# LDS Hospital Operating Rooms 2 & 3 Diffuser Replacement

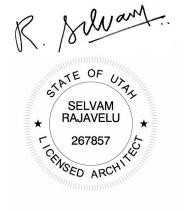
8<sup>th</sup> Avenue, C Street Salt Lake City, Utah 84143

for

## INTERMOUNTAIN HEALTHCARE

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May 20 2021





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# INVITATION TO BID (REFER TO OWNER'S INVITATION TO BID DOCUMENTS INCLUDED IN RFP)

**PROJECT:** Intermountain Healthcare

LDS Hospital, Operating Rooms 2 & 3 Diffuser Replacement

8<sup>th</sup> Avenue, C Street Salt Lake City, Utah 84143

**LOCATION:** The project is located at:

8<sup>th</sup> Avenue, C Street Salt Lake City, Utah 84143

OWNER: IHC Health Services, Inc.

TIME AND PLACE:

The Owner will receive bids on **T.B.D.**: See owner's Invitation to Bid.

**IHC Health Services, Inc.** (Intermountain Healthcare) Facility Design and Construction (FD&C)

36 South State Street, 21st Floor Salt Lake City, Utah 84111-1486

Attention: Annalisa Silcox annalisa.silcox@imail.org

TYPE OF BID: Bids shall be on a Stipulated Sum basis.

TIME OF COMPLETION:

Bidders shall provide a Date of Substantial Completion on their Bid Form. Consideration

will be given to bidders offering earlier times of completion.

BIDDING DOCUMENTS:

Bidding documents will be available on May 21, 2021 thru the office of **NJRA Architects, 5272 S. College Drive, Murray**, Utah 84123 in accordance with the Instructions to Bidders. Electronic copies of the Contract Documents (PDF's) will be provided to invited Contractors only. Bidding Documents **are not allowed to be posted** 

in any plan rooms. Any Contractor who violates this, will be disqualified.

BID

**SECURITY/BONDS:** Bid Security or Performance and Payment Bonds will not be required for this project.

LIQUIDATED

**DAMAGES:** Liquidated Damages will not be assessed for this project.

RIGHT TO REJECT BIDS:

The **Owner** reserves the right to reject any or all bids, and to waive any irregularities in

any bid or in the bidding

**END OF SECTION** 

#### SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

A. The Supplementary Instructions to Bidders herein describe, contain changes and additions to Section 00 0100 - AIA A701 Instructions to Bidders (included by reference - copies may be obtained from the Architect's office for the cost of reproduction). Where any part of the Instructions to Bidders is modified by these Supplementary instructions, the unaltered provisions shall remain in effect.

#### **3.1.5 COPIES**

Add the following:

The title or cover sheet to the drawings and the index to the Project Manual contains a list of all documents which comprise a full set of bid documents for this project. Any Contractor, Subcontractor, vendor or any other person participating in or bidding on this project shall be responsible for the information contained in any and all sheets of drawings and all sections of the specifications. If any person, party or entity elects to submit bids for any portion, or all, of this project, that person, party or entity shall be responsible for any and all information contained in these drawings and specifications, including, but not limited to, any subsequent addendums or clarifications that may be issued.

#### 3.3 SUBSTITUTIONS

Amend 3.3.2 to read:

No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Architect at least 7 days prior to the date for receipt of Bids. Such requests...

#### 3.4 ADDENDA

Amend 3.4.3 to read:

No addenda will be issued later than 24 hours prior to the date for receipt of Bids except an addendum may be issued no later than 12 hours prior to the date for receipt of bids for the purpose of cancellation or postponement of receipt of bids. It is the responsibility of the Bidder to disseminate telephone addendum information to sub-bidders.

#### 4.2 BID SECURITY

**Delete** this article in its entirety. Bid bonds will not be required for this project.

#### 4.3 SUBMISSION OF BIDS

Amend 4.3.4 to read:

Bids shall be hand delivered in sealed envelope or emailed to the Owner at the address noted in the Invitation to Bid. Bids submitted orally, or by telephone or facsimile will not be considered.

#### 5.3 ACCEPTANCE OF BID (AWARD)

Amend 5.3.2 to read:

The Owner shall ... to determine the low bidder on the basis of the sum of the Base Bid or on the basis of the sum of the Base Bid and any combined accepted Alternates. Cost of insurance will not be used as the basis of award.

#### **ARTICLE 7 - PERFORMANCE AND PAYMENT BOND**

Delete this Article in its entirety. Bonds will not be required for this Project.

**END OF SECTION** 

#### **BID FORM**

TO:	IHC Health Services, Inc. (Intermountain Healthcare) Facility Design and Construction (FD&C) 36 South State Street, 21st Floor Salt Lake City, Utah 84111-1486
	Attention: Annalisa Silcox Email: annalisa.silcox@imail.org
PROJECT:	Intermountain Healthcare LDS Hospital, Operating Rooms 2 & 3 Diffuser Replacement 8 <sup>th</sup> Avenue, C Street Salt Lake City, Utah 84143
NAME OF B	IDDER:
BIDDER AD	DRESS:
Specifications ( familiar with a availability of la required in co	ned, in compliance with your Invitation To Bid, having examined the Drawings and (Contract Documents) and related documents and the site of the proposed work and being II of the conditions surrounding the construction of the proposed project, including the abor, hereby propose to furnish all labor, materials, services, equipment and appliances onnection with or incidental to the construction of the above named project in strict with the following specification and drawings:
	Bidders, General Conditions, Supplemental General Conditions, Specification Divisions as applicable addenda and Drawings as listed on the drawing cover sheets as prepared by ts.
subcontractors	by signing this BID FORM, that I/We have a working relationship with the proposed and that Bids we're not solicited from; and/or the received Contract Documents were not an Rooms for distribution to subcontractors broadly.
	or the placement in Operating Rooms 2 & 3 at LDS Hospital for Intermountain lealthcare:
	e Base Bid contract listed above and shown on the Drawings and described in the Project agree to perform for the sum of:
	Dollars (\$

(In the case of discrepancy, written amount shall govern)

# CONTRACTOR'S PROPOSED CONSTRUCTION TIME PERIOD: This Bid requires a construction time in calendar days (shall not exceed a total of 56 days) from the date of authorization of \_\_\_\_\_\_ calendar days. The anticipated date of Substantial Completion is thus \_\_\_\_\_, 2021. ADDENDA: I/We acknowledge receipt of the following addenda for the above noted project: \_\_\_/ \_\_/ \_\_/\_\_ SCHEDULE OF VALUES: I/We have attached with this Bid Form our Schedule of Values (Section 00 4373) which reflects the above Base Bid. We submit this for Owner review of subcontractors that are being proposed for this Project. TYPE OF ORGANIZATION: (Corporation, Partnership, Individual, etc.) \_\_\_\_\_\_ SEAL (If a Corporation) Respectfully Submitted,

Name of Bidder

Authorized Signature

#### **SCHEDULE OF VALUES**

NAME OF BIDDER:		
DATE:		

DIV	TITLE	AMOUNT	\$/SQ. FT	COMMENTS
01	General Conditions	\$	_ \$	_
02	Demolition	\$	_ \$	_
09	Finishes	\$	_ \$	_
23	HVAC	\$	\$	
	SUBTOTAL	\$	_	_
	OVERHEAD AND PROFIT	\$	_ \$	_
	TOTAL COST	\$	_ \$	_

**END OF SECTION** 

#### **OWNER/CONTRACTOR AGREEMENT**

#### **PART 1 - GENERAL**

#### 1.1 SUMMARY

A. Intermountain Healthcare's 'CONTRACTOR AGREEMENT' (Stipulated Sum) for Construction between the Owner and General Contractor' where the basis of payment is a STIPULATED SUM, will *presumably* be used on this project. An electronic copy may be obtained from Intermountain Healthcare's Project Manager.

#### **BONDS, CERTIFICATES AND OWNER DOCUMENTS**

#### **PART 1 - GENERAL**

#### 1.1 SUMMARY

- A. The following documents are incorporated by reference; copies may be obtained from Intermountain Healthcare or the Architect for the cost of reproduction, if necessary. Electronic copies of the Intermountain Healthcare Documents can be obtained by contacting the Intermountain Healthcare Project Manager.
  - 1. Intermountain Healthcare Document 'Application and Certificate for Payment'
  - 2. Intermountain Healthcare Document 'Application and Certificate for Payment Continuation Sheet'
  - 3. Intermountain Healthcare Document 'Change Order' (CO)
  - 4. Intermountain Healthcare Document 'Proposed Change Order' (PCO)
  - 5. Intermountain Healthcare Document 'A/E Supplement Instructions' (ASI)
  - 6. Intermountain Healthcare Document 'Proposal Request' (PR)
  - 7. Intermountain Healthcare Document 'Construction Change Directive' (CCD)
  - 8. Intermountain Healthcare Document 'Request For Information' (RFI)
  - 9. AIA Document G704 'Certificate of Substantial Completion'
  - 10. AIA Document G707 'Consent of Surety to Final Payment' (if required)
  - 11. AIA Document G707A 'Consent of Surety to Reduction in or Partial Release of Retainage' (if required)
  - 12. AIA Document A312 'Payment Bond' (if required)
  - 13. AlA Document A312 'Performance Bond' (if required)

#### **SECTION 00 6276.13**

#### **EXEMPTION CERTIFICATE**

#### **PART 1 - GENERAL**

#### 1.1 SUMMARY

A. Construction materials purchased by or on behalf of **Intermountain Healthcare** *may be* exempt from Utah sales and use taxes. Tax Exempt **Form TC-721** must be used by vendors when purchasing construction materials for **Intermountain Healthcare** projects. A copy of Form TC-721, with the Owner's pertinent tax information, follows this cover page.

#### Instructions to Bidders

for the following Project: (Name, location, and detailed description)

#### THE OWNER:

(Name, legal status, address, and other information)

#### THE ARCHITECT:

(Name, legal status, address, and other information)

#### **TABLE OF ARTICLES**

- 1 DEFINITIONS
- 2 BIDDER'S REPRESENTATIONS
- 3 BIDDING DOCUMENTS
- 4 BIDDING PROCEDURES
- 5 CONSIDERATION OF BIDS
- 6 POST-BID INFORMATION
- 7 PERFORMANCE BOND AND PAYMENT BOND
- 8 ENUMERATION OF THE PROPOSED CONTRACT DOCUMENTS

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

FEDERAL, STATE, AND LOCAL LAWS MAY IMPOSE REQUIREMENTS ON PUBLIC PROCUREMENT CONTRACTS. CONSULT LOCAL AUTHORITIES OR AN ATTORNEY TO VERIFY REQUIREMENTS APPLICABLE TO THIS PROCUREMENT BEFORE COMPLETING THIS FORM.

It is intended that AIA Document G612<sup>™</sup>–2017, Owner's Instructions to the Architect, Parts A and B will be completed prior to using this document.

#### **ARTICLE 1 DEFINITIONS**

- § 1.1 Bidding Documents include the Bidding Requirements and the Proposed Contract Documents. The Bidding Requirements consist of the advertisement or invitation to bid, Instructions to Bidders, supplementary instructions to bidders, the bid form, and any other bidding forms. The Proposed Contract Documents consist of the unexecuted form of Agreement between the Owner and Contractor and that Agreement's Exhibits, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, all Addenda, and all other documents enumerated in Article 8 of these Instructions.
- § 1.2 Definitions set forth in the General Conditions of the Contract for Construction, or in other Proposed Contract Documents apply to the Bidding Documents.
- § 1.3 Addenda are written or graphic instruments issued by the Architect, which, by additions, deletions, clarifications, or corrections, modify or interpret the Bidding Documents.
- § 1.4 A Bid is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- § 1.5 The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents, to which Work may be added or deleted by sums stated in Alternate Bids.
- § 1.6 An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from, or that does not change, the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.
- § 1.7 A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, as described in the Bidding Documents.
- § 1.8 A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.
- § 1.9 A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment, or labor for a portion of the Work.

#### **ARTICLE 2 BIDDER'S REPRESENTATIONS**

- § 2.1 By submitting a Bid, the Bidder represents that:
  - .1 the Bidder has read and understands the Bidding Documents;
  - .2 the Bidder understands how the Bidding Documents relate to other portions of the Project, if any, being bid concurrently or presently under construction;
  - .3 the Bid complies with the Bidding Documents;
  - 4 the Bidder has visited the site, become familiar with local conditions under which the Work is to be performed, and has correlated the Bidder's observations with the requirements of the Proposed Contract Documents:
  - .5 the Bid is based upon the materials, equipment, and systems required by the Bidding Documents without exception; and
  - .6 the Bidder has read and understands the provisions for liquidated damages, if any, set forth in the form of Agreement between the Owner and Contractor.

#### ARTICLE 3 BIDDING DOCUMENTS

#### § 3.1 Distribution

§ 3.1.1 Bidders shall obtain complete Bidding Documents, as indicated below, from the issuing office designated in the advertisement or invitation to bid, for the deposit sum, if any, stated therein.

(Indicate how, such as by email, website, host site/platform, paper copy, or other method Bidders shall obtain Bidding Documents.)

- § 3.1.2 Any required deposit shall be refunded to Bidders who submit a bona fide Bid and return the paper Bidding Documents in good condition within ten days after receipt of Bids. The cost to replace missing or damaged paper documents will be deducted from the deposit. A Bidder receiving a Contract award may retain the paper Bidding Documents, and the Bidder's deposit will be refunded.
- § 3.1.3 Bidding Documents will not be issued directly to Sub-bidders unless specifically offered in the advertisement or invitation to bid, or in supplementary instructions to bidders.
- § 3.1.4 Bidders shall use complete Bidding Documents in preparing Bids. Neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete Bidding Documents.
- § 3.1.5 The Bidding Documents will be available for the sole purpose of obtaining Bids on the Work. No license or grant of use is conferred by distribution of the Bidding Documents.

#### § 3.2 Modification or Interpretation of Bidding Documents

- § 3.2.1 The Bidder shall carefully study the Bidding Documents, shall examine the site and local conditions, and shall notify the Architect of errors, inconsistencies, or ambiguities discovered and request clarification or interpretation pursuant to Section 3.2.2.
- § 3.2.2 Requests for clarification or interpretation of the Bidding Documents shall be submitted by the Bidder in writing and shall be received by the Architect at least seven days prior to the date for receipt of Bids. (Indicate how, such as by email, website, host site/platform, paper copy, or other method Bidders shall submit requests for clarification and interpretation.)
- § 3.2.3 Modifications and interpretations of the Bidding Documents shall be made by Addendum. Modifications and interpretations of the Bidding Documents made in any other manner shall not be binding, and Bidders shall not rely upon them.

#### § 3.3 Substitutions

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

#### § 3.3.2 Substitution Process

- § 3.3.2.1 Written requests for substitutions shall be received by the Architect at least ten days prior to the date for receipt of Bids. Requests shall be submitted in the same manner as that established for submitting clarifications and interpretations in Section 3.2.2.
- § 3.3.2.2 Bidders shall submit substitution requests on a Substitution Request Form if one is provided in the Bidding Documents.
- § 3.3.2.3 If a Substitution Request Form is not provided, requests shall include (1) the name of the material or equipment specified in the Bidding Documents; (2) the reason for the requested substitution; (3) a complete description of the proposed substitution including the name of the material or equipment proposed as the substitute, performance and test data, and relevant drawings; and (4) any other information necessary for an evaluation. The request shall include a statement setting forth changes in other materials, equipment, or other portions of the Work, including changes in the work of other contracts or the impact on any Project Certifications (such as LEED), that will result from incorporation of the proposed substitution.
- § 3.3.3 The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.
- § 3.3.4 If the Architect approves a proposed substitution prior to receipt of Bids, such approval shall be set forth in an Addendum. Approvals made in any other manner shall not be binding, and Bidders shall not rely upon them.

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

#### § 3.4 Addenda

§ 3.4.1 Addenda will be transmitted to Bidders known by the issuing office to have received complete Bidding

(Indicate how, such as by email, website, host site/platform, paper copy, or other method Addenda will be transmitted.)

- § 3.4.2 Addenda will be available where Bidding Documents are on file.
- § 3.4.3 Addenda will be issued no later than four 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.
- § 3.4.4 Prior to submitting a Bid, each Bidder shall ascertain that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt in the Bid.

#### **ARTICLE 4 BIDDING PROCEDURES**

#### § 4.1 Preparation of Bids

- § 4.1.1 Bids shall be submitted on the forms included with or identified in the Bidding Documents.
- § 4.1.2 All blanks on the bid form shall be legibly executed. Paper bid forms shall be executed in a non-erasable medium.
- § 4.1.3 Sums shall be expressed in both words and numbers, unless noted otherwise on the bid form. In case of discrepancy, the amount entered in words shall govern.
- § 4.1.4 Edits to entries made on paper bid forms must be initialed by the signer of the Bid.
- § 4.1.5 All requested Alternates shall be bid. If no change in the Base Bid is required, enter "No Change" or as required by the bid form.
- § 4.1.6 Where two or more Bids for designated portions of the Work have been requested, the Bidder may, without forfeiture of the bid security, state the Bidder's refusal to accept award of less than the combination of Bids stipulated by the Bidder. The Bidder shall neither make additional stipulations on the bid form nor qualify the Bid in any other manner.
- § 4.1.7 Each copy of the Bid shall state the legal name and legal status of the Bidder. As part of the documentation submitted with the Bid, the Bidder shall provide evidence of its legal authority to perform the Work in the jurisdiction where the Project is located. Each copy of the Bid shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further name the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current power of attorney attached, certifying the agent's authority to bind the Bidder.
- § 4.1.8 A Bidder shall incur all costs associated with the preparation of its Bid.

#### § 4.2 Bid Security

§ 4.2.1 Each Bid shall be accompanied by the following bid security: (Insert the form and amount of bid security.)

§ 4.2.2 The Bidder pledges to enter into a Contract with the Owner on the terms stated in the Bid and shall, if required, furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty. In the event the Owner fails to comply with Section 6.2, the amount of the bid security shall not be forfeited to the Owner.

- § 4.2.3 If a surety bond is required as bid security, it shall be written on AIA Document A310™, Bid Bond, unless otherwise provided in the Bidding Documents. The attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of an acceptable power of attorney. The Bidder shall provide surety bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.
- § 4.2.4 The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until (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. However, if no Contract has been awarded or a Bidder has not been notified of the acceptance of its Bid, a Bidder may, beginning days after the opening of Bids, withdraw its Bid and request the return of its bid security.

#### § 4.3 Submission of Bids

§ 4.3.1 A Bidder shall submit its Bid as indicated below:

(Indicate how, such as by website, host site/platform, paper copy, or other method Bidders shall submit their Bid.)

- § 4.3.2 Paper copies of the Bid, the bid security, 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 party receiving the Bids 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.
- § 4.3.3 Bids shall be submitted by the date and time and at the place indicated in the invitation to bid. Bids submitted after the date and time for receipt of Bids, or at an incorrect place, will not be accepted.
- § 4.3.4 The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.
- § 4.3.5 A Bid submitted by any method other than as provided in this Section 4.3 will not be accepted.

#### § 4.4 Modification or Withdrawal of Bid

- § 4.4.1 Prior to the date and time designated for receipt of Bids, a Bidder may submit a new Bid to replace a Bid previously submitted, or withdraw its Bid entirely, by notice to the party designated to receive the Bids. Such notice shall be received and duly recorded by the receiving party on or before the date and time set for receipt of Bids. The receiving party shall verify that replaced or withdrawn Bids are removed from the other submitted Bids and not considered. Notice of submission of a replacement Bid or withdrawal of a Bid shall be worded so as not to reveal the amount of the original Bid.
- § 4.4.2 Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids in the same format as that established in Section 4.3, provided they fully conform with these Instructions to Bidders. Bid security shall be in an amount sufficient for the Bid as resubmitted.
- § 4.4.3 After the date and time designated for receipt of Bids, a Bidder who discovers that it made a clerical error in its Bid shall notify the Architect of such error within two days, or pursuant to a timeframe specified by the law of the jurisdiction where the Project is located, requesting withdrawal of its Bid. Upon providing evidence of such error to the reasonable satisfaction of the Architect, the Bid shall be withdrawn and not resubmitted. If a Bid is withdrawn pursuant to this Section 4.4.3, the bid security will be attended to as follows:

(State the terms and conditions, such as Bid rank, for returning or retaining the bid security.)

#### ARTICLE 5 CONSIDERATION OF BIDS

#### § 5.1 Opening of Bids

If stipulated in an advertisement or invitation to bid, or when otherwise required by law, Bids properly identified and received within the specified time limits will be publicly opened and read aloud. A summary of the Bids may be made available to Bidders.

#### § 5.2 Rejection of Bids

Unless otherwise prohibited by law, the Owner shall have the right to reject any or all Bids.

#### § 5.3 Acceptance of Bid (Award)

§ 5.3.1 It is the intent of the Owner to award a Contract to the lowest responsive and responsible Bidder, provided the Bid has been submitted in accordance with the requirements of the Bidding Documents. Unless otherwise prohibited by law, the Owner shall have the right to waive informalities and irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's best interests.

§ 5.3.2 Unless otherwise prohibited by law, the Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the lowest responsive and responsible Bidder on the basis of the sum of the Base Bid and Alternates accepted.

#### **ARTICLE 6 POST-BID INFORMATION**

#### § 6.1 Contractor's Qualification Statement

Bidders to whom award of a Contract is under consideration shall submit to the Architect, upon request and within the timeframe specified by the Architect, a properly executed AIA Document A305<sup>TM</sup>, Contractor's Qualification Statement, unless such a Statement has been previously required and submitted for this Bid.

#### § 6.2 Owner's Financial Capability

A Bidder to whom award of a Contract is under consideration may request in writing, fourteen days prior to the expiration of the time for withdrawal of Bids, that the Owner furnish to the Bidder reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. The Owner shall then furnish such reasonable evidence to the Bidder no later than seven days prior to the expiration of the time for withdrawal of Bids. Unless such reasonable evidence is furnished within the allotted time, the Bidder will not be required to execute the Agreement between the Owner and Contractor.

#### § 6.3 Submittals

§ 6.3.1 After notification of selection for the award of the Contract, the Bidder shall, as soon as practicable or as stipulated in the Bidding Documents, submit in writing to the Owner through the Architect:

- .1 a designation of the Work to be performed with the Bidder's own forces;
- .2 names of the principal products and systems proposed for the Work and the manufacturers and suppliers of each; and
- .3 names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work.
- **§ 6.3.2** The Bidder will be required to establish to the satisfaction of the Architect and Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.
- § 6.3.3 Prior to the execution of the Contract, the Architect will notify the Bidder if either the Owner or Architect, after due investigation, has reasonable objection to a person or entity proposed by the Bidder. If the Owner or Architect has reasonable objection to a proposed person or entity, the Bidder may, at the Bidder's option, withdraw the Bid or submit an acceptable substitute person or entity. The Bidder may also submit any required adjustment in the Base Bid or Alternate Bid to account for the difference in cost occasioned by such substitution. The Owner may accept the adjusted bid price or disqualify the Bidder. In the event of either withdrawal or disqualification, bid security will not be forfeited.
- § 6.3.4 Persons and entities proposed by the Bidder and to whom the Owner and 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 Architect.

#### ARTICLE 7 PERFORMANCE BOND AND PAYMENT BOND

#### § 7.1 Bond Requirements

§ 7.1.1 If stipulated in the Bidding Documents, the Bidder shall furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder.

- § 7.1.2 If the furnishing of such bonds is stipulated in the Bidding Documents, the cost shall be included in the Bid. If the furnishing of such bonds is required after receipt of bids and before execution of the Contract, the cost of such bonds shall be added to the Bid in determining the Contract Sum.
- § 7.1.3 The Bidder shall provide surety bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.
- § 7.1.4 Unless otherwise indicated below, the Penal Sum of the Payment and Performance Bonds shall be the amount of the Contract Sum.
- (If Payment or Performance Bonds are to be in an amount other than 100% of the Contract Sum, indicate the dollar amount or percentage of the Contract Sum.)

#### § 7.2 Time of Delivery and Form of Bonds

- § 7.2.1 The Bidder shall deliver the required bonds to the Owner not later than three days following the date of execution of the Contract. If the Work is to commence sooner 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 and delivered in accordance with this Section 7.2.1.
- § 7.2.2 Unless otherwise provided, the bonds shall be written on AIA Document A312, Performance Bond and Payment Bond.
- § 7.2.3 The bonds shall be dated on or after the date of the Contract.
- § 7.2.4 The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix to the bond a certified and current copy of the power of attorney.

#### ARTICLE 8 ENUMERATION OF THE PROPOSED CONTRACT DOCUMENTS

- § 8.1 Copies of the proposed Contract Documents have been made available to the Bidder and consist of the following documents:
  - AIA Document A101<sup>TM</sup>–2017, Standard Form of Agreement Between Owner and Contractor, unless otherwise stated below.
    - (Insert the complete AIA Document number, including year, and Document title.)
  - AIA Document A101<sup>TM</sup>–2017, Exhibit A, Insurance and Bonds, unless otherwise stated below. (Insert the complete AIA Document number, including year, and Document title.)
  - AIA Document A201<sup>TM</sup>–2017, General Conditions of the Contract for Construction, unless otherwise stated below.
    - (Insert the complete AIA Document number, including year, and Document title.)
  - AIA Document E203<sup>TM</sup>–2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below: (Insert the date of the E203-2013.)
  - .5 Drawings

	Number	Title	Date	
.6	Specifications			
	Section	Title	Date	Pages
.7	Addenda:			
	Number	Date	Pages	
.8	[ ] AIA Document l	oly and include appropriate info E204 <sup>TM</sup> $=2017$ , Sustainable Proje of the E204-2017.)		
	[ ] The Sustainability	y Plan:		
	Title	Date	Pages	
	[ ] Supplementary a	nd other Conditions of the Con	tract:	
	Document	Title	Date	Pages
.9	Other documents listed b (List here any additional	elow: documents that are intended to	form part of the Propose	ed Contract Documents.)

# **Certificate of Substantial Completion**

PROJECT: (name and address)	CONTRACT INFOR Contract For: Date:	MATION:	CERTIFICATE INFORMATION: Certificate Number: 001 Date:	
OWNER: (name and address)	ARCHITECT: (name	e and address)	CONTRACTOR: (name and aa	ldress)
The Work identified below has been recomplete. Substantial Completion is the accordance with the Contract Docume Completion of the Project or portion of (Identify the Work, or portion thereof,	ne stage in the progress of ents so that the Owner can designated below is the date	the Work when the Work of occupy or utilize the Work e established by this Certif	or designated portion is sufficient for its intended use. The date	ently complete in
ARCHITECT (Firm Name) SIGN	ATURE PF	RINTED NAME AND TITLE	DATE OF SUBSTANTIAL C	COMPLETION
WARRANTIES The date of Substantial Completion of required by the Contract Documents, (Identify warranties that do not comm  WORK TO BE COMPLETED OR CORRE A list of items to be completed or corr (Identify the list of Work to be completed)	except as stated below: ence on the date of Substan  CTED ected is attached hereto, or	- ntial Completion, if any, an	ad indicate their date of commo	encement.)
The failure to include any items on such Contract Documents. Unless otherwise the date of issuance of the final Certific correct the Work on the list of items a	e agreed to in writing, the cate of Payment or the dat	date of commencement of e of final payment, whiche	warranties for items on the atta	ached list will be or will complete of
Cost estimate of Work to be complete	d or corrected: \$			
The responsibilities of the Owner and identified below shall be as follows: (Note: Owner's and Contractor's legal	•		_	e, and other items
The Owner and Contractor hereby acc	ept the responsibilities ass	igned to them in this Certi	icate of Substantial Completic	on:
CONTRACTOR (Firm Name)	GNATURE	PRINTED NAME AND	TITLE DATE	
OWNER (Firm Name) SIG	GNATURE	PRINTED NAME AND	TITLE DATE	

# Contractor's Affidavit of Release of Liens

ONTRACT FOR: ONTRACT DATED:		ARCHITECT:  CONTRACTOR:  SURETY:  OTHER:
		SURETY:
		<del>_</del>
		OTHER:
ched hereto includ labor or services	e the Contra who have or	ctor, all Subcontractors, all suppliers of materials may have liens or encumbrances or the right to any manner out of the performance of the Contraction
D HERETO: Liens, yment.	CONTRA	CTOR: (Name and address)
ens from	BY:	
uipment the Owner,		(Signature of authorized representative)
		(Printed name and title)
	Subscribe	ed and sworn to before me on this date:
	Notary P	ublic: mission Expires:
	ched hereto include labor or services we perty of the Owner of the Own	labor or services who have or operty of the Owner arising in D HERETO: CONTRACTION Liens, yment.  ens from BY: uipment the Owner,  Subscribe

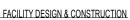
# Consent Of Surety to Final Payment

PROJECT: (Name and address)	ARCHITECT'S PROJECT NUMBER:	OWNER:
	CONTRACT FOR:	ARCHITECT:
TO OWNED: ALL III		CONTRACTOR:
<b>FO OWNER:</b> (Name and address)	CONTRACT DATED:	SURETY:
		OTHER:
In accordance with the provisions of the (Insert name and address of Surety)	Contract between the Owner and the Contractor as indicated above, the	
on bond of (Insert name and address of Contractor)		, SURETY,
nereby approves of the final payment to not relieve the Surety of any of its obliga (Insert name and address of Owner)	the Contractor, and agrees that final payment to the Contractor shall ations to	, CONTRACTOR,
as set forth in said Surety's bond.		, OWNER,
IN WITNESS WHEREOF, the Surety had (Insert in writing the month followed by		
	(Surety)	
	(Signature of authorized representa	tive)
Attest: (Seal):	(Printed name and title)	



# **UTILITIES SHUTDOWN REQUEST (Utilities & Emergency Egress, Etc.)**

Project Name:	Project Name Address Address	Contractor:	Contractor Contact Name Phone Number	
Owner:	IHC Health Services, Inc.	Contractor(s)/ Subcontractor(s) Performing Work:	Contractor Contact Name Phone Number	
FD&C PM:	PM Name			
Start of Impairment:	Date Time	End of Impairment:	Date Time	
IMPAIRMENT REQUI	REMENTS			
	quest <b>MUST</b> be approved by Fac	ility Management 3 working o	days (min.) before work begins.	_
Facility Management <b>MU</b>	<b>IST</b> be notified when work is read	ly to begin and when work is o	complete.	
			MUST be notified if impairments need to	9
	ED INFORMATION TO BE (			
Text	CTED (Building, Floor, Area	a/Department, Users, De	evices, etc.)	
TYPE OF SHU	TDOWN (CHECK ALL THAT	APPLY)		
Electrica	Emergency Police  Main Switch of Individual Page	Gear* Fire Alarm		
Plumbir	Sewer Stock Vent Hot Water Do	Steam Line	r Domestic	
Sprinkle	Riser* Individual He Horizontal M			
Medical	Compressed Oxygen Nitrous Oxide	Special Miz		





				FACILITY DESIGN & CONSTRU
[	Mechanical	☐ Chilled Water ☐ Steam ☐ Glycol	Hot Water Compressor Condenser	☐ VAV's ☐ Electrical Disconnec
-	A CILITY DEDAMES		* Requir	es Fire Alarm & Security Coordin
<u> </u>	ACILITY PERMITS			
L	**Above Ceiling			
	**Hot Work			
	**Infection Cont	rol Risk Control (ICRA)		
	**Other			
*	* Completed forms must be	e attached		
RE	EASON FOR IMPAIR	MENT		
	Text			
co	OMMENTS			
	Text			
_	TTA CUDAFNITC			
А	TTACHMENTS  1. 3 Pre-Cons	truction GC Detailed Shu	tdown Plan Template.xl	SX
	<del>-</del>	Area Floor Plan		
יאסו	2 TO DE COMPLET	TED DV EACH ITV NAANAA	CENAENIT	
		TED BY FACILITY MANAG		
. V		•	nt of time? Yes No	
			w and sign	
. V	· ·		rs? Yes No ed, Intermountain Health	
		ider must be implement	za, micrinountam neatt	icare Jarety Officer and
. С		rs of impaired areas not	ified:	
	,	: :		
		er:		

acility Name:	Permit No.:
Requestor Name:	Project No.:
Company/Dept:	Work/PO No.:
Contact Phone:	WORKET O NO.
	Chart Times
Start Date:	Start Time:
End Date:	End Time:
Exact Location of Work:	
Description of Work:	
Sescription of Work.	
Will ANY penetrations be made	e in walls, roof, floor or ceilings?
Will wiring or data cabling be i	nstalled or modified?
Type of Wiring	
Communication Door Control	HVAC Security
Low or High Voltage Elec	
Fiber Optic	Television
Fire Alarm	Other -
—— Will fixtures, appliances, duct v	work or equipment be installed?
How will the work be supporte	pd?
Fastened to deck or structure Fastened to wall	New cable tray  New pipe rack or conduit rack
Existing cable tray	Other -
Existing pipe rack or cond	
ntermountain Point of Contact	
	Print Name Clearly
Site Pre-Inspection	
ntermountain Representative:	
Notes or Observations (if any):	Print Name Clearly Print Name Clearly
()	
Site Post-Inspection	
-	Requestor:
Intermountain Representative:	Print Name Clearly Print Name Clearly
ntermountain Representative:  No unsealed penetration	Print Name Clearly Print Name Clearly
ntermountain Representative:  No unsealed penetration	Print Name Clearly Print Name Clearly
ntermountain Representative:  No unsealed penetration	Print Name Clearly Print Name Clearly
Notes or Observations (if any):	Print Name Clearly  All installations properly supported
Intermountain Representative:  No unsealed penetration	Print Name Clearly  All installations properly supported  proval of Work



Hot Work Permit	Intermountain Primary Children's Medical Center
Facility Name:  Requestor Name:  Company/Dept:	Intermountain Healthcare  Intermountain Healthcare  Intermountain Medical Group
Contact Phone:	selecthealth Permit No.:
	End Date:
, and the second	
Work / PO No.: Start Time:	End Time:
Exact Location of Work:	
Heat Sources  Gas Torch  Grinder  Arc Welder	Drill Chemical
Other -	
Fire blankets or protective mats in place  Space is well-ventilated  Signage and barricades in place  Wel	
Upon Conclusion of Work	
Name of Fire Watch Personnel:  Fire watch was kept for 60 minutes after hot work was  No sign of smoke or fire was detected during fire watch	
Notes or Observations (if any):  Intermountain Review and Approval of Work	
Intermountain Point of Contact:	Date:
incermountain rount or contact.	Date.
Why do we have to do this?  Because more people die of smoke inhalation in fires than Because 6% of all TJC findings at Intermountain are penetr	





## **Intermountain Healthcare**

# **Facilities Management**

#### **Infection Control Work Permit**

\*\* Standards Referenced: EC 02.06.05; Guidelines for Design and Construction of Health Care Facilities 2010

Project Start Date:
Estimated Completion Date:
Need to Relocate Patients?
Yes No
Date Signed:
Date Signed:
Date Signed:
sification Table):
Class III Class IV
<del></del>
Permit Approved By:
Permit Approved By: Printed Name:
Printed Name:
Printed Name:

#### **Construction Activity Class Worksheet**

Complete Steps 1 through 3, then see Step 4.

1. Determine Construction Activity Type:

Type A:

#### Inspection and non-invasive activities

Includes, but not limited to:

- ceiling tile replacement limited to 1 tile per 50 sf.
- painting or wall covering, without sanding
- finish electrical and minor plumbing work
- activities that do not generate dust or require cutting walls or access to ceilings for other than

Type B:

Small scale, short duration activities that create minimal dust and disruption to patient population via noise, vibration, odors or ventillation systems

Includes, but not limited to:

- installing telephone or computer cabling
- access to chase or mechanical spaces

Type C:

Generates moderate or high levels of dust or requires demolition or removal of ANY fixed building components or assemblies

Includes, but not limited to:

- sanding walls to remove paint or wall coverings
- removal of floor coverings, ceiling tiles or casework
- new wall construction or major cabling activities

Type D:

Major demolition or construction that creates major disruption, i.e. noise, dust, vibration, odor, or mechanical systems

Includes, but not limited to:

- heavy demolition or removal of a complete cabling system
- new construction or buildout of shelled space
- 2. Determine Infection Control Risk Group:

Lowest

- Office areas
- Admitting
- Meeting rooms
- Education centers
- Copy centers
- Fitness centers
- Gift shops
- Mail rooms
- Plant engineering
- EVS
- etc.

Medium

- Behavioral health
- EEG / EKG
- Outpatient clinics
- Outpatient pharmacy
- Outpatient labs
- Physical therapy
- Sleep labs
- Employee health
- Materials management
- Clinical engineering
- etc.

High

- Cafeteria
- Snack bar
- Food services
- Imaging services
- Nuclear medicine
- Radiology
- Physical therapy pools
- Wound clinic
- etc.

Highest

- Nursing units
- ER / ED
- Cancer services
- Cath labs
- Central processing
- Infusion clinic
- ICU / NICU / CCU
- Isolation rooms
- Operating rooms
- Pharmacy
- Lab / Pathology
- Endoscopy
- etc.

3. Find the Construction Class on the matrix below:

**Construction Activity Type** 

IC Risk Group

	Type A	Туре В	Type C	Type D
Lowest	Class I	Class II	Class II	Class III
Medium	Class I	Class II	Class III	Class IV
High	Class I	Class II	Class IV	Class IV
Highest	Class II	Class IV	Class IV	Class IV

4. Follow the appropriate Infection Control Protocols below:

#### **During Construction**

- Perform work using methods to minimize raising dust or tracking dust into other areas.
- Immediately replace ceiling tile upon completion of inspection.
- All measures for Class I work.
- Use active dust control measures.
- Use water mist to control dust while cutting.
- Seal doors, ducts, vents and HVAC units.
- Place dust control mats at entries to work area; keep them clean and effective.
- Remove debris only in tightly covered containers.
- All measures for Class II work.
- Construct barriers to prevent dust and other contaminant migration prior to beginning work.
- Maintain negative air pressure in work space using HEPA filtration units.
- All measures for Class III work.
- Seal all pipes, conduits and penetrations.
- Construct and use anteroom for all entry to work area; HEPA vacuum all personnel, or have them change clothing before they leave the work area.
- All personnel wear shoe covers while in the work area and remove them before entering the hospital.

#### **Upon Completion**

- Clean work area.
- All measures for Class I work.
- Wipe all horizontal surfaces with disinfectant.
- Remove final debris only in tightly covered containers.
- Vacuum using HEPA filtered vacuum; mop with disinfectant as appropriate.
- Remove all seals from doors, ducts, vents and HVAC units.
- All measures for Class II work.
- Remove construction barriers only after all needed inspections are complete and passed.
- Remove construction barriers in a manner that minimizes the spread of dust and debris.
- All measures for Class III work.

