Light Fixture Types" on drawing A4 and as specified in this section.

2.2 FLUORESCENT LAMP BALLASTS

- A. Description: Include the following features, unless otherwise indicated:
 - 1. Designed for type and quantity of lamps indicated at full light output.
- B. Electronic ballasts for linear lamps shall include the following features, unless otherwise indicated:
 - 1. Comply with NEMA C82.11.
 - 2. Ballast Type: Rapid start, unless otherwise indicated.
 - 3. Sound Rating: A.
 - 4. Total harmonic distortion rating of less than 10 percent according to NEMA C82.11.
 - 5. Transient Voltage Protection: IEEE C62.41, Category A.
 - 6. Operating Frequency: 25kHz or higher.
 - 7. Lamp Current Crest Factor: Less than 1.7.
 - 8. Power Factor: 95 percent, minimum.
 - 9. Flicker: Less than 5 percent
 - 10. Parallel Lamp Circuits: Multiple lamp ballasts connected to maintain full light output on surviving lamps if one or more lamps fail.

2.2 FLUORESCENT LAMP BALLASTS (Con't)

- C. Electromagnetic ballasts for linear lamps shall have the following features, unless otherwise indicated:
 - 1. Comply with NEMA C82.1.
 - 2. Type: Energy saving, high-power factor, Class P, automatic-reset thermal protection.
 - 3. Ballast Manufacturer Certification: Indicated by label.

- D. Ballasts for compact lamps shall have the following features, unless otherwise indicated:
 - 1. Type: Electronic.
 - 2. Power Factor: 95 percent, minimum.
 - 3. Flicker: Less than 5 percent.
 - 4. Lamp Current Crest Factor: Less than 1.7.
 - 5. Electronic Ballast Operating Frequency: 30kHz or higher.
 - 6. Lamp end-of-life detection and shutdown circuit.
 - 7. Transient Protection: Comply with IEEE C62.41 for Category A1 locations.
 - 8. For non recessed fixtures only: Ballast Coil Temperature: 65 deg C, maximum.

2.3 FLUORESCENT LAMPS

- A. Low-Mercury Lamps: Comply with Federal toxic characteristic leaching procedure test, and yield less than 0.2 mg of mercury per liter, when tested according to NEMA LL 1.

- B. T5 rapid-start lamps, rated 14 w and 28 W maximum, 1200 and 2900 initial lumens (minimum), CRI of 85 (minimum), color temperature of 3500 K, and average rated life of 20,000 hours, unless otherwise indicated.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Set units level, plumb, and square with ceiling and walls, and secure.
- B. Support for surface-mounted ceiling Fluorescent Fixtures:
 - 1. Install individual and continuous row fixtures using a minimum of (4) 1/4" diameter stainless steel toggle style (non-wing) anchors, per fixture, at existing plaster ceilings. Ensure that toggles properly bear on plaster and lath using the minimum allowable hole size.
- C. Provide connectors bands for continuous row mounting.
- D. Provide Flat Smooth End Caps
- E. Lamping: Provide 3500K lamps.

END OF SECTION 26 50 00

**THE FOLLOWING 7 PAGES CONTAIN THE JOHNSON
CONTROLS COST PROPOSAL, ALONG WITH THE
SCOPE OF WORK, FOR MODIFICATIONS TO
THE FIRE ALARM SYSTEM**

**THIS COST AND SCOPE OF WORK MUST BE
INCLUDED BY THE BIDDER IN THEIR BID.**



429 Hayden Station Road
 Suite C
 WINDSOR, CT 06095-1340
 (860) 602 3200
 FAX: (860) 683 8506

Johnson Controls Quotation

TO:
 SCSU
 615 Fitch St, Rm# 329
 ATTN: Facilities OPs
 HAMDEN, CT 06514-4803

Project: SCSU Moore Field 1st flr reno
 Customer Reference: SCSU-2012-12 Moore Field House
 Johnson Controls Reference: 129419557
 Date: 04/05/2019
 Page 1 of 7

Johnson Controls is pleased to offer for your consideration this quotation for the above project.

QUANTITY	MODEL NUMBER	DESCRIPTION
1st flr restroom renovations		
		Notification Devices
3	4906-9101	STROBE MC RED

Net selling price for 1st flr restroom renovations, FOB shipping point, \$101.43

Technical Labor	
Professional Services - Technical Labor	
DSGN LAB	DESIGN LABOR
CAD LAB	CAD LABOR
PM LAB	PROJECT/CONSTRUCTION MGMT
Technical Services - Technical Labor	
COMM LAB	Commissioning Labor

Net selling price for Technical Labor, FOB shipping point, \$2,990.00

Total net selling price, FOB shipping point, \$3,091.43

Comments

Please read the notes below and call if you have any questions.

