

# LEDDY PARK ARENA

CONTRACT #2

LEDDY PARK ROAD

BURLINGTON, VT 05401

## PROJECT MANUAL

### OWNER

THE CITY OF BURLINGTON  
Department of Public Works  
645 Pine Street, Suite A  
Burlington, VT 05401

### ARCHITECT

Duncan•Wisniewski Architecture

255 So. Champlain Street

Burlington, VT 05401

April 30, 2013

# LEDDY PARK ARENA

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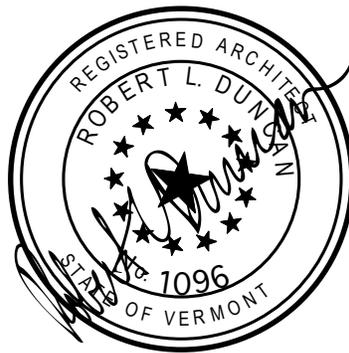
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## **ADVERTISEMENT FOR BIDS**

### **Leddy Park Arena Repairs**

Burlington, VT

Sealed bids for general construction, repairs, and ADA accessibility improvements to one set of team rooms at Leddy Park Arena will be received at the office of City of Burlington, Department of Public Works at 645 Pine Street, Suite A, Burlington, VT 05401 until 2:00 PM local time on Friday, June 7, 2013. Bids received after this time will not be accepted.

All Bidders will be required to be prequalified to work for the City of Burlington or shall include a prequalification application with their bid. The prequalification application is available on the City's website ([www.burlingtonvt.gov/docs/ContractorPreQualification.pdf](http://www.burlingtonvt.gov/docs/ContractorPreQualification.pdf)), at the Department of Public Works, and at the City Clerk's Office.

#### **PROJECT DESCRIPTION**

OWNER: City of Burlington

ARCHITECT: Duncan Wisniewski Architecture

Project Location: Leddy Park Arena, Leddy Park Road, Burlington, VT 05401

The overall scope of work includes masonry, carpentry, finishes, toilet partitions, and plumbing; minimum electrical will be performed by the Owner.

#### **PROCUREMENT OF DOCUMENTS**

In lieu of paper documentation, the information for Bidders, Contract Documents & Contract Drawings will be emailed to prospective Bidders. In addition these documents can be downloaded from the Public Works website at: <http://www.burlingtonvt.gov/DPW/Bids,-RFPs-and-RFQs/>

Bidder shall submit a bid using forms included in this specification, copies of which may be made for this purpose.

#### **PRE-BID MEETING**

All bidders are invited to attend a site walkthrough on Wednesday, May 22, 2013 at 8:30 AM. Representatives of the Owner and Architect will be present to explain the project and answer general questions. Please meet at the main entrance to the Arena Building.

The Arena Building is open 7 days per week, so prospective bidders may visit the affected areas after checking in at the front office.

POINT-OF-CONTACT: Bob Duncan, Duncan•Wisniewski Architecture, 255 South Champlain Street, Burlington, VT 05401; 802-864-6693 x4#; [bobd@duncanwisniewski.com](mailto:bobd@duncanwisniewski.com)

#### **BID SECURITY AND BOND**

Bidders will be required to furnish bid security in accordance with the Instructions to Bidders in the form of a Bid Bond or certified check in the amount of 5% of the total bid. The successful bidder will be required to furnish a Performance Bond and a Payment Bond each in the amount of 100% of the Contract Price.

**END OF SECTION**

## **INSTRUCTIONS TO BIDDERS**

### 1.0 Definitions

“Contract Documents” dated include all of the bid documents for the Leddy Park Arena Contract #2. All codes, ordinances, regulations and standards applicable to this project and any Addenda issued prior to the execution of this Contract and all Modifications issued after execution of the Contract, and other related documents, shall apply to this Project and the Contract to do its work and are adopted by reference into and made part of the Contract Documents. Refer to the General Conditions for applicable codes and standards.

The City of Burlington shall hereinafter be called the “Owner”; Duncan Wisniewski Architecture shall be called the “Architect”.

“Addenda” are written or graphic instruments issued by the Design Architect prior to the execution of the Contract which modify or interpret the Contract Documents by additions, deletions, clarifications, or corrections.

A “Bid” is a complete and properly signed proposal submitted to do the complete Work or a designated portion thereof for the sums stipulated therein, submitted in accordance with the Contract Documents. A submission is only deemed to be a “bid” if it is complete and properly signed and submitted in conformance with the Contract Documents.

A “Unit Price” is an amount stated in the Bid as a price per unit of measurement for materials or services as described in the Contract Documents or in the proposed Contract Documents.

A Bidder is any person, firm or corporation submitting a BID for the WORK.

A Subbidder is a person or entity who submits a Bid to a Bidder for materials or labor for a portion of the Work.

### **1.1 Bidder's Representation and Responsibilities**

Each Bidder by making their Bid represents that:

They have read and understand the Contract Documents and their Bid is made in accordance therewith.

They have visited the site, have familiarized themselves with the local conditions under which the Work is to be performed and have correlated their observations with the requirements of the proposed Contract Documents.

Their Bid is based upon the materials, systems, and equipment required by the Contract Documents or approved equivalent, approved by the Architect, Engineer or Owner.

They have satisfied themselves of the accuracy of the estimated quantities in the Bid Schedule by examination of the site and a review of the Drawings and Specifications, including Addenda.

They shall not assert that there was a misunderstanding concerning the quantities of Work or of the nature of the Work to be done.

The estimated quantities on the plans and in the documents are not guaranteed, but are given as a basis for the comparison of bids.

If a bidder submits a unit bid price of zero for a contract bid item, the bid will be declared informal in its entirety.

A bidder may submit a unit bid price that is obviously below the cost of the item. If the City of Burlington awards and enters into a contract with a Bidder that has submitted a unit bid price that is obviously below cost, the contractor shall be obligated to perform the work under such item as indicated in the contract

documents unless, in the sole discretion of the Architect or Owner, the contractor is otherwise directed by the Architect.

When Optional Bid Items are indicated in the proposal bidders shall bid on only one pay item in each group of options, leaving the other pay items in the group without a bid price. If a bidder enters more than one unit price bid in a group of options, only the lowest total price will be considered as the basis of calculation for determining the low bidder and used in the contract.

When "Alternate Bid Items" are indicated in the Proposal bidders must bid on all pay items in each set of "Alternate Bid Items". Failure to bid on all of the "Alternate Bid Items" in the proposal may result in rejection of the bid.

When the schedule of items for a contract contains one or more pay items which have a quantity of one (1) and a unit price and total price entered, the Contractor has set a unit price in the event that such item is used. If such item is determined to be needed by the Architect, the work will be performed by the contractor according to the contract documents at the unit price listed.

When it is indicated in the contract documents that payment or costs of work and/or materials are incidental to one or more other contract items (but not to specific other items), such costs shall be included by the bidder in the price bid for all other contract items.

## **1.2 Contract Documents**

### Copies

Bidders have been provided with complete sets of the Contract Documents from the issuing office, with the exception of the codes and standards applicable to this project, which are available from:

<http://library.municode.com/index.aspx?clientID=13987&stateID=45&statename=Vermont> &

Vermont Department of Public Safety  
Division of Fire Safety  
372 Hurricane Lane  
Hurricane Lane, Vermont 05495  
<http://firesafety.vermont.gov>

Bidders shall use complete sets of Contract Documents in preparing Bids. Neither the Owner nor the Architect assumes any responsibility for errors or misinterpretation resulting from the use of the Contract Documents.

In making copies of the Contract Documents available on the above terms, the Owner or the Architect do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

At the time of the opening of Bids, each Bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the Contract Documents (including all Addenda). The failure or omission of any Bidder to receive or examine any form, instrument, or document shall in no way relieve any Bidder from the obligation in respect to their Bid.

### Interpretation or Correction of Contract Documents

The Contract Documents contain the provisions required for the construction of the Project. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed by the Contractor or relieve them from fulfilling any of the conditions of the contract.

Bidders and SubBidders shall promptly notify the Owner of any ambiguity, inconsistency, or error which they may discover upon examination of the Contract Documents or of the site and local conditions.

Bidders and SubBidders requiring clarification or interpretation of the Contract Documents shall make a written request to the Point of Contact (sroy@burlingtonvt.gov) at least four (4) days prior to the date for receipt of Bids. An interpretation will be mailed by certified mail with return receipt requested to prospective Bidders at the addresses given by them not later than five (5) days before opening. Failure of any Bidder to receive any such Addendum or interpretation shall not relieve such Bidder from any obligation under his Bid as submitted. All Addenda so issued shall become part of the Contract Documents.

Any interpretation, correction, or change of the Contract Documents will be made by Addendum. Interpretations, corrections, or changes of the Contract Documents made in any other manner will not be binding; and Bidders shall not rely upon such interpretations, corrections, or changes.

### Substitutions

The materials, products, and equipment described in the Contract Documents establish a standard of required function, dimension, appearance, and quality to be met by any proposed substitution.

If the Design Architect approves any proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.

No substitutions will be considered after the Contract award unless specifically provided in the Contract Documents.

### Addenda

Addenda will be mailed or delivered to all who are known by the Owner to have received a complete set of Contract Documents.

Copies of Addenda will be made available for inspection wherever Contract Documents are on file for that purpose.

No Addenda will be issued later than four (4) days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.

Each Bidder shall ascertain prior to submitting their bid that they have received all Addenda issued, and they shall acknowledge that receipt in their Bid.

If this solicitation is amended, then all terms and conditions which are not modified remain unchanged. All addenda so issued become part of the Contract Documents.

## **1.3 Bidding Procedure**

### Forms and Style of Bids

All bids shall be sealed in an envelope which shall be clearly marked with the words "Leddy Contract #2" and any other project or other identifying number, the bidder's name and the date and time for receipt of bids. Bids shall be submitted on forms identical to the form included with the Contract Documents. A conditional or qualified Bid will not be accepted.

All blank spaces under the page(s) headed "Bid Schedule" must be filled in with ink or typewriter in both words and figures indicating the unit price for each respective item. The bid total shall be entered in words and figures.

Where so indicated by the makeup of the Bid Form, sums shall be expressed in both words and figures, and in case of discrepancy between the two, the amount written in words shall govern.

In the event there is any discrepancy in the Bid between any unit price in figures and the extended totals, the unit price shall govern and the extended totals in each case shall be corrected

accordingly. No Bid will be accepted which does not contain a unit price for each item in the Bid Form.

Any interlineations, alteration, or erasure must be initialed by the signer of the Bid.

Each copy of the Bid shall include the legal name of the Bidder and a statement that the Bidder is a sole proprietor, a partnership, a corporation, or some other legal entity. Each copy shall be signed by the person or persons legally authorized to bind the Bidder to a Contract. A Bid by a corporation LLC or partnership shall further give the state of incorporation, registered agent for service of process information and have the corporate seal affixed. All corporations, LLCs or partnerships must be registered with the state of Vermont as being authorized to do business in the state of Vermont. A Bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the Bidder.

The estimate quantities are not guaranteed but are given as a basis for the comparison of bids.

### Bid Security

Each Bid shall be accompanied by a bid security in the form and amount required pledging that the Bidder will enter into a Contract with the Owner on the terms stated in their Bid. Standard AIA Bid Bond forms are acceptable. The Bidder will also furnish Bonds covering the faithful performance of the Contract and the payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such Bonds, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty. The amount of the bid security shall not be forfeited to the Owner in the event the Owner fails to comply.

If a surety Bond is provided in lieu of a certified check, it shall be written on the Bid Form provided in the Agreement; and the attorney who executes the Bond on behalf of the surety shall affix to the Bond a certified and current copy of their power of attorney.

The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until either; A) the Contract has been executed and Bonds, if required, have been furnished; B) the specified time has elapsed so that Bids may be withdrawn; or C) all Bids have been rejected.

### Submission of Bids

All copies of the Bid and any other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the Owner and shall be identified with the Project name, the Bidder's name and address, and, if applicable, the designated portion of the Work for which the Bid is submitted. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "Sealed Bid Enclosed" on the face thereof.

Bids shall be deposited at the designated location prior to the time and date for receipt of Bids indicated in the Advertisement or Invitation to Bid (2:00 p.m. local time on **April 19, 2013**) or any extension thereof made by Addendum. Bids received after the time and date for receipt of Bids will be returned unopened.

The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.

Oral, telephonic, telegraphic or electronic Bids are invalid and will not receive consideration.

Any bids received at the place designated in the solicitation after the exact time specified for receipt will not be considered.

There can not be any negotiation with Bidders in the period between the opening of the bids and the award of the contract.

### Modification or Withdrawal of Bid

A Bid may not be modified, withdrawn, or canceled by the Bidder during the time period following the time and date designated for the receipt of Bids, and each Bidder so agrees in submitting their Bid. Should there be reasons why the contract cannot be awarded within the specified period; the time may be extended by mutual agreement between the Owner and the Bidder.

Prior to the time and date designated for receipt of Bids, any Bid submitted may be modified or withdrawn by notice to the Owner at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder. shall be mailed and postmarked on or before the date and time set for receipt of Bids, and it shall be so worded as not to reveal the amount of the original Bid.

Withdrawn Bids may be resubmitted up to the time designated for the receipt of Bids provided that they are then fully in conformance with these instructions to Bidders.

Bid security, if any is required, shall be in an amount sufficient for the Bid as modified or resubmitted.

#### **1.4 Consideration of Bids**

Opening of Bids: The properly identified Bids will be opened and read publicly. An abstract of the same information may, at the discretion of the Owner, be made available to the Bidders within a reasonable time. Bidders must not enter into any agreement, participate in any collusion, or otherwise take any action in restraint of free competitive bidding.

Rejection of Bids: A Bid may be declared "Informal" and hence rejected if it shows any alteration of form, omissions or additions not called for in the Bid, lacks proper signatures, is a conditional bid, has alternate bids unless required in the Bid, has irregularities of any kind, has changes to the printed content, is submitted on a form not furnished by the City, is incomplete, fails to acknowledge receipt of one or more addendums, or includes a clause in which the bidder reserves a right to accept or reject the contract award.

A Bid may be rejected at the time of bid opening or following analysis to confirm the Bid.

The City may reject any or all Bids, waive any or all technicalities, and/or advertise for new bids if in its sole judgment, or that of the awarding authority, the best interests of the City, or the awarding authority, will be served.

A Bid submitted without a completed Compliance with Livable Wage & Non-Outsourcing Ordinance Form will be rejected.

A Bid submitted without a signed Contractor's Equal Employment Certification Form will be rejected.

A Bid submitted without a completed Debarment and Non-Collusion Affidavit will be rejected.

A Bid submitted without a Bid Guarantee will be rejected.

Bids which fail to acknowledge the bidders receipt of any addendum will result in the rejection of the bid if the addendum (addenda) contained information which substantively changed the City's requirements.

The City will decide whether any bid prices are unbalanced above or below a reasonable cost analysis value as determined by the Project Manager. Bids in which bid prices are unbalanced, mathematically and/or materially, may be rejected at the sole discretion of the City. For purposes of this subsection "mathematically unbalanced bid" and "materially unbalanced bid" shall have the same meaning as in 23 CFR Part 635 – Construction and Maintenance.

Prospective bidders may be disqualified for various reasons including (a) Submission of more than one Bid for the same work by an entity under the same or different names, (b) Evidence of

collusion among bidders, or (c) Any other cause for suspension or debarment as detailed in the Agency's policy and Procedures on Debarment, Code of Vermont Rules (CVR), Volume 8A, 14 010 004, pages 1-10.

The Owner shall have the right to limit or redefine the scope of work, thereby changing the contract amount.

The Owner shall reserve the right to interview Bidders prior to the Award of the project although the interview cannot be a basis for Award.

#### Acceptance of Bid (Award)

It is the intent of the Owner to award a Contract to the lowest responsive and responsible Bidder, conforming to specification, provided the Bid has been submitted in accordance with the requirements of the Contract Documents and does not exceed the funds available. The Owner shall have the right to waive any informality or irregularity in any Bid or Bids received and to accept the Bid or Bids which, in their judgment, is in their own best interests.

Bidders shall be prequalified to work in the City of Burlington prior to award of the project to a Bidder. Also any subcontract work that exceed the \$7500 limit, will need to be prequalified to work in the City of Burlington for this project.

#### Submittals

The Bidder shall, within ten (10) days of Notice of Award of a Contract for the Work and upon request, submit the following information to the Owner:

A designation of the Work to be performed by the Bidder with its own forces, which shall be a minimum of 30% of the work;

The proprietary names and the suppliers of principal items or systems of materials and equipment proposed for the Work; and

A list of names of the Subcontractors, persons, or other entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work.

The Bidder will be required to establish to the satisfaction of the Architect and the Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Contract Documents.

Persons and entities proposed by the Bidder and to whom the Owner and the Architect have made no reasonable objection must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and the Architect.

### **1.5 Award of Contract**

#### Notice of Award

The Owner shall issue a Notice of Award upon acceptance of a Bid. The Notice of Award shall be accompanied by the necessary Agreement forms. The Notice of Award shall be executed within the time designated in the Advertisement for Bids.

#### Agreement

The Contractor to whom the Contract is awarded will be required to execute the Agreement within ten (10) calendar days from the date when the Notice of Award is delivered to the Bidder.

The Owner, within ten (10) days of receipt of the Agreement signed by the party whom the Agreement was awarded, shall sign the Agreement and return to such party an executed duplicate of the Agreement.

Should the Owner not execute the Agreement within such period, the Bidder may by Written Notice, withdraw their signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the Owner.

#### Notice to Proceed

The Notice to Proceed shall be issued within ten (10) days of the execution of the Agreement by the Owner. Should there be reasons why the Notice to Proceed cannot be issued within such period, the time may be extended by mutual agreement between the Owner and Contractor.

If the Notice to Proceed has not been issued within the ten (10) day period or within the period mutually agreed upon, the Contractor may terminate the Agreement without further liability on the part of either party, and will not forfeit their Bid Bond.

### **1.6 Compliance with Laws and Regulations**

By submitting a bid an entity certifies that it is familiar with all Federal, State and local laws, ordinances and regulations which affect in any way the materials, equipment, haul roads, sidewalks, bike paths, and drives used in or upon the work, the conduct of the work, and the persons engaged or employed in the performance of the work to be performed pursuant to the contract.

By submitting a bid an entity certifies that it shall forthwith report in writing to the City any provision in the plans, proposal, specifications or proposed contract that the bidder/contractor believes is in conflict with or inconsistent with any Federal, State or local law, ordinance, or regulation.

By submitting a bid a prospective Bidder certifies that if, during its investigation of the work in the process of preparing its bid, it discovers or encounters subsurface or latent physical conditions at a project site differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, it shall notify in writing the Municipality of the specific differing conditions immediately upon discovering or encountering the differing site conditions.

An entity further certifies that if it fails to notify the City of any differing site conditions as described above, it shall waive any and all rights that it might have to additional compensation from the City for additional work as a result of the differing site conditions and that it shall not bring a claim for additional compensation because of differing site conditions.

By submitting a bid a prospective bidder/contractor certifies that no claim or defense of ignorance or misunderstanding concerning Federal, State or local laws, ordinances and/or regulations will be employed by a bidder/contractor or considered by the City in claims, litigation, alternative dispute resolution procedures, or other matters concerning the contract for which the bid is submitted.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the Project, shall apply to the contract throughout. <http://www.municode.com/services/mcsgateway.asp?sid=45&pid=13987>

The City of Burlington zoning, obstruction, excavation, outsourcing, union deterrence, and pre-qualification ordinances as well as its "Minority Business Enterprise," "Women's Business Enterprise," "Women in Construction Trades Ordinance," "Livable Wage Ordinance" and "Outsourcing Ordinance" regulations shall apply to the Work. A certified copy of each weekly payroll must be submitted by the prime contractor and each subcontractor within seven days after the regular payment date thereof. The weekly payroll copy must be accompanied with a certificate of compliance indicating that the attached payroll is correct and complete. Payrolls must be complete. The prime contractor is responsible for the submittal of payrolls by subcontractors. All basic records pertaining t

The project is exempt from sales tax and the City shall provide the exemption number to the Contractor.

Laborers and mechanics employed by the prime contractor and subcontractors are covered by the contract provisions, but employees of material suppliers are not. The prime contractor is responsible for violations of labor provisions by the subcontractors.

Owner/operators of non-hauling equipment are employees (must be included on payroll; either prime or subcontractor) and are covered by the labor standards provisions.

Truck owner/operators are not considered to be subcontractors and are not covered by the labor standard provisions. Such truck owner/operators shall be considered independent contractors and must be certified to be independent contractors by the contractor who shall indemnify and hold harmless the Owner against any and all claims made against Owner as a result of such truck owner/operators acts or omissions.

The Project is subject to all of the Safety and Health Regulations (CFR 29, Part 1926 and all subsequent amendments) as promulgated by the U.S. Department of Labor on June 24, 1974. Contractors are urged to become familiar with the requirements of these regulations.

Contracts for Work under the Bid will obligate the Contractors and Subcontractors not to discriminate in employment practices.

Bidders should be aware of the civil rights and equal opportunity provisions in which they agree not to discriminate on the grounds of race, color, religion, sex or national origin. Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246) and required contract provisions Required Contract Provisions Federal Aid Construction Contracts (Federal Form 1273) and the Revision dated June 27, 1994. The conditions of these documents are a part of the construction contract and the contractor must adhere to them.

All reporting will be done to the City of Burlington.

## **1.7 Livable Wage**

Bidders are advised that certain City contractors are required to comply with the City of Burlington's livable wage ordinance rates. The livable wage ordinance is applicable to service contracts with the City of Burlington (as opposed to purchasing of goods) where total amount of the contract or contracts with the same person or entity exceeds \$15,000 for any twelve-month period. The livable wage for employees who receive health care benefits (i.e., employer cost or contribution of at least \$1.20 per hour) is **\$13.94** per hour. The livable wage for employees who do not receive health care benefits is **\$17.71** per hour.

An employee of a covered contractor must be paid the livable wage during the period of time he or she expends on furnishing services funded by the City. Covered employees must agree to the payment of the livable wage as a condition of entering into a covered service contract with the City. A covered employer who violates the livable wage ordinance may be barred from receiving a contract or grant from the City for a period of up to 2 years and may be subject to other civil enforcement remedies.

Please see livable wage ordinance for more detailed description of its requirements.  
<http://www.municode.com/services/mcsgateway.asp?sid=45&pid=13987>

## **1.8 Public Records Policy**

Due regard will be given for the protection of proprietary information contained in all Bids received; however, vendors should be aware that all materials associated with the procurement are subject to the terms of the Vermont Access to Public Records Act (1.V.S.A. Ch. 5, Subchapter 3) and all rules, regulations and interpretations resulting there from, including those from the City Attorney's Office, the office of the Attorney General of the State of Vermont, and the office of the Vermont Secretary of State, and any other applicable rules, regulations or judicial decisions regarding access to the records of government.

It will not be sufficient for vendors to merely state generally that the Bid is proprietary in nature and not therefore subject to the release to third parties. Those particular pages or sections which a vendor believes to be proprietary and of a trade secret nature must be specifically identified as such and must be

separated from other sections or pages of their Bid. Convincing explanation and rationale sufficient to justify each exemption from release consistent with Section 316 of Title 1 of the Vermont Statutes Annotated must accompany the Bid. The rationale and explanation must be stated in terms of the prospective harm to the competitive position of the vendor that would result from release pursuant to the above-cited statute. Between a vendor and the State, the final administrative authority to release or exempt any or all material so identified rests with the State. All such materials should be submitted in a separate sealed envelope and marked "CONFIDENTIAL".

In the event that the disclosure of confidential information is sought under the Vermont Access to Public Records Act, Bidder shall review the request within the time required by law and determine if the information should remain confidential and should be withheld unless otherwise ordered by a court of competent jurisdiction. In the event of a continuing request for disclosure, Bidder shall be responsible to seek timely and appropriate judicial injunctive relief to prevent disclosure.

## **1.9 Performance Bond and Labor and Material Payment Bond**

### Bond Requirements

Prior to execution of the Contract, the Bidder shall furnish Bonds covering the faithful performance of the Contract and the payment of all obligations arising there-under in such form and amount as the Owner may prescribe. Bonds may be secured through the Bidder's usual sources.

### Time of Delivery and Form of Bonds

The Bidder shall deliver the required Bonds to the Owner not later than the date of execution of the Contract; or if the Work is to be commenced prior thereto in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such Bonds will be furnished.

The Bidder shall require the attorney-in-fact who executes the required Bonds on behalf of the surety to affix thereto a certified and current copy of power of attorney.

### Preconstruction Conference

After award of a contract under this solicitation and prior to the start of work, the successful bidder will be required to attend a preconstruction conference with representatives of the City of Burlington and its Architect, and other interested parties convened by the City. The conference will serve to acquaint the participants with the general plan of the construction operation and all other requirements of the contract. The City will provide the successful bidder with the date, time and place of the conference.

### Waste Borrow and Staging Area

The Contractor and/or property owner shall obtain all necessary permits and clearances prior to using off site waste, borrow or staging areas.

## **2.0 Miscellaneous**

### Waste Borrow and Staging Area

The Contractor and/or property owner shall obtain all necessary permits and clearances prior to using off site waste, borrow or staging areas.

**END OF SECTION**

**BID FORM**

Bid of \_\_\_\_\_ (hereinafter called Bidder), organized and existing under the laws of the State of \_\_\_\_\_ doing business as

\_\_\_\_\_  
(a corporation, a partnership, of an individual)

To the City of Burlington, (hereinafter called Owner)

In compliance with your Advertisement for Bids, Bidder hereby proposes to perform all Work for the Leddy Park Contract #2 Repairs, located in Burlington, Vermont, in strict accordance with the Contract Documents, within the time set forth therein, and at the prices stated below.

By submission of this Bid, each Bidder certifies, and in the case of a joint Bid, each party thereto certifies as to their own organization, that its Bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

Bidder hereby agrees to commence Work under this contract on the date of issuance of the Notice to Proceed.

Bidder hereby agrees to to fully complete the Project within \_\_\_\_\_ (\_\_\_\_) calendar days from the Notice to Proceed.

Bidder acknowledges receipt of the following Addenda:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The Bidder, having examined the Contract Documents and the site of the proposed work, and being familiar with all the conditions for the proposed project, hereby proposes to furnish all labor, materials and equipment in accordance with the Contract Documents within the time set forth therein and at the sum stated below. Refer to Section 01021, Allowances, for allowance items to be included in the base bid. Note: Sales taxes are required to be paid on this project.

Bidder agrees to perform all the Work described in the Contract Documents for the sum of:

\_\_\_\_\_  
Written Dollars \$ \_\_\_\_\_  
Figures

**I. ALTERNATES:**

a. To complete the work described in Alternate 1, add the following:

\_\_\_\_\_  
Written Dollars \$ \_\_\_\_\_  
Figures

THE ABOVE BID IS HEREBY RESPECTFULLY SUBMITTED BY

CONTRACTOR: \_\_\_\_\_

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

BUSINESS ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_

STATE: \_\_\_\_\_

DATE: \_\_\_\_\_

ATTEST: \_\_\_\_\_ (Seal – if bid is by a corporation)

Unit Prices have been computed in accordance the General Conditions. The above unit prices shall include all labor, materials, removal, overhead, profit, insurance, etc. to cover the finished work of the several kinds called for on the drawings and specifications. We hereby certify that we did not enter into any agreement, participate in any collusion, or otherwise take any action in restraint of free competitive bidding. The low bid will be determined by the base bid.

Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities provided, determined as provided in the Contract Documents.

Bidder agrees that the Work will be substantially completed and ready for final payment in accordance with the General Conditions on or before the dates or within the number of calendar days indicated in this Contract.

Bidder accepts the provisions of this Contract as to liquidated damages in the event of failure to complete the Work within the times specified above, which shall be stated in this Agreement.

The Owner reserves the right to accept, reject, or discard any or all Bids submitted; and award the Contract to the Bidder that best meets the needs of the Owner.

If Bidder is:  
An Individual

Name (typed or printed): \_\_\_\_\_

By: \_\_\_\_\_ (SEAL)  
(Individual's signature)

Doing business as: \_\_\_\_\_

Business address: \_\_\_\_\_

Phone No.: \_\_\_\_\_ FAX No.: \_\_\_\_\_

A Partnership

Partnership Name: \_\_\_\_\_(SEAL)

By: \_\_\_\_\_  
(Signature of general partner – attach evidence of authority to sign)

Name (typed or printed): \_\_\_\_\_

Business address: \_\_\_\_\_

Phone No.: \_\_\_\_\_ FAX No.: \_\_\_\_\_

Name of Registered Agent (typed or printed): \_\_\_\_\_

Agent's address: \_\_\_\_\_

Agent's Phone No.: \_\_\_\_\_ FAX No.: \_\_\_\_\_

A Corporation

Corporation Name: \_\_\_\_\_(SEAL)

State of Incorporation: \_\_\_\_\_

Type (General Business, Professional, Service, Limited Liability): \_\_\_\_\_

By: \_\_\_\_\_  
(Signature – attach evidence of authority to sign)

Name (typed or printed): \_\_\_\_\_

Title: \_\_\_\_\_  
(CORPORATE SEAL)

Attest \_\_\_\_\_  
(Signature of Corporate Secretary)

Business address: \_\_\_\_\_

Phone No.: \_\_\_\_\_ FAX No.: \_\_\_\_\_

Date of Qualification to do business is \_\_\_\_\_.

Name of Registered Agent (typed or printed): \_\_\_\_\_

Agent's address: \_\_\_\_\_

Agent's Phone No.: \_\_\_\_\_ FAX No.: \_\_\_\_\_

A Joint Venture

Joint Venturer Name: \_\_\_\_\_(SEAL)

By: \_\_\_\_\_  
(Signature of joint venture partner – attach evidence of authority to sign)

Name (typed or printed): \_\_\_\_\_

Title: \_\_\_\_\_

Business address: \_\_\_\_\_

Phone No.: \_\_\_\_\_ FAX No.: \_\_\_\_\_

Joint Venturer Name: \_\_\_\_\_ (SEAL)

By: \_\_\_\_\_

(Signature – attach evidence of authority to sign)

Name (typed or printed): \_\_\_\_\_

Title: \_\_\_\_\_

Business address: \_\_\_\_\_

Phone No.: \_\_\_\_\_ FAX No.: \_\_\_\_\_

Phone and FAX Number, and Address for receipt of official communications:

\_\_\_\_\_

\_\_\_\_\_

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

Name of Registered Agent (typed or printed): \_\_\_\_\_

Agent's address: \_\_\_\_\_

Agent's Phone No.: \_\_\_\_\_ FAX No.: \_\_\_\_\_

**END OF SECTION**

**Burlington Ordinance Compliance for Contracts**

**Standard Contract Language**

**COMPLIANCE WITH LAWS:** The Contractor shall comply with all applicable federal, state and local laws, including but not limited to the City of Burlington’s Livable Wage Ordinance, Outsourcing Ordinance, and Union Deterrence Ordinance. As a condition of this contract, the Contractor shall submit the written certifications required by the ordinances attesting to compliance.

---

**Certification of Compliance with the City of Burlington’s Livable Wage Ordinance**

I, \_\_\_\_\_, on behalf of \_\_\_\_\_ (Contractor) and in connection with \_\_\_\_\_ (City contract/project/grant), hereby certify under oath that (1) Contractor shall comply with the City of Burlington’s Livable Wage Ordinance; (2) as a condition of entering into this contract or grant, Contractor confirms that all covered employees, as defined by Burlington’s Livable Wage Ordinance, shall be paid a livable wage for the term of the contract as determined and adjusted annually by the City of Burlington’s Chief Administrative Officer, (3) a notice regarding the applicability of the Livable Wage Ordinance shall be posted in the workplace or other location where covered employees work, and (4) payroll records or other documentation, as deemed necessary by the Chief Administrative Officer, shall be provided within ten (10) business days from receipt of the City's request.

Dated at \_\_\_\_\_, Vermont this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

By: \_\_\_\_\_  
Duly Authorized Agent

Subscribed and sworn to before me: \_\_\_\_\_  
Notary

---

**Certification of Compliance with the City of Burlington's Outsourcing Ordinance**

I, \_\_\_\_\_, on behalf of \_\_\_\_\_ (Contractor) and in connection with \_\_\_\_\_ (City contract/project/grant), hereby certify that all services provided under this contract shall be performed in the United States or Canada. I understand that this requirement also applies to any subcontractor I may hire to provide services for the City of Burlington. .

Dated at \_\_\_\_\_, Vermont this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

By: \_\_\_\_\_  
Duly Authorized Agent

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**Certification of Compliance with the City of Burlington's Union Deterrence Ordinance**

I, \_\_\_\_\_, on behalf of \_\_\_\_\_ (Contractor) and in connection with \_\_\_\_\_ (City contract/project/grant), hereby certify that Contractor (1) shall comply with the City of Burlington's Union Deterrence Ordinance; (2) has not advised the conduct of any illegal activity under that Ordinance, (3) does not currently, and will not over the life of the contract provide union deterrence services in violation of this Ordinance.

Dated at \_\_\_\_\_, Vermont this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

By: \_\_\_\_\_  
Duly Authorized Agent

**BID BOND**

BIDDER (Name and Address):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SURETY (Name and Address of Principal Place of Business):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

OWNER ((Name and Address):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

BID

BID DUE DATE: \_\_\_\_\_

PROJECT (Brief Description Including Location): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

BOND

BOND NUMBER: \_\_\_\_\_

DATE (Not later than Bid Due Date): \_\_\_\_\_

PENAL SUM: \_\_\_\_\_

IN WITNESS WHEREOF, Surety and Bidder, intending to be legally bound hereby, subject to the terms printed on the following pages, do each cause this Bid Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

BIDDER

SURETY

\_\_\_\_\_(Seal)  
Bidder's Name and Corporate Seal

\_\_\_\_\_(Seal)  
Surety's Name and Corporate Seal

By: \_\_\_\_\_  
Signature and Title

By: \_\_\_\_\_  
Signature and Title  
(Attach Power of Attorney)

Attest: \_\_\_\_\_  
Signature and Title

Attest: \_\_\_\_\_  
Signature and Title

- Note: (1) Above addresses are to be used for giving required notice.  
(2) Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

- A. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond.
- B. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents and Contract Documents.
- C. This obligation shall be null and void if:
  - 1. Owner accepts Bidder's bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents and Contract Documents, or
  - 2. All bids are rejected by Owner, or
  - 3. Owner fails to issue a notice of award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by paragraph E hereof).
- D. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
- E. Surety waives notice of and any and all defenses based on or arising out of any time extension to issue notice of award agreed to in writing by Owner and Bidder, provided that the time for issuing notice of award including extensions shall not in the aggregate exceed 120 days from Bid Due Date without Surety's written consent.
- F. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in paragraph D above is received by Bidder and Surety, and in no case later than one year after Bid Due Date.
- G. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
- H. Notice required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
- I. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent or representative who executed this Bond on behalf of Surety to execute, seal and deliver such Bond and bind the Surety thereby.
- J. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of the Bond conflicts with any applicable provision of any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
- K. The term "bid" as used herein includes a bid, offer or Bid as applicable.

**END OF SECTION**

**NOTICE OF AWARD**

TO: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project Description:     Leddy Park Arena Repairs, Contract #2

The Owner has considered the Bid submitted by you for the above described Work in response to its Advertisement for Bids dated \_\_\_\_\_, and Information for Bidders. You are hereby notified that your Bid has been accepted for items in the amount of \$\_\_\_\_\_.

You are required by the Information for Bidders to execute the Agreement and furnish the required Contractor's Performance Bond, Payment Bond, and certificates of insurance within ten (10) calendar days from the date of the Notice to you.

If you fail to execute said Agreement and to furnish said Bonds within then (10) days from the date of this Notice, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Bid as abandoned and as forfeiture of your Bid Bond. The Owner will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of the Notice of Award to the Owner.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Owner \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

**ACCEPTANCE OF NOTICE**

Receipt of the above Notice of Award is hereby acknowledged

by \_\_\_\_\_

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Owner \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

**AGREEMENT**

This Agreement, made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between City of Burlington, hereinafter called the "Owner," and \_\_\_\_\_ doing business as a \_\_\_\_\_ (an individual, a partnership, or a corporation), hereinafter called the "Contractor."

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

- A. The Contractor agrees to commence and complete the construction described as follows: Leddy Park Arena Repairs Contract #2, Burlington, Vermont.
- B. The Contractor agrees to furnish all the necessary labor, materials, equipment, tools, and other services of any nature whatsoever necessary to execute, complete, or deliver in a workmanlike manner the improvements to Leddy Park Arena, City of Burlington as shown on the Drawings and described in the Specifications listed below, in this Agreement, and in the Bid Form attached hereto.
- C. The Contractor will commence the Work required by the Contract Documents on the date of issuance of the Notice to Proceed and will complete the same by \_\_\_\_\_ unless the period for completion is extended otherwise by the Contract Documents. The Contractor acknowledges that the date of beginning and the time for completion of the Work are essential conditions of the Contract Documents.
- D. The Contractor agrees to perform all the Work described in the Contract Documents and comply with the terms therein for the sum of \$ \_\_\_\_\_ or as shown in the Bid schedule.
- E. The term "Contract Documents" means and includes the following:
  - ADVERTISEMENT FOR BIDS
  - INSTRUCTIONS TO BIDDERS
  - BID FORM
  - COMPLIANCE WITH LIVABLE WAGE & NON-OUTSOURCING ORDINANCES
  - BID BOND
  - NOTICE OF AWARD
  - NOTICE TO PROCEED
  - AGREEMENT
  - ACCEPTANCE OF NOTICE
  - CHANGE ORDER
  - PERFORMANCE & PAYMENT BONDS
  - GENERAL CONDITIONS
  - SUPPLEMENTARY CONDITIONS
  - APPLICATION FOR PAYMENT
  - CERTIFICATE OF SUBSTANTIAL COMPLETION
  - CERTIFICATE OF FINAL COMPLETION OF WORK
  - GENERAL SPECIFICATIONS
  - DRAWINGS prepared by Duncan Wisniewski Architecture.