#### **Additional Requirements For This Area:**

Initials:	Date:			

#### **Other Considerations for Work Impact**

1. Identify the risk levels of adjacent spaces: Other Below Lateral Lateral Front High Lowest Medium Lowest Medium Lowest High Highest Medium Medium High 2. Identify likely outages and their effects: plumbing, medical gas, ventilation, electrical, etc.: 3. Describe specific containment measures to be used: 4. Describe specific risks associated with water damage: 5. Describe noise and vibrations that will impact patient care areas and how you will mitigate that: 6. Identify the project work hours - avoiding patient care impact when possible: 7. Do plans allow for sufficient isolation/negative airflow rooms? No 8. Do plans allow for sufficient hand washing sinks per AIA guidlines? 9. Do plans allow for sufficient access to clean and soiled utility rooms? 10. Describe the Project Communication Plan for traffic paterns, EVS, etc.: 11. Describe the Project Monitoring Plan for infection control, safety, etc.:



# **Intermountain Healthcare**

# **Facilities Management**

**Interim Life Safety Measures Work Permit** 

\*\* Standards Referenced: LS 01.02.01; NFPA 101 2000 Sections 9.6.1.8, 9.7.6.1

PeopleSoft Project # or Job Name:	Project Start Date:
Project Manager:	Estimated Completion Date:
Contractor Performing Work:	Need to Relocate Patients?
	Yes No
Affected Department Supervisor Signature:	Date Signed:
Environmental Services Supervisor Signature:	Date Signed:
Environment of Care Manager Signature:	Date Signed:
	Ç
Affected Life Safety Systems  Fire Detection  Specific Areas to be Affected by This Work:	Fire or Smoke Barriers Egress
Initials: Date:	
Exceptions or Additions to This Permit:	
Initials: Date:	
Request and Approval:	
Permit Request By: Printed Name:	Permit Approved By: Printed Name:
Filiteu Name.	Filited Name.
Simpature.	Simulations
Signature:	Signature:
Date:	Date:

# Fire Detection, Suppression and Barrier Systems Yes Will individual smoke or heat detectors be out of service longer than 4 hours? Will fire alarm panel be out of service or in "test" mode longer than 4 hours? Will fire alarm circuits be out of service longer than 4 hours? Will fire alarm communication lines be out of service longer than 4 hours? If "yes" to any of the above, detail the interim life safety measures to be taken below: Yes No Will covers be placed on any smoke or heat detectors? If "yes" list the devices to be covered and when the covers will be removed: On conclusion of work, check box to indicate that all covers have been removed. Yes Will any component of the uppression system be out of service longer than 4 hours? If "yes," detail the interim life safety measures to be taken below: Yes No NA Will any floor, wall or ceiling be penetrated? If "yes" above, is the floor, wall or ceiling a rated assembly? If "yes," detail the interim life safety measures to be taken below: **Egress Integrity** No Yes Will any portion of the work obstruct a means of egress? Will any portion of the work alter a means of egress? Will any portion of the work obstruct, impair or remove egress signage? Will any portion of the work obstruct, impair or remove egress lighting? If "yes," detail the interim life safety measures to be taken below:

# **Maintaining a Safe Work Environment** Yes No Will a Hot Work Permit be needed? Will a Confined Space Entry Permit be needed? Will an Above Ceiling Work Permit be needed? Will air quality monitoring be required on site? **Workplace Safety Guidelines** Access to the work site is restricted to authorized personnel only. All personnel wear appropriate PPE while on site. All personnel have had a site safety briefing and know where emergency services are located. Tobacco use is strictly prohibited on the work site. Chemical safety data sheets and safety stations are available to all personnel on site. The work site is maintained in a clean and orderly state at all times. All tools are unplugged and power turned off at the end of each work day. All tools, including extension cords and ladders are in safe operating condition. Any temporary structures or partitions are built smoke tight and of non-combustible materials. Intermountain Healthcare is notified of any fire system shut down before work begins. Workplace Safety Gudelines for Long-Duration Projects Fire alarm and temporary suppression systems will be tested monthly. At least 1 fire drill will be conducted per shift per month. Describe the Project Communication Plan for traffic paterns, EVS, etc.: Describe the Project Monitoring Plan for life safety measures:



#### APPLICATION AND CERTIFICATION FOR PAYMENT

To Owner: IHC Health Services, Inc. Owner Project #: Owner Project # Application #:

36 South State Street Salt Lake City, UT 84111

Application Date: 12/1/2018

From Contractor: Contractor Name Via A/E: Architect Name

chitect Name

Address City, State, Zip Period To: 12/31/2018

Contract Invoice #: 1

Project Name: Project Name

Address

City, State, Zip

#### CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract. The Continuation Sheet is attached.

5.4 Previously Released Retention	\$ - \$ 100.00	Original Contract Sum     Total Contract Change By Change Orders     Current Contract Sum     Total Completed & Stored To Date					
5.2 Previously Withheld Retention       \$ 2.50         5.3 Total Retention Withheld       \$ 3.75         5.4 Previously Released Retention       \$ -         5.5 This Period Retention Released       \$ -         5.6 Total Retention Released       \$ -         5.7 Current Total Retention Withheld       \$ 3.75         6. Total Earned Less Retainage       \$ 71.25		Retention:	5.				
5.3 Total Retention Withheld       \$ 3.75 5.00         5.4 Previously Released Retention       \$ -         5.5 This Period Retention Released       \$ -         5.6 Total Retention Released       \$ -         5.7 Current Total Retention Withheld       \$ 3.75 100         6. Total Earned Less Retainage       \$ 71.25	\$ 1.25	5.1 This Period Retention					
5.4 Previously Released Retention							
5.5 This Period Retention Released	\$ 3.75 5.00%	5.3 Total Retention Withheld					
5.6 Total Retention Released	<mark>\$ -</mark>	5.4 Previously Released Retention					
5.7 Current Total Retention Withheld\$ 3.75 100 6. Total Earned Less Retainage\$ 71.25							
6. Total Earned Less Retainage\$ 71.25	\$ - 0.00%	5.6 Total Retention Released					
	\$ 3.75 100.00%	5.7 Current Total Retention Withheld					
7. Less Previous Certificates For Payments\$ - 0.00	\$ 71.25	Total Earned Less Retainage	6.				
	\$ - 0.00%	Less Previous Certificates For Payments	7.				
8. Current Payment Due	<b>\$ 23.75</b> 23.75%	Current Payment Due	8.				
9 Balance To Finish Plus Retention \$ 76.25 76.25	\$ 76.25 76.25%	Balance To Finish, Plus Retention	9.				

Change Order Summary	Amount
Total Changes Approved in Previous Months By	
Owner	-
Total Approved Changes This Month	\$ -
Total Contract Change By Change Orders	\$ -

#### CONTRACTOR<sup>3</sup>:

Contract Date:

Contractor Name

12/17/2016

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

By: John Doe	Da	ate:	12/31/2018
State of:			
	ay of		_
My Commission Expires:			

#### A/E's CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based upon on-site observations and the data comprising the application, the A/E certifies to the Owner that to the best of the A/E's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the Amount Certified.

Amount Certified	\$23.75
------------------	---------

#### A/E:

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

This Certificate is not negotiable. The amount certified is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

Approved by FD&C PM<sup>1, 2</sup>:

(Signature) (Date)

<sup>&</sup>lt;sup>1</sup> For major capital projects, FD&C Project Manager to sign. <sup>2</sup> Intermountain's "Monthly Pay Application Checklist" must be submitted by PM with For geographical area managed projects, geographical area Contractor's Application & Certification for Payment before processing. Project Manager to sign.

<sup>&</sup>lt;sup>3</sup> Contractor has verified the work associated with the "Current Payment Due" and has attached all relevant invoices and backup information with this application & certification for payment.



## **CONTINUATION SHEET**

**Application and Certification for Payment,** 

Containing Contractor's signed certification is attached.

Project Name: Project Name

Owner Project #: Owner Project #

Application #: 1

**Application Date: 12/1/2018** 

Period To: 12/31/2018

Contractor Invoice #: 1

Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р
Item No.	Description of Work	Original Contract Sum (CM/GC Pre- Construction Fee; Contract Buyouts)	Total Contract Change By Change Orders	Current Contract Sum (C + D)	Work Co From Previous Applications	This Period In Place	Materials Presently Stored This Period (Not in F or G	Total Completed and Stored Through This Period (F + G + H)	% (I / E)	Balance To Finish (E - I)	This Period Retention (G + H * 5%)	Total Retention Withheld (I * 5%)	This Period Retention Released	Total Retention Released	Current Payment Due <sup>3</sup> (G + H - L + N)
00001	Enter Description of Work	\$ 100.00	\$ -	\$ 100.00	\$ 50.00	\$ 25.00	\$ -	\$ 75.00	75%	\$ 25.00	\$ 1.25	\$ 3.75	\$ -	\$ -	\$ 23.75
00002		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00003		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00004		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00005		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00006		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00007		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00008		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00009		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00010		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00011		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00012		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00013		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00014		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00015		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00016		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00017		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00018		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00019		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00020		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00021		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00022		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00023		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00024		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00025		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00026		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00027		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00028		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
00029		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Intermo	ountain Project Grand Totals	\$ 100.00	\$ -	\$ 100.00	\$ 50.00	\$ 25.00	\$ -	\$ 75.00	75%	\$ 25.00	\$ 1.25	\$ 3.75	\$ -	\$ -	\$ 23.75



A/E SUPPLE	MENTAL INSTRUCTION	IS	ASI # <u>001</u>					
Project Name:	Project Name Address Address	A/E:	Architect					
Bid Package:	1.0X	Date:	Date Issued					
Owner:	IHC Health Services, Inc.	ASI Page Count:	xx					
Intermountain Project #:	Project ID #	ASI Prepared By:	Name					
FD&C PM:	PM Name	Contractor:	Contractor					
ASI Description:	Description							
Reason For Change	e (Required):							
	Omission A/E Request GC Rec	quest Owner/FD&C Requ	est Functional Request					
Unknown Conditio	on							
	cuted in accordance with the following s the Work without change in Construction							
submit written notice i	ves that a change in Construction Costs, C in the form of a Proposed Change Order (I rovisions of the Contract Documents. The onal cost and/or time.	PCO) substantiating such claim	to the A/E. The claim shall be made in					
DETAILED DESCRIP	TION:							
Text								
ATTACHMENTS:	ATTACHMENTS:							
Text								
Approved by FD&C	: (Signature)		(Date)					

<sup>&</sup>lt;sup>1</sup> For major capital projects, FD&C Project Manager to sign.
For local facility managed projects, local facility Project Manager to sign.



CCD # 001



CONSTRUCTION CHANGE DIRECTIVE

OCHOTICO OTANOL DIRECTIVE OOD # OOT							
Project Name:	Project Name Address Address	A/E:	Architect				
Bid Package:	1.0X	Date:	Date Issued				
Owner:	IHC Health Services, Inc.	CCD Page Count:	xx				
Intermountain Project #:	Project ID #	CCD Prepared By:	Name				
FD&C PM:	PM Name	Contractor:	Contractor				
CCD Subject:	Subject						
Reason For Change	e (Required):						
	Omission A/E Request GC Req	uest Downer/FD&C Requi	est   Trunctional Request				
<u> </u>		destowner/r bac kequ	esti unctional request				
Unknown Condition	on						
	GE IN CONSTRUCTION \$ SUM, OR CONTRACT						
In order to expedite the work and avoid or minimize delays in the work which may affect the contract sum and/or contract time, the Contract Documents are hereby amended as described below. Proceed with this work promptly. Submit final costs for work involved and change in Contract Time (if any as a Proposed Change Order), for inclusion in a subsequent Change Order, per the General Conditions.							
All work shall be in accordance with the terms, stipulations and conditions of the original Contract Documents.  DESCRIBE BRIEFLY ANY PROPOSED CHANGES:							
Text							

CCD Document Revised: July 2019

**ATTACHMENTS:** 

Text	
Approved by FD&C PM¹:	
(Signature)	(Date)
Approved by FD&C Exec. Director <sup>2</sup> :	
(Signature)	(Date)

<sup>&</sup>lt;sup>1</sup> For major capital projects, FD&C Project Manager to sign.
For local facility managed projects, local facility Project Manager to sign.

<sup>&</sup>lt;sup>2</sup> For major capital projects, FD&C Design & Construction Exec. Director to sign when the charge exceeds \$200,000 as outlined in "Construction Change Order Procedure".

For local facility managed projects, System Construction Director to sign when the charge exceeds \$25,000 as outlined in "Approval Authority Capital Expenditures Policy".



CHANGE ORDER CO # 001

Project Name: Project Name Contractor: Contractor

Address Address

Bid Package: 1.0X CO Date: Date

Owner: IHC Health Services, Inc. CO Page Count: XX

Intermountain CO Prepared By: Name

Project #: Project ID #

FD&C PM: PM Name A/E: Architect

This Change Order is not valid until signed by the Owner, A/E and Contractor.

CO Description: Description

PCO #	Description	Reason for Change	Amount
xxx	Enter Description	Enter Reason for	\$
		Change from PCO Form	
		Total This Change Order:	\$

#### **CO Details:**

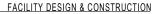
The Original Contract Sum was	\$
The net change by previously authorized Change Orders was	\$
The Contract Sum prior to this Change Order was	\$
The Contract Sum will be increased (decreased) by this Change Order	\$
The new Contract Sum including this Change Order, will be	\$
The Contract Time will be increased (decreased) by	Enter Calendar Days
	or 0
The date of Substantial Completion as of this Change Order therefore is	Enter Date

Contractor: Contractor Firm Contractor Rep. Name - T	itle	Architect: Architect Firm Architect Rep. Name - Title		Intermountain Healthcare: IHC Health Services, Inc. Clay Ashdown/Adam Jensen <sup>1</sup>		
Signature	Date	Signature	Date	VP, Financial Strategy, Growth and Development/ Executive Director, Design and Construction	Date	
				FD&C Director <sup>2</sup> FD&C Project Manager <sup>3</sup>	Date Date	

<sup>&</sup>lt;sup>1</sup> Executive Director, Design and Construction to sign when Change Order amount is \$100,000 or less, otherwise, VP, Financial Strategy, Growth and Development is required to sign per the "Contract Policy" and "Approval Authority Expenditures Policy".

<sup>&</sup>lt;sup>2</sup> For major capital projects, Executive Director, Design & Construction to sign if Change Order is more than \$100,000. For local facility managed projects, System Construction Director to sign.

<sup>&</sup>lt;sup>3</sup> For major capital projects, FD&C Project Manager to sign.
For local facility managed projects, local Facility Project Manager to sign.





PROPOSED (	CHANGE ORDER		PCO # <u>001</u>				
Project Name:	Project Name Address Address	Contractor:	Contractor				
Bid Package:	1.0X	PCO Issue Date:	Date Issued				
Owner:	IHC Health Services, Inc.	PCO Page Count:	xx				
Intermountain Project #:	Project ID #	PCO Prepared By:	Name				
FD&C PM:	PM Name	A/E:	Architect				
this PCO in a Change	t is executed the Contractor is auth Order for A/E and Owner approval		rk described below and to include				
PCO Description:	Description						
Reference:	Reference ASI, RFI, PR, CCD ch	ange document this PCO is	in response to.				
		•	•				
Reason For Change	e (Required):						
□*A/E Error □*A/	'E Omission □A/E Request □GC	Request Owner/FD&C Re	quest Functional Request				
Unknown Condition	on □**Facility						
A/E responsibility.  **If Facility is checked fees and the Facility	Omission is checked, the Contractored, the Facility and FD&C PM are to representative is to initial the PCO D&C PM to coordinate with Capital	determine the Facility's cost or provide email acknowledge	responsibility, including design ment of financial commitment				
PCO Details:							
	*A/E is responsib		. Agreed to if PCO is signed.				
Item Subcont	**Facility is responsib	le for \$	. Agreed to if PCO is signed. Amount				
	Enter Description	n	\$				
	PCO Subtotal		\$				
	Contractors Fee (	5%) per the contract	\$				
	Total Cost of this	PCO Request	\$				
L			•				

Contractor: Contractor Firm Contractor Rep. Name - Ti	tle	Architect: Architect Firm Architect Rep. Name	e - Title	Intermountain Healthca IHC Health Services, Inc. Owners' Rep. – PM Name	are:
Signature	Date	Signature	Date	FD&C Project Manager <sup>1</sup> FD&C Director <sup>2</sup>	Date Date

<sup>&</sup>lt;sup>1</sup> For major capital projects, FD&C Project Manager to sign.\*
For local facility managed projects, local facility Project Manager to sign.\*

<sup>&</sup>lt;sup>2</sup> For major capital projects, Executive Director, Design & Construction to sign when the charge exceeds \$200,000 as outlined in the "Construction Change Order Procedure".

For local facility managed projects, System Construction Director to sign when the charge exceeds \$25,000 as outlined in the "Approval Authority Capital Expenditures Policy".

<sup>\*</sup> PM signatures are required for all PCO's prior to work commencing.



PROPOSAL I	REQUEST		PR # <u>001</u>
Project Name:	Project Name Address Address	A/E:	Architect
Bid Package:	1.0X	Date:	Date Issued
Owner:	IHC Health Services, Inc.	PR Page Count:	xx
Intermountain Project #:	Project ID #	PR Prepared By:	Name
FD&C PM:	PM Name	Contractor:	Contractor
PR Description:	Description		
Reason For Change	e (Required):		
□A/E Error □A/E	Omission A/E Request GC R	equest Owner/FD&C Requ	est Functional Request
Unknown Condition	on		
	emized list of Construction Costs, with Contract Time incidental to the propose	· · · · · · · · · · · · · · · · · · ·	
THIS IS NOT A CHANGE PROPOSED MODIFICAT	ORDER, A CONSTRUCTION CHANGE DIF	RECTIVE OR A NOTICE TO PROCEE	D WITH THE WORK DESCRIBED IN THE
DESCRIPTION:			
Text			
ATTACHMENTS:			
Text			
Requested by:		ted Name and Title)	(Date)
(Jigite	(Fillit	tea name and ride;	(bate)
Approved by FD&C	DM¹·		
Teproted by 1 Date	(Signature)		(Date)

<sup>&</sup>lt;sup>1</sup> For major capital projects, FD&C Project Manager to sign. For local facility managed projects, local facility Project Manager to sign.







#### REQUEST FOR INFORMATION RFI # 001 **Project Name Project Name:** Contractor: Contractor **Address Address** 1.0X **Date Issued Bid Package:** Date: Owner: IHC Health Services, Inc. **RFI Page Count:** XXIntermountain RFI Prepared By: Name Project ID # Project #: FD&C PM: **PM Name** Architect: **Architect** RFI Description: Description **Cross Reference:** ASI #, Drawing Info, etc. **RFI Response Date** Date Requested: Contractor Attestation (Required checkbox): The undersigned Contractor has reviewed the Contract Documents and is unable to locate this requested information within the Contract Documents. This RFI requests information, direction, or clarification for this specific item. **Contractor Signature:** Signature Date: Date **QUESTION:** Text **RESPONSE:** Text A/E Response By: Name Date: Date A/E PM Date: Name Date Acknowledgement:



FUNCTIONAL	CHANGE REQUEST		FCR # <u>001</u>
Project Name:	Project Name Address Address	A/E:	Architect
Bid Package:	1.0X	Date:	Date Issued
Owner:	IHC Health Services, Inc.	PR Page Count:	xx
Intermountain Project #:	Project ID #	PR Prepared By:	Name
FD&C PM:	PM Name	Contractor:	Contractor
Request Description:	Description		
,	ST:		
Requester:			
(Signature)	(Printed	Name and Title)	(Date)
Operations Manage	ment Approval:		
	(Signature)	(Printed Name and Title)	(Date)
Approved by FD&C I			
	(Signature)		(Date)

<sup>&</sup>lt;sup>1</sup> For major capital projects, FD&C Project Manager to sign.
For local facility managed projects, local facility Project Manager to sign.





## PERSONNEL OVERTIME APPROVAL FORM

Project Name:	Project Name Address City, State, Zip		
Owner:	IHC Health Services, Inc.		
Intermountain Project #:			
FD&C PM:			
Contractor:			
Employee or position:			
Job Title:			
Salaried Employee:	(Check box if yes)		
Hourly Rate:			
Invoice Period:			
proposed overtime and th	er's approval of employee overtime for the Project e reasons for the request are specified below. The p request form is duly executed on behalf of Owner	roposed overtime will be deeme	
OVERTIME JUSTIFICATIO	N:		
Contractor:		Owner:	
Contractor Firm		IHC Health Services, Inc.	
Contractor Rep. Name - Ti	itle	FD&C Project Manager	
Signature	Date	Signature	Date
	<del></del>	0.0	- 410

# **Contractor Orientation**

Intermountain Healthcare Facilities Management

This orientation is to be read to all workers by the Facility Manager or designee, and a copy is to be given to each worker on the job site.

## Safety on the Job Site

## Your Safety

Unsafe acts will not be tolerated on the job site. We want you to be as healthy and whole when you go home, as you were when you arrived.

Appropriate PPE will be worn at all times while working on the job site. Ladders and other equipment will be used properly.

Always use the proper lock-out/tag-out (LOTO) procedures and equipment to ensure that you and others are protected from hazardous energy while working. Be aware that energized systems in healthcare facilities can be complex, and your work may affect others in remote areas of the facility. Coordinate any LOTO activity with the Facility Manager and other affected trades.

## The Safety of Others

Nothing you do should put others in danger or harm them in any way. Be thoughtful and deliberate about safety.

## Your Behavior on the Job Site

#### How You Should Act

You should come to work with a clean body in clean clothes. You should come to work sober. Attempting to work while under the influence of any drugs or alcohol – even if they are prescribed – can be dangerous to you and others, and is cause for immediate removal from the job site.

Be considerate of others. Remember that others may take offense at things you do, even when you mean no harm. Avoid doing or saying things that may bother or upset others.

No music, no smoking, no cursing, no shouting, no leering, no fighting, no racially or culturally insensitive comments, no suggestive or offensive comments, no propositions, and no soliciting are permitted while you are on the job site.

#### Phones, Cameras, and Other Communication or Recording Devices

You should not carry on personal communication or phone conversations while on the job site.

You must NEVER photograph, or video or audio record ANYTHING or ANYONE on Intermountain Healthcare property. This will not be tolerated, and in some cases this may violate the law. If work needs to be photographed, have your supervisor or the facilities team on site take the pictures.

							record	

## Where You Should Be on the Property

## **Parking**

Park only in the location identified by the Facility Manager in your orientation. Parking personal vehicles in any other location may result in their removal.

On this job site, the parking location is:	

## Smoking

Smoking is not allowed on any Intermountain property. If you need to smoke, vape, or use tobacco in other ways, you must leave the property and return when you're done.

Drugs are never allowed.

#### **Break Time**

Take breaks only in areas identified by the Facility Manager in your orientation. During breaks do not engage in loud conversation or use offensive language.

On this job site, the break location is:	

#### Meals

The Facility Manager will tell you in your orientation if you are permitted to use the facility cafeteria and dining room during your meal time. Take meals only in areas identified by the Facility Manager in your orientation.

Never take breaks in public areas meant for patients and their guests.

On this job site, the meal location is:	<u> </u> .
On this job site, the break location is:	

## When You Should Be on the Property

When you are working, or on the property for work you should not arrive earlier than is necessary for you to assemble your tools and equipment for the day. Arriving very early and 'hanging around' is not permitted. Your supervisor will tell you what time you should arrive at work.

When you are done with the work day, and your tools and equipment are cleaned and put away, and your job site is clean, you should leave the property directly. Staying on the job site after work is not permitted.

Of course, if you are a patient, or are visiting one of our patients, you are always welcome in the public areas of the facility. Do not visit the job site unless you are here for work.

We ask you that while you are here you remember that you may be seen by others as representing your company or ours, and to please comport yourself accordingly.

# How a Healthcare Facility May Be Different from Other Jobs Sites People

The people who come to our hospitals and other facilities come because they feel sick, hurt, scared, or sad. They don't come to see us when everything is going fine. They want to feel safe and comfortable and confident that everything will be better soon.

Many of them are sensitive to noise, dust, fumes, odors, and vibrations. Please do everything you can to control these irritants.

The procedures we do in our facilities frequently require quiet and stillness. Please be sensitive to this and be ready to accommodate requests to stop work briefly or move to a different area of the facility to continue working.

## **Building Systems**

The structure of our hospitals and other facilities is intended to actively work to protect our staff, patients, and visitors in the event of an emergency. This means that you must be very careful about how your work impacts other systems and parts of the building. Some of the rules are strange, but all are important.

Certain walls are intended to stop smoke or fire from spreading because when our buildings catch fire we cannot leave. We continue to care for our patients, perform surgeries, help birth babies, and provide emergency medical care. When working around or through these walls – "rated assemblies" – it is critical that you do so properly.

A pre-inspection by a member of the facility's maintenance team of the area you'll be working in is required so that you can understand where rated assemblies are, and how you must treat them. This also gives you an opportunity to identify existing conditions for which you may not be responsible.

A post-inspection by a member of the facility's maintenance team of the work you've done is required so that you can demonstrate that you've complied with all requirements for maintaining the integrity of our protective rated assemblies.

On this job site, the contact for fire stopping materials is:
Along with rated assemblies, our facilities have very sensitive fire and smoke detection systems, as well as automatic sprinkler systems. If your activities will cause dust or vibration or impact, be aware and mitigate any adverse effect you may have on these systems.
On this job site, the contact for fire alarm systems is:
If your work interrupts or disables any portion of the building's life safety systems, including fire alarm, fire suppression, and emergency egress, you may be required to implement interim life safety measures
On this job site, the contact for interim life safety is:

Much of our air is exhausted to the outside. If you are working around exhaust fans, you must know what areas the exhaust is coming from. Some exhausts are laden with radioactive elements. Some carry infectious diseases and other germs. Your supervisor will tell you about these areas.

On this job site, the hazardous exhaust areas are:
Many of our patients depend on clean and fresh outside air to be provided to them. Smoking on roofs or around air intakes is strictly forbidden for this reason. If you must operate equipment on roofs or around air intakes, be certain to coordinate your work with the Facility Manager.
On this job site, the sensitive air intakes are:
Much of our equipment may start without notice. Take care to avoid being harmed by unexpected starts, or unexpected discharges of steam, hot water, or chemicals. Unless you are authorized to be working around this equipment you should stay out of these spaces.
All work above the ceiling requires an Above Ceiling Work Permit, and all hot work requires a Hot Work Permit.
On this job site, the contact for Above Ceiling Work Permits is:
On this job site, the contact for Hot Work Permits is:
Infection Control Because many of our patients are ill, there is a chance that you will be exposed to germs. There is also a chance that you will expose our patients to germs you've brought from outside the hospital. We do our best to keep our physical environment clean and to control all infectious matter.
You can protect yourself by ensuring that your vaccinations are current, and by only going in places you are authorized to go. Wash or sanitize your hands frequently – especially after using the restroom and before eating. Never eat food anywhere except where you are told to have meal breaks. The Plumber's Rule No. 3 applies to everyone in healthcare: Don't bite your fingernails!
Your work may require an Infection Control Risk Assessment. The Facility Manager will help you determine when that is, and will help you through the process. This process helps identify the best ways to keep you and our patients safe from infections and other impediments to healing. Once the assessment is done, be certain to abide by all of its conditions.
On this job site, the infection control contact is:

## A Clean Job Site

Throughout the work day, you will be responsible to maintain a reasonably clean job site. This makes it a safer place for you to work. It makes it a safer place for others to work, as well.

At the end of each work day, you will be responsible to leave all materials in an orderly state, remove all waste, scrap, and debris from the site, and leave the area broom clean. All potential hazards will be secured and made as safe as possible.

All construction waste and debris must be disposed of properly. Never use toilets or floor drains for this purpose. Cover all carts while moving debris through the facility, and use tacky mats to control dust tracking over floors.

## Our Expectation of Workmanship

It doesn't matter if you're a ventilation mechanic, an electrician, a painter, or a plumber. It doesn't matter if you're installing carpet, or ceiling tiles, or kitchen equipment, or cabinetry. Every piece of our facilities is in place to support the lifesaving and healing work we do.

The hard reality is that someone's life will literally depend on the quality of the workmanship you put into the jobs you do in Intermountain Healthcare facilities.

And it's another hard reality that someone you care for may very likely come to the facilities you helped build. Please do the kind of job you'd trust your loved one's life to.



## **CONSTRUCTION SAFETY REQUIRMENTS**

- I. Outside Contractors and Intermountain Construction Employees performing construction activities on occupied Intermountain Healthcare property shall meet the following requirements. Stand-alone, new construction sites are not covered by these requirements. Outside Contractors will meet additional qualifications through the Supply Chain Organization Supplier Credentialing Procedure.
  - a. No work will be performed in any Intermountain Facility without prior approval and coordination with the accountable Facility Engineering Manager or Director.
  - b. Each outside contractor will have a Safety Program that complies with 29 CFR 1926 Subpart C. The Safety Program will be in writing.
  - c. Any chemical brought onto Intermountain Property must meet the following requirements:
    - i. Approved by the facility's Chemical Safety Officer,
    - ii. Accompanied by a current material safety data sheet,
    - iii. Stored in accordance with the chemical manufacturer's safety requirements in the appropriate labeled container.
    - iv. Where the chemical quantity is restricted for Healthcare Occupancies by NFPA 30 or other standards, it is the contractor's responsibility to provide for off-site storage.
    - v. The Contractor is responsible to comply with Intermountain's Hazardous Materials policy.
    - vi. The Contractor is responsible for the removal of all chemicals from Intermountain Property and for proper disposal in accordance with applicable laws and regulations.
  - d. No work will be performed without the completion of an Interim Life Safety and Infection Control Risk Assessment. These risk assessments will cover each phase of the construction project.
  - e. In existing facilities, an Asbestos inspection and any necessary abatement will be conducted prior to any renovation or remodel per the Hazmat policy.
  - f. Where work will cause noise or vibration, an assessment will be made following facility procedures to mitigate potential hazards to patients.
  - g. Above the Ceiling Permits
    - i. The Contractor will follow each facility's procedure for obtaining an above the ceiling work permit.
    - ii. No work will be performed prior to obtaining this permit.
  - h. Hot Work Permits
    - i. The Contractor will obtain a Hot Work Permit from Facilities Engineering prior to performing any hot work.
    - ii. The Contractor will provide a continuous and qualified fire watch for the duration and location specified by the Facility Engineering Director.
  - i. Confined Space Permits
    - i. The contractor will coordinate with the Intermountain Facility Engineering Director to assure that all requirements are met and a permit is completed prior to entering a permit required confined space.

## j. Control of Airborne Contaminants

- i. The contractor will control all airborne dusts, mists, fumes, and vapors such that there is no exposure to Intermountain employees, patients, or visitors. This includes the generation of contaminants outside the building.
- ii. If necessary, work will be conducted after hours to minimize potential exposures to staff, patients, and members of the public.

## k. Personal Protective Equipment.

- i. PPE for head, eye, face, hand, foot, and respiratory protection is the responsibility of the contractor, and will be provided and worn as necessary for the exposure, except as follows:
  - 1. Hard Hats and Safety Glasses are required to be worn at all times when in the construction area. Hard hats may be removed when working in areas where the suspended ceiling grid has been completely installed.
- ii. Fall Protection is the responsibility of the contractors and shall meet all 29 CFR 1926 requirements of the applicable Subparts.



RESPONSIBILITY MATRIX
Updated January 5, 2021

The following list identifies the majority of the items that are to be included in the capital project build-out. All Owner items need to be coordinated with A/E (Design Team), Contractor, and Owner (Facility Design & Construction and Supply Chain Facility Equipment Planners). For OFOI or OFCI items, Contractor is required to track equipment on construction schedule and to notify Owner of required delivery times taking into account for equipment lead times.

required delivery times taking into account for equipment	OWNER/VENDOR	NOTES	ADDITIO	NAL NOTE	s
OFOI - (Owner Furnished / Owner Installed)		ns with Owner and track within construction schedule)	Data	Power	Backing
Art	Owner / Owner (Alpine Art)	All artwork to be coordinated with Dan Kohler. Provide power to			g
		required artwork.			
Brochure Racks Chart Racks	Owner / Owner Owner (Midwest)	Contractor to provide proper backing.  Contractor to provide proper backing.			
Copiers, fax	Owner / Owner	A/E to locate where copy/fax/printer is not visual clutter.	Yes	Yes	
Cup Dispensers	Owner / Owner				
Exam Tables  Systems Furniture (including demountable partitions)	Owner / Owner Owner (Midwest & Steelcase)	Coordinate modesty panels with elec. outlets. Sit/Stand desks to have modesty panel on front. Attention to be given to cord management. A/E to coordinate data and power with Midwest.	Yes	Yes	
Receptionist Desk	Owner / Owner (Midwest & Steelcase)				
Moveable Metal Shelving	Owner / Owner				
Recliners / Draw Chairs Signage - Exterior	Owner / Owner (IG Group, YESCO)	Provide power and data to required exterior signage. Provide circuits for above ceiling signs. Coordinate thru-wall conduit sleeves with weather barrier. A/E to coordinate traffic signage and Contractor to install. Intermountain Logo Signs - (2) 20A Circuits - May vary. InstaCare and other Signs - (1) 20 A Circuits - May vary.	Yes	Yes	Yes
Signage - Interior (including Code Signage)	Owner / Owner (Scribbley, Hightech)	Provide power to required signage. Contractor to track in schedule and notify Owner for when Code Required signage is required to be installed.			
Radiology Equipment	Owner / Owner (See subject matter expert list)	A/E responsible to coordinate final site equipment drawings into Construction Documents from Owner's Vendor.	Yes	Yes	
Clinical Garbage Cans (Clinical, Office, PT, Etc.)	Owner / Owner	Construction Documents from Owner's vehicle.			
Computers, Printers, Scanners, Keyboards, Mice, etc.	Owner / Owner	In-ceiling & wall mounts, conduits and boxes mounted by Contractor. Computers to be All-in-One, typ. in IMG exam rooms.	Yes	Yes	Yes
Televisions, Digital Projectors, similar devices, etc.	Owner / Owner	These items to be provided by Owner, but A/E to coordinate locations and infrastructure. Contractor to refer to OFCI section.	Yes	Yes	Yes
Keyboard Trays PACS	Owner / Owner Owner / Owner				
Magnetic Marker Boards, Cork Boards, Huddle Boards, Idea		A/E to coordinate location with O			Ver
Tracking Boards, etc.	Owner / Owner (Midwest)	A/E to coordinate location with Owner.			Yes
Emergency Evacuation Medical Sled (Med Sled) Supply Area Panels	Owner / Owner Owner / Owner	A/E to coordinate location with Owner.			Yes
Supply Area Panels	Owner / Owner	Contractor to provide proper backing, coordinate with Owner.			Yes
Audio/Video (A/V)	Owner / Owner	Intermountain SCO will source & supply the A/V system including specialized cabling (e.g. HDMI, etc). Refer to CFCI section for Contractor requirements. A/E to identify locations on drawings, coordinate with Owner. Contractor to provide infrastructure, back boxes, conduits, pathways and cabling (from wall side back).	Yes	Yes	
Nurse Notification Call (NNC) System & Devices (Hospital Campus)	Owner / Owner (Hill-Rom)	Hospital local facility team to work with Supply Chain Facility Equipment Planning team to contract directly with Nurse Notification Call (NNC) system vendor (Hill-Rom) for devices, equipment, monitors, etc. A/E to coordinate with Owner and Hill-Rom for all NNC infrastructure required to support the device locations and types designated by Hill-Rom on their site specific drawings. Hill-Rom site specific drawings to be coordinated and included in the A/E Contract Documents. Contractor to provide all infrastructure including conduits, back boxes, cabling (e.g. homeruns to RCB, RCB to device, device to device, etc.), etc. for all NNC devices (e.g. RCB, GSR-10, room devices, etc.). The cabling for the NNC system will be coordinated and installed by the Contractor/Subcontractor (i.e. low voltage sub). Contractor to coordinate with Hill-Rom.	Yes; see CFCI	Yes; see CFCI	
Staff Assist Notification Call System & Devices (Medical Group Clinics on hospital campuses to match NNC system)	Owner / Owner (Hill-Rom)	Hospital local facility/IMG Ops team to work with Supply Chain Facility Equipment Planning team to contract directly with Staff Assist Notification Call system vendor (Hill-Rom) for devices, equipment, monitors, etc. (from wall side out). Staff Assist Notification system to be coordinated with Hospital Campus NNC system, as applicable, Medical Group Strategic Planner, and IMG Operations Officer. A/E to coordinate with Owner and Hill-Rom for all Staff Assist Notification Call system infrastructure required to support the device locations and types designated by Hill-Rom on their site specific drawings. Hill-Rom site specific drawings to be coordinated and included in the A/E Contract Documents.  Contractor to provide all infrastructure including conduits, back boxes, cabling (e.g. home-runs to RCB, RCB to device, device to device, etc.), etc. for all NNC and Staff Assist Notification Call devices (e.g. RCB, GSR-10, etc.). The cabling for the NNC and Staff Assist Notification Call system will be coordinated and installed by the Contractor/Subcontractor (i.e. low voltage sub). Contractor to coordinate with Hill-Rom.	Yes; see CFCI	Yes; see CFCI	
Staff Assist Notification Call System & Devices (Stand-alone Medical Group Clinics)	Owner / Owner (Hill-Rom)	IMG Ops team to work with Supply Chain Facility Equipment Planning team to contract directly with Staff Assist Notification Call system vendor (Hill-Rom) for devices, equipment, monitors, etc. (from wall side out). Staff Assist Notification Call system to be coordinated with Medical Group Strategic Planner and Operations Officer. A/E to coordinate with Owner and Hill-Rom for all Staff Assist Notification Call system infrastructure required to support the device locations and types designated by Hill-Rom on their site specific drawings. Hill-Rom site specific drawings to be coordinated and included in the A/E Contract Documents. Contractor to provide all infrastructure including conduits, back boxes, cabling (e.g. home-runs to RCB, RCB to device, device to device, etc.), etc. for all Staff Assist Notification Call devices (e.g. RCB, GSR-10, etc.). The cabling for the Staff Assist Notification Call system will be coordinated and installed by the Contractor/Subcontractor (i.e. low voltage sub). Contractor to coordinate with Hill-Rom.	Yes; see CFCI	Yes; see CFCI	