Contact Information:
 Ryan St. Germain
 Electronic System Sales Representative

Cell: 860-308-5985

email: ryan.stgermain@jci.com

THIS QUOTATION AND ANY RESULTING CONTRACT SHALL BE SUBJECT TO THE GENERAL TERMS AND CONDITIONS ATTACHED HERETO.
 Fire, Security, Communications, Sales & Service
 Offices & Representatives in Principal Cities throughout North America



Johnson Controls Quotation

Comments (continued)

Johnson Controls Inc.
429 Hayden Station Road Suite C
Windsor, CT 06095

JCI's Scope of Work:

Southern CT State University
MOORE FIELD HOUSE - FIRST FLOOR RESTROOM Renovations - 2019
PROJECT NO. SCSU-2012-12
Fire Alarm
Pricing is per State Contract # #18PSX0005
Prevailing Wage is excluded from this quote

1. JCI shall supply equipment, testing and programming labor for the equipment as listed above.
2. JCI to test and certify newly installed devices
3. Please note we are supply all strobe only devices and NOT horn strobe like drawing shows for two restrooms
4. Installation by Electrical Contractor as follows:
 - a. New strobe only devices will need to be wired back to the main fire alarm control panel's transponder located in basement on backside of wall of existing FACP
 - b. Electrical Contractor to terminate wire at field devices and in panel on XPS power supply

Exceptions and/or Clarifications:

JCI has configured our equipment to satisfy the design as indicated on the design documents. JCI is not responsible for the design of this project. Additional devices may be deemed necessary by the AHJ and could result in additional cost.

The electrical contractor will provide and install all conduit and boxes (including the installation of JCI provided weatherproof boxes and cabinets), pull strings, flexible piping, box blank covers, electrical breakers, terminal cabinets, breaker locks, wire, devices, terminations.

All conduits must be installed above ground (except PIV connections and runs identified on the drawings referenced in these comments). If additional conduit is installed in the ground floor slab or below ground, wet location cable shall be provided at no additional cost to JCI LP.

THIS PROPOSAL IS BASED UPON ONLY THOSE ITEMS DENOTED BY [X]":

- Specification section:
- Information from plans Drawing Numbers and Dates: A4 Dated 12-21-2012
- Up to and including addendum:
- Customer provided bill of material

Fire, Security, Communications, Sales & Service
Offices & Representatives in Principal Cities throughout North America



Johnson Controls Quotation

Comments (continued)

- Verbal request
- Value engineering
- Design Build

THIS QUOTATION INCLUDES ONLY THOSE ITEMS DENOTED BY "[X]":

- Equipment as listed
- Demolition of existing fire alarm devices
- CT State Sales Tax
- Freight (F.O.B. shipping point)
- Shop Drawings
- PE Sealed Drawings
- Panel terminations
- Technical installation support including programming
- Permit
- Inspection Fees
- Payment/Performance Bonds
- 1 functional system certification test
- 1 AHJ test
- 1 10% Re-Test
- 1 Separate Elevator Test
- 2 Hours of operation and maintenance training
- Close out documentation
- Interface to non-Simplex provided equipment i.e.: HVAC and elevator
- One year standard warranty
- Monitoring
- AHCA Inspection
- UL Certification

THIS QUOTATION DOES NOT INCLUDE THE FOLLOWING:

- Bi-Directional Antenna, First Responder Radio Amplifiers
- Radio Signal tests or surveys
- Electric Locks or Door Hardware
- Owner to provide any LAN/network connections required
- Owner to provide PC for Access Control SW
- Patch panels or cords
- Racks
- Phased Checkout
- Raceway or standard electric boxes
- 120vac power
- Fire protection switches or gas solenoids
- Phone lines
- Remote station monitoring contract (available upon request)
- Knox box
- Cutting, drilling, patching, fire caulking or painting
- Interface to non-Simplex provided equipment i.e.: HVAC and elevator
- Fire watch
- Weatherproof and conditioned control equipment housing
- No asbestos abatement is identified, expected or included in this contract. All policies and procedures referenced in the specification will be followed as required.



Johnson Controls Quotation

Comments (continued)

- No Lead paint abatement is identified, expected or included in this contract. All policies and procedures referenced in the specification will be followed as required.
- Cost for CAD files

It is JCI (JCI) understanding that these drawings and specifications represent the work to be accomplished in its entirety and no additional work or materials is expected or required. This quote covers direct costs only and we reserve the right to claim for impact and consequential costs.