Addenda:

No. \_\_\_\_\_, dated \_\_\_\_\_, 20\_\_\_\_

No. \_\_\_\_\_, dated \_\_\_\_\_, 20\_\_\_\_

Disadvantaged Business Enterprise (DBE) Policy Contract Requirements  
General Special Provisions for All Projects dated July 6, 2010  
Work Zone Safety and Mobility Guidance Document  
City of Burlington Prequalification of Construction Contractors Application  
All codes, ordinances, regulations and standards applicable to this project, including the City's livable wage, outsourcing, and union deterrence ordinances.

- F. Leddy Park Arena Repairs shall include all of the Work shown on the Drawings, described in the Specifications, and this Agreement.
- G. Work under this Agreement shall be commenced immediately upon the receipt of the Notice to Proceed. The Contractor agrees to complete the work specified by **June 14, 2013**. If the contract time is extended due to the negligence of the Contractor, the Contractor shall be held responsible for all associated consulting costs, such as resident inspection, testing, etc., incurred as a result of the extension. The Contractor agrees to pay as liquidated damages the amounts as defined in the Bid Form, if so noted.
- H. The Contractor agrees to bind every subcontractor by the terms of the Contract Documents. The Contract Documents shall not be construed as creating a contractual relationship between any subcontractor and the Owner.
- I. All Work shall be done under the general supervision of the Owner. The Owner and the Architect shall decide any and all questions which may arise as to the quality and acceptability of materials furnished, Work performed, rate of progress of Work, interpretation of Drawings and Specifications, and all questions as to the acceptable fulfillment of this Agreement on the part of the Contractor.
- J. This Agreement and all of the covenants hereof shall insure to the benefit of and be binding upon the Owner and the Contractor respectively, their successors, assigns, and legal representatives. Neither the Owner nor the Contractor shall have the right to assign, transfer, or sublet its interest or obligations hereunder without written consent of the other party.
- K. The Owner shall make progress payments monthly to the Contractor on the basis of an approved estimate of the Work performed during the preceding month based upon the Schedule of Values. Payment requests shall be submitted to the Architect. The Architect shall approve or disapprove the payment request within ten (10) calendar days. Payment shall be within twenty (20) days of the payment request approval. All materials and Work covered by partial payments shall thereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of materials and Work upon which payments have been made. This provision shall also not be construed as relieving the Contractor for the sole responsibility for the restoration of any damaged Work or as a waiver of the right of the Owner to require fulfillment of all the terms of this Agreement.
- L. The Contractor shall maintain in effect throughout the term of this Agreement comprehensive public liability insurance with an A rated insurance carrier, or better qualified to transact business in the State of Vermont, insuring against all legal liability for injuries or damages suffered as a result of the exercise of rights granted pursuant to this Agreement in the amounts specified below. The City of Burlington shall be named as an additional insured on such insurance policy for the possible liabilities resulting from the Contractor's actions or omissions. It is agreed that the liability insurance furnished by the Contractor is primary and non-contributory for all the additional insureds.

Prior to the execution of the Agreement, the Contractor shall furnish the City with a certificate of insurance which shall include the provision that the City is named as an additional insured and shall be given 30 days written notification prior to cancellation of such insurance.

It is the responsibility of Contractor to ensure that a current certificate of insurance is on file with the City at all times. Failure to furnish and maintain a current certificate of insurance on file with the City will result in a hold on all outstanding pay requisitions until such time as the current certificate of insurance is on file.

Contractor is responsible to verify and confirm in writing to the CITY that:

- a. All subcontractors, agents or workers meet the minimum coverages and limits plus maintain current certificates of coverage for all subcontractors, agents or workers. Subcontractors must comply with the same insurance requirements as the Contractor.

- b. All coverages shall include adequate protection for activities involving hazardous materials.
- c. All work activities related to the agreement shall meet minimum coverages and limits.

No warranty is made that the coverages and limits listed herein are adequate to cover and protect the interests of the Contractor for the Contractor's operations. These are solely minimums that have been developed and must be met to protect the interests of the Municipality.

The chosen contractor shall procure insurance to cover the below-listed requirements from an insurance company registered and licensed to do business in the State of Vermont and having an A.M. Best insurance rating of at least A, financial size category VII or greater ([www.ambest.com](http://www.ambest.com)). Before the construction contract is executed, the Contractor shall file with the Owner a certificate of insurance executed by the insurance company or its licensed agent(s) stating that with respect to the contract awarded, the Contractor carries insurance in accordance with the following requirements:

1. Workers Compensation Insurance: With respect to all operations performed, the Contractor shall carry Workers Compensation Insurance in accordance with the laws of the State of Vermont. The Contractor shall also ensure that all subcontractors carry Workers Compensation Insurance for all Work performed by them. Minimum limits for Employer's Liability:
 

Bodily Injury by Accident:	\$500,000 each accident
Bodily Injury by Disease:	\$500,000 policy limit, \$500,000 each employee
  
2. Contractors' Public Liability and Property Damage Insurance: With respect to all operations performed by the Contractor and subcontractors, the Contractor shall carry Public Liability and Property Damage Insurance providing all major divisions of coverage including, but not limited to:
  - Premises – Operations
  - Independent Contractors' Protective
  - Products and Completed Operations
  - Personal Injury Liability
  - Contractual Liability Applying to the Contractor's Obligations for Damage
  - Claims, Broad Form Property Damage
  - Collapse and Underground (CU) Coverage
  - Explosion (X) Coverage, unless this requirement is waived in writing.
  - a) If the Public Liability Coverages are provided under a Commercial General Liability Policy, coverage shall be provided on an Occurrence form. Limits of Coverage shall be not less than:
    - \$1,000,000 Each Occurrence
    - \$2,000,000 General Aggregate Applying, In Total, To This Project Only
    - \$1,000,000 Products/Completed Operations Aggregate
    - \$ 250,000 Fire Damage
    - \$ 500,000 Medical Expense (Any one person)
  
3. Automobile Liability Insurance: The contractor shall carry commercial Automobile Liability Insurance covering all motor vehicles, including owned, hired, borrowed and non-owned vehicles, used in connection with the project. Limits of Coverage shall be not less than:
  - Bodily Injury: \$500,000 Each Person, \$1,000,000 Each Occurrence
  - Property Damage: \$500,000 Each Occurrence
  - or:
  - Combined Single Limit: \$1,500,000 Each Occurrence
  
4. Valuable Papers Insurance: Contractor shall carry valuable papers insurance in a form and amount sufficient to ensure the restoration or replacement of any plans, drawings, field notes, or other data relating to the work, whether supplied by the

Owner or developed by the Architect, Engineer or Contractor, subcontractor, worker, or agent, in the event of loss, impairment or destruction of these documents. Such coverage shall remain in force until the final plans, and all related materials, have been delivered by the Contractor to and accepted by the City. The policy shall provide coverage on an each occurrence basis with limits not less than:

Valuable Papers:           \$10,000  
Electronic Data Media: \$10,000

General Insurance Conditions: The insurance hereinbefore specified under parts 1-4 shall be maintained in force until acceptance of the project by the Owner. Under part 2, Products and Completed Operations Coverage shall be maintained in force for at least one year after the date of acceptance of the project.

Each policy shall name City of Burlington as an additional insured for the possible liabilities resulting from the Contractor's actions or omissions. Umbrella Excess Liability Policies may be used in conjunction with primary policies to comply with any of the limit requirements specified above. Claims-made coverage forms are not acceptable without the prior written consent of the Owner. The Insurance Company shall agree to investigate and defend all claims against the insured for damages covered, even if groundless.

Each policy furnished shall contain a rider or non-cancellation clause reading in substance as follows:

Anything herein to the contrary notwithstanding, no cancellation, termination or alteration of this policy by the company or the assured shall become effective unless and until notice of cancellation, termination or alteration has been given by registered mail to City of Burlington at least thirty (30) calendar days before the effective cancellation, termination or alteration date unless all Work required to be performed under the terms of the contract is satisfactorily completed as evidenced by the formal acceptance by City of Burlington.

There shall be no directed compensation allowed the Contractor on account of any premium or other charge necessary to take out and keep in effect such insurance or Bond, but the cost thereof shall be considered included in the general cost of the Work.

- M. The Contractor will indemnify and hold the Owner and the Architect harmless from all claims growing out of the lawful demands of subcontractors, laborers, workers, mechanics, material providers, and furnishers of machinery and parts thereof, equipments, tools, and all supplies incurred in the performance of the Work. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived.

The Contractor and all Contract Documents between the Contractor and Subcontractors, shall comply with and fully conform to the provisions of Title 9, Chapter 102 "Construction Contracts" Section 4001 et seq. of Vermont Statutes Annotated.

The Contractor will indemnify and hold harmless the Owner and the Architect and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees, arising out of or resulting from the performance of the Work, provided that any such claims, damages, loss or expense is attributable to Bodily injury, sickness, disease or death, or the injury to or destruction of tangible property, including the loss of use resulting therefrom, and is caused in whole or in part by any negligent or willful act or omission of the Contractor, and/or Subcontractor, or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

- N. The Contractor agrees to provide and pay for all materials, labor, tools, equipment, water, light, transportation, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to execute, complete, and deliver the Work contained in the Drawings and Specifications within the specified time. Any penalty imposed by the State of Vermont due to excavation, movement, or erosion of the soils on the site during the

life of the Agreement shall be the responsibility and expense of the Contractor.

- O. If the Contractor defaults or neglects to carry out the Work in accordance with this Agreement, the Owner may, after forty-eight (48) hours written notice to the Contractor and without prejudice to any other remedy it may have, make good such deficiencies.

The cost thereof shall be deducted from the payment then or thereafter due the Contractor or, at its option, the Owner may terminate this Agreement and take possession of the site and all materials, equipment, tools, construction equipment, and machinery thereon owned by the Contractor and may finish the Work by whatever method it may deem expedient. The Contractor shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of this Agreement exceeds the cost of finishing the Work, such excess shall be paid to the Contractor. However, if such expense exceeds the unpaid balance, the Contractor shall pay the difference to the Owner.

- P. The successful Bidder, simultaneously with the execution of the Agreement, is required to furnish a faithful Performance Bond in an amount equal to one hundred percent (100%) of the Agreement amount and a Labor and Material Payment Bond equal to one hundred percent (100%) of the Agreement amount; said Bonds shall be secured from a surety company satisfactory to the Owner.

- Q. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors and assigns.

- R. The law of the State of Vermont shall govern this Contract. In the event of a dispute, ambiguities shall not be construed against the drafter. This agreement is the entire agreement between the parties, superseding all other communications, written or oral, between the parties relating to the subject matter of this Agreement. This Agreement may be amended or modified only in writing signed by both parties.

- S. Force Majeure. Notwithstanding any provision of this Agreement, none of the parties shall be deemed in violation of this agreement if it is prevented from performing any obligations hereunder by reasons of strikes, boycotts, labor disputes, acts of God, acts of the public enemy, acts of superior governmental authority, severe weather conditions, riots, rebellion, sabotage, or any other circumstances for which it is not responsible or which is not under its control, and the Party experiencing force majeure gives written notice to the other party identifying the nature of such force majeure, and when it began. The party experiencing force majeure shall take immediate action to attempt to remove such causes of the force majeure as may occur from time to time, and its operations under this agreement shall be resumed immediately after such cause has been removed, provided that no party shall be required to settle any labor dispute except upon terms that the party deems acceptable. The suspension of any obligations under this section shall not affect any rights accrued under this agreement prior to the occurrence of the force majeure. The party giving notice of the force majeure shall also give notice of its cessation. No party shall be required to perform an obligation under this section if the cost of removing the cause of a force majeure exceeds 110% of the cost of performing the obligation itself.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement in duplicate. One counterpart each has been delivered to Owner and Contractor. All portions of the Contract Documents have been signed or identified by Owner and Contractor or on their behalf.

This Agreement will be effective on \_\_\_\_\_, \_\_\_\_\_ (which is the Effective Date of the Agreement).

OWNER:

CONTRACTOR:

\_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_

By: \_\_\_\_\_

Attest: \_\_\_\_\_

Attest: \_\_\_\_\_

Address for giving notices:

Address for giving notices:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(If OWNER is a corporation, attach evidence of authority to sign. If OWNER is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of OWNER-CONTRACTOR Agreement.)

License No. \_\_\_\_\_  
(Where applicable)

Agent for service of process: \_\_\_\_\_

(If CONTRACTOR is a corporation or a partnership, attach evidence of authority to sign.)

Designated Representative:

Designated Representative:

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Phone: \_\_\_\_\_

Facsimile: \_\_\_\_\_

Facsimile: \_\_\_\_\_

**END OF SECTION**

**NOTICE TO PROCEED**

Date: \_\_\_\_\_

To: \_\_\_\_\_  
(Name of Contractor)

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contract: \_\_\_\_\_

Project: \_\_\_\_\_

OWNER'S CONTRACT NO. \_\_\_\_\_

You are notified that the Contract Times under the above contract will commence to run on \_\_\_\_\_  
\_\_\_\_\_ By that date, you are to start performing your obligations under the Contract  
Documents. In accordance with the Agreement, the date of Substantial Completion is \_\_\_\_\_  
\_\_\_\_\_ and the date of readiness for final payment is \_\_\_\_\_

In addition, before you may start any Work at the Site, you must

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

By: \_\_\_\_\_  
(Owner)

\_\_\_\_\_  
(Authorized Signature)

\_\_\_\_\_  
(Title)

**END OF SECTION**

**CHANGE ORDER**

CHANGE ORDER NO.: \_\_\_\_\_ Date: \_\_\_\_\_

Project No.: \_\_\_\_\_ Project Title: \_\_\_\_\_

Contract No.: \_\_\_\_\_ Agreement Date: \_\_\_\_\_

Contract Title: \_\_\_\_\_ Original Price: \_\_\_\_\_

Owner: \_\_\_\_\_ Contractor: \_\_\_\_\_

The following changes are hereby made to the Contract Documents:  
Description:

Justifications:

Change to Contract Price: \$ \_\_\_\_\_

Original Contract Price: \$ \_\_\_\_\_

Current Contract Price adjusted by previous Change Order: \$ \_\_\_\_\_

The Contract Price due to this Change Order will be (increased) (decreased) by: \$ \_\_\_\_\_

New Adjusted Contract Price: \$ \_\_\_\_\_

Change to Contract Time:

The Contract Time will be (increased) (decreased) by \_\_\_\_\_ Calendar days

The date for completion of all work will be \_\_\_\_\_ (Date)

The attached Contractor's Revised Project Schedule reflects increases or decreases in the Contract Time as authorized by this Change Order. Stipulated price and time adjustment includes all costs and time associated with the above described change. Contractor waives all rights for additional compensation or time extension for said change. Contractor and Owner agree that the price(s) and time adjustment(s) stated above are equitable and acceptable to both parties.

REQUESTED BY: \_\_\_\_\_

**SIGNATURES/APPROVALS**

\_\_\_\_\_  
(Architect)

\_\_\_\_\_  
(Contractor)

\_\_\_\_\_  
(Owner)

**END OF SECTION**

**PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS: that

\_\_\_\_\_  
(Name of Contractor)

\_\_\_\_\_  
(Address of Contractor)

a \_\_\_\_\_, hereinafter called Principal,  
(Corporation, Partnership, or Individual)

and \_\_\_\_\_  
(Name of Surety)

\_\_\_\_\_  
(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

City of Burlington  
(Name of Owner)

645 Pine Street, Suite A; Burlington, VT 05401  
(Address of Owner)

Hereinafter called Owner, in the penal sum of \_\_\_\_\_ Dollars, \$(\_\_\_\_\_) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

The Condition of this obligation is such that whereas, the Principal entered into a certain contract with the Owner, dated the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, a copy of which is hereto attached and made a part hereof for the construction of:

Leddy Park Arena Contract #2

Now, therefore, if the principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety and during the one year guaranty period, and if they shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

Provided, further, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the Work to be performed thereunder or the Specifications accompanying the same shall in any wise affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the Work or to the Specifications.

Provided, further, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

In Witness Whereof, this instrument is executed in \_\_\_\_\_ counterparts,  
(No.)

each one of which shall be deemed an original, this the  
\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

ATTEST:

\_\_\_\_\_  
Principal

\_\_\_\_\_  
(Principal Secretary)

(SEAL)

By: \_\_\_\_\_ (s)

\_\_\_\_\_  
Witness as to Principal

Address: \_\_\_\_\_

\_\_\_\_\_  
Address

\_\_\_\_\_  
Surety

ATTEST:

\_\_\_\_\_  
Witness as to Surety

By: \_\_\_\_\_  
Attorney-in-Fact

\_\_\_\_\_  
Address

\_\_\_\_\_  
Address

NOTE: Date of Bond must not be prior to date of Contract. If Contractor is Partnership, all partners should execute Bond.

IMPORTANT: Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570) as amended and be authorized to transact business in the State where the Project is located.

**END OF SECTION**

**PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENTS: that

\_\_\_\_\_  
(Name of Contractor)

\_\_\_\_\_  
(Address of Contractor)

a \_\_\_\_\_, hereinafter called Principal,  
(Corporation, Partnership, or Individual)

and \_\_\_\_\_  
(Name of Surety)

\_\_\_\_\_  
(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

City of Burlington  
(Name of Owner)

645 Pine Street, Suite A; Burlington, VT 05401  
(Address of Owner)

Hereinafter called Owner, in the penal sum of \_\_\_\_\_ Dollars, \$(\_\_\_\_\_) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

The Condition of this obligation is such that whereas, the Principal entered into a certain contract with the Owner, dated the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, a copy of which is hereto attached and made a part hereof for the construction of:

Leddy Park Arena Contract #2

Now, Therefore, if the Principal shall promptly make payment to all persons, firms, Subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the Work provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such Work and all insurance premiums on said Work, and for all labor performed in such Work whether by Subcontractor or otherwise, then this obligation shall be void; otherwise to remain in force and effect.

Provided, Further, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the Work to be performed thereunder or the Specifications accompanying the same shall in any wise affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the Work or to the Specifications.

Provided, Further, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

In Witness Whereof, this instrument is executed in \_\_\_\_\_ counterparts,  
(No.)

each one of which shall be deemed an original, this the

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

ATTEST:

\_\_\_\_\_  
Principal

\_\_\_\_\_  
(Principal Secretary)

(SEAL)

By: \_\_\_\_\_(s)

\_\_\_\_\_  
Witness as to Principal

Address: \_\_\_\_\_

\_\_\_\_\_  
Address

\_\_\_\_\_

\_\_\_\_\_  
Surety

ATTEST:

\_\_\_\_\_  
Witness as to Surety

By: \_\_\_\_\_  
Attorney-in-Fact

\_\_\_\_\_  
Address

\_\_\_\_\_  
Address

NOTE: Date of Bond must not be prior to date of Contract. If Contractor is Partnership, all partners should execute Bond.

IMPORTANT: Surety companies executing Bond must appear on the Treasury Department's most current list (Circular 570) as amended and be authorized to transact business in the State where the Project is located.

**END OF SECTION**



CONTRACTOR'S Certification:

The undersigned Contractor certifies that (1) all previous progress payments received from Owner on account of Work done under the Contract referred to above have been applied on account to discharge Contractor's legitimate obligations incurred in connection with Work covered by prior Applications for Payment numbered 1 through \_\_\_\_\_ inclusive; (2) title of all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to Owner at time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to Owner indemnifying Owner against any such Lien, security interest or encumbrance); and (3) all Work covered by this Application for Payment is in accordance with the Contract Documents and not defective.

\_\_\_\_\_

DATE:

\_\_\_\_\_  
Contractor:

\_\_\_\_\_  
Signature:

State of \_\_\_\_\_

County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_,

Notary Public

My Commission expires: \_\_\_\_\_

Payment of the above AMOUNT DUE THIS APPLICATION is recommended.

\_\_\_\_\_  
DATE:

Duncan Wisniewski Architecture

Architect:

\_\_\_\_\_  
Signature:

\_\_\_\_\_  
DATE:

City of Burlington

Owner:

\_\_\_\_\_  
Signature:

**END OF SECTION**



Recommended By:

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Architect	Authorized Representative	Date
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Approved By:

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Owner	Authorized Representative	Date
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The Contractor accepts the above Certificate of Substantial Completion.

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Contractor	Authorized Representative	Date
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EXCEPTIONS AS TO GUARANTEES AND WARRANTIES:

ATTACHMENTS:

1) Punch List Dated:

**CERTIFICATE OF FINAL COMPLETION OF WORK**

Contract No.: \_\_\_\_\_

Agreement Date: \_\_\_\_\_

Contract Description:

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Completion Date Per Agreement And Change Orders: \_\_\_\_\_

**FINAL CERTIFICATION OF CONTRACTOR**

I hereby certify that the Work as identified in the Final Estimate of Payment for construction Contract Work dated \_\_\_\_\_, represents full compensation for the actual value of Work completed. All Work completed conforms to the terms of the Agreement and authorized changes.

\_\_\_\_\_  
DATE:

\_\_\_\_\_  
Contractor:

\_\_\_\_\_  
Signature:

\_\_\_\_\_  
Title:

**FINAL STATEMENT OF ARCHITECT**

I have reviewed the Contractor's Final Payment Request dated \_\_\_\_\_ and hereby state that to the best of my knowledge, the cost of the Work identified on the Final Estimate represents full compensation for the actual value of Work completed and that the Work has been completed in accordance with the terms of the Agreement and authorized changes. This statement is provided in accord with the terms of General Condition #23(b).

\_\_\_\_\_  
DATE:

\_\_\_\_\_  
Architect:

\_\_\_\_\_  
Signature:

\_\_\_\_\_  
Title:

**FINAL ACCEPTANCE OF OWNER**

I, as representative of the Owner, accept the above Final Certifications and authorize Final Payment in the amount of \$\_\_\_\_\_ and direct the Contractor's attention to the General Condition #23. The guaranty for all Work completed subsequent to the date of Substantial Completion, expires one (1) year from the date of this Final Acceptance.

\_\_\_\_\_  
DATE:

\_\_\_\_\_  
Owner:

\_\_\_\_\_  
Authorized Representative:

## **SPECIFICATIONS**

### GENERAL CONDITIONS

1. Definitions
2. Applicable Codes
3. Drawings and Specifications
4. Additional Instructions & Detail Drawings
5. Schedules, Reports and Records
6. Materials, Services and Facilities
7. Inspection and Testing
8. Substitutions
9. Patents
10. Surveys, Permits, Regulations
11. Protection of Work, Property, Persons
12. Fire Prevention
13. Supervision by Contractor
14. Project Meetings
15. Coordination with Utilities
16. Changes in the Work
17. Changes in Contract Price
18. Time for Completion & Liquidated Damages
19. Correction of Work
20. Cutting, Patching and Subsurface Conditions
21. Suspension of Work, Termination/ Delay
22. Payments to Contractor
23. Acceptance of Final Payment as Release
24. Insurance
25. Contract Security
26. Assignments
27. Indemnification
28. Separate Contracts
29. Subcontracting
30. Architect's Authority
31. Land and Rights-of-Way
32. Guaranty
33. Taxes
34. Notices
35. Responsible Parties
36. Tobacco Products
37. Hours of Work

1. **DEFINITIONS:**

Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:

**ADDENDA:** Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the CONTRACT DOCUMENTS, DRAWINGS and SPECIFICATIONS, by additions, deletions, clarifications or corrections.

**ARCHITECT:** The person, firm or corporation named as such in the CONTRACT DOCUMENTS.

**BID:** The offer or Bid of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.

**BIDDER:** Any person, firm or corporation submitting a BID for the WORK.

**BONDS:** Bid, Performance, and Payment Bonds and other instruments of security, furnished by the CONTRACTOR and their surety in accordance with the CONTRACT DOCUMENTS.

**CHANGE ORDER:** A written order to the CONTRACTOR authorizing an addition, deletion or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME.

**CONTRACT DOCUMENTS:** The contract, including Advertisement For Bids, Instructions to Bidders, BID Form, Bid Bond, Agreement, Payment Bond, Performance Bond, NOTICE OF AWARD, NOTICE TO PROCEED, CHANGE ORDER, DRAWINGS, SPECIFICATIONS, and ADDENDA.

**CONTRACT PRICE:** The total monies payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.

**CONTRACT TIME:** The number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK.

**CONTRACTOR:** The person, firm or corporation with whom the OWNER has executed the Agreement.

**DRAWINGS:** The part of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been prepared or approved by the Architect.

**FIELD ORDER:** A written order effecting a change in the WORK not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, issued by the Architect to the CONTRACTOR during construction.

**NOTICE OF AWARD:** The written notice of the acceptance of the BID from the OWNER to the successful BIDDER.

**NOTICE TO PROCEED:** Written communication issued by the OWNER to the CONTRACTOR authorizing him to proceed with the WORK and establishing the date of commencement of the WORK.

**OWNER:** A public or quasi-public body or authority, corporation, association, partnership, or individual for whom the WORK is to be performed.

**PROJECT:** The undertaking to be performed as provided in the CONTRACT DOCUMENTS.

**RESIDENT PROJECT REPRESENTATIVE:** The authorized representative of the OWNER who is assigned to the PROJECT site or any part thereof.

SHOP DRAWINGS: All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed.

SPECIFICATIONS: A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.

SUBCONTRACTOR: An individual, firm or corporation having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the WORK at the site.

SUBSTANTIAL COMPLETION: That date as certified by the Architect when the construction of the PROJECT or a specified part thereof is sufficiently completed, in accordance with the CONTRACT DOCUMENTS, so that the PROJECT or specified part can be utilized for the purposes for which it is intended.

SUPPLEMENTAL GENERAL CONDITIONS: Modifications to General Conditions required by a Federal agency for participation in the PROJECT and approved by the agency in writing prior to inclusion in the CONTRACT DOCUMENTS, or such requirements that may be imposed by applicable state laws.

SUPPLIER: Any person or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site.

WORK: All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, and all materials and equipment incorporated or to be incorporated in the PROJECT.

WRITTEN NOTICE: Any notice to any party of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at their last given address, or delivered in person to said party or their authorized representative on the WORK.

## 2. APPLICABLE CODES

The codes and standards applicable to this project include:

- a. 2012 Vermont Access Rules.
- b. 2012 Vermont Fire & Building Safety Code, including the Uniform Fire Code (NFPA 1 -2012) as amended, the Life Safety Code (NFPA 101-2012) as amended, the International Building Code (IBC-2012) as amended, and other NFPA standards as may be referenced in the above codes.
- c. 2011 National Electrical Code, NFPA 70
- d. 2009 State of Vermont Plumbing Rules (adoption & amendments), IPC 2009\_
- e. The City of Burlington ordinances referenced in the bid documents
- f. 2010 ADA Standards for Accessible Design

## 3. DRAWINGS AND SPECIFICATIONS

- a. The intent of the DRAWINGS and SPECIFICATIONS is that the CONTRACTOR shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the WORK in accordance with the CONTRACT DOCUMENTS and all incidental work necessary to complete the PROJECT in an acceptable manner, ready for use, occupancy or operation by the OWNER.
- b. In the event there is a conflict between CONTRACT DOCUMENTS, the following documents are listed in order of precedence.
  - (1) Project Permits. In the event of a conflict between permit requirements, the more protective or stringent shall take precedence as determined by the Architect.
  - (2) Special Provisions
  - (3) Contract Plans
    - Calculated Dimensions
    - Scaled Dimensions

- (4) General Special Provisions
  - (5) Standard Drawings
    - Calculated Dimensions
    - Scaled Dimensions
  - (6) Supplemental Specifications
  - (7) Standard Specifications
  - (8) Any Other Specifications Adopted by Reference
- c. Any discrepancies found between the DRAWINGS and SPECIFICATIONS and site conditions or and inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS shall be immediately reported to the Architect, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after their discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR'S risk.
- d. A total of five (5) sets of the DRAWINGS and SPECIFICATIONS will be given to the CONTRACTOR for use and distribution to complete the work of this project. Any additional sets required by the CONTRACTOR or any SUBCONTRACTOR will be made available at the cost of reproduction and postage, if applicable.
4. ADDITIONAL INSTRUCTION AND DETAIL DRAWINGS
- a. The CONTRACTOR may be furnished additional instructions and detail drawings, by the Architect, as necessary to carry out the WORK required by the CONTRACT DOCUMENTS.
- b. The additional drawings and instruction thus supplied will become a part of the CONTRACT DOCUMENTS. The CONTRACTOR shall carry out the WORK in accordance with the additional detail drawings and instructions.
5. SCHEDULES, REPORTS AND RECORDS
- a. The CONTRACTOR shall submit to the OWNER such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data where applicable as are required by the CONTRACT DOCUMENTS for the WORK to be performed.
- b. Prior to the first partial payment estimate the CONTRACTOR shall submit construction progress schedules showing the order in which they propose to carry on the WORK, including dates at which they will start the various parts of the WORK, estimated date of completion of each part and, as applicable:
- c. The dates at which special detail drawings will be required; and
- d. Respective dates for submission of SHOP DRAWINGS, the beginning of manufacture, the testing and the installation of materials, supplies and equipment.
- e. The CONTRACTOR shall also submit a schedule of payments that they anticipate they will earn during the course of the WORK.
6. MATERIALS, SERVICES AND FACILITIES
- a. It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the WORK within the specified time.
- b. Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection.
- c. Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.
- d. Materials, supplies and equipment shall be in accordance with samples submitted by the CONTRACTOR and approved by the Architect.
- e. Materials, supplies or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.
7. INSPECTION AND TESTING

- a. All materials and equipment used in the construction of the PROJECT shall be subject to adequate inspection and testing in accordance with generally accepted standards, as required and defined in the CONTRACT DOCUMENTS.
  - b. The CONTRACTOR shall provide at their expense the testing and inspection services required by the CONTRACT DOCUMENTS.
  - c. If the CONTRACT DOCUMENTS, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any WORK to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR will give the Architect timely notice of readiness. The CONTRACTOR will then furnish the Architect the required certificates of inspection, testing or approval.
  - d. Inspections, tests or approvals by the Architect or others shall not relieve the CONTRACTOR from their obligations to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.
  - e. The Architect and their representatives will at all times have access to the WORK. In addition, authorized representatives and agents of any participating Federal or State agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The CONTRACTOR will provide proper facilities for such access and observation of the WORK and also for any inspection, or testing thereof.
  - f. If any WORK is covered contrary to the written instructions of the Architect it must, if requested by the Architect, be uncovered for their observation and replaced at the CONTRACTOR'S expense.
  - g. If the Architect considers it necessary or advisable that covered WORK be inspected or tested by others, the CONTRACTOR, at the Architect's request, will uncover, expose or otherwise make available for observation, inspection or testing as the Architect may require, that portion of the WORK in questions, furnishing all necessary labor, materials, tools, and equipment. If it is found that such WORK is defective, the CONTRACTOR will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction. If, however, such WORK is not found to be defective, the CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate CHANGE ORDER shall be issued.
8. SUBSTITUTIONS
- a. Whenever a material, article or piece of equipment is identified on the DRAWINGS or SPECIFICATIONS by reference to brand name or catalog number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equivalent capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the CONTRACT DOCUMENTS by reference to brand name or catalog number, and if, in the opinion of the Architect, such material, article, or piece of equipment is of equal substance and function to that specified, the Architect may approve its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are approved, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without a change in the CONTRACT PRICE or CONTRACT TIME.
9. PATENTS:
- a. The CONTRACTOR shall pay all applicable royalties and license fees. They shall defend all suits or claims for infringement of any patent rights and save the OWNER harmless from loss on account thereof, except that the OWNER shall be responsible for any such loss when a particular process, design, or the product of a particular manufacturer or manufacturers is specified, however, if the CONTRACTOR has reason to believe that the design, process or product specified is an infringement of a patent, they shall be responsible for such loss unless they promptly gives such information to the Architect.
10. SURVEYS, PERMITS, REGULATIONS

- a. The OWNER shall furnish all boundary surveys and establish all base lines for locating the principal component parts of the WORK together with a suitable number of bench marks adjacent to the WORK as shown in the CONTRACT DOCUMENTS. From the information provided by the OWNER, unless otherwise specified in the CONTRACT DOCUMENTS, the CONTRACTOR shall develop and make all detail surveys needed for construction such as slope stakes, batter boards, stakes for pile locations and other working points, lines, elevations and cut sheets.
- b. The CONTRACTOR shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, they shall be charged with the resulting expense and shall be responsible for any mistake that may be caused by their unnecessary loss or disturbance.
- c. Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured by the CONTRACTOR. The CONTRACTOR is responsible to apply for and pick up the building permit from the City of Burlington; however, there will not be any fees required to be paid for it. The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the WORK as drawn and specified. If the CONTRACTOR observes that the CONTRACT DOCUMENTS are at variance therewith, they shall promptly notify the Architect in writing, and any necessary changes shall be adjusted as provided in Section 13, CHANGES IN THE WORK.
- d. The CONTRACTOR shall be responsible for adhering to all City of Burlington and State of Vermont requirements regarding erosion control and construction related drainage in, on, and around the project site. The CONTRACTOR shall designate a responsible person to oversee the implementation and maintenance of the Erosion Prevention and Sediment Control (EPSC) Plan.

#### 11. PROTECTION OF WORK, PROPERTY AND PERSONS

- a. The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. They will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- b. The CONTRACTOR will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. They will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. They will notify owners of adjacent utilities when prosecution of the WORK may affect them. The CONTRACTOR will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or to the acts or omissions of the OWNER or the Architect or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.
- c. In emergencies affecting the safety of persons or the WORK or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the Architect or OWNER, shall act to prevent threatened damage, injury or loss. They will give the Architect prompt WRITTEN NOTICE of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby, and a CHANGE ORDER shall thereupon be issued covering the changes and deviations involved.
- d. Prior to the start of construction, the CONTRACTOR shall submit a list of personnel authorized and capable to operate all necessary equipment, to be contacted on call, complete with telephone numbers and addresses, should any emergency work be required within the project limits during non-working hours. If the CONTRACTOR is not available to perform the required repairs, the OWNER or its assigns will perform the required work and reduce the CONTRACT PRICE by a like amount plus 15% administrative costs and all related expenses.

#### 12. FIRE PREVENTION

- a. The WORK shall be performed in such a manner as to prevent fire. During any work involving a fire hazard, each SUBCONTRACTOR shall take all precautions against start and spreading of fire.

- b. The CONTRACTOR shall provide and maintain sand buckets, suitable fire extinguishers and hoses where required to provide adequate means of extinguishing fires. Minimum fire prevention requirements shall be as defined in NFPA 1, or as directed and approved by the Authority Having Jurisdiction (AHJ).

### 13. SUPERVISION BY CONTRACTOR

- a. The CONTRACTOR shall supervise and direct the WORK. They shall be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR shall employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given to the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the WORK.
- b. The supervisor assigned to the project may not be transferred to another project prior to completion of the punch list for this project.
- c. The CONTRACTOR shall be available by phone, which may be cellular.

### 14. PROJECT MEETINGS

- a. Project meetings between Architect, OWNER and CONTRACTOR, including SUBCONTRACTORS as required to coordinate the WORK, will be held on a weekly basis at a mutually agreed-upon time.
- b. A preconstruction meeting will be held after signing the agreement between the OWNER and the CONTRACTOR and prior to commencement of construction. Attendance at this meeting, which shall include the CONTRACTOR and all major SUBCONTRACTORS, is required.

### 15. COOPERATION WITH UTILITIES

- a. The CONTRACTOR and applicable SUBCONTRACTOR shall be responsible to coordinate the work with all utilities affecting the project. Such coordination shall include verification of existing utilities, location, size, etc.
- b. The CONTRACTOR shall maintain all existing utility services to homes and businesses at all times. The CONTRACTOR will be responsible for providing temporary service while WORK is being done on the Utility.

### 16. CHANGES IN THE WORK

- a. The OWNER may at any time, as the need arises, order changes within the scope of the WORK without invalidating the Agreement. If such changes increase or decrease the amount due under the CONTRACT DOCUMENTS, or in the time required for performance of the WORK, an equitable adjustment shall be authorized by CHANGE ORDER.
- b. The Architect, also, may at any time, by issuing a FIELD ORDER, make changes in the details of the WORK. The CONTRACTOR shall proceed with the performance of any changes in the WORK so ordered by the Architect unless the CONTRACTOR believes that such FIELD ORDER entitles them to a change in CONTRACT PRICE or TIME, or both, in which event they shall give the Architect WRITTEN NOTICE thereof within seven (7) days after the receipt of the ordered change. Thereafter the CONTRACTOR shall document the basis for the change in CONTRACT PRICE or TIME within thirty (30) days. The CONTRACTOR shall not execute such changes pending the receipt of an executed CHANGE ORDER or further instruction from the OWNER.

### 17. CHANGES IN CONTRACT PRICE

- a. The CONTRACT PRICE may be changed only by a CHANGE ORDER. The value of any WORK covered by a CHANGE ORDER or of any claim for increase or decrease in the CONTRACT PRICE shall be determined by one or more of the following methods in the order of precedence listed below:
  - (1) Unit prices previously approved.
  - (2) An agreed lump sum.

- (3) The actual cost for labor, direct overhead, materials, supplies, equipment Blue Book Rates, and other services necessary to complete the WORK. In addition, there shall be added an amount to be agreed upon but not to exceed fifteen (15) percent of the actual cost of the WORK to cover the cost of general overhead and profit.

18. TIME FOR COMPLETION

- a. The date of beginning and the time for completion of the WORK are essential conditions of the CONTRACT DOCUMENTS and the WORK embraced shall be commenced as per the NOTICE TO PROCEED.
- b. The CONTRACTOR will proceed with the WORK at such rate of progress to insure final completion within the CONTRACT TIME. IT is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the CONTRACT TIME for the completion of the WORK described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.