Alertus - Mass Notification System (Public Areas)	Owner (Alertus) / Contractor	TAKE TO Identify locations on drawings, coordinate with Owner.	Yes	Yes	
Alertus - Mass Notification System (Public Areas)	Intermountain CTIS/Telecom) / Contractor	install with Owner's Vendor.  A/E to identify locations on drawings, coordinate with Owner.	Voc	Voc	
Distributed Antenna System (DAS)	Owner (DAS vendor selected and managed by	A/E to locate infrastructure on drawings to simplify the DAS install.  Contractor to track on construction schedule and coordinate DAS			
iCentra Tracking Boards	Owner / Contractor	A/E to identify locations on drawings, coordinate with Owner.	Yes	Yes	Yes
UPS (MRI, Data Room, CPU, or other similar equipment)	Owner / Contractor	monitoring.  A/E to identify equipment locations on drawings, coordinate with Owner.	Yes	Yes	Yes
Building Alarms / Medication Refrigerator Alarm / Pharmacy Alarm System	Owner / Contractor	A/E to identify locations and infrastructure on drawings, coordinate with Owner. Contractor to provide conduit and infrastructure into accessible ceiling for access from equipment and/or devices. Local Facility to contract with alarm company for alarm, wire, and		Yes	
Patient Lifts	Owner (Liko, subsidiary of Hill-Rom) / Contractor	A/E to identify locations on drawings, coordinate with Owner. A/E to design required support structure for Contractor to install for necessary Liko patient lift connections (e.g. pendant / rails / etc). Contractor to coordinate shop drawings and installation requirements prior with Liko. Connect to equipment branch if provided.		Yes	
Radiation Protection Calculations and Certification	Owner / Contractor	A/E to coordinate with Owner in the design phase for coordinating with Medical Physicists Consultants or others, when required. Contractor to coordinate prior to Gyp. Bd. install.			Yes
Digital Projector Mounts, TV Mounts, & Computer Mounts (Ergotron Brackets/Mounts, etc.)	Owner / Contractor	A/E to identify locations on drawings, coordinate with Owner.  Contractor to coordinate with Owner for ordering and install coordination. In-ceiling & wall mounts, conduits and boxes provide and installed by Contractor A/E to coordinate A/V requirements.  Contractor to pull required A/V cabling.	Yes	Yes	Yes
Cubicle Curtains & Tracks	Owner (Medline) / Contractor	coordination.  A/E to identify locations on drawings, coordinate with Owner.  Contractor to coordinate with Owner for ordering and install coordination.			
Shower Curtains & Rods	Owner (Medline) / Contractor	coordination.  A/E to identify locations on drawings, coordinate with Owner.  Contractor to coordinate with Owner for ordering and install			
Clinical Clocks	Owner / Contractor	coordination.  A/E to identify locations on drawings, coordinate with Owner.  Contractor to coordinate with Owner for ordering and install		Yes	Yes
OR Clocks	Owner / Contractor	Owner for ordering and install of boom mounting plates.  A/E to identify locations on drawings, coordinate with Owner.  Contractor to coordinate with Owner for ordering and install	Yes	Yes	Yes
Boom Mounting Plates (Equipment, Lighting, Anesthesia)	Owner / Contractor	A/E to coordinate with Owner and Owner's selected equipment Vendor, A/E to identify boom locations on drawings, coordinate with Owner; A/E to coordinate the design of the boom support structure into drawings. Final site specific equipment drawings from Vendor to be coordinated with Construction Documents. Contractor to coordinate with Owner and install boom support structure and boom mounting plates. Contractor to coordinate with	Yes	Yes	Yes
IV Track	Owner / Contractor	Backing to be coordinated, if required.			Yes
Scrub Sinks & Carriers	Owner / Contractor	A/E to identify locations on drawings, coordinate with Owner.  Contractor to coordinate with Owner for ordering and for install coordination.  A/E to identify locations on drawings, coordinate with Owner.			Yes
Procedure Lights	Owner / Contractor	A/E to coordinate with Owner and Owner's selected equipment Vendor; A/E to identify locations on drawings, coordinate with Owner; A/E to coordinate the design of the procedure light support structure into drawings. Contractor to provide and install procedure light support structure.		Yes	Yes
Stadiometers, Recessed Scales	Owner / Contractor	A/E to identify locations on drawings, coordinate with Owner; coordinate power.		Yes	
Diagnostic Board (Otoscope / Ophthalmoscope)	Owner / Contractor	A/E to identify locations on drawings, coordinate with Owner.		Yes	
Diaper Changing Station Hand Sanitizer Dispensers (Avagard)	Owner / Contractor Owner / Contractor	A/E to identify locations on drawings, coordinate with Owner.  A/E to identify locations on drawings, coordinate with Owner.			Yes
Sanitary Napkin Dispensers/Receptacles	Owner / Contractor	A/E to identify locations on drawings, coordinate with Owner.			
Soap Dispensers Toilet Paper Dispensers	Owner / Contractor Owner / Contractor	A/E to identify locations on drawings, coordinate with Owner.  A/E to identify locations on drawings, coordinate with Owner.			
Paper Towel Dispensers	Owner / Contractor	A/E to identify locations on drawings, coordinate with Owner.	100	100	
Automated External Defibrillator (AED)  Time Clocks	Owner / Contractor Owner / Contractor	to coordinate recess, semi-recessed, or surface mount options with Owner.  Conduit and boxes by Contractor, Coordinate location with Owner.	Yes	Yes	Yes
	,	A/E to identify locations on drawings, coordinate with Owner, A/E	Data	Power	Backing
OFCI - (Owner Furnished / Contractor Installed)	(Constitute leasting of its	Clinical Programs and Security.	D		D. II
Infant/Pediatric Security System	Owner / Owner (Totguard)	A/E to identify locations on drawings. This system is to be coordianted with Owner, Women's and Children's Operations,	Yes	Yes	
Sharps Disposal Container	Owner / Owner (Stericycle)	A/E to identify locations on drawings, coordinate with Owner.  Backing to be coordinated, if required.			
IV Hangar	Owner / Owner	A/E to identify locations on drawings, coordinate with Owner.  Backing to be coordinated, if required.			
Patient Monitoring System & Devices (Hospital Campus)	Owner / Owner	conduits, back boxes, and home-run cabling from Patient Monitoring devices to TEC/TDR rooms that connect to Intermountain's network (Intermountain Semon certified installer low voltage subcontractor to install). The Patient Monitoring system device to device cabling is by Vendor.	Yes	Yes	
Patient Monitoring System & Devices (Hospital Campus)	Owner / Owner	Hospital local facilities to work with Supply Chain Facility Equipment Planning team to contract directly with Patient Monitoring vendors for devices, equipment, monitors, etc. (from wall side out). A/E to identify locations on drawings, coordinate with Owner. Contractor to provide all infrastructure including	Yes	Yes	

CFCI - (Contractor Furnished / Contractor Installed)			Data	Power	Backing
Blinds/Shades (manual and powered)	Contractor / Contractor	A/E to identify locations on drawings, coordinate with Owner.		Yes	
Apron Hooks/Rack (Heavy Duty in Radiology)	Contractor / Contractor	A/E to identify locations on drawings, coordinate with Owner.			Yes
Communication Boards (e.g. Patient Rooms)	Contractor / Contractor	A/E to identify locations on drawings, coordinate with Owner.			Yes
Emergency Phones, Kiosks - Exterior	Contractor / Contractor	A/E to identify locations on drawings, coordinate with Owner.  Conduit and boxes by Contractor.	Yes	Yes	Yes
Med Gas Certification	Contractor / Contractor	Contractor to coordinate Vendor with Owner			
Emergency Shower Station / Eye Wash Station	Contractor / Contractor	A/E to identify locations on drawings, coordinate with Owner. These shall meet ANSI and Owner requirements.			
Fire Extinguishers	Contractor / Contractor	A/E to identify types and locations on drawings, coordinate with Owner. 10 lbs. minimum - refer to Intermountain Design Guidelines & Construction Standards.			Yes
Grab Bars (Rest rooms, Radiology, Exam rooms, etc.)	Contractor / Contractor	A/E to identify locations on drawings.			Yes
Coat Hooks (Rest rooms/Showers, Exam rooms, Offices/Workstations only)	Contractor / Contractor	A/E to identify locations on drawings.			
Mirrors (Rest rooms, Exams, Radiology, Rehab, etc.)	Contractor / Contractor	A/E to identify locations on drawings, coordinate with Owner.			Yes
Pneumatic Tube Systems	Contractor / Contractor (SwissLog, Atreo Group, or other approved)	A/E to identify locations on drawings, coordinate with Owner. If SwissLog, verify pricing is per Intalere (Amerinet) Contract Agreement. Design assistance fees are included in this agreement.	Yes	Yes	
Plumbing Shrouds Security Cameras, Video Surveillance	Contractor / Contractor Contractor / Contractor (AlphaCorp/Convergint)	A/F to identify leasting and describe an approximate or with Owner	Yes		
Security Carrieras, video Surveillance		A/E to identify locations on drawings, coordinate with Owner.	162		
Voice/Data Cabling (all horizontal cabling)	Contractor / Contractor (Cache Valley Elec., IES Commercial, Data Tech Professionals, Hunt Electric, and others listed in Intermountain Div. 27)	Refer to Division 27 in the Intermountain Design Guidelines and Construction Standards. Coordinate with Owner/User on connections, pairs of fiber/copper, conduits, inner-ducts, etc.	Yes		
Support Bracing/Structure for Radiology and similar equipment	Contractor / Contractor	A/E to coordinate with Owner and Owner's selected Radiology equipment Vendor; A/E to coordinate the design of the support bracing/structure into drawings. Final site specific equipment drawings from Vendor to be coordinated with Construction Documents. Contractor to coordinate with Owner for install of support structure.	Yes	Yes	Yes
Wall Protection (Incl. Bumper and Corner Guards)	Contractor / Contractor	A/E to identify locations on drawings, coordinate with Owner.			
Intrusion Detection	Contractor / Contractor	A/E to identify locations on drawings, coordinate with Owner.			
Access Control, Card Readers (Lenel)	Contractor / Contractor (AlphaCorp/Convergint)	A/E to identify locations on drawings, coordinate with Owner.			
Communication Cabling	Contractor / Contractor	A/E to identify locations on drawings, coordinate with Owner.			
TV System Distribution	Contractor / Contractor	A/E to identify locations on drawings, coordinate with Owner.			
Audio/Video (A/V)	Contractor / Contractor	Intermountain SCO will source & supply the A/V system including specialized cabling (e.g. HDMI, etc). A/E to identify locations on drawings, coordinate with Owner. Contractor to provide infrastructure, back boxes, conduits, pathways and misc. cabling (from wall side back).	Yes	Yes	
Nurse Notification Call (NNC) System - Low Voltage Cabling (Hospital Campus)	Contractor / Contractor (Hill-Rom)	A/E to coordinate with Owner and Hill-Rom for all NNC infrastructure required to support the device locations and types designated by Hill-Rom on their site specific drawings. Hill-Rom site specific drawings to be coordinated and included in the A/E Contract Documents. Contractor to provide all infrastructure including conduits, back boxes, cabling (e.g. home-runs to RCB, RCB to device, device to device, etc.), etc. for all NNC devices (e.g. RCB, GSR-10, etc.). The cabling for the NNC system will be coordinated and installed by the Contractor/Subcontractor (i.e. low voltage sub). Contractor to coordinate with Hill-Rom.	Yes	Yes	
Staff Assist Notification Call System - Low Voltage Cabling (Medical Group Clinics on hospital campuses to match NNC system)	Contractor / Contractor (Hill-Rom)	A/E to coordinate with Owner and Hill-Rom for all Staff Assist Notification Call system infrastructure required to support the device locations and types designated by Hill-Rom on their site specific drawings. Hill-Rom site specific drawings to be coordinated and included in the A/E Contract Documents. Contractor to provide all infrastructure including conduits, back boxes, cabling (e.g. home-runs to RCB, RCB to device, device to device, etc.), etc. for all NNC and Staff Assist Notification Call devices (e.g. RCB, GSR-10, etc.). The cabling for the NNC and Staff Assist Notification Call system will be coordinated and installed by the Contractor/Subcontractor (i.e. low voltage sub). Contractor to coordinate with Hill-Rom.	Yes	Yes	
Staff Assist Notification Call System - Low Voltage Cabling (Stand-alone Medical Group Clinics)	Contractor / Contractor (Hill-Rom)	A/E to coordinate with Owner and Hill-Rom for all Staff Assist Notification Call system infrastructure required to support the device locations and types designated by Hill-Rom on their site specific drawings. Hill-Rom site specific drawings to be coordinated and included in the A/E Contract Documents. Contractor to provide all infrastructure including conduits, back boxes, cabling (e.g. home-runs to RCB, RCB to device, device to device, etc.), etc. for all Staff Assist Notification Call devices (e.g. RCB, GSR-10, etc.). The cabling for the Staff Assist Notification Call system will be coordinated and installed by the Contractor/Subcontractor (i.e. low voltage sub). Contractor to coordinate with Hill-Rom.	Yes	Yes	
Patient Monitoring System & Devices (Hospital Campus)	Contractor / Contractor	A/E to identify locations on drawings, coordinate with Owner. Contractor to provide all infrastructure including conduits, back boxes, and home-run cabling from Patient Monitoring devices to TEC/TDR rooms that connect to Intermountain's network (Intermountain Siemon certified installer low voltage subcontractor to install). The Patient Monitoring system device to device cabling is by Vendor.	Yes	Yes	



# INTERMOUNTAIN HEALTHCARE GENERAL CONDITIONS

## January 2016

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# ARTICLE 1 GENERAL PROVISIONS

#### 1.1 BASIC DEFINITIONS

A/E. "A/E" means the person lawfully licensed to practice architecture or engineering or an entity lawfully practicing architecture or engineering identified as such in the A/E's Agreement and is referred to throughout the Contract Documents as if singular in number. The term "A/E" also means the A/E's representative and its subconsultants. When these General Conditions are part of a Contract in which the design professional is an interior designer, landscape subconsultant or other design professional, the term "A/E" as used in these General Conditions shall be deemed to refer to such design professional. A license is not required when the type of design professional is one which is not subject to a professional license, but such professional must meet the prevailing standards in the State of Utah for such practice. For projects where there is no A/E hired by Intermountain, the references in the General Conditions to A/E shall be deemed to refer to Intermountain as may be practicably applied.

**A/E's AGREEMENT**. "A/E's Agreement" means, unless the context requires otherwise, the agreement executed by the A/E and Intermountain for the Project.

**ADDENDA**. "Addenda" means the written or graphic instruments issued prior to the opening of Bids which clarify, correct or change the bidding documents or the Contract Documents.

**ASI**. "ASI" shall mean a Supplemental Instruction issued by the A/E to the Contractor which may result in clarifications or minor changes in the Work and does not affect the contract time or the contract amount.

**BID**. "Bid" means the offer of the bidder submitted on the prescribed form setting forth the proposed stipulated sum for the Work to be performed.

**BONDS**. "Bonds" mean the bid bond, performance and payment bonds and other instruments of security

**CHANGE ORDER**. "Change Order" means a written instrument signed by Intermountain and Contractor, stating their agreement for changes of the Contract as specified on the required Intermountain change order form.

**CLAIM**. "Claim" means a dispute, demand, assertion or other matter arising in connection with the Contract or the Project, whether submitted by Intermountain or the Contractor, including a Subcontractor at any tier subject to the provisions of these General Conditions. A requested amendment, requested change order, or a Construction Change Directive (CCD) is not Claim unless agreement cannot be reached and the procedures of these General Conditions are followed.

**CM/GC**. "CM/GC" means the Construction Manager/General Contractor, whether a person or entity, identified in the CM/GC Agreement, and is referred to throughout the Contract

Documents as if singular in number. The term "CM/GC" means the CM/GC or its authorized representative.

**CM/GC AGREEMENT**. "CM/GC Agreement" means, if applicable, the agreement executed by the CM/GC and Intermountain for the Project.

CONSTRUCTION CHANGE DIRECTIVE. A "Construction Change Directive" or "CCD" means a written order signed by Intermountain, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both.

Intermountain may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions; even if it may impact the Contract Sum and Contract Time.

**CONTRACT**. The Contract Documents form the Contract for Construction. The term "Contract" represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the A/E and Contractor, (2) between Intermountain and a Subcontractor or (3) between any persons or entities other than Intermountain and Contractor. The Contract may be amended or modified only by (1) a written amendment executed by both Intermountain and Contractor, or (2) by a Modification.

CONTRACT DOCUMENTS. The term "Contract Documents" means the Contractor's Agreement between Intermountain and Contractor (hereinafter referred to as "Contractor's Agreement"), the Conditions of the Contract (General, Supplementary and other Conditions), the Drawings, Specifications, Addenda, other documents listed in the Contractor's Agreement and Modifications issued after execution of the Contractor's Agreement. The Contract Documents shall also include the bidding/proposal documents, including the Instructions to Bidders/Proposers, Notice to Contractors, the Bid/Proposal Form, and/or the response to the request for proposal, to the extent not in conflict with the other above-stated Contract Documents and other documents and oral presentations as part of the Selection which are documented as an attachment to the Contract.

**CONTRACT SUM**. The term "Contract Sum" means the Contract Sum as stated in the Contractor's Agreement and, including authorized and signed adjustments to this agreement (modifications), is the total amount payable by Intermountain to the Contractor for performance of the Work under the Contract Documents.

**CONTRACT TIME**. "Contract Time," unless otherwise provided in the Contract Documents, means the period of time, including authorized and signed adjustments (modifications), stated in the Contract Documents for Substantial Completion of the Work.

**CONTRACTOR**. The Contractor is the person or entity identified as such in the Contractor's Agreement or the CM/GC Agreement, as applicable, and is referred to throughout the Contract Documents as if singular in number. The term "Contractor" means the Contractor or the Contractor's authorized representative. When separate contracts are awarded for different

portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case, shall mean the Contractor who executes each separate Contractor's or CM/GC Agreement, as applicable.

**CONTRACTOR'S AGREEMENT**. "Contractor's Agreement" means, unless the context requires otherwise, the stipulated sum agreement executed by the Contractor and Intermountain for the Project.

**DAY**. The term "day" or "days" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

**DEFECTIVE**. "Defective" is an adjective which when modifying the word "Work" refers to Work that does not conform to the Contract Documents, or does not meet the requirements of any inspection, referenced standard, code, test or approval referred to in the Contract Documents, or has been damaged.

**DIRECTOR**. "Director" means Intermountain's Director of Facility Planning and Development unless the context requires otherwise. Director may include a designee selected by the Director for the particular function referred to in the General Conditions.

**DRAWINGS**. The "Drawings" are the graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, showing the design, location and dimensions of the Work, and generally include the drawings, elevations, sections, details, schedules and diagrams.

**INTERMOUNTAIN**. "Intermountain" means IHC Health Services, Inc. operating through its Department of Facility Planning and Development. Unless the context requires otherwise, Intermountain is the "Owner" as that term is commonly referred to in the construction industry.

**INTERMOUNTAIN/OWNER'S REPRESENTATIVE**. The "Intermountain Representative" or "Owner's Representative" is the person (also referred to as the "Project Manager") assigned by the Director to manage the Project and is the sole person authorized to act on behalf of Intermountain under this Agreement.

**INSPECTION**. The word "inspection" or its derivatives shall mean a review of the Project, including but not limited to a visual review of the Work completed to date to ascertain if the Work is in accordance with the Contract Documents, including all applicable building codes and construction standards.

**INVITATION TO BID**. "Invitation to Bid" means Intermountain's solicitation or request to a contractor to provide a Bid.

**MODIFICATION**. A "Modification" is (1) a Change Order (2) Construction Change Directive or (3) ASI.

**NOTICE TO PROCEED.** A "Notice to Proceed" is a document prepared by Intermountain and by its terms authorizes the Contractor to commence Work on the Project. It is deemed issued

upon being sent by Intermountain to the Contractor's specified address within the Bid or Proposal.

**PARTIAL USE**. "Partial Use" means placing a portion of the Work in service for the purpose for which it is intended (or a related purpose) before reaching Substantial Completion for all the Work. This partial use does not constitute "substantial completion."

**PRODUCT DATA**. "Product Data" means illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

**PROJECT**. The "Project" means the total construction of the Work performed under the Contract Documents.

**PROJECT MANUAL (FOR CONSTRUCTION).** The "Project Manual" is the volume of assembled Specifications for the Work and may include the bidding/proposal requirements, sample forms, General or Supplementary Conditions of the Contract.

**PROPOSAL.** "Proposal" means the A/E's or CM/GC's response to Intermountain's Request for Proposal.

**PROPOSAL REQUEST OR "PR."** A "Proposal Request" or "PR" is a proposal request filed with the Contractor for the purposes of seeking a proposal in order to resolve an issue as part of the Change Order or Contract Modification process.

**PROPOSED CHANGE ORDER**. A "Proposed Change Order" ("PCO"), is an informal request by the Contractor filed with Intermountain Representative, in an effort to commence the Contract Modification Process. It shall not be considered a "Claim." The PCO may be related to any potential, or actual delay, disruption, unforeseen condition or materials or any other matter in which the Contractor intends to seek additional monies or time.

**REQUEST FOR INFORMATION or RFI**. A "Request for Information" or "RFI" is a request filed by the Contractor with the A/E regarding any request for information, direction or clarification related to the Contract Documents, plans or specifications.

**REQUEST FOR PROPOSAL or RFP**. "Request for Proposal" or "RFP" means Intermountain's solicitation for A/E or CM/GC Proposals.

SALES TAX and/or USE TAX. Sales Tax and/or Use Tax, unless the context requires otherwise, shall mean the sales tax and/or use tax collected or to be collected by the Utah State Tax Commission and shall include any sales and/or use tax that the Utah State Tax Commission collects on behalf of any special district, local government or political subdivision. Intermountain is a sales-tax exempt entity for materials supplied to the Project and will provide a Utah State Tax Commission Exemption Certificate to the Contractor.

**SAMPLES**. "Samples" mean physical examples, which illustrate materials, equipment or workmanship and establishes standards by which the Work will be judged.

**SHOP DRAWINGS**. "Shop Drawings" means drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

**SPECIFICATIONS**. The "Specifications" are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards, installation and workmanship for the Work, and performance of related systems and services.

**SUBCONTRACTOR**. "Subcontractor" means the person or entity that has a direct contract with the Contractor, including any trade contractor or specialty contractor, or with another Subcontractor at any tier to provide labor or materials for the work but does not include suppliers who provide only materials, equipment or supplies to a contractor or subcontractor. Notwithstanding the foregoing, the text in which the term is used may provide for the exclusion of Subcontractors of other Subcontractors or the exclusion of suppliers. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or authorized representative of the Subcontractor. The Term "Subcontractor" does not include a separate contractor or subcontractors of a separate contractor.

**SUBSTANTIAL COMPLETION**. Substantial Completion" is the date certified in accordance with Article 9.2 and means the date the Work or designated portion thereof is sufficiently complete, and any lack of completion or performance does not reasonably interfere with Intermountain's intended use of the Project, in accordance with the Contract Documents so that Intermountain can occupy and use the Work for its intended use.

**WORK**. The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all labor, materials, equipment and services provided, or to be provided, by the Contractor to fulfill the Contractor's obligations.

# ARTICLE 2 INTERMOUNTAIN

#### 2.1 INFORMATION AND SERVICES REQUIRED OF INTERMOUNTAIN

- **2.1.1 INTERMOUNTAIN'S REPRESENTATIVE**. Intermountain shall designate an Intermountain Representative authorized to act in Intermountain's behalf with respect to the Project. Intermountain or such authorized representative shall render decisions within a reasonable time pertaining to documents submitted by the A/E and/or Contractor in order to avoid a compensable delay in the orderly and sequential progress of the Project.
- **2.1.2 SPECIALISTS AND INSPECTORS.** Intermountain will provide certified building inspection services in accordance with the adopted Building Codes. This includes 'routine' and 'special' inspections unless otherwise noted in the A/E Agreement. Intermountain may assign an inspector or specialist to note deviations from, or necessary adjustments to, the Contract Documents or to report deficiencies or defects in the Work. The inspector or specialist's activities in no way relieve the Contractor of the responsibilities set forth in the Contract Documents.

- **2.1.3 SURVEYS AND LEGAL DESCRIPTION**. Intermountain shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall review this information, including the surveys and any provided geotechnical studies, and compare such information with observable physical conditions and the Contract Documents.
- **2.1.4 PROMPT INFORMATION AND SERVICES**. Upon receipt of a written request from the Contractor, Intermountain shall furnish information or services under Intermountain's control with reasonable promptness to avoid delay in the orderly progress of the Work.

# 2.1.5 COPIES OF DRAWINGS AND PROJECT MANUALS (FOR CONSTRUCTION). Unless otherwise provided in the Contract Documents, the Contractor will be furnished electronic copies of Drawings and Project Manuals for Contractor's use in connection with the execution of the Work for the Project.

**2.1.6 OTHER DUTIES.** The foregoing is in addition to other duties and responsibilities of Intermountain enumerated herein and especially those in respect to Article 2.2 (Construction by Intermountain or by Separate Contractors), Article 8 (Payments and Completion) and Article 10 (Insurance and Bonds).

#### 2.2 CONSTRUCTION BY INTERMOUNTAIN OR BY SEPARATE CONTRACTORS

# 2.2.1 INTERMOUNTAIN'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS.

- (1) **IN GENERAL**. Intermountain reserves the right to perform construction or operations related to the Project with Intermountain's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver or subrogation.
- (2) **COORDINATION AND REVISIONS**. Intermountain shall provide for coordination of the activities of Intermountain's own forces and of each separate Contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and Intermountain in reviewing their construction schedules when directed to do so. The Contractor shall make any revisions to the construction schedule and Contract Sum deemed necessary after a joint review and agreement by Intermountain. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors and Intermountain until subsequently revised.

#### 2.2.2 MUTUAL RESPONSIBILITY

- (1) **CONTRACTOR COORDINATION**. The Contractor shall afford Intermountain and separate contractor(s) a reasonable opportunity for delivery and storage of their materials and equipment and performance of their activities and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.
- (2) **REPORTING PROBLEMS TO INTERMOUNTAIN**. If part of the Contractor's Work depends on work by Intermountain or a separate contractor, the Contractor

shall, prior to proceeding with that portion of the Work, promptly report in writing to Intermountain apparent defects in workmanship that would render it unsuitable for proper execution. Failure of the Contractor to make said report shall constitute an acknowledgment that Intermountain's or separate contractors completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects in workmanship not then reasonably discoverable.

- (3) **COSTS**. Costs caused by delays or by improperly timed activities or defective construction shall be borne by the responsible party in accordance with the procedures and provisions of the Contract Documents.
- (4) **CONTRACTOR REMEDIAL WORK**. The Contractor shall promptly remedy damage caused by the Contractor to completed or partially completed Work or to property of Intermountain or separate contractors and subcontractors as provided in Article 6.

## ARTICLE 3 A/E

#### 3.1 A/E'S ADMINISTRATION OF THE CONTRACT

**3.1.1 IN GENERAL**. The A/E assists Intermountain with the administration of the Contract as described in the Contract Documents. The A/E shall have the authority to act on behalf of Intermountain only to the extent provided in the Contract Documents or A/E's Agreement.

#### 3.1.2 SITE VISITS

- (1) Site visits or inspections by the A/E, Intermountain or any Intermountain representative shall in no way limit or affect the Contractor's responsibility to comply with all the requirements and the overall design concept of the Contract Documents as well as all applicable laws, statutes, ordinances, resolutions, codes, rules, regulations, orders and decrees.
- (2) **WRITTEN REPORT**. The A/E shall promptly submit to Intermountain a written report subsequent to each site visit.

#### 3.1.3 COMMUNICATIONS FACILITATING CONTRACT

**ADMINISTRATION.** Except as authorized by the Intermountain Representative or as otherwise provided in the Contract Documents, including these General Conditions, the A/E and Contractor shall communicate through the Intermountain Representative on issues regarding the timing of the Work, cost of the Work or scope of the Work. Contractor shall comply with communication policies agreed upon at any pre-construction meeting with Intermountain. Communications by and with the A/E sub-consultants shall be through the A/E. Communications by and with Subcontractors shall be through the Contractor. Communications by and with separate contractors shall be through Intermountain.

**3.1.4** A/E MAY REJECT WORK, ORDER INSPECTION, TESTS. The A/E shall have the responsibility and authority to reject Work which, based upon the A/E's knowledge or what may be reasonably inferred from the A/E's site observations and review of data, does not conform to the Contract Documents. Whenever the A/E considers it necessary or advisable for implementation of the intent of the Contract Documents, the A/E shall have the responsibility and authority to require additional inspections or testing of the Work in accordance with the

provisions of the Contract Documents, whether or not such Work is fabricated, installed or completed, provided, however, the A/E must obtain Intermountain's prior written approval of any such additional inspections or testing. However, neither this authority of the A/E nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the A/E to the Contractor, Subcontractors, their agents or employees or other persons performing portions of the Work, including separate contractors. If the Contractor disputes the rejection of any Work and the correction thereof shall involve additional cost or time, it shall be Intermountain's option to accept such Work whether it be conforming or nonconforming.

#### 3.1.5 A/E REVIEW CONTRACTOR'S SUBMITTALS

- (1) Contractor shall submit shop drawings, product data, and samples and other submittals required by the Contract Documents to the A/E as required by the approved submittal schedule.
- (2) The A/E shall review and approve or take other appropriate action upon Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the purpose of checking for conformance with the information and design concepts expressed in the Contract Documents. A/E action taken on a submittal shall not constitute a Modification of this Agreement.
- (3) The A/E's action shall be taken no later than 15 days following A/E's receipt of the submittal, unless agreed to otherwise by Contractor and Intermountain, in order to avoid a delay in the Work of the Contractor or of separate contractors while allowing sufficient time in the A/E's professional judgment to permit adequate review.
- (4) Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents.
- (5) The A/E's review of the Contractor's submittals shall not relieve the Contractor of the obligations under the Contract Documents.
- (6) The A/E's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the A/E, of any construction means, methods, techniques, sequences or procedures.
- (7) The A/E's approval of a specific item shall not indicate approval of an assembly of which the item is a component.
- (8) When professional certification of performance characteristics of materials, systems or equipment is required by the Contract Documents, the A/E shall be entitled to rely upon such certifications to establish that the materials systems or equipment will meet the performance criteria required by the Contract Documents.
- **3.2 OWNERSHIP AND USE OF A/E'S DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS**. All Drawings, Specifications and other documents prepared by the A/E are and shall remain the property of Intermountain, and Intermountain shall retain all common law, statutory and other reserved rights with respect thereto. Said documents were

prepared and are intended for use as an integrated set for the Project which is the subject of this Contractor's Agreement. The Contractor shall not modify or use Contract Documents on any other project without the prior written consent of Intermountain and A/E. Any such non-permissive use or modification, by Contractor, the Contractor's Subcontractors at any tier or anyone for whose acts the Contractor is liable, shall be at Contractor's sole risk. Contractor shall hold harmless and indemnify Intermountain from and against any and all claims, actions, suits, costs, damages, loss, expenses and attorney fees arising out of such non-permissive use or modification by the Contractor. The Contractor and Subcontractors are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications and other documents prepared by the A/E appropriate to and for use in the execution of their Work under the Contract Documents. All copies made under this license shall bear the statutory copyright notice, if any, shown on the Drawings, Specifications and other documents prepared by the A/E. Submittals or distributions necessary to meet official regulatory requirements or for other purposes relating to completion of the Project are not to be construed as a publication in derogation of Intermountain's copyright or other reserved rights.

# ARTICLE 4 CONTRACTOR

## 4.1 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

- **4.1.1 REVIEWING CONTRACT DOCUMENTS, INFORMATION, REPORTING ERRORS, INCONSISTENCIES OR OMISSIONS**. The Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by Intermountain pursuant to Article 2.1 hereinabove and shall at once report to Intermountain and A/E errors, inconsistencies or omissions discovered. The Contractor shall not be liable to Intermountain or A/E for damage resulting from errors, inconsistencies or omission in the Contract Documents, unless the Contractor recognized such error, inconsistency or omission or a Contractor of ordinary skill and expertise for the type of Work involved would have readily so recognized such error, inconsistency or omission, and the Contractor failed to report such to Intermountain and A/E. If the Contractor performs any construction activity without such notice to Intermountain and A/E and prior to the resolution of the error, inconsistency or omission, the Contractor shall assume appropriate responsibility for such performance and shall bear an appropriate amount of the attributable costs for correction.
- **4.1.2 FIELD CONDITIONS**. The Contractor shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the Contractor, or information which a Contractor of ordinary skill and expertise for the type of Work involved would have known, before commencing activities. Errors, inconsistencies or omissions discovered shall be reported to Intermountain and A/E at once. If the Contractor performs any construction activity without such notice to Intermountain and A/E and prior to the resolution of the error, inconsistency or omission, the Contractor shall assume appropriate responsibility for such performance and shall bear an appropriate amount of the attributable costs for correction.

## 4.1.3 PERFORM IN ACCORDANCE WITH CONTRACT DOCUMENTS AND

**SUBMITTALS**. The Contractor shall perform the Work in accordance with the Contract Documents and submittals approved in accordance with the Contract Documents

# **4.1.4 PERFORMANCE TO PRODUCE THE COMPLETE SYSTEM AND INTENDED RESULTS**. Performance by the Contractor shall be required to the extent consistent with the Contract Documents and reasonably inferable from the Contract Documents as being necessary to allow the system to function within its intended use.

- **4.1.5 INTENT AND HIERARCHY**. The Contract Documents should be read as a whole and wherever possible, the provisions should be construed in order that all provisions are operable. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complimentary, and what is required by one Document or provisions thereof shall be as binding as if required by all the Documents or provisions thereof. In case of an irreconcilable conflict between provisions within a Contract Document or between Contract Documents, the following priorities shall govern as listed below:
- (1) A particular Modification shall govern over all Contract Document provisions or Modifications issued prior to said particular Modification.
- (2) Attachments to the Contractor's Agreement resulting from the Selection process including any management plan or documented interview information shall govern over addenda, the General Conditions, plans and specifications.
- (3) A particular Addendum shall govern over all other Contract Document provisions issued prior to said particular Addendum. Subsequent Addenda shall govern over all prior Addenda.
- (4) The Supplementary General Conditions shall govern over the General Conditions.
- (5) These General Conditions shall govern over all other Contract Documents except for the Supplementary General Conditions, Addenda, Modifications and Attachments resulting from the selection process.
- (6) The drawings and specifications shall not govern over any of the documents listed above.
- (7) In case of a conflict or ambiguity within the same level of hierarchy of described documents, Intermountain reserves the right to select the most stringent requirement unless the preponderance of the contract indicates the less stringent requirement.

## 4.1.6 DIVIDING WORK AND CONTRACTOR REPRESENTATION.

Organization of the specifications into divisions, sections and articles, and arrangement of Drawings, shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade. Contractor represents that the Subcontractors, Sub-subcontractors, manufacturers and suppliers engaged or to be engaged by it are and will be familiar with the requirements for performance by them of their obligations.

**4.1.7 PLANNING AND PRIORITY**. The Contractor shall plan and schedule its work to facilitate the Project and shall maintain a work schedule to place proper priority to sequence work to complete the project timely.

#### 4.2 SUPERVISION AND CONSTRUCTION PROCEDURES

- **4.2.1 SUPERVISION AND CONTROL**. The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over the construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, except to the extent that the Contract Documents expressly and specifically state otherwise.
- **4.2.2 RESPONSIBILITY**. The Contractor shall be responsible to Intermountain for acts and omissions of the Contractor's employees, Subcontractors, and their agents and employees, and other persons performing portions of the Work under a contract with the Contractor or on behalf of the Contractor.
- **4.2.3 NOT RELIEVED OF OBLIGATIONS**. The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of Intermountain or its agents in Intermountain's administration of the Contract, or by tests, inspections or approvals required or performed by persons other than the Contractor or for those that the Contractor is liable.

#### 4.2.4 INSPECTIONS AND APPROVALS

- (1) The Contractor is responsible for requesting inspections for various stages and portions of the Work required under the Contract Documents in a timely manner.
- (2) If any of the Work is required to be inspected or approved by the terms of the Contract Documents by any public authority, the Contractor shall timely request such inspection or approval to be performed in accordance with Article 9. Except as provided in Article 9, work shall not proceed without any required inspection and the associated authorization to proceed. Contractor shall promptly notify Intermountain if the inspector fails to appear at the site.

#### 4.3 LABOR AND MATERIALS

- **4.3.1 PAYMENT BY CONTRACTOR.** Except to the extent it is otherwise stated in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities, supplies, consumables and services necessary for the proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
- **4.3.2 DISCIPLINE AND COMPETENCE**. The Contractor shall enforce strict discipline and good order among the Contractor's employees, its Subcontractors, agents, representatives and other persons performing under the Contract Documents. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.
- **4.4 TAXES AND OTHER PAYMENTS TO GOVERNMENT**. The Contractor shall pay sales, consumer, use, employment-related and similar taxes related to the Work or portions

thereof provided by the Contractor which are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect, and shall comply with the laws and regulations regarding the payment of Sales and/or Use Tax and any exemptions; provided that, Intermountain is a sales-tax exempt entity for materials supplied to the Project and will provide a Utah State Tax Commission Exemption Certificate to the Contractor.

### 4.5 PERMITS, FEES, NOTICES, LABOR AND MATERIALS

- **4.5.1 PERMITS AND FEES**. Unless required in the Supplementary General Conditions or an Addendum, it will not be necessary for the Contractor to obtain or pay for local building permits, plan check fees, electrical permits, plumbing permits, connection fees, or impact fees, nor will it be necessary to pay fees for inspections pertaining thereto.
- **4.5.2 COMPLIANCE WITH PUBLIC AUTHORITIES, NOTICES.** The Contractor shall comply with and give notices required by laws, ordinances, resolutions, rules, regulations and lawful orders of public authorities bearing on the performance of the Work.

#### 4.5.3 CORRELATION OF CONTRACT DOCUMENTS AND ENACTMENTS.

It is not the Contractor's responsibility to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, resolutions, building codes, and rules and regulations. Notwithstanding this, if the Contractor observes, or if such is readily observable to a Contractor of ordinary skill and expertise for the type of Work involved, that a portion of the Contract Documents is at variance therewith, the Contractor shall promptly notify the A/E and Intermountain in writing, and necessary changes shall be accomplished by appropriate Modification.

- **4.5.4 FAILURE TO GIVE NOTICE**. If the Contractor, or any Subcontractor thereof performs Work without complying with the requirements of this Article 4.5 hereinabove, the Contractor shall assume appropriate responsibility for such Work and shall bear the appropriate amount of the attributable costs.
- **4.6 SUPERINTENDENT**. The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site at all times during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be similarly confirmed on written request in each case.

#### 4.7 TIME AND CONTRACTOR'S CONSTRUCTION SCHEDULES

#### 4.7.1 PROGRESS AND COMPLETION

- (1) **TIME IS OF THE ESSENCE; COMPLETE WITHIN CONTRACT TIME**. Time is of the essence. By executing the Contractor's Agreement, the Contractor confirms that the Contract Time is adequate to perform the Work. The Contractor shall proceed expeditiously with adequate forces to achieve Substantial Completion within the Contract Time.
- (2) **NOTICE TO PROCEED AND INSURANCE**. The Contractor shall not prematurely commence operations on the site or elsewhere prior to the issuance of a Notice to

Proceed by Intermountain or prior to the effective date of insurance required by Article 10 to be furnished by the Contractor, whichever is the latter.