SCHEDULE MILESTONES:

TIME IS OF THE ESSENCE with regard to this quotation as it relates to the project schedule which is [] known [X] unknown at this time.

ADDITIONAL NOTES:

If JCI is awarded this project we will need:

- A complete set of bid documents including all specifications and any addendums
- An electronic CAD file in AutoCAD shall be sent to ryan.stgermain@jci.com or mailed to the branch address provided on this quotation.
- A complete schedule
- A copy of the "Notice of Commitment"
- Your P.O. or contract will need to reference this proposal # and amount. This proposal and its terms and condition shall take precedence. Your Purchase Order or contract is subject to review and must be mutually agreeable.

Quotation is valid for a period of 30 days ONLY unless modified in writing by JCI.

All work is to be performed during normal JCI hours of 8am to 5pm Monday through Friday with the exception of company sponsored holidays unless specifically noted otherwise.
We reserve the right to correct this quote for errors and omissions.

As stated above, JCI will perform the work pursuant to the attached Terms and Conditions. Should the parties fail to execute a mutually agreeable definitive agreement, all work performed by JCI on or related to the above captioned project (with the exception of any monitoring services anticipated, which will only be performed pursuant to the unaltered terms and conditions of JCI's standard Monitoring Agreement) will be performed pursuant to the attached Terms and Conditions.

Please indicate your approval of this quotation by signing the last page and returning to my attention as noted below.

Ryan St. Germain
Electronic Systems Sales
Cell: (860) 308-5985
email: ryan.stgermain@jci.com

TERMS AND CONDITIONS (Rev. 4/18)

1. Payment. Payments shall be invoiced and due in accordance with the terms and conditions set forth above. Work performed on a time and material basis shall be at Company's then-prevailing rate for material, labor, and related items, in effect at the time supplied under this Agreement. Company shall invoice Customer for progress payments to one hundred (100%) percent based upon equipment delivered or stored, and services performed. Customers without established satisfactory credit shall make payments of cash in advance, upon delivery or as otherwise specified by Company. Where Customer establishes and maintains satisfactory credit, payments shall be due and payable thirty (30) days from date of invoice. Company reserves the right to revoke or modify Customer's credit in its sole discretion. Customer's failure to make payment when due is a material breach of this Agreement. If Customer fails to make any payment when due, in addition to any other rights and remedies available, Company shall have the right, at Company's sole discretion, to stop performing any Services and/or withhold further deliveries of materials, until the account is current. In the event payment is not received when due, Company may, at its discretion, assess late fees at the rate of 1.5% per month or the maximum rate allowed by law. Customer agrees to pay all costs of collection, including without limitation costs, fees, and attorneys' fees. Customer's failure to make payment when due is a material breach of this Agreement until the account is current.

2. Pricing. The pricing set forth in this Agreement is based on the number of devices to be installed and services to be performed as set forth in the Scope of Work ("Equipment" and "Services"). If the actual number of devices installed or services to be performed is greater than that set forth in the Scope of Work, the price will be increased accordingly. If this Agreement extends beyond one year, Company may increase prices upon notice to the Customer. Customer agrees to pay all taxes, permits, and other charges, including but not limited to state and local sales and excise taxes, however designated, levied or based on the service charges pursuant to this Agreement. Prices in any quotation or proposal from Company are subject to change upon notice sent to Customer at any time before the quotation or proposal has been accepted. Prices for products covered may be adjusted by Company, upon notice to Customer at any time prior to shipment, to reflect any increase in Company's cost of raw materials (e.g., steel, aluminum) incurred by Company after issuance of Company's applicable proposal or quotation.

3. Alarm Monitoring Services. Any reference to alarm monitoring services in this Agreement is included for pricing purposes only. Alarm monitoring services are performed pursuant to the terms and conditions of Company's standard alarm monitoring services agreement.

4. Code Compliance. Company does not undertake an obligation to inspect for compliance with laws or regulations unless specifically stated in the Scope of Work. Customer acknowledges that the Authority Having Jurisdiction (e.g. Fire Marshal) may establish additional requirements for compliance with local codes. Any additional services or equipment required will be provided at an additional cost to Customer.