19. CORRECTION OF WORK

- a. The CONTRACTOR shall promptly remove from the premises all WORK rejected by the Architect for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not, and the CONTRACTOR shall promptly replace and re-execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER and shall bear the expense of making good all WORK of other CONTRACTORS destroyed or damaged by such removal or replacement.
- b. All removal and replacement WORK shall be done at the CONTRACTOR's expense. If the CONTRACTOR does not take action to remove such rejected work within ten (10) days after receipt of WRITTEN NOTICE, the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

20. CUTTING, PATCHING AND SUBSURFACE CONDITIONS

- a. The CONTRACTOR shall be responsible for all cutting, fitting and patching that may be required to complete the Work, make its parts fit together properly, repair existing conditions, or modify existing conditions to accept new work.
- b. Examine all conditions before proceeding, maintain safe conditions and structural integrity; inform Architect of any discrepancies in the CONTRACT DOCUMENTS and remedy all defects before proceeding.
- c. It is the intent of the CONTRACT DOCUMENTS that all areas requiring cutting and patching shall be restored to a completely finished condition acceptable to the Architect and the OWNER.
- d. The CONTRACTOR shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the OWNER by WRITTEN NOTICE of:
  - (1) Subsurface or latent physical conditions at the site differing materially from those indicated in the CONTRACT DOCUMENTS; or
  - (2) Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the CONTRACT DOCUMENTS.
- e. The OWNER shall promptly investigate the conditions, and if they find that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the WORK, an equitable adjustment shall be made and the CONTRACT DOCUMENTS shall be modified by a CHANGE ORDER. Any claim of the CONTRACTOR for adjustment hereunder shall not be allowed unless they have given the required WRITTEN NOTICE; provided that the OWNER may, if they determine the facts so justify, consider and adjust any such claims asserted before the date of final payment.

21. SUSPENSION OF WORK, TERMINATION AND DELAY

- a. The OWNER may suspend the WORK or any portion thereof for a period of not more than ninety days or such further time as agreed upon by the CONTRACTOR, by WRITTEN NOTICE to the CONTRACTOR and the Architect which notice shall fix the date on which WORK shall be resumed. The CONTRACTOR will resume the WORK on the date so fixed. The CONTRACTOR will be

allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any suspension.

- b. If the CONTRACTOR is adjudged as bankrupt or insolvent, or if they make a general assignment for the benefit of their creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of their property, or if they file a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if they repeatedly fail to supply sufficient skilled workmen or suitable materials or equipment, or if they repeatedly fail to make prompt payments to SUBCONTRACTORS or for labor, materials or equipment or if they disregard laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK or if they disregard the authority of the Architect, or if they otherwise violate any provision of the CONTRACT DOCUMENTS, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and their surety a minimum of ten (10) days from delivery of a WRITTEN NOTICE, terminate the services of the CONTRACTOR and take possession of the PROJECT and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method they may deem expedient. In such case the CONTRACTOR shall not be entitled to receive any further payment until the WORK is finished. If the unpaid balance of the CONTRACT price exceeds the direct and indirect costs of completing the PROJECT, including compensation for additional professional services, such excess SHALL BE PAID TO THE CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the Architect and incorporated in a CHANGE ORDER.
- c. Where the CONTRACTOR's services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies by the OWNER due to the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.
- d. After ten (10) days from delivery of a WRITTEN NOTICE to the CONTRACTOR and the Architect, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the CONTRACT. In such case, the CONTRACTOR shall be paid for all WORK executed and any expense sustained plus reasonable profit.
- e. If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than ninety (90) days by the OWNER or under an order of court or other public authority, or the Architect fails to act on any request for payment within thirty (30) days after it is submitted, or the OWNER fails to pay the CONTRACTOR substantially the sum approved by the Architect or awarded by arbitrators within thirty (30) days of this approval and presentation, then the CONTRACTOR may, after ten (10) days from delivery of a WRITTEN NOTICE to the OWNER and the Architect, terminate the CONTRACT and recover from the OWNER payment for all WORK executed and all expenses sustained. In addition and in lieu of terminating the CONTRACT, if the Architect has failed to act on a request for payment or if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon ten (10) days WRITTEN NOTICE to the OWNER and the Architect stop the WORK until they have been paid all amounts then due, in which event and upon resumption of the WORK, CHANGE ORDERS shall be issued for adjusting the CONTRACT PRICE or extending the CONTRACT TIME or both to compensate for the costs and delays attributable to the stoppage of the WORK.
- f. If the performance of all or any portion of the WORK is suspended, delayed, or interrupted as a result of a failure of the OWNER or Architect to act within the time specified in the CONTRACT DOCUMENTS, or if no time is specified, within a reasonable time, an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, shall be made by CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessarily caused by the failure of the OWNER or Architect.

## 22. PAYMENTS TO CONTRACTOR

- a. At least ten (10) days before each progress payment falls due (but not more often than once a month), the CONTRACTOR will submit to the Architect a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the Architect may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER, as will establish the OWNER's title to the material and equipment and protect their interest therein, including applicable insurance.

The Architect will, within ten (10) days after receipt of each partial payment estimate, either indicate in writing their approval of payment and present the partial payment estimate to the OWNER, or return the partial payment estimate to the CONTRACTOR indicating in writing their reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will, within ten (10) days of the presentation to them of an approved partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the approved partial payment estimate.

- b. The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.
- c. Prior to SUBSTANTIAL COMPLETION, the OWNER, with the approval of the Architect and with the concurrence of the CONTRACTOR, may use any completed or substantially completed portions of the WORK. Such use shall not constitute an acceptance of such portions of the WORK.
- d. The OWNER shall have the right to enter the premises for the purpose of doing WORK not covered by the CONTRACT DOCUMENTS. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK, or the restoration of any damaged WORK except such as may be caused by agents or employees of the OWNER.
- e. Upon completion and acceptance of the WORK, the Architect shall issue a certificate attached to the final payment request that the WORK has been accepted by them under the conditions of the CONTRACT DOCUMENTS. The entire balance found to be due the CONTRACTOR, including the retained percentages, but except such sums as may be lawfully retained by the OWNER, shall be paid to the CONTRACTOR within thirty (30) days of completion and acceptance of the WORK.
- f. The CONTRACTOR will indemnify and save the OWNER or the OWNER'S agents harmless from all claims growing out of the lawful demands of SUBCONTRACTORS, laborers, workmen, mechanics, material-men, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the WORK. The CONTRACTOR shall, at the OWNER'S request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the CONTRACTOR fails to do so the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the CONTRACTOR shall be resumed, in accordance with the terms of the CONTRACT DOCUMENTS, but in no event shall the provisions of this sentence be construed to impose any obligations upon the OWNER to either the CONTRACTOR, their Surety, or any third party. In paying any unpaid bills of the CONTRACTOR, any payment so made by the OWNER shall be considered as a payment made under the CONTRACT DOCUMENTS by the OWNER to the CONTRACTOR and the OWNER shall not be liable to the CONTRACTOR for any such payments made in good faith.
- g. The OWNER will not pay interest on late application for payment from the CONTRACTOR.
- h. In the event of a dispute of payment of the CONTRACTOR between the OWNER and CONTRACTOR, the CONTRACTOR shall first negotiate with the City Project Manager, then Director of Public Works, and finally the Public Works Commission, which is the final authority.

## 23. ACCEPTANCE OF FINAL PAYMENT AS RELEASE

- a. The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically accepted by the CONTRACTOR for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment, however, final or otherwise, shall not release the CONTRACTOR or their sureties from any obligations under the CONTRACT DOCUMENTS or the PERFORMANCE BOND or PAYMENT BONDS.
- b. Final payment will not be released until the CONTRACTOR furnishes the OWNER with an original copy of the Certificate of Occupancy issued by the Department of Public Works of the City of Burlington, and the Contractor furnishes the OWNER with original copies of the final sign-offs of the individual inspectors for electrical, mechanical and plumbing.

## 24. INSURANCE

- a. The CONTRACTOR shall purchase and maintain such insurance as will protect them from claims

set forth below which may arise out of or result from the CONTRACTOR'S execution of the WORK, whether such execution be by themselves or by any SUBCONTRACTOR or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- b. Claims under workmen's compensation, disability benefit and other similar employee benefit acts;
  - (1) Claims for damages because of bodily injury, occupational sickness or disease, or death of their employees;
  - (2) Claims for damages because of bodily injury, sickness or disease, or death of any person other than their employees;
  - (3) Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the CONTRACTOR, or (2) by any other person; and
  - (4) Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.
- c. Certificates of Insurance acceptable to the OWNER shall be filed with the OWNER prior to commencement of the WORK. These Certificates shall contain a provision that coverage afforded under the policies will not be canceled unless at least fifteen (15) days prior WRITTEN NOTICE has been given to the OWNER.
- d. The CONTRACTOR shall procure and maintain, at their own expense, during the CONTRACT TIME, liability insurance as hereinafter specified:
  - (1) Contractor's General Public Liability and Property Damage Insurance including vehicle coverage issued to the CONTRACTOR and protecting them from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the CONTRACT DOCUMENTS, whether such operations be by themselves or by any SUBCONTRACTOR under them, or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR under them. Insurance shall be written with a limit of liability set forth in the amounts set forth in the Agreement.
  - (2) The CONTRACTOR shall acquire and maintain, if applicable, Fire and Extended Coverage insurance upon the PROJECT to the full insurable value thereof for the benefit of the OWNER, the CONTRACTOR, and SUBCONTRACTORS as their interest may appear. This provision shall in no way release the CONTRACTOR or CONTRACTOR'S surety from obligations under the CONTRACT DOCUMENTS to fully complete the PROJECT.
- e. The CONTRACTOR shall procure and maintain, at their own expense, during the CONTRACT TIME, in accordance with the provision of the laws of the state in which the WORK is performed, Workmen's Compensation Insurance, including occupational disease provisions, for all of their employees at the site of the PROJECT and in case any WORK is sublet, the CONTRACTOR shall require such SUBCONTRACTOR similarly to provide Workmen's Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the CONTRACTOR. In case any class of employees engaged in hazardous WORK under this CONTRACT at the site of the PROJECT is not protected under Workmen's Compensation statute, the CONTRACTOR shall provide, and shall cause, each SUBCONTRACTOR to provide, adequate and suitable insurance for the protection of their employees not otherwise protected.

## 25. CONTRACT SECURITY

- a. The CONTRACTOR shall within ten (10) days after the receipt of the NOTICE OF AWARD furnish the OWNER with a PERFORMANCE BOND and a PAYMENT BOND in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions and agreements of the CONTRACT DOCUMENTS, and upon the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK provided by the CONTRACT DOCUMENTS. Such BONDS shall be executed by the CONTRACTOR and a corporate bonding company licensed to transact such business in the state in which the WORK is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these BONDS shall be borne by the CONTRACTOR. If at any time a surety on any such BOND is declared bankrupt or loses its right to do business in the state in which the WORK is to be performed or is removed from the list of Surety Companies accepted on Federal BONDS, CONTRACTOR shall within ten (10) days after notice from the OWNER to do so, substitute an acceptable BOND (or BONDS) in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premiums on such

BOND shall be paid by the CONTRACTOR. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable BOND to the OWNER.

## 26. ASSIGNMENTS

- a. Neither the CONTRACTOR nor the OWNER shall sell, transfer, assign or otherwise dispose of the CONTRACT or any portion thereof, or of their right, title or interest therein, or their obligations thereunder, without written consent of the other party.

## 27. INDEMNIFICATION

- a. The CONTRACTOR will indemnify and hold harmless the OWNER and the Architect and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the WORK, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the CONTRACTOR, and SUBCONTRACTOR, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.
- b. In any and all claims against the OWNER or the Architect, or any of their agents or employees, by any employee of the CONTRACTOR, any SUBCONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts any of the may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any SUBCONTRACTOR under workmen's compensation acts, disability benefit acts or other employee benefits acts.
- c. The obligation of the CONTRACTOR under this paragraph shall not extend to the liability of the Architect, their agents or employees arising out of the preparation or approval of maps, DRAWINGS, opinions, reports, surveys, CHANGE ORDERS, design or SPECIFICATIONS.

## 28. SEPARATE CONTRACTS

- a. The OWNER reserves the right to let other CONTRACTS in connection with this PROJECT. The CONTRACTOR shall afford other CONTRACTORS reasonable opportunity for the introduction and storage of their materials and the execution of their WORK, and shall properly connect and coordinate their WORK with other CONTRACTOR'S. If the proper execution or results of any part of the CONTRACTOR'S WORK depends upon the WORK of any other CONTRACTOR, the CONTRACTOR shall inspect and promptly report to the Architect any defects in such WORK that render it unsuitable for such proper execution and results.
- b. The OWNER may perform additional WORK related to the PROJECT by themselves or they may let other CONTRACTS containing provisions similar to these. The CONTRACTOR will afford the other CONTRACTORS who are parties to such CONTRACTS (for the OWNER, if they are performing the additional WORK themselves), reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate their WORK with others.
- c. If the performance of additional WORK by other CONTRACTORS or the OWNER is not noted in the CONTRACT DOCUMENTS prior to the execution of the CONTRACT, WRITTEN NOTICE thereof shall be given to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believes that the performance of such additional WORK by the OWNER or others involves them in additional expense or entitles them to an extension of the CONTRACT TIME, they may make a claim therefore as provided in Section 14 and 15.

## 29. SUBCONTRACTING

- a. The CONTRACTOR may utilize the services of specialty SUBCONTRACTORS on those parts of the WORK which under normal contracting practices, are performed by specialty SUBCONTRACTORS.
- b. The CONTRACTOR shall not award WORK to SUBCONTRACTOR(S), in excess of seventy (70) percent of the CONTRACT PRICE, without prior written approval of the OWNER.
- c. The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of their SUBCONTRACTORS, and of persons wither directly or indirectly employed by them, as they are

- for the acts and omissions of persons directly employed by them.
- d. The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORS to the CONTRACTOR by the terms of the CONTRACT DOCUMENTS insofar as applicable to the WORK of SUBCONTRACTORS and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.
  - e. Nothing contained in this CONTRACT shall create any contractual relation between any SUBCONTRACTOR and the OWNER.
  - f. The CONTRACTOR shall provide a copies of all subcontracts to OWNER.
30. ARCHITECT'S AUTHORITY
- a. The Architect shall act as the OWNER'S representative during the construction period. They shall decide questions which may arise as to quality and acceptability of materials furnished and WORK performed. They shall interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. The Architect will make visits to the site and determine if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.
  - b. The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the quality of materials, workmanship and execution of the WORK. Inspections may be made at the factory or fabrication plant of the source of material supply.
  - c. The Architect will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.
  - d. The Architect shall promptly make decisions relative to interpretation of the CONTRACT DOCUMENTS.
31. LAND AND RIGHTS-OF-WAY
- a. Prior to issuance of NOTICE TO PROCEED, the OWNER shall obtain all land and rightsofway necessary for carrying out and for the completion of the WORK to be performed pursuant to the CONTRACT DOCUMENTS, unless otherwise mutually agreed.
  - b. The OWNER shall provide to the CONTRACTOR information which delineates and describes the lands owned and rights-of-way acquired.
  - c. The CONTRACTOR shall provide at their own expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities, or for storage of materials.
  - d. The CONTRACTOR shall notify property owners or residents 24 hours in advance before blocking access. Access shall be provided during non-working hours.
  - e. The CONTRACTOR shall obtain Obstruction Permits when needed at its own expense.
32. GUARANTY
- a. The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of one, (1) year from the date of SUBSTANTIAL COMPLETION or FINAL COMPLETION OF THE PROJECT or specified part, as appropriate. The CONTRACTOR warrants and guarantees for a period of one (1) year from the date of SUBSTANTIAL COMPLETION or FINAL COMPLETION OF THE PROJECT or specified part, as appropriate, that the completed project is free from all defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the project resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other WORK that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The Performance BOND shall remain in full force and effect through the guarantee period.
  - b. The guarantee cannot include normal maintenance items or problems caused by events beyond control of the CONTRACTOR.
33. TAXES
- a. This project qualifies for sales tax exemption. Obtain tax exemption number form the OWNER.

34. NOTICES

All notices to be given to the parties hereto shall be sent to or made at the following addresses:

OWNER:

City Of Burlington  
Department of Public Works  
645 Pine Street, Suite A  
Burlington, VT 05401

ARCHITECT:

Duncan Wisniewski Architecture  
255 South Champlain Street  
Burlington, VT 05401

CONTRACTOR:

To Be Determined

35. RESPONSIBLE PARTIES

OWNER:

• Steve Roy, Project Manager, City of Burlington

ARCHITECT:

• Bob Duncan, Principal, Duncan Wisniewski Architecture

CONTRACTOR

• To Be Determined

Any of the parties may designate from time to time, by appropriate written notice to the others, additional or other representatives.

36. TOBACCO PRODUCTS

- a. Smoking or chewing of any tobacco products will not be permitted within the worksite.

37. HOURS OF WORK

- a. The CONTRACTOR is limited to working 7:00 AM to 5:00 PM, Monday through Friday and 7:00 AM to 5:00PM, Saturday unless a waiver is requested in writing and is granted by the OWNER.

**END OF SECTION**

## SECTION 01010 - SUMMARY OF WORK

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

1. Work Included:
  1. The Project includes interior demolition, concrete masonry work, finish carpentry, finish hardware, painting and finishing, toilet partitions, plumbing and miscellaneous electrical work.
  2. The Work of this Project is defined in the Contract Documents and is outlined below.
    - a) The work includes but is not limited to:
      - General conditions
      - Interior demolition
      - Concrete masonry
      - Finish carpentry
      - Gypsum board
      - Painting and finishing
      - Toilet partitions
      - Toilet accessories
      - Plumbing
      - Electrical (minimal, provided by Owner)

END OF SECTION

## SECTION 01100 - ALTERNATES & UNIT PRICING

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work included: Provide alternate bid proposals as described in this section.

#### 1.02 RELATED WORK

- A. Work included: Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications, and other Sections as described in Item 1.04.

#### 1.03 PROCEDURES:

- A. Work included: Provide alternate bids and/or unit pricing to be used to add or deduct from the amount of the Base Bid if the corresponding change in Scope is accepted by the Owner or required by a change in scope of work.
- B. Include all costs, including materials, installation, fees, overhead and profit, CM mark-up, etc the alternate prices.
- C. Show the proposed alternate amounts opposite their proper description on the Bid Form.

#### 1.04 SPECIFIC ALTERNATES

- A. Alternate 1:
  - 1. Section 08100: Delete metal door frames and replace with fiberglass door frames, as manufactured by Tiger Door LLC ([www.tigerdoor.com](http://www.tigerdoor.com)), 1802 Izard Street, Omaha, NE. 68102, or approved equivalent, in accordance with General Conditions, Item 8. FRP door frames furnished under this specification shall utilize a high-modulus pultruded structural FRP shape. The standard frame section shall be double rabbeted jamb (as per wall thickness) x 2" face, 3/16" thick, with integral 5/8" doorstop with 1 15/16" soffits, to match typical hollow metal configurations; refer to details on drawings for custom sized frames in Team Rooms A & B.

#### 1.05 UNIT PRICING

- 1. No requirements.

END OF SECTION

## SECTION - 01200 - PROJECT MEETINGS

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

1. Work included: To enable orderly review during progress of the Work, and to provide for systematic discussion of problems, the Architect will conduct project meetings throughout the construction period.
2. Related Work: Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

### PART 2 - PRODUCTS (Not Included)

### PART 3 - EXECUTION

#### 3.01 PRECONSTRUCTION MEETING

1. A preconstruction meeting will be scheduled within 7 working days after the Owner has issued the Notice to Proceed. Attendance by the General Contractor (project manager, site superintendent) and major subcontractors is required. All participants shall be familiar with the Project and authorized to decide matters relating to the work. Data will be distributed and discussed on at least the following items:
  1. Organizational arrangement of General Contractor's forces and personnel, and those of subcontractors, materials suppliers, and Architect.
  2. Channels and procedures for communication.
  3. Construction schedule, including sequence of critical work.
  4. Schedule of Values review.
  5. Contract Documents review, including distribution of required copies of original Documents and revisions.
  6. Processing of Shop Drawings and other data submitted to the Architect for review.
  7. Processing of Communications and Change Orders.
  8. Rules and regulations governing performance of the Work.
  9. Procedures for safety and first aid, security, quality control, housekeeping, and related matters.
  10. Determine E-Mail distribution list for project meeting notes and other communications.
  11. Schedule the weekly job meeting day and time.
  12. Review Rubbish Removal, Separation and Recycling plan.
  13. Shop drawing submittal log.

#### 3.02 PROJECT MEETINGS

1. Project meetings will be held every week at the job site at a regular time as determined at the preconstruction meeting.
2. Assign the same Project Manager and other representatives of the Contractor to represent the Contractor at project meetings throughout the progress of the Work. Representatives of major subcontractors may be required to be present at specific job meetings. Representatives of the subcontractor attending meeting must be authorized to make decisions for the subcontractor concerning the Work.
3. Questions, clarifications and other issues affecting the progress of the Work should be addressed at these meetings well in advance of when the information is actually needed to order materials or proceed with the Work in the field.
4. Typical Agenda:
  1. Review, revise as necessary, and approve minutes of the previous meeting.
  2. Review progress of the Work and status of the Schedule since the last meeting.
  3. Review General and Housekeeping issues and other current business. Identify problems which impede planned progress. Develop corrective measures and procedures to regain planned schedule.
  4. Review status of requisitions and change orders.

5. Review progress of the work in order of site, architectural, mechanical and electrical. Complete other current business.
6. Review field observations, problems and conflicts.
7. Review requisitions, sketches, change orders.
8. Review Record Documents status.

5. Minutes:

1. The Architect will prepare minutes of each project meeting and distribute those minutes via email to each participant within three (3) days of the meeting.
2. The Contractor is responsible to distribute the job notes to Contractor's personnel, subcontractors and any other necessary parties.
3. If no exception is taken to these notes by the next job meeting after issuance they become incorporated into the Contract Documents. If they need to be revised the Architect will revise the documents, reissue them and if no exception is taken at the next job meeting they then become part of the Contract Documents.

3.03 FIELD MEETINGS

1. The Architect will typically make a second weekly site visit to review the progress of the work and discuss new issues with the Contractor and the subcontractors.
2. Insofar as possible, the Architect will attempt to schedule this meeting at a regular time, or inform the Contractor when he will be there, so that the project supervisor can be available to review the progress and ask or answer questions concerning the work.
3. Informal communications, especially by phone, between Architect and Contractor that occur during the course of the week outside the regularly scheduled Job Meetings and that affect or clarify the scope of work may be referenced in the field meeting notes or in separate RFI's or e-mails.

END OF SECTION

## SECTION 01250 COMMUNICATIONS

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

1. Work included: To facilitate an orderly system of communication between Owner, Architect and Contractor the following system is established.
2. Related Work: Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

### PART 2 PRODUCTS - Not Used

### PART 3 - EXECUTION

#### 3.01 DISTRIBUTION LIST

1. An E-Mail distribution list for project meeting notes and other communications is determined at the Pre-Construction Meeting. At minimum, the list includes the Owner's Project Managers, the Architect and his Consultants, the Contractor's project manager and project supervisor.
2. Drawings and other graphic communications will be distributed to required parties as hard copy.

#### 3.02 PROJECT MEETING & FIELD MEETING NOTES

1. Each meeting will be numbered and dated and distributed by Architect via E-mail to those on the agreed upon distribution list.

#### 3.03 REQUEST FOR INFORMATION (RFI)

1. All communications from Contractor requesting information or clarification about the Work will be issued as a Request for Information (RFI) to be numbered and dated, e.g. RFI-1.
2. If a subcontractor requests information provide a cover sheet assigning an RFI number and date and general summary and attach any pertinent material from the subcontractor.
3. If a request comes through without an RFI number, the Architect will return it or assign one consecutively based on the last one received. If a request is made over the phone that requires a response the Architect will also assign a number to reference in his response.
4. The Architect's response will include the same number. The RFI Response will provide the information requested and will reference any attached drawings, project clarifications or other necessary material.

#### 3.04 GENERAL COMMUNICATIONS (GC)

1. All other communications between Owner, Architect and Contractor will be referred to as General Communications and will be dated but, recognizing the rapidity, varied forms and complexity of modern communications may take, not numbered.
2. All GC's will be kept in a separate file section by the Architect.

#### 3.05 PROPOSAL REQUEST (PR) or CHANGE ORDER REQUEST (COR)

1. If as a result of a RFI or GC the Owner, Architect or Contractor determine that a change in the contract sum or time may be justified, issue a description of the proposed change as a Proposal Request (PR) or Change Order Request (COR) to be numbered and dated.

2. Provide all required backup material, including subcontractor, to evaluate the scope of the PR and change to the contract sum or time. The PR will be discussed at regular job meetings and approved or denied and be so indicated in the meeting notes.
3. On a monthly basis approved PR's can be incorporated into a Change Order, processed per the General Conditions, which would reference and include each PR and include all approved backup material.
4. The backup materials include detailed information on labor, material and equipment for Contractor and all subcontractors.
5. Weekly job meeting notes will summarize outstanding PR's and note when approved.
6. The Contractor is responsible for providing a monthly summary sheet of all PR's to date, including both those outstanding and approved and noting which CO the approved ones have been incorporated into.

#### 3.06 SKETCHES (SK's)

1. If as a result of an RFI that graphic changes or additions to the contract documents are required, this information will be issued as a Sketch (SK) which is numbered and dated.
2. SK's will be consecutively numbered by each discipline and reference should be made to SKA1 (architectural), SKC1 (i.e., civil), SKS1 (structural), etc.
3. Every attempt will be made to issue SK's in 8.5 x 11, 11 x 17, or 12 x 18 format to facilitate inclusion in the Project Record Documents.

END OF SECTION

## SECTION 01340 - SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

### PART 1 - GENERAL

#### 1.01 REQUIREMENTS

1. Submit Shop Drawings, Product Data, and Samples required by the Contract Documents.
2. Related Work: Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
  1. Refer to requirements for Substitutions in Section 01000 General Requirements.

#### 1.02 SHOP DRAWINGS

1. Drawings shall be presented in a clear and thorough manner.
  1. Details shall be identified by reference to sheet and detail, schedule, or room numbers shown on Contract Drawings.

#### 1.03 PRODUCT DATA

1. Preparation:
  1. Clearly mark each copy to identify pertinent products or models.
  2. Show performance characteristics and capacities.
  3. Show dimensions and clearances required.
  4. Show wiring or piping diagrams and controls.
2. Manufacturer's standard schematic drawings and diagrams:
  1. Modify drawings and diagrams to delete information which is not applicable to the Work.
  2. Supplement standard information to provide information specifically applicable to the Work.

#### 1.04 SAMPLES

1. Office samples shall be of sufficient size and quantity to clearly illustrate:
  1. Functional characteristics of the product, with integrally related parts and attachment devices.
  2. Full range of color, texture and pattern.

#### 1.05 GENERAL CONTRACTOR RESPONSIBILITIES

1. At the Pre-Construction Meeting provide a complete submittal log to the Architect listing all proposed and required submittals including proposed dates for transmittal to Architect.
2. Review Part 1 of each specification section which generally lists the specific submittals required by the Architect/Consultants. This list may not be exhaustive or complete and the Contractor is required to determine what additional submittals are necessary to plan, organize, schedule and complete the work.
3. Review all submissions for conformance with the Contract Documents and the requirements of the Work and stamp or sign all submissions indicating that this has been done prior to submission. Submittals received without indication of this review will be returned to the Contractor without review.
4. Determine and verify:
  1. Field measurements.
  2. Field construction criteria.
  3. Catalog numbers and similar data.
  4. Conformance with specifications.
5. Coordinate each submittal with requirements of the Work and of the Contract Documents.
6. Notify the Architect/Engineer in writing, at time of submission, of any deviations in the submittals from requirements of the Contract Documents.

7. Do not begin fabrication or work which requires submittals until submittals have been reviewed and returned.

#### 1.06 SUBMISSION REQUIREMENTS

1. Make submittals promptly in accordance with the approved schedule, and in such sequence as to cause no delay in the Work or in the work of any other contractor. Electronic submittals are preferred. Review sheets, and if applicable, marked-up copies of submittals, shall be returned electronically for distribution and copying for inclusion into binders as part of the Project Record Documents. When submittals are made electronically, the number shall be as follows:
  1. Shop drawings: One copy for the Architect, which will be forwarded to Consultant(s) as necessary.
  2. Product Data: One copy for the Architect, which will be forwarded to Consultant(s) as necessary.
  3. Samples: submit actual samples as stated in each individual specifications section, or as appropriate for review and approval.
4. When hard copies must be submitted, the number of submittals required shall be as follows:
  1. Shop Drawings:
    - a) Two copies for the Architect and applicable Consulting Engineer.
    - b) One copy for the Owner. Verify if required at Pre-Construction Meeting. Owner may elect to only review specific submittals in which case a list will be provided to Contractor at the Pre-Construction Meeting.
    - c) Additional copies (See Record Documents for number) to be retained by the Contractor and bound into binders as part of the Project Record Documents.
    - d) Additional copies as needed by the Contractor to carry out the work.
  2. Product Data: Submit the number of copies which the Contractor requires, plus two copies, which will be retained by the Architect/Engineer.
  3. Samples: Submit the number stated in each individual specifications section, or as appropriate for review and approval.
5. Submittals shall contain:
  1. Shop Drawings.
  2. The Project title and number.
  3. Contract identification.
  4. The names of Contractor, Supplier and Manufacturer.
  5. Identification of the product, with the specification section number.
  6. Field dimensions, clearly identified as such.
  7. Relation to adjacent or critical features of the work or materials.
  8. Applicable standards, such as ASTM or Federal Specification numbers.
  9. Identification of deviations from the Contract Documents.
  10. Identification of all revisions on re-submittals.
  11. A blank space for General Contractor and Architect/Engineer review stamps.
  12. General Contractor's stamp, initialed or signed, certifying review of the submittal, verification of products, field measurements and field construction criteria, and coordination of the information within the submittal with requirements of the work and contract documents.
6. All submittals shall be in 8 1/2" x 11", 11" x 17" or 12" x 18" sizes insofar as possible to facilitate filing and for easy inclusion into project manual. Coordinate these sizes in advance with suppliers and fabricators to avoid delay in reviewing. In cases where it is necessary to submit in 24" x 36" (or larger) sheet sizes to facilitate review, the final reviewed set will be reduced for filing and inclusion in project manual. All sheets shall be punched for inclusion into standard three ring binder.

#### 1.07 RESUBMISSION REQUIREMENTS

1. Make any corrections or changes in the submittals required by the Architect/Engineer and resubmit until approved.
2. Shop Drawings and Product Data:
  1. Revise initial drawings or data, and resubmit as specified for the initial submittal.
  2. Indicate any changes which have been made other than those requested by the Architect/Engineer.

3. Samples: Submit new samples as required for initial submittal.

#### 1.08 DISTRIBUTION

1. Distribute reproductions of Shop Drawings and copies of Product Data which carry the Architect/Engineer's reviewed stamp to:
  1. Job site file.
  2. Record documents file (maintain three copies for Owner's manuals).
  3. Other affected contractors.
  4. Subcontractors.
  5. Supplier or Fabricator.
  6. Others as required.
2. Distribute samples which carry the Architect/Engineer's reviewed stamp as directed by the Architect/Engineer.

#### 1.09 ARCHITECT/CONSULTANT DUTIES

1. Review submittals within three weeks of submission by Contractor and in accordance with the established project schedule. If the Architect requests additional information the review period will start when the information is received. If materials requiring color choices are not submitted all at once, the period will be delayed until all related submittals have been received.
2. Architect's review is only for conformance with the design concept of the project and compliance with the information given in the Contract Documents. The Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains to the fabrication processes or to techniques of construction, and for coordination of the work of all trades.
3. Attach a separate, signed, review sheet to each copy of the submittal or affix review stamp on Contractor's cover sheets indicating review and one of the following actions: No Exception Taken, Furnish as Corrected, Revise and Resubmit, or Rejected. Comments, additional information and corrections or modifications will be noted on the cover sheet or directly on the submittal.
4. Return submittals to the Contractor for distribution, or for resubmissions.

END OF SECTION

## SECTION 01370 - SCHEDULE OF VALUES

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

1. Work included: Provide a detailed breakdown of the agreed Contract Sum showing values allocated to each of the various parts of the Work, as specified herein and in other provisions of the Contract Documents.
2. Related Work: Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

#### 1.02 QUALITY ASSURANCE

1. Use required means to assure arithmetical accuracy of the sums described.
2. When so required by the Architect, provide copies of the subcontracts or other data acceptable to the Architect, substantiating the sums described.

#### 1.03 SUBMITTALS

1. At the Pre-Construction Meeting or before, submit a proposed Schedule of Values to the Architect for review. Schedule of values shall include the value of each portion of the work, in accordance with and following the the sections defined in Section 01010.
  1. Meet with the Architect and determine the additional data, if any, required to be submitted.
  2. Secure the Architect's approval of the Schedule of Values prior to submitting first application for payment.

END OF SECTION

## SECTION 01500 - TEMPORARY FACILITIES AND CONTROLS

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

1. Provide temporary facilities and controls needed for the Work including, but not necessarily limited to:
  1. Temporary utilities such as heat, water and electrical power and lighting;
  2. Sanitary facilities;
  3. Enclosures such as tarpaulins, barricades, and canopies;
  4. Temporary barriers;
  5. Construction aids and equipment to facilitate execution of the work (scaffolds, staging, lighting, chutes, and other such facilities and equipment).
  6. Protection, throughout construction, of existing site and building elements and materials to remain.
  7. Field office and communication facilities.
  8. Trash removal and recycling.
2. Related work:
  1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
  2. Permanent installation and hookup of the various utility lines are described in other Sections.
  3. See Section 01690 Cleaning for information on Rubbish Removal and Recycling.

#### 1.02 QUALITY ASSURANCE

1. Maintain temporary facilities and controls in proper and safe condition throughout progress of the Work. All work of this Section must be in accordance with applicable codes and standards, including but not limited to OSHA and VOSHA.
2. All field offices and related equipment to be in place, hooked to utilities and operating within 7 days of the start of construction.
3. Based on project schedule noted elsewhere in the bid documents the Contractor is responsible for including all costs for power and temporary heating in the base bid unless noted otherwise in the contract documents.
4. Coordinate with governing authority, including municipality and utilities, as required and secure all necessary permits for temporary controls in public ways and for protection of the public good.

#### 1.03 SUBMITTALS - Comply with Section 01340 and the following:

1. Trash and Recycling Plan.
2. Temporary heating equipment and plan.

### PART 2 - PRODUCTS

#### 2.01 UTILITIES

1. Water:
  1. Water for normal daily operations (drinking, cleaning, etc.) will be available on site. Any hoses, connections, etc. shall be provided by the Contractor.
2. Heating: Provide, pay for, and maintain heat and ventilation as needed to facilitate progress of the Work, to meet all manufacturer and specification minimum conditions, and to protect materials and finishes from damage due to temperature or humidity. Kerosene fired or electric heaters will not be permitted for this purpose.

3. Sanitary facilities:
  1. Provide temporary sanitary facilities in the quantity required for use by all personnel.
  2. Maintain in clean and sanitary condition at all times.
4. Electrical: Provide and maintain a system of temporary electrical power and lighting, which may be connected to the building electrical system. Cost of power used during construction shall be paid for by the Owner.
5. Snow Removal: Be responsible for plowing and removing any snow that interferes with construction work, parking, storage or general access to the site for the duration of the work.

#### 2.02 ENCLOSURES

1. Provide and maintain, for the duration of construction, all scaffolds, tarpaulins, warning signs, steps, platforms, bridges, and other temporary construction necessary for proper completion of the Work in compliance with the Construction Documents and pertinent safety regulations.
2. Completely remove enclosures and other construction aids at the completion of the Work. Clean and repair damage caused by installation.

#### 2.03 TEMPORARY BARRIERS

1. Provide and maintain suitable barriers as required to prevent public entry and to protect the Work, existing facilities, the general public, trees and plants from construction operations. Maintain barriers at all times around open excavations.
2. Barriers shall be of neat appearance and structurally adequate for the purpose. Relocate as required by progress of the Work. Completely remove enclosures and other construction aids at the completion of the Work. Clean and repair damage caused by installation.

#### 2.04 TEMPORARY CONTROLS

1. Dust control: Minimize raising dust from construction operations. Provide positive means to prevent dust from disturbing adjacent property, including but not limited to wetting down or placing calcium chloride as necessary.
2. Stormwater control: Provide methods to control surface water to prevent damage to the Work, the site, or adjacent property. Refer to the civil engineering specifications for requirements related to stormwater control.
3. Pollution control:
  1. Provide methods, means and facilities as required to prevent contamination of soil, water, atmosphere or the general public by the discharge of noxious substances from construction operations.
  2. Take special measures to prevent harmful substances from disturbing adjacent property and the general public.

#### 2.05 CONTRACTOR'S FIELD OFFICE

1. Provide a secure, weatherproof area for the Contractor's own use where Contract Documents, job records, samples and other necessary job related data can be kept.
2. Provide a phone, answering machine and a facsimile machine.
3. Include a suitably furnished meeting space for job meetings large enough for 10 people.
4. Provide a heating system sufficient to heat the occupied areas to 65 degrees F at all times in cold weather and an air conditioner to cool the occupied areas during meetings to 78 degrees F, or adequate fans and ventilation to assure comfort during meetings.