- **4.7.2 SCHEDULE PREPARATION**. The Contractor, promptly after being awarded the Contract, shall prepare and submit for Intermountain's and A/E's review, a reasonably detailed CPM schedule for the Work. The schedule shall indicate the order, sequence, and interdependence of all items known to be necessary to complete the Work including construction, procurement, fabrication, and delivery of materials and equipment, submittals and approvals of samples, shop drawings, procedures, or other documents. Work items of Intermountain, other Contractors, utilities and other third parties that may affect or be affected by the Contractor shall be included. If Intermountain is required, by the Contract Documents, to furnish any materials, equipment, or the like, to be incorporated into the Work by the Contractor, Contractor shall submit, with the first schedule submittal, a letter clearly indicating the dates that such items are required at the Project Site. The critical path should be identified, including the critical paths for interim completion dates and milestones. The CPM schedule shall be developed using Primavera, MS Project, or Suretrack unless otherwise authorized by Intermountain Representative. The Contractor's schedule shall be updated at least once per month and submitted with each pay request. The Contractor shall maintain an original baseline schedule and shall provide Intermountain monthly written reports indicating Contractor's compliance or noncompliance with the original schedule.
- **4.7.3 INITIAL CONTRACTTIME**. Unless otherwise specified in the bidding documents, the initial Contract Time is the time identified in the Contractor's Agreement.
- **4.7.4 INTERIM COMPLETION DATES AND MILESTONES**. The schedule must include contractually specified interim completion dates and milestones. The milestone completion dates indicated are considered essential to the satisfactory performance of this Contract and to the coordination of all Work on the Project. The milestone dates listed are not intended to be a complete listing of all Work under this Contract or of interfaces with other Project Contractors.
- **4.7.5 SCHEDULE CONTENT REQUIREMENTS**. The schedule shall indicate an early completion date for the Project that is no later than the Project's required completion date. The schedule, including all activity duration's shall be given in calendar days. The Schedule shall also indicate all of the following:
- (1) Interfaces with the work of outside contractors (e.g., utilities, power and with any separate Contractor);
  - (2) Description of activity including activity number/numbers;
  - (3) Estimated duration time for each activity;
- (4) Early start, late start, early finish, late finish date, and predecessor/successors including stop-start relationships with lead and lag time for each activity;
  - (5) Float available to each path of activities;
  - (6) Actual start date for each activity begun;
  - (7) Actual finish date for each activity completed;

- (8) The percentage complete of each activity in progress or completed;
- (9) Identification of all critical path activities;
- (10) The critical path for the Project, with said path of activities being clearly and easily recognizable on the time-scaled network diagram. The path(s) with the least amount of float must be identified. Unless otherwise authorized by Intermountain Representative, no more than 40% of all activities may be identified as critical path items. The relationship between non-critical activities and activities on the critical path shall be clearly shown on the network diagram;
- (11) Unless otherwise authorized by Intermountain Representative, all activities on the schedule representing construction on the site may not have duration longer than 14 days. Construction items that require more than 14 days to complete must be broken into identifiable activities on the schedule with durations less than 14 days. The sum of these activities represents the total length required to complete that construction item; and
- (12) Additional requirements as specified in the Supplemental General Conditions.
- **4.7.6 INTERMOUNTAIN'S RIGHT TO TAKE EXCEPTIONS**. Intermountain reserves the right to take reasonable exception to activity duration, activity placement, construction logic or time frame for any element of the Work to be scheduled.
- **4.7.7 FLOAT TIME**. Float or slack time is defined as the amount of time between the earliest start date and the latest start date or between the earliest finish date and the latest finish date of a chain of activities on the Schedule. By a proposal request or modification delivered to the Contractor, Intermountain has the right to use the float time for non-critical path activities until the Contractor has reallocated such time on a newly submitted schedule.
- **4.7.8 INITIAL SCHEDULE SUBMISSION**. No progress payments will be approved until the Contractor has submitted a Project detailed CPM schedule for the entire project.
- **4.7.9 UPDATES**. Prior to any approval of a pay request, Intermountain, A/E and Contractor shall review the Contractor's schedule compared to the Work completed. Intermountain approves the amount of Work completed as supported by the schedule of values and as verified by the determination of Work completed. If necessary, the Contractor shall then update and submit to Intermountain the schedule with the pay request; all of which in accordance with Intermountain's approval. All updates shall be provided in electronic and hard copy formats. At each scheduled meeting with Intermountain Representative, the Contractor shall provide a "three week look ahead" with long lead items identified.
- **4.7.10 SCHEDULE OF SUBMITTALS**. The Contractor shall prepare and keep current, for the A/E's and Intermountain's review, a schedule of submittals required under the Contract Documents which is coordinated with the Contractor's construction schedule and allows the A/E a reasonable time to review the submittals. This submittal schedule is to be included as part of the construction schedule. Submittals requiring expedited review must be clearly identified as such in the schedule of submittals.
- **4.7.11 SCHEDULE RECOVERY**. If the Work represented by the critical path falls behind by more than 7 days, the project schedule shall be redone within 14 days showing how

the Contractor shall recover the time. A narrative that addresses the changes in the schedule from the previously submitted schedule shall be submitted along with the schedule in both hard copy (appropriate report formats to be determined by Intermountain Representative) and electronic copy. The Contractor shall comply with the most recent schedules.

#### 4.7.12 SCHEDULE CHANGES AND MODIFICATIONS.

- (1) **CONTRACT TIME CHANGE REQUIRES MODIFICATION**. The Contract Time may only be shortened or extended by a written modification fully executed by Intermountain.
- Contractor, after approval of the complete detailed construction schedule, desire to change his plan of construction, he shall submit his requested revisions to Intermountain and the A/E along with a written statement of the revisions including a description of the sequence and duration changes for rescheduling the work, methods of maintaining adherence to intermediate milestones and the contract completion date and the reasons for the revisions. If the requested changes are acceptable to Intermountain, which acceptance shall not be unreasonably withheld, they will be incorporated into the Schedule in the next reporting period. If after submitting a request for change in the Contract Schedule, Intermountain does not agree with the request, Intermountain will schedule a meeting with the Contractor to discuss the differences.
- (3) **CHANGES IN CONTRACT TIME**. The critical path schedule as the term is used in the provisions herein shall be based on the current version of the Contractor's schedule for the Project and accepted by Intermountain just prior to the commencement of the modification, asserted delay, suspension or interruption. If the Contractor believes it is entitled to an extension of Contract Time under the Contract Documents, the Contractor shall submit a PCO in accordance with Article 7.2 to the A/E and Intermountain Representative accompanied by an analysis of the requested time adjustment.

#### 4.7.13 EXCUSABLE DELAY

(1) **IN GENERAL**. If the Contractor is delayed at any time in the progress of the Work on the critical path schedule by an act or neglect of Intermountain or other causes beyond the Contractor's control or by other causes which Intermountain determines may justify delay, then the Contract Time shall be extended by Change Order. The Contractor shall immediately take all steps reasonably possible to lessen the adverse impact of such delay. Notwithstanding the above, to the extent any of the causes for delay were caused by the Contractor, reasonably foreseeable by the Contractor or avoidable by the Contractor, then to such extent the delay shall not be cause for extension of the Contract Time. For purposes of this paragraph, Contractors shall include all subcontractors and others under the responsibility of the Contractor.

The determination of the total number of days' extension will be based upon the current construction schedule in effect at the inception of the change and/or delay and upon all data relevant to the extension as it exists in the project record. Once approved, such data shall be incorporated in the next monthly update of the schedule.

Contractor acknowledges and agrees that delays in work items which, according to the schedule analysis, do not affect any milestone dates or the Contract completion dates shown on the CPM at the time of the delay, will not be the basis for a contract extension.

- (2) **WEATHER-RELATED EXCUSABLE DELAYS**. Completion time will not be extended for normal bad weather or any weather that is reasonably foreseeable at the time of entering into the contract. The time for completion as stated in the contract documents includes due allowance for calendar days on which Work cannot be performed out of doors. The Contractor acknowledges that it may lose days due to weather conditions. Contract time may be extended at no cost to Intermountain if all of the following are met which must be established by the Contractor:
- (a) That the weather prevented Work from occurring that is on the critical path for the project based upon a critical path schedule previously submitted to Intermountain and to the extent accepted by Intermountain;
  - (b) There are no concurrent delays attributed to the Contractor;
- (c) The Contractor took all reasonable steps to alleviate the impact of the weather and took reasonable attempts to prevent the delay and despite such reasonable actions of Contractor, the weather impacted the critical path as described above; and
  - (d) One of the following occurred:
  - 1. The weather was catastrophic, such as a tornado, hurricane, severe wind storm, severe hail storm; or
  - 2. Based on the full history of information published from the closest station as indicated from the Western Regional Climate Center (Desert Research Institute 2215 Raggio Parkway Reno, Nevada 89512, and as may be described on the website at http://www.wrcc.dri.edu/summary/), one or more of the following occurred:
    - a. For any day between November 1 and March 31, the minimum temperature fell below the average minimum temperature plus the extreme low temperature recorded for the month divided by 2.
    - b. For any day between November 1 and March 31, the maximum temperature fell below the monthly average for the minimum temperature.
    - c. The daily precipitation exceeded 75% of the historical one day maximum for the month.
    - d. The snowfall for the month exceeded 175% of the historical average snow fall for the month.

### 4.7.14 COMPENSABLE DELAY, SUSPENSION OR INTERRUPTION

- (1) **BASIC CONDITIONS**. In addition to the other requirements of the Contract Documents, a compensable delay, suspension or interruption of the work occurs only when the following are met:
- (a) Is wholly unanticipated by the parties at the time of execution of the Contractor's Agreement or is caused by the breach of a fundamental obligation of the Contract Documents attributable to Intermountain; and
- (b) The Contractor delivers a written notice to A/E and Intermountain within seven (7) days that the Contractor knows or should have known of the condition giving rise to the purported compensable delay, disruption, suspension or interruption, and said continuation affects the Contract Time as indicated by the last submitted and reasonable critical path schedule.
- (2) **COMPENSABLE DELAY FORMULA**. To the extent of the compensable delay, the Contractor's total entitlement for all compensable delay damages is the computed result of the following formula: Contract Sum divided by Contract Time (in calendar days); the result of which is then multiplied by 0.05; and the result of which is multiplied by the number of calendar days of compensable days allowed under these General Conditions that are beyond the Contract Time. Notwithstanding any other provision of these General Conditions or the Contract Documents, to the extent the Contractor is entitled to receive the 10% or 15% markup under Article 7.4, this provision shall be inapplicable and the markup shall be deemed to include all the compensable delay damages provided by this paragraph.
- (3) **PERIOD OF COMPENSABLE DELAY, SUSPENSION OR INTERRUPTION**. The length and extent of compensable delay, shall be determined, with the use of the Project's critical path schedule, by ascertaining the number of additional days to the Contract Time that are needed in order to perform the Work in accordance with the Contract Documents as a result of the continuation of the aforesaid delay, disruption, suspension or interruption after receipt of the written notice received by the A/E and Intermountain under Section 4.7.14(1)(b) above.
- (4) **CONCURRENT DELAY**. Notwithstanding any other provision of these General Conditions, to the extent a non- compensable delay occurs at the same time as a compensable delay, Intermountain shall not be responsible for any compensation for the period of the non-compensable delay.
- **4.7.15 TIME EXTENSION REQUEST.** Any time extension shall be requested within 21 days after the Contractor knew or should have known about the delay and shall be supported by the critical path schedule analysis.

#### 4.7.16 LIQUIDATED DAMAGES

(1) **IN GENERAL**. Should the Contractor fail to complete the Work within the Contract Time, there shall be deducted from any amount due or that may become due the Contractor, the sum, if any, stated in the Contractor's Agreement. Such sum is fixed and agreed upon by Intermountain and Contractor as liquidated damages due Intermountain by reason of the inconvenience and added costs of administration, engineering, supervision and other costs resulting from the Contractor's default, and not as a penalty. Actual damages related to delay cannot be ascertained at the time of execution of the Contract. To the extent that the liquidated

damages exceed any amounts that would otherwise be due the Contractor, the Contractor shall be liable for such excess to Intermountain. Intermountain may seek enforcement of such obligation by legal action, and if such is necessary, shall recover the related costs and attorney fees. Notwithstanding any other provision of these General Conditions, the availability of liquidated damages to Intermountain shall not limit Intermountain's right to seek damages or other remedies available under law or equity to the extent such damages or remedies are not based upon delay.

- (2) **NO WAIVER OF INTERMOUNTAIN'S RIGHTS**. Permitting the Contractor to continue any part of the Work after the time fixed for completion or beyond any authorized extension thereof, shall in no way operate as a waiver or estoppel on the part of Intermountain of any of its rights under the Contract Documents, including the right to liquidated damages or any other remedies or compensation.
- 4.8 DOCUMENTS AND SAMPLES AT THE SITE, CERTIFYING "AS-BUILTS". The Contractor shall maintain at the site for Intermountain, one record copy of the Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked weekly to record changes and selections made during construction, as well as approved Shop Drawings, Product Data, Samples and similar submittals. These aforesaid items shall be available to the A/E and shall be delivered to the A/E for submittal to Intermountain upon completion of the Work, signed by the Contractor, certifying that they show complete and exact "as-built" conditions, stating sizes, kind of materials, vital piping, conduit locations and similar matters. All notes of encountered or changed conditions shall be included.

## 4.9 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- **4.9.1 NOT CONTRACT DOCUMENTS**. Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. The submittal shall demonstrate, for those portions of the Work for which the submittal is required, the way the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents.
- **4.9.2 PROMPTNESS**. The Contractor shall review, approve and submit to the A/E, Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work, or the activities of Intermountain or separate contractors.
- **4.9.3 NOT PERFORM UNTIL A/E APPROVES**. The Contractor shall perform no portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved in writing by the A/E. Such Work shall be in accordance with the approved submittals.
- **4.9.4 REPRESENTATIONS BY CONTRACTOR.** By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.
- **4.9.5 CONTRACTOR'S LIABILITY**. The Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the A/E's approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor

has specifically informed the A/E in writing of such deviation at the time of the submittal and the A/E has given written approval to the specific deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the A/E's review and comment.

- **4.9.6 DIRECT SPECIFIC ATTENTION TO REVISIONS**. The Contractor shall direct specific attention in writing to all revisions on resubmitted Shop Drawings, Product Data, Samples or similar submittals, except those requested by the A/E and indicated on previous submittals.
- **4.9.7 INFORMATIONAL SUBMITTALS**. Informational submittals upon which the A/E is not expected to take responsive action may be so identified in the Contract Documents.
- 4.9.8 RELIANCE ON PROFESSIONAL CERTIFICATION. When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, Intermountain and A/E shall be entitled to rely upon the accuracy and completeness of such calculations and certifications. If a professional stamp is required, the professional shall be licensed in the State of Utah unless otherwise approved by Intermountain in writing. Likewise, the Contractor is entitled to rely upon the accuracy and completeness of the calculations made by the A/E in developing the Contract Documents, unless a Contractor of ordinary skill and expertise for the type of Work involved would know that such is inaccurate or incomplete and therefore must immediately notify Intermountain in writing.

#### 4.10 USE OF SITE

- **4.10.1 IN GENERAL**. The Contractor shall confine operations at the site to areas permitted by the Contract Documents, law, ordinances, resolutions, rules and regulations, and permits and shall not unreasonably encumber the site with materials or equipment. Contractor shall take all reasonable means to secure the site, protect the site and protect the Work from any damage. The site shall be left free and clear of refuse, equipment, materials, etc. and the site shall not be subject to spilled liquids and chemicals, toxic or otherwise. Should such an incident occur while the Contractor has control of the site, the Contractor shall be responsible to clean the site and pay all associated costs, fines and penalties. Notwithstanding this, Contractor is not responsible for any damage to the site or the Work to the extent caused by Intermountain or Intermountain's agents.
- **4.10.2 ACCESS TO NEIGHBORING PROPERTIES**. The Contractor shall not, except as provided in the Contract Documents or with Intermountain's advance written consent when necessary to perform the Work, interfere with access to properties neighboring the Project site by the owners of such properties and their respective tenants, agents, invitees and guests.
- **4.11 ACCESS TO WORK**. The Contractor shall provide Intermountain and A/E access to the Work in preparation and progress, wherever located.
- **4.12 ROYALTIES AND PATENTS**. The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of patent rights and shall hold Intermountain and A/E harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a patent, the Contractor

shall be responsible for such loss unless such information is promptly furnished to Intermountain in writing.

#### 4.13 INDEMNIFICATION

#### **4.13.1 IN GENERAL**

- To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless Intermountain and its affiliates, subsidiaries, officers, employees, agents, authorized volunteers (hereinafter the above listing of entities and persons is referred to as "indemnitees") from and against every kind and character of claims, damages, losses and expenses, including but not limited to attorneys' fees, and including those events covered under the blanket Contractual Liability Coverage required under the Contract Documents, arising out of or resulting from any act or omission in the performance of the Work including the work of all the Subcontractors and their employees, provided that any such claim, damage, loss or expense is caused in whole or in part by the negligent or wrongful act or omission of the Contractor, any Subcontractor, and their employees, provided that any such claim, damage loss or expense is caused in whole or in part by the negligent or intentional act or omission of the Contractor, any Subcontractor, or anyone directly or indirectly employed or the agent of any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. The Contractor shall defend all actions brought upon such matters to be indemnified hereunder and pay all costs and expenses incidental thereto, but Intermountain shall have the right, at its option, to participate in the defense of any such action without relieving the Contractor of any obligation hereunder. Notwithstanding any of the above, to the extent the Contractor is complying with a written directive from Intermountain that is not based on the Contractor's recommendation, the Contractor shall not be held liable under the indemnification provision of this Agreement if the Contractor has promptly disagreed with the written directive by delivering such objection to Intermountain in writing.
- (2) Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person under Contract Documents.
- (3) In claims against any person or entity indemnified under this Article 4.13 by an employee of the Contractor, Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this Article 34.13 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or Subcontractor under workers' or workmen's compensation acts, disability benefits acts or other employee benefit acts.
- (4) Intermountain and Contractor waive all rights against each other for damages to the Work during construction to the extent covered by the applicable Builder's Risk Policy, except such rights as they may have to the proceeds of such insurance as set forth in these General Conditions. Contractor shall require similar waivers from its Subcontractors, Subconsultants, and agents at any tier.

# ARTICLE 5 SUBCONTRACTORS

## 5.1 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

## 5.1.1 APPROVAL REQUIRED

- (1) Listing of Subcontractors shall be as stated in the Contract Documents, including but not limited to the "Intermountain Subcontractors List Form".
- (2) The Contractor shall not contract with a proposed person or entity to whom Intermountain has made a reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.
- **5.1.2 BUSINESS AND LICENSING REQUIREMENTS**. All Subcontractors used by the Contractor shall comply with all applicable business and licensing requirements.
- **5.1.3 SUBSEQUENT CHANGES**. After the bid opening, the Contractor may change its listed Subcontractors only in accordance with the Contract Documents and with written approval of the Director.
- (1) Intermountain will pay the additional costs for an Intermountain requested change in subcontractor if all of the following are met:
  - (a) If Intermountain in writing requests the change of a subcontractor;
- (b) The original subcontractor is a responsible subcontractor that meets the requirements of the Contract Documents; and
- (c) The original subcontractor did not withdraw as a subcontractor on the project.
- (2) In all other circumstances, the Contractor shall pay the additional cost for a change in a subcontractor.
- **5.1.4 BONDING OF SUBCONTRACTORS**. Subcontractors as identified by Intermountain in the procurement documents, may be required to submit performance and payment bonds to cover the full extent of their portion of the Work. This provision does not in any way limit the right of the Contractor to have subcontractors at any tier be required to have a performance and/or payment bond.

#### 5.2 SUBCONTRACTUAL RELATIONS

- **5.2.1 COMPLY WITH CONTRACT DOCUMENTS**. By appropriate enforceable agreement, and to the extent it can be practically applied, the Contractor shall require each Subcontractor to be bound to the Contractor by the terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these Documents, assumes towards Intermountain and A/E.
- **5.2.2 RIGHTS.** Each Subcontractor agreement shall preserve and protect the rights of Intermountain and A/E under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the Subcontractor agreement, the

benefit of all rights and remedies against the Contractor that the Contractor, by the Contract Documents, has against Intermountain.

- **5.2.3 SUB-SUBCONTRACTORS**. The Contractor shall require each Subcontractor to enter into similar agreements with its Subcontractors which complies with the requirements of Paragraphs 5.2.1 and 5.2.2 hereinabove.
- **5.2.4 DOCUMENT COPIES**. The Contractor shall make available to each proposed Subcontractor, prior to execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound. Subcontractors shall similarly make copies of applicable portions of the Contract Documents available to their respective proposed Subcontractors.

#### 5.3 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

**5.3.1 CONDITIONS FOR ASSIGNMENT TO INTERMOUNTAIN**. Each subcontract agreement for a subcontractor at any tier for a portion of the Work is assigned by the Contractor to Intermountain provided that the assignment is effective only after termination of the Contract by Intermountain for cause pursuant to Article 12.2 or stoppage of the Work by Intermountain pursuant to Article 12.5, and only for those subcontract agreements which Intermountain accepts by notifying the Subcontractor in writing. The subcontract shall be equitably adjusted to meet the new conditions of the work.

## ARTICLE 6 PROTECTION OF PERSONS AND PROPERTY

#### 6.1 SAFETY OF PERSONS AND PROPERTY

- **6.1.1 CONTRACTOR RESPONSIBILITY**. The Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall take all reasonable precautions for the safety of, and shall provide reasonable protection to prevent damage, injury or loss to:
  - (1) Employees on the Work and other persons who may be affected thereby;
- (2) The Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or a Subcontractor; and
- (3) Other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 6.1.2 SAFETY PROGRAM, PRECAUTIONS. The Contractor shall institute a safety program at the start of construction to minimize accidents. Said program shall continue to the final completion of the Project and conform to applicable laws and regulations including the Utah Occupational Safety and Health Rules and Regulations as published by the Utah Industrial Commission UOSH Division. The Contractor shall post signs, erect barriers, and provide those items necessary to implement the safety program. As soon as the Contractor proceeds with the Work, the Contractor shall have all workers and all visitors on the site wear safety hard hats, as

well as all other appropriate safety apparel such as safety glasses and shoes, and obey all safety rules and regulations and statutes. The Contractor shall post a sign in a conspicuous location indicating the necessity of wearing hard hats and the Contractor shall loan such hats to visitors.

- **6.1.3 COMPLIANCE WITH LAWS**. The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss. In particular, the Contractor shall comply with all applicable provisions of Federal, State and municipal safety laws, rules and regulations as well as building codes to prevent accidents or injury to persons on, about, or adjacent to the premises where the Work is being performed.
- **6.1.4 ERECT AND MAINTAIN SAFEGUARDS**. The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including effective fences, posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.
- **6.1.5 UTMOST CARE**. When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.
- **6.1.6 PROMPT REMEDY**. The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Paragraph 6.1.1 of these General Conditions caused in whole or in part by the Contractor, a Subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under said Paragraph 6.1.1, except to the extent such damage or loss is directly due to errors in the Contract Documents or caused by agents or employees of the A/E or Intermountain. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under the Contract Documents.
- **6.1.7 SAFETY DESIGNEE**. The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents, damage, injury or loss. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to Intermountain and A/E.
- **6.1.8 LOAD SAFETY**. The Contractor shall not load or permit any part of the construction or site to be loaded so as to endanger its safety.
- **6.1.9 OFF-SITE RESPONSIBILITY**. In addition to its other obligations under this Article 6, the Contractor shall, at its sole cost and expense, promptly repair any damage or disturbance to walls, utilities, streets, ways, sidewalks, curbs and the property of Intermountain and third parties (including municipalities and other governmental agencies) resulting from the performance of the Work, whether by it or by its Subcontractors at any tier. The Contractor shall not cause materials, including soil and debris, to be placed or left on streets or ways.
- **6.1.10 EMERGENCIES**. In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. Contractor shall promptly notify Intermountain Representative of the action taken.

- 6.2 **HAZARDOUS MATERIALS**. In the event the Contractor encounters on the site material reasonably believed to be asbestos or polychlorinated biphenyl (PCB) or any other hazardous waste or substance which may endanger the health of those persons performing the Work or being on the site, the Contractor shall immediately stop Work in the area affected and immediately report the condition to Intermountain Representative and A/E by phone with a follow-up document in writing. The Work in the affected area shall be resumed when written direction is provided by Intermountain Representative. Except to the extent provided otherwise in the Contract Documents or if the presence of hazardous materials is due to the fault of the Contractor, the Contractor shall not be required to perform without the Contractor's consent, any Work relating to asbestos, polychlorinated biphenyl (PCB) or any other hazardous waste or substance. Intermountain shall procure a licensed abatement contractor qualified to remove the hazardous material. The abatement contractor shall submit notification of demolition to the Utah Division of Air Quality. Abatement contractor shall pay the notification fee. A copy of the hazardous material survey report shall be available to all persons who have access to the construction site.
- 6.3 HISTORICAL AND ARCHEOLOGICAL CONSIDERATIONS. In the event the Contractor knows or should have known of any cultural, historical or archeological material that is either recognized as an item to be protected under Federal, State, or local law or regulation, or is an item of obvious value to Intermountain, the Contractor shall cease any work that would interfere with such discovery and immediately report the condition to the Intermountain Representative and A/E by phone with a follow-up document in writing. Work shall resume based upon the direction of Intermountain Representative. Contractor cooperation with any Intermountain recognized archaeologist or other cultural/historical expert is required.
- **6.4 CONTRACTOR LIABILITY**. If the Contractor fails in any of its obligations in Articles 6.1 through 6.3 above, the Contractor shall be liable to any damages to Intermountain or any third party resulting from such noncompliance. The Contractor shall also be liable for any mitigation or restoration effort resulting from such noncompliance. To the extent all the following is met, the Contractor may treat the discovery of such material similarly to an unforeseen condition:
- **6.4.1** The discovery of such material is reasonably unforeseeable given the site conditions that the Contractor should have been aware;
- **6.4.2** The presence of such material was not identified in any part of the Contract Documents:
- **6.4.3** The Contractor has undertaken all proper action to mitigate any impact of such discovery on the critical path or monies related to the Project;
- **6.4.4** The discovery affects the critical path or contract price from that which was contemplated by the Contract Documents; and
  - **6.4.5** The requirements of 7.1.5 and the Contract documents are met.

## ARTICLE 7 MODIFICATIONS, REQUEST FOR INFORMATION, PROPOSED CHANGE ORDER, AND CLAIMS PROCESS

#### 7.1 MODIFICATIONS: IN GENERAL

- **7.1.1 TYPES OF MODIFICATIONS AND LIMITATIONS**. Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or ASI, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents. The Contractor must have a written Modification executed by Intermountain under this Article 7 prior to proceeding with any Work sought to be an extra.
- **7.1.2 BY WHOM ISSUED.** A Change Order or Construction Change Directive shall be issued by Intermountain Representative. An ASI is issued by the A/E. The A/E shall prepare Change Orders and Construction Change Directives with specific documentation and data for Intermountain's approval and execution in accordance with the Contract Documents, and may issue ASIs not involving an adjustment in the contract sum or an extension of the Contract Time which are not inconsistent with the intent of the Contract Documents.
- **7.1.3 CONTRACTOR TO PROCEED UNLESS OTHERWISE STATED.**Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive or ASI.
- **7.1.4 ADJUSTING UNIT PRICES**. If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are so changed in a proposed Change Order or Construction Change Directive that application of such unit prices to quantities of Work proposed will cause a substantial inequity to Intermountain or Contractor, the applicable unit prices may be equitably adjusted.
- 7.1.5 SPECIAL NOTICES REQUIRED IN ORDER TO BE ELIGIBLE FOR ANY CONTRACT MODIFICATION. In order to be eligible for any Modification under this Article 7, the Contractor must have met the following special notice requirements:
- (1) CONCEALED OR UNKNOWN CONDITIONS. The Contractor must file a written notice with Intermountain Representative within seven (7) calendar days of that the Contractor knew or should have known of a site condition described below or the Contractor shall be deemed to waive any right to file any PCO or Claim for additional monies or time related to such condition:
- (a) If the Contractor encounters unknown and reasonably unforeseeable subsurface or otherwise concealed physical conditions, including hazardous or historical/cultural materials under Article 6, which differ materially from those indicated by the Contract Documents or a site inspection; or
- (b) If the Contractor encounters unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents.
- (2) INCREASE IN CONTRACT TIME. If the Contractor encounters a situation in which the Contractor knows or should have known that such situation would cause a delay, disruption, interruption, suspension or the like to the Project, the Contractor must file a

notice with the Intermountain Representative within seven (7) working days of when the Contractor knew or should have known of such circumstance or the Contractor shall be deemed to waive any right to file any PCO or Claim for additional monies or time related to such circumstance. To the extent Intermountain is damaged by the failure of the Contractor to provide such notice after the Contractor knows or should have known of such circumstance, the Contractor shall be liable for damages attributable thereto in addition to any liquidated damages (if applicable).

## 7.2 CONTRACTOR INITIATED REQUESTS

- **7.2.1 THE REQUEST FOR INFORMATION, RFI, PROCESS AND TIME TO FILE.** The Contractor may file an RFI with the A/E regarding any concern which will assist the Contractor in the proper completion of the Work including, but not limited to issues related to the Contract Documents, plans and specifications. The RFI shall be filed with the A/E in a timely manner so as not to prejudice Intermountain as to the quality, time or money related to the Work.
- 7.2.2 PROPOSED CHANGE ORDER ("PCO"). Within twenty-one (21) days after the Contractor knows or should have known of a situation or concern where the Contractor is going to request additional monies or time, the Contractor must file a Proposed Change Order ("PCO") with Intermountain Representative, or the Contractor shall be deemed to waive any right to claim additional monies or time related to such situation or concern. The PCO shall include all available documentation supporting the PCO available to the Contractor at the time of filing and the Contractor shall thereafter diligently pursue the supplementation(s) of such documentation and promptly deliver such supplementation(s) to Intermountain Representative.
- (1) **INTERMOUNTAIN REPRESENTATIVE RESPONSE**. One of the following may occur after a PCO is filed with Intermountain Representative:
- (a) Intermountain Representative, after considering any input by the A/E, may reach an agreement with the Contractor and issue a Change Order.
- (b) Intermountain, after considering any input by the A/E, may issue a Construction Change Directive.
- (c) If Intermountain Representative, after considering any input by the A/E, disagrees with the Contractor's PCO, Intermountain representative may seek additional information or verification from the Contractor, the A/E or other sources, may negotiate with the Contractor, may issue a Change Order upon such later agreement, may retract the PR, or may issue a Construction Change Directive. The A/E must continually work with Intermountain in providing data, documentation and efforts to resolve the issues related to the PR.
- **7.3 PROPOSAL REQUEST INITIATED BY INTERMOUNTAIN**. Intermountain may file a Proposal Request with the Contractor seeking information, data and/or pricing relating to a change in the contract time and or monies owing for particular scope changes or other modifications to the Contract Documents. The PR shall provide a time limit for the Contractor to file a response with the A/E and Intermountain Representative. If a proposal is not timely provided by the Contractor, Intermountain may calculate the Change Order under Article 7.4.2 below. Upon such timely receipt of the proposal, one of the following shall occur:

- **7.3.1 IF AGREEMENT, CHANGE ORDER ISSUED**. Intermountain Representative, after considering any input by the A/E, may reach an agreement with the Contractor and issue a Change Order.
- **7.3.2 IF DISAGREEMENT**. If the Intermountain Representative disagrees with the Contractor's proposal, after considering any input from the A/E, Intermountain representative may seek additional information or verification from the Contractor or other sources, may negotiate with the Contractor, may issue a Change Order upon such later agreement, may retract the PR, or may issue a Construction Change Directive. If a Construction Change Directive is issued which identifies Intermountain representative's position in regard to the subject contract sum and/or time adjustment, the Contractor must initiate the Claim resolution process provided for herein within twenty-one (21) days of the Contractor's receipt of the Construction Change Directive, or the Contractor shall be deemed to waive any such request for additional time or money as a result of the issuance of the Construction Change Directive. Such waiver shall entitle Intermountain to convert the Construction Change Directive into a Change Order, whether or not executed by the Contractor. If the Construction Change Directive leaves open the determination of additional time or money related to the directed change, then the time period for initiating the Claim resolution process shall not accrue until such time as Intermountain has conveyed to the Contractor a position as to the time and money owing as a result of the directed change.

#### 7.4 EVALUATION OF PROPOSAL FOR ISSUING CHANGE ORDERS

- **7.4.1 ADJUSTING SUM BASED UPON AGREEMENT**. If the Change Order provides for an adjustment to the Contract Sum, the adjustment shall be based on the mutual agreement of the Contractor and Intermountain, including any terms mandated by unit price agreements or other terms of the Contract Documents.
- **7.4.2** INTERMOUNTAIN RESOLUTION OF SUM AND STANDARDS IN THE ABSENCE OF AN AGREEMENT UNDER PARAGRAPH 7.4.1. In the absence of an agreement under Paragraph 7.4.1 above, the adjustment shall be based on an itemized accounting of costs and savings supported by appropriate data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Paragraph shall be limited to the following:
- (1) All direct and indirect costs of labor; including workers compensation insurance, social security and other federal and state payroll based taxes, and payroll based fringe benefits paid by Contractor so long as they are reasonable and no higher than that charged to other clients:
- (2) Costs of materials, on-site temporary facilities, supplies and equipment (except hand tools) required for or incorporated into the work;
- (3) Rental costs of machinery, equipment, tools (except hand tools), and onsite temporary facilities, whether rented from the Contractor or others;
- (4) Costs of permits and other fees, sales, use or similar taxes related to the Work;
- (5) Additional costs of field supervision and field office personnel directly attributable to the change; and

- (6) Overhead and profit by the following liquidated formula which is not a penalty but a reasonable calculation agreed upon at the time of execution of the Contractor's Agreement, and provided by formula herein due to the fact that the actual amount due for said overhead and profit cannot easily be ascertained at the time of such execution. The markups in 7.4.2(6)(a) and (b) below are to cover the Contractor's additional payment and performance bond premiums, insurance premiums not specified under Paragraph 7.4.2(1), home office and on-site overhead and profit. Overhead and profit includes, but is not limited to the Contractor's Project Manager and Cost Estimator. Each request for pricing shall stand on its own and not be combined with other requests for pricing in determining the allowed markup described below. A particular request for pricing shall include all items reasonably related together and determinable at the time of the request. If several unrelated requests for pricing are grouped together in a single Change Order, each request for pricing will be considered separately for purposes of calculating the markup under the following formula:
- (a) A markup of 15% shall be applied to the cost of each individual charge up to \$20,000 in cost, but in no case shall the markup be less than \$150;
- (b) A markup of 10% shall be applied to the portion of the cost of each individual charge in excess of \$20,000;
- (c) Subcontractors at any tier shall be entitled to markup their costs related to a Change Order with the same percentages as specified in Paragraphs 7.4.2(6)(a) and (b) above, except that the minimum markup shall be \$50 for any individual change.
- **7.4.3 CREDITS**. The amount of credit to be allowed by the Contractor to Intermountain for a deletion or change which results in a net decrease in the Contract Sum shall be actual net cost as confirmed to Intermountain based upon corroboration by an appropriate source.

#### 7.5 CONSTRUCTION CHANGE DIRECTIVES

- 7.5.1 WHEN USED AND CONTRACTOR'S RIGHT TO CHALLENGE. A Construction Change Directive may be issued by Intermountain Representative in the case of a need for the Work to commence. If the Construction Change Directive leaves open the determination of additional time or money related to the directed change, then the Construction Change Directive shall indicate the timeframe(s) in which further information is to be provided to resolve the matter. At any time that Intermountain and the Contractor agree upon the time and money related to a Construction Change Directive, a Change Order shall be executed by the parties. Additionally, the Construction Change Directive may be converted to a Change Order under Paragraph 7.2.2 or Article 7.3 above.
- **7.5.2 PROCEED WITH WORK AND NOTIFY INTERMOUNTAIN ABOUT ADJUSTMENT METHOD**. Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved.
- **7.5.3 INTERIM PAYMENTS BY INTERMOUNTAIN**. Pending the final determination of the total cost of the Construction Change Directive, Intermountain shall pay any undisputed amount to the Contractor.

**7.6 A/E'S SUPPLEMENTAL INSTRUCTION** (Commonly referred to as an "ASI"). The A/E may at any time that is consistent with maintaining the quality, safety, time, budget and function of the Work, issue to the Contractor a supplemental instruction ("ASI") after approval from Intermountain Representative is obtained. The Contractor must file with Intermountain Representative a PCO under Paragraph 7.2.2 above, within 21 calendar days of the Contractor's receipt of the ASI, or the Contactor shall be deemed to have waived any right to additional time or monies as a result of such ASI.

#### 7.8. RESOLUTION OF CLAIMS.

- **7.8.1 ESCALATION PROCESS**. Each Claim must be submitted to the escalation process and then, if necessary, to judicial action, as described in the following:
- (1) The parties involved in the Claim will arrange in-person meetings or telephone conferences at mutually convenient times and places, according to the levels and time schedules set forth below. The parties will use reasonable and good faith efforts in this escalation process to respond promptly and to resolve the Claim.

Levels and Representatives	Allotted Time Period from Notice or from Previous Level
Level 1  Contractor: Managing Principal  Intermountain: the Director	7 days
Level 2 Associate Vice President or higher level executive	10 days

- **7.8.2 JUDICIAL ACTION.** If any Claim cannot be resolved through the escalation process described above, the matter will be resolved through judicial action brought exclusively in the state courts of the State of Utah or in the federal courts of the United States which are located in Salt Lake County, Utah. The parties hereto hereby agree to submit to the jurisdiction and venue of such courts for the purposes hereof.
- **7.8.3 CONTRACTOR REQUIRED TO CONTINUE PERFORMANCE**. Pending the final determination of the Claim, including any judicial review or appeal process, and unless otherwise agreed upon in writing by the Director, the Contractor shall proceed diligently with performance of the Contract and Intermountain shall continue to make payments in accordance with the Contract Documents.

#### 7.9 PAYMENT OF CLAIM

- 7.9.1 When a standalone component of a Claim has received a final determination, and is no longer subject to review or appeal, that amount shall be paid in accordance with the payment provisions of the Contract Documents or judicial order.
- 7.9.2 When the entire Claim has received a final determination, and is no longer subject to review or appeal, the full amount shall be paid within fourteen (14) days of the date of the final determination unless the work or services has not been completed, in which case the amount shall be paid in accordance with the payment provisions of the Contract Documents to the point that the work or services is completed.
- 7.9.3 The final determination date is the earlier of the date upon which the claimant accepted the settlement in writing with an executed customary release document and waived its rights of appeal, or the expiration of the appeal period, with no appeal filed, or the determination made resulting from the final appeal.
- 7.9.4 Any final determination where the Intermountain is to pay additional monies to the Contractor shall not be delayed by any appeal or request for judicial review by another party brought into the process by Intermountain as being liable to Intermountain.
- 7.9.5 Notwithstanding any other provision of the Contract Documents, payment of all or part of a Claim is subject to any set-off, claims or counterclaims of Intermountain.
- 7.9.6 Payment to the Contractor for a Subcontractor issue (Claim) deemed filed by the Contractor, shall be paid by the Contractor to the Subcontractor in accordance with the contract between the Contractor and the Subcontractor.
- 7.9.7 The execution of a customary release document related to any payment may be required as a condition of making the payment.