5. Limitation of Liability; Limitations of Remedy. It is understood and agreed by the Customer that Company is not an insurer and that insurance coverage shall be obtained by the Customer and that amounts payable to company hereunder are based upon the value of the services and the scope of liability set forth in this Agreement and are unrelated to the value of the Customer's property and the property of others located on the premises. Customer agrees to look exclusively to the Customer's insurer to recover for injuries or damage in the event of any loss or injury and that Customer releases and

waives all right of recovery against Company arising by way of subrogation. Company makes no guaranty or Warranty, including any implied warranty of merchantability or fitness for a particular purpose that equipment or services supplied by Company will detect or avert occurrences or the consequences therefrom that the equipment or service was designed to detect or avert. It is impractical and extremely difficult to fix the actual damages, if any, which may proximately result from failure on the part of Company to perform any of its obligations under this Agreement. Accordingly, Customer agrees that, Company shall be exempt from liability for any loss, damage or injury arising directly or indirectly from occurrences, or the consequences therefrom, which the equipment or service was designed to detect or avert. Should Company be found liable for any loss, damage or injury arising from a failure of the equipment or service in any respect, Company's liability shall be limited to an amount equal to the Agreement price (as increased by the price for any additional work) or where the time and material payment term is selected, Customer's time and material payments to Company. Where this Agreement covers multiple sites, liability shall be limited to the amount of the payments allocable to the site where the incident occurred. Such sum shall be complete and exclusive. IN NO EVENT SHALL COMPANY BE LIABLE FOR ANY DAMAGE, LOSS, INJURY, OR ANY OTHER CLAIM ARISING FROM ANY SERVICING, ALTERATIONS, MODIFICATIONS, CHANGES, OR MOVEMENTS OF THE COVERED SYSTEM(S) OR ANY OF ITS COMPONENT PARTS BY THE CUSTOMER OR ANY THIRD PARTY. COMPANY SHALL NOT BE LIABLE FOR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING BUT NOT LIMITED TO DAMAGES ARISING FROM THE USE, LOSS OF THE USE, PERFORMANCE, OR FAILURE OF THE COVERED SYSTEM(S) TO PERFORM. The limitations of liability set forth in this Agreement shall inure to the benefit of all parents, subsidiaries and affiliates of company, whether direct or indirect, company's employees, agents, officers and directors.

6. Reciprocal Waiver of Claims (SAFETY Act). Certain of Company's systems and services have received Certification and/or Designation as Qualified Anti-Terrorism Technologies ("QATT") under the Support Anti-terrorism by Fostering Effective Technologies Act of 2002, 6 U.S.C. §§ 441-444 (the "SAFETY Act"). As required under 6 C.F.R. 25.5 (e), to the maximum extent permitted by law, Company and Customer hereby agree to waive their right to make any claims against the other for any losses, including business interruption losses, sustained by either party or their respective employees, resulting from an activity resulting from an "Act of Terrorism" as defined in 6 C.F.R. 25.2, when QATT have been deployed in defense against, response to, or recovery from such Act of Terrorism.

7. General Provisions. Customer has selected the service level desired after considering and balancing various levels of protection afforded, and their related costs. All work to be performed by Company will be performed during normal working hours of normal working days (8:00 a.m. – 5:00 p.m., Monday through Friday, excluding Company holidays), as defined by Company, unless additional times are specifically described in this Agreement. Company will perform the services described in the Scope of Work section ("Services") for one or more system(s) or equipment as described in the Scope of Work section or the listed attachments ("Covered System(s)"). The Customer shall promptly notify Company of any malfunction in the Covered System(s) which comes to Customer's attention. This Agreement assumes the Covered System(s) are in operational and maintainable condition as of the Agreement

date. If, upon initial inspection, Company determines that repairs are recommended, repair charges will be submitted for approval prior to any work. Should such repair work be declined Company shall be relieved from any and all liability arising therefrom. UNLESS OTHERWISE SPECIFIED IN THIS AGREEMENT, ANY INSPECTION (AND, IF SPECIFIED, TESTING) PROVIDED UNDER THIS AGREEMENT DOES NOT INCLUDE ANY MAINTENANCE, REPAIRS, ALTERATIONS, REPLACEMENT OF PARTS, OR ANY FIELD ADJUSTMENTS WHATSOEVER, NOR DOES IT INCLUDE THE CORRECTION OF ANY DEFICIENCIES IDENTIFIED BY COMPANY TO CUSTOMER. COMPANY SHALL NOT BE RESPONSIBLE FOR EQUIPMENT FAILURE OCCURRING WHILE COMPANY IS IN THE PROCESS OF FOLLOWING ITS INSPECTION TECHNIQUES, WHERE THE FAILURE ALSO RESULTS FROM THE AGE OR OBSOLESCENCE OF THE ITEM OR DUE TO NORMAL WEAR AND TEAR. THIS AGREEMENT DOES NOT COVER SYSTEMS, EQUIPMENT, COMPONENTS OR PARTS THAT ARE BELOW GRADE, BEHIND WALLS OR OTHER OBSTRUCTIONS OR EXTERIOR TO THE BUILDING, ELECTRICAL WIRING, AND PIPING.