#### 2.06 TRASH REMOVAL AND RECYCLING

1. Waste Reduction Plan:
  1. As soon as the Owner provides a Notice to Proceed and before construction begins, provide a complete plan for waste reduction including separation, recycling and disposal of materials and submit to the Architect for review and approval.
  2. Assistance in developing the plan may be obtained through the Agency of Natural Resources, Department of Environmental Conservation, Waste Management Division at 802.241.3444 or through the website at [www.anr.state.vt.us/dec/wastediv/recycling/c&d.htm](http://www.anr.state.vt.us/dec/wastediv/recycling/c&d.htm). A sample plan is available at [www.anr.state.vt.us/dec/wastediv/recycling/recyclingplan.pdf](http://www.anr.state.vt.us/dec/wastediv/recycling/recyclingplan.pdf). as well as access to the Vermont Construction Site Reuse & Recycling Directory.
2. Demolition: In the case of demolition of existing structures include a plan for salvaging material of value.
3. Rubbish Removal & Recycling: Contract with a qualified waste removal company for adequate dumpsters on site, removal and proper recycling or disposal of all waste material generated in the process of completing the work.
4. Trash Separation - Include the following minimum separation in the waste reduction plan:
  1. Wood (untreated).
  2. Cardboard and paper.
  3. Construction materials.
  4. Other Recyclables.
  5. Trash.

### PART 3 - EXECUTION

#### 3.01 COORDINATION WITH GOVERNING AUTHORITIES

1. Consult with the Director of the Department of Public Works, City Burlington, for any specific requirements that may be imposed regarding protection of public ways, utility coordination, etc.

#### 3.02 MAINTENANCE AND REMOVAL

1. Maintain temporary facilities and controls as long as needed for safe and proper completion of the Work. All work shall be in compliance with all applicable safety regulations including VOSHA and OSHA. Temporary barriers and controls shall be in accordance with all applicable state and federal highway regulations.
2. Remove such temporary facilities and controls as rapidly as progress of the Work will permit, or as directed by the Architect.

#### 3.03 PROTECTION

1. Do not disturb or damage original building elements or materials unless scheduled to be demolished. In the event of damage to existing building elements, make all repairs and replacements necessary to the approval of the Owner at no additional cost.

#### 3.04 WASTE REMOVAL

1. Contractor and all subcontractors are required to participate in the waste removal and reduction plan including separation of materials.
2. Remove, recycle and dispose of all material in accordance with all applicable regulations.
3. Provide adequate amounts of dumpsters and containers clearly marked.

#### 3.05 TEMPORARY HEATING

1. Once the building is minimally weathertight - rough framing nearly complete, windows installed or protected, and roofing felt installed - only use methods of heat which do not generate moisture inside the building.
2. Submit plan to Architect in advance of starting temporary heat for approval.
3. Salamanders and similar equipment are not allowed.

END OF SECTION

## SECTION 01640 - PRODUCT HANDLING

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work included: Protect products scheduled for use in the Work by means including, but not necessarily limited to, those described in this Section.
- B. Related work:
  - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

#### 1.02 QUALITY ASSURANCE

- A. Include within the General Contractor's quality assurance program such procedures as are required to assure full protection of work and materials.

#### 1.03 MANUFACTURER'S RECOMMENDATIONS

- A. Except as otherwise approved by the Architect, determine and comply with manufacturer's recommendations on product handling, storage, and protection.

#### 1.04 PACKAGING

- A. Deliver products to the job site in their manufacturer's original container with labels intact and legible.
  - 1. Maintain packaged materials with seals unbroken and labels intact until time of use.
  - 2. Promptly remove damaged material and unsuitable items from the job site, and promptly replace with material meeting the specified requirements, at no additional cost to the Owner.
- B. The Architect may reject as non-complying such materials and products that do not bear identification satisfactory to the Architect as to manufacturer, grade, quality, and other pertinent information.

#### 1.05 PROTECTION

- A. Protect finished surfaces, including jambs and soffits of openings used as passageways, through which equipment and materials are handled.
- B. Provide protection for finished floor surfaces in traffic areas prior to allowing equipment or materials to be moved over such surfaces.
- C. Maintain finished surfaces clean, unmarred, and suitably protected until accepted by the Owner.
- D. Protect all material from damage by moisture, abrasion, and impact.
- E. Materials shall be allowed to acclimate to moisture levels on site before installation. Verify that moisture and temperature levels in both air and actual substrate material meet manufacturer's specifications by means of moisture meters and thermometers. Document readings in daily job logs for future reference.

#### 1.07 REPAIRS AND REPLACEMENTS

- A. In event of damage, promptly make replacements and repairs to the approval of the Architect and at no additional cost to the Owner.
- B. Additional time required to secure replacements and to make repairs will not be considered by the Architect to justify an extension in the Contract Time of Completion.

PART 2 - PRODUCT - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION

## SECTION 01690 - CLEANING

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

1. Work included: Furnish all labor, material and equipment to complete all cleaning work as defined in the Contract Documents and as required to provide a complete and proper installation. Work includes, but is not necessarily limited to, the following:
  1. Daily Cleaning.
  2. Final Cleaning.
2. Related work:
  1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
  2. Refer to requirements under Section 09650, Linoleum Floor Coverings, for special cleaning and sealing requirements, if that work is performed under this Section.

#### 1.02 QUALITY ASSURANCE

1. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and methods needed to complete the work of this Section.
2. Final cleaning must be provided before initial punch list inspection for certification of substantial completion.

### PART 2 - PRODUCTS.

#### 2.01 EQUIPMENT

1. Tools: Mops, brushes, brooms, rags, wipes, scrapers, buckets and any other equipment necessary to accomplish the required level of cleaning.

#### 2.02 CLEANING PRODUCTS

1. Water, soaps, cleansers and as required to accomplish the required level of cleaning and as recommended by the manufacturer of the product being cleaned. Pay special attention to requirements of flooring finishes. Use low VOC products; where possible.

### PART 3 - EXECUTION.

#### 3.01 GENERAL

1. Quality: Provide the level of cleanliness generally provided by skilled cleaners using commercial quality building maintenance equipment and materials in a commercial building and maintenance program. The site and building shall be kept clean throughout the construction period.
2. Regulations: Conduct cleaning and waste removal operations in accordance with all local and Federal rules and environmental regulations.
3. Comply with all finish material manufacturer's written instructions for methods and products used in cleaning.

#### 3.02 DAILY CLEANING

1. Make daily inspection and remove all debris, materials and any other accumulations from building and. Remove all waste material that could be a fire hazard from site.

2. Maintain safe and navigable areas through site and building.
3. Depending on season of construction, provide snow plowing and shoveling as required to maintain access and complete work from start of project until substantial completion.

### 3.03 SITE FINAL CLEANING

1. Clean entire project site, yard and grounds in areas disturbed or affected by construction activities of rubbish, waste or excess materials, stones, litter, cigarette butts and other foreign substances.
2. Sweep and hose down paved areas. Remove spills, stains and other deposits.
3. Remove equipment, construction materials and temporary facilities. If applicable, remove all snow and ice from access routes to building.

END OF SECTION

## SECTION 01700 - CONTRACT CLOSEOUT

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

1. Furnish all labor, material and equipment to complete all contract closeout work and provide an orderly and efficient transfer of the completed Work to the Owner as defined in the Contract Documents and as required to provide a complete and proper installation. Work includes, but is not necessarily limited to, the following:
  1. Contract completion procedures.
  2. All project record documents, drawings and binders.
  3. Operating, warranty and maintenance binders.
  4. Instruction and training of Owner's maintenance personnel.
  5. Other submittals indicated in this section and as required.
  6. Completion of Project Substantial Completion checklist included in Project Manual.
2. Related work:
  1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
  2. Section 01720 Project Record Documents.
  3. Section 01730 Operating, Maintenance and Warranty Data.
  4. Relevant Sections of Divisions 15 & 16.

#### 1.02 QUALITY ASSURANCE

1. Prior to requesting inspection by the Architect, use adequate means to assure that the Work is completed in accordance with the specified requirements and is ready for the requested inspection.
  1. Contractor and all subcontractors will undertake their own inspection, provide a written punchlist and complete the work prior to requesting a Substantial Completion inspection by the Architect and Owner.
  2. If the Architect arrives for a substantial completion review scheduled by the Contractor and determines that the work is not sufficiently complete for review the expense of the Architect's time will be deducted from the contract sum at the rate of \$95/hr for a minimum of one hour including all travel time.
  3. If more than 3 visits are required to complete substantial and final completion, as defined herein, due to misrepresentation or incompleteness by the Contractor the additional Architect's time will be deducted from the contract sum at the rate of \$95/hr for a minimum of one hour including all travel time for each additional visit.
  4. Substantial Completion will not be certified unless all items in this section and the Project Substantial Completion Checklist are accepted by Owner and Architect.

#### 1.03 PROCEDURES

1. The process for review of substantial completion and final completion is limited to a maximum of three (3) site visits, as defined herein. Any visits beyond those defined herein, due to misrepresentation or incompleteness by the General Contractor, shall be paid for by the General Contractor as per the requirements of Item 1.02 above.

### PART 2 - PRODUCTS - Not Used

### PART 3 - EXECUTION

#### 3.01 PRE-SUBSTANTIAL COMPLETION

1. Before requesting a review of substantial completion by the Architect the Contractor will inspect the work, record their own punchlist, and complete the items on that punch list to assure that, excepting minor items, the work is substantially complete. Correct all discrepancies from the contract documents as well as examples of inferior work.

2. All equipment and mechanical and electrical systems must be fully operational prior to substantial completion review.
3. Secure the Certificate of Occupancy from the Authority Having Jurisdiction (AHJ).
4. Provide all substantial completion submittals, as defined in 3.03 below, and originals of all permits. Allow the Architect, Consultants and Owner a minimum of two weeks to review closeout submittals. Make corrections noted in review.
5. Complete Final Cleaning as defined in Section 01690.
6. The Architect can be available after a regular job meeting to review the requirements and conduct an informal walkthrough to answer questions and assist in clarifying the level of substantial completion review, particularly in relation to paint, finish and cleaning work.

### 3.02 SUBSTANTIAL COMPLETION REVIEW

1. When the Owner and Architect agree that the project is approaching Substantial Completion they will schedule a time and visit the site together to conduct a thorough review of the work. Typically, this will be organized by, but not limited to, the following categories: site and building exterior.
2. Work that is missing, incomplete, incorrect, substandard or not meeting the intent of the contract documents will be identified and recorded on handwritten sheets. At the end of the review these sheets can be copied by the contractor for immediate use.
3. It is recognized that the nature and size of the work may require the substantial completion review to be phased over several visits. If necessary, these visits will be organized by category, floor, units, buildings or as deemed appropriate by the Architect. There will be a maximum of three substantial completion reviews conducted by the Architect, organize the phasing of the work to coordinate with these reviews.
4. After the substantial completion review the Architect will organize the punch list items, including that done by consultants into a single document called the Punch List.
5. The Architect will assign values to these items including a total, and submit them to the Owner and Contractor for review. When all are in agreement over the value of the work to be withheld, the Architect will prepare a "Certificate of Substantial Completion" on AIA Form G704, accompanied by the punch list.
6. At substantial completion, retainage may be reduced as per requirements in Section 01000. The requisition at Substantial Completion will include the reduction of retainage and a value of the punchlist.

### 3.03 SUBSTANTIAL COMPLETION SUBMITTALS

1. Project Record Documents (also known as 'as built') showing any variations from the Contract Documents, drawings and specifications including SK's and other documents modifying the scope of the work.
2. Submit the following items as part of the substantial completion process:
  1. Warranties and Bonds.
  2. Emergency Contact List: See Section 01730. List of subcontractors, service organizations and principal vendors including at least two names, addresses and telephone numbers where they can be reached for emergency service 24 HOURS PER DAY.
  3. Evidence of compliance with requirements of governmental agencies having jurisdiction including, but not necessarily limited to: Certificates of Inspection; Certificates of Occupancy.
  4. Other items included in the Project Substantial Completion Checklist provided by Owner.

### 3.04 FINAL COMPLETION

1. Prepare and submit written notice that the work is ready for final inspection, including an itemized list of all items on the punch list that have been completed and carefully note which ones are outstanding.
2. Verify that the work is complete in accordance with the Contract Documents and punch list appended to G704.
3. The Architect will review the status of completion. Should the Architect determine that the Work is incomplete or defective, the Architect will promptly so notify the Contractor, in writing, listing the incomplete or defective work. The Contractor shall remedy the deficiencies promptly, and notify the Architect when ready for reinspection.
4. Complete all submittals.
5. Re-clean any areas affected by punch list work.
6. When the Architect determines that the work is acceptable under the Contract Documents, a certificate of final completion will be executed and the remaining retainage released. A maximum of two final completion inspections are included.

#### 3.05 FINAL COMPLETION SUBMITTALS

1. Evidence of payment and final release of liens of all subcontracts and major material suppliers.
2. Final written acceptance by Owner of all Substantial Completion submittals.
3. Submit a final statement to the Architect showing all adjustments to the Contract Sum.

END OF SECTION

## SECTION 01720 - PROJECT RECORD DOCUMENTS

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

1. Work included:
  1. Throughout progress of the Work, the General Contractor shall maintain an accurate record of changes in the Contract Documents, as described in Article 3.1 below.
  2. Upon completion of the Work, transfer the recorded changes to a set of Record Documents, as described in Article 3.2 below.
  3. Substantial Completion will not be certified before the Record Documents are accepted by the Owner.
2. Related work:
  1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
  2. Section 01700 Contract Closeout.

#### 1.02 QUALITY ASSURANCE

1. Accuracy of records:
  1. Thoroughly coordinate changes within the Record Documents, making adequate and proper entries on each page of Specifications and each sheet of Drawings and other Documents where such entry is required to show the change properly.
  2. Accuracy of records shall be such that future search for items shown in the Contract Documents may rely reasonably on information obtained from the approved Project Record Documents.
2. Make entries within 24 hours after receipt of information that the change has occurred.

#### 1.03 SUBMITTALS

1. The Architect's approval of the current status of Project Record Documents may be a prerequisite to approval of requests for progress payment and request for final payment under the Contract.
2. Prior to submitting request for final payment, submit the final Project Record Documents to the Architect and secure his approval. Final payment will not be made until the Architect and the Owner have received and approved the Record Drawings and O & M manuals.

#### 1.04 PRODUCT HANDLING

1. Maintain the job set of Record Documents completely protected from deterioration and from loss and damage until completion of the Work and transfer of all recorded data to the final Project Record Documents.
2. In the event of loss of recorded data, use means necessary to again secure the data to the Architect's approval.
  1. Such means shall include, if necessary in the opinion of the Architect, removal and replacement of concealing materials.
  2. In such case, provide replacements to the standards originally required by the Contract Documents.

### PART 2 - PRODUCT

#### 2.01 DEFINITION/DOCUMENTS TO BE INCLUDED

1. The Project Record Documents (PRD) are comprised of the original Contract Documents with clear indication of all changes that have occurred through the course of construction as a result of job conditions, changes to the contract, or clarifications issued by the Architect and consultants.
2. Full size reproductions of contract drawings indicating as built conditions.

3. SK's or other materials which modify original contract documents.
4. Copies of all permits and trade sign offs.
5. Reduction of all drawings to fit in binder.
6. Testing results.

## 2.02 RECORD DOCUMENTS

1. JOB SET: Promptly following receipt of the Owner's Notice to Proceed, secure from the Architect at no charge to the General Contractor one complete set of all Documents comprising the Contract. Maintain this set of drawings and specifications in the job trailer and record all changes on a daily basis, including those of all subcontractors. Review progress with Architect on a regular basis and at completion of typical job phases.
2. FINAL SET: At a time nearing completion of the work, secure one complete set of all Drawings in the Contract, from the Architect, at no cost to the General Contractor. Carefully and crisply transcribe all the information from the job set to the final, clean set. Include all additional graphic material issued by the Architect or consultants.
  1. Provide 2 sets of the Project Record Documents, in addition to any required by the Contractor, for:
    - a) City of Burlington, DPW (1).
    - b) City of Burlington, Memorial Auditorium (1).

## 2.03 FORMATTING

1. MANUAL
  1. Size: 8-1/2" X 11" and 11" x 17" folded as required.
  2. Paper: White bond, at least 20 lb. weight.
  3. Text: Neatly written or printed.
  4. Drawings: 11" in height preferable; bind in with text.
  5. Fly Sheets/Tabs: Separate each portion of the Manual with neatly prepared fly sheets or tabs briefly describing contents of the ensuing portion; fly sheets may be in color.
  6. Binding: 3-ring 'D' type binders with clear plastic pockets to insert titles.
  7. Measurements: Provide all measurements in U.S. standard units.
  8. Provide front, back and side covers for each Manual clearly identifying the project, name of Contractor, general subject and space for acceptance signature of the Architect.
2. DRAWINGS
  1. White xerographic bond copies, bound at left, 24" x 36".
  2. Reduction set at 11 x 17 bound into binder, folded by discipline.

## PART 3 - EXECUTION

### 3.01 MAINTENANCE OF JOB SET

1. Immediately upon receipt of the job set described in Paragraph 2.1-A above, identify each set of the Documents with the title, "RECORD DOCUMENTS - JOB SET".
2. Making entries on Drawings:
  1. Using an erasable colored pencil (not ink or indelible pencil), clearly describe the change by graphic line and notes as required.
  2. Date all entries.
  3. Maintain copies of all other modifications to the Contract Documents including approved submittals and sketches issued by the Architect and his consultants.

### 3.02 FINAL PROJECT RECORD DOCUMENTS

1. The purpose of the final Project Record Documents is to provide factual information regarding all aspects of the Work, both concealed and visible, to enable future modification of the Work to proceed without lengthy and expensive site measurement, investigation, and examination.
2. Review and submittal:
  1. Submit the completed set of project Record Documents to the Architect as described in Paragraph 1.3-B above.
  2. Make required changes and promptly deliver the final Project Record Documents to the Architect.
  3. Approved documents must be delivered to all Owner representatives at least one week in advance of all instructional meetings under Section 01700.
3. Clearly mark all changes on all copies in a manner which makes it clear where modifications to the original contract documents have been made. Use color, clouding or other methods acceptable to the Architect.

END OF SECTION

## SECTION 01730 - OPERATING, MAINTENANCE AND WARRANTY DATA

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

1. Work included: To aid the continued instruction of operating and maintenance personnel, and to provide a positive source of information regarding the products incorporated into the Work, furnish and deliver the data described in this Section and in other pertinent Sections of these Specifications.
  1. Substantial Completion will not be certified before the Operating, Maintenance and Warranty (OMW) documents are accepted by the Owner.
2. Related work:
  1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
  2. SECTION 01700 Contract Closeout.

#### 1.02 QUALITY ASSURANCE

In preparing data required by this Section, use only personnel who are thoroughly trained and experienced in operation and maintenance of the described items and completely familiar with the requirements of the Section.

#### 1.03 SUBMITTALS

1. Comply with pertinent provisions of Section 01340.
2. Unless otherwise directed in other Sections, or in writing by the Architect, submit three (3) copies of the final Manual to the Architect prior to instruction of operation and maintenance personnel. Final payment will not be made until the Architect and the Owner have received and approved the Record Drawings and O & M manuals.

### PART 2 - PRODUCTS

#### 2.01 DEFINITION/DOCUMENTS TO BE INCLUDED

1. The Operation, Maintenance and Warranty Data (O&M) are comprised of detailed information about all building components and systems.
2. Critical shop drawings and submittals of building materials and systems that the Owner may need to refer to to match, replace or order additional in the future.
3. All information required to operate and maintain the components and systems.
4. All warranty information.
5. Emergency contact list.
6. Reduced record drawings.
7. Provide one separate, bound set of all approved submittals to the Department of Public Works, City of Burlington.

#### 2.02 MANUALS

Where Operation, Maintenance, and Warranty Manuals are required to be submitted under other Sections of these Specifications, prepare in accordance with the provisions of the Section.

1. Format:
  1. Size: 8-1/2" X 11".
  2. Paper: White bond, at least 20 lb. weight.

3. Text: Neatly written or printed.
  4. Drawings: 11" in height preferable; bind in with text.
  5. Flysheets: Separate each portion of the Manual with neatly prepared flysheets briefly describing contents of the ensuing portion; flysheets may be in color.
  6. Binding: 3-ring binders will be acceptable; all binding is subject to the Architect's approval.
  7. Measurements: Provide all measurements in U.S. standard units.
2. Provide front and back covers for each Manual clearly identifying the project, name of Contractor, general subject and space for acceptance signature of the Architect.
  3. Contents: Include at least the following:
    1. Neatly machine printed index, according to CSI Divisions, at the front of the Manual, giving immediate information as to location within the Manual of all emergency information regarding the installation.
    2. List names, addresses and phone numbers of the General Contractor and all major subcontractors. Include emergency phone numbers for elevator, sprinkler, mechanical, controls, electrical and fire alarm representatives.
    3. Provide information for all materials that the Owner may need to replace or order additional amounts of including site related pumps and motors; exterior siding, trim and cladding assemblies; roofing and accessories; doors, hardware and windows; flooring and finishes; specialties and equipment.
    4. Complete instructions regarding operation and maintenance of all equipment including cleaning, lubrication, disassembly, and reassembly. For boiler and other HVAC equipment provide a standard replacement part list including order numbers and vendor contact.
    5. Complete nomenclature and part number of all replaceable parts (HVAC and electrical), name and address of nearest vendor, and all other data pertinent to procurement procedures.
    6. Recommended spare parts list for all boilers and lamping schedule for lighting fixtures.
    7. Copy of all guarantees and warranties issued.
    8. Manufacturer's bulletins, cuts, and descriptive data, where pertinent, clearly indicating the precise items included in this installation and deleting, or otherwise clearly indicating, all manufacturers' data with which this installation is not concerned.
    9. Include and bind copies of all shop drawings and submittals that are of a size so as to fit in the format. Shop drawings that are full size sheets shall be assembled and included in the "Record Documents" set.
    10. Organize the data as per CSI divisions, separated by tabs with similar information grouped together.
    11. Include a copy, supplied by Architect, of the exterior and interior color and material summary.
    12. Such other data as required in pertinent Sections of these Specifications.

## PART 3 - EXECUTION

### 3.01 MANUALS

Revise manuals as required after submission and review with Owner's personnel.

END OF SECTION

## SECTION 04110 - MASONRY MORTAR

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work included: Furnish all labor, materials, tools, equipment, and services for all masonry mortar as shown on the drawings, specified herein and as required for a complete and proper installation.
- B. Related work: Documents affecting work of the Section include but are not necessarily limited to, General and Supplementary Conditions, and Sections of Division I of these specifications.
  - 1. Section 04210 - Concrete Masonry
  - 2. Section 04510 - Masonry Cleaning

#### 1.02 QUALITY ASSURANCE

- A. Materials standards: ASTM Standards indicated.
- B. Mortar standards and testing: Brick Institute of America (BIA).

#### 1.03 SUBMITTALS - Comply with Section 01340 and the following:

- A. Product Data: Prepare mix reports for each type of mortar proposed to be used. Include description of contents and proportions, and results of tests specified in paragraph "Quality Assurance".

#### 1.04 PRODUCT DELIVERY, STORAGE AND HANDLING - Comply with Section 01640 and the following:

- A. Immediately upon delivery to job site, place materials in area protected from weather.
- B. Store materials a minimum of 6" above ground on framework or blocking and cover with a protective waterproof covering providing adequate air circulation and ventilation.

### PART 2 - PRODUCTS

#### 2.01 MATERIALS

- A. Portland Cement: ASTM C150, Type II. (except Type III may be used for cold weather protection with the Architect's approval).
  - 1. No air entrainment.
  - 2. Maximum percent of alkalis: 0.60 in accord with Table 1A.
  - 3. Color: Light gray.
- B. Hydrated lime: ASTM C207, Type S.
- C. Prepared Masonry Cement: ASTM C91, Type S.
- D. Mortar aggregate: Washed sand, ASTM C144.
- E. Colored Mortar Pigment: Untinted light gray mortar shall be used for all concrete masonry work.
- F. Grout: ASTM C476.
- G. Water: Potable.

#### 2.02 MIXES

- A. General:
  - 1. Mortar shall be machine-mixed in an approved type of mixer in which the quantity of water can be accurately and uniformly controlled. Where hydrated limes are used, use the dry mix method. Where the dry mix method is employed, the materials for each batch shall be well raked and turned over

together before the water is added until the even color of the mixed materials indicates that the cementitious materials have been thoroughly distributed throughout the mass, after which the water shall be gradually added until a thoroughly mixed mortar of the required plasticity is obtained. The same mortar mixture shall be used throughout.

2. The method of measuring materials shall be such that the specified proportions of the materials can be controlled and accurately maintained. Shovel measurement shall not be allowed.
  3. All cementitious materials and aggregate shall be mixed for at least three (3) minutes in a mechanical batch mixer with the maximum amount of water to produce a workable consistency. Hand mixing shall not be used unless approved.
  4. Adjust consistency to satisfaction of the mason.
  5. Do not use anti-freeze additives.
- B. Concrete masonry: Mortar shall be Type S, meeting a minimum compressive strength of 2000 psi after 28 days. Either a prepared masonry cement or a cement-lime mix, prepared in accordance with ASTM C270, may be used.

### PART 3 - EXECUTION

#### 3.01 INSTALLATION

- A. Comply with requirements specified for materials being laid or being repointed.
- B. Mortar which has begun to set or is not used within 2 1/2 hours after initial mixing shall be discarded. Mortar which has stiffened due to evaporation within the 2 1/2 hour period shall be retempered to restore its workability. Retempering mortar which has partially hardened, without additional cement aggregate or water, will not be permitted.
- C. Do not use mortar after it has begun to set.
- D. Whenever any concrete or mortar is hoisted up the sides of walls or transported across floor slabs, the surface of same shall be protected and covered with a waterproof canvas tarpaulin or reinforced paper.

END OF SECTION

## SECTION 04210 - CONCRETE MASONRY UNITS

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work included:
  - 1. Furnish all labor, materials, tools, equipment and services for concrete masonry unit work, including creating new openings in existing CMU wall and new CMU walls, as indicated on the drawings, specified herein, and as needed for a complete and proper installation in accordance with the provisions of the Contract Documents.
  - 2. Completely coordinate with work of all other trades.
  - 3. Although such work may not be specifically indicated, furnish and install all supplementary or miscellaneous appurtenances and devices incidental to or necessary for a sound, secure and complete installation.
  
- B. Related work: Documents affecting the work of this Section include but are not necessarily limited to, General and Supplementary Conditions, and Sections of Division I of these specifications.
  - 1. Section 04110 - Masonry Mortar
  - 2. Loose lintels shall be furnished and installed under this Section.

#### 1.02 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and methods needed to complete the work of this Section. Concrete masonry construction shall comply with the applicable sections of the National Concrete Masonry Association, Portland Cement Association and American Concrete Institute Codes.
  
- B. Tolerances:
  - 1. Maximum variation from plumb in vertical lines and surfaces of columns, walls and arrises:
    - a) 1/4 in. (6.4 mm) in 10 ft. (3 m).
  - 2. Maximum variation from level of grades for exposed lintels, sills, parapets, horizontal grooves and other conspicuous lines:
    - a) 1/4 in. (6.4 mm) in 20 ft. (6 m).
  - 3. Maximum variation from plan location of related portions of columns, walls and partitions:
    - a) 1/2 in. (12.7 mm) in 20 ft. (6 m).
  - 4. Maximum variation in cross-sectional dimensions of columns and thicknesses of walls from dimensions shown on drawings:
    - a) Minus 1/4 in. (6.4 mm).
    - b) Plus 1/2 in. (12.7 mm).

#### 1.03 SUBMITTALS

- A. Comply with Section 01340.

#### 1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver units on pallets, tightly bound.
  
- B. Protect all materials from the weather.

#### 1.05 CUTTING AND PATCHING

- A. Be responsible for all cutting, fitting and patching that may be required to complete the Work, make its parts fit together properly, repair existing conditions, or modify existing conditions to accept new work.
  
- B. Examine all conditions before proceeding, maintain safe conditions and structural integrity; inform Architect of any discrepancies in the Contract Documents and remedy all defects before proceeding.

## PART 2 - PRODUCTS

### 2.01 MASONRY MATERIALS

#### A. CONCRETE MASONRY:

1. Concrete masonry units shall be hollow load-bearing modular units, in standard 4" x 8" x 16", 8" x 8" x 16" and 12"x8"x16" sizes, with special sizes and types (bond beams, etc.) as required, meeting ASTM C90, Grade N, Type I, two cells with minimum solids content to comply with UL listing. Aggregate shall comply with ASTM C33.
  - a) Sizes and shapes shall be as indicated or required for conditions.
  - b) Provide concrete bricks of same materials, texture and quality.
  - c) Do not use chipped, cracked, spalled or imperfect units exposed in finish work.
  - d) Pattern: Running bond.

### 2.02 MASONRY ACCESSORIES

#### A. Horizontal joint reinforcing (Dur-O-Wall, AA Wire Products Co, or approved equivalent):

1. Cold drawn steel wire, ASTM A82. Deformed steel wire, ASTM A496.
2. No. 9 ga. side and cross rods.
3. Truss or Ladur type design.
4. Prefabricated corner and tee sections: minimum length of 32 in. (81.28 cm) from point of intersection.
5. For use in single wythe walls: Two wire, AA Wire Products Co., AA600.
6. Wire shall be standard mill galvanized for interior walls.

#### B. Control joints shall be manufactured from styrene butadiene rubber, designed to maintain lateral stability in wall.

### 2.03 MASONRY MORTAR

#### A. Mortar and grout: See Section 04110.

### 2.04 STEEL LINTELS

#### A. Refer to details on drawings for type, size and minimum length requirements for steel lintels.

## PART 3 - EXECUTION

### 3.01 INSPECTION

- A. Verify suitability of substrate to accept work.
- B. Verify that anchors and flashings are correct.

### 3.02 CUTTING NEW OPENINGS

- A. Cut out existing CMU's where shown on the drawings to accommodate new door openings, new fixture locations, shower valves, etc. Care must be taken to not destroy edges of units scheduled to remain.
- B. Because all existing masonry is stack bonded, saws may be used to cut all edges of openings. Fine work to remove mortar from remaining CMUs shall be performed with hammer and chisel.

### 3.03 INSTALLATION - GENERAL

- A. Installation constitutes acceptance of substrate and responsibility for performance.
- B. Build walls to thicknesses indicated.
- C. Saw cut as required to provide pattern indicated and as required to accommodate electrical devices, conduit, and mechanical piping.

- D. Install in running bond. Do not use less than half size units.
- E. Do not use chipped, cracked, spalled or imperfect units exposed in finish work.
- F. Do not wet concrete masonry units.
- G. Build single-wythe concrete masonry walls to actual thickness of masonry units.

#### 3.04 LAYING AND TOOLING

- A. Lay out walls in advance for uniform and accurate spacing of bond patterns and joints. Properly locate openings, movement type joints, returns and offsets. CMU's shall be laid in a stacked bond to match existing work. Exterior corners of concrete masonry shall be fully bonded at time of installation; "toothing" of exterior corners shall not be permitted. All concrete masonry corners and intersections shall be fully bonded together; butt joint intersections will not be permitted.
- B. Lay masonry units with completely filled bed and head joints.
  - 1. Butter ends with sufficient mortar to fill head joints and shove into place.
  - 2. Do not slush head joints.
- C. Maintain nominal 3/8 in (9 mm) joint widths.
  - 1. Cut joints where concealed.
  - 2. Tool exposed joints with concave joints.
- D. During tooling of joints, enlarge any voids or holes, except weep holes, and completely fill with mortar.
- E. Point-up all joints at corners, openings and adjacent work to provide neat, uniform appearance. Remove any masonry units disturbed after laying.
- F. Where work is stopped and later resumed, rack back 1/2 unit length in each course.
  - 1. Remove loose units and mortar prior to laying fresh masonry.
- G. As work progresses, build-in items indicated and specified.
  - 1. Fill in solidly with mortar around built-in items.
  - 2. Grout fill space between metal frames and masonry.

#### 3.05 REINFORCING

- A. Coordinate continuous joint reinforcement with concrete masonry units to provide required reinforcement.
  - 1. Embed longitudinal side rods in mortar for entire length with minimum cover of 5/8 in. (16 mm) on exterior side[ of walls and 1/2 in. (13 mm) at other locations.
  - 2. Lap reinforcement minimum of 6 in. (150 mm) at ends. Do not bridge control and expansion joints with reinforcing except at wall openings.
  - 3. Make corners and wall intersections by use of prefabricated "L" and "T" sections.
  - 4. Cut and bend units as required.
  - 5. Install reinforcing at 16" (400 mm) on center vertically.
  - 6. Install reinforcing at 8" (200 mm) on center at starter courses and over openings.
  - 7. Use continuous reinforcing for bond tie between wythes.
- B. Reinforce masonry openings over 12" (300 mm) wide with horizontal joint reinforcing placed in two bed joints above lintel and below sill.
  - 1. Extend reinforcing minimum of 24" (600 mm) beyond jambs of opening.
  - 2. Bridge control joints where required.
- C. Construct bond beam headers and courses as required on the drawings.

#### 3.06 GROUTING

- A. Slush solid all new metal door frames.

### 3.07 CONTROL JOINTS AND SEALANTS

- A. Provide vertical expansion, control and isolation joints where indicated on the drawings.
  - 1. Where not indicated, provide at maximum 30' (9.2 m) on center; coordinate location with Architect in field.
  - 2. Rake all mortar out of joint.
  - 3. Locate control joints at points of natural weakness in masonry.
- B. Seal joints between brick and relieving lintels; seal expansion and control joints.

### 3.08 REPAIR, POINTING AND CLEANING

- A. Remove and replace loose, stained, damaged or improperly laid units.
  - 1. Provide new units to match.
  - 2. Install in fresh mortar.
  - 3. Point to eliminate evidence of replacement.
- B. Clean concrete masonry exposed to view by rubbing all units with flat pieces of concrete masonry to remove all blemishes and mortar drippings. Thoroughly clean all inside corners of concrete masonry with square and flat pieces of concrete masonry to remove all blemishes and mortar drippings.

END OF SECTION

## SECTION 06200 - FINISH CARPENTRY

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work included: Install miscellaneous trim; metal door frames; doors; toilet and bathroom accessories; toilet partitions; etc., where shown on the drawings, as specified herein, and as needed for a complete and proper installation.
- B. Related work: Documents affecting work of this Section include, but are not necessarily limited to, General and Supplementary Conditions, and Sections of Division I of these specifications.
  - 1. Section 08100 - Metal Doors and Frames
  - 2. Section 10216 - Toilet Room Partitions
  - 3. Section 10800 - Toilet Accessories

#### 1.02 QUALITY ASSURANCE

- A. Use adequate numbers of skilled carpenters who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and methods needed to complete the work of this Section.

#### 1.03 SUBMITTALS - Comply with the provisions of Section 01340.

#### 1.04 CUTTING AND PATCHING

- A. Be responsible for all cutting, fitting and patching that may be required to complete the Work, make its parts fit together properly, repair existing conditions, or modify existing conditions to accept new work.
- B. Examine all conditions before proceeding, maintain safe conditions and structural integrity; inform Architect of any discrepancies in the Contract Documents and remedy all defects before proceeding.

### PART 2 - PRODUCTS

#### 2.01 MATERIALS - Provide materials in the quantities needed for the work shown on the drawings and meeting or exceeding the following standards for quality:

- A. LAVATORY FRAMING
  - 1. Support new solid surface countertop on hardwood cleats fastened to CMU's on three sides.
  - 2. Intermediate support brackets shall be the EH series, as manufactured by Rakks/Rangine Corporation, 330 Reservoir St., Needham, MA 02494, or approved equivalent in accordance with General Conditions, Item 8.
    - a. Material: 6063-T6 extruded aluminum
    - b. Construction: TIG welded along both 45° mitered sides and across the back. All sharp edges ground and deburred.
    - c. Hardware: 5/16" holes accept 1/4" screws.
    - d. Finish: off-white powder coat.
    - e. Model: EH-1818

#### 2.02 OTHER PRODUCTS

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

## PART 3 - EXECUTION

### 3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which this work will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions have been corrected.

### 3.02 QUALITY OF THE WORK

- A. Jointing:
  - 1. Produce joints which are true, tight and well nailed with all members assembled in accordance with the Drawings.
  - 2. Make joints to conceal shrinkage; miter exterior joints; cope interior joints; miter or scarf end-to-end joints.
  - 3. Install trim in pieces as long as possible, jointing only where solid support is obtained.
- B. Fastening:
  - 1. Install items straight, true, level, plumb, square and firmly anchored in place.
  - 2. Where blocking is required, coordinate with other trades to ensure proper placement of same in a timely manner.
  - 3. Nail trim with finish nails of proper size to hold the member firmly without splitting the wood. On exposed work, set nails for putty.

### 3.03 INSTALLATION OF OTHER ITEMS

- A. Install items specified under other Sections in strict accordance with the drawings and the recommended methods of the applicable manufacturer, anchoring all items firmly into position at the prescribed location, straight, level, plumb, square and level. Such items include metal door frames; hanging of doors; finish hardware; toilet room partitions; toilet accessories; baby changing stations; and other items which may be reasonably inferred as a part of finish carpentry.

END OF SECTION

## SECTION 06650 - SOLID SURFACE FABRICATIONS

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work included: Provide solid polymer fabrications where shown on the drawings, as specified herein, and as needed for a complete and proper installation.
  - 1. Lavatory tops with undermount bowls and cove backsplashes.
- B. Related work: Documents affecting work of this Section include, but are not necessarily limited to, General and Supplementary Conditions, and Sections of Division I of these specifications.
  - 1. Section 06200 - Finish Carpentry for shelf supports
  - 2. Section 09300 - Ceramic Tile
  - 3. Section 15400 - Plumbing Fixtures

#### 1.02 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.

#### 1.03 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. Applicable standards:
  - 1. American National Standards Institute (ANSI)
  - 2. American Society for Testing and Materials (ASTM)
  - 3. NSF International
  - 4. 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. Allowable tolerances:
  - 1. Variation in component size:  $\pm 1/8$ ".
  - 2. Location of openings:  $\pm 1/8$ " from indicated location.