### 7.10 ALLOCATION OF COSTS OF CLAIM RESOLUTION PROCESS

- 7.10.1 Except for attorneys' fees, and unless otherwise agreed to by the parties to the Claim, the costs of resolving the Claim shall be allocated among the parties on the same proportionate basis as the determination of financial responsibility for the Claim. The costs of resolving the Claim that are subject to allocation include the claimant's filing fee, the costs of any person(s) evaluating the Claim, the costs of making any required record of the process, and any additional testing or inspection procured to investigate and/or evaluate the Claim.
- 7.10.2 The prevailing Party in any Claim, judicial action or other proceeding is entitled to recover its reasonable attorneys' fees, other fees, and costs incurred in the proceeding, in addition to any other relief to which that Party may be entitled.
- **7.11 ALTERNATIVE PROCEDURES**. To the extent otherwise permitted by law, if all parties to a Claim agree in writing, a protocol for resolving a Claim may be used that differs from the process described in this Article 7.

# ARTICLE 8 PAYMENTS AND COMPLETION

8.1 SCHEDULE OF VALUES. With the first Application for Payment, the Contractor shall submit to the A/E and Intermountain Representative a schedule of values allocated to all the various portions of the Work. The Schedule of Values shall be submitted on the form approved and provided by Intermountain. The A/E shall make recommendations to the Intermountain Representative regarding the Schedule of Values including any suggested modifications. When approved, including any approved modifications, by Intermountain Representative, it shall be the basis for future Contractor Applications for Payments. The Contractor shall not be entitled to payment until receipt and acceptance of the Schedule of Values.

#### 8.2 APPLICATIONS FOR PAYMENT

- **8.2.1 IN GENERAL**. The following general requirements shall be met:
- (1) The Contractor shall submit to the A/E an itemized Application for Payment for Work completed in accordance with the schedule of values and that reflects retainage as provided for in the Contractor's Agreement. The Application for Payment shall be on a special form approved and provided by Intermountain.
- (2) Such application shall be supported by such data substantiating the Contractor's right to payment as Intermountain or A/E may require. Said data may include, but is not limited to, copies of requisitions from Subcontractors.
- (3) Such applications may include requests for payment pursuant to approved Change Orders or Construction Change Directives.
- (4) Such applications may not include requests for payment for portions of the Work performed by a subcontractor when the Contractor does not intend to pay to a Subcontractor because of a dispute or other reason.
- (5) In executing the Application for Payment, the Contractor shall attest that subcontractors involved with prior applications for payment have been paid, unless the Contractor provides a detailed explanation why such payment may not have occurred. Intermountain reserves the right to require the Contractor to submit a payment waiver from one or more subcontractors.
- **8.2.2 PAYMENT FOR MATERIAL AND EQUIPMENT.** Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by Intermountain and A/E, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to Intermountain to establish Intermountain's title to such materials and equipment or otherwise protect Intermountain's interest, and shall include applicable insurance, storage and transportation to the site for such materials and equipment stored off the site. Intermountain may require copies of invoices or other suitable documentation.
- **8.2.3 WARRANTY OF TITLE**. The Contractor warrants that title to all Work covered by an Application for Payment will pass to Intermountain no later than the time for payment. The Contractor further warrants that upon submittal of an Application for Payment, all

Work for which Certificates for Payment have been previously issued and payments received from Intermountain shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, or other persons or entities making a claim by reason of having provided labor, materials and/or equipment relating to the Work.

**8.2.4 HOLDBACK BY INTERMOUNTAIN**. Notwithstanding anything to the contrary contained in the Contract Documents, Intermountain may, as a result of the Claim resolution process, withhold any payment to the Contractor hereunder if and for so long as the Contractor fails to perform any of its obligations hereunder or otherwise is in default under any of the Contract Documents.

#### 8.3 CERTIFICATES FOR PAYMENT

- **8.3.1 ISSUED BY A/E**. The A/E shall within ten (10) days after receipt of the Contractor's Application for Payment, either issue to Intermountain a Certificate for Payment, with a copy to the Contractor, for such amount as the A/E determines due, or notify the Contractor and Intermountain in writing of the A/E's reasons for withholding certification in whole or in part as provided in Paragraph 8.4.1. If the A/E fails to act within said ten (10) day period, the Contractor may file the Application for Payment directly with Intermountain Representative and Intermountain will thereafter have twenty (20) days from the date of Intermountain's receipt to resolve the amount to be paid and to pay the undisputed amount. The accuracy of the Contractor's Applications for Payment shall be Contractor's responsibility, not A/E's.
- **8.3.2** A/E'S REPRESENTATIONS. The A/E's issuance of a Certificate for Payment shall constitute a representation to Intermountain that to the best of the A/E's knowledge, information and belief, based upon the A/E's observations at the site, the data comprising the Application for Payment, and what is reasonably inferable from the observations and data, that the Work has progressed to the point indicated in the Application and that the quality of the work is in accordance with the Contract Documents. The foregoing representations are subject to minor deviations from the Contract Documents correctable prior to completion and to specific qualifications expressed by the A/E. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified. However, the issuance of a Certificate for Payment shall not be a representation that the A/E has (a) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (b) reviewed construction means, methods, techniques, sequences or procedures, (c) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by Intermountain to substantiate the Contractor's right to payment, (d) ascertained how or for what purpose the Contractor used money previously paid on account of Contract Sum, or (e) any duty to make such inquiries.

#### 8.4 DECISIONS TO WITHHOLD CERTIFICATION

**8.4.1 WHEN WITHHELD**. The A/E may decide not to certify payment and may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect Intermountain, if in the A/E's judgment the representations to Intermountain required in Paragraph 8.3.2 above cannot be made. If the A/E is unable to certify payment in the amount of the Application, the A/E shall notify the Contractor and Intermountain as provided in Paragraph

above. If the Contractor and A/E cannot agree on a revised amount, the A/E shall promptly issue a Certificate for Payment for the amount to which the A/E makes such representations to Intermountain. The A/E may also decide not to certify payment or, because of subsequently discovered evidence or observations, may nullify the whole or part of a Certificate for Payment previously issued, to such extent as may be necessary in the A/E's opinion to protect Intermountain from loss because of:

- (1) Defective Work not remedied;
- (2) Third party claims filed or reasonable evidence indicating probable filing of such claims;
- (3) Failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
- (4) Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
  - (5) Damage to Intermountain or another contractor;
- (6) Reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
  - (7) Failure to carry out the Work in accordance with the Contract Documents.
- **8.4.2 CERTIFICATION ISSUED WHEN REASONS FOR WITHHOLDING REMOVED.** When the reasons stated in Paragraph 8.4.1 for withholding certification are removed, certification will be made for such related amounts.
- **8.4.3 CONTINUE WORK EVEN IF CONTRACTOR DISPUTES A/E'S DETERMINATION**. If the Contractor disputes any determination by the A/E or the result of the Claim resolution process with regard to any Certification of Payment, the Contractor nevertheless shall expeditiously continue to prosecute the Work.
- **8.4.4 INTERMOUNTAIN NOT IN BREACH**. Intermountain shall not be deemed to be in breach of this Contract by reason of the withholding of any payment pursuant to any provision of the Contract Documents provided Intermountain's action or such withholding is consistent with the results of the dispute resolution process.

#### 8.5 PROGRESS PAYMENTS

## 8.5.1 IN GENERAL, INTEREST ON LATE PAYMENTS

- (1) Except as provided in Paragraph 8.3.1, Intermountain shall pay any undisputed amount within sixty (60) days of the date that the application for payment was submitted to the A/E. In no event shall Intermountain be required to pay any disputed amount.
- (2) Except as otherwise provided by law, if any payment is made more than sixty (60) days after receipt by Intermountain of the applicable invoice (with any required supporting documentation), the late payment shall bear interest from the due date until payment is made at the rate of five percent (5%) per annum.

- 8.5.2 CONTRACTOR AND SUBCONTRACTOR RESPONSIBILITY. The
- Contractor shall promptly pay each Subcontractor, upon receipt of payment from Intermountain, out of the amount paid to the Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payment to its Subcontractors in a similar manner.
- **8.5.3 INFORMATION FURNISHED BY A/E OR INTERMOUNTAIN TO SUBCONTRACTOR.** The A/E or Intermountain shall, on request, furnish to the Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the A/E and Intermountain on account of portions of the Work done by such Subcontractor.
- **8.5.4 INTERMOUNTAIN AND A/E NOT LIABLE**. Neither Intermountain nor A/E shall have an obligation to pay, monitor or enforce the payment of money to a Subcontractor, except to the extent as may otherwise be required by law.
- **8.5.5 CERTIFICATE, PAYMENT OR USE NOT ACCEPTANCE OF IMPROPER WORK**. A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by Intermountain shall not constitute acceptance of Work that is not in accordance with the Contract Documents.
- **8.6 PAYMENT UPON SUBSTANTIAL COMPLETION**. Upon Substantial Completion of the Work or designated portion thereof and upon application by the Contractor and certification by the A/E, Intermountain shall make payment, reflecting adjustment in retainage, if any, for such Work or portion thereof as provided in the Contract Documents. To the extent allowed by law, Intermountain may retain up to 200% of the fair market value of the work that has not been completed in accordance with the Contract Documents.

#### 8.7 PARTIAL OCCUPANCY OR USE

**8.7.1 IN GENERAL**. Intermountain may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, and authorized by public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is Substantially Complete, provided Intermountain and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of the warranties required by the Contract Documents. When the Contractor considers a portion to be substantially complete, the Contractor shall prepare and submit a list to the A/E as previously provided for herein. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. Contractor shall have continuing responsibility to protect the unoccupied portions of the site and the Work during such partial occupancy and shall be responsible for damage except to the extent caused solely by Intermountain during such partial occupancy or use.

The stage of progress of the Work shall be determined by written agreement between Intermountain and Contractor.

- **8.7.2 INSPECTION**. Immediately prior to such partial occupancy or use, Intermountain, Contractor and A/E shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.
- **8.7.3 NOT CONSTITUTE ACCEPTANCE**. Except to the extent it is agreed upon in writing by Intermountain, partial occupancy or use of a portion or portion of the Work shall not constitute acceptance of Work not complying with the requirement of the Contract Documents.

#### 8.8 FINAL PAYMENT

- **8.8.1 CERTIFICATE FOR PAYMENT**. The A/E's final Certificate for Payment shall constitute a further representation that the conditions listed in Paragraph 8.8.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.
- **8.8.2 CONDITIONS FOR FINAL PAYMENT**. Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the A/E the following to the extent required by Intermountain Representative:
- (1) An affidavit that payrolls, bills for material and equipment, and other indebtedness connected with the Work for which Intermountain's property might be responsible or encumbered (less amounts withheld by Intermountain) have been paid or otherwise satisfied;
- (2) A current or additional certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days prior written notice, by certified mail, return receipt requested, has been given to Intermountain;
- (3) A written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents;
- (4) If requested by surety in a timely manner or by Intermountain, consent of surety, to final payment;
- (5) Receipt of Record Drawings, Specifications, Addenda, Change Orders and other Modifications maintained at the site; the warranties, instructions, operation and maintenance manuals, and training videos required to be furnished by the Contract Documents;
- (6) Other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by Intermountain. If a Subcontractor refuses to furnish a release or waiver required by Intermountain, Intermountain may require consent of Surety to the final payment. If such liens, claims, security interests or encumbrances remain unsatisfied after payments are made, the Contractor shall refund to Intermountain all money that Intermountain may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees; and
- (7) A written statement demonstrating how the Contractor will distribute interest earned on retention to Subcontractors as required by Section 13.8.5, U.C.A.
- **8.8.3 WAIVER OF CLAIMS: FINAL PAYMENT**. The making of final payment shall constitute a waiver of Claims by Intermountain except those arising from:

- (1) Liens, Claims, security interests or encumbrances arising out of the Contract and unsettled;
- (2) Failure of the Work to comply with the requirements of the Contract Documents;
  - (3) Terms of warranties required by the Contract Documents; or
  - (4) The one-year guaranty period and any corrected Work.
- **8.8.4 DELAYS NOT CONTRACTOR'S FAULT**. If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, Intermountain shall, upon application by the Contractor and certification by the A/E, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of claims. Unless otherwise stated by Intermountain in writing, the making of final payment shall constitute a waiver of claims by Intermountain as provided in Paragraph 8.8.3 for that portion of that Work fully completed and accepted by Intermountain.
- **8.8.5 WAIVER BY ACCEPTING FINAL PAYMENT.** Acceptance of final payment by the Contractor or a Subcontractor shall constitute a waiver of Claims by that payee except those Claims previously made in writing and identified by that payee as unsettled at the time of final Application for Payment. Such waivers shall be in addition to the waiver described in Paragraph 8.8.3.

#### **ARTICLE 9**

# TESTS AND INSPECTIONS, SUBSTANTIAL AND FINAL COMPLETION, UNCOVERING, CORRECTION OF WORK, AND GUARANTY PERIOD

#### 9.1 TESTS AND INSPECTIONS

- **9.1.1 IN GENERAL**. Tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations, resolutions or orders of public authorities having jurisdiction shall be made at an appropriate time. Unless otherwise specifically set forth in the Contract Documents or agreed to by Intermountain in writing, Intermountain shall contract for such tests, inspections and approvals with an independent entity, or with the appropriate public authority, and Intermountain shall bear all related costs of tests, inspections and approvals except as provided below. If any of the Work is required to be inspected or approved by the terms of the Contract Documents or by any public authority, the Contractor shall, at least two working days prior to the time of the desired inspection, and following the procedures established by Intermountain, request such inspection or approval to be performed. The Contractor shall give the A/E timely notice of when and where tests and inspections are to be made so that the A/E may observe such procedures.
- **9.1.2 FAILURE OF AN INSPECTOR TO APPEAR**. Work shall not proceed without any required inspection and the associated authorization by Intermountain to proceed unless the following procedures and requirements have been met:

- (1) The inspection or approval was requested in a timely manner as provided in Paragraph 9.1.1;
- (2) The Contractor received written confirmation from the inspection entity that the inspection was scheduled;
- (3) The Contractor has contacted or attempted to contact the inspector to confirm that the inspector is unable to perform the inspection as scheduled;
- (4) If the inspector has confirmed that it is unable to perform the inspection as scheduled or if the Contractor is unable to contact the inspector, the contractor shall attempt to contact the Intermountain Representative for instruction; and the Contractor has documented the condition of the work prior to being covered through photos or other means.
- **9.1.3 NONCONFORMING WORK**. If such procedures for testing, inspection or approval under Paragraph 9.1.1 reveal failure of portions of the Work to comply with the requirements established by the Contract Documents, the Contractor shall bear all costs made necessary by such failure including those of repeated procedures and compensation for Intermountain's expenses, including the cost of retesting for verification of compliance if necessary, until Intermountain accepts the Work in question as complying with the requirements of the Contract Documents.
- **9.1.4 CERTIFICATES**. Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the A/E.
- **9.1.5 A/E OBSERVING**. If the A/E is to observe tests, inspections or approvals required by the Contract Documents, the A/E shall do so with reasonable promptness and, where practicable, at the normal place of testing.
- **9.1.6 PROMPTNESS**. Tests, inspections and arrangements for approvals conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

## 9.2 INSPECTIONS: SUBSTANTIAL AND FINAL

- **9.2.1 SUBSTANTIAL COMPLETION INSPECTION**. Prior to requesting a substantial completion inspection, the Contractor shall prepare a comprehensive initial punchlist, including unresolved items from prior inspections, for review by Intermountain and A/E to determine if the Project is ready for a substantial completion inspection. If Intermountain determines that the initial punchlist indicates that the Project is not substantially complete, the initial punchlist will be returned to the Contractor with written comments. If Intermountain determines that the initial punchlist indicates that the Project may be substantially complete, the A/E shall promptly organize and perform a Substantial Completion inspection in the presence of Intermountain and all appropriate authorities.
- (1) If the A/E reasonably determines that the initial punchlist prepared by the Contractor substantially understates the amount of the Work remaining to be completed and the Project is not substantially complete, the A/E shall report this promptly to Intermountain, and upon concurrence of Intermountain, the Contractor will be assessed the costs of the inspection and punchlist preparation incurred by the A/E and Intermountain.

- (2) When the Work or designated portion thereof is Substantially Complete, the A/E shall prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion; shall establish responsibilities of Intermountain and Contractor for security, maintenance, heat, utilities, damage to the work and insurance; and shall fix the time within which the Contractor shall finish all items on the punchlist accompanying the Certificate. The Certificate of Substantial Completion shall require approval by Intermountain Representative. If there is a punchlist, the Contractor shall proceed promptly to complete and correct items on the list. Failure to include an item on the punchlist does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.
- (3) Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof except to the extent as provided otherwise in the Contract Documents or if such warranty is related to an item where the work is not complete. Such warranty documents shall state the length of the warranty, which must comply with the Contract Documents.
- (4) The Certificate of Substantial Completion shall be submitted by the A/E to Intermountain and Contractor for their written acceptance of responsibilities assigned to them in such Certificate.
- (5) Except to the extent Intermountain Representative otherwise approves in advance and in writing, the Contractor shall submit the following documents in order to achieve Substantial Completion: written warranties, guarantees, operation and maintenance manuals, and all complete as-built drawings. The Contractor must also provide or obtain any required approvals for occupancy. The Contractor is responsible for the guaranty of all Work, whether performed by it or by its Subcontractors at any tier.
- **9.2.2 FINAL COMPLETION INSPECTION**. Prior to requesting a final inspection, the Contractor shall verify all punchlist items are corrected/completed. Once all punchlist items are corrected/completed the Contractor shall notify Intermountain and request a final inspection. Intermountain shall notify the A/E and perform a final inspection. Two final inspections may be allowed due to required weather changes required to complete some items. When all punchlist items are completed a final pay request will be provided by the Contractor, authorized by the A/E and processed by Intermountain.

## 9.3 UNCOVERING OF WORK

- **9.3.1 UNCOVER UNINSPECTED WORK**. Except as provided in Paragraph 9.3.3, if a portion of the Work is covered prior to an Inspector's approval to proceed, it must, be uncovered for the Inspector's inspection and be replaced at the Contractor's expense without change in the Contract Time.
- **9.3.2 OBSERVATION PRIOR TO COVERING**. Except as provided in Paragraph 9.3.3, if Intermountain or the A/E has requested in writing to observe conditions prior to any Work being covered or if such observation is specified in the Contract Documents, and the Work is covered without such observation, the Contractor shall be required to uncover and appropriately replace the Work at the Contractor's expense without change in the Contract Time. If the Contractor requests an inspection and Intermountain or A/E, including any inspector of

each, does not appear, the Contractor shall immediately notify Intermountain of such lack of appearance, but shall not cover the Work without such inspection.

9.3.3 WHEN AN INSPECTOR FAILS TO APPEAR OR A/E OR INTERMOUNTAIN DID NOT MAKE PRIOR REQUEST. If Work is performed by the Contractor without an inspection as provided in Paragraph 9.1.2 or if a portion of the Work has been covered which the A/E or Intermountain has not specifically requested to observe prior to its being covered or such observation is not specified by the Contract Documents, the A/E or Intermountain may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement, shall, by appropriate Change Order, be charged to Intermountain. If such Work is not in accordance with the Contract Documents, the Contractor shall pay such costs unless the condition was caused by Intermountain or a separate contractor in which event Intermountain shall be responsible for payment of such costs.

### 9.4 CORRECTION OF WORK AND GUARANTY PERIOD

**9.4.1 CONTRACTOR CORRECT THE WORK**. The Contractor shall correct Work rejected by the A/E, Inspector or Intermountain, or failing to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear the costs of correcting such rejected Work, including additional testing and inspections and compensation for the A/E's and Inspector's services and expenses made necessary thereby.

## 9.4.2 GUARANTY AND CORRECTION AFTER SUBSTANTIAL

**COMPLETION**. If within one year after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established under Paragraph 9.2.1 or by terms of an applicable special warranty or guaranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, including failure to perform for its intended purpose, the Contractor shall correct it promptly after receipt of written notice from Intermountain to do so unless Intermountain has previously given the Contractor a written acceptance of such condition. The period of one year shall be extended with respect to portions of the Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work. This obligation of the Contractor under this Paragraph 9.4.2 shall be operative notwithstanding the acceptance of the Work under the Contract, the final certificate of payment, partial or total occupancy and/or termination of the Contract. Intermountain shall give notice of observed defects with reasonable promptness, however, failure to give such notice shall not relieve the Contractor of its obligation to correct the Work at the cost that the Contractor would have incurred if Intermountain did so report with reasonable promptness. All corrected Work shall be subject to a one-year guaranty period the same in all respects as the original Work, except that such guaranty period shall commence from the time of Substantial Completion of the corrected Work. This guaranty period does not affect Intermountain's right to pursue any available remedies against Contractor.

## 9.4.3 REMOVAL OF WORK

- (1) The Contractor shall promptly remove from the premises all Work that Intermountain and/or the A/E determines as being in nonconformance with the Contract Documents, whether incorporated or not.
- (2) The Contractor shall promptly replace and re-execute the Work in accordance with the Contract Documents and without expense to Intermountain.
- (3) The Contractor shall bear the expense of correcting destroyed or damaged construction, whether completed or partially completed, of Intermountain or of other contractors destroyed or damaged by such removal or replacement.
- (4) If the Contractor does not remove such rejected Work within a reasonable time, fixed by written notice, Intermountain may have the materials removed and stored at the expense of the Contractor.
- (5) If the Contractor does not correct the nonconforming Work within a reasonable time, fixed by written notice, Intermountain may correct it in accordance with Paragraph 12.2.2 of these General Conditions.
- **9.4.4 NOT LIMIT OTHER OBLIGATIONS**. Nothing contained in this Article 9.4 shall be construed to establish a period of limitation with respect to other obligations which the Contractor may have under the Contract Documents. Establishment of the time period of one year as described in Paragraph 9.4.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

## 9.5 ADDITIONAL WARRANTIES

- **9.5.1 IN GENERAL**. In addition to any other provisions of this Article 9, the following warranties shall apply:
- (1) The Contractor warrants to Intermountain that materials and equipment furnished under the Contract will be of good quality and new, except to the extent otherwise required or expressly permitted by the Contract Documents.
- (2) The Contractor also warrants to Intermountain that the Work will be free from defects not inherent in the quality required or permitted and that the Work will conform to the requirements of the Contract Documents. Work not conforming to said requirements, including substitutions not properly approved and authorized, may be considered defective at Intermountain's option.
- **9.5.2 EXCLUSION**. Unless due to the negligent or intentional act or omission of the Contractor or those under the Contractor's control, or as otherwise stated in the Contract Documents, the Contractor's guaranty excludes remedy for damage or defect caused by abuse, modifications not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage.

- **9.5.3 FURNISH EVIDENCE ON REQUEST**. If requested by the A/E or Intermountain, the Contractor shall furnish satisfactory evidence as to the type and quality of materials and equipment.
- **9.6 ACCEPTANCE OF NONCONFORMING WORK**. If Intermountain prefers to accept Work which is not in accordance with the requirements of the Contract Documents, Intermountain may do so in writing instead of requiring its removal and correction, in which case the Contract Sum shall be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

## ARTICLE 10 INSURANCE AND BONDS

**10.1 LIABILITY INSURANCE.** To protect against liability, loss and/or expense arising in connection with the performance of services described under the Contract Documents, the Contractor shall obtain and maintain in force during the entire period of Contract Documents without interruption, as part of the Construction Costs for the Project, the following stated insurance from insurance companies authorized to do business in the State of Utah, in a form and content satisfactory to Intermountain. The Contractor shall require all Subcontractors to have and maintain similarly required policies. All of the following listed insurance coverages shall be provided by the Contractor.

# 10.1.1 CONTRACTOR'S COMMERCIAL GENERAL LIABILITY INSURANCE.

The Contractor shall maintain coverage on an occurrence made basis, annual aggregate policy limit based on the following chart, unless modified by mutual agreement of the parties, including coverage for Premises-Operations, Independent Contractors' Protective, Products-Completed Operations, Contractual Liability, Personal Injury, and Broad-Formed Property Damage (including coverage for Explosion, Collapse, and Underground hazards).

Small Project (\$2,000,000 or less) Minimum Commercial General Liability Coverage \$1,000,000 each occurrence, \$3,000,000 general aggregate

Medium Project (\$2,000,001 to \$10,000,000) Minimum Commercial General Liability Coverage \$5,000,000 each occurrence, \$10,000,000 general aggregate

Large Project (Greater than \$10,000,000) Minimum Commercial General Liability Coverage \$10,000,000 each occurrence, \$20,000,000 general aggregate

For insurance purposes, the size of the Project will be specified in the Contractor's Agreement or CM/GC Agreement, as applicable.

Intermountain reserves the right to require additional coverage from that stated in the chart herein above, at Intermountain's expense for the additional coverage portion only. Intermountain also reserves the right to require project specific insurance, and if such right has been exercised it

shall be indicated in the Contract Documents. Unless project specific insurance is required by Intermountain, the coverage shall be written under a policy with limits applicable to this project only. Products and Completed Operations insurance must be maintained in force for the discovery of claims for the full statute of limitations period under applicable law. The Contractor's policy must also include contractual liability coverage applicable to the indemnity provision of this Agreement for those portions of the indemnity provisions that are insured under the Contractor's policy and in accordance with this Agreement, including the attachments hereto.

The Contractor shall collect and keep on-file evidence that Contractor and each Subcontractor has current certificates of this Commercial General Liability Insurance requirement, and produce them upon request by Owner.

- 10.1.2 WORKERS' COMPENSATION INSURANCE AND EMPLOYERS' LIABILITY INSURANCE. Worker's Compensation Insurance shall cover full liability under the Worker's Compensation Laws of the jurisdiction in which the Project is located at the statutory limits required by said jurisdiction's laws. The Contractor shall collect and keep on-file evidence that Contractor and each Subcontractor has current Workers Compensation Insurance, as required by State statute, and produce them upon request by Owner.
- **10.1.3 AUTOMOBILE**. Automobile liability insurance for claims arising from the ownership, maintenance, or use of a motor vehicle. The insurance shall cover all owned, nonowned, and hired automobiles used in connection with the work, with the following minimum limits of liability: \$1,000,000 Combined Single Limit Bodily Injury and Property Damage per Occurrence.
- 10.1.4 VALUABLE PAPERS AND RECORDS COVERAGE AND ELECTRONIC DATA PROCESSING (DATA AND MEDIA) COVERAGE. The Contractor and all Subcontractors of the Contractor shall provide coverage for the physical loss of or destruction to their work product including drawings, specifications, and electronic data and media.
- 10.1.5 AIRCRAFT USE. Contractor using its own aircraft, or employing aircraft in connection with the work performed under the Contract Documents shall maintain Aircraft Liability Insurance with a combined single limit of not less than \$1,000,000 per occurrence. Said certificate shall state that the policy required by this paragraph has been endorsed to name Intermountain as an Additional Insured.
- **10.1.6 POLICY AGGREGATE(S).** The Contractor's policy(ies) shall be endorsed to have General Aggregate apply to this Project only.
- 10.1.7 CERTIFICATES. Before the Contract Documents are executed, the Contractor shall submit certificates in form and substance satisfactory to Intermountain as evidence of the insurance requirements of this Article. Such certificates shall contain provisions that no cancellation, or non-renewal shall become effective except upon thirty (30) days prior written notice by US Mail to Intermountain as evidenced by return receipt, certified mail sent to Intermountain. The Contractor shall notify Intermountain within thirty (30) days of any claim(s) against the Contractor which singly or in the aggregate exceed 20% of the applicable required insured limits and the Contractor shall, if requested by Intermountain, use its best efforts to reinstate the policy within the original limits and at a reasonable cost. Intermountain shall be named as an additional insured party, as primary coverage and not contributing, on all the

insurance policies required by this Article except the professional liability and workers' compensation policies. Intermountain reserves the right to request the Contractor to provide a loss report from its insurance carrier.

- 10.1.8 MAINTAIN THROUGHOUT CONTRACT DOCUMENTS TERM. The Contractor agrees to maintain all insurance required under the Contract Documents during the required term. If the Contractor fails to furnish and maintain said required insurance, Intermountain may purchase such insurance on behalf of the Contractor, and the Contractor shall pay the cost thereof to Intermountain upon demand and shall furnish to Intermountain any information needed to obtain such insurance.
- **10.1.9 WAIVERS OF SUBROGATION**. All policies required, except Workers Compensation Insurance, shall be endorsed to include waivers of subrogation in favor of Intermountain.
- **10.1.10 EXCESS COVERAGES**. Any type of insurance or any increase of limits of liability not described in the Contract Documents which the Contractor requires for its own protection or on account of any statute, rule or regulation, shall be its own responsibility and at its own expense.
- **10.1.11 NOT RELIEVE CONTRACTOR OF LIABILITY**. The carrying of any insurance required by the Contract Documents shall in no way be interpreted as relieving the Contractor of any other responsibility or liability under the Contract Documents or any applicable law, statute, rule, regulation, or order.
- **10.1.12 CONTRACTOR COMPLIANCE WITH POLICIES**. Contractor shall not violate or knowingly permit to be violated any of the provisions of the policies on insurance required under this Agreement.
- **10.1.13 DEDUCTIBLE LIABILITY**. Any and all deductibles in the above described policies shall be assumed by, for the account of, and at sole risk of Contractor. The allowable deductible for any of the policies required by these General Conditions shall be no more than \$1,000 or 0.1 percent of the Contract Amount, whichever is greater.

## **10.1.14 ADDITIONAL REQUIREMENTS**

- (1) Any type of insurance or any increase of limits of liability not described in this Agreement which the Contractor requires for its own protection or on account of any statute, rule or regulation, shall be its own responsibility and at its own expense.
- (2) The carrying of any insurance required by this Agreement shall in no way be interpreted as relieving the Contractor or Subcontractors of any other responsibility or liability under this Agreement or any applicable law, statute, rule, regulation or order.
- (3) Contractor shall not violate or knowingly permit to be violated any of the provisions of the policies on insurance required under these General Conditions.

## 10.2 "BUILDER'S RISK" PROPERTY INSURANCE

**10.2.1 IN GENERAL**. At Intermountain's option, Intermountain may provide, or may require Contractor to provide, "Builder's Risk" property insurance to protect Intermountain, as well as all Contractors and Subcontractors, and include them as insureds, with respect to Work

performed hereunder at Intermountain's own cost and expense, according to the policies and forms currently in force with insurance carriers selected by Intermountain.

- **10.2.2 DEDUCTIBLE**. The above described "Builders Risk" policies shall be subject to a total deductible of \$5,000 per loss occurrence, which shall be assumed by all Contractors or Subcontractors, in proportion to their share of the total amount of an insured loss occurrence.
- **10.2.3 WAIVER**. Contractor, including all Subcontractors, and Intermountain hereby waive all rights against each other for damages caused by perils insured against under the "Builder's Risk" insurance provided by Intermountain and the Contractor each shall require similar waivers from their contractors, subcontractors, sub-consultants and agents, at any tier.
- 10.2.4 SPECIAL HAZARDS. Intermountain shall bear the risk of loss, delay and/or damage due to earthquake and/or flood and may either insure or self-insure that risk. If the Contractor requests in writing that insurance for other special hazards be included in the "Builder's Risk" policy, Intermountain shall, if possible, include such insurance in the policy and the cost thereof shall be charged to the Contractor by Change Order.
- 10.3 PERFORMANCE BOND AND PAYMENT BOND. If required by the Contract Documents, the Contractor shall submit and maintain in full force and effect as required by law and the Contract Documents, as part of the Construction Costs for the Project, on forms provided by Intermountain, and include as part of the quoted total all costs involved in securing and furnishing, the bonds listed below, based on the completed cost of the Contract and effective upon execution of the Contract. Said bonds shall be from surety companies which are authorized to do business in the State of Utah, listed in the U. S. Department of Treasury Circular 570, Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies, and acting within the limitation listed therein.
- 10.3.1 A full 100 percent performance bond covering the faithful execution of the Contract in accordance with the Contract Documents; and
- 10.3.2 A full 100 percent payment bond covering payment of all obligations arising under the Contract Documents, for the protection of each person supplying labor, service, equipment, or material for the performance of the Work.
- 10.3.3 Any required insurance required under the U.S. Terrorism Risk Insurance Act of 2002, any similar applicable law, or as such Act may be amended.
- **10.4 INTERMOUNTAIN SELF-INSURANCE**. Intermountain may, at its option, satisfy any insurance requirements applicable to Intermountain through its self-insurance and risk management program.

# ARTICLE 11 MISCELLANEOUS PROVISIONS

**11.1 A/E'S RESPONSIBILITIES**. These General Conditions are not intended to provide an exhaustive or complete list of the A/E's responsibilities. A separate agreement between Intermountain and A/E incorporates these General Conditions by reference and includes additional Design responsibilities.

- 11.2 SUCCESSORS AND ASSIGNS. Intermountain and Contractor respectively bind themselves, to the other party in respect to covenants, agreements and obligations contained in the Contract Documents. The Contractor shall not assign the Contract without the prior written consent of Intermountain, nor shall the Contractor assign any amount due or to become due as well as any rights under the Contract, without prior written consent of Intermountain.
- 11.3 WRITTEN NOTICE. Written notice shall be deemed to have been duly served if (a) delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended, or (b) delivered at or sent by registered or certified mail, return receipt requested, or (c) deposited for delivery with a nationally recognized overnight courier service, to the last business address known to the party giving notice.

## 11.4 RIGHTS AND REMEDIES

- **11.4.1 NOT LIMIT.** Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.
- 11.4.2 NOT WAIVER. Except as expressly provided elsewhere in the Contract Documents, no action or failure to act by Intermountain, A/E or Contractor shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval or acquiescence in a breach thereunder, except as any of the above may be specifically agreed to in writing. In no case shall the Contractor or any Subcontractors be entitled to rely upon any waiver of any of these General Conditions unless agreed to in writing by Intermountain.

## 11.5 COMMENCEMENT OF STATUTORY LIMITATION PERIOD

- 11.5.1 BEFORE SUBSTANTIAL COMPLETION. Except as provided in 11.5.4 below, as to acts or failures to act occurring prior to the relevant date of Substantial Completion, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than such date of Substantial Completion.
- 11.5.2 BETWEEN SUBSTANTIAL COMPLETION AND FINAL CERTIFICATION FOR PAYMENT. Except as provided in Paragraph 11.5.4 below, as to acts or failures to act occurring subsequent to the relevant date of Substantial Completion and prior to issuance of the final Certification for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of issuance of the final Certification for Payment.
- 11.5.3 AFTER FINAL CERTIFICATION FOR PAYMENT. Except as provided in Paragraph 11.5.4 below, as to acts or failures to act occurring after the relevant date of issuance of the final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of any act or failure to act by the Contractor pursuant to any guaranty provided under Article 9 the date of any correction of the Work or failure to correct the Work by the Contractor under Paragraph 9.4.2, or the date of actual commission of any other act or failure to perform any duty or obligation by the Contractor or Intermountain, whichever occurs last.

- 11.5.4 EXCEPTION. Notwithstanding any other provision of this Article 11.5 to the contrary, no applicable statute of limitations shall be deemed to have commenced with respect to any portion of the Work which is not in accordance with the requirements of the Contract Documents, which would not be visible or apparent upon conducting a reasonable investigation, and which is not discovered by Intermountain until after the date which, but for this Paragraph 11.5.4, would be the date of commencement of the applicable statute of limitations; the applicable statute of limitations instead shall be deemed to have commenced on the date of such discovery by Intermountain.
- **11.6 APPLICABLE LAWS.** The applicable laws and regulations of the State of Utah, as well as any applicable local laws and regulations not superseded or exempted by State law, shall govern the execution of the Work embodied in the Contract Documents as well as the interpretation of the Contract Documents.
- **11.7 INTERPRETATION**. In the interest of brevity, the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an", but the fact that a modification or an article is absent from the statement and appears in another is not intended to affect the interpretation of either statement.
- 11.8 VENUE. In case of any dispute, which may arise under the Contract Documents, the place of venue shall be in the County of Salt Lake, Utah, unless otherwise agreed to by all the parties in writing.
- **11.9 SEVERABILITY**. The invalidity of any part, paragraph, subparagraph, phase, provision or aspect of the Contract documents shall not impair or affect in any manner the validity, enforceability or effect of the remainder of the Contract Documents.
- 11.10 CONSTRUCTION OF WORDS. Unless otherwise stated in the Contract Documents, words, which have well-known technical or construction industry meanings, shall be construed as having such recognized meanings. Unless the context requires otherwise, all other technical words shall be construed in accordance with the meaning normally established by the particular, applicable profession or industry. All other words, unless the context requires otherwise, shall be construed with an ordinary, plain meaning.
- **11.11 NO THIRD PARTY RIGHTS**. These General Conditions create rights and duties only as between Intermountain and Contractor, and Intermountain and A/E. Nothing contained herein shall be deemed as creating third party beneficiary contract rights or other actionable rights or duties as between Contractor and A/E, or as between Intermountain, Contractor, or A/E on the one hand, and any other person or entity.

# ARTICLE 12 TERMINATION OR SUSPENSION OF THE CONTRACT

## 12.1 TERMINATION BY CONTRACTOR

**12.1.1 IN GENERAL**. If the Work is stopped for a period of ninety (90) days through no act or fault of the Contractor or a Subcontractor, or their agents or employees or any other persons performing portions of the Work under contract with any of the above, the Contractor, may terminate the Contract in accordance with 12.1.2 herein below for any of the following reasons:

- (1) Because Intermountain has persistently failed to fulfill fundamental Intermountain's obligations under the Contract Documents with respect to matters important to the progress of the Work;
- (2) Issuance of an order of a court or other public authority having jurisdiction which necessitates such termination, except that where the Contractor has standing, the Contractor must cooperate in efforts to stay and/or appeal such order;
- (3) An act of government, such as a declaration of national emergency, making material unavailable; or
- (4) Unavoidable casualties or other similar causes as listed in Paragraph 12.2.2(2) herein below.
- **12.1.2 NOTICE.** If one of the reasons for termination in Paragraph 12.1.1 hereinabove exist, the Contractor may, upon ten (10) additional days' written notice to Intermountain and A/E, and such condition giving cause for termination still not cured, terminate the Contract and recover from Intermountain payment for Work executed and for proven loss with respect to materials, equipment, tools, and construction equipment and machinery, including reasonable overhead, profit and damages associated only with work completed prior to the notice of termination.