8. Customer Responsibilities. Customer shall furnish all necessary facilities for performance of its work by Company, adequate space for storage and handling of materials, light, water, heat, heat tracing, electrical service, local telephone, watchman, and crane and elevator service and necessary permits. Where wet pipe system is installed, Customer shall supply and maintain sufficient heat to prevent freezing of the system. Customer shall promptly notify Company of any malfunction in the Covered System(s) which comes to Customer's attention. This Agreement assumes any existing system(s) are in operational and maintainable condition as of the Agreement date. If, upon initial inspection, Company determines that repairs are recommended, repair charges will be submitted for approval prior to any work. Should such repair work be declined Company shall be relieved from any and all liability arising therefrom. Customer shall further:

- supply required schematics and drawings unless they are to be supplied by Company in accordance with this Agreement;
- Provide a safe work environment, in the event of an emergency or Covered System(s) failure, take reasonable safety precautions to protect against personal injury, death, and property damage, continue such measures until the Covered System(s) are operational, and notify Company as soon as possible under the circumstances.
- Provide Company access to any system(s) to be serviced,
- Comply with all laws, codes, and regulations pertaining to the equipment and/or services provided under this agreement.

9. Excavation. In the event the Work includes excavation, Customer shall pay, as an extra to the contract price, the cost of any additional work performed by Company due to water, quicksand, rock or other unforeseen condition or obstruction encountered or shoring required.

10. Structure and Site Conditions. While employees of Company will exercise reasonable care in this respect, Company shall be under no responsibility for loss or damage due to the character, condition or use of foundations, walls, or other structures not erected by It or resulting from the excavation in proximity thereto, or for damage resulting from concealed piping, wiring, fixtures, or other equipment or condition of water pressure. All shoring or protection of foundation, walls or other structures subject to being disturbed by any excavation required hereunder shall be the responsibility of Customer. Customer shall have all things in readiness for installation including, without limitation, structure to support the sprinkler system and related equipment (including tanks), other materials, floor or suitable working base, connections and facilities for erection at the time the materials are delivered. In the event Customer fails

to have all things in readiness at the time scheduled for receipt of materials, Customer shall reimburse Company for all expenses caused by such failure. Failure to make areas available to Company during performance in accordance with schedules that are the basis for Company's proposal shall be considered a failure to have things in readiness in accordance with the terms of this Agreement.

11. Confined Space. If access to confined space by Company is required for the performance of Services, Services shall be scheduled and performed in accordance with Company's then-current hourly rate.

12. Hazardous Materials. Customer represents that, except to the extent that Company has been given written notice of the following hazards prior to the execution of this Agreement, to the best of Customer's knowledge there is no:

- "permit confined space," as defined by OSHA,
- risk of infectious disease,
- need for air monitoring, respiratory protection, or other medical risk,
- asbestos, asbestos-containing material, formaldehyde or other potentially toxic or otherwise hazardous material contained in or on the surface of the floors, walls, ceilings, insulation or other structural components of the area of any building where work is required to be performed under this Agreement.

All of the above are hereinafter referred to as "Hazardous Conditions". Company shall have the right to rely on the representations listed above. If hazardous conditions are encountered by Company during the course of Company's work, the discovery of such materials shall constitute an event beyond Company's control and Company shall have no obligation to further perform in the area where the hazardous conditions exist until the area has been made safe by Customer as certified in writing by an independent testing agency, and Customer shall pay disruption expenses and re-mobilization expenses as determined by Company. This Agreement does not provide for the cost of capture, containment or disposal of any hazardous waste materials, or hazardous materials, encountered in any of the Covered System(s) and/or during performance of the Services. Said materials shall at all times remain the responsibility and property of Customer. Company shall not be responsible for the testing, removal or disposal of such hazardous materials.

13. OSHA Compliance. Customer shall indemnify and hold Company harmless from and against any and all claims, demands and/or damages arising in whole or in part from the enforcement of the Occupational Safety Health Act (and any amendments or changes thereto) unless said claims, demands or damages are a direct result of causes within the exclusive control of Company.

14. Interferences. Customer shall be responsible to coordinate the work of other trades (including but not limited to ducting, piping, and electrical) and for and additional costs incurred by Company arising out of interferences to Company's work caused by other trades.