#### 1.04 SUBMITTALS - In addition to the provisions of Section 01340, comply with the following:

- A. Samples:
  - 1. Submit minimum 6"X6" samples, showing full range of color and pattern variation.
  - 2. Cut sample and seam together for representation of inconspicuous seam.
- B. Product data: Indicate product description, fabrication information and compliance with specified performance characteristics, including chemical-resistance.
  - 1. Fabricator/installer qualifications: provide copy of certification number.
  - 2. Manufacturer certificates: signed by manufacturers certifying that they comply with requirements.
- C. Maintenance data: Submit manufacturer's care and maintenance data, including repair and cleaning instructions. Include in project close-out documents.
- D. Shop drawings:
  - 1. Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices and other components.

2. Show full-size details, edge details, thermoforming requirements, attachments, etc.
3. Show locations and sizes of furring, blocking, including concealed blocking and reinforcement specified in other Sections.
4. Show locations and sizes of cutouts and holes for plumbing fixtures, faucets, soap dispensers, waste receptacle and other items installed in solid surface.

1.05 PRODUCT HANDLING - Comply with Section 01640, and the following:

- A. Do not deliver 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.

1.06 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.

1.07 MAINTENANCE

- A. Provide maintenance requirements as specified by the manufacturer.

PART 2 - PRODUCTS

2.01 MANUFACTURER

- A. Product: "Corian" as manufactured by The DuPont Company, or approved equivalent in accordance with General Conditions, Item 8. Provide 22" deep X length required, with three (3) undermount bowls, factory installed, including integral cove backsplash. Refer to drawings for plan and details.

2.02 MATERIALS

- A. Solid polymer components:
  1. Cast, nonporous, filled polymer, not coated, laminated or of composite construction with through body colors meeting ANSI Z124.3 or ANSI Z124.6, having minimum physical and performance properties specified.
  2. Superficial damage to a depth of 0.010 inch (.25 mm) shall be repairable by sanding and/or polishing.
- B. Thickness:
  1. Thickness: 1/2 inch.
  2. Color: selected by Owner from manufacturer's standard colors.
- C. Edge treatment:
  1. Build up edge to creat 1-1/2" thick finished appearance, depth of thickened edge minimum 3" deep.
- D. Integral sink:
  1. Model #: 810.
  2. Color: white.
  3. Mounting: Seamed undermount.
- E. Backsplash:
  1. Coved.
- F. Sidesplash:
  1. Field applied.

G. Performance characteristics:

Property	Typical Result	Test
Tensile Strength	6,000 psi	ASTM D 638
Tensile Modulus	1.5 x 10 <sup>-6</sup> psi	ASTM D 638
Tensile Elongation	0.4% min.	ASTM D 638
Flexural Strength	10,000 psi	ASTM D 790
Flexural Modulus	1.2 x 10 <sup>-6</sup> psi	ASTM D 790
Hardness	>85	Rockwell "M" Scale
ASTM D 785	56	Barcol Impressor
ASTM D 2583		
Thermal Expansion (1.80 x 10 <sup>-5</sup> in./in./°F)	3.02 x 10 <sup>-5</sup> in./in./°C	ASTM D 696
Gloss (60° Gardner)	5–75 (matte—highly polished)	ANSI Z124
Light Resistance Method 3.3	(Xenon Arc) No effect	NEMA LD 3-2000
Wear and Cleanability	Passes	ANSI Z124.3 & Z124.6
Stain Resistance: Sheets	Passes	ANSI Z124.3 & Z124.6
Fungus and Bacteria Resistance	Does not support microbial growth	ASTM G21&G22
Boiling Water Resistance	No visible change	NEMA LD 3-2000 Method 3.5
High Temperature Resistance	No change	NEMA LD 3-2000 Method 3.6
Izod Impact (Notched Specimen)	0.28 ft.-lbs./in. of notch	ASTM D 256 (Method A)
Ball Impact Resistance: Sheets	No fracture—1/2 lb. ball: 1/4" slab—36" drop 1/2" slab—144" drop	NEMA LD 3-2000 Method 3.8
Weatherability	ΔE* <sub>94</sub> <5 in 1,000 hrs.	ASTM G 155
Specific Gravity †	1.7	
Water Absorption	Long-term 0.4% (3/4") 0.6% (1/2") 0.8% (1/4")	ASTM D570
Flammability	All colors	ASTM E 84, NFPA 255 & UL 723
Flame Spread Index	<25	
Smoke Developed Index	<25	

2.03 LOCATIONS

- A. Lavatory tops with undermount bowls shall be installed in Women’s toilet room.

2.04 ACCESSORY PRODUCTS

- A. Joint adhesive: Use manufacturer’s standard two-part adhesive kit to create inconspicuous, non-porous joints, with a chemical bond.
- B. Sealant:
  1. Manufacturer’s standard mildew-resistant, FDA-compliant, UL-listed silicone sealant in colors matching components.
- C. Sink/lavatory mounting hardware:
  1. Manufacturer’s standard bowl clips, panel inserts and fasteners for attachment of undermount sinks/lavatories.

2.05 FABRICATION

- A. Shop assembly:

1. Fabricate components to greatest extent practical to sizes and shapes indicated, in accordance with approved shop drawings and manufacturer's printed instructions and technical bulletins.
2. Form joints between components using manufacturer's standard joint adhesive without conspicuous joints.
  - a. Reinforce with strip of solid polymer material, 2" wide.
3. Provide factory cutouts for plumbing fittings and bath accessories as indicated on the drawings.
4. Rout and finish component edges with clean, sharp returns.
  - a. Rout cutouts, radii and contours to template.
  - b. Smooth edges.
  - c. Repair or reject defective and inaccurate work.

## 2.06 FINISHES

- A. Owner will select from the manufacturer's standard color chart.
- B. Finish:
  1. Provide surfaces with a uniform finish.
    - a. Matte; gloss range of 5–20.

## PART 3 - EXECUTION

### 3.01 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.

### 3.02 INSTALLATION

- A. Install components plumb, level and rigid, scribed to adjacent finishes, in accordance with approved shop drawings and product data. Keep components and hands clean during installation.
  1. Provide product in the largest pieces available.
  2. Field joints shall not be allowed.
  3. Cut and finish component edges with clean, sharp returns.
  4. Rout radii and contours to template.
  5. Anchor securely to supports.
  6. Align adjacent countertops and form seams to comply with manufacturer's written recommendations using adhesive in color to match countertop.
  7. Carefully dress joints smooth, remove surface scratches and clean entire surface.
  8. Install countertops with no more than 1/8-inch (3 mm) sag, bow or other variation from a straight line.
- B. Coved backsplashes and applied sidesplashes:
  1. Install applied sidesplashes using manufacturer's standard color-matched silicone sealant.
  2. Fabricate radius cove at intersection of counters with backsplashes to fit snugly.
  3. Adhere applied sidesplashes to countertops using manufacturer's standard color-matched silicone sealant.
- C. Integral sinks;
  1. Provide solid surface materials bowls and/or lavatories sinks with overflows in locations shown on the drawings.
  2. Secure sinks and lavatory bowls to tops using manufacturer's recommended sealant, adhesive and mounting hardware to maintain warranty.

### 3.03 CLEAN-UP & PROTECTION

- A. Keep components and hands clean during installation. Remove adhesives, sealants and other stains. Components shall be clean on Date of Substantial Completion.
- B. Repair or replace damaged work that cannot be repaired to architect's satisfaction.

### 3.04 SCHEDULE

- A. Womens Restroom

1. Surfaces of material adhesively joined with inconspicuous seams.
2. Countertop thickness: 1/2" on appropriate substrate.
3. Edge detail: built-up to 1-1/2".
4. Backplash: integral to countertop with cove.
5. Sidesplashes: provided at both ends.

END OF SECTION

## SECTION 08100 - METAL DOORS AND FRAMES

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work included: Provide steel door frames and flush metal doors where shown on the drawings, as specified herein, and as required for a complete and proper installation. Metal frames shall be installed under Section 04210 and metal doors shall be installed under Section 06200.
- B. Related work: Documents affecting work of this Section include, but are not necessarily limited to, General and Supplementary Conditions, and Sections of Division I of these specifications.
  - 1. Section 01100 - Alternates & Unit Pricing
  - 2. Section 04210 - Concrete Masonry
  - 3. Section 06200 - Finish Carpentry
  - 4. Section 08710 - Finish Hardware
  - 5. Section 09900 - Painting and Finishing

#### 1.02 SUBMITTALS - Comply with Section 01340 and the following:

- A. Shop drawings: Submit for review of fabrication and installation of steel doors and frames. Include details of each frame type, elevations of door design types, conditions at openings, details of construction, location and installation requirements of finish hardware and reinforcements, and details of joints and connections. Show anchorage and accessory items required for installation. Submit manufacturer's technical product data substantiating that products comply with requirements.
  - 1. Provide schedule of doors and frames using same reference numbers for details and openings as used in contract drawings.
  - 2. Coordinate glazing frames and stops with glass and glazing requirements.

#### 1.03 PRODUCT HANDLING

- A. Comply with Section 01640 and the following:
  - 1. Protect products from moisture, construction traffic, and damage; store under cover.
  - 2. Place units on 4-inch (101 mm) high wood sills to prevent rust or damage.
  - 3. Do not use non-vented plastic or canvas shelters; should wrappers become wet, remove immediately.

#### 1.04 REFERENCES - Products supplied in this Section shall comply with the following standards:

- A. ANSI/SDI Standard #100 "Recommended Specifications for Standard Steel Doors and Frames".
- B. NFPA #80: "Fire Doors and Fire Windows"; SDI: All publication standards; DHI: All publication standards.
- C. ASTM Standards:
  - 1. ASTM E152, "Standard Methods of Fire Tests for Door Assemblies".
  - 2. ASTM A366, "Specifications for Steel, Carbon, Cold Rolled Sheet, Commercial Quality".
  - 3. ASTM A568, "Specifications for Steel, Carbon and High Strength Low Alloy Hot Rolled Strip, and Cold Rolled Sheet, Commercial Quality".
  - 4. ASTM A525, "Specifications for Steel Sheet, Zinc Coated (galvanized) by the Hot Dip Process, General Requirements".
  - 5. ASTM A526, "Specifications for Steel Sheet, Zinc Coated (galvanized) by the Hot Dip Process, Commercial Quality".
  - 6. NFPA 80 - Standard for Fire Doors and Windows.

#### 1.05 WARRANTY

- A. Metal doors shall be warranted for the life of the installation (against warpage).

#### 1.06 FIRE-RATED ASSEMBLIES

- A. Provide UL or FM label rated openings where indicated, with labeled doors having appropriate labeled frames of the type required for the wall material, to accommodate the hardware specified and to meet code requirements. Submit manufacturer's certification that each door and frame assembly has been constructed to conform to design, materials and construction equivalent to the requirements for labeled assemblies, products or units tested in accordance with ASTM E152.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS

- A. Metal doors and standard 2" door frames and borrowed light frames shall be manufactured by Steelcraft Company, Curries Company, or approved equivalent in accordance with General Conditions, Item 8. Throat depths for door and borrowed light frames shall be determined by the supplier, based upon the various wall thicknesses as shown on the drawings.

### 2.02 STEEL REQUIREMENTS

- A. All doors and frames shall be manufactured from commercial quality stretcher leveled flatness, cold rolled steel per ASTM A366 and A568 or galvanized steel sheet per ASTM A525 or A526 hot dipped galvanized to A60 minimum coating weight. Internal reinforcing may be manufactured of hot rolled pickled and oiled steel per ASTM A569.

### 2.03 METAL FRAMES (Refer to Section 01100 for fiberglass frames alternate).

- A. GENERAL - Comply with ANSI/SDI 100.
- B. STANDARD 2" FRAMES - Provide steel frames for doors, transoms, sidelights, borrowed lights, and other openings of types and styles as shown on the drawings and schedules. Frame surfaces shall be free from wave, buckle or other defects; exposed welds shall be dressed smooth and flush. All frames shall be phosphatized and finished as standard with one coat of baked- on prime paint. Frames shall comply with ANSI/SDI 119-1983, Level A, one million cycle swing test performance for a 4070 door.
  - 1. All door frames for masonry walls shall be furnished with welded frames and provided with not less than 3 wall anchors per jamb, of type required by jamb conditions and adjacent materials. All door frames shall be mortised and reinforced for hardware in accordance with the hardware schedule. Jambs and headers shall be mitered, other members butted. Labels of Underwriter's Laboratories, Inc. (or equivalent) shall be attached to hinge jamb of frames supplied for labeled doors as scheduled. Refer to details on the drawings for specific frame conditions.
  - 2. Refer to door schedule for frame sizes, including height of head, at each location.

### 2.04 METAL DOORS - Comply with ANSI/SDI 100.

- A. Unlabeled flush metal doors shall be manufactured with 18 ga. (galvanized where specified) steel skins, scheduled to be painted. Furnish doors in sizes as indicated on the drawings; refer to door schedule for doors requiring glass lights. Doors shall be 707 Series as manufactured by Curries Co., or approved equivalent in accordance with Section 01000, Item 18.

### 2.05 REINFORCING

- A. Reinforce, drill and tap doors and frames to receive mortised hinges, locks, latches, flush bolts, and door closers as required. Preparations shall be in accordance with ANSI A115. Provide minimum reinforcing for mortise or surface applied hardware as follows:
  - a) Hinges - 10 gauge or equivalent number of threads on doors, - 7 gauge on frames
  - b) Locks - 12 gauge or equivalent number of threads
  - c) Surface closers - 12 gauge
  - d) Hold open arms - 12 gauge
  - e) Panic devices - 12 gauge

### 2.06 FINISH HARDWARE

- A. Secure templates from the finish hardware supplier and make provision for all finish hardware at the factory.

## 2.07 FABRICATION

- A. Refer to referenced standards for specifications for shop assembly; shop/factory fitting, machining and finishing; and tolerances for both frames and doors.

## PART 3 - EXECUTION

### 3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which this work will be performed. Correct conditions detrimental to timely and proper completion of the work. Verify that project conditions are acceptable before beginning installation of frames and that completed openings to receive frames are of correct size and thickness. Do not proceed until unsatisfactory conditions have been corrected.

### 3.02 INSTALLATION

- A. STANDARD AND WELDED FRAMES - Install hollow metal doors and frames in accordance with the manufacturer's instructions, final shop drawings, SDI 105-87 "Recommended Erection Instructions for Steel Frames" and DHI "Installation of Commercial Steel Doors and Steel Frames, Insulated Steel Doors in Wood Frames, and Builder's Hardware".
  1. Refer to details on drawings for specific frame configurations.
  2. Set masonry frames accurately into openings and plumb, align and brace securely until permanent anchors are set. Provide spreaders as required. Slush all masonry frames solid. After wall construction is completed, remove temporary braces and spreaders and leave surfaces undamaged.
  3. Immediately after installation, sand smooth all rusted and/or damaged areas of prime coat and apply touch-up compatible primer.
  4. Installation of doors and door hardware is provided in Section 06200.
  5. Installation of glazing is specified in Section 08540.
  6. Field finishing of factory-primed frames is specified in Section 09900.
- B. METAL DOORS - Metal doors (labeled and unlabeled, flush) shall be installed by skilled carpenters, plumb, true and square in the opening, in accordance with the details on the drawings. Installation shall be performed under Section 06200. Doors that do not swing properly shall be adjusted or re-hung as required.
  1. Follow door manufacturer's written instructions.
  2. Install rated doors in accordance with National Fire Protection Association (NFPA 80) requirements.
  3. Handle doors with clear gloves, do not drag across one another or other surfaces. Leave doors ready for finishing.
  4. Properly protect units from damage or deterioration until final acceptance. Refinish or replace doors damaged during subsequent construction.
  5. Refer to finish hardware section for installation of hardware.

### 3.03 ADJUSTING

- A. Operation: Adjust doors and hardware for smooth and balanced door operation. Correct any deficiency that prohibits the door from swinging or operating freely. Do not remove hinge screws after initial insertion. Shims used for alignment purposes must be inserted between hinge and frame. Do not insert shims between hinge and door.
- B. Replace doors that are damaged or that do not comply with requirements. Doors may be repaired or refinished if Work complies with requirements and shows no evidence of repair or refinishing.

## END OF SECTION

## SECTION 08710 - FINISH HARDWARE

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work included: Furnish all labor, materials and equipment to complete all finish hardware as defined in the Contract Documents, and as required for a complete and proper installation, including, but not necessarily limited to:
  - 1. Interior door hardware.
  - 2. Miscellaneous hardware and fasteners.
- B. Related work: Documents affecting work of this Section include, but are not necessarily limited to, General and Supplementary Conditions, and Sections of Division I of these specifications.
  - 1. Section 06200 - Finish Carpentry
  - 2. Section 08100 - Metal Doors and Frames
  - 3. Section 08200 - Wood & Composite Doors
  - 4. Section 08540 - Aluminum Entrances, Frames & Storefront
- C. Specific Omissions: Hardware for the following is specified or indicated elsewhere, unless specifically listed in the hardware sets:
  - 1. Windows.
  - 2. Cabinets of all kinds, including open wall shelving (except master keyed cabinet locks).
  - 3. Signs, except as noted.
  - 4. Toilet accessories of all kinds including coat hooks.

#### 1.02 SUBMITTALS - Comply with Section 01340 and the following:

- A. General: Submit the following in accordance with Conditions of Contract and Division 1 requirements.
- B. Catalog Cuts: Product data including manufacturers' technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
- C. Final Hardware Schedule Content: Organize schedule into "hardware sets" indicating complete designations of every item required for each door or opening. Include the following information:
  - 1. Type, style, function, size, and finish of each hardware item and related door and frame.
  - 2. Vertical, typed and include clearly understandable references to the cut sheets and product literature.
  - 3. To facilitate submittal review use the same numbering system as specification or if supplier system must be different then include specification number after the supplier designation for easy cross reference.
  - 4. Name and manufacturer of each item.
  - 5. Fastenings, mounting locations and other pertinent information.
  - 6. Explanation of all abbreviations, symbols and codes.
  - 7. Before submitting schedule coordinate all work with door and frame manufacturers as well as electric access controls and incorporate into schedule.
- D. Samples: If requested by the Architect, submit samples of typical hardware and finishes.
- E. Templates: After final approval of the hardware schedule, provide all templates for doors, frames, and other work specified to be factory prepared for the installation of door hardware.

#### 1.03 REFERENCES

- A. Vermont Fire Prevention & Building Code - See Division 1 for detailed requirements.
- B. NFPA - National Fire Protection Association
  - 1. NFPA 80 - Standard for Fire Doors & Fire Windows.
  - 2. NFPA 105 - Smoke and Draft Control Door Assemblies.

- C. UL - Underwriter Laboratories
  - 1. UL 10B - Fire Tests of Door Assemblies.
  - 2. UL 305 - Panic Hardware.
  - 3. UL10C – Positive Pressure Test of Fire Door Assemblies
- D. Handicapped Standards
  - 1. ANSI A 117.1
  - 2. ADA - Americans with Disabilities Act.
  - 3. UFAS - Uniform Federal Accessibility Standard
- E. DHI - Door and Hardware Institute.
  - 1. Sequence and format for the hardware schedule.
  - 2. Recommended locations for builder's hardware.

#### 1.04 QUALITY ASSURANCE:

- A. Substitutions: Products shall be those specified to ensure a uniform basis of acceptable materials. Requests for substitutions must be made in accordance with Division 1 requirements. If proposing a substitute product, submit product data for the proposed item with product data for the specified item and indicate basis for substitution and savings to be made. Provide sample if requested. Certain products have been selected for their unique characteristics and particular project suitability.
  - 1. Items specified as "no substitution" shall be provided exactly as listed.
  - 2. Items listed with no substitute manufacturers listed have been requested by the Owner or Architect to match existing for continuity and/or future performance and maintenance standards or because there is no known equivalent product.
  - 3. If no other products are listed in a category, then "no substitution" is implied.
- B. Supplier Qualifications: A recognized architectural hardware supplier, with warehousing facilities in the Project's vicinity, that has a record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this Project and that employs an accredited Architectural Hardware Consultant (AHC), who is available to the Owner, Architect, and Contractor, at reasonable times during the course of the Work for consultation.
- C. Single Source Responsibility: Obtain each type of hardware (latch and locksets, hinges, closers, etc.) from a single manufacturer.
- D. Fire-Rated Openings: Provide door hardware for fire-rated openings that complies with NFPA Standard No. 80 and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed and are identical to products tested by Underwrites Laboratories, Intertek Testing Services, Factory Mutual, or other testing and inspecting organizations acceptable to the authorities having jurisdiction for use on types and sizes of doors indicated in compliance with requirements of fire-rated door and door frame labels.
- E. Review Drawings, Schedules and Specifications for design concept and provide all hardware necessary to realize the design concept.
- F. Coordination with Related Work: Be responsible for coordinating the finish hardware with all door, frame and related electronic work.
- G. Installers: Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and methods needed to complete the work of this Section.

#### 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Tag each item or package separately with identification related to the final hardware schedule, and include installation instructions with each item or package.
- B. Each article of hardware shall be individually packaged in manufacturer's original container.

- C. Contractor will provide secure lock-up for door hardware delivered to the Project, but not yet installed. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses.
- D. Items damaged in shipment shall be replaced promptly and with proper material and paid for by whomever did the damage or caused the damage to occur.
- E. All hardware shall be handled in a manner to avoid damage, marring, or scratching. Any irregularities that occur to the hardware after it has been delivered to the Project shall be corrected, replaced, or repaired by the Contractor. All hardware shall be protected against malfunction due to paint, solvent, cleanser, or any chemical agent.

1.06 WARRANTY

- A. Provide manufacturer's warranties as specified in Division 1 and as follows:
  - 1. Closers: 10 years, except electronic closers, 2 years.
  - 2. Exit Devices: 3 years, except electrified devices, 1 year.
  - 3. Hinges: Life of the building.
  - 4. Locksets: 7 years
  - 5. All other hardware: 1 year.
- B. No liability is to be assumed where damage or faulty operation is due to improper installation, improper use, or abuse.
- C. Products judged to be defective during the warranty period shall be replaced or repaired in accordance with the manufacturer's warranty, at no additional cost to the Owner.

1.07 MAINTENANCE

- A. Furnish a complete set of any specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Approval of manufacturers other than those listed shall be in accordance with paragraph 1.04.A.
- B. Note that even though an acceptable substitute manufacturer may be listed, the product must provide all the functions and features of the specified product or it will not be approved.
 

- Item	Scheduled Manufacturer	Acceptable Substitute
- Hinges	Ives (IVE)	McKinney, Hager, Stanley
- Locksets	Schlage (SCH)	Sargent
- Cylinders & Keying	Schlage (SCH)	Sargent
- Exit Devices & Mullions	Falcon (FAL)	Sargent, Precision
- Door Closers	Falcon (FAL)	Norton, Yale
- Push & Pull Plates & Bars	Ives (IVE), Rockwood (ROC)	Hager, Burns
- Flush Bolts & Coordinators	Ives (IVE)	Rockwood, Hager, Burns
- Protection Plates	Ives (IVE)	Rockwood, Hager
- Stops & Holders	Ives (IVE)	Rockwood
- Silencers	Ives (IVE)	Rockwood
- Thresholds & Weatherstrip	Reese (REE)	Pemko, Nat'l Guard, DHSI
- Key Cabinets	Telkee (TEL)	Lund, HPC
- C. Hand of Door: Drawings show direction of slide, swing, or hand of each door leaf. Furnish each item of hardware for proper installation and operation of door movement as shown.
- D. Where the hardware specified is not adaptable to the finished shape or size of the members requiring hardware, furnish suitable types having the same operation and quality as the type specified, subject to the Architect's approval.

## 2.02 MATERIALS

### A. Fasteners

1. Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation.
2. Furnish screws for installation with each hardware item. Finish exposed (exposed under any condition) screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work as closely as possible including "prepared for paint" surfaces to receive painted finish.
3. Provide concealed fasteners for hardware units that are exposed when door is closed except to the extent that no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on opposite face is exposed in other work unless their use is the only means of reinforcing the work adequately to fasten the hardware securely.
4. All hardware shall be installed with the fasteners provided by the hardware manufacturer.

### B. Hinges

1. The following is a guide for hinge type required for this specification:
  - a) 1 3/4" thick doors up to and including 3'-0" wide:
    - interior: standard weight, concealed bearing, steel, 4 1/2" high
2. Provide 3 hinges per door leaf for doors 90 inches or less in height, and one additional hinge for each 30 inches of additional door height.
  - a) Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
    - Steel Hinges: Steel pins
    - Non-Ferrous Hinges: Stainless steel pins
    - Interior Doors: Non-rising pins

### C. Standard Duty Cylindrical Locks and Latches:

1. Chassis: cylindrical design, corrosion-resistant plated cold-rolled steel, through-bolted.
2. Locking Spindle: stainless steel, interlocking design.
3. Latch Retractors: forged steel. Balance of inner parts: corrosion-resistant plated steel or stainless steel.
4. Lever Trim: accessible design, independent operation, spring-cage supported, minimum 2" clearance from lever mid-point to face of door.
5. Lock Series, Lever Design and Certification - Per Schedule:
  - a) Schlage ND Series - Athens - ANSI A156.2, 1996, Series 4000 Grade 1
6. Certifications:
  - a) ANSI A156.2, 1994, Series 4000, Grade 2
  - b) UL listed for A label and lesser class single doors up to 4 ft x 8 ft.

### D. Door Closers

1. Heavy duty
  - a) Provide door closers certified to ANSI/BHMA A156.4 Grade 1 requirements by a BHMA certified independent testing laboratory. Closers shall be ISO 9000 certified. Units shall be stamped with date of manufacture code.
  - b) Door closers shall have fully hydraulic, full rack and pinion action with an aluminum cylinder. Closer body shall be 1-1/2 inch diameter, and heat-treated pinion journal shall be 11/16 inch diameter.
  - c) Provide hydraulic fluid requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to 10 degrees F. Fluid shall be fireproof and shall pass the requirements of the UL10C "positive pressure" fire test.
  - d) Spring power shall be continuously adjustable over the full range of closer sizes, and allow for reduced opening force as required by accessibility codes and standards. Hydraulic regulation shall be by tamper-proof, non-critical valves. Closers shall have separate adjustment for latch speed, general speed, and backcheck.
  - e) Closers shall not incorporate Pressure Relief Valve (PRV) technology.
  - f) Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other finish hardware items interfering with closer mounting.
  - g) Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Closers shall not be visible in corridors, lobbies and other public spaces unless approved by Architect.

h) Door closers meeting this specification: Falcon SC70 series, Norton 7500 series, Yale 4400 series.

2. Medium Duty

- a) Door closers shall have fully hydraulic, full rack and pinion action with a high strength cast aluminum cylinder. Cylinder body shall be 1 1/4" in diameter, and pinion shall be 5/8" in diameter.
- b) Hydraulic fluid shall be of a type requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F. Fluid shall be fireproof and shall pass the requirements of the UL10B fire test.
- c) Spring power shall be continuously adjustable over the full range of closer sizes, and allow for reduced opening force for the physically handicapped. Hydraulic regulation shall be by tamper-proof, non-critical valves. Closers shall have separate adjustment for latch speed, general speed, and backcheck.
- d) All closers shall have stamped steel arms.
- e) Closers shall not incorporate a pressure relief valve. All closers shall have full covers.
- f) Closer cylinders, arms, and metal covers shall have a painted finish to match locksets.
- g) Unless closer mounting is specifically identified in hardware sets, closers shall be mounted on the side of the door which is least exposed to public view.
- h) Door closers meeting this specification: Falcon SC80 series, Norton 8500 series, and Yale 3500 series.

E. Push Plates: 8" wide x 16" high x .050" thick. Where door stile does not allow 8" wide plates, 4" wide plates may be used.

F. Door Pulls & Push Bars: Solid bar stock, diameter and length as scheduled. Push bars shall be of sufficient length to span from center to center of each stile.

G. Protection Plates: Provide kick, mop, or armor plates as scheduled. Furnish with machine or wood screws, finished to match plates. Sizes of plates shall be as follows:

- 1. Kick Plates - 8" high x 2" LWOD on single doors, 1" LWOD on pairs
- 2. Mop Plates - 4" high x 2" LWOD on single doors, 1" LWOD on pairs
- 3. Armor Plates - 36" high x 2" LWOD on single doors, 1" LWOD on pairs

H. Door Stops and Holders

- 1. It shall be the responsibility of the hardware supplier to provide door stops for all doors in accordance with the following requirements:
  - a) Wall stops shall be used wherever possible.
  - b) Where wall stops cannot be used, provide dome type floor stops of the proper height.
  - c) At any opening where a wall or floor stop cannot be used, a heavy duty overhead stop must be used.

I. Thresholds and Weatherstrip: Furnish as scheduled and per architectural details. Match finish of other items as closely as possible. Provide only those units where resilient or flexible seal strip is easily replaceable and readily available. Thresholds noted as bronze shall be cast bronze, not bronze finished aluminum.

J. Silencers: "Push-in" type silencers for each hollow metal or wood frame, 3 for each single frame, 2 for each pair frame. Omit where gasketing is scheduled.

2.03 FINISHES

A. Finish of all hardware shall be as follows:

- 1. Locks and Latches - 626 Satin Chrome.
- 2. Door Closers with painted aluminum finish
- 3. Thresholds and Weatherstripping anodized finish; thresholds at exterior doors shall be bronze.
- 4. Kickplates and Armor Plates to be Clear Acrylic.
- 5. Hinges to be Satin Chrome US26D.
- 6. Exit Devices / Fire Panic Devices - 628.

2.04 KEYING

- A. All locks and cylinders shall be grand master keyed and master keyed per the Owner's instructions. Provide conventional cylinders at exterior and interior openings.
- B. Provide 5 keys per lock, and a total of 6 master keys.
- C. All master keys shall be delivered directly to the Owner by the hardware supplier, who shall obtain a receipt for delivery of same.

2.05 FINISH HARDWARE SCHEDULE

- A. GENERAL
  - 1. Provide hardware for each door to comply with requirements of this Section, hardware set numbers indicated in door schedule, and in the following schedule of hardware sets.
  - 2. It is intended that the following schedule includes complete items of finish hardware necessary to complete the work. If a discrepancy is found in the schedule, such as a missing item, improper hardware for a frame, door or fire codes, the preamble will be the deciding document.
  - 3. Locksets, exit devices, and other hardware items are referenced in the Hardware Sets for series, type, and function. Refer to the preamble for special features, options, cylinders/keying, and other requirements.

**HARDWARE GROUP NO. 01**

FOR USE ON DOOR TYPE D-01:

QTY		DESCRIPTION	CATALOG NUMBER	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5	IVE
1	EA	PULL BAR	8103EZ-10"-NO	IVE
1	EA	PUSH PLATE	8200 3.5X15	IVE
1	EA	SURFACE CLOSER	SC71 DSHO	FAL

**HARDWARE GROUP NO. 02**

FOR USE ON DOOR TYPE D-02:

QTY		DESCRIPTION	CATALOG NUMBER	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5	IVE
1	EA	PULL BAR	8103EZ-10"-NO	IVE
1	EA	PUSH PLATE	8200 3.5X15	IVE
1	EA	AUTO OPERATOR	8242	FAL
2	EA	TRANSMITTER KIT	8310-844	FAL
1	EA	WALL MOUNT PUSHPLATE	8310-852T	FAL
1	EA	RECEIVER	8310-865	FAL
2	EA	FLUSH MOUNT BOX	8310-869F	FAL

AUTO OPERATOR SHALL BE MOUNTED ON PUSH SIDE. PRESS WALL SWITCHES SHALL BE FLUSH MOUNTED WITH WIRELESS TRANSMITTERS. BOTH PUSH PLATES SHALL BE ALWAYS ACTIVE. 110V WIRING TO AUTO OPERATOR SHALL BE FURNISHED AND INSTALLED BY THE OWNER.

END OF SECTION

## SECTION 09250 - GYPSUM BOARD

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work included: Furnish and install all labor, materials and equipment to complete all gypsum board work, where shown on the drawings, as specified herein, and as required for a complete and proper installation, including but not necessarily limited to:
  - 1. Gypsum board ceilings.
  - 2. Gypsum drywall finishing including joint tape and compound treatment.
- B. Related work: Documents affecting work of this Section include, but are not necessarily limited to, General and Supplementary Conditions, and Sections of Division I of these specifications.
  - 1. Section 06200 - Finish Carpentry
  - 2. Section 09900 - Painting & Finishing

#### 1.02 SUBMITTALS - Comply with Section 01340 and the following:

- A. Gypsum Board:
  - 1. Product Data: Submit product specifications and installation instructions for each gypsum drywall component, including other data as may be required to show compliance with these specifications, including material composition, thickness, sizes and fire resistance.
  - 2. Certificates: Submit manufacturer's written certification that product meets specified requirements.

#### 1.03 PRODUCT HANDLING - Comply with Section 01640 and the following:

- A. Deliver materials in original packages, containers or bundles bearing G-P Gypsum Corporation brand name and identification.
- B. Store materials inside, level, under cover. Keep dry. Protect from weather, other elements and damage from construction operations and other causes.
- C. Handle gypsum boards to prevent damage to edges, ends or surfaces. Protect accessories and trim from being bent or damaged.

#### 1.04 QUALITY ASSURANCE

- A. Install gypsum drywall in conformance with the "Recommended Specifications for the Application and Finishing of Gypsum Wallboard" (GA-216) by the Gypsum Association.

#### 1.05 PROJECT CONDITIONS

- A. Environmental Requirements: Comply with requirements of gypsum board application standards and recommendations of manufacturer for environmental conditions before, during and after application of gypsum board.
- B. Ventilation: Ventilate building spaces as required to remove excess moisture that would otherwise prevent drying of joint treatment material immediately after its application.

#### 1.06 REFERENCES

- A. Gypsum Association: GA-216-2004, "Application and Finishing of Gypsum Panel Products". Refer to drawings for specific GA listed assemblies being used on this project; full assembly requirements are included in this Project Manual.

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURER

- A. Gypsum board and sheathing products specified in this section are based upon the products manufactured by G-P Gypsum, or approved equivalent in accordance with General Conditions, Item 8. Note that gypsum board products that are manufactured in China will not be accepted for use in this project, due to the probability of contamination from sulfuric acid.

## 2.02 MATERIALS

- A. Gypsum board shall be manufactured by Georgia Pacific, United States Gypsum, National Gypsum Company, or approved equivalent in accordance with Section 01000, Item 18.
  - 1. Gypsum board shall be moisture resistant type, furnished in 48" widths, long edges tapered, and in such lengths so as to minimize the number of end joints, 3/8" or 1/2" thickness, as manufactured by Georgia Pacific, or approved equivalent in accordance with Section 01000, Item 18. Small adjustments will have to be made to lighting fixtures, diffusers, etc. to account for ceiling thickness change, and because the gypsum board will be fully backed by plywood, thinner gypsum board is preferred.

## 2.03 GYPSUM BOARD EDGE TRIM

- A. L bead shall be fully taped type at perimeter edge of all ceilings.
  - 1. Rigid vinyl as manufactured by Trim-Tex, or approved equivalent in accordance with General Conditions, Item 8.
  - 2. Zinc-coated steel, minimum 26 ga., as approved by the Architect.

## 2.04 JOINT SYSTEMS

- A. General: Comply with ASTM C 475/C 475M.
- B. Joint Tape:
  - 1. Basis-of-Design Product: ToughRock Paper Tape.
- C. Joint Compound for Interior Gypsum Wallboard: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.
  - 1. Prefilling: At open joints and damaged surface areas, use setting-type taping compound.
    - a) Basis-of-Design Product: G-P Gypsum; ToughRock Setting Compound.
  - 2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use drying type - all-purpose and setting-type compounds.
    - a) Basis-of-Design Product: G-P Gypsum; ToughRock Ready Mix All-Purpose Joint Compound.
    - b) Use setting-type compound for installing paper-faced metal trim accessories.
  - 3. Fill Coat: For second coat, use drying-type, all-purpose compound.
    - a) Basis-of-Design Product: G-P Gypsum; ToughRock Ready Mix All-Purpose Joint Compound.
  - 4. Finish Coat: For third coat, use all-purpose compound.
    - a) Basis-of-Design Product: G-P Gypsum; ToughRock Ready Mix All-Purpose Joint Compound

## 2.05 AUXILIARY MATERIALS

- A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written recommendations.
- B. Laminating Adhesive: Adhesive or joint compound recommended for directly adhering gypsum panels to continuous substrate.
  - 1. Use adhesives that have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- C. Steel Drill Screws: ASTM C 1002, unless otherwise indicated.
  - 1. Use screws complying with ASTM C 954 for fastening panels to steel members from 0.033 to 0.112 inch (0.84 to 2.84 mm) thick.
  - 2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.
- D. Provide other miscellaneous angles, channels, etc. as may be required to complete the work.

## 2.06 OTHER MATERIALS

- A. Provide other materials not specifically described but required for a complete and proper installation, as selected by the Contractor and reviewed by the Architect. Other materials may include, but not be limited to, miscellaneous furring channels, sections, bent plates, plates, etc., as manufactured by Marion Industries, Dietrich Industries, or approved equivalent in accordance with General Conditions, Item 8.

## PART 3 - EXECUTION

### 3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which this work will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions have been corrected.
- B. Review all framing prior to commencement of gypsum board installation. Do not commence installation unless all required blocking to properly support gypsum board is in place, including, but not limited to, angles, straps, solid wood or plywood.

### 3.02 GENERAL

- A. All work shall be in accordance with the recommendations of the manufacturer. Standard level of finishing shall be to Level 4, in accordance with ASTM C 840, GA-216-2004 (Application and Finishing of Gypsum Panel Products) and GA-650 as defined by the Gypsum Association.
- B. Trim and accessories shall be installed in accordance with the requirements of the manufacturer's system. The drawings do not purport to show all locations and requirements for all trim. Carefully study the drawings and provide all the trim required to complete the work.