## 12.2 TERMINATION BY INTERMOUNTAIN FOR CAUSE

- **12.2.1 IN GENERAL**. Intermountain may terminate the Contract if the Contractor fails to cure any of the following within a period of ten (10) days (or longer if Intermountain so approves in writing) after receipt of notice from Intermountain specifying the cause for termination:
- (1) The Contractor persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- (2) The Contractor fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors;
- (3) The Contractor persistently disregards laws, ordinances, or rules, regulations, resolutions or orders of a public authority having jurisdiction; or
- (4) The Contractor fails to perform the Work within the time specified in the Contract Documents or any authorized extension thereof or the Contractor fails to make progress with the Work as to endanger such compliance;
- (5) The Contractor fails to perform the Work or is otherwise in breach of a material provision of the Contract Documents;
- (6) The Contractor fails to respond promptly to the financial responsibility inquiry under the Contractor's Agreement;
- (7) As permissible by law for a reason to terminate, the Contractor is adjudged bankrupt;

- (8) As permissible by law for a reason to terminate, the Contractor should make a general assignment for the benefit to creditors;
- (9) As permissible by law for a reason to terminate, the Contractor should have a receiver appointed on account of the Contractor's insolvency; or
- (10) The Contractor fails to follow the material safety requirements and precautions either as expressly provided in the Contract Documents or as consistent with the customary practices in the industry.

## 12.2.2 INTERMOUNTAIN'S RIGHT TO CARRY OUT THE WORK

- with the Contract Documents and fails within a ten (10) day period (or longer if approved by Intermountain in writing) after receipt of written notice from Intermountain to cure such default or neglect, Intermountain may without prejudice to other remedies Intermountain may have, correct such deficiencies, including taking over the Work and prosecuting the same to completion, by contract or otherwise, and may take possession of, and utilize in completing the Work, such materials, appliances, and facilities as may be on the site of the Work as well as the site as necessary for its proper completion. In such case, Intermountain shall offset from payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for the A/E, Intermountain's staff and legal counsel's additional services and expenses made necessary by such default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to Intermountain. The Contractor shall continue performance of the Contract to the extent not terminated.
- (2) Except with respect to defaults of Subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform the Contract arises out of causes beyond the control and without the fault or negligence of the Contractor or anyone for whom the Contractor may be liable. Such causes may include, but are not limited to, acts of God or of the public enemy, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; but in every case the failure to perform must be beyond the control and without the fault or negligence of the Contractor or anyone for whom the Contractor may be liable. If the failure to perform is caused by the default of a Subcontractor, and if such default arises out of causes beyond the control of both the Contractor and the Subcontractor, and without the fault or negligence of either of them or anyone for whom either may be liable, the Contractor shall not be liable for any excess costs for failure to perform unless the supplies or services to be furnished by the Subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery or completion schedule.

# 12.2.3 ITEMS REQUIRED TO BE TRANSFERRED OR DELIVERED.

Intermountain may require the Contractor to transfer title and deliver to Intermountain, in the manner and to the extent directed by Intermountain:

- (1) Any completed portion of the Work; and
- (2) Any partially completed portion of the Work and any parts, tools, dies, jigs, fixtures, drawings, information, and contract rights (hereinafter called "construction materials") as the Contractor has specifically produced or specifically acquired for the

performance of such part of this Contract as has been terminated; and the Contractor shall, upon direction of Intermountain, protect and preserve property in the possession of the Contractor in which Intermountain has an interest.

- **12.2.4 PAYMENT.** When Intermountain terminates the Contract for one or more of the reasons stated in Paragraph 12.2.1, Intermountain may withhold payment and/or pursue all available remedies.
- 12.2.5 INTERMOUNTAIN PROTECTION IF LIENABLE. When the subject property is lienable, Intermountain may withhold from amounts otherwise due the Contractor for such completed Work or construction materials such sum as Intermountain determines to be necessary to protect Intermountain against loss because of outstanding liens or claims for former lien holders.
- **12.2.6 CREDITS AND DEFICITS**. If the unpaid balance of the Contract Sum exceeds the full cost of finishing the Work, including compensation for the A/E's services and expenses made necessary thereby, such excess shall be paid to the Contractor. If such cost exceeds the unpaid balance, the Contractor shall pay the difference to Intermountain this obligation for payment shall survive the termination of the Contract.
- 12.2.7 IF CONTRACTOR FOUND NOT IN DEFAULT OR EXCUSABLE. If, after notice of termination of the Contract under the provisions of this Article, it is determined for any reason that the Contractor was not in default under the provisions of this Article, or that the default was excusable under the provisions of this Article, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to the termination for convenience provisions.
- **12.2.8 RIGHTS AND REMEDIES NOT EXCLUSIVE**. The rights and remedies of Intermountain provided in this Article 12.2 shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

# 12.3 SUSPENSION, DELAY OR INTERRUPTION OF WORK BY INTERMOUNTAIN FOR CONVENIENCE

- **12.3.1 BY INTERMOUNTAIN IN WRITING**. Intermountain may in writing and without cause, order the Contractor to suspend, delay or interrupt the Work in whole or in part for such period of time as Intermountain may determine to be appropriate for the convenience of Intermountain.
- **12.3.2 ADJUSTMENTS**. Any adjustment in Contract Sum and Time shall be in accordance with Articles 3, 4, and 7.

# 12.4 TERMINATION FOR CONVENIENCE OF INTERMOUNTAIN

**12.4.1 IN GENERAL**. The performance of Work under this Contract may be terminated by Intermountain in accordance with this Article 12.4 in whole, or from time to time, in part, whenever Intermountain shall determine that such termination is in the best interest of Intermountain or any person for whom Intermountain is acting under this Contract. Any such termination shall be effected by delivery to the Contractor of a notice of termination specifying the extent to which performance of Work under the Contract is terminated, and the date upon which such termination becomes effective.

- **12.4.2 CONTRACTOR OBLIGATIONS**. After receipt of a notice of termination, and except as otherwise directed by Intermountain in writing, the Contractor shall:
- (1) Stop work under the Contract on the date and to the extent specified in the notice of termination;
- (2) Place no further orders or subcontracts for materials, services or facilities, except as may be necessary for completion of such portion of the Work under the Contract as is not terminated;
- (3) Terminate all orders and subcontracts to the extent that they relate to performance of Work terminated by the notice of termination;
- (4) Assign to Intermountain in the manner, at the times, and to the extent directed by Intermountain, all of the right, title and interest of the Contractor under the orders and subcontracts so terminated, in which case Intermountain shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;
- (5) Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification of Intermountain, which approval or ratification shall be final for all the purposes of this Article 12.4;
- (6) Transfer title and deliver to Intermountain in the manner, at the times, and to the extent, if any, directed by Intermountain:
- (a) The fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced as a part of, or acquired in connection with the performance of the Work terminated by the notice of termination; and
- (b) The completed or partially completed drawings, information, and other property which, if the Contract had been completed, would have been required to be furnished to Intermountain;
- (7) Use best efforts to sell, in the manner, at the times, to the extent, and at the price or prices directed or authorized by Intermountain, any property of the types referred to in Paragraph 12.4.2(6) above; provided, however, that the Contractor:
  - (a) Shall not be required to extend credit to any purchaser; and
- (b) May acquire any such property under the conditions prescribed by and at a price or prices approved by Intermountain; and provided further that the proceeds of any such transfer of or disposition shall be applied in reduction of any payments to be made by Intermountain to the Contractor under this Contract or shall otherwise be credited to the price or cost of the Work covered by this Contract or paid in such other manner as Intermountain may direct;
- (8) Complete performance of such part of the Work as shall not have been terminated by the notice of termination; and

- (9) Take such action as may be necessary, or as Intermountain may direct, for the protection and preservation of the property related to this Contract which is in the possession of the Contractor in which Intermountain has or may acquire an interest.
- **12.4.3 AGREED UPON PAYMENT**. Subject to the provisions of Paragraph 12.4.3 above, the Contractor and Intermountain may agree upon the amount to be paid to the Contractor by reason of the total or partial termination of Work pursuant to this Article 12.4.
- **12.4.4 PAYMENT NOT AGREED UPON**. In the event of the failure of Contractor and Intermountain to agree, as provided in Paragraph 12.4.4, upon the whole amount to be paid to the Contractor by reason of the termination of Work pursuant to this Article 12.4, Intermountain shall pay to the Contractor the amounts determined by Intermountain as follows, but without duplication of any amounts agreed upon in accordance with Paragraph 12.4.3:
- (1) With respect to all Contract Work performed prior to effective date of the notice of termination, the total (without duplication of any items) of:
  - (a) The cost of such Work including undisputed Claim amounts;
- (b) The cost of terminating, settling and paying claims arising out of the termination of Work under subcontracts or orders as provided in Paragraph 12.4.2(5) above, exclusive of the amounts paid or payable on account of supplies or materials delivered or services furnished by Subcontractors prior to the effective date of the notice of termination under this Contract, which amounts shall be included in the cost on account of which payment is made under Paragraph 12.4.4(1)(a) above;
- (c) A sum, as overhead and profit on Paragraph 12.4.4(1) (a) above, determined by Intermountain to be fair and reasonable;
- (d) The reasonable cost of the preservation and protection of property incurred pursuant to Paragraph 12.4.2(9); and any other reasonable cost incidental to termination of Work under this Contract, including expenses incidental to the determination of the amount due to the Contractor as the result of the termination of Work under this Contract.
- (2) The total sum to be paid to the Contractor under Paragraph 12.4.4(1) above shall not exceed the total Contract Sum as reduced by the amount of payments otherwise made and as further reduced by the Contract price of work not terminated. Except for normal spoilage, and except to the extent that Intermountain shall have otherwise expressly assumed the risk of loss in writing, there shall be excluded from the amounts payable to the Contractor under Paragraph 12.4.4(1) above, the fair value of property which is destroyed, lost, stolen, or damaged so as to become undeliverable to Intermountain, or to a buyer pursuant to Paragraph 12.4.2(7).
- **12.4.5 DEDUCTIONS**. In arriving at the amount due the Contractor under this Article 12.4, there shall be deducted:
- (1) All unliquidated advance or other payments on account theretofore made to the Contractor, applicable to the terminated portion of this Contract;
- (2) Any Claim which Intermountain may have against the Contractor in connection with this Contract; and

- (3) The agreed price for, or the proceeds of sale of, any materials, supplies, or other things acquired by the Contractor or sold, pursuant to the provisions of this Article 13.4, and not otherwise recovered by or credited to Intermountain.
- 12.4.6 PARTIAL PAYMENTS. Intermountain may, from time to time, under such terms and conditions as it may prescribe, make partial payments and payments on account against cost incurred by the Contractor in connection with the terminated portion of this Contract whenever, in the opinion of Intermountain the aggregate of such payments shall be within the amount to which the Contractor will be entitled hereunder. If the total of such payments is in excess of the amount finally agreed or determined to be due under this Article 12.4, such excess shall be payable by the Contractor to Intermountain upon demand, together with interest at a rate of five percent (5%) per annum for the period until the date such excess is repaid to Intermountain; provided, however, that no interest shall be charged with respect to any such excess payment attributable to a reduction in the Contractor's claim by reason of retention or other disposition of termination inventory until ten (10) days after the date of such retention or disposition, or such later date as determined by Intermountain by reason of the circumstances.
- **12.4.9 PRESERVE AND MAKE AVAILABLE RECORDS**. Unless otherwise provided for in this Contract, or by applicable law, the Contractor shall, from the effective date of termination until the expiration of three years after final settlement under this Contract, preserve and make available to Intermountain at all reasonable times at the office of the Contractor, but without direct charge to Intermountain, all books, records, documents and other evidence bearing on the costs and expenses of the Contractor under this Contract and relating to the Work terminated hereunder, or, to the extent approved by Intermountain Representative, photographs, micrographs, or other authentic reproductions thereof.
- 12.4.10 INTERMOUNTAIN'S RIGHT TO STOP THE WORK. If the Contractor fails to correct Work or fails to carry out Work, as required by the Contract Documents or fails to comply with all required and customary safety precautions; Intermountain, by written order signed personally or by an agent specifically so empowered by Intermountain in writing, may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Intermountain to stop the Work shall not give rise to a duty on the part of the Intermountain to exercise this right for the benefit of the Contractor or any other person or entity



## **SECTION 011000 - SUMMARY**

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Work covered by the Contract Documents.
  - 2. Use of premises.
  - 3. Code compliance
  - 4. Dust control
  - 5. Protection of existing improvements
  - 6. Traffic Control
  - 7. Temporary Controls

#### 1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Identification: Project consists of replacement of the existing diffusers in Operating Rooms 2 &3 at LDS Hospital.
- B. Total square feet: Not Applicable only existing wall diffusers are being replaced.

Project Location: LDS Hospital, 8th Avenue, C Street, salt Lake City, Utah 84143

- C. 1. Owner: Intermountain Healthcare, 36 South State Street, 21st Floor Salt Lake City, Utah 84111
  - 2. Owner's Representative: Mark Richins, Intermountain Healthcare, Salt Lake City, Utah
- D. Architect: NJRA Architects, 5272 College Drive, Suite 104, Murray, Utah 84123.
- E. The Work consists of the following:
  - 1. The Work includes: architectural, mechanical work as defined on the contract documents.

## 1.4 USE OF PREMISES

- A. Contractor's use of premises is limited only by Owner's right to perform work or to retain other contractors on portions of Project.
- B. Assume full responsibility for the protection and safekeeping of products under this Contract, stored on the site.

SUMMARY 011000 - 1

#### 1.5 CODE COMPLIANCE

- A. All work shall comply with current edition of codes including but not limited to the following:
  - 1. International Building Code
  - 2. International Existing Building Code
  - 3. International Mechanical Code
  - 4. International Plumbing Code
  - 5. NFPA
  - 6. National Electric Code
  - 7. OSHA Regulation
  - 8. Health and Safety Regulations
  - 9. Utility Company Regulations
  - 10. Police, Fire Department Rules
  - 11. Environmental Protection Regulations
  - 12. Americans with Disabilities Act
- B. Arrange for authorities having jurisdiction to inspect and test according to their requirements and for each temporary utility before use. Obtain required certifications and permits.
- C. Requirements of codes and regulations shall be considered as the minimum. Where the contract documents exceed (without violating) code and regulation requirements, contract requirements shall take precedence. Where codes conflict, the more stringent shall apply.

#### 1.6 DUST CONTROL

Temporary partitions should be constructed as called out on the Contract Documents and as mentioned in specification Section 024119 – Selective Demolition.

### 1.7 PROTECTION OF EXISTING IMPROVEMENTS

- A. Take precautions necessary to protect all existing utilities, monitor wells, and other Site improvements to remain from damage due to the work of this Project.
- B. Provide restoration of damaged property if damage is a result of construction activities.

#### 1.8 TRAFFIC CONTROL

- A. Maintain control of vehicular and pedestrian traffic caused by, or resulting from, the work of this Project.
- B. Means of control shall be in accordance with the applicable regulations of the jurisdiction responsible for traffic safety.

## 1.9 TEMPORARY CONTROLS

SUMMARY 011000 - 2

A. Conform to all applicable state and local ordinances and regulations. Obtain and pay for necessary permits and licenses as required by local jurisdictions.

END OF SECTION

SUMMARY 011000 - 3

## **SECTION 012900 – PAYMENT PROCEDURES**

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes measurement and payment provisions for, but not limited to, the following:
  - 1. Materials Delivered but Not Yet Installed.
  - 2. Schedule of Values.
  - 3. Applications for Payment.
  - 4. Preliminary Progress Schedule.
  - 5. Construction Progress Schedule.
  - 6. Change Orders.

#### 1.2 MATERIALS DELIVERED BUT NOT INSTALLED

- A. Exclude from Applications for Payment materials or equipment delivered and stored, but not yet incorporated into the Work, unless circumstances dictate acceptance (i.e. pre-purchase of equipment for early delivery to prevent delay of construction or subsequent facility opening date) and pre-payment is agreed to, in writing, by the Owner.
- B. If Owner has agreed to make early payment on account of materials or equipment not incorporated in the Work, but delivered and stored in conformance with the requirements of the Contract Documents, at the site, or at some other location agreed upon in writing, such pre-payment shall be conditioned upon approval by Contractor's Insurance Carrier, and Architect, in writing, prior to submission by Contractor of the applicable payment request.
- C. Pre-payment request shall contain substantiating documentation, including:
  - 1. Bill(s) of Sale.
  - 2. Evidence of insurance for the materials or equipment, covering the item(s) until completion of installation.
  - 3. Provision for transportation to the Project Site.
  - 4. Protection of Owner's interest under any circumstance (i.e. Owner's right to retrieve equipment or materials from storage area of a bankrupt company's property).
  - 5. Provision for inspection/testing at the stored location.
  - 6. Provision for security until completion of installation.

### 1.3 SCHEDULE OF VALUES

A. Type schedule on AIA Document G703. Owner's Standard Invoice/Schedule of Values or Contractor's standard forms and automated printout equivalent to the AIA Document will be considered for approval by Owner upon Contractor's request. Identify schedule with:

- 1. Title of Project and location.
- 2. Architect and Project number.
- 3. Name and Address of Contractor.
- 4. Contract designation.
- 5. Date of submission.
- B. Schedule shall list the installed dollar value of the component parts of the Work in sufficient detail to serve as a basis for computing values for progress payments during construction.
- C. List each subcontract first using the Table of Contents of the Project Manual as the format.
  - 1. Next list any allowances included in the contract amount.
  - 2. List each major section or portion of work to be performed by the Contractor.
  - 3. List Contractor's fee separately.
  - 4. List any contingencies.
  - 5. Identify each line item with the number and title of the respective major section of the specifications.
  - 6. Subdivide items to correspond with cost correlation requirements for construction progress schedule.
- D. For each major line item list sub-values of major products by building area or floor level or other operations under the item.
- E. For the various portions of the Work:
  - 1. Each item shall include a directly proportional amount of the Contractor's overhead and profit.
  - 2. For items on which progress payments will be requested for stored materials, break down the value into:
    - a. The cost of the materials, delivered and unloaded, with taxes paid.
    - b. The total installed value.
- F. The sum of all values listed in the schedule shall equal the total Contract Sum.
- G. Refer to General Conditions, Article 12, for changes.

#### 1.4 APPLICATIONS FOR PAYMENT

- A. Format and Data Required:
  - Submit applications typed on AIA Document G702/703, Application for Payment. Contractor's standard forms and automated print-out equivalent to the AIA Document will be considered for approval by Architect upon request by the Contractor.
  - 2. Submit 2 copies with "wet" signatures.
  - 3. Add provision for Inspector of Record's signature.
- B. Provide itemized data on continuation sheet:

- 1. Format, schedules, line items and values: Those of the Schedule of Values accepted by Architect.
- 2. Include Payment Application number.
- C. Preparation of Application for Each Progress Payment:
  - 1. Application Form:
    - a. Fill in required information, including that for Change Orders executed prior to date of submittal of application along with the number assigned to each Change Order.
    - b. Fill in summary of dollar values to agree with respective totals indicated on continuation sheets.
    - c. Certification that the Project Record Documents are current with the progress status of the Project.
    - d. Execute certification with signature of a responsible officer of Contract firm.
  - 2. Continuation Sheets:
    - a. Fill in total list of all scheduled component items of Work, with item number and scheduled dollar value for each item.
    - b. Fill in dollar value in each column for each scheduled line item when work has been performed or products stored.
      - 1) Round off values to nearest dollar, or as specified for Schedule of Values, and percent of item completion.
    - c. List each Change Order executed prior to date of submission, at the end of the continuation sheets.
      - 1) List by Change Order number, and description, as for an original component item of work.
- B. Substantiating Data for Progress Payments:
  - 1. When Owner or Architect requires substantiating data, submit information, with a cover letter identifying:
    - a. Project.
    - b. Application number and date.
    - c. Detailed list of enclosures.
    - d. For stored products.
      - 1) Item number and identification as shown on application.
      - 2) Description of specific Material.
  - 2. Submit 1 copy of data and cover letter for each copy of application.
  - 3. Revised updated CPM schedule.
  - 4. Current period's General Contractor Conditional Waiver and the prior period's Unconditional Waiver.
  - 5. Waivers from Subcontractors.
  - 6. Copies of invoices for National Purchase Agreement (NPA) items.
  - Corrections and updates to "as-built" documents.
- C. Preparation of Application for Final Payment:
  - 1. Fill in application form as specified for progress payments.
  - 2. Use continuation sheet for presenting the final statement of accounting as specified in Section 01700 CONTRACT CLOSEOUT.
- D. Submittal Procedure:

- 1. Submit Applications for Payment to Owner at the times stipulated in the Agreement.
- 2. Number: 3 copies of each Application.
- 3. When Owner, Inspector of Record, and Contractor agree on percentages to be requested, and when agreed and signed by them and Architect, Architect will transmit the Certificate for Payment to Owner.
- 4. Approval and signing of the Application for Payment by Owner and Architect is contingent upon approval of the current status of the As-Built Drawings/Record Documents and submittal of updated CPM schedule.

#### 1.5 CHANGE ORDERS

- A. Change Orders shall be processed by the Architect in accordance with the Conditions of the Contract, Supplementary Conditions of the Contract, and as herein specified.
- B. Coordination with Contractor's Submittals:
  - 1. Revise Schedule of Values and Application for Payment forms monthly to record each change as a separate item of Work, and to record the adjusted Contract Sum.
  - 2. Upon completion of work under a Change Order, enter pertinent changes in record documents.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

**END OF SECTION** 

## SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

#### PART 1 - GENERAL

#### 1.1 SUMMARY

A. This Section describes the requirements for Project coordination.

#### 1.2 DESCRIPTION OF REQUIREMENTS

- A. Minimum administrative and supervisory requirements necessary for coordination of Work shall be fulfilled collectively by the Contractor in coordination with subcontractors including, but not necessarily limited to, the following:
  - 1. Coordination drawings.
  - Coordination meetings.
  - 3. Administrative coordinating personnel.
  - 4. Contractor's coordination of work.

#### 1.3 COORDINATION MEETINGS

A. Schedule and conduct meetings and conferences at project site, unless otherwise indicated.

#### 1.4 ADMINISTRATIVE COORDINATION PERSONNEL

- A. Provide a General Superintendent and other administrative and supervisory personnel required for performance of the Work.
- B. Provide specific coordinating personnel for each subcontractor as reasonably required for interfacing Work with other work of total Project.
- C. Submittal of Staff Names, Duties: Within 7 days of Notice to Proceed submit to the Owner a listing of principal staff assignments and consultants, including names, addresses and telephone numbers.

#### 1.5 CONTRACTOR'S COORDINATION OF WORK

- A. Provide and coordinate the following:
  - 1. General and special services and operations to furnish and install Work.
  - 2. Primary, major and accessory materials, and items necessary to complete the installation.
  - Labor operations and material items reasonably incidental for finishing.
  - 4. Performance of work and delivery of materials in accordance with established construction schedules.
- B. Coordinate all aspects of construction operations, generally, and specifically as

required to provide Owner with a complete, operable facility.

- 1. Resolve any dispute over coordination, or failure to coordinate, such that resolution is consistent with Contract Documents. When such resolution is not possible, refer to the General Conditions.
- 2. Where proper execution of this Work depends on the work of any other contractor, inspect and promptly report to Architect any defects in such work that render it unsuitable for such proper execution and results.
- 3. Cooperate with other contractors on the Project site and with Architect so that completion of all work can proceed with prudent speed.
  - a. Furnish other contractors, whose work is fitted to this work, detail and erection drawings giving full information regarding the fabrication and assembly of this Work.
  - So far as possible, drawings shall indicate checked field measurements.
  - c. Cooperate in timing this Work to join with the work of other contractors or the Owner.
- 4. Check the drawings of other contracts for interferences with this Work and promptly report to Architect, in writing, any such interferences.
- 5. Submit complete information, including Drawings, descriptions, sketches, marked prints, etc., as required for Architect's review and coordination of drawings by others which are a part of this Work.
- C. Mechanical, Electrical, and Related Systems Coordination: Prior to proceeding with the work, and before installation, coordinate and work out all "tight" conditions involving work of various Sections.
  - 1. Before work proceeds in these areas, prepare supplemental drawings for review by the Architect.
  - 2. Provide all work necessary to coordinate tight conditions, including supplemental drawings in sufficient detail for showing that all work is coordinated in "tight" areas, and additional labor and materials necessary to overcome "tight" conditions at no increase in cost to the Owner.
  - 3. Coordination of "tight" conditions shall include:
    - a. Providing sufficient clear space around all equipment necessary for maintenance access and as required by Code.
    - b. Adjustments in depth, position, and elevation of underground and overhead utilities at points of conflict. Utility space conflicts shall be resolved by giving precedence to those utilities which are called out to be sloped. The term "utility" as used in this paragraph includes: all piping, conduit, and ductwork.

## 1.6 COORDINATION DRAWINGS

- A. Submit plans and cross-sections in sufficient detail to show coordinated layout of all ducts, pipes, electrical work, access doors, above ceiling clearances, canopy rigging, acoustical curtains, and other related items. Plans and cross-sections shall be provided that include all underground ducts, electrical ductbanks, piping, and other underground utilities.
- B. Engage professional drafter to prepare these drawings to one-quarter scale on Auto-CAD with title blocks to match the Contract Drawings.

- These plans shall reflect existing dimensions as field-verified by the Contractor.
- 2. Plans shall be uniform and identical and shall serve as backgrounds for preparation of shop or layout drawings required under Divisions 15 and 16 and ultimately for recording of as-built information required under these divisions.
- 3. Where additional sheets of elevations, sections, details, and/or diagrams are required, such sheets shall match the Contract Drawings with respect to size and title block.
- 4. Prior to beginning excavation for structural footings and utilities, submit a coordination plan showing all underground utilities including: all underground piping, underground ductwork, electrical and communication ductbanks.
  - The plan shall be a composite overlay of sheets each dedicated to a single underground utility using a common background and scale.
  - b. Dimensions shall be sufficient to clearly indicate the position and depth of each utility relative to structural footings, above grade structures, and finished grade.
  - c. At points where the plan indicates that utilities will cross each other, cross a structural footing, or run within six (6) feet parallel to either each other or a structural footing, provide a cross section drawing.
  - d. Cross section drawings shall clearly show the relative positions and depths of each utility and structural footing.
  - e. The composite plan and cross section drawing(s) shall be updated to "as-builts" and submitted with the Project Record (As-Built) Drawings.
- C. Do not commence work until the Architect has reviewed these Drawings.

#### 1.7 MISCELLANEOUS PROVISIONS

- A. Prior to starting a particular type or kind of work:
  - 1. Examine for relevant information, all Contract Documents and subsequent data issued;
  - 2. Check accepted submittals and verify dimensions at job site;
  - 3. Consult manufacturers for instructions applicable to conditions under which Work is to be installed;
  - 4. Inspect areas, surfaces or construction receiving the Work.
    - a. Start of work shall signify compliance with the above requirements and acceptance of previously placed construction or substrates as being in satisfactory condition to achieve proper installations and first quality workmanship as intended under these specifications.
    - b. Failure to so inspect and report shall constitute an acceptance of the other contractor's work.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

**END OF SECTION** 

## **SECTION 013110 - FIELD ENGINEERING**

#### PART 1 - GENERAL

#### 1.1 FIELD MEASUREMENTS AND EXISTING CONDITIONS

- A. Contractor Responsibility: Exact field measurements are responsibility of the Contractor. Any required off-sets, additional fittings, re-routing of existing or new work to provide serviceable system within the location shown, and to maintain head room and clearances to match existing construction, are responsibility of the Contractor.
- B. Layout of the Work: The Contractor shall employ, at the Contractor's own expense, Registered Civil Engineer or Licensed Land Surveyor. Contractor's engineer or surveyor will provide layout of the work of the Project and establish all reference points and elevations required for construction.

#### 1.2 GRADES, LINES AND LEVELS

- A. Identification: Owner will identify existing benchmarks, control points, and property corners.
- B. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
- C. Benchmarks: Establish and maintain a minimum of six permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
  - 1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
  - 2. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
  - 3. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.
- D. Preservation: All stakes, boundary lines, bench marks or survey marks, etc., which have been or may be established in any part of the Project site or adjacent thereto shall be carefully preserved and respected by the Contractor and shall be restored at the Contractor's expense if lost or destroyed as result of the Contractor's operations.
  - 1. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.

- E. Conflict: The Contractor will be held responsible for correctness of layout, for establishing location of existing concealed utility lines, and for notifying the Architect in writing in event of conflict with the Drawings. In such case, the Contractor shall not proceed until instructed by the Architect.
- F. Certified Survey: On completion of foundation walls, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, plumbness and elevations of construction and sitework.
- G. Final Property Survey: Prepare a final property survey showing significant features (real property) for Project. Include on the survey a certification, signed by land surveyor that principal metes, bounds, lines, and levels of Project are accurately positioned as shown on the survey.
  - 1. Show boundary lines, monuments, streets, site improvements and utilities, existing improvements and significant vegetation, adjoining properties, acreage, grade contours, and the distance and bearing from a site corner to a legal point.

**END OF SECTION** 

#### **SECTION 013300 - SUBMITTAL PROCEDURES**

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

#### 1.3 SUBMITTAL PROCEDURES

- A. General: Electronic copies of CAD Drawings of the Contract Drawings will not be provided by Architect for Contractor's use in preparing submittals.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
- C. Submittals Schedule: Comply with requirements in Division 1 Section "Construction Progress Documentation" for list of submittals and time requirements for scheduled performance of related construction activities. Submittals should be submitted by contractor to architect within 30 days from notice to proceed.
- D. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
  - 1. Initial Review: Allow 10 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
  - 2. Resubmittal Review: Allow 10 days for review of each resubmittal.
- E. Identification: Place a permanent label or title block on each submittal for identification.
  - 1. Indicate name of firm or entity that prepared each submittal on label or title block.
  - 2. Include the following information on label for processing and recording action taken:
    - a. Project name.
    - b. Date.

- c. Name and address of Architect.
- d. Name and address of Contractor.
- e. Name and address of subcontractor.
- f. Name and address of supplier.
- g. Name of manufacturer.
- h. Submittal number or other unique identifier, including revision identifier.
- i. Number and title of appropriate Specification Section.
- j. Drawing number and detail references, as appropriate.
- k. Location(s) where product is to be installed, as appropriate.
- F. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form.
- G. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities.
  - 1. Use for Construction: Use only final submittals with mark indicating "Approval notation from Architect's action stamp".

# PART 2 - PRODUCTS

#### 2.1 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
  - 1. Mark each copy of each submittal to show which products and options are applicable.
  - 2. Include the following information, as applicable:
    - a. Manufacturer's written recommendations.
    - b. Manufacturer's product specifications.
    - c. Manufacturer's installation instructions.
    - d. Standard color charts.
    - e. Manufacturer's catalog cuts.
    - f. Standard product operation and maintenance manuals.
    - a. Compliance with specified referenced standards.
  - 3. Submit Product Data concurrent with Samples.
  - 4. Number of Copies: Submit four copies of Product Data, unless otherwise indicated.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
  - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:

- a. Dimensions.
- b. Identification of products.
- c. Fabrication and installation drawings.
- d. Roughing-in and setting diagrams.
- e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
- f. Shopwork manufacturing instructions.
- g. Schedules.
- h. Design calculations.
- Compliance with specified standards.
- i. Relationship to adjoining construction clearly indicated.
- 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm) but no larger than 30 by 40 inches (750 by 1000 mm).
- 3. Number of Copies: Submit four opaque copies of each submittal, Architect will retain two copies; remainder will be returned.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
  - 1. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
    - a. Number of Samples: Submit one full set of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.

#### PART 3 - EXECUTION

### 3.1 CONTRACTOR'S REVIEW

A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.

#### 3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:

**END OF SECTION** 

## **SECTION 014000 – QUALITY REQUIREMENTS**

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section describes the requirements for Owner furnished testing and inspection services which include the following:
  - 1. Observation by Inspector of Record.
  - 2. Laboratory responsibilities.
  - 3. Laboratory reports.
  - 4. Limits on testing laboratory authority.
  - 5. Contractor responsibilities.
  - 6. Schedule of inspections and tests.
- B. These services are identified to indicate the requirement for cooperation and assistance needed by Owner's testing and inspection agency.

#### 1.2 QUALITY ASSURANCE

- A. Testing and Inspection Agency Qualifications: A testing and inspection agency must have a minimum 5 years continuing experience preceding date of these Contract Documents, and be qualified in accordance with the following American Society for Testing and Materials (ASTM) publications:
  - 1. ASTM E 548-84 Standard Practice for Generic Criteria for use in the Evaluation of Testing and Inspection Agencies.
  - 2. ASTM E 699-79 (1984) Standard Criteria for Evaluation of Agencies Involved in Testing, Quality Assurance, and Evaluating Building Components in Accordance with Test Methods Promulgated by ASTM Committee E-6.
- B. Testing Equipment: Calibrated at intervals with devices of accuracy traceable to either National Bureau of Standards or accepted values of natural physical constants.

### 1.3 INSPECTION AND TESTING PERSONNEL AND FACILITIES

- A. Inspector of Record:
  - The Owner will employ one or more qualified Inspectors of Record, acceptable to the Local Building Department issuing Permits who will be employed continuously at the construction site, working under the Owner Representative's general direction. The IOR(s) will observe progress of the work and to report to the Owner any non-conformance with Contract Documents.
  - In compliance with the State Building Code, Part 1, Title 24 of the California Code of Regulations, Article 7-145, the Inspector of Record shall have personal knowledge, obtained by continuous inspection of all

parts of the work of construction in all stages of its progress, to ensure that the work is in accordance with the approved contract documents.

- 3. Specific duties and limits of responsibilities include the following:
  - Observing and spot checking materials upon arrival at site, and work in progress, to determine conformance with Contract Documents. Reporting any defects immediately to the Owner.
  - b. Maintaining liaison with the Contractor and his Subcontractors only through Contractor's superintendent.
  - c. Evaluating Contractor's suggestions and reporting them with recommendations to the Owner for final decision.
  - d. Remaining alert to the Construction Schedule and immediately reporting any potential delays and problems to the Owner.
  - e. Maintaining a Daily Log of activities on site, pertinent to a continuous project report record.
  - f. Preparing a Verified Report every 3 months (or sooner if required for a specific project schedule).
  - g. Receiving Samples of construction materials at the jobsite.
  - h. Scheduling and accompanying regulatory inspectors through the project and reporting to the Owner the results of such inspection visits.
  - i. Being alert to conditions which could affect Hospital's existing operation.
  - j. Reviewing and verifying degree of work completion with that cited in Contractor's monthly payment request.
  - k. Maintaining Contract information and Shop Drawing files.
  - Preparing a Field Inspection Report of incomplete or unsatisfactory work at intervals throughout the work progress. Checking off such items when made complete and satisfactory by Contractor.
  - m. Attending project meetings in accordance with specifications Section 013100.
  - n. Enforcing Infection Control requirements.
  - o. Provide all coordination for independent Testing Laboratories.
  - p. Participate in formation of Final Punch List.
- B. Local Permit Issuing Agency will approve the Inspector of Record for the project who shall be allowed access to the project site at any time.
- C. Testing and Inspection Agency:
  - 1. The Owner will employ and pay for the services of an independent testing and inspection agency to perform the tests and inspections required herein except where noted otherwise.
    - a. Employment of the testing and inspection agency shall in no way relieve the Contractor's obligation to perform the work defined in the Contract Documents.
  - 2. Limitations of authority of the Testing and Inspection Agency:
    - a. Testing Agency is not authorized to:
      - 1) Release, revoke, alter, or enlarge on the requirements of the Contract Documents;
      - 2) Approve or accept any portion of the Work, or;
      - 3) Perform any duties of the Contractor.
  - 3. All work shall conform to the requirements of state and local applicable

Codes.

- 4. Testing and inspection agency shall perform tests and inspections as required by applicable regulation as indicated in the specification Sections, and as directed by the Owner and required by the Code.
- 5. Testing and inspection agency shall prepare, cure, store, and transport job samples to the Laboratory.
- 6. At the completion of the Project, verified reports shall be submitted as required by CCR, Title 22 and as directed.

#### 1.4 LABORATORY REPORTS

- A. After each inspection and test, promptly submit copies of laboratory report which includes:
  - 1. Date issued.
  - 2. Project title and number,
  - 3. Name of Inspector from inspection agency,
  - 4. Date and time of sampling or inspection,
  - 5. Identification of product and specifications section,
  - 6. Location in the Project,
  - 7. Type of inspection or test,
  - 8. Date of test,
  - 9. Results of tests.
  - 10. Conformance with Contract Documents,
  - 11. Whether original test or re-test,
  - 12. State/local permit number,
- B. Reports shall be distributed to the following:
  - 1. Architect of Record
  - 2. Inspector of Record (I.O.R.)
  - 3. General Contractor
  - 4. Owner
  - 5. Applicable Consultant
  - 6. Local Jurisdiction where applicable

## 1.5 LABORATORY RESPONSIBILITIES

- A. Provide qualified personnel at site. Cooperate with Architect/Inspector of Record and Contractor in performance of services.
- B. Perform specified inspecting, sampling, and testing of Products in accordance with specified standards.
- C. Ascertain compliance of materials and mixes with requirements of Contract Documents.
- D. Promptly notify Architect, IOR and Contractor of observed irregularities or non-conformance of Work or Products.
- E. Perform additional inspection and test required by Architect.
- F. Attend preconstruction meetings and progress meetings when requested.

# 1.6 CONTRACTOR'S RESPONSIBILITIES

- A. Cooperate with Inspector of Record and Testing and Inspection Agency and provide access to Work, including off-site manufacturer's or fabricator's operations.
  - 1. Provide required quantities of material samples to be tested.
  - 2. Samples will be selected and taken by representative of Testing and Inspection Agency.
- B. Furnish copies of product data and test reports as required.
- C. Furnish incidental labor and facilities:
  - 1. To provide access to work to be tested;
  - 2. To obtain and handle samples at the Project site, or at the source of the Product to be tested or inspected;
  - To facilitate inspections and tests, and;
  - 4. For storage and curing of test samples at the Project site.
- D. Provide, on a weekly basis, a Short Interval Project Schedule with a minimum three-week duration which identifies upcoming testing requirements.
- E. Schedule the tests and inspections required by the Contract Documents and applicable codes and regulations with the Inspector of Record and the Testing and Inspection Agency, a minimum of 48 hours in advance.
  - When tests or inspections cannot be performed after such notice, or if re-tests and re-inspections are required due to the fault of the Contractor, all costs for such re-work shall be deducted from the Contract Amount. If the remaining unpaid balance in the Contract is insufficient to cover the Change Order for this work, Contractor shall pay the difference directly to the Owner.
  - 2. Do not cover corrected Work until said Work has been re-tested and or re-inspected satisfactorily.
- F. Arrange with Owner's Testing and Inspection Agency and pay for additional samples and tests required for the Contractor's convenience when approved by Owner.
- G. Contractor shall pay costs for the following specified items:
  - 1. Design mixes for:
    - a. Cast-in-Place concrete
  - 2. Redesign of mixes due to change in source of ingredients.
  - Certified mill test reports.
- H. Notification of Architect:
  - 1. In addition to tests and inspections called for in this Section, notify applicable parties of inspections and testing called for in the individual Sections of the Specifications or on the Drawings.
  - 2. Notify 48 hours in advance, to assure inspections prior to covering up or

closing in of work involved. Any work covered up before such required inspection or testing shall be uncovered or removed at the Contractor's expense.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

**END OF SECTION** 

## **SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS**

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

A. This Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

## 1.3 USE CHARGES

- A. General: Cost or use charges for temporary facilities shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost.
- B. Water Service: Pay water service use charges for water used by all entities for construction operations.
- C. Electric Power Service: Pay electric power service use charges for electricity used by all entities for construction operations.