15. Modifications and Substitutions. Company reserves the right to modify materials, including substituting materials of later design, providing that such modifications or substitutions will not materially affect the performance of the Covered System(s).

16. Changes, Alterations, Additions. Changes, alterations and additions to the Scope of Work, plans, specifications or construction schedule shall be invalid unless approved in writing by Company. Should changes be approved by Company, that increase or decrease the cost of the work to Company, the parties shall agree, in writing, to the change in price prior to performance of any work. However, if no agreement is reached prior to the time for performance of said work, and Company elects to perform said work so as to avoid delays, then Company's estimate as to the value of said work shall be deemed accepted by Customer. In addition, Customer shall pay for all extra work requested by Customer or made necessary because of incompleteness or inaccuracy of plans or other information submitted by Customer with respect to the location,

type of occupancy, or other details of the work to be performed. In the event the layout of Customer's facilities has been altered, or is altered by Customer prior to the completion of the Work, Customer shall advise Company, and prices, delivery and completion dates shall be changed by Company as may be required.

17. Commodities Availability. Company shall not be responsible for failure to provide services, deliver products, or otherwise perform work required by this Agreement due to lack of available steel products or products made from plastics or other commodities. In the event Company is unable, after reasonable commercial efforts, to acquire and provide steel products, or products made from plastics or other commodities, if required to perform work required by this Agreement, Customer hereby agrees that Company may terminate the Agreement, or the relevant portion of the Agreement, at no additional cost and without penalty. Customer agrees to pay Company in full for all work performed up to the time of any such termination.

18. Project Claims. Any claim of failure to perform against Company arising hereunder shall be deemed waived unless received by Company, in writing specifically setting forth the basis for such claim, within ten (10) days after such claims arises.

19. Backcharges. No charges shall be levied against Company unless seventy-two (72) hours prior written notice is given to Company to correct any alleged deficiencies which are alleged to necessitate such charges and unless such alleged deficiencies are solely and directly caused by Company.

20. System Equipment. The purchase of equipment or peripheral devices (including but not limited to smoke detectors, passive infrared detectors, card readers, sprinkler system components, extinguishers and hoses) from Company shall be subject to the terms and conditions of this Agreement. If, in Company's sole judgment, any peripheral device or other system equipment, which is attached to the Covered System(s), whether provided by Company or a third party, interferes with the proper operation of the Covered System(s), Customer shall remove or replace such device or equipment promptly upon notice from Company. Failure of Customer to remove or replace the device shall constitute a material breach of this Agreement. If Customer adds any third party device or equipment to the Covered System(s), Company shall not be responsible for any damage to or failure of the Covered System(s) caused in whole or in part by such device or equipment.

21. Reports. Where inspection and/or test services are selected, such inspection and/or test shall be completed on Company's then current Report form, which shall be given to Customer, and, where applicable, Company may submit a copy thereof to the local authority having jurisdiction. The Report and recommendations by Company are only advisory in nature and are intended to assist Customer in reducing the risk of loss to property by indicating obvious defects or impairments noted to the system and equipment inspected and/or tested. They are not intended to imply that no other defects or hazards exist or that all aspects of the Covered System(s), equipment, and components are under control at the time of inspection. Final responsibility for the condition and operation of the Covered System(s) and equipment and components lies with Customer.

22. Limited Warranty. Subject to the limitations below, Company warrants any equipment (as distinguished from the Software) installed pursuant to this Agreement to be free from defects in material and workmanship under normal use for a period of one (1) year from the date of first beneficial use or all or any part of the Covered System(s) or 18 months after Equipment shipments, whichever is earlier, provided however, that Company's sole liability, and Customer's sole remedy, under this limited warranty shall be limited to the repair or replacement of the Equipment or any part thereof, which Company determines is defective, at Company's sole option and subject to the availability of service personnel and parts, as determined by Company. Company warrants expendable items, including, but not limited to, video and print heads, television camera tubes,

video monitor displays tubes, batteries and certain other products in accordance with the applicable manufacturer's warranty. Company does not warrant devices designed to fail in protecting the System, such as, but not limited to, fuses and circuit breakers. Company warrants that any Company software described in this Agreement, as well as software contained in or sold as part of any Equipment described in this Agreement, will reasonably conform to its published specifications in effect at the time of delivery and for ninety (90) days after delivery. However, Customer agrees and acknowledges that the software may have inherent defects because of its complexity. Company's sole obligation with respect to software, and Customer's sole remedy, shall be to make available published modifications, designed to correct inherent defects, which become available during the warranty period. If Repair Services are included in this Agreement, Company warrants that its workmanship and material for repairs made pursuant to this Agreement will be free from defects for a period of ninety (90) days from the date of furnishing.