### 3.03 GYPSUM BOARD INSTALLATION

- A. Typical:
  - 1. Gypsum board shall be applied directly to existing plywood ceilings.
  - 2. Fasten gypsum board with screws that are spaced a maximum of 8" o/c on ceilings and 12" o/c on walls.
  - 3. Install ceiling boards in the narrow direction of the spaces to minimize the number of end-butt joints. In public rest rooms, use boards of sufficient length to eliminate butt joints. Stagger end joints at least 1'-0" on Team Room ceilings.
- B. Install gypsum board with face side out. Do not install damaged or damp boards.

### 3.04 GYPSUM BOARD FINISHING

- A. Use the same fasteners to anchor trim accessory flanges as required to fasten gypsum board to the supports. Otherwise, fasten flanges by nailing or stapling in accordance with G-P Gypsum instructions and recommendations.
- B. Standard metal or vinyl beads may be used unless metal beads are required for specific details. Workmanship is expected to be of the highest quality. Apply treatment at gypsum board joints, flanges of trim accessories, penetrations, fastener heads and surface defects. Prefill open joints and rounded or beveled edges using type of compound specified, or as may be required by field conditions or schedule. Maintain 50 degrees - 70 degrees during installation and taping of gypsum board and thereafter.
- C. Ceilings:
  - 1. Joint treatment and finish preparation for painted ceilings and soffits:
    - a) Apply joint tape over joints and embed in setting-type joint compound specified.
    - b) Skim coat joints and fasteners with setting-type joint compound for smooth finish.
    - c) Level 4 finish required.

### 3.05 CLEANING UP

- A. In addition to the other requirements for cleaning, use care to prevent scattering gypsum wall board scraps and dust, and to prevent tracking to other floor surfaces.
- B. At completion of each segment of installation, promptly pick up and remove all scrap, debris and surplus material resulting from this work.

### 3.06 PROTECTION OF SURFACES

- A. Provide protection that ensures gypsum drywall work will remain without damage or deterioration at time of substantial completion.
  - 1. Repair damaged work to be indistinguishable from adjacent work. Replace work which cannot be repaired as required.

END OF SECTION

## SECTION 09657 - RESILIENT ATHLETIC FLOORING

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work included: Furnish and install resilient rubber athletic flooring, including all adhesives and accessories, as shown on the drawings, as specified herein, and as required for a complete and proper installation.
- B. Related work: Documents affecting work of this Section include, but are not necessarily limited to, General and Supplementary Conditions, and Sections of Division I of these specifications.
  - 1. Section 03300 - Concrete Slabs

#### 1.02 REFERENCES

- A. General: Standards listed by reference, including revisions by issuing authority, form a part of this specification section to extent indicated. Standards listed are identified by issuing authority, authority abbreviation, designation number, title or other designation established by issuing authority. Standards subsequently referenced herein are referred to by issuing authority abbreviation and standard designation.
- B. American Society for Testing and Materials (ASTM):
  - 1. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers – Tension
  - 2. ASTM F137 Standard Test Method for Flexibility of Resilient Flooring Materials with Cylindrical Mandrel Apparatus
  - 3. ASTM F970 Standard Test Method for Static Load Limit
  - 4. ASTM D2047 Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as measured by the James Machine
  - 5. ASTM F925 Standard Test Method for Resistance to Chemicals of Resilient Flooring
  - 6. ASTM C423 Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method
  - 7. ASTM C518 Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
  - 8. ASTM E492 Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine
  - 9. ASTM E413 Classification for Rating Sound Insulation
  - 10. ASTM E2129 Standard Practice for Data Collection for Sustainability Assessment of Building Products
  - 11. ASTM D5116 Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions From Indoor Materials/Products
  - 12. ASTM F150 Standard Test Method for Electrical Resistance of Conductive and Static Dissipative Resilient Flooring
  - 13. ASTM D297 Standard Practice for Rubber Products - Chemical Analysis
  - 14. ASTM D3676 Standard Specification for Rubber Cellular Cushion used for Carpet or Rug Underlay
  - 15. ASTM D395 Standard Test Methods for Rubber Property - Compression Set
  - 16. ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring
  - 17. ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride
  - 18. ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes
  - 19. ASTM F1292 Standard Specification for Impact Attenuation of Surfacing Materials within the Use Zone of Playground Equipment
- C. Leadership in Energy and Environmental Design – LEEDTM
  - 1. International Organization for StandardizationTM document, ISO 14021 - Provides guidance on the terminology, symbols, testing and verification methodologies that an organization should use for self-declaration of the environmental aspects of its products and services.

### 1.03 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
- B. Product Data: Submit product data, including manufacturer's guide specifications product sheet, for specified products.
- C. Shop Drawings: Submit shop drawings showing layout, profiles, and product components, including anchorage, accessories, finish colors, patterns, and textures.
- D. Samples: Submit selection and verification samples for finishes, colors, and textures.
- E. Manufacturer's Instructions: Manufacturer's installation instructions.
- F. Closeout Submittals, submit the following:
  - 1. Operation and Maintenance Data: Operation and maintenance data for installed products in accordance with Division 1 Closeout Submittals (Maintenance Data and Operational Data) Section. Include methods for maintaining installed products and precautions against cleaning materials and methods detrimental to finishes and performance.

### 1.04 PRODUCT HANDLING

- A. General: Comply with Division 1 Product Requirements Sections.
- B. Ordering: Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.
- C. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- D. Storage and Protection: Store materials at temperature and humidity conditions recommended by manufacturer and protect from exposure to harmful weather conditions.

### 1.05 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and methods needed to complete the work of this Section.
- B. Qualifications:
  - 1. Installer Qualifications: Installer experienced in performing work of this section who has specialized in installation of work similar to that required for this project.
  - 2. Manufacturer's Qualifications: Manufacturer capable of providing field service representation during construction and approving application method.
- C. Mock-Ups: Install at project site a job mock-up using acceptable products and manufacturer-approved installation methods. Obtain Owner's and Architect's acceptance of finish color, texture and pattern, and workmanship standard. Size shall be minimum 4'X4'.
  - 1. Maintenance: Maintain mock-up during construction for workmanship comparison; remove and legally dispose of mock-up when no longer required.
- D. Pre-installation Meetings: Conduct pre-installation meeting to verify project requirements, substrate conditions, manufacturer's instructions, and manufacturer's warranty requirements.

### 1.06 PROJECT CONDITIONS

- A. Temperature Requirements: Maintain air temperature in spaces where products will be installed for time period before, during, and after installation as recommended by manufacturer.

- B. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.

#### 1.07 WARRANTY

- A. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under Contract Documents.
  - 1. Warranty Period: ?? years commencing in Date of Substantial Completion.

#### 1.08 EXTRA MATERIALS

- A. Extra Materials: Deliver to Owner extra materials from same production run as products installed. Package products with protective covering and identify with descriptive labels.
- B. Quantity: Furnish quantity of full size recycled rubber flooring units equal to 5% of amount installed; tiles of half size or larger may be left for the Owner's use, but shall not count as part of the 5% requirement.

### PART 2 – PRODUCTS

#### 2.01 MANUFACTURER(S)

- A. Resilient athletic surfacing shall be manufactured by **ECORE International**™, 715 Fountain Ave., Lancaster, PA 17601: telephone - (800) 322-1923, (717) 295-3400; fax - (717) 295-3414; email - [info@ecoreintl.com](mailto:info@ecoreintl.com); **Roppe Corporation**, 1602 N. Union Street, PO Box 1158, Fostoria, OH 44830: telephone - (800) 537-9527, (419) 435-8546; fax - (419) 435-1056; email - [sales@roppe.com](mailto:sales@roppe.com); or approved equivalent in accordance with General Conditions, Item 8.
- B. Source Quality: Obtain recycled rubber resilient flooring materials from a single manufacturer.

#### 2.02 ECORE PRODUCTS

- A. EVERLAST sports surfacing: Recycled rubber resilient flooring shall be manufactured from a combination of quality recycled SBR tire rubber and EPDM flecks. EVERLAST sports surfacing is a single-ply non-laminated surface with high slip resistance, durability, cushioned resilience, stain resistance, and consistent color (no wear layer). Furnish in tile configuration.
  - 1. Product Name: The non-laminated, single-ply, rubber surface furnished under this specification shall be ECORE's ECOSurfaces ECONights Recycled Rubber Flooring.
  - 2. Material: Made from a formulation of high quality post consumer recycled rubber granules encapsulated in a wear and water-resistant elastomeric network with multiple colored reprocessed ColorMill™ EPDM rubber.
  - 3. Tile Dimensions: ECOSurfaces ECONights rolled rubber surface will have an overall thickness of 3/8" nominal [8 mm] in 24" X 24" square edge tile size.
  - 4. Tile Weight: 1.8 lb/ft<sup>2</sup> [8.6 kg/m<sup>2</sup>].
  - 5. Tile Standard Tolerances: Thickness: ± .3 mm.
  - 6. Colors: manufacturer's standard colors.
  - 7. Tensile Strength (ASTM D412): 200 lb/in<sup>2</sup> min.
  - 8. Flexibility (ASTM F137): pass 1/4" mandrel.
  - 9. Static Load Limit (ASTM F970): 400 lb/in<sup>2</sup> < 0.005 in.
  - 10. Coefficient of Friction (ASTM D2047): > 0.9.
  - 11. Chemical Resistance (ASTM F925): 5% Acetic Acid: no change; 70% Isopropyl Alcohol: no change; 5% Sodium Hydroxide: no change; 5% Hydrochloric Acid: no change; 5% Ammonia: no change; Bleach: no change; 5% Phenol: no change; Sulfuric Acid: no change.
  - 12. Noise Reduction Coefficient (ASTM C423): 0.10 sabine/ft<sup>2</sup> Single layer 8mm 10% EPDM.
  - 13. Thermal Conductivity (ASTM C518): approximately 0.406 Btu-in/hr-ft<sup>2</sup>-°F.
  - 14. Impact Insulation Class (ASTM E492): 49 – 1 layer 9mm SBR on 6" reinforced concrete slab, no ceiling.

15. Sound Transmission Coefficient (ASTM E413): 51 – 1 layer 9mm SBR on 6” reinforced concrete slab, no ceiling.
16. Sustainability (ASTM E2129): data collected.
17. VOC Washington State IAQ Test (ASTM D5116): pass.
18. CHPS/CA 01350 (ASTM D5116): pass.

- B. E-Grip III one-component polyurethane adhesive: E-Grip III is a one-component polyurethane moisture cured, non-sag, permanently elastic adhesive that has excellent adhesion to elastomers, concrete, and wood and is engineered for indoor and outdoor applications. E-Grip III polyurethane adhesive shall be furnished by E-CORE.
1. Adhesive Type: one-component polyurethane
  2. Adhesive Cure System: moisture cured
  3. VOC Content: 0 (calculated)
  4. Solvents: None
  5. Freeze/Thaw: Stable
  6. Application Temperature: 40° F to 100° F
  7. Calcium Chloride Test (ASTM F1869): Maximum 5.5 lbs per 1,000 sq. ft. in 24 hrs allowable.
  8. Relative Humidity (RH) Test (ASTM F2170): Maximum 85% RH allowable
  9. Flashpoint: > 500° F
  10. Shelf Life: 12 months
  11. Working Time: 30-40 minutes
  12. Trowel: 1/16” square notched trowel
  13. Coverage Rate: 95 ft<sup>2</sup> per gallon (1/16” square notched trowel)
  14. Weight: 4 gallon pail - 56 lbs; 2 gallon pail - 28 lbs; 10.1 oz. cartridge

### 2.03 ROPPE PRODUCTS

- A. Tuflex recycled rubber flooring: Recycled rubber resilient flooring shall be manufactured from a combination of quality recycled SBR tire rubber and EPDM flecks, including 95% post-consumer content.
1. Product Name: Titan.
  2. Material: Made from a formulation of high quality post consumer recycled rubber granules encapsulated in a wear and water-resistant elastomeric network with multiple colored reprocessed EPDM rubber.
  3. Tile Dimensions: overall thickness of 3/8” nominal [8 mm] in 27” X 27” (685.8mm x 685.8mm) square edge tile.
  4. Approx. Tile Weight: 2.15 lb/ft<sup>2</sup> [10.3 kg/m<sup>2</sup>].
  5. Tile Standard Tolerances: Thickness: - 0.005 in. (- 0.127mm)/+ 0.015 in. (+0.381).
  6. Colors: manufacturer’s standard colors.
  7. Tensile Strength (ASTM D412): 525 lb/in<sup>2</sup> min.
  8. Tear resistance (ASTM D624): 93 +/-15 lbs/in.
  9. Static Load Limit (ASTM F970): 400 lb/in<sup>2</sup> < 0.005 in.
  10. Coefficient of Friction (ASTM D2047): 1.20 dry.
  11. Hardness – Shore A (ASTM D – 2240): 60 +/- 5 pts.
  12. Impact Insulation Class (ASTM E492): 49 – 1 layer 9mm SBR on 6” reinforced concrete slab, no ceiling.
  13. Sound Absorption Coefficient: 0.60.
- B. ROP635 Solvent-Free Moisture-Cured Polyurethane Adhesive: premium one-part adhesive designed for high performance installations of Tuflex Square Edge Tile for interior installations over concrete, approved wood substrates, metal and other non-porous substrates, on grade, below grade, or above grade.  
Caution: Exposure to moisture/cleaning within 24 hours after installation for interior installations may slow the set up time, and may adversely affect the adhesive resulting in an installation failure.
1. Adhesive Type: one-component polyurethane.
  2. Adhesive Cure System: moisture cured.
  3. VOC Content: 44g/l, according to CA Rule #1168.
  4. Solvents: None.
  5. Application Temperature: 40° F to 100° F.
  6. Calcium Chloride Test (ASTM F1869): Maximum 5.5 lbs per 1,000 sq. ft. in 24 hrs allowable.
  7. Relative Humidity (RH) Test (ASTM F2170): Maximum 85% RH allowable.
  8. Flashpoint: > 500° F

9. Shelf Life: 6 months @70°F(21°C) in an unopened container.
10. Working Time: approximately 3 hours at 75°F (24°C) and 50% relative humidity.
11. Trowel: 1/16" square notched trowel.
12. Coverage Rate: 90 ft<sup>2</sup> per gallon (1/16" square notched trowel).

#### 2.04 OTHER MATERIALS

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor and reviewed by the Architect.

### PART 3 – EXECUTION

#### 3.01 MANUFACTURER'S INSTRUCTIONS

- A. Compliance: Comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions, and product carton instructions for installation.

#### 3.02 EXAMINATION

- A. Site Verification of Conditions: Verify substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer's instructions.

#### 3.03 PREPARATION

- A. Surface Preparation: Insure to installer's satisfaction that substrate is compliant with manufacturer's criteria for moisture content, surface preparation, etc.
- B. Existing conditions will necessarily require floor preparation. Since precise scope is not clear, assume that all floors scheduled to receive new flooring will be completely scraped and cleaned. Preparation that cannot be achieved by normal scraping and cleaning will be assumed to be extra work.

#### 3.04 INSTALLATION

- A. Comply with manufacturer's technical and installation manuals for installation procedures and techniques for recycled rubber resilient flooring installation.

#### 3.05 CLEANING

- A. Cleaning: Remove temporary coverings and protection of adjacent work areas. Repair or replace damaged installed products. Clean installed products in accordance with manufacturer's instructions prior to Owner's acceptance. Remove construction debris from project site and legally dispose of debris.

#### 3.06 PROTECTION

- A. Protection: Protect installed product and finished surfaces from damage during construction.

END OF SECTION

## SECTION 09675 - POLYASPARTIC POLYUREA FLOORING

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work included: Provide and install all seamless flooring and integral base where shown on the drawings, as specified herein, and as required for a complete and proper installation. Work includes, but is not necessarily limited to, the following:
  - 1. Seamless flooring and cove base.
  - 2. Floor Preparation. NOTE: existing floor surface is seamless epoxy.
- B. Related work: Documents affecting work of this Section include, but are not necessarily limited to, General and Supplementary Conditions, and Sections of Division I of these specifications.
  - 1. Section 03300 - Concrete
  - 2. Section 09656 - Resilient Athletic Surfacing

#### 1.02 REFERENCES

- A. ASTM International:
  - 1. ASTM D 522 – Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings.
  - 2. ASTM D 638 – Standard Test Method for Tensile Properties of Plastics.
  - 3. ASTM D 1014 – Standard Practice for Conducting Exterior Exposure Tests of Paints and Coatings on Metal Substrates.
  - 4. ASTM D 1308 – Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes.
  - 5. ASTM D 2047 – Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine.
  - 6. ASTM D 2794 – Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
  - 7. ASTM D 4060 – Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser.
  - 8. ASTM D 4541 – Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers.
  - 9. ASTM D 4587 – Standard Practice for Fluorescent UV-Condensation Exposures of Paint and Related Coatings.
  - 10. ASTM F 1869 – Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
- B. SSPC: The Society for Protective Coatings:
  - 1. SSPC-Paint 36 – Two-Component Weatherable Aliphatic Polyurethane Topcoat, Performance-Based.

#### 1.03 QUALITY ASSURANCE

- A. Applicator Qualifications: An applicator who is certified by the manufacturer for application of specified polyaspartic polyurea flooring system.
- B. Single-Source Responsibility: Obtain products from same source throughout Project.
- C. Field Samples: Locate at site and obtain approval before start of final work.
  - 1. Apply to 18-sq. ft. floor area to achieve dry film mil thickness at location selected by Architect. Include 48-inch length of integral cove base.
  - 2. Demonstrate range of finishes and workmanship, including curing procedures.
  - 3. Test slip-resistance coefficients of friction compliance with requirements by slip-meter testing according to ASTM D 2047.
  - 4. Accepted field samples provide standard for comparison with remaining work.
  - 5. Approved field sample may become part of the Work if undisturbed at completion of Project.

#### 1.04 SUBMITTALS - Comply with Section 01340 and the following:

- A. Product Data: For each product indicated.
  - B. Samples for Initial Selection: Manufacturer's color charts showing full range of colors.
  - C. Samples for Verification: 6-inch-square Samples, to demonstrate finish, color, and texture of flooring.
  - D. Applicator Certificate: Manufacturer's certificate for applicator, complying with requirements.
  - E. Maintenance Data: For including in maintenance manuals specified in Division 01.
- 1.05 DELIVERY, STORAGE AND HANDLING - Comply with Section 01640 and the following:
- A. Deliver and store materials in original packages with unbroken seals and labels intact.
  - B. Store in clean, dry and protected location, according to manufacturer's requirements.
- 1.06 PROJECT CONDITIONS
- A. Environmental Conditions: Comply with manufacturer's instructions for range of ambient temperatures and environmental conditions required to apply polyaspartic polyurea flooring.
  - B. Do not install polyaspartic polyurea flooring over concrete slabs until they are sufficiently cured, as determined by manufacturer's recommended tests.
- 1.07 WARRANTY
- A. Special Warranty for Polyaspartic Polyurea Flooring: Manufacturer's standard warranty against yellowing, fading, and delamination.
    1. Warranty Period: 3 years.

## PART 2 - PRODUCTS

### 2.01 POLYASPARTIC POLYUREA FLOORING AND INTEGRAL BASE SYSTEM

- A. Product: Cimarron Wholesale; One Day Floors™, or approved equivalent in accordance with General Conditions, Item 8.
- B. System Characteristics:
  1. Color and Pattern: As selected by Architect from manufacturer's standard product line.
  2. Surface: Granulated polypropylene OSHA and ADA-compliant slip-resistant finish.
  3. Cove Base: Prefabricated lightweight moisture-resistant flexible polymer composite cove base, 1/4-inch thick at base portion, with 1-inch cove radius and toe angled down to transition smoothly to floor.
    - a) Include prefabricated outside and inside corners.
    - b) Height: 4 inches.
    - c) Product: Solid Rock Enterprises; SpeedCove.
  4. System Minimum Thickness: Colored Quartz Blended Colors: 11 mils.
- C. System Components: Manufacturer's standard clear, self-priming, ultra-violet stable, polyaspartic aliphatic polyurea flooring system, designed for indoor or outdoor use, consisting of the following:
  1. Primer Sealer Coat:
    - a) Application Method: Roller.
    - b) Thickness of Coat: 3 mils, dry film thickness.
  2. Media/Bed Coat:
    - a) Application Method: Roller.
    - b) Thickness of Coat: 2 mils, dry film thickness.
  3. Media: Manufacturer's standard product, as follows:
    - a) Coloring Agents: Manufacturer's recommended product.
    - b) Colored Quartz (Ceramic-Coated Silica) Product: 3M'; Colorquartz', Type S.
    - c) Application Method: Broadcast.
    - d) Media Usage: Colored Quartz-Blended Colors, Light-Quartz Broadcast: 1 lb./40 sq. ft.

- 4. Topcoat:
  - a) Application Method: Roller.
  - b) Thickness of Coat: Quartz-Blended Colors, Light-Quartz Broadcast: 6 mils, minimum dry film thickness.
  - c) Number of Coats: As required to achieve system minimum thickness.

- D. System Physical Properties: Provide polyaspartic polyurea flooring with physical properties as follows:
  - 1. Tensile Strength, ASTM D 638: 5,935 psi.
  - 2. Adhesion Pull-Off, ASTM D 4541:
    - a) Concrete: Failure.
    - b) Steel: 1000 psi.
  - 3. Elongation, ASTM D 638: 9 percent.
  - 4. Abrasion Resistance, ASTM D 4060: 21.7 mg maximum weight loss.
  - 5. Impact Direct/Reverse, ASTM D 2794: 120 lbs./inch.
  - 6. Mandrel Bend, ASTM D 522: Passes, no cracking.
  - 7. Color-Gloss Retention, SSPC-Paint 36:
    - a) 48 Month South Florida, ASTM D 1014: Level 3.
    - b) 2000 Hours Accelerated, ASTM D 4587: Level 3.
- E. System Chemical Resistance: Test specimens of cured polyaspartic polyurea flooring shall comply with ASTM D 1308.

## 2.02 ACCESSORY MATERIALS

- A. Patching Material: One Day Floors Crack Fill.
- B. Granulated Polypropylene: Manufacturer's recommended product.
- C. Tools:
  - 1. Floor Scraper: Manufacturer's recommended 14-inch-wide standard floor scraper with radius corners.
  - 2. EPDM Squeegee: Manufacturer's recommended 18-inch-wide EPDM zero-straight squeegee.
- D. Joint Sealant: Two-part polyurethane traffic-grade sealant, type recommended by manufacturer.
  - 1. Colors: As selected by Architect.

## PART 3 - EXECUTION

### 3.01 EXAMINATION

- A. Examine substrates and conditions for compliance with manufacturer's requirements.
- B. Do not proceed until unsatisfactory conditions have been corrected.

### 3.02 PREPARATION

- A. Prepare and clean substrates according to manufacturer's instructions. Verify that substrates are dry and free of curing and sealing compounds. Ensure existing epoxy is well-bonded to concrete substrate; areas of epoxy that are loose must be removed and the concrete substrate mechanically-prepared by grinding. Mechanically grind existing epoxy to a CSP 2 profile according to ICRI Technical Guideline 03732, in order to ensure proper profile for mechanical bond, and fill low spots/holes/cracks and other defects in existing epoxy. Vacuum substrate, to ensure clean and dry surface for seamless flooring installation. Do not use solvents.
  - 1. Test substrate by pouring a slight amount of water on concrete in random areas to determine if water is absorbed into the concrete and leaves it wet. If water beads, continue grinding until a porous substrate is indicated.
- B. Perform moisture testing, one of the following:
  - 1. Perform anhydrous calcium chloride test, ASTM F 1869. Proceed with application when substrates have moisture-vapor emission rates that do not exceed 5 lb of water/1000 sq. ft. in 24 hours.
  - 2. Perform relative humidity test complying with ASTM F 1869.

- C. Perform pH tests recommended by manufacturer to confirm substrates have neutral pH.
- D. Repair cracks according to ICRI standards. Fill sawcut control joints with silica sand and patching material according to manufacturer's recommendations. Fill tooled control joints with sealant.
- E. Vacuum substrates, broom agitate, and vacuum a second time immediately prior to application of polyaspartic polyurea flooring.
- F. Materials Preparation: Mix polyaspartic polyurea flooring according to manufacturer's instructions.

### 3.03 APPLICATION

- A. General: Apply polyaspartic polyurea flooring according to manufacturer's instructions.
  - 1. Apply polyaspartic polyurea flooring with 18-inch-long phenolic core 3/8-inch synthetic nap cover.
- B. Apply primer sealer over substrate at manufacturer's recommended rate.
  - 1. Cure polyaspartic polyurea flooring according to manufacturer's instructions. Prevent contamination while applying and curing flooring system.
  - 2. Apply additional coats when previous coat is tack free and walk-on ready.
- C. Install cove base after primer sealer is cured, according to manufacturer's instructions.
- D. Apply media/bed coat at manufacturer's recommended rate.
  - 1. Broadcast media at manufacturer's recommended rate for specified system.
  - 2. When polyaspartic polyurea flooring is tack-free and walk-on ready, recover excess media.
  - 3. Colored Quartz Media: Vacuum excess colored quartz media.
- E. Apply topcoat(s) in number of coats required at manufacturer's recommended rate.
  - 1. Use EPDM squeegee and cross roll with roller in opposite direction on polyaspartic polyurea floors with media.
  - 2. Blend measured amount of granulated polypropylene and mix to suspension in topcoat. After application of topcoat, confirm slip resistance compliance by slip-meter testing according to ASTM D 2047.
- F. Joints: Where expansion joints interrupt substrates, provide joint in polyaspartic polyurea flooring as recommended by manufacturer.
  - 1. Install sealant according to manufacturer's instructions.

### 3.04 CURING, CLEANING, AND PROTECTION

- A. Cure according to manufacturer's instructions.
- B. Protect polyaspartic polyurea flooring from damage for the remainder of the construction period according to manufacturer's recommendations. Remove temporary coverings just prior to cleaning for final inspection.
- C. Clean polyaspartic polyurea flooring using materials and procedures recommended by manufacturer.

### 3.05 FIELD QUALITY CONTROL

- A. Testing: Engage a qualified testing agency to confirm slip-resistance compliance with requirements by slip-meter testing according to ASTM D 2047. Comply with the following wet or dry coefficients of friction (COF):
  - 1. Level Surfaces COF: 0.60.
  - 2. Ramps COF: 0.80.

END OF SECTION

## SECTION 09775 SANITARY FRP PANELS

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work included: The work required under this Section includes all materials, fabrication, labor and equipment to complete all Sanitary FRP Panel work as indicated on the drawings, as specified herein, and as required for a complete and proper installation.
  - 1. Locations: walls of new shower in Team Room A.
- B. Related work: Documents affecting work of this Section include, but are not necessarily limited to, General and Supplementary Conditions, and Sections of Division I of these specifications.
  - 1. Section 04210 - Concrete Masonry
  - 2. Section 06200 - Finish Carpentry

#### 1.02 SUBMITTALS - Comply with Section 01340.

- 1. Provide sample showing specified color.
- 2. Provide adhesive information including VOC compliance.

#### 1.03 PRODUCT HANDLING - Comply with Section 01640.

#### 1.04 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and methods needed to complete the work of this Section.

### PART 2 - PRODUCTS

#### 2.01 PRODUCT

- A. Sanitary FRP panels shall be "Glasbord with Surfaseal", fabricated from fiberglass reinforced polyester (FRP), with integral color, as manufactured by Kemlite, or approved equivalent in accordance with General Conditions, Item 8.
  - 1. Finish: Embossed Surface.
  - 2. Size : 48" x 96" x .09".
  - 3. Color : White.
  - 4. Barcol Hardness: 35 as per ASTM - E2583.
  - 5. Flexural Strength: 8.5 x 103 psi (59 MPa) as per ASTM - D790.
  - 6. Flexural Modulus: 0.35x 106 psi (2413 MPa) as per ASTM - D790.
  - 7. Tensile Strength: 5 x 103 psi (34 Mpa) as per ASTM - D638.
  - 8. Tensile Modulus: 0.6 x 106 psi (4137 MPa) ASTM - D638.
  - 9. Izod Impact: 6.0 ft-lb/in notched (0.32 J/mm) as per ASTM - D256.
  - 10. Coefficient of Linear Thermal Expansion: 1.6 x 10<sup>-5</sup> in/in/°F 29 µm/m/°C as per ASTM - D696.
  - 11. Gardner Impact Strength: 30 in-lb (3.4 J) as per ASTM - D3029.
  - 12. Water Absorption: 0.16%/24hrs@77°F (0.16%/24hrs@25°C) as per ASTM - D570.
  - 13. R Value: 0.23 hr•ft<sup>2</sup>•°F/BTU (0.047 hr•m<sup>2</sup>•°C/kcal) as per ASTM - C114.
  - 14. Surface Burning Characteristics: Class C as per ASTM - E84.
  - 15. Taber Abrasion Resistance (cs-17 wheels, 1000g. Wt, 25 cycles): 0.01%Max Wt. Loss as per Taber Test.
- B. Accessories:
  - 1. Trim, joiners, etc.: Manufacturer's standard for PVC rivets, base, corners, edge and division.
  - 2. Adhesive: C-551 Latex Based Construction Adhesive - Low VOC.
  - 3. Sealant: MS-250 (Clear), waterproof, silicone sealant.

## PART 3 - EXECUTION

### 3.01 GENERAL

- A. Maintain a temperature of 60 degrees for at least 48 hours before and after installation.
- B. Maintain relative humidity within limits required by adhesive manufacturer.
- C. Verify that substrate is smooth, flat and even. Proceeding with the work indicates acceptance of substrate.
- D. Substrate must be dry and free of dirt, dust and grease.

### 3.02 INSTALLATION

- A. Install with adhesive in accordance with manufacturer's instruction guide # 6211. Seal vertical joints with division molding. Install edge molding at top, bottom, inside and outside corners as recommended by manufacturer.
- B. Do all cutting and drilling with carbide tipped blades.
- C. Adhesive shall be installed using a notched trowel and cross hatched application method.
- D. Layout work and install with proper gaps to allow for expansion and contraction.

END OF SECTION

## SECTION 09900 - PAINTING AND FINISHING

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work included: The work required under this Section includes all the painting and finishing of the exterior and interior exposed surfaces as indicated on the drawings, listed on the painting schedule in part 3 of this section, as specified herein, and as required for a complete and proper installation.
- B. Related work: Documents affecting work of this Section include, but are not necessarily limited to, General and Supplementary Conditions, and Sections of Division I of these specifications.
  - 1. Section 04210 - Concrete Masonry Units
  - 2. Section 06200 - Finish Carpentry
  - 3. Section 08100 - Metal Doors & Frames
  - 4. Section 09250 - Gypsum Wallboard
  - 5. Shop priming of miscellaneous metal work, etc.
- C. "Paint" as used herein means coating systems materials including primers, enamels, stains, sealers, fillers, oil, alkyd, latex, polyurethane, epoxy, and enamel-type paints, etc., and the application of these materials.

1.02 SUBMITTALS - Comply with Section 01340.

1.03 PRODUCT HANDLING - Comply with Section 01640.

#### 1.04 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and methods needed to complete the work of this Section.

#### 1.05 STORAGE OF MATERIALS

- A. Store all materials used on the job in a single place and keep such place neat and clean, restoring any damage to it or its surroundings. Soiled or used rags, waste and trash shall be removed from the building each night and disposed of in accordance with all applicable federal, state and local regulations. Take every precaution to avoid fire.

#### 1.06 JOB, WEATHER AND TEMPERATURE CONDITIONS

- 1. Once painting has commenced, maintain a constant temperature of 65F or above.
- 2. Before painting is started in any area, vacuum clean and remove excessive dust.
- 3. After painting operations have begun, broom cleaning shall not be allowed; cleaning shall then be performed only with commercial vacuuming equipment.
- 4. Adequate illumination shall be provided in all areas where painting operations are in progress.

#### 1.07 COOPERATION WITH OTHER TRADES

- A. Schedule and coordinate this work with other trades. Do not proceed until other work or job conditions are as required to achieve satisfactory results. Examine the specifications for the other trades and become familiar with all their provisions regarding painting.

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS

- A. Interior
  - 1. Paint: 100% acrylic latex paint as manufactured by Benjamin Moore, Glidden, Pittsburg Paint Company, Pratt and Lambert, Sherwin Williams, or approved equivalent in accordance with General Conditions, Item 8.

## 2.02 STANDARDS

- A. All paint colors shall be selected from samples prepared by the painting contractor. Samples shall be a minimum of 4'X8', in areas as directed by the Architect. These samples shall be painted on separate panels, so they may be used for comparison to finished surfaces.
- B. All painting materials shall be delivered in original containers with unbroken seals, intact labels and with the manufacturer's instructions printed thereon. All painting materials shall arrive on the job color-mixed except for tinting of undercoats or possible thinning.
- C. Application equipment is not required to be new, but shall be adequate or as recommended on the product label for the work required herein.
- D. Accessory materials shall include all required ladders, scaffolding, drop cloths, maskings, scrapers, tools, dusters, cleaning solvents and waste, as required to perform the work and achieve the specified results.
- E. Do not paint over any door or frame labels (i.e. UL, Inc., Warnock-Hersey, etc.)

## 2.03 PAINT SCHEDULE

- A. Surfaces to be painted:
  - 1. Interior painted masonry/concrete: 1 coat latex masonry primer, 2 coats acrylic latex eggshell finish.
  - 2. Gypsum board ceilings: 1 coat latex primer, 2 coats acrylic latex interior flat.
  - 3. Interior painted wood: 1 coat factory primer, 2 coats acrylic latex interior semi-gloss enamel.
  - 4. Interior painted metal: 1 coat primer (factory applied, touch up as required), 2 coats acrylic latex interior semi-gloss enamel.
  - 5. Interior painted metal (existing steel columns, new steel lintels, etc.): 1 coat interior metal primer, 2 coats 100% acrylic latex interior eggshell.
- B. The following products are specified to establish level of quality; all products are manufactured by Sherwin Williams, Inc. Substitutions of equivalent products shall be in accordance with General Conditions, Item 8.
  - 1. Interior Finishes:
    - a) Gypsum board:
      - Primer: B28W00600 - ProGreen Interior Latex Primer White (tint)
      - Flat Finish: B30W02651 - ProMar® 200 Zero VOC Interior Latex Flat
      - Eg-Shel: B20W02651 - ProMar® 200 Zero VOC Interior Latex Eg-Shel
    - b) New concrete masonry:
      - Primer: B42W46 Block filler
      - Semi-Gloss: B31W02651 - ProMar® 200 Zero VOC Interior Latex Semi-Gloss
    - c) Existing concrete masonry:
      - Primer: Not required over previously painted surfaces
      - Semi-Gloss: B31W02651 - ProMar® 200 Zero VOC Interior Latex Semi-Gloss
    - d) Metal:
      - Primer: B66W00310 - Pro Industrial Pro-Cryl® Universal Primer (tint)
      - Semi-Gloss: B66W00651 - Pro Industrial 0 VOC Acrylic Semi-Gloss
    - e) Steel columns, steel lintels, other exposed metal, etc.:
      - Primer: B66W310 - ProCryl Universal Metal Primer
      - Eggshell: B42W2 - Waterborne Acrylic Dry Fall

## PART 3 - EXECUTION

### 3.01 INSTALLATION

- A. General:
  - 1. Examine the work of others prior to the application of any paint or finishing material. If any surface to be finished cannot be put in proper condition by customary cleaning, sanding and puttying operations, notify the General Contractor immediately, in writing. Do not proceed with finishing until surface or

conditions are acceptable. Application of paint or finish to the surface constitutes acceptance of the surface and responsibility to achieve satisfactory results.

2. Employ skilled mechanics to ensure the very best workmanship. Materials shall be applied by workers experienced in the use of the product involved. All paints and stains shall be applied in strict accordance with the specific manufacturer's recommendations. Pay particular attention to requirements relating to application of epoxy materials, including ventilation, temperature, surface preparation, etc.
3. Apply all coats under adequate illumination. Spread evenly and flow on smoothly without runs, sags, holidays, brush marks, air bubbles and excessive roller stipple.
4. Upon completion of the work remove all paint spots from floors, glass and other surfaces. Remove all rubbish and accumulated material not caused by others and leave the work in a clean, orderly and acceptable condition.
5. All finished surfaces shall be smooth, even and free from any defects. Brushwork shall show even coating, free from brushmarks.
6. Spraying of primer on gypsum board surfaces is acceptable. Final coat of all finish on gypsum board surfaces may be spray applied, providing that it is "back-rolled" concurrently. All other surfaces shall be roller or brush applied, as appropriate for the surface being painted.

B. Preparation of surfaces: Prior to application of paint to any interior surfaces, thoroughly broom clean and then vacuum clean all floors and surfaces.

1. Prepare all surfaces before painting, removing dust, grease and marks from surface. Surfaces shall be clean, dry, adequately protected from dampness and free of any foreign materials which will adversely affect adhesion or appearance of applied coating. Mildew shall be removed and the surface neutralized per the coating manufacturer's recommendations.
2. Gypsum drywall: fill all minor irregularities with joint compound and sand to a smooth, level surface. Use care to avoid raising nap of paper.
3. Concrete masonry units:
  - a) Patch large openings and holes and finish flush with adjacent surface. After priming, fill any remaining small holes with prepared patching material.
  - b) These surfaces shall be dry when finished. No finishing operations shall commence until they have cured for 28 days and are dry.
4. Ferrous metal surfaces:
  - a) Remove dirt and grease with mineral spirits and wipe dry with clean cloth.
  - b) Remove rust, mill scale and defective paint down to sound surfaces or bare metal using scraper, sandpaper or wire brush as necessary. Grind, disc sand, etc. as necessary to remove "shoulders" at sound paint.
  - c) Touch up all bare metal and damaged shop coats with matching primer.
5. Galvanized metal surfaces: remove dirt and grease with mineral spirits and wipe dry with clean cloth.

### 3.02 QUALITY OF WORK

A. Interior:

1. Enamel finish applied to wood or metal shall be sanded with fine sandpaper and then cleaned between coats to produce an even surface.
2. Interior doors scheduled to be painted shall be sealed on the top and bottom edges with primecoat only, unless the top edge is visible from an elevated space when the door is open. Hinge and strike edges shall be finished to match door faces.
3. Any millwork, including custom wood door frames, not specified to be shop-finished shall be finished under this section.