# 1.4 QUALITY ASSURANCE

A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

# PART 2 - PRODUCTS

# 2.1 MATERIALS

## 2.2 TEMPORARY FACILITIES

- A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.
- B. Common-Use Field Office: Of sufficient size to accommodate needs of construction personnel. Keep office clean and orderly. Furnish and equip offices as follows:
  - 1. Furniture required for Project-site documents including file cabinets, plan tables, plan racks, and bookcases.

- 2. Heating and cooling equipment necessary to maintain a uniform indoor temperature of 68 to 72 deg F.
- 3. Lighting fixtures capable of maintaining average illumination of 20 fc at desk height.

## 2.3 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- B. Heating Equipment: Unless Owner authorizes use of permanent heating system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.

### PART 3 - EXECUTION

## 3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

### 3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
  - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Water Service: Install water service and distribution piping in sizes and pressures adequate for construction.
- C. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
- D. Heating: Provide temporary heating required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.
- E. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.

- F. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
- G. Telephone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Install one telephone line(s) for each field office.
- H. Traffic Controls: Comply with requirements of authorities having jurisdiction.
  - 1. Protect existing site improvements to remain including curbs, pavement, and utilities.
  - 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- I. Parking: Provide temporary parking areas for construction personnel.
- J. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
  - 1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties nor endanger permanent Work or temporary facilities.
  - 2. Remove snow and ice as required to minimize accumulations.
- K. Project Identification and Temporary Signs: Provide Project identification sign. Install signs where indicated to inform public and individuals seeking entrance to Project. Unauthorized signs are not permitted.
- L. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 1 Section "Cleaning" for progress cleaning requirements.
- M. Temporary Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate.

## 3.3 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- B. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.
  - 1. Inspect, repair, and maintain erosion- and sedimentation-control measures during construction until permanent vegetation has been established.

- C. Stormwater Control: Comply with authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- D. Site Enclosure Fence: Before construction operations, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.
- E. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- F. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
  - 1. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
  - 2. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

# 3.4 OPERATION, TERMINATION, AND REMOVAL

- A. Maintenance: Maintain facilities in good operating condition until removal.
  - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- B. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

**END OF SECTION** 

# **SECTION 016000- PRODUCT REQUIREMENTS**

#### PART 1 - GENERAL

## 1.1 SUMMARY

- A. Work Included: This Section contains definitions, product requirements and requirements for prior approved items.
- B. Delivery and storage of materials and equipment.
- C. Procedures for selecting products and approving substitutions.

### 1.2 DEFINITIONS

- A. General: Definitions are not intended to negate the meaning of other terms used in Contract Documents, including specialties, systems, structure, finishes, accessories, furnishings, special construction, and similar terms, which are self-explanatory and have recognized meanings in the construction industry.
- B. Products: Purchased items for incorporation into the Work, regardless of whether specifically purchased for Project or taken from Contractor's stock of previously purchased products.
- C. Materials: Products which must be substantially cut, shaped, worked, mixed, finished, refined, or otherwise fabricated, processed, installed, or applied to form units of Work.
- D. Appliances, Equipment, and Fixtures: Products with operational parts, regardless of whether motorized or manually operated and particularly including products with service connections (wiring, piping, etc.).
- E. System: A unit of Work (i.e., structural system, vacuum system, etc.) shown or specified to include particular products, materials, appliances, equipment, or fixtures.
- F. Substitutions: Where products, materials, appliances, equipment, or fixtures are listed by trade name(s), manufacturer name(s), or catalog reference(s) or where these items are shown or specified as part of a system or systems, items or systems proposed for use by Contractor that are not listed or differ from those shown or specified as part of a system will be considered substitutions.
  - 1. Submit substitutions in accordance with requirements of this Section.
  - 2. The requirements for substitutions do not apply to specified Contractor options. Revisions to Contract Documents, where requested by Owner or Architect are changes, not substitutions.
  - 3. Contractor's determinations of and compliance with governing regulations and orders issued by governing authorities do not constitute substitutions, and do not constitute a basis for change orders; except as

provided for under substitution procedures in this Section or elsewhere in Contract Documents.

G. Prior -to-Bid Approvals: Products, materials, appliances, equipment, fixtures, or systems that have been proposed as substitutions and accepted by Owner prior to bid.

## 1.3 DESCRIPTION

- A. General: Specific products, materials, appliances, equipment, fixtures, accessories, manufacturers, and proprietary mentioned by name, grade, or brand, in Specifications or on Drawings have been selected for their particular fitness, availability, and desirability for use appropriate to Work of this Project and are intended to establish the standard of quality.
- B. Compliance: The compliance requirements, for individual products are multiple in nature and may include generic, descriptive, proprietary, performance, prescriptive, compliance with standards, compliance with codes, conformance with graphic details, and other similar forms and methods of indicating requirements.

### 1.4 PRODUCT REQUIREMENTS

- A. General: Provide products which comply with requirements, and which are undamaged and unused at time of installation, and which are complete with accessories, trim, finish, safety guards, and other devices and details needed for a complete installation and for intended use.
  - 1. Materials shall be new unless otherwise specified and unused, except for testing of current production models on date of order, undamaged, and un-deteriorated at time of use.
  - 2. Identify materials in accordance with accepted trade standards and requirements of this Section.
  - 3. Select and use methods or processes, including intermediate processes, which will produce the specified finished material or product.
  - 4. Ascertain that the Work, including materials, products, and equipment delivered and installed, is in full compliance with the Contract Documents and appropriate submittals.
  - 5. Standard Products: Where available, provide standard products of types which have been produced and used previously and successfully on other projects and in similar applications.
  - 6. Continued Availability: Where additional amounts of product, by nature of its application, are likely to be needed by Owner at a later date for maintenance and repair or replacement work, provide a standard, domestically produced product which is likely to be available to Owner at such later date.
- B. Nameplates: Except as otherwise indicated for required approval labels and operating data, do not permanently attach or imprint manufacturer's or producer's nameplates or trademarks on exposed surfaces of products which will be exposed to view either in occupied spaces or on exterior of the Work.

- 1. Labels: Locate required labels and stamps on a concealed surface or, where required for observation after installation, on an accessible surface which, in occupied spaces, is not conspicuous.
- 2. Equipment Nameplates: Provide permanent nameplate on each item of service-connected or power-operated equipment. See sections specifying equipment requirements for specifics.

#### 1.5 QUALITY ASSURANCE

- A. Special Requirement: Due to certain Owner requirements, Owner will not consider substitutions on certain items. Therefore, substitutions will not be considered for items followed by the words: "no substitution(s)."
- B. Architect's Compensation:
  - 1. Except as limited by provisions of Owner-Architect or Owner-Contractor Agreements, Contractor shall reimburse Owner for compensation paid to Architect for evaluation of substitution proposals made during construction, whether or not substitution is accepted by Owner.
  - 2. Refer to Request for Substitution form at the end of this Section.

# C. Delays and Costs:

- 1. Substitution proposals made during construction shall be in accordance with procedures outlined in this Section and be made in sufficient time to allow for adequate time for Architect's review and evaluation.
- 2. Delays and added costs associated with inadequate supportive data, necessary extended evaluations, or redesign work caused by substitutions shall be borne by Contractor.
- 3. Cost changes resulting from proposed substitutions shall be clearly stated with the initial substitution proposal. Subsequently discovered costs resulting from the substitution shall be borne by Contractor.

## 1.6 TRANSPORTATION AND HANDLING

- A. Transport products by methods to avoid product damage; deliver in undamaged condition in manufacturer's unopened containers or packaging, dry.
- B. Provide equipment and personnel to handle products by methods to prevent soiling or damage.
- C. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
- D. Deliver products in the manufacturer's sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting and installing.

## 1.7 STORAGE AND PROTECTION

- A. Store Products in accordance with manufacturer's instructions, with seals and labels intact and legible.
- B. Store sensitive products in weathertight enclosures; maintain within temperature and humidity ranges required by manufacturer's instructions.
- C. For exterior storage of fabricated products, place on sloped supports above ground. Cover products subject to deterioration with impervious sheet covering; provide ventilation to avoid condensation.
- D. Store loose granular materials on solid surfaces in a well-drained area; prevent mixing with foreign matter.
- E. Arrange storage to provide access for inspection, periodically inspect to assure products are undamaged and are maintained under required conditions.
- F. After installation, provide covering to protect products from damage from traffic and construction operations, remove when no longer needed.

## 1.8 PROCEDURES

- A. Procedures for Selecting Products: Contractor's options for selecting products are limited by Contract Document requirements and governing regulations, and are not controlled by industry traditions or procedures experienced by Contractor on previous construction projects.
  - 1. Single Product/Manufacturer Name:
    - Provide product indicated. Do not offer to provide an unnamed product unless it has been accepted under substitution provisions listed below.
    - b. Except as otherwise indicated, "Named" is defined to mean manufacturer's name for product as recorded in latest issue of published product literature as of date of Contract Documents.
    - c. Refer to requests to use products of a later (or earlier) model to Architect for acceptance before proceeding.
  - 2. Two or More Product/Manufacturer Names:
    - a. Provide 1 of the named products, at Contractor's option.
    - b. Do not offer to provide an unnamed product unless it has been accepted under substitution provisions listed below.
  - 3. Performance Requirements:
    - a. Provide products which comply with specific performances indicated and which are recommended by manufacturer (in published product literature or by individual certification) for application indicated.
    - b. Overall performance of a product is implied where product is specified for specific performances.
  - 4. Standards, Codes, and Regulations: Where compliance with an imposed standard, code, or regulation is required, selection from among products which comply with requirements of those standards, codes, and regulations is Contractor's option.
  - 5. Prescriptive Requirements: Provide products which have been produced

in accordance with prescriptive requirements, using specified ingredients and components, and complying with specified requirements for mixing, fabricating, curing, finishing, testing, and similar operations in manufacturing process.

- 6. Visual Matchina:
  - a. Where matching of an established sample is required, final judgment of whether a product proposed by Contractor matches sample satisfactorily is Architect's judgment.
  - Where no product exists within specified cost category, which
    matches sample satisfactorily and complies with requirements,
    comply with provisions concerning, substitutions and change
    orders for selection of an equivalent product.
- 7. Visual Selection:
  - a. Where specified product requirements include "color(s), pattern(s), texture(s), etc. selected by Architect" or words of similar effect, selection of manufacturer and basic product (complying with requirements) is Contractor's option, and subsequent selection of color(s), pattern(s), and texture(s), etc. is Architect's selection.
  - b. Where specified product requirements include "color(s), pattern(s), texture(s), etc., to match Architect's sample" or words to that effect, selection of product (complying with requirements, and within established cost category) is Architect's selection, including designation of manufacturer where necessary to obtain desired color, pattern, or texture.

## 1.9 SUBSTITUTION PROCEDURES

- A. Prior (-to-Bid) Approvals: Substitute products, materials, appliances, equipment, fixtures, or systems will be considered by Architect.
  - 1. Any bidder, material supplier, or manufacturer desiring to propose substitution(s) shall:
    - a. Submit in a sealed envelope catalog cuts, shop drawings, or other descriptive literature for products, materials, appliances, equipment, fixtures, or systems for proposed substitution.
    - b. Submit not later than 14 calendar days before bid opening
  - 2. Make request to Architect in triplicate on copies of Request for Substitution form included at end of this Section.
  - 3. Submittal(s) shall include a complete and adequate analysis showing point-for-point comparison to specified item(s) or system(s) and must prove equality or superiority.
  - 4. Include related Section and Drawing number(s), and fully document compliance with requirements for substitutions.
  - 5. Include product data/drawings, description of methods, samples.
    - a. Where applicable, statement of effect on construction time and coordination with other affected Work.
    - b. Cost information for proposal.
  - 6. Include identification of previous use locally with dates and names of Architect and Owner.
  - 7. Anything less will not be considered.
  - 8. Equivalency:
    - a. The Architect will be the initial judge of equivalency of proposed

- substitution(s).
- b. Architect will make written recommendation of acceptance or rejection to Owner.

## Satisfaction:

- a. Prior to proposing substitution(s), certify that item or system is equal to that specified.
- b. That it will fit into space allocated.
- c. That item affords comparable ease of operation, maintenance, and service.
- d. That appearance, longevity, and suitability for climate and use are comparable to item specified.
- e. That substitution is in Owner's interest.
- 10. Manufacturer's data which is readily available to Architect is not acceptable for establishing proof of quality.
  - a. Provide laboratory test data performed by a nationally recognized independent testing laboratory known for its testing expertise.
  - b. Laboratory test shall include types of materials used in substitute item or system, including their thickness and strength, and a direct comparison to item or system specified for capacities, capabilities, coatings, functions, life cycle usage, and operations.
  - c. No change in Architect's design intent will be allowed where item or system will be exposed and where it will be used.
- 11. Proof: Burden of proof that a proposed substitution is equal or equivalent to a specified item or system shall be upon Contractor, who shall support his request with sufficient test data, samples, brochures, and other means to permit Architect to make a fair and equitable decision on merits of proposal.
- 12. Based on Architect's written recommendation of acceptance or rejection, Owner will determine acceptability of proposed substitutions.
- 13. Architect will notify Bidders of Owner's acceptance not later than 5 calendar days prior to bid opening via an addendum to the Contract Documents listing only accepted substitutions.
- 14. Responsibility: Acceptance of substitutions shall not relieve Contractor from responsibility for complying with all other requirements of the Contract Documents and coordinating substitution(s) with adjacent materials and other affected equipment.

# B. During Construction:

- 1. Substitutions will not be considered when they are indicated or implied on submittals without separate written request prior to submittal, or when acceptance will require substantial revision of Contract Documents.
- 2. Architect and Owner will consider requests from Contractor during construction for substitutions (following procedures outlined above for prior approvals) only under 1 or more of the following conditions:
  - a. Substitution is required for compliance with subsequent interpretation of code requirements or insurance regulations.
  - b. Shown or specified item or system cannot be provided within Contract Time or becomes unavailable due to no fault of Contractor.
  - c. Subsequent information disclosed inability of item(s) or system(s) to

- perform properly or to fit in designated space, or manufacturer(s) refuse(s) to certify or warrant performance as required.
- d. When, in Architect's judgment, a substitution would be substantially in Owner's best interests in terms of cost (substantial credit), time, or other valuable considerations, after deducting offsetting responsibilities Owner may be required to bear, including additional compensation to Architect for evaluation and redesign services, increased cost of other work by Owner or separate contractors, and similar considerations.

PART 2 – PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

**END OF SECTION** 

# REQUEST FOR SUBSTITUTION

Α.	Completed reproduction of this form shall accompany all requests for substitutions. Failure to submit form with request shall be cause for rejection. Substituted items or systems may be incorporated into the Work only after receipt of Owner's written approval. Fill in all applicable spaces and cross out all nonapplicable information bracketed ([]) or unbracketed.		
	[Subcontractor:] [Material Supplier:] [Manufacturer:] Date: Requested Substitution: Reference: Specification SectionDrawing Reference Reason for Substitution: [Prior Approval] [During Construction]:		
В.	Resulting Change to Contract Amount: [Add] [Deduct](Include supporting documentation.)		
C.	For substitutions made during construction the Architect will, upon receipt of substitution proposal, fill in the following compensation information, add it to or deduct it from the Change to the Contract Amount and submit Net Change to Contract Amount to Owner for approval. Upon receipt of Owner's approval, Architect will proceed with substitution review.		
D. E.	Architect's Fee for Substitution Evaluation: Architect's Fee for Changes to Contract:		
F.	Documents Due to Substitution:  Net Change to Contract Amount (B + C + D): [Add] [Deduct]  Resulting Change to Contract Time: AddDeduct  Summary of Related Work Requiring Coordination (if any):		
	(Contractor shall assume responsibility for complete coordination with Work of all trades involved if Substitution Request is approved.)		
G.	Attached Documentation: The following is herewith attached to provide complete documentation of requested substitution:		
	[ ]Product Data [ ]Samples [ ]Shop Drawings [ ]Test Reports [ ]Other:		
Н.	Contractor's Signature		
	Subcontractor's/Supplier's/Manufacturer's Signature		

# **SECTION 017600- GUARANTIES AND WARRANTIES**

#### PART 1 - GENERAL

## 1.1 SUMMARY

A. This Section includes requirements for guaranties and warranties for contract closeout and during specified guaranty/warranty periods.

## 1.2 DESCRIPTION OF REQUIREMENTS

- A. General Limitations: It is recognized that specific guaranties and warranties are intended to protect Owner against failure of the Work to perform as required, and against deficient, defective, and faulty materials and workmanship, regardless of sources.
- B. Related Damages and Losses: When correcting guarantied or warranted work which has failed, remove and replace other Work of Project which has been damaged as a result of such failure or which must be removed and replaced to provide access for correction of Work.
- C. Reinstatement of Guaranty or Warranty Period: In addition to requirements in the General Conditions, when Work covered by a special project guaranty or product warranty has failed and has been corrected by replacement or restoration, reinstate guaranty or warranty by written endorsement for 1 year starting on date of acceptance of replaced or restored Work.
- D. Replacement Cost, Obligations: Except as otherwise indicated, cost of replacing or restoring failing guaranties or warranted units or products is Contractor's obligation, without regard for whether Owner has already benefitted from use through a portion of anticipated useful service lives.
- E. Rejection of Warranties: Owner reserves the right, at time of Substantial Completion or thereafter, to reject coincidental product warranties submitted by Contractor, which in opinion of Owner detract from or confuse interpretation of requirements of Contract Documents.
- F. Contractor's Procurement Obligations: Do not purchase, subcontract for, or allow others to purchase or subcontract for materials or units of Work for Project where a special project guaranty, specified product warranty, certification, or similar commitment is required until it has been determined that entities required to sign or countersign such commitments are willing to do so.
- G. Specific Guaranty or Warranty Forms: Where a special project guaranty or specified project warranty is required, prepare a written document to contain terms and appropriate identification; ready for execution by required parties.
  - 1. A sample form is attached as the last article of this Section.
  - 2. Refer to individual sections of Divisions 2 through 33 for specific content and requirements.

3. Submit draft to Owner for approval prior to final executions.

## 1.3 REQUIREMENTS INCLUDED

- A. Compile specified warranties.
- B. Compile specified service and maintenance contracts.
- C. Co-execute submittals when so specified.
- D. Review submittals to verify compliance with Contract Documents.
- E. Submit to Architect for review and transmittal to Owner.

### 1.4 SUBMITTAL REQUIREMENTS

- A. Assemble warranties, bonds, and service and maintenance contracts, executed by each of the respective manufacturers, suppliers, and subcontractors.
- B. Number of original signed copies required: 2 each.
- C. Table of Contents: Neatly typed, in orderly sequence. Provide complete index information for each item.
  - 1. Product or work item with index number to bound item.
  - 2. Firm, with name of principal, address, and telephone number.
  - 3. Scope.
  - 4. Date of beginning of warranty, bond or service and maintenance contract
  - 5. Duration of warranty, bond, or service maintenance contract.
  - 6. Provide information for Owner's personnel:
    - a. Procedure to be followed in case of failure.
    - Circumstances which might affect the validity of warranty or bond.
  - 7. Contractor, name of responsible principal, address and telephone number.

# 1.5 FORM OF SUBMITTALS

- A. Prepare in duplicate packets.
- B. Format:
  - 1. Size 8-1/2 x 11 inches on punched sheets for standard 3-ring binder a. Fold larger sheets to fit into binders.
  - 2. Warranty-Guaranty wording shall be as printed below.
  - 3. Cover: Identify each packet with typed or printed title "GUARANTIES AND WARRANTIES". List:
    - a. Title of Project.
    - b. Name of Contractor.

C. Binders: Commercial quality, 3-ring, with durable and cleanable plastic covers.

## 1.6 TIME OF SUBMITTALS

- A. Make submittals within 10 days after date of Substantial Completion prior to final request for payment.
- B. For items or work, where acceptance is delayed materially beyond Date of Substantial Completion, provide updated submittal within 10 days after acceptance, listing date of acceptance as start of warranty period.

## 1.7 SUBMITTALS REQUIRED

- A. Submit warranties, bonds, service and maintenance contracts as specified in respective Sections of Specifications and as follows:
  - 1. Provide when noted in individual Sections of the Project Manual Divisions 2 through 33.

## 1.8 SAMPLE FORM OF WARRANTY-GUARANTY

- A. Print or type Warranty-Guaranty on installing contractor's own letterhead.
- B. Wording and signatures required.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

**END OF SECTION** 

# **GUARANTEE-WARRANTY**

When required by the specifications, warranties and/or guarantees other than one year shall be in the form of the following on the Contractor's own letterhead:

GUARANTEE-WARRANTY FOR INTERMOUNTAIN HEALTHCARE, OREM COMMUNITY HOSPITAL, PHARMACY REMODEL (FOR USP 797)

We hereby warrant and the General Contractor and/or Material Manufacturer guarantee that the \_(name of product, equipment or system)\_ that we have installed in the Intermountain Medical Center project, has been done in accordance with the Contract Documents and that the work as installed will fulfill the requirements of the guaranty-warranty included in the specifications. We agree to repair or replace any or all of our work, together with any other adjacent work which may be displaced by so doing, that may prove to be defective in its workmanship or material within a period of \_\_\_\_\_\_\_\_ years from the date of Substantial Completion, without any expense whatsoever to the Owner, ordinary wear and tear and unusual abuse or neglect excepted.

In the event of our failure to comply with the above mentioned conditions within sixty (60) days after being notified in writing by the Owner, we collectively or separately do hereby authorize the Owner to proceed to have said defects repaired and made good at our expense, and we will honor and pay the costs and charges therefore upon demand.

Signed	Countersigned	
(Subcontractor)	· ·	(General Contractor)
Name(Print)	Name(Print)	)
Company	Company	
Address	Address	
License No	_ License No	
Countersigned(Material Mar	nufacturer)	
Name(Print)		
Company		
Address		

## SECTION 017823 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

## PART 2 - RELATED DOCUMENTS

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

# 2.2 SUMMARY

- A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
  - 1. Operation and maintenance documentation directory.
  - 2. Emergency manuals.
  - 3. Operation manuals for systems, subsystems, and equipment.
  - 4. Maintenance manuals for the care and maintenance of products, materials, and finishes.
- B. Related Sections include the following:
  - 1. Division 1 Section "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.
  - 2. Division 1 Section "Project Record Documents" for preparing Record Drawings for operation and maintenance manuals.
  - 3. Divisions 2 through 33 Sections for specific operation and maintenance manual requirements for the Work in those Sections.

## 2.3 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

# 2.4 SUBMITTALS

- A. Final Submittal: Submit one copy one of each manual in final form at least 15 days before final inspection. Architect will return copy with comments within 15 days after final inspection.
  - Correct or modify each manual to comply with Architect's comments.
     Submit 3 copies of each corrected manual within 15 days of receipt of Architect's comments.

### 2.5 COORDINATION

A. Where operation and maintenance documentation includes information on installations by more than one factory-authorized service representative, assemble and coordinate information furnished by representatives and prepare manuals.

## PART 3 - OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

- A. Organization: Include a section in the directory for each of the following:
  - 1. List of documents.
  - 2. List of systems.
  - 3. List of equipment.
  - 4. Table of contents.
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
- D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

# 3.2 MANUALS, GENERAL

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
  - 1. Title page.
  - 2. Table of contents.
  - 3. Manual contents.
- B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:
  - 1. Subject matter included in manual.
  - 2. Name and address of Project.
  - 3. Name and address of Owner.
  - 4. Date of submittal.

- 5. Name, address, and telephone number of Contractor.
- Cross-reference to related systems in other operation and maintenance manuals.
- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
  - 1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
  - 1. Binders/Maintenance Manuals: Organize operation and maintenance data into suitable sets of manageable size. Binders shall be Red Buckram binders with easy view metal for sheet size 11" X 8 ½" with expandable metal capacity as required for the project, rivet through construction with library corners using #12 BB and lining with same materials as cover, front cover and back-bone foil stamped in white. Binders shall be as manufactured by Hiller Bookbinding or equal. The master index sheet and each tabbed index sheet shall be AICO Gold-Line indexes or equal. Mark appropriate identification on front spine of each binder. Include the following types of information:
    - a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
    - b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
  - 2. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
  - 3. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
    - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
    - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

## 3.3 EMERGENCY MANUALS

A. Content: Organize manual into a separate section for each of the following:

- 1. Type of emergency.
- 2. Emergency instructions.
- 3. Emergency procedures.
- B. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
  - 1. Fire.
  - 2. Flood.
  - Gas leak.
  - 4. Water leak.
  - 5. Power failure.
  - 6. Water outage.
  - 7. System, subsystem, or equipment failure.
  - 8. Chemical release or spill.
- C. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
- D. Emergency Procedures: Include the following, as applicable:
  - 1. Instructions on stopping.
  - 2. Shutdown instructions for each type of emergency.
  - 3. Operating instructions for conditions outside normal operating limits.
  - 4. Required sequences for electric or electronic systems.
  - 5. Special operating instructions and procedures.

## 3.4 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
  - 1. System, subsystem, and equipment descriptions.
  - 2. Performance and design criteria if Contractor is delegated design responsibility.
  - 3. Operating standards.
  - 4. Operating procedures.
  - 5. Operating logs.
  - 6. Wiring diagrams.
  - 7. Control diagrams.
  - 8. Piped system diagrams.
  - 9. Precautions against improper use.
  - 10. License requirements including inspection and renewal dates.
- B. Descriptions: Include the following:
  - 1. Product name and model number.
  - 2. Manufacturer's name.
  - 3. Equipment identification with serial number of each component.

- 4. Equipment function.
- 5. Operating characteristics.
- 6. Limiting conditions.
- 7. Performance curves.
- 8. Engineering data and tests.
- 9. Complete nomenclature and number of replacement parts.
- C. Operating Procedures: Include the following, as applicable:
  - 1. Startup procedures.
  - 2. Equipment or system break-in procedures.
  - 3. Routine and normal operating instructions.
  - 4. Regulation and control procedures.
  - 5. Instructions on stopping.
  - 6. Normal shutdown instructions.
  - 7. Seasonal and weekend operating instructions.
  - 8. Required sequences for electric or electronic systems.
  - 9. Special operating instructions and procedures.
- D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- E. Piped Systems: Diagram piping as installed and identify color-coding where required for identification.

## 3.5 PRODUCT MAINTENANCE MANUAL

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Product Information: Include the following, as applicable:
  - 1. Product name and model number.
  - 2. Manufacturer's name.
  - 3. Color, pattern, and texture.
  - 4. Material and chemical composition.
  - 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
  - 1. Inspection procedures.
  - 2. Types of cleaning agents to be used and methods of cleaning.
  - 3. List of cleaning agents and methods of cleaning detrimental to product.

- 4. Schedule for routine cleaning and maintenance.
- 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
  - 1. Include procedures to follow and required notifications for warranty claims.

## 3.6 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL

- A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
  - 1. Standard printed maintenance instructions and bulletins.
  - 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
  - 3. Identification and nomenclature of parts and components.
  - 4. List of items recommended to be stocked as spare parts.
- D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
  - 1. Test and inspection instructions.
  - 2. Troubleshooting guide.
  - 3. Precautions against improper maintenance.
  - 4. Aligning, adjusting, and checking instructions.
  - 5. Demonstration and training videotape, if available.
- E. Maintenance and Service Schedules: Include service and Iubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
  - 1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.

- 2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- G. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
  - 1. Include procedures to follow and required notifications for warranty claims.

### PART 4 - EXECUTION

# 4.1 MANUAL PREPARATION

- A. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.
- B. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- C. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
  - 1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
  - 2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- D. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
  - 1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- E. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with

information contained in Record Drawings to ensure correct illustration of completed installation.

- 1. Do not use original Project Record Documents as part of operation and maintenance manuals.
- 2. Comply with requirements of newly prepared Record Drawings in Division 1 Section "Project Record Documents."
- F. All manuals will be delivered in electronic format to the owner upon project completion. No hard copy manuals will be accepted.
- G. Comply with Division 1 Sections for schedule for submitting operation and maintenance documentation.

**END OF SECTION** 

# **SECTION 017839 - PROJECT RECORD DOCUMENTS**

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

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

# 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
  - 1. Record Drawings.
  - 2. Record Specifications.
  - 3. Record Product Data.
- B. Related Sections include the following:
  - 1. Division 1 Section for general closeout procedures.
  - 2. Division 1 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
  - 3. Divisions 2 through 33 Sections for specific requirements for Project Record Documents of the Work in those Sections.

## 1.3 SUBMITTALS

- A. Record Drawings: Comply with the following:
  - 1. Number of Copies: Submit one set(s) of marked-up Record Prints.
    - a. Final Submittal: Submit one set(s) of marked-up Record Prints showing modifications for trades involved in the project.
- B. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit one copy of each Product Data submittal.
  - 1. Where Record Product Data is required as part of operation and maintenance manuals, submit marked-up Product Data as an insert in manual instead of submittal as Record Product Data.

### PART 2 - PRODUCTS

# 2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of blue- or black-line white prints of the Contract Drawings and Shop Drawings.
  - 1. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
    - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
    - b. Accurately record information in an understandable drawing technique.
    - c. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
  - 2. Content: Types of items requiring marking include, but are not limited to, the following:
    - a. Dimensional changes to Drawings.
    - b. Revisions to details shown on Drawings.
    - c. Depths of foundations below first floor.
    - d. Locations and depths of underground utilities.
    - e. Revisions to routing of piping and conduits.
    - f. Revisions to electrical circuitry.
    - g. Actual equipment locations.
    - h. Duct size and routina.
    - i. Locations of concealed internal utilities.
    - j. Changes made following Architect's written orders.
    - k. Details not on the original Contract Drawings.
    - l. Field records for variable and concealed conditions.
  - 3. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
  - 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
  - 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
  - 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

# 2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
  - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.

## 2.3 MISCELLANEOUS RECORD SUBMITTALS

A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

## PART 3 - EXECUTION

# 3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
- B. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.

**END OF SECTION** 

# SECTION 017900 - CLEANING

#### PART 1 - GENERAL

## 1.1 SUMMARY

- A. Work Included: Requirements for periodic, general, and final cleaning of the project.
- B. Provide temporary and periodic clean-up of extra materials, waste and general debris during construction of the work, together with the final clean-up and cleaning, polishing and other "housekeeping" required to bring various surfaces to an acceptable condition prior to final inspection, or before additional work is done during construction.
- C. This Section includes requirements for Cleaning for all phases of the Project. Some requirements of this Section may not be applicable to individual project Phases.

# 1.2 GENERAL REQUIREMENTS

- A. Maintain premises and public properties free from accumulations of waste, debris, and rubbish in accordance with applicable safety and insurance standards and local ordinances.
- B. The acceptable level of cleanliness of the Project shall be the decision of the Architect.
  - 1. Work necessary to achieve such acceptable state shall be performed when required.
- C. Burning: Burning of waste materials and/or rubbish on Site is not permitted.

## 1.3 CLEAN-UP DURING CONSTRUCTION

- A. During construction, provide cleaning-up as follows:
  - 1. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
  - 2. Remove debris and rubbish from pipe chases, plenums, down spouts, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
  - 3. Broom and vacuum clean interior areas prior to start of surface finishing and continue cleaning to eliminate dust.
  - 4. Remove waste materials, debris, and rubbish from site weekly, or more often if needed, and dispose off-site in compliance with local regulations.
  - 5. Storage areas: Ensure that materials to be used for construction are stored in designated structures or areas by the appropriate trades.

    Maintain such areas or structures in a clean condition for the life of the

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- Project.
- 6. Containers: Provide appropriate containers, such as dump containers, and locate on site for collection of waste materials and rubbish.
- 7. Supervision: Oversee all cleaning of areas by the trades using them. Ensure that resulting accumulations are deposited in appropriate containers.
- 8. Clean-up: Daily, weekly, or as necessary, clean-up floors and Site areas. Remove all loose materials, by sweeping if necessary.

## 1.4 FINAL CLEANING

A. Provide final clean-up and polishing just prior to final inspection and/or acceptance of the work of the Project.

# B. Preparation:

- 1. Prior to final inspection, remove all loose material of any nature, except spare parts, loose furniture or furnishings, manuals, parts books, and similar items.
- 2. Remove all temporary buildings, utility lines or pipes and other work of a temporary nature.
- 3. Remove all temporary wrappings. Leave no trace of wrap or adhesive.

# C. Surface Cleaning:

- 1. Special cleaning for specific units of Work as specified and as shown on Drawinas.
- 2. Provide final cleaning of the Work, at time indicated, consisting of cleaning each surface or unit of Work to normal "clean" condition expected for a first-class building cleaning and maintenance program.
- 3. Comply with manufacturer's instructions for cleaning operations.
- D. The following are examples, but not by way of limitation, of cleaning levels required:
  - 1. Remove labels which are not required as permanent labels.
  - 2. Clean transparent materials, including mirrors and window/door glass, to a polished condition, removing substances which are noticeable as vision-obscuring materials. Replace broken glass and damaged transparent materials.
  - Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of dust, stains, films, and similar noticeable distracting substances.
    - a. Except as otherwise indicated, avoid disturbance of natural weathering of exterior surfaces.
    - b. Restore reflective surfaces to original reflective condition.
  - 4. Wipe surfaces of mechanical and electrical equipment clean, including elevator equipment and similar equipment; remove excess lubrication and other substances.
  - 5. Remove debris and surface dust from limited-access spaces including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
  - 6. Clean concrete floors in unoccupied spaces broom clean.

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- 7. Vacuum clean carpeted surfaces and similar soft surfaces.
- 8. Clean plumbing fixtures to a sanitary condition, free of stains including those resulting from water exposure.
- 9. Clean light fixtures and lamps so as to function with full efficiency.
- 10. Clean Project Site (staging areas, Contractor Parking areas), including landscape development areas, of litter and foreign substances.
- 11. Sweep paved areas to a broom-clean condition; remove stains, petro-chemical spills, and other foreign deposits.
- E. Pest Control: Engage an experienced exterminator to make a final inspection of Project, and to rid Project of rodents, insects, and other pests.
- F. Removal of Protection: Except as otherwise indicated or requested by Hospital Representative, remove temporary protection devices and facilities which were installed during course of Work to protect previously completed Work during remainder of construction period.
- G. Compliances:
  - 1. Comply with safety standards and governing regulations for cleaning operations.
  - Do not burn waste materials at site, or bury debris or excess materials on the property, or discharge volatile or other harmful or dangerous materials into drainage systems.
  - 3. Remove waste materials from site and dispose of in a lawful manner.
- H. Moving Parts: Lubricate moving parts as recommended by the parts manufacturer, or as directed by the Architect. Wipe clean, all surplus lubricants.
- I. Protection: Protect finished floors from damage due to traffic or other causes.

**END OF SECTION** 

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## SECTION 024119 - SELECTIVE DEMOLITION

### PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Demolition and removal of selected portions of a building or structure.
  - 2. Repair procedures for selective demolition operations.

### 1.3 DEFINITIONS

- A. Remove: Carefully detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.
- C. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

### 1.4 MATERIALS OWNERSHIP

A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, demolished materials shall become Contractor's property and shall be removed from Project site.

## 1.5 SUBMITTALS

A. Proposed Dust-Control and Noise-Control Measures: Submit statement or drawing that indicates the measures proposed for use, proposed locations, and proposed time frame for their operation. Identify options if proposed measures are later determined to be inadequate.

## 1.6 PROJECT CONDITIONS

A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.

- B. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.
  - 1. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from authorities having jurisdiction.
- C. Owner assumes no responsibility for condition of areas to be selectively demolished.
  - 1. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
  - 1. If materials suspected of containing hazardous materials are encountered in the work, Contractor will be responsible for removal and disposal of all materials. A copy of an Asbestos Report will be provided to the Contractor prior to construction beginning. See Bid Proposal for unit price to remove hazardous materials.
- E. Storage or sale of removed items or materials on-site will not be permitted.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
  - 1. Maintain fire-protection facilities in service during selective demolition operations.

# PART 2 - PRODUCTS (Not Applicable)

### PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.

# 3.2 UTILITY SERVICES

- A. Existing Utilities: Maintain services indicated to remain and protect them against damage during selective demolition operations.
- B. Do not interrupt existing utilities serving occupied or operating facilities unless authorized in writing by Owner and authorities having jurisdiction. Provide

temporary services during interruptions to existing utilities, as acceptable to Owner and to authorities having jurisdiction.

- 1. Provide at least 72 hours' notice to Owner if shutdown of service is required during changeover.
- C. Utility Requirements: Locate, identify, disconnect, and seal or cap off indicated utilities serving areas to be selectively demolished.

## 3.3 PREPARATION

- A. Temporary Enclosures: Provide temporary enclosures for protection of existing building and construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
  - 1. Where heating or cooling is needed and permanent enclosure is not complete, provide insulated temporary enclosures. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions and effects.
- B. Temporary Partitions: Erect and maintain dustproof partitions and temporary enclosures to limit dust and dirt migration and to separate areas from fumes and noise.

## 3.4 SELECTIVE DEMOLITION

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
  - Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
  - 2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  - 3. Dispose of demolished items and materials promptly.
- B. Existing Facilities: Comply with building manager's requirements for using and protecting building facilities during selective demolition operations.

## 3.5 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
- B. Burning: Do not burn demolished materials.

C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

**END OF SECTION** 

# **SECTION 050500 - METAL FASTENERS**

#### PART 1 - GENERAL

## 1.1 SUMMARY

- A. Work Included: This Section establishes general standards and requirements for metal fasteners utilized for attachment of items to the primary structure of the building and is incorporated in others Sections of these specifications where referenced, including:
  - 1. Expansion Bolts.
  - 2. Powder Actuated Devices.
  - Bolts, screws and other fasteners.
- B. Work Specified Elsewhere:
  - 1. DIVISION 23 Mechanical.

#### 1.2 SUBMITTALS

- A. Comply with provisions of Section 013300 Submittal Procedures.
- B. Product Data: Manufacturers' information on materials, fabrication, and installation. Include current ICBO Reports and other information to substantiate compliance with Contract Documents.
- C. Substitutions: Include with requests for substitution of fastening device type, minimum embedment, length, load capacity for pull out and shear, and installation torque of fasteners and statement that fastening devices meet or exceed requirements specified in Contract Documents.

## 1.3 QUALITY ASSURANCE

- A. Field Quality Control:
  - 1. The Owner's Testing Lab will perform and report on tests and inspections as follows:
  - 2. Expansion Bolts:
    - a. Test 50 percent of drilled-in anchorages to 2.0 times the allowable load specified with special inspection in tension.
    - b. If any anchor fails testing, test all anchors of the same category installed that day until twenty consecutive anchors pass, then resume the initial testing frequency. Cost of this testing shall be borne by Contractor.

#### PART 2 - PRODUCTS

## 2.1 MATERIALS

- A. Expansion Bolts: Hilti, Inc.'s Kwik Bolt II, Kwik Bolt III or equal; wedge type stud expansion anchor system, comply with FS FF-S-325, Group II, Type 4, Class 1. Provide stainless steel expansion bolts for exterior exposure.
- B. Powder Actuated Devices: Hilti Fastening Systems, Impex Tool Corporation, or equal; pins and tools. Tempered steel pins with special corrosion-resistant finish. Provide guide washers to accurately control penetration. Accomplish fastening by low-velocity piston-driven powder-actuated tool.
  - 1. Type and Size: Hilti X-DNI, dome head nail with smooth shank, 0.145-inch shank diameter, not less than 1-1/4-inch penetration.
- C. Nuts and Bolts: ASTM A307 with suitable nuts, in accordance with ASTM A563, and washers 1/4-inch diameter, unless otherwise noted.

# PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Expansion Bolts: Install in predrilled holes for fastening items into concrete.
  - 1. Install expansion bolts according to the manufacturer's instructions as to tools, torque and tightening procedure.
  - 2. Expansion bolt locations and spacings: As shown.
  - 3. Edge Distance: Not less than 10 bolt diameters.
  - 4. Unless otherwise noted, install expansion bolts with manufacturer's recommended minimum embedments. Embedment length is exclusive of thickness of floor coverings, grout pads or other overlays.
  - 5. Do not recess expansion bolts more than one-fourth of the nominal bolt diameter. Abandon overdrilled holes or partially fill with nonshrink grout and redrill when grout has set.
  - 6. Abandon holes if the axis of a drilled hole deviates more than 5 degrees from normal to the concrete surface.
  - 7. If a concrete reinforcing bar is encountered during drilling, immediately terminate drilling and notify the Architect. Subject to review and approval the SEOR, the Architect may authorize using one of the following procedures:
    - a. If the location may be shifted, fill abandoned hole with nonshrink grout and install expansion bolt with a minimum of 1/2 inch of sound concrete between the expansion bolt and the abandoned hole, or...
    - b. If the location may not be shifted, use a diamond core drill to cut the rebar and drill the hole beyond the reinforcing such that the whole wedge portion of the expansion bolt can be expanded below the bar, or...
    - c. If the location may not be shifted, core an oversize hole at the direction of the Architect and grout an acceptable anchor in place.
- B. Fasten Work tightly to prevent rattle or vibration except where expansion-contraction tolerances are required.

- C. When expansion bolts are installed through metal deck into concrete slab above, embedment shall not extend closer than 3/4-inch to top of concrete. Locate at center of bottom flute. Minimum embedment shall be 1-1/2-inches above top flute of decking.
- D. Expansion Bolt Test Values:
  - 1. Test Procedure: Apply proof test loads by means of hydraulic ram, calibrating spring loading device, or torque wrench without removing nut if possible. If not possible, remove nut and install a threaded coupler to same tightness as original nut using a torque wrench.
  - 2. Test Equipment: Calibrated by approved testing laboratory per standard industry procedures.
  - 3. Expansion Bolts shall withstand following minimum test loads for specified wedge type anchors:

Anchor Thread Size (diameter in inches)	Tension Test Load (lbs.)	<u>Test Torque</u> (ft-lbs.)	
1/4	800	10	
3/8	1100	25	
1/2	2000	50	
5/8	2300	80	
3/4	3700	150	
1	5800	250	

- 4. Acceptance Criteria:
  - a. Hydraulic Ram Method: Expansion bolt is acceptable if there is no observable movement nor loosening of washer at application of tension test load.
  - b. Torque Wrench Method: Expansion bolt is acceptable if the test torque is reached within one-half turn of the nut.
- 5. Test Timing: Within 24 hours after expansion bolt installation and in the presence of the Inspector of Record.

**END OF SECTION** 

# SECTION 076200 - SHEET METAL FLASHING AND TRIM

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. This Section includes the following sheet metal flashing and trim:
  - Manufactured through-wall flashing
  - 2. Manufactured reglets.
  - 3. Formed low-slope roof flashing and trim.
  - 4. Formed wall sheet metal fabrications
  - Formed equipment support flashing.

## 1.3 PERFORMANCE REQUIREMENTS

- A. General: Install sheet metal flashing and trim to withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failing, rattling, leaking, and fastener disengagement.
- B. Fabricate and install roof edge flashing and copings capable of resisting the following forces according to recommendations in FMG Loss Prevention Data Sheet 1-49:
  - 1. Wind Zone 1: For velocity pressures of 21 to 30 lbf/sq. ft.: 60-lbf/sq. ft. perimeter uplift force, 90-lbf/sq. ft. corner uplift force, and 30-lbf/sq. ft. outward force.
- C. Thermal Movements: Provide sheet metal flashing and trim that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures by preventing buckling, opening of joints, hole elongation, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Provide clips that resist rotation and avoid shear stress as a result of sheet metal and trim thermal movements. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
  - 1. Temperature Change (Range): 120 deg F, ambient; 180 deg F, material surfaces.
- D. Water Infiltration: Provide sheet metal flashing and trim that do not allow water infiltration to building interior.

#### 1.4 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Shop Drawings: Show layouts of sheet metal flashing and trim, including plans and elevations. Distinguish between shop- and field-assembled work. Include the following:
  - 1. Identify material, thickness, weight, and finish for each item and location in Project.
  - 2. Details for forming sheet metal flashing and trim, including profiles, shapes, seams, and dimensions.

- 3. Details for fastening, joining, supporting, and anchoring sheet metal flashing and trim, including fasteners, clips, cleats, and attachments to adjoining work.
- 4. Details of expansion-joint covers, including showing direction of expansion and contraction.
- C. Samples for Initial Selection: For each type of sheet metal flashing and trim indicated with factory-applied color finishes.
  - 1. Include similar Samples of trim and accessories involving color selection.

## 1.5 QUALITY ASSURANCE

A. Sheet Metal Flashing and Trim Standard: Comply with SMACNA's "Architectural Sheet Metal Manual." Conform to dimensions and profiles shown unless more stringent requirements are indicated.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver sheet metal flashing materials and fabrications undamaged. Protect sheet metal flashing and trim materials and fabrications during transportation and handling.
- B. Unload, store, and install sheet metal flashing materials and fabrications in a manner to prevent bending, warping, twisting, and surface damage.
- C. Stack materials on platforms or pallets, covered with suitable weathertight and ventilated covering. Do not store sheet metal flashing and trim materials in contact with other materials that might cause staining, denting, or other surface damage.

## 1.7 COORDINATION

A. Coordinate installation of sheet metal flashing and trim with interfacing and adjoining construction to provide a leakproof, secure, and noncorrosive installation.

# PART 2 - PRODUCTS

# 2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
  - 1. Products: Subject to compliance with requirements, provide one of the products specified.

## 2.2 SHEET METALS

- A. Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653M, G90 coating designation; structural quality, mill phosphatized for field painting where indicated.
- B. Prepainted, Metallic-Coated Steel Sheet: Steel sheet metallic coated by the hot-dip process and prepainted by the coil-coating process to comply with ASTM A 755/A 755M.
  - 1. Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653M, G90 (Z275) coating designation; structural quality.
  - 2. Exposed Finishes: Apply the following coil coating:

- a. Metallic Fluoropolymer: AAMA 621. Three-coat fluoropolymer finish with suspended metallic flakes containing not less than 70 percent PVDF resin by weight in both color coat and clear topcoat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
  - 1) Color: As selected by Architect from manufacturer's full range.
- C. Lead Sheet: ASTM B 749, Type L51121, copper-bearing lead sheet.
- D. Stainless-Steel Sheet: ASTM A 240/A 240M Type 304 dead soft, fully annealed; with smooth, flat surface.

#### 2.3 UNDERLAYMENT MATERIALS

A. Felts: ASTM D 226, Type II (No. 30), asphalt-saturated organic felt, nonperforated.

#### 2.4 MISCELLANEOUS MATERIALS

- A. General: Provide materials and types of fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation.
- B. Fasteners: Wood screws, annular threaded nails, self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads.
  - Fasteners for Flashing and Trim: Blind fasteners or self-drilling screws, gasketed, with hex washer head.
- C. Solder for Lead: ASTM B 32, Grade Sn50, 50 percent tin and 50 percent lead.
- D. Solder for Zinc: ASTM B 32, 60 percent lead and 40 percent tin with low antimony, as recommended by manufacturer.
- E. Elastomeric Sealant: ASTM C 920, elastomeric polyurethane or silicone polymer sealant; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.
- F. Asphalt Roofing Cement: ASTM D 4586, asbestos free, of consistency required for application.

# 2.5 FABRICATION, GENERAL

- A. General: Custom fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item indicated. Shop fabricate items where practicable. Obtain field measurements for accurate fit before shop fabrication.
- B. Fabricate sheet metal flashing and trim in thickness or weight needed to comply with performance requirements, but not less than that specified for each application and metal.
- C. Fabricate sheet metal flashing and trim without excessive oil canning, buckling, and tool marks and true to line and levels indicated, with exposed edges folded back to form hems.
  - 1. Fabricate nonmoving seams in accessories with flat-lock seams. Tin edges to be seamed, form seams, and solder.

- D. Expansion Provisions: Where lapped or bayonet-type expansion provisions in the Work cannot be used, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with elastomeric sealant concealed within joints.
- E. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal.
  - 1. Thickness: As recommended by SMACNA's "Architectural Sheet Metal Manual" for application but not less than thickness of metal being secured.

## 2.6 MANUFACTURED SHEET METAL FLASHING AND TRIM

- A. Reglets: Units of type, material, and profile indicated, formed to provide secure interlocking of separate reglet and counterflashing pieces, and compatible with flashing indicated.
  - 1. Manufacturers:
    - a. Cheney Flashing Company, Inc.
    - b. Fry Reglet Corporation.
    - c. Hickman, W. P. Company.
    - d. Keystone Flashing Company, Inc.
  - 2. Material: Galvanized steel, 0.0217 inch thick.
  - Surface-Mounted Type: Provide with slotted holes for fastening to substrate, with neoprene or other suitable weatherproofing washers, and with channel for sealant at top edge.
  - 4. Masonry Type: Provide with offset top flange for embedment in masonry mortar joint.

## 2.7 ROOF-DRAINAGE SHEET METAL FABRICATIONS

- A. Parapet Scuppers: Fabricate scuppers to dimensions required, with closure flange trim to exterior, 4-inch-wide wall flanges to interior, and base extending 4 inches beyond cant or tapered strip into field of roof. Fabricate from the following materials:
  - 1. Galvanized Steel: 0.028 inch thick.

## 2.8 LOW-SLOPE ROOF SHEET METAL FABRICATIONS

- A. Copings: Fabricate in minimum 96-inch-long, but not exceeding 10-foot-long, sections. Fabricate joint plates of same thickness as copings. Furnish with continuous cleats to support edge of external leg and drill elongated holes for fasteners on interior leg. Miter corners, seal, and solder or weld watertight.
  - 1. Joint Style: Standing seam joint.
    - a. Galvanized Steel: 0.0396 inch thick in concealed areas.
    - b. Prepainted, Metallic-Coated Steel: 0.0396 inch thick in exposed areas.
- B. Roof and Roof-to-Wall Transition Expansion-Joint Cover: Fabricate from the following materials. Shop fabricate interior and exterior corners.
  - Galvanized Steel: 0.034 inch thick.
- C. Base Flashing: Fabricate from the following material:
  - Galvanized Steel: 0.0276 inch thick.
- D. Counterflashing: Fabricate from the following material:
  - 1. Galvanized Steel: 0.0217 inch thick.

- E. Flashing Receivers: Fabricate from the following material:
  - 1. Galvanized Steel: 0.0217 inch thick.
- F. Roof-Penetration Flashing: Fabricate from the following material:
  - 1. Galvanized Steel: 0.0276 inch thick.
- G. Roof-Drain Flashing: Fabricate from the following material:
  - 1. Lead: 4.0 lb/sq. ft., hard tempered.

#### 2.9 MISCELLANEOUS SHEET METAL FABRICATIONS

- A. Equipment Support Flashing: Fabricate from the following material:
  - Galvanized Steel: 0.0276 inch thick.

## 2.10 WALL SHEET METAL FABRICATIONS

- A. Through-Wall Flashing (Drip plates): Fabricate continuous flashings in minimum 96-inch-long, but not exceeding 12-foot-long, sections, at bottom of veneers and at shelf angles. Fabricate discontinuous lintel, sill, and similar flashings to extend 6 inches beyond each side of wall openings; and form with 2-inch-high, end dams. Fabricate from the following materials:
  - Stainless Steel: 0.016 inch thick.
- B. Opening Flashings in Frame Construction: Fabricate head, sill, and similar flashings to extend 4 inches beyond wall openings. Form head and sill flashing with 2-inch-high, end dams. Fabricate from the following materials:
  - Stainless Steel: 0.016 inch thick.

## 2.11 FINISHES

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

## PART 3 - EXECUTION

# 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions and other conditions affecting performance of work.
  - 1. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.
  - 2. Proceed with installation only after unsatisfactory conditions have been corrected.

## 3.2 INSTALLATION, GENERAL

- A. General: Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement. Use fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required to complete sheet metal flashing and trim system.
  - 1. Torch cutting of sheet metal flashing and trim is not permitted.
- B. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating or by other permanent separation as recommended by fabricator or manufacturers of dissimilar metals.
  - 1. Coat side of lead sheet metal flashing and trim with bituminous coating where flashing and trim will contact wood, ferrous metal, or cementitious construction.
  - 2. Underlayment: Where installing metal flashing directly on cementitious or wood substrates, install a course of felt underlayment and cover with a slip sheet or install a course of polyethylene underlayment.
  - 3. Bed flanges in thick coat of asphalt roofing cement where required for waterproof performance.
- C. Install exposed sheet metal flashing and trim without excessive oil canning, buckling, and tool marks.
- D. Install sheet metal flashing and trim true to line and levels indicated. Provide uniform, neat seams with minimum exposure of solder, welds, and elastomeric sealant.
- E. Install sheet metal flashing and trim to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
  - Space cleats not more than 12 inches apart. Anchor each cleat with two fasteners. Bend tabs over fasteners.
- F. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet with no joints allowed within 24 inches of corner or intersection. Where lapped or bayonet-type expansion provisions cannot be used or would not be sufficiently watertight, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with elastomeric sealant concealed within joints.
- G. Fasteners: Use fasteners of sizes that will penetrate substrate not less than 1-1/4 inches for nails and not less than 3/4 inch for wood screws.
  - 1. Galvanized or Prepainted, Metallic-Coated Steel: Use stainless-steel fasteners.
- H. Seal joints with elastomeric sealant as required for watertight construction.
- Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pretin edges
  of sheets to be soldered to a width of 1-1/2 inches except where pretinned surface would show
  in finished Work.
  - Do not solder prepainted sheet.

# 3.3 ROOF FLASHING INSTALLATION

A. General: Install sheet metal roof flashing and trim to comply with performance requirements and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, set units true to line, and level as indicated. Install work with laps, joints, and seams that will be permanently watertight.

- B. Copings: Anchor to resist uplift and outward forces according to recommendations in FMG Loss Prevention Data Sheet 1-49 for specified wind zone and as indicated.
  - 1. Interlock exterior bottom edge of coping with continuous cleats anchored to substrate at 16-inch centers.
  - 2. Anchor interior leg of coping with screw fasteners and washers at 18-inch centers.
- C. Pipe or Post Counterflashing: Install counterflashing umbrella with close-fitting collar with top edge flared for elastomeric sealant, extending a minimum of 4 inches over base flashing. Install stainless-steel draw band and tighten.
- D. Counterflashing: Coordinate installation of counterflashing with installation of base flashing. Insert counterflashing in reglets or receivers and fit tightly to base flashing. Extend counterflashing 4 inches over base flashing. Lap counterflashing joints a minimum of 4 inches and bed with elastomeric sealant.
  - Secure in a waterproof manner by means of snap-in installation and sealant or lead wedges and sealant.
- E. Roof-Penetration Flashing: Coordinate installation of roof-penetration flashing with installation of roofing and other items penetrating roof. Install flashing as follows:
  - Seal with elastomeric sealant and clamp flashing to pipes penetrating roof except for lead flashing on vent piping.

#### 3.4 WALL FLASHING INSTALLATION

- A. General: Install sheet metal wall flashing to intercept and exclude penetrating moisture according to SMACNA recommendations and as indicated. Coordinate installation of wall flashing with installation of wall-opening components such as windows, doors, and louvers.
- B. Through-Wall Flashing: Installation of manufactured through-wall flashing is specified in Division 4 Section "Unit Masonry Assemblies."

# 3.5 MISCELLANEOUS FLASHING INSTALLATION

A. Equipment Support Flashing: Coordinate installation of equipment support flashing with installation of roofing and equipment. Weld or seal flashing with elastomeric sealant to equipment support member.

## 3.6 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.
- B. Clean and neutralize flux materials. Clean off excess solder and sealants.
- C. Remove temporary protective coverings and strippable films as sheet metal flashing and trim are installed. On completion of installation, clean finished surfaces, including removing unused fasteners, metal filings, pop rivet stems, and pieces of flashing. Maintain in a clean condition during construction.
- D. Replace sheet metal flashing and trim that have been damaged or that have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION 076200

#### **SECTION 079200 - JOINT SEALANTS**

## PART 1 - GENERAL

# 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. This Section includes sealants for the following applications, including those specified by reference to this Section:
  - 1. Exterior joints in the following vertical surfaces and nontraffic horizontal surfaces:
    - a. Perimeter joints between materials listed above and frames of doors and windows.
  - 2. Exterior joints in the following horizontal traffic surfaces:
    - a. Control, expansion, and isolation joints in cast-in-place concrete slabs.
  - 3. Interior joints in the following vertical surfaces and horizontal nontraffic surfaces:
    - a. Vertical control joints on exposed surfaces of interior unit masonry and concrete walls and partitions.
    - b. Perimeter joints between interior wall surfaces and frames of interior doors, windows, and elevator entrances.
    - c. Joints between plumbing fixtures and adjoining walls, floors, and counters.
    - d. Other joints as indicated.

# 1.3 PERFORMANCE REQUIREMENTS

A. Provide elastomeric joint sealants that establish and maintain watertight and airtight continuous joint seals without staining or deteriorating joint substrates.

## 1.4 SUBMITTALS

A. Product Data: For each joint-sealant product indicated.

# 1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to Project site in original unopened containers or bundles with labels indicating manufacturer, product name and designation, color, expiration date, pot life, curing time, and mixing instructions for multicomponent materials.

B. Store and handle materials in compliance with manufacturer's written instructions to prevent their deterioration or damage due to moisture, high or low temperatures, contaminants, or other causes.

#### 1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not proceed with installation of joint sealants under the following conditions:
  - 1. When ambient and substrate temperature conditions are outside limits permitted by joint sealant manufacturer.
- B. Joint-Width Conditions: Do not proceed with installation of joint sealants where joint widths are less than those allowed by joint sealant manufacturer for applications indicated.
- C. Joint-Substrate Conditions: Do not proceed with installation of joint sealants until contaminants capable of interfering with adhesion are removed from joint substrates.

## PART 2 - PRODUCTS

## 2.1 PRODUCTS AND MANUFACTURERS

A. Products: Subject to compliance with requirements, provide one of the products indicated for each type in the sealant schedules at the end of Part 3.

# 2.2 MATERIALS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.
- B. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range for this characteristic.

## 2.3 ELASTOMERIC JOINT SEALANTS

A. Elastomeric Sealant Standard: Comply with ASTM C 920 and other requirements indicated for each liquid-applied chemically curing sealant in the Elastomeric Joint-Sealant Schedule at the end of Part 3, including those referencing ASTM C 920 classifications for type, grade, class, and uses.

#### 2.4 ACOUSTICAL JOINT SEALANTS

A. Acoustical Sealant for Exposed and Concealed Joints: For each product of this description indicated in the Acoustical Joint-Sealant Schedule at the end of

Part 3, provide manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C 834 and the following:

1. Product effectively reduces airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.

## 2.5 JOINT-SEALANT BACKING

A. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

## 2.6 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants with joint substrates.
- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

# PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

## 3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint sealant manufacturer's written instructions and the following requirements:
  - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and

- compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
- 2. Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil-free compressed air. Porous joint surfaces include the following:
  - a. Concrete.
  - b. Masonry.
  - c. Unglazed surfaces of ceramic tile.
- 3. Remove laitance and form-release agents from concrete.
- B. Joint Priming: Prime joint substrates where recommended in writing by joint sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

# 3.3 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations of ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Acoustical Sealant Application Standard: Comply with recommendations of ASTM C 919 for use of joint sealants in acoustical applications as applicable to materials, applications, and conditions indicated.
- D. Install sealant backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
- E. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and back of joints.
- F. Install sealants by proven techniques to comply with the following and at the same time backings are installed:
  - 1. Place sealants so they directly contact and fully wet joint substrates.
  - 2. Completely fill recesses provided for each joint configuration.

- 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- G. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
  - 1. Remove excess sealants from surfaces adjacent to joint.
  - 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.

## 3.4 CLEANING

A. Clean off excess sealants or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

#### 3.5 PROTECTION

A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from the original work.

# 3.6 ELASTOMERIC JOINT-SEALANT SCHEDULE

- A. Multicomponent Nonsag Polysulfide Sealant: Where joint sealants of this type are indicated, provide products complying with the following:
  - 1. Products: Provide one of the following:
    - a. cm-60; W.R Meadows, Inc.
    - b. T-2235-M: Morton International, Inc.
    - c. T-2282; Morton International, Inc.
    - d. Thiokol 2P: Morton International, Inc.
    - e. GC-5 Synthacalk; Pecora Corporation.
    - f. Two-Part Sealant; Sonneborn Building Products Div., ChemRex Inc.
  - 2. Type and Grade: M (multicomponent) and NS (nonsag).
  - 3. Class: 25.
  - 4. Uses Related to Exposure: T (traffic)

## 3.7 LATEX JOINT-SEALANT SCHEDULE

- A. Latex Sealant: Where joint sealants of this type are indicated, provide products complying with the following:
  - 1. Products: Provide one of the following:
    - a. Chem-Calk 600; Bostik Inc.

- b. NuFlex 330; NUCO Industries, Inc.
- c. LC 160 All Purpose Acrylic Caulk; Ohio Sealants, Inc.
- d. AC-20; Pecora Corporation.
- e. PSI-701; Polymeric Systems, Inc.
- f. Sonolac; Sonneborn Building Products Div., ChemRex, Inc.
- g. Tremflex 834; Tremco.

# 3.8 ACOUSTICAL JOINT-SEALANT SCHEDULE

- A. Acoustical Sealant for Exposed and Concealed Joints: At all sound partitions and where joint sealants of this type are indicated, provide products complying with the following:
  - 1. Products: Provide one of the following:
    - a. AC-20 FTR Acoustical and Insulation Sealant; Pecora Corporation.
    - b. SHEETROCK Acoustical Sealant; USG Corp., United States Gypsum Co.
- B. Acoustical Sealant for Concealed Joints: At all sound partitions and where joint sealants of this type are indicated, provide products complying with the following:
  - 1. Products: Provide one of the following:
    - a. Pro-Series SC-170 Rubber Base Sound Sealant; Ohio Sealants, Inc.
    - b. BA-98; Pecora Corporation.
    - c. Tremco Acoustical Sealant; Tremco.

**END OF SECTION** 

## **SECTION 099123- PAINTING**

## PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Work Included: Interior painting, complete as shown on Drawings and as specified.
  - 1. Work includes, but is not limited to, painting of following items, materials, and spaces:
    - a. Paint the following exposed electrical items to match adjacent surfaces even if the items are factory-finished:
      - All exposed conduit under walkway and in exterior storage room.
    - b. Paint hollow metal door and frame to match other exterior hollow metal doors and frames field verify.
    - c. Guardrails and handrails: Paint all exposed ferrous metal assemblies...
  - 2. Do not paint the following items:
    - a. Factory-finished items specified in various Sections.
    - b. Pre-finished wall, ceiling, and floor coverings.
    - c. Concrete traffic or walking decks, walks, steps, and ramps.
    - d. Code-Required Labels: Keep equipment identification and fire rating labels free of paint.
    - e. Surfaces concealed in walls and above ceilings except as specifically indicated otherwise.
    - f. Ducts, piping, conduit, and equipment concealed in walls and ceilings, unless specifically indicated otherwise.
    - g. Do not paint "Shell Areas" as shown on drawings except paint all sides of doors and frames at walls into finished areas.
    - h. Mechanical or elevator shafts not requiring periodic cleaning.
    - i. Mechanically-finished nonferrous metal, such as stainless steel, aluminum, and bronze, except exposed mechanical and electrical items.
    - j. Interior spaces specifically noted as unpainted.
  - 3. Note: This Section includes a comprehensive listing of paint finish types. Not all paint systems included herein may be required by the Scope of Work of this Project, or the scope of some finishes may be very limited. The responsibility of the Contractor to schedule the Work so that all specified and required Painting Scope is included in the Scope of Work for the Project.
- B. Work Specified Elsewhere:
  - 1. Section 050500 Metal Fasteners.
  - 2. Section 079200 Joint Sealants.

## 1.2 SUBMITTALS

A. Comply with requirements of Section 013300 – Submittal Procedures.

B. Product Data: Submit complete list of materials proposed for use, together with manufacturer's data and specifications.

# C. Samples:

- 1. Opaque Colors and Finishes: Submit samples, on hardboard, using materials accepted for Project, of each color and paint finish selected with texture to simulate actual conditions. Prepare three samples, 8-1/2 inches by 11 inches, with required number of paint coats clearly visible.
- 2. Transparent and Stained Finishes: Prepare samples on species and quality of wood to be used in the Work. Re-submit as requested until acceptable sheen, color, and texture are achieved. Label and identify each sample as to location and application.

#### 1.3 QUALITY ASSURANCE

- A. Labeling: Include following on label of each container:
  - 1. Manufacturer's name and product name.
  - 2. Generic type of paint.
  - 3. Manufacturer's stock number.
  - 4. Color.
  - 5. Instructions for reducing, where applicable.
- B. Special Requirements of Regulatory Agencies: Use materials for Work of this Section which comply with volatile organic compound limitations and other regulations of local Air Quality Management District and other local, state, and federal agencies having jurisdiction.
- C. Project Mock-Up: As directed by the Architect, apply on actual wall surfaces where designated, samples of each and any color selected for final review.
  - 1. On at least 100 square feet of surface as directed, provide full-coat finish samples until required sheen, color and texture are obtained.
  - 2. Duplicate painted finishes of prepared samples.
  - 3. Simulate finished lighting conditions for review of in-place work.

## 1.4 PRODUCT HANDLING

- A. Comply with requirements of Section 016000 Product Requirements.
- B. Delivery: Deliver material in sealed containers with labels legible and intact.
- C. Storage of Materials:
  - 1. Store only acceptable Project materials on Project site.
  - 2. Store in suitable location.
  - 3. Restrict storage to paint materials and related equipment.
  - 4. Comply with health and fire regulations.

## 1.5 PROJECT CONDITIONS

## A. Environmental Requirements:

- 1. Comply with manufacturer's recommendations as to environmental conditions under which coatings and coating systems can be stored and applied.
- 2. Do not apply finish in areas where dust is being generated.
- B. Protection: Cover or otherwise protect finished work of other trades and surfaces not being painted concurrently or not to be painted.

#### 1.6 SCHEDULING

A. Gypsum Board: Verify that a fully-cured skim coat has been applied to Gypsum Board specified for Level 5 finish and scheduled to receive semi-gloss or gloss paint finishes. Do not proceed until completed.

#### 1.7 MAINTENANCE

A. Extra Materials: At completion of Work, deliver to Owner extra stock of paint of one gallon of each color used of each coating material used. Tightly seal and clearly label containers.

#### PART 2 - PRODUCTS

# 2.1 MANUFACTURERS

- A. Primers and Single-color Paints: Provide paint systems as manufactured by the following manufacturers. Unless otherwise specified, single source all components of a paint system from a single manufacturer, including primer/sealer/undercoat and body and finish coats to assure compatibility.
  - 1. Basis of Design: Sherwin Williams.

## 2.2 MATERIALS

- A. General: Provide materials selected for coating system for each type of surface which are the product of single manufacturer.
- B. Thinner: As recommended by each manufacturer for his respective product.
- C. Unsuitability of Specified Products: Claims concerning unsuitability of any materials specified will not be entertained, unless such claim is made in writing to the Architect before Work is started.

#### 2.3 COLORS

A. Color and Sheen: Field verify color to match adjacent existing (or as selected by Architect if not scheduled on Drawings) based on standard color chips provided by one or more of the listed manufacturers.

B. Mixing: Deliver paints and stains ready mixed to Project site.

## 2.4 MILDEW RESISTANCE

A. General: Add fungicidal agent to paint per manufacturer's recommendations. Add agent to paint at factory. Clearly indicate on labels that paint is mildew resistant.

## 2.5 PRODUCT LIST

#### A. Products:

	<u>BM</u>	<u>ICI</u>	<u>S/W</u>	FRA
Concrete Sealer	066	3210	A24W300	065
Ferrous Metal Primer	M04	4160	B50NZ2	661F774
Latex Enamel, Semi-Gloss	276	1406	B31W200	128

#### PART 3 - EXECUTION

# 3.1 EXAMINATION

- A. Verification of Conditions: Examine surfaces scheduled to receive paint and finishes for conditions that might adversely affect execution, permanence, or quality of work and which cannot be put into acceptable condition through preparatory work. Proceed with preparation or coating application only when conditions are satisfactory.
- B. Review all questions regarding the scope of painting with Owner prior to proceeding with Work.

# 3.2 SURFACE PREPARATION

A. General: Remove scale, dirt, dust, grit, rust, wax, grease, efflorescence, loose material, and other foreign matter detrimental to proper adhesion of paint.

## B. Metals:

- 1. Chipped or Abraded Areas in Shop Coatings: Touch-up using appropriate primer.
- 2. Galvanized Surfaces: Apply a wash coat made by dissolving 8 ounces copper acetate or copper sulfate in one gallon of water; apply with brush.
- 3. Stainless Steel: Scarify surfaces before applying prime coat.

#### D. Wood:

1. General: If required, sandpaper surfaces smooth before applying primer. Thoroughly clean knots; apply thin coat of knot sealer over surfaces shown to receive opaque finish.

- 2. Back Priming: Back prime surfaces installed against cementitious surfaces; give particular attention to sealing cross-grained surfaces.
- 3. Puttying:
  - a. General: Fill nail holes, cracks, and other depressions flush with putty after prime coat application. Allow putty to dry; sandpaper smooth before applying body coat.
  - b. For Opaque Finish: Linseed oil type putty.

## E. Protection:

- General: Properly protect floors and other adjacent work by drop cloths or other suitable coverings. In areas scheduled for painting, maintain wrappings and factory-applied protection provided by other trades.
- 2. Hardware and Other Obstructions: Remove or protect factory finished items such as hardware, plates, lighting fixtures, grilles, and similar items placed prior to painting. Reposition or remove protection upon completion of each space. Equipment adjacent to surfaces requiring paint disconnected, moved, reset, and reconnected by respective trades.
- 3. Fire Precautions: At end of each work day, place in metal containers or remove from premises, solvent soaked cloths, waste, and other materials which constitute a fire hazard.
- F. Moisture Content: Do not apply initial coating until moisture content of surface is within limitations recommended by paint manufacturer.

#### 3.3 APPLICATION

- A. General: Apply paint per manufacturer's instructions and as specified. Thoroughly stir paint and keep at uniform consistency during application. Apply paint evenly, free from drops, ridges, waves, laps, and brush marks; finished surface uniform in sheen, color, and texture. Apply succeeding coats to unscarred and completely integral base coats; slightly vary color of undercoats to distinguish them from preceding coat. Allow sufficient time between coats to assure proper drying. Sandpaper smooth interior finishes between coats.
- B. Prime Coat: Do not thin primers in excess of manufacturer's printed directions. Apply by brush, unless otherwise specified, within 8 hours after cleaning.
- C. Body and Finish Coats: Do not thin; apply by brush, roller or spray.
- D. Drying Time: Comply with recommendations of product manufacturer for drying time between succeeding coats.
- E. Moldings and Ornaments: Leave clean and true to details with no undue amount of paint in corners and depressions.
- F. Edges of Paint: Where adjoining other materials or colors, make clean and sharp with no overlapping.

- G. Refinishing: Refinish entire wall where portion of finish is deemed not acceptable.
- H. Precaution: Do not paint over fusible links, UL labels, or sprinkler heads.
- I. Exposed Plumbing and Mechanical Items: Finish items without factory finish such as conduits, pipes, access panels, and items of similar nature to match adjacent wall and ceiling surfaces, unless otherwise directed.

#### 3.4 CLEANING

- A. General: Touch up and restore finish where damaged. Remove spilled, splashed, or spattered paint from surfaces. Do not mar surface finish of item being cleaned.
- B. Storage Space: Leave clean and in condition required for equivalent spaces in Project.

## 3.5 PAINT SYSTEMS

- A. Schedule: Only major areas are scheduled. Treat miscellaneous and similar items and areas within room or space with similar system.
- B. Number of Coats: Where number of coats are specified, it is only as a minimum requirement. Apply additional coats, at no additional cost to Owner, if necessary to completely hide base material, produce uniform color, and provide satisfactory finish result.
- C. Thickness of Coats: For each paint system product, provide the manufacturer's recommended mil-thickness for each applied coat.
- D. Systems Specifications: These specifications are a guide and are meant to establish procedure and quality. Confer with Architect to determine exact finish desired.
- E. Acceptance of Final Colors: Do not apply final coats of paint for either exterior and interior systems until colors have been reviewed and accepted by the Architect.

# 3.6 EXTERIOR PAINT SCHEDULE (Field Verify to match adjacent existing)

- A. Ferrous Metal and Galvanized Metals: Provide the following system or comparable one from one of the approved manufacturers.
  - Semi-Gloss Finish
     Primer: Pro Industrial Pro-Cryl Universal Metal Primer, B66-310, <100 g/L VOC</li>
     1st coat:Pro Industrial Zero VOC Acrylic Semi-Gloss, B66-650 series, 0 g/L VOC
     2nd coat:Pro Industrial Zero VOC Acrylic Semi-Gloss, B66-650 series, 0 g/L VOC
- B. Exposed Concrete: Provide anti graffiti coating for all exposed exterior concrete retaining walls and benches:
  - 1. S-W Anti-Graffiti Coating or Architect's approved equal.

- C. Concrete Site Flatwork (including sidewalks driveways, etc.)
  - 1. 100% acrylic topical sealer by Concrete Sealers USA, low gloss.
  - 3.7 CLEANING:
  - A. Comply with provisions of Section 017900 Cleaning.
  - B. Remove paint spots, oil, and stains from adjacent surfaces upon completion of Work; leave Work clean.

**END OF SECTION** 

#### **SECTION 230100 - MECHANICAL REQUIREMENTS**

#### PART 1 - GENERAL

- 1.1 GENERAL CONDITIONS
  - A. The General Conditions of the Contract, with the amendments, supplements, forms and requirements in Division 1, and herewith made a part of this Division.
  - B. All sections of Division 21, 22, & 23 shall comply with the Mechanical General Requirements. The standards established in this section as to quality of materials and equipment, the type and quality of workmanship, mode of operations, safety rules, code requirements, etc., shall apply to all sections of this Division as though they were repeated in each Division.
  - C. Mechanical equipment that is pre-purchased if any will be assigned to the Mechanical Contractor. By assignment to the Mechanical Contractor, the Mechanical Contractor shall accept and installed the equipment and provide all warrantees and guarantees as if the Mechanical Contractor had purchased the equipment.
  - D. Construction Indoor-Air Quality Management
    - Comply with SMACNA's "SMACNA IAQ Guideline for Occupied Buildings under Construction."
      - a. If Owner authorizes use of permanent heating, cooling, and ventilating systems during construction period as specified in Division 01 Section "Temporary Facilities and Controls," install filter media having a MERV 8 according to ASHRAE 52.2 at each return-air inlet for the air-handling system used during construction.
      - b. Replace all air filters immediately prior to occupancy.
    - 2. Comply with one of the following requirements:
      - a. After Construction ends, prior to occupancy and with all interior finishes installed, perform a building flush-out by supplying a total volume of 14000 cu.
         Ft. of outdoor air per sq. ft. of floor area while maintaining an internal temperature of at least 60 deg F and a relative humidity no higher than 60 percent.
      - b. If occupancy is desired prior to flush-out completion, the space may be occupied following delivery of a minimum of 3500 cu. ft. of outdoor air per sq. ft. of floor area to the space. Once a space is occupied, it shall be ventilated at a minimum rate of 0.30 cfm per sq. ft. of outside air or the design minimum outside air rate determined in EQ Prerequisite 1, whichever is greater. During each day of the flush-out period, ventilation shall begin a minimum of three hours prior to occupancy and continue during occupancy. These conditions shall be maintained until a total of 14000 cu. ft./sq. ft. of outside air has been delivered to the space.

## 1.2 SCOPE OF WORK

- A. The project described herein is the LDS Hospital Operating Rooms 2 & 3 Diffuser Replacement. This work shall include all labor, materials, equipment, fixtures, and devices for the entire mechanical work and a complete operating and tested installation as required for this project.
- B. This Division will schedule the boiler inspection and pay for all costs associated with certifying the boiler with the state.

## 1.3 CODES & ORDINANCES

A. All work shall be executed in accordance with all underwriters, public utilities, local and state rules and regulations applicable to the trade affected. Should any change in the plans and Specifications be required to comply with these regulations, the Contractor shall notify the Architect before the time of submitting his bid. After entering into contract, the Contractor will be held to complete all work necessary to meet these requirements without extra expense to the Owner. Where work required by drawings or specifications is above the standard required, it shall be done as shown or specified.

# B. Applicable codes:

- 1. Utah Boiler and Pressure Vessel Rules and Regulations-Latest Edition
- 2. International Building Code- 2018 Edition
- 3. International Mechanical Code- 2018 Edition
- 4. International Plumbing Code- 2018 Edition
- 5. International Fire Code- 2018 Edition
- 6. International Energy Code- 2018 Edition
- 7. International Fuel Gas Code- 2018 Edition
- 8. National Electrical Code- 2016 Edition