EXCEPT AS EXPRESSLY SET FORTH HEREIN, COMPANY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES PERFORMED OR THE PRODUCTS, SYSTEMS OR EQUIPMENT, IF ANY, SUPPORTED HEREUNDER.

Warranty service will be performed during Company's normal working hours. If Customer requests warranty service at other than normal working hours, service will be performed at Company's then current rates for after ours services. All repairs or adjustments that are or may become necessary shall be performed by and authorized representative of Company. Any repairs, adjustments or interconnections performed by Customer or any third party shall void all warranties.

23. Indemnity. Customer agrees to indemnify, hold harmless and defend Company against any and all losses, damages, costs, including expert fees and costs, and expenses including reasonable defense costs, arising from any and all third party claims for personal injury, death, property damage or economic loss, including specifically any damages resulting from the exposure of workers to Hazardous Conditions whether or not Customer pre-notifies Company of the existence of said hazardous conditions, arising in any way from any act or omission of Customer or Company relating in any way to this Agreement, including but not limited to the Services under this Agreement, whether such claims are based upon contract, warranty, tort (including but not limited to active or passive negligence), strict liability or otherwise. Company reserves the right to select counsel to represent it in any such action.

24. Insurance. Customer shall name Company, its officers, employees, agents, subcontractors, suppliers, and representatives as additional insureds on Customer's general liability and auto liability policies.

25. Termination. Any termination under the terms of this Agreement shall be made in writing. In the event Customer terminates this Agreement prior to completion for any reason not arising solely from Company's performance or failure to perform, Customer understands and agrees that Company will incur costs of administration and preparation that are difficult to estimate or determine. Accordingly, should Customer terminate this Agreement as described above, Customer agrees to pay all charges incurred for products and equipment installed and services performed, and in addition pay an amount equal to twenty (20%) percent of the price of products and equipment not yet delivered and Services not yet performed, return all products and equipment delivered and pay a restocking fee of twenty (20%) percent of the price of products or equipment returned. Company may terminate this Agreement immediately at its sole discretion upon the occurrence of any Event of Default as hereinafter defined. Company may also terminate this Agreement at its sole discretion upon notice to Customer if Company's performance of its obligations under this Agreement becomes impracticable due to obsolescence of equipment at



Customer's premises or unavailability of parts.

26. Default. An Event of Default shall be 1) failure of the Customer to pay any amount within ten (10) days after the amount is due and payable, 2) abuse of the System or the Equipment, 3) dissolution, termination, discontinuance, insolvency or business failure of Customer. Upon the occurrence of an Event of Default, Company may pursue one or more of the following remedies, 1) discontinue furnishing Services, 2) by written notice to Customer declare the balance of unpaid amounts due and to become due under the this Agreement to be immediately due and payable, provided that all past due amounts shall bear interest at the rate of 1 ½% per month (18% per year) or the highest amount permitted by law, 3) receive immediate possession of any equipment for which Customer has not paid. 4) proceed at law or equity to enforce performance by Customer or recover damages for breach of this Agreement, and 5) recover all costs and expenses, including without limitation reasonable attorneys' fees, in connection with enforcing or attempting to enforce this Agreement.

27. Exclusions. Unless expressly included in the Scope of Work, this Agreement expressly excludes, without limitation, testing inspection and repair of duct detectors, beam detectors, and UV/IR equipment; provision of fire watches; clearing of ice blockage; draining of improperly pitched piping; replacement of batteries; recharging of chemical suppression systems; reloading of, upgrading, and maintaining computer software; system upgrades and the replacement of obsolete systems, equipment, components or parts; making repairs or replacements necessitated by reason of negligence or misuse of components or equipment or changes to Customer's premises, vandalism, corrosion (including but not limited to micro-bacterially induced corrosion ("MIC")), power failure, current fluctuation, failure due to non-Company installation, lightning, electrical storm, or other severe weather, water, accident, fire, acts of God or any other cause external to the Covered System(s). Repair Services provided pursuant to this Agreement do not cover and specifically excludes system upgrades and the replacement of obsolete systems, equipment, components or parts. All such services may be provided by Company at Company's sole discretion at an additional charge. If Emergency

Services are expressly included in the scope of work section, the Agreement price does not include travel expenses.

28. No Option to Solicit. Customer shall not, directly or indirectly, on its own behalf or on behalf of any other person, business, corporation or entity, solicit or employ any Company employee, or induce any Company employee to leave his or her employment, for a period of two years after termination of this Agreement.