### 3.03 SCOPE OF WORK

A. INTERIOR

1. Paint concrete masonry walls in team rooms, public restrooms and both sides of concession area wall where new windows are scheduled (paint full height and width on concession side, minimum height to one full CMU course above windows and minimum width from door frame to door frame).
2. Finish/paint all metal doors, door frames and trim in rooms or spaces scheduled to be painted.

END OF SECTION

## SECTION 10216 - TOILET ROOM PARTITIONS

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work included: Provide solid plastic floor mounted, overhead braced toilet partitions and wall mounted urinal screens as shown on the drawings, as specified herein, and as required for a complete and proper installation.
- B. Related work: Documents affecting work of this Section include, but are not necessarily limited to, General and Supplementary Conditions, and Sections of Division I of these specifications.
  - 1. Section 06200 - Finish Carpentry

#### 1.02 REFERENCES

- A. ASTM International (ASTM):
  - 1. A167 - Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
  - 2. B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.

#### 1.03 SUBMITTALS

- A. Comply with the pertinent provisions of Section 01340.
- B. Shop Drawings: Include dimensioned layout, elevations, trim, closures, and accessories.
- C. Product Data: Manufacturer's descriptive data for panels, hardware, and accessories.
- D. Samples: 3x3 inch samples showing available colors.

#### 1.03 PRODUCT HANDLING

Comply with Section 01640.

#### 1.04 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and methods needed to complete the work of this Section.
- B. Manufacturer Qualifications: Minimum five (5) years experience in manufacture of solid plastic toilet compartments with products in satisfactory use under similar service conditions.
- C. Installer Qualifications: Minimum five (5) years experience in work of this Section.

#### 1.05 WARRANTY

- A. Provide manufacturer's 25 year warranty against breakage, corrosion, and delamination under normal conditions.

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS

- A. All partition products shall be as manufactured by Scranton Products Company, 801 East Corey Street, Scranton, PA 18505 ([www.scrantonproducts.com](http://www.scrantonproducts.com)), or approved equivalent, in accordance with General Conditions, Item 8.

#### 2.02 MATERIALS

- A. Doors, panels and pilasters:
  - 1. Fabricated from high density polyethelene (HDPE), fabricated from polymer resins compounded under high pressure, forming single thickness panel.
  - 2. Waterproof and nonabsorbent, with self-lubricating surface, resistant to marks by pens, pencils, markers, and other writing instruments.
  - 3. 1 inch thick with edges rounded to 1/4 inch radius.
  - 4. Recycled content: Minimum twenty-five (25) percent.
  - 5. Color: To be selected from manufacturer's full color range.
  - 6. Aluminum Extrusions: ASTM B221, 6463-T5 alloy and temper.
  - 7. Stainless Steel: ASTM A167, Type 304.
  
- B. HARDWARE
  - 1. Hinges shall be 8 inches long, fabricated from heavy-duty extruded aluminum with bright dip anodized finish, wrap-around flanges, adjustable on 30-degree increments, through bolted to doors and pilasters with stainless steel, Torx head sex bolts. Hinges shall operate on field-adjustable nylon cams, field adjustable in 30 degree increments.
  - 2. Door Strike and Keeper:
    - a. 6 inches long, fabricate from heavy-duty extruded aluminum with bright dip anodized finish, with wrap-around flanges secured to pilasters with stainless steel tamper resistant Torx head sex bolts.
    - b. Bumper: Extruded black vinyl.
  - 3. Latch and housing:
    - a. Heavy-duty extruded aluminum.
    - b. Latch housing: Bright dip anodized finish.
    - c. Slide latch and paddle.
  - 4. Coat hook/bumper: Combination type, chrome plated Zamak.
  - 5. Door Pulls: Chrome plated Zamak.

## 2.03 COMPONENTS

- A. Doors and dividing panels: 55 inches high, mounted 14 inches above finished floor, with aluminum heat-sinc fastened to bottom edges.
  
- B. Pilasters: Mounted 14 inches above floor, secured to ceiling supports with manufacturer's standard hardware. fastened to pilaster sleeves with stainless steel tamper resistant Torx head sex bolt, with stainless steel angle attachment to floor and ceiling.
  
- C. Pilaster Sleeves: 4 inches high, 20 gage stainless steel, secured to pilaster with stainless steel tamper resistant Torx head sex bolt.
  
- D. Wall Brackets: 54 and 68 inches long, heavy-duty aluminum, bright dip anodized finish, fastened to pilasters and panels with stainless steel tamper resistant Torx head sex bolts.
  
- E. Accessories: Provide miscellaneous toggle bolts, shields, etc. as required to complete the installation into existing wall conditions.

## PART 3 - EXECUTION

### 3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which the work will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions have been corrected.

### 3.02 INSTALLATION

- A. Install compartments in accordance with manufacturer's instructions and approved Shop Drawings. Install rigid, straight, plumb, and level.
  
- B. Locate bottom edge of doors and panels 14 inches above finished floor.

- C. Provide uniform, maximum 3/8 inch vertical clearance at doors.
- D. Evidence of cutting, drilling, or patching is unacceptable and cause for rejection.

3.03 ADJUSTING

- A. Adjust doors and latches to operate correctly.

END OF SECTION

## SECTION 10800 - TOILET ROOM ACCESSORIES

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work included: Provide bathroom accessories as shown on the drawings, as specified herein, and as required for a complete and proper installation.
- B. Related work: Documents affecting work of this Section include, but are not necessarily limited to, General and Supplementary Conditions, and Sections of Division I of these specifications.
  - 1. Section 06200 - Finish Carpentry

#### 1.02 SUBMITTALS

Comply with the pertinent provisions of Section 01340.

#### 1.03 PRODUCT HANDLING

Comply with Section 01640.

#### 1.04 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and methods needed to complete the work of this Section.

### PART 2 - PRODUCTS

#### 2.01 BATHROOM ACCESSORIES

- A. Anchors and fasteners: provide anchors and fasteners as supplied with the accessories.
- B. Provide stainless steel with satin finish for all accessory items. Mirrors shall be furnished with stainless steel frames; listed dimensions shall be inclusive of frames.
- C. Locations for accessories shall be as shown on the drawings or as approved by the Architect. Where required, accessories shall be installed in accordance with the 2010 ADA Guidelines and the 2012 Vermont Access Rules.
- D. Manufacturers are listed to establish quality. Others may be substituted as an approved equivalent, in accordance with General Conditions, Item 8.

#### 2.02 ACCESSORY SCHEDULE

ITEM	MODEL	QUANTITY
Surface mounted TP holder	Salvaged/furnished by owner	9
Surface mtd paper towel dispenser	Salvaged/furnished by owner	8
Grab bars	ASI Type 01	7 (2@24", 3@42", 1@36", 1@48")
Mirror (Men's Room)	ASI 0600A 16X36	5
Mirror (Women's & Team Rooms)	ASI 0600A 18X36	7
Mirror (Men's & Women's Rooms)	ASI 0600A 18X72	2

#### 2.03 BABY CHANGING STATIONS

- A. MANUFACTURER - Horizontal Baby Changing Stations (two required) shall be Model No 9012 by American Specialties Inc., 441 Saw Mill River Road, Yonkers, New York 10701-4913, or approved equivalent, in accordance with General Conditions, Item 8.
- B. PRODUCT REQUIREMENTS
  - 1. Baby Changing Station shall be horizontal format and shall protrude no more than 4" [102] from wall when in retracted position.

2. Unit shall comply with 2010 ADA Accessibility Standards, shall support a static load of 300 lbs. (136.1 kg) and be tested in excess of 350 lbs. (158.8 kg).
3. No metal parts shall be visible when unit is open or closed and no parts of the operating mechanism shall be accessible when unit is open or closed to provide a tamper-resistant and pinch proof user environment.
4. Unit shall be provided with two integral heavy-duty bag hooks clearly marked with international-style symbols.
5. Unit shall not prominently display any garish graphics or brand name on exterior surfaces.
6. Entire unit shall be assembled of completely sealed components to provide easy cleaning and no penetration zones to harbor microbes or bacteria. Unit shall provide no level surfaces when open or closed that may invite the resting or placement of cups, cans, bottles or cigarettes.
7. Mounting fasteners shall be concealed after installation using color matched recess plug-covers supplied.
8. Unit shall be a light grey color and unit shall be recyclable at end of usable life.

C. MATERIALS

1. Unit shall be fabricated of non-porous plastic (FDA approved HDPE) tested according to ASTM G21, ASTM G22 and ANSI A117.1. Color shall be selected by the Architect.
2. Hinges shall be reinforced, full-length steel-on-steel.
3. Mounting supports shall be multiple, 10 ga. steel.
4. Operation: hidden pneumatic gas spring mechanism for safe open/close operation with one hand.
5. Unit shall be provided with an adjustable two-part child protection safety-strap mounted with concealed fasteners on high walls of cradle. Rear strap shall be vinyl coated.

D. ACCESSORIES

1. Unit shall include an integral built-in liner dispenser for use with 3-ply chemical free biodegradable 13"X18" sanitary liners, with concealed, self-latching lock requiring no keys, that may be easily converted to a multi-fold towel dispenser with no adapters. A view slot shall be provided to indicate low liner/towel stack condition.
2. Replaceable snap-lock protective holding straps.
3. Unit shall provide graphic and instructions in seven languages on interior back.

- E. WARRANTY - Provide a copy of the manufacturer's standard five year warranty, product liability policy and five year replacement policy against vandalism.

2.04 OTHER MATERIALS

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor and reviewed by the Architect.

PART 3 - EXECUTION

3.01 SURFACE CONDITIONS

- A. Examine the areas and conditions under which the work will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Refer to plans and elevations on drawings for accessory locations and mounting heights.
- B. Coordinate with the work of other trades to assure proper and adequate provision in the work of those trades for interface with this work.
- C. Install each item in its proper location, firmly anchored into solid blocking or with toggle bolts, lead shields, etc., level and plumb, and in accordance with the manufacturer's recommendations.

END OF SECTION

## SECTION 15400 - PLUMBING FIXTURES

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Work covered by this Section includes the furnishing and installation of all plumbing fittings, including miscellaneous revisions to water lines, domestic hot and cold water piping, and pipe insulation within the rooms designated on the drawings, as specified herein, and as required for a complete and proper installation.
- B. Related work: Documents affecting work of this Section include, but are not necessarily limited to, General and Supplementary Conditions, and Sections of Division I of these specifications.
- C. The plumbing work shown on the Drawings is schematic and the Specifications define the work in broad terms. As such, the Contract Documents shall not be construed as a complete description of all of the details of design and construction required. Provide all labor, materials, equipment, appliances, tools, hardware and accessories and perform all work necessary for the complete execution of the plumbing work as shown on the Drawings, required by the Specifications and work not specifically shown or specified, yet required to ensure proper and complete operation of all systems. The Work shall comply with all applicable codes, regulations and ordinances. This Contractor shall secure and pay for all required fees, permits, and inspections for the work included in this Section.

#### 1.02 SUBMITTALS

- A. Comply with the pertinent provisions of Section 01340.
- B. Submittals shall be complete by specification article. All items specified under the same article as the major item shall be included in the submittals. No partial or incomplete submittal will be accepted or reviewed. Submittals for equipment requiring electrical service shall include wiring diagrams.
- C. Provide copies of all required permits.
- D. Provide Operation and Maintenance Manuals for all equipment.
- E. Submittals and/or shop drawings are to be edited to show specific data for the mechanical equipment that the contractor intends to provide.
- F. Submittals and/or shop drawings shall be identified with numbers and letters identical to those listed on the drawings and/or specifications.

#### 1.03 PRODUCT HANDLING

Comply with Section 01640.

#### 1.04 QUALITY ASSURANCE

- A. Plumbing work shall be performed by a duly licensed plumber who is qualified to do such work and who is normally engaged in this type of work. S/he shall be familiar with the materials being installed, with all pertinent standards, codes, regulations and ordinances, the manufacturers' recommended installation procedures, the requirements of the City of Burlington, and the requirements of the Contract Documents.
- B. Plumbing materials, products, equipment, construction and installations shall comply with State and local plumbing codes and other applicable standards. All plumbing fixtures and components that convey potable water shall comply with NSF/ANSI Standard 61, Annex G. Wherever a conflict may exist between these Contract Documents or any of the codes or City's requirements, the more stringent shall govern.

## PART 2 – PRODUCTS

### 2.01 FIXTURES

- A. The majority of existing fixtures will be reused in place, although faucets and valves will be replaced in all fixtures scheduled to be reused. All fixtures scheduled to be reused shall be removed, thoroughly cleaned and drain lines fully snaked to eliminate any existing clogs. Use care not to damage any fixtures. Any fixtures not scheduled to be reused shall be saved for Owner's inventory.
  - 1. Sinks (lavatories): provide with service stops, stainless steel braided supplies, PVC P-trap with cleanout, PVC tailpiece, chrome stops. Provide hot supply and trap insulation where specified.
  - 2. Toilets (waterclosets): provide new wax seals, mounting bolts and caps, and flange extenders to align with finish floor height as required.
  - 3. Urinals: provide new rough-in components as required.
- B. Fixtures to be reused shall be carefully stored, and re-installed after painting and finishing operations have been completed.
  - 1. Sinks (lavatories): caulk/seal perimeter to existing wall, using polyurethane or silicone sealant.
  - 2. Toilets (waterclosets): caulk/seal perimeter of base to floor, using polyurethane or silicone sealant. Do not use plumber's putty for this purpose.
  - 3. Urinals: caulk/seal perimeter to existing wall, using polyurethane or silicone sealant.

### 2.02 PLUMBING FITTINGS

- A. Furnish and install where indicated on the Drawings. All fixtures and fittings shall be provided with all necessary accessories to form a complete installation.
- B. Plumbing Fixtures shall be provided as scheduled below.

### 2.03 PLUMBING FITTING/FIXTURE SCHEDULE

- P-1 Replace existing lavatory faucet with new electronic sensor-operated faucet which shall feature vandal-resistant cast brass body with dual inlets, check valves & filter screens. Single post mounting (provide blanks to cover remaining lavatory holes). Features integrated design with the sensor, solenoid valve and all electronics enclosed in the spout. Shall also feature above-deck mixing valve with ceramic disc valve, hot limit safety stop and removable handle, for user to manually control temperature. Furnish with manufacturer recommended lithium battery. Fitting shall be American Standard Model # 705.205, or approved equivalent, in accordance with General Conditions, Item 8.
- P-1A Replace existing lavatory faucet with new electronic sensor-operated faucet which shall feature vandal-resistant cast brass body with dual inlets, check valves & filter screens. Single post mounting (provide blanks to cover remaining lavatory holes). Features integrated design with the sensor, solenoid valve and all electronics enclosed in the spout. Shall also feature above-deck mixing valve with ceramic disc valve, hot limit safety stop and removable handle, for user to manually control temperature. Furnish with manufacturer recommended lithium battery. Fitting shall be American Standard Model # 705.205, or approved equivalent, in accordance with General Conditions, Item 8. Traps and supply piping for ADA compliant wall hung lavatory sinks shall be insulated with a white, fitted anti-microbial pipe cover. Cover shall be designed to allow access to the stop valves. Provide "Lav-Guard", as manufactured by Truebro, Inc., or approved equivalent, in accordance with General Conditions, Item 8.
- P-2 Replace existing toilet valve with new electronic proximity infrared sensor activated toilet flush valve. Unit shall feature a self-cleaning piston valve with integral wiper spring in refill orifice to prevent clogging. Flush volume is determined by amount of time user is in detection zone: 60 seconds or less, 1.1 gpf/4.2 Lpf; more than 60 seconds: 1.28 gpf/4.8 Lpf. Unit shall include a fully mechanical manual over-ride that can provide a complete flush without battery power, a cast brass valve body and metal cover with chrome finish, vandal resistant stop cap, angle stop with back-flow protection, vacuum breaker and lithium battery. Flush valve shall be American Standard Model # 6065.521.002, or approved equivalent, in accordance with General Conditions, Item 8.

- P-3 New handicapped accessible shower valve with accessories shall feature a wall supply with 1/2" NPT female inlets and 1/2" NPSM male outlet, 59" metal hose, vacuum breaker, 1.5 gpf/5.7 lpf min., 3-function water saving personal shower and a 36" Slide Bar. R120SS pressure balanced valve and trim shall feature a cast brass body with ceramic disc valve cartridge to control water temperature and volume, and shall feature a hot limit safety stop. Fitting shall be American Standard Model #1662.211.002, or approved equivalent, in accordance with General Conditions, Item 8.
- P-4 Replace existing urinal valve with new electronic proximity infrared sensor activated urinal flush valve shall feature self-cleaning piston valve, and includes a fully mechanical manual over-ride that can provide a complete flush without battery power. Includes cast brass valve body and metal cover with chrome finish, vandal resistant stop cap and lithium battery. 1" Angle stop with back-flow protection and 1-1/4" vacuum breaker included. Flush valve shall be American Standard Model # 6062.601.002, 1.0 gpf / 3.8 lpf, or approved equivalent, in accordance with General Conditions, Item 8.
- P-5 Replace existing urinal and flush valve with new complete unit, including carrier arms. Install so top of rim is 15-1/4" AFF. New valve shall be electronic proximity infrared sensor activated urinal flush valve and feature self-cleaning piston valve, and includes a fully mechanical manual over ride that can provide a complete flush without battery power. Includes cast brass valve body and metal cover with chrome finish, vandal resistant stop cap and lithium battery. 1" Angle stop with back-flow protection and 1-1/4" vacuum breaker included. Flush valve shall be rated at 1.0 gpf/ 3.8 lpf. Complete package shall be American Standard "Washbrook", Model #6501.610, or approved equivalent, in accordance with General Conditions, Item 8.
- P-6 Replace existing watercloset with new ADA compliant watercloset and flush valve, including new wax seal and height adapter as required to match finish floor elevation. Complete package unit including toilet and valve shall be American Standard "Madera" w/Selectronic Flush Valve, 1.28 gpf/4.8 lpf, model # 3461.528, or approved equivalent, in accordance with General Conditions, Item 8. Confirm rough-in (10" or 12") requirement in field; rim height shall be 16-1/2" height for accessibility. Provide with extra heavy duty open front seat less cover, American Standard #5905.100, or approved equivalent, in accordance with General Conditions, Item 8. Valve shall be electronic proximity infrared sensor activated urinal flush valve and feature self-cleaning piston valve, and includes a fully mechanical manual over ride that can provide a complete flush without battery power. Includes cast brass valve body and metal cover with chrome finish, vandal resistant stop cap and lithium battery. 1" Angle stop with back-flow protection and 1-1/2" vacuum breaker included.

## PART 3 – EXECUTION

### 3.01 INSPECTION AND PREPARATION

- A. Prior to work of this Section, carefully inspect the work of other trades and verify that such work is complete to the point where this installation may properly commence. Since the majority of this work is to replace existing sink, urinal and toilet fittings, delay installation as long as possible to minimize conflicts with other finish trades.
- B. Verify that plumbing work may be installed in strict accordance with pertinent codes, regulations and ordinances.
- C. The scale of the Drawings precludes indicating all offsets, fittings, accessories and details which may be required. Carefully examine the Drawings and the work of other trades for conditions which may affect the installation of the plumbing. Rearrange the plumbing work, as required, and provide all items required to meet such conditions to complete the systems.

### 3.02 INSTALLATION

- A. Install piping promptly, capping or plugging open ends and making pipe generally free from traps and in a manner to conserve space for other work. Run pipes straight and parallel or at right angles to walls with risers erected plumb and true.
- B. Insulation - Provide pipe insulation on exposed and concealed hot and cold water lines in accordance with minimum energy requirements.
- C. Do not cover up or enclose work until it has been tested and inspected.

### 3.03 TESTING

- A. Test all pipelines in accordance with the requirements of all local and state plumbing codes. Test underground piping prior to backfilling.
- B. Insure that the test pressure which might damage fixtures or equipment does not reach such units by valving them off or otherwise isolating them during the test.
- C. All hydrostatic tests shall be held for a minimum of eight hours without loss of pressure. All air tests shall be held for a minimum of one hour without loss of pressure.

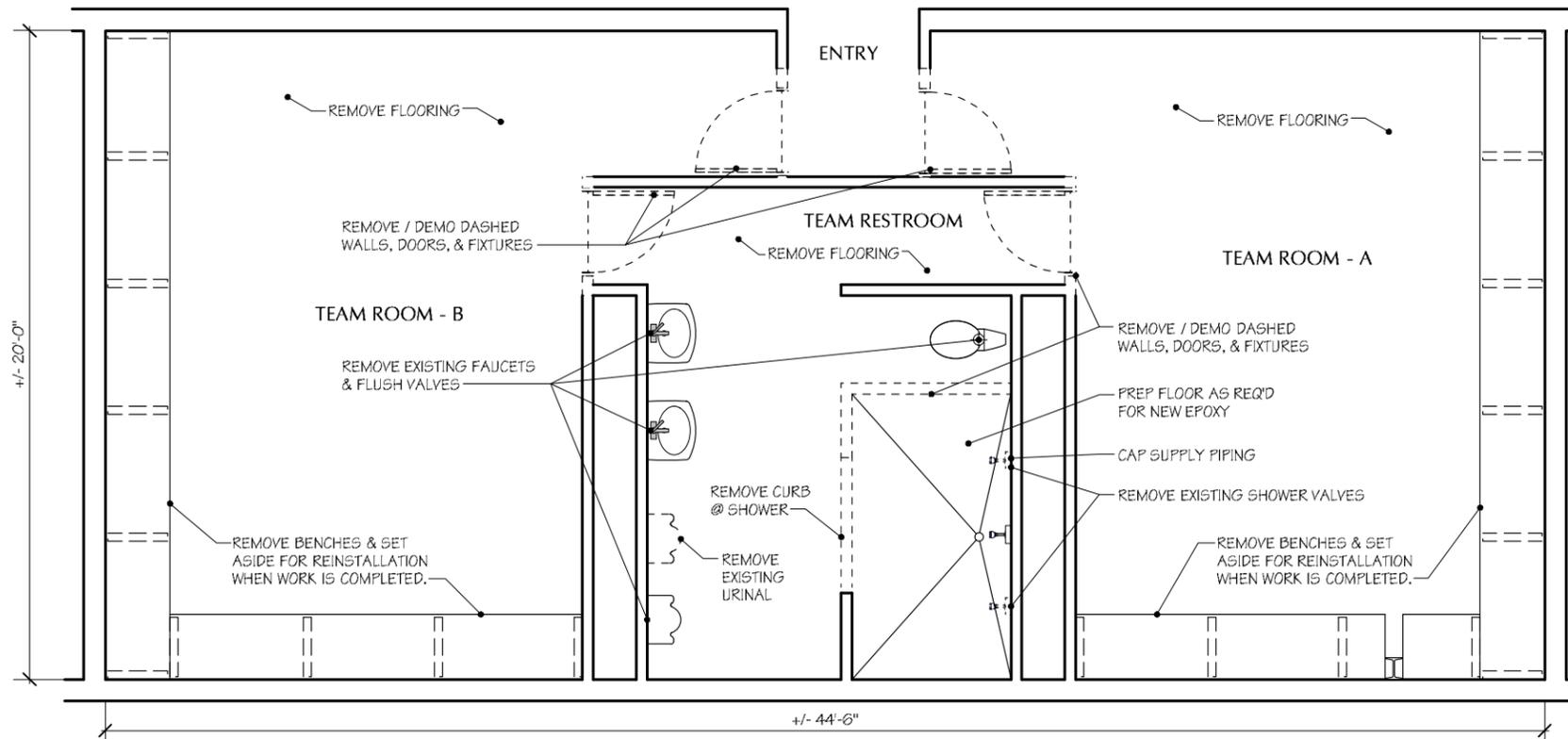
### 3.04 FLUSHING OF LINES

- A. Flush all pipes affected by this work that carry potable water, first being sure that trapped air is expelled, and the system is full of water. Use sufficient potable water to insure that all debris has been washed out and that residual chlorine is at its maximum available concentration.

### 3.05 ADJUST AND CLEAN

- A. Make any adjustments which may be required to make systems perform as required. Set controls and prepare system for permanent operation.
- B. Thoroughly clean all work and remove labels, stamps, dirt, pipe jointing materials and the like to place the systems in a neat, clean and sanitary condition. Use only manufacturer recommended cleaning solutions on fixtures and fittings so as not to damage the finish.

END OF SECTION

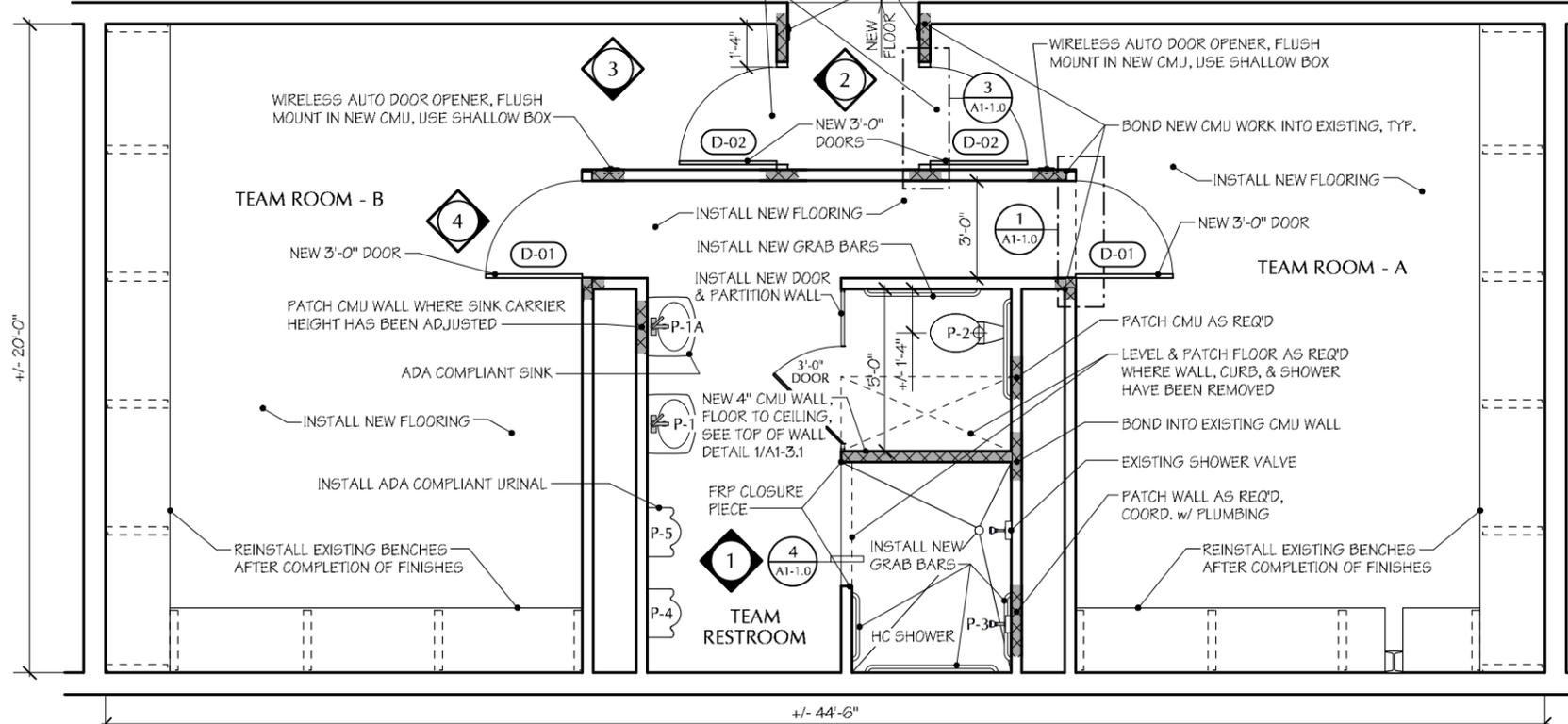


**TEAM ROOM A & B - DEMO PLAN**

Scale: 3/16" = 1'-0"

110V POWER TO AUTO DOOR OPENER PROVIDED BY OWNER, COORDINATE AS REQ'D

WIRELESS AUTO DOOR OPENERS, FLUSH MOUNT IN NEW CMU, USE SHALLOW BOX



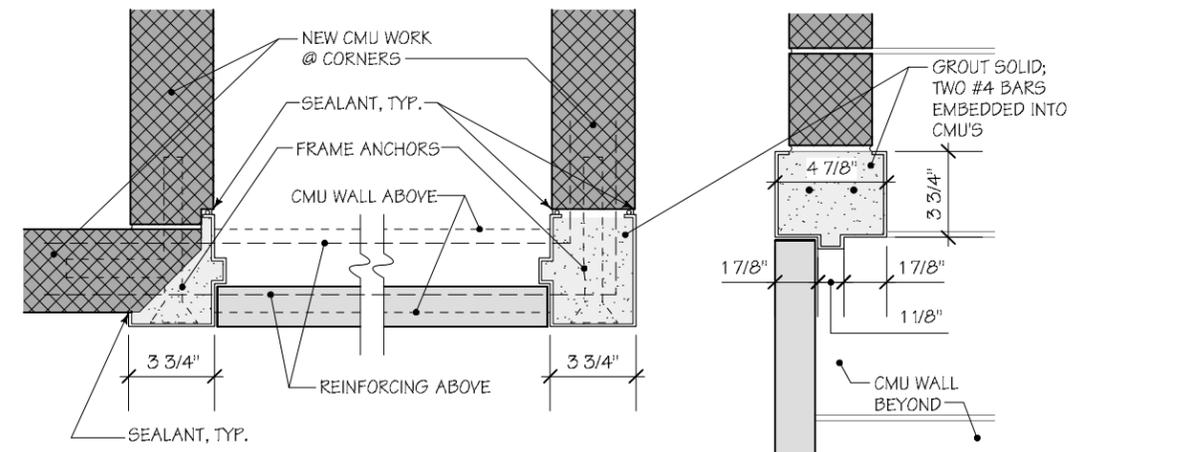
**TEAM ROOM A & B - PROPOSED PLAN**

Scale: 3/16" = 1'-0"

# LEDDY PARK ARENA

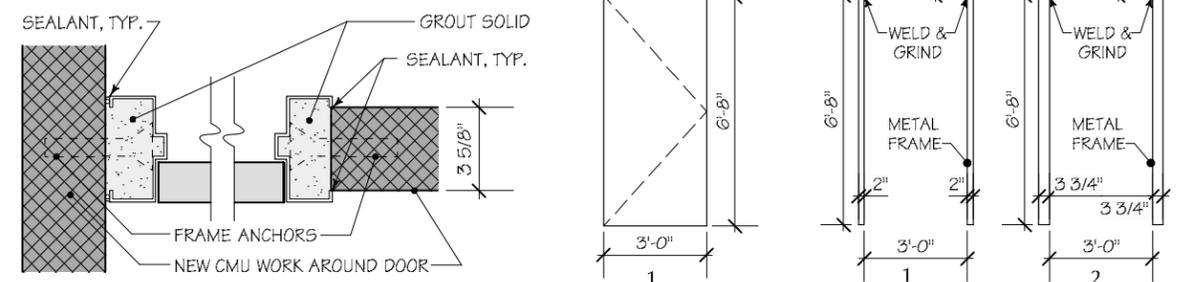
BURLINGTON, VERMONT

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**1 DR. (D-01) JAMB DETAIL** (ONE AS SHOWN & ONE OPPOSITE)  
SCALE: 1 1/2" = 1'-0"

**2 DR. (D-01) HD. DETAIL**  
SCALE: 1 1/2" = 1'-0"



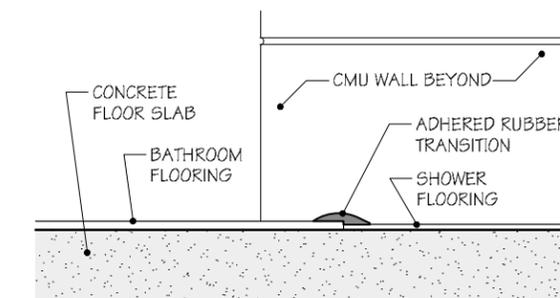
**3 DR. (D-02) JAMB DETAIL** (HEAD SIMILAR)  
SCALE: 1 1/2" = 1'-0" (ONE AS SHOWN & ONE OPPOSITE)

**DR. ELEVATION**  
SCALE: 3/16" = 1'-0"

**DR. FRAME ELEVATIONS**  
SCALE: 3/16" = 1'-0"

## LEDDY PARK - DOOR SCHEDULE

MARK	D-01	D-02
SIZE	1 3/4" x 3'-0" x 6'-8"	1 3/4" x 3'-0" x 6'-8"
DOOR ELEVATION	1	1
DOOR MATERIAL	SOLID CORE METAL	SOLID CORE METAL
FRAME ELEVATION	2	1
FRAME MATERIAL	METAL	METAL
HARDWARE	1	2
DETAILS	1&2/A1-1.0	3/A1-1.0



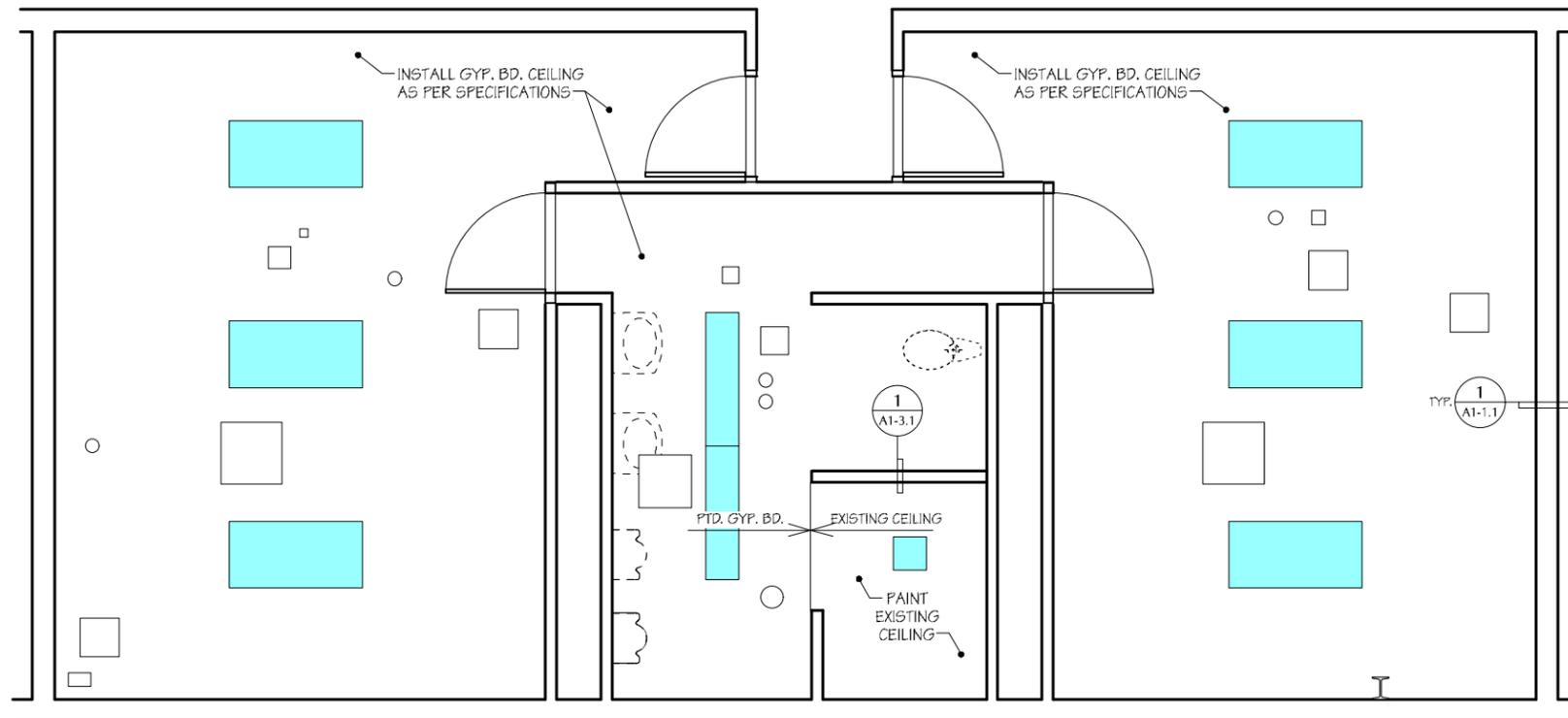
**4 FLOOR TRANSITION @ SHOWER**  
SCALE: 1 1/2" = 1'-0"

DATE: 05/2/2013

**Duncan Wisniewski** ARCHITECTURE

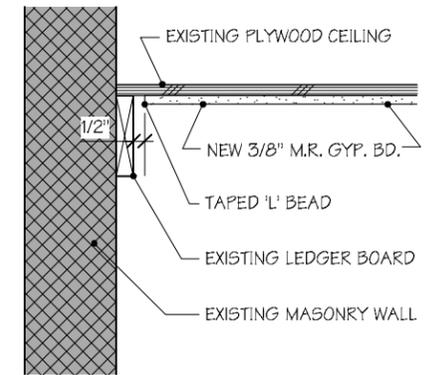
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BURLINGTON, VERMONT 05401  
T: 802.864.6693

**A1-1.0**



TEAM ROOM A & B - RCP  
 Scale: 3/16" = 1'-0"

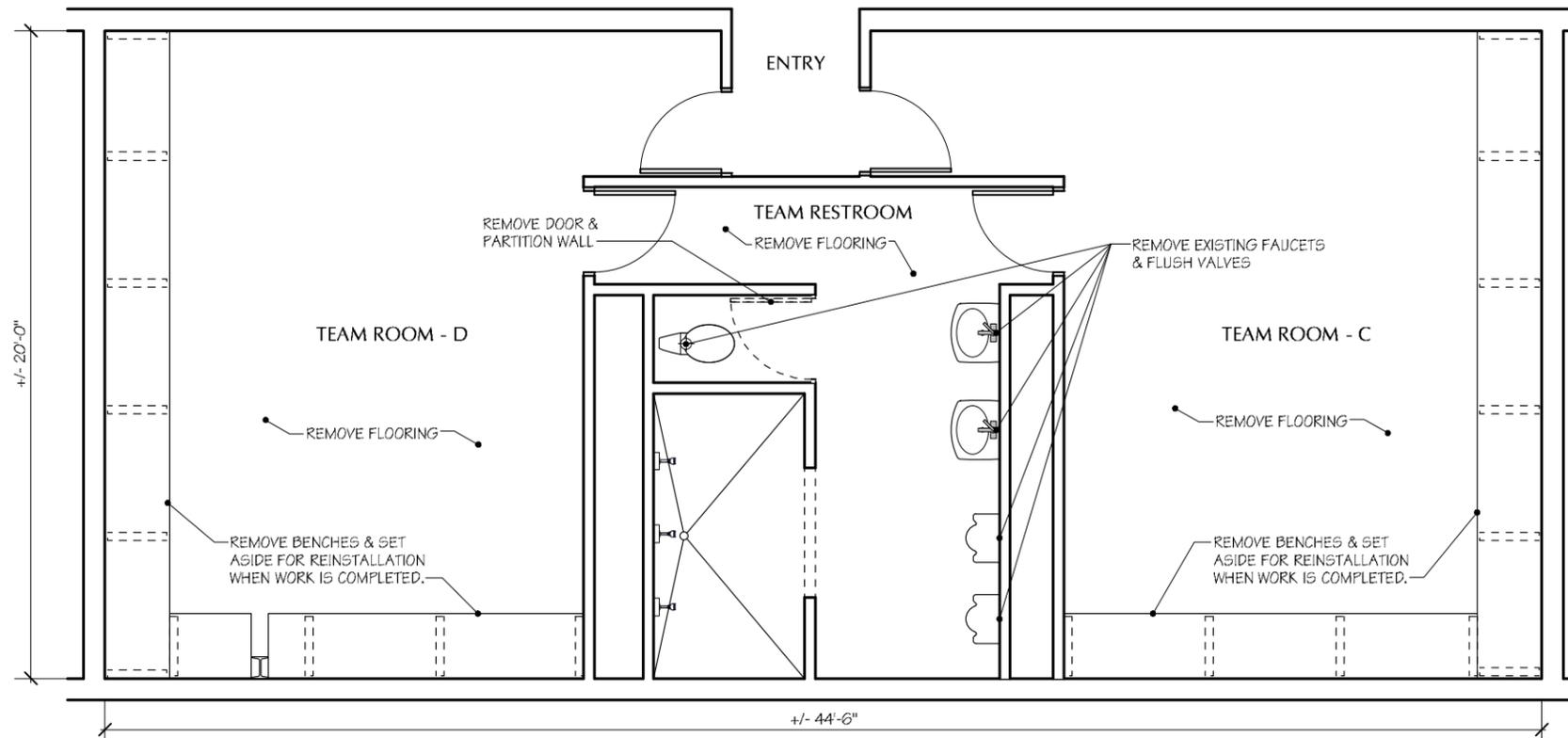
**NOTE:** ALL LIGHT FIXTURES & CEILING EQUIPMENT IS APPROXIMATELY LOCATED. ADJUST AS REQ'D TO ACCOMMODATE THICKNESS OF NEW GYP. BD. CEILING.



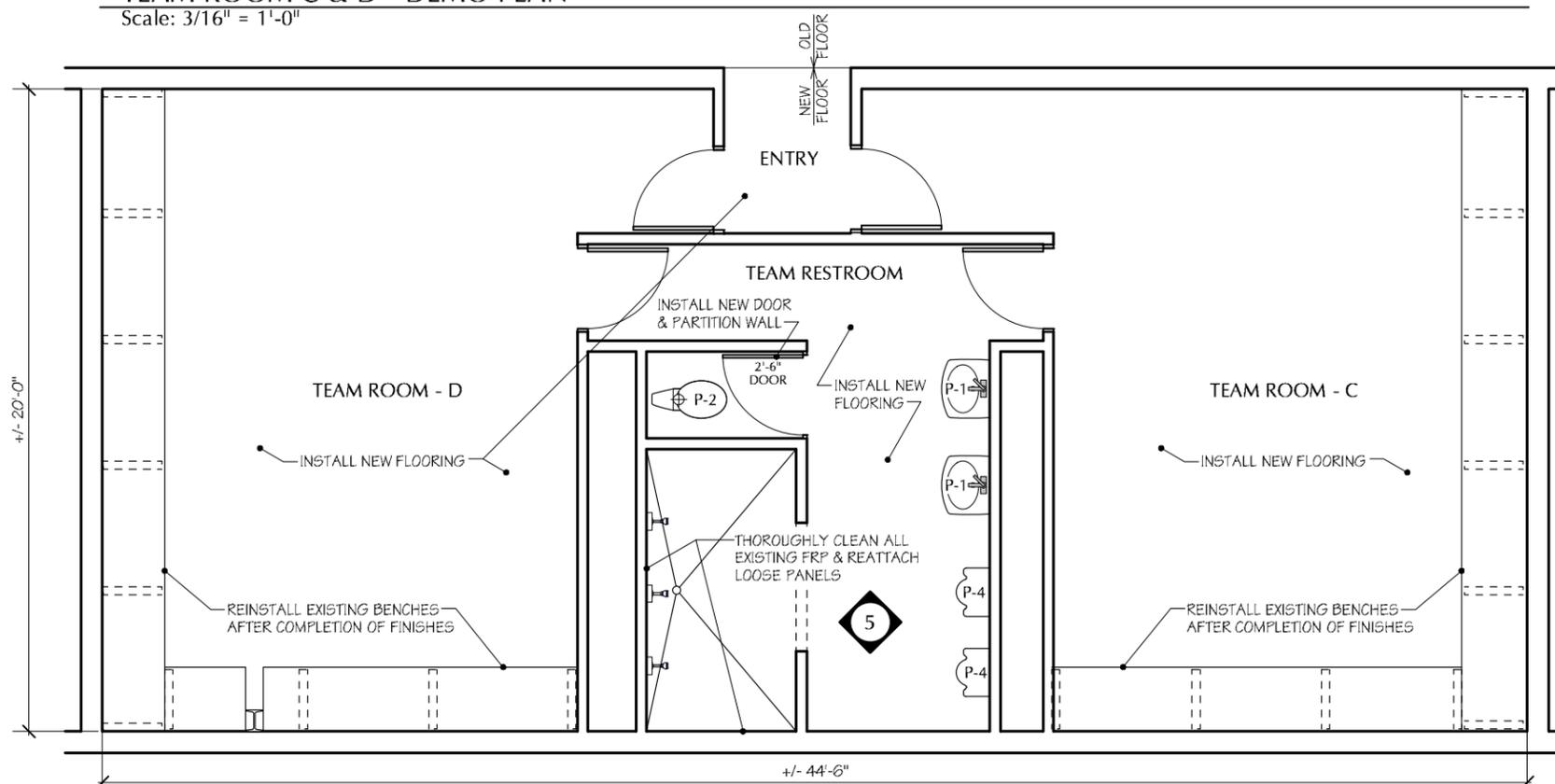
**1** CEILING EDGE DETAIL  
 SCALE: 1 1/2" = 1'-0"

**CEILING KEY**

-  CEILING MOUNTED FLUORESCENT LIGHT
-  CEILING MOUNTED SUPPLY/EXHAUST GRILLE
-  CEILING MOUNTED ACCESS PANEL OR MECH. EQUIPMENT
-  CEILING MOUNTED SENSOR OR DETECTOR



**TEAM ROOM C & D - DEMO PLAN**  
Scale: 3/16" = 1'-0"



**TEAM ROOM C & D - PROPOSED PLAN**  
Scale: 3/16" = 1'-0"

LEDDY PARK - TEAM ROOM A, B, C, & D FINISH SCHEDULE			
ROOM NAME	TEAM ROOMS & ENTRY	SHOWER	TEAM ROOM RESTROOMS
FLOOR	RESILIENT ATHLETIC FLOORING	EPOXY	RESILIENT ATHLETIC FLOORING
WALLS	PTD. CMU	FRP	PTD. CMU
CEILING	MOISTURE RESISTANT PTD. GYP. BD.	-	MOISTURE RESISTANT PTD. GYP. BD.
REMARKS	-	-	-

NOTE: FOR PLUMBING SCHEDULE REFER TO SPECIFICATIONS. ALL EXISTING FIXTURES SCHEDULED TO REMAIN SHALL BE REMOVED, THOROUGHLY CLEANED, & REINSTALLED AFTER COMPLETION OF FINISH PAINTING.

# LEDDY PARK ARENA

BURLINGTON, VERMONT

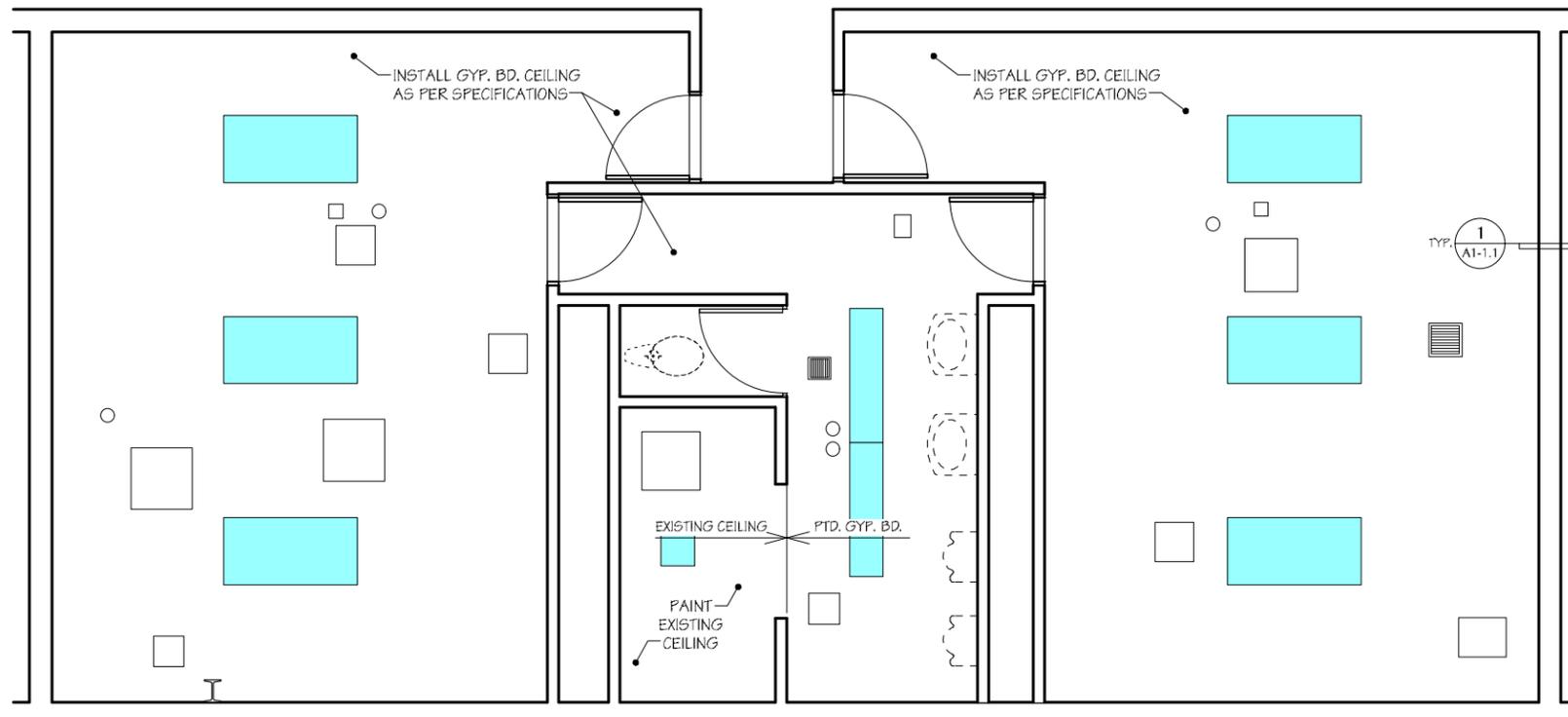
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DATE: 05/2/2013

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**A1-2.0**

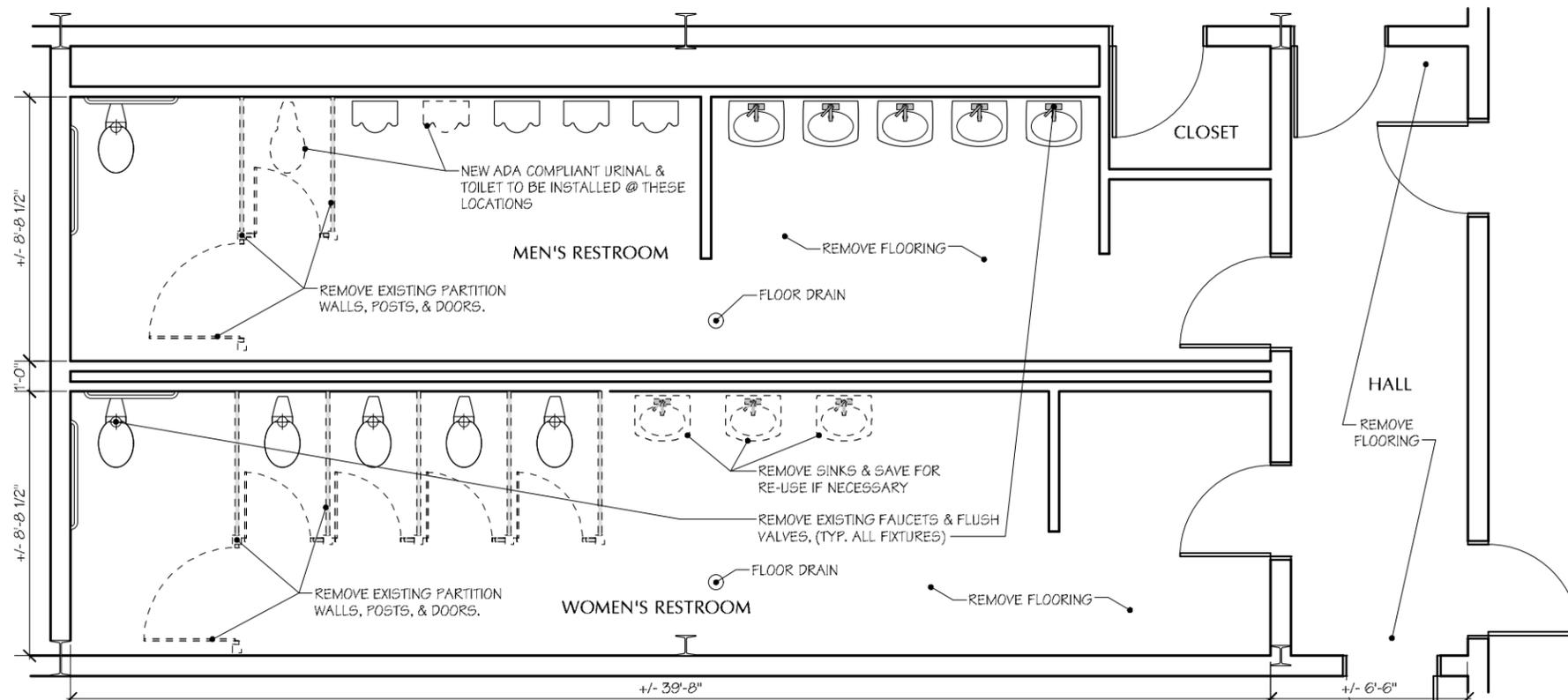


**CEILING KEY**

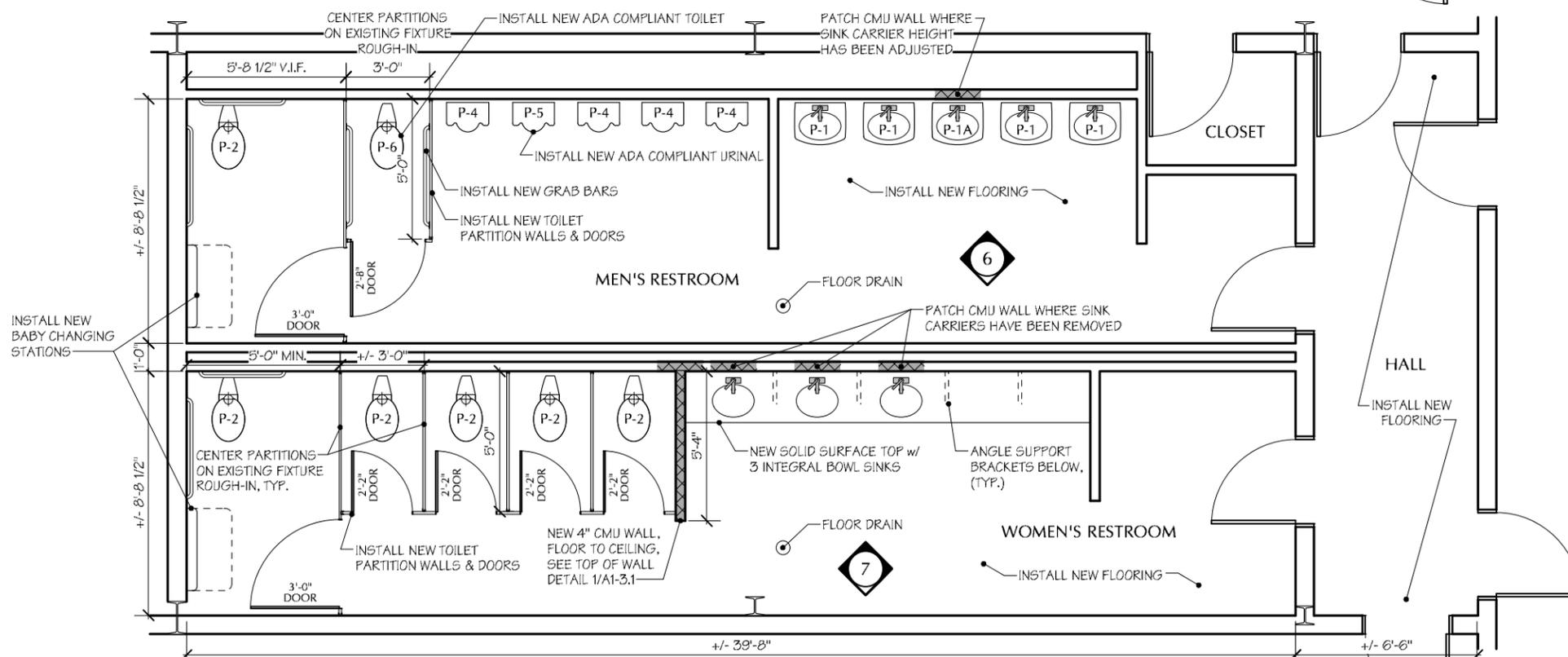
-  CEILING MOUNTED FLUORESCENT LIGHT
-  CEILING MOUNTED SUPPLY/EXHAUST GRILLE
-  CEILING MOUNTED ACCESS PANEL OR MECH. EQUIPMENT
-  CEILING MOUNTED SENSOR OR DETECTOR

**TEAM ROOM C & D - RCP**  
 Scale: 3/16" = 1'-0"

**NOTE:** ALL LIGHT FIXTURES & CEILING EQUIPMENT IS APPROXIMATELY LOCATED. ADJUST AS REQ'D TO ACCOMMODATE THICKNESS OF NEW GYP. BD. CEILING.



**RESTROOMS - DEMO PLAN**  
Scale: 3/16" = 1'-0"



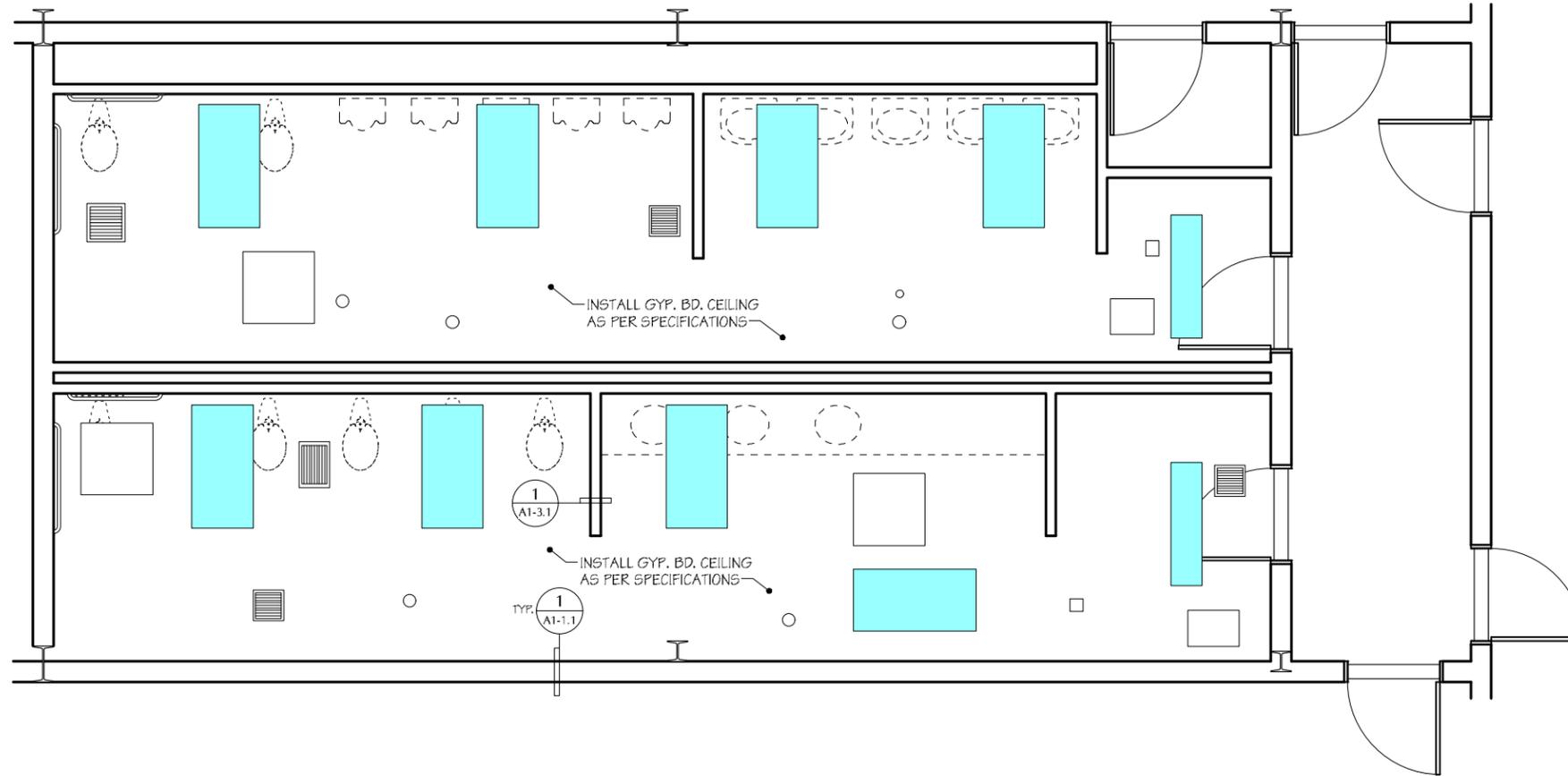
**RESTROOMS - PROPOSED PLAN**  
Scale: 3/16" = 1'-0"

LEDDY PARK - RESTROOMS FINISH SCHEDULE		
ROOM NAME	MEN'S & WOMEN'S RESTROOMS	HALL
FLOOR	RESILIENT ATHLETIC FLR'G	RESILIENT ATHLETIC FLR'G
WALLS	PTD. CMU	-
CEILING	MOISTURE RESISTANT PTD. GYP. BD.	-
REMARKS	-	-

NOTE: FOR PLUMBING SCHEDULE REFER TO SPECIFICATIONS. ALL EXISTING FIXTURES SCHEDULED TO REMAIN SHALL BE REMOVED, THOROUGHLY CLEANED, & REINSTALLED AFTER COMPLETION OF FINISH PAINTING.

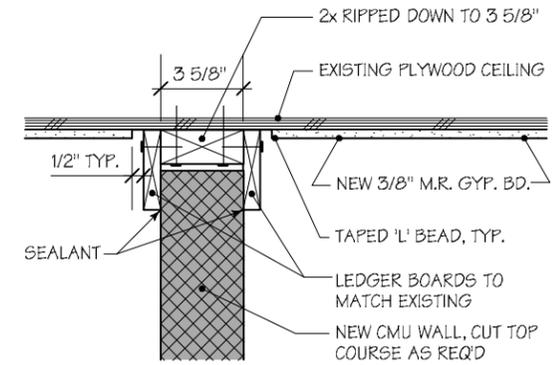
# LEDDY PARK ARENA

BURLINGTON, VERMONT



RESTROOMS - RCP  
Scale: 3/16" = 1'-0"

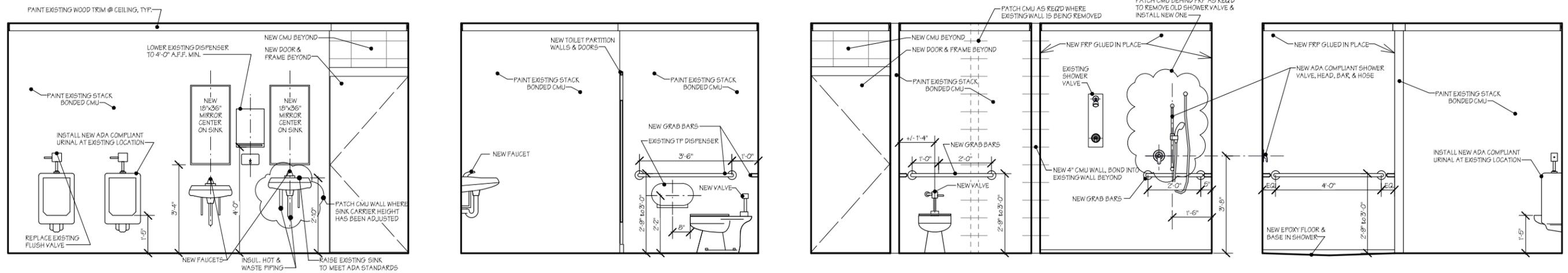
**NOTE:** ALL LIGHT FIXTURES & CEILING EQUIPMENT IS APPROXIMATELY LOCATED. ADJUST AS REQ'D TO ACCOMMODATE THICKNESS OF NEW GYP. BD. CEILING.



1 T.O. WALL DETAIL  
SCALE: 1 1/2" = 1'-0"

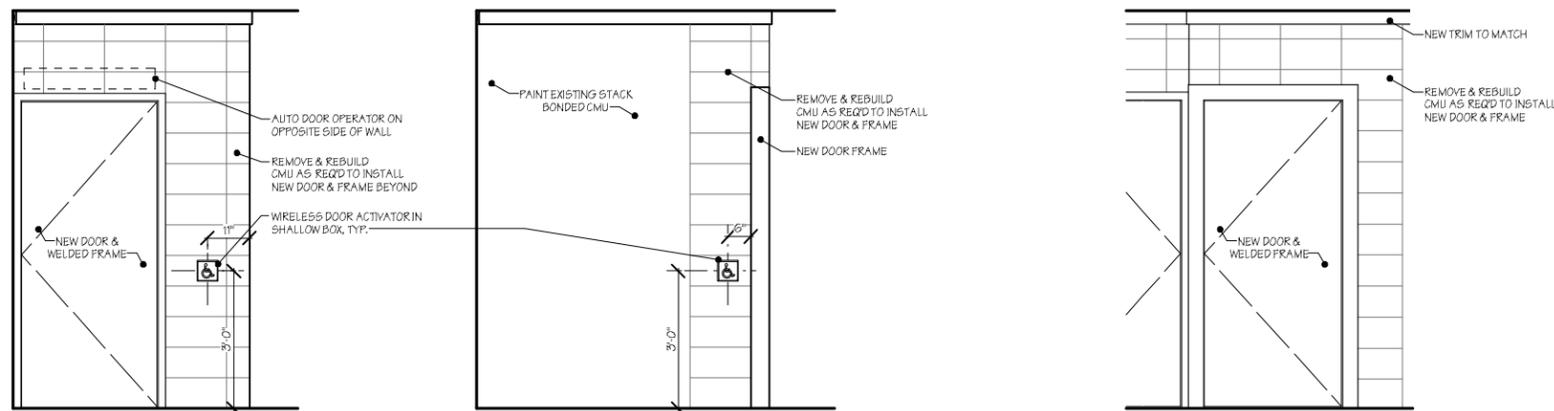
CEILING KEY

-  CEILING MOUNTED FLUORESCENT LIGHT
-  CEILING MOUNTED SUPPLY/EXHAUST GRILLE
-  CEILING MOUNTED ACCESS PANEL OR MECH. EQUIPMENT
-  CEILING MOUNTED SENSOR OR DETECTOR



**1 RESTROOM @ TEAM ROOM A & B - PROPOSED ELEVATIONS**  
SCALE: 1/4" = 1'-0"

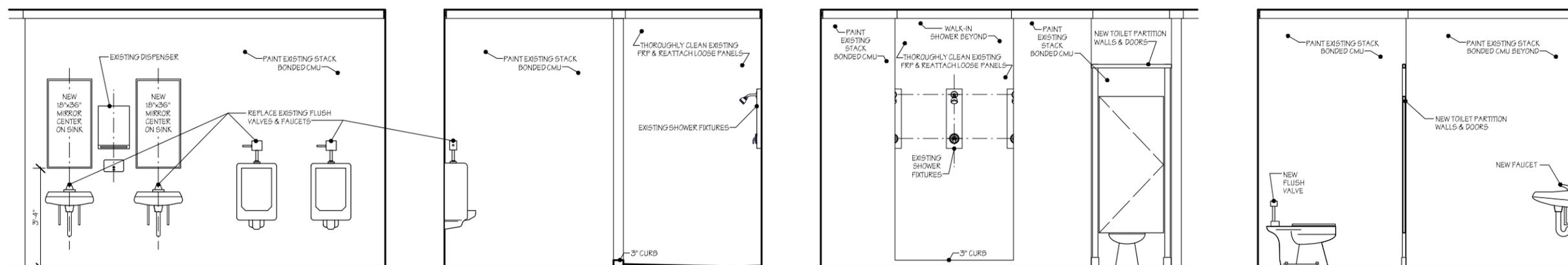
NOTE: COURSING & BONDING OF CMU WALLS NOT SHOWN EXCEPT WHERE NEW WORK IS REQUIRED.



**2 TEAM RM. B ENTRY (A OPPOSITE)**  
SCALE: 1/4" = 1'-0"

**3 TEAM RM. B ENTRY (A OPPOSITE)**  
SCALE: 1/4" = 1'-0"

**4 TEAM RM. B RESTROOM ENTRY (A OPPOSITE)**  
SCALE: 1/4" = 1'-0"



**5 RESTROOM @ TEAM ROOM C & D - PROPOSED ELEVATIONS**  
SCALE: 1/4" = 1'-0"

**LEDDY PARK ARENA**  
BURLINGTON, VERMONT

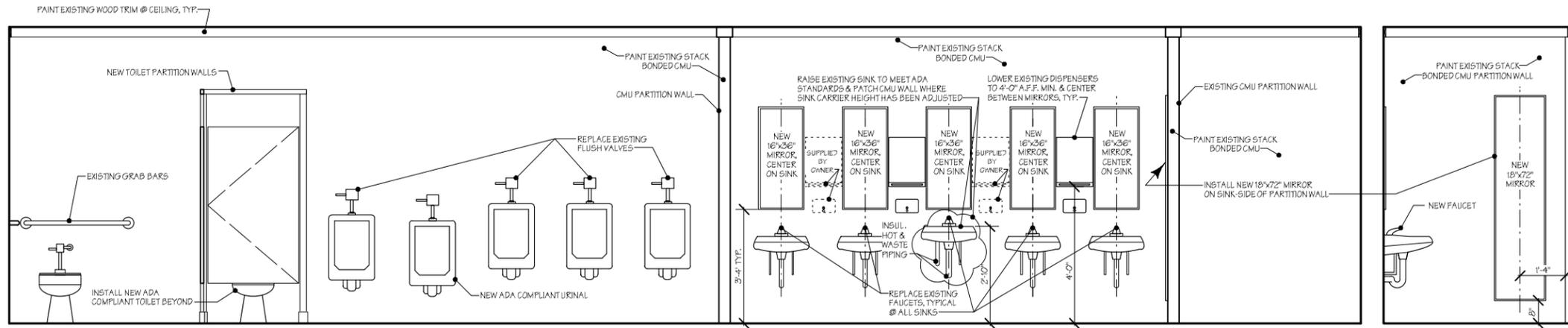
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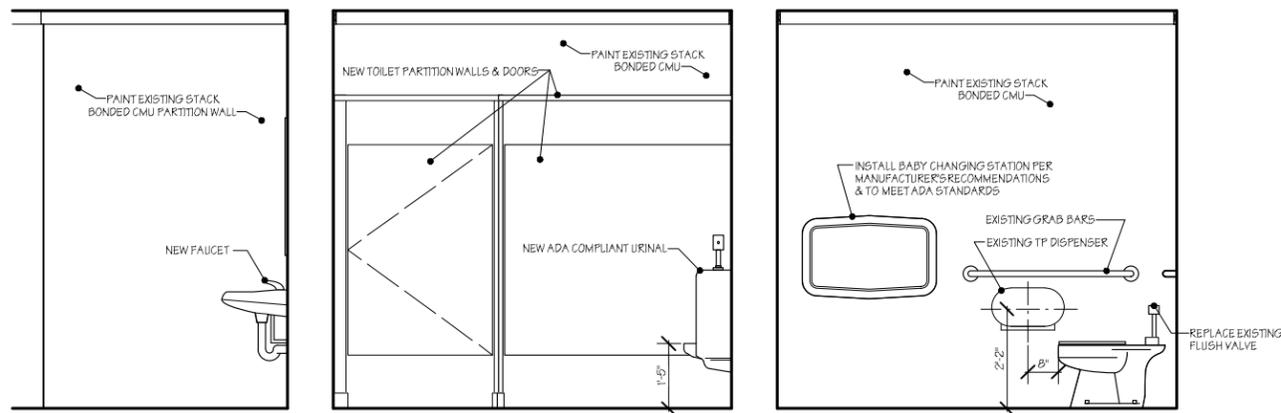
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**A2-1.0**

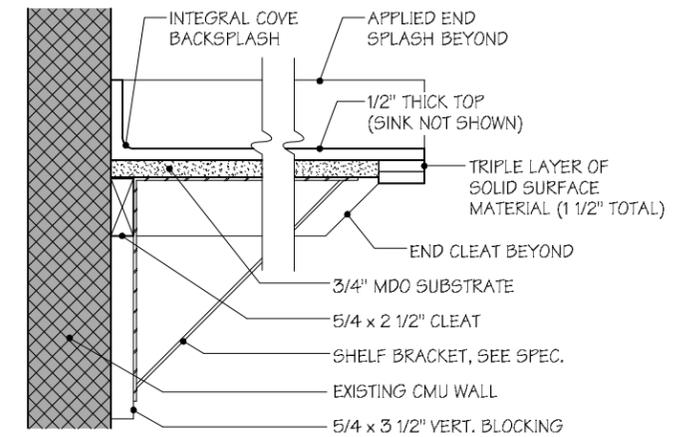


**6 MEN'S RESTROOM - PROPOSED ELEVATIONS**  
SCALE: 1/4" = 1'-0"

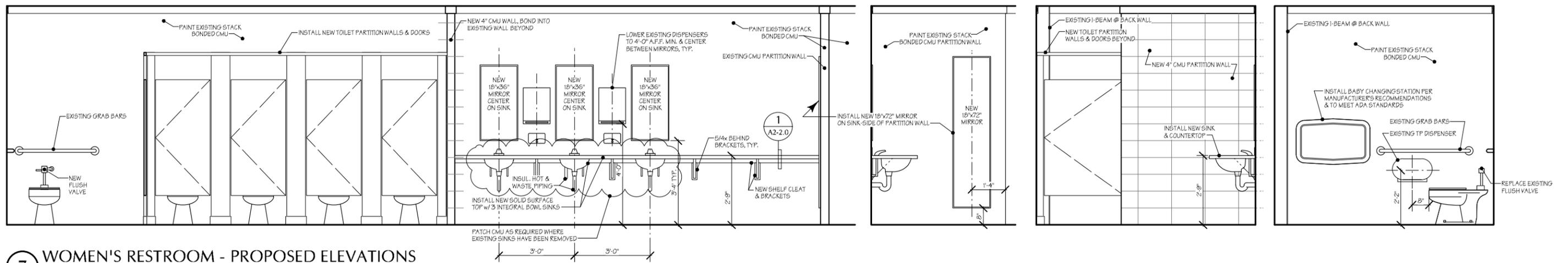


NOTE: COURSING & BONDING OF CMU WALLS NOT SHOWN EXCEPT WHERE NEW WORK IS REQUIRED.

**6 MEN'S RESTROOM - PROPOSED ELEVATIONS**  
SCALE: 1/4" = 1'-0"



**1 COUNTERTOP DETAIL**  
SCALE: 1 1/2" = 1'-0"



**7 WOMEN'S RESTROOM - PROPOSED ELEVATIONS**  
SCALE: 1/4" = 1'-0"

# LEDDY PARK ARENA

BURLINGTON, VERMONT

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DUNCAN • WISNIEWSKI ARCHITECTURE  
A Professional Corporation

DATE: 05/2/2013

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**A2-2.0**