29. Force Majeure; Delays. Company shall not be liable for any damage or penalty for delays or failure to perform work due to acts of God, acts or omissions of Customer, acts of civil or military authorities, Government regulations or priorities, fires, epidemics, quarantine, restrictions, war, riots, civil disobedience or unrest, strikes, delays in transportation, vehicle shortages, differences with workmen, inability to obtain necessary labor, material or manufacturing facilities, defaults of Company's subcontractors, failure or delay in furnishing complete information by Customer with respect to location or other details of work to be performed, impossibility or impracticability of performance or any other cause or causes beyond Company's control, whether or not similar to the foregoing. In the event of any delay caused as aforesaid, completion shall be extended for a period equal to any such delay, and this contract shall not be void or voidable as a result of the delay. In the event work is temporarily discontinued by any of the foregoing, all unpaid installments of the contract price, less an amount equal to the value of material and labor not furnished, shall be due and payable upon receipt of invoice by Customer.

30. One-Year Limitation on Actions; Choice of Law. It is agreed that no suit, or cause of action or other proceeding shall be brought against either party more than one (1) year after the accrual of the cause of action or one (1) year after the claim arises, whichever is shorter, whether known or unknown when the claim arises or whether based on tort, contract, or any other legal theory. The laws of Massachusetts shall govern the validity, enforceability, and interpretation of this Agreement.

31. Assignment. Customer may not assign this Agreement without Company's prior written consent. Company may assign this Agreement to an affiliate without obtaining Customer's consent.

32. Entire Agreement. The parties intend this Agreement, together with any attachments or Riders (collectively the "Agreement") to be the final, complete and exclusive expression of their Agreement and the terms and conditions thereof. This Agreement supersedes all prior representations, understandings or agreements between the parties, written or oral, and shall constitute the sole terms and conditions of sale for all equipment and services. No waiver, change, or modification of any terms or conditions of this Agreement shall be binding on Company unless made in writing and signed by an Authorized Representative of Company.

33. Severability. If any provision of this Agreement is held by any court or other competent authority to be void or unenforceable in whole or in part, this Agreement will continue to be valid as to the other provisions and the remainder of the affected provision.

34. Legal Fees. Company shall be entitled to recover from the customer all reasonable legal fees incurred in connection with Company enforcing the terms and conditions of this Agreement.

35. License Information (Security System Customers): AL Alabama Electronic Security Board of Licensure 7956 Vaughn Road, Pmb 392, Montgomery, Alabama 36116 (334) 264-9388; AR Regulated by: Arkansas Board of Private Investigators And Private Security Agencies, #1 State Police Plaza Drive, Little Rock 72209 (501)618-8600; CA Alarm company operators are licensed and regulated by the Bureau of Security and Investigative Services, Department of Consumer Affairs, Sacramento, CA, 95814. Upon completion of the installation of the alarm system, the alarm company shall thoroughly instruct the purchaser in the proper use of the alarm system. Failure by the licensee, without legal excuse, to substantially commence work within 20 days from the approximate date specified in the agreement when the work will begin is a violation of the Alarm Company Act: NY Licensed by N.Y.S. Department of the State: TX Texas Commission on Private Security, 5805 N. Lamar Blvd., Austin, 78752-4422, 512-424-7710. License numbers available at www.jci.com or contact your local Johnson Controls office.

IMPORTANT NOTICE TO CUSTOMER

In accepting this Proposal, Customer agrees to the terms and conditions contained herein including those on the following pages of this Agreement and any attachments or riders attached hereto that contain additional terms and conditions. It is understood that these terms and conditions shall prevail over any variation in terms and conditions on any purchase order or other document that the Customer may issue. Any changes in the system requested by the Customer after the execution of this Agreement shall be paid for by the Customer and such changes shall be authorized in writing. **ATTENTION IS DIRECTED TO THE LIMITATION OF LIABILITY, WARRANTY, INDEMNITY AND OTHER CONDITIONS ON THE FOLLOWING PAGES. This proposal shall be void if not accepted in writing within thirty (30) days from the date of the Proposal.**

<p>Offered By: Johnson Controls Fire Protection LP License#: 429 Hayden Station Road Suite C WINDSOR, CT 06095-1340 Telephone: (860) 602 3200</p> <hr/> <p>Representative: <u> Ryan St. Germain </u></p> <hr/> <p>Email: <u> ryan.stgermain@jci.com </u></p>	<p>Accepted By: (Customer)</p> <p>Company: _____</p> <p>Address: _____</p> <p>Signature: _____</p> <p>Title: _____</p> <p>P.O.#: _____ Date: _____</p>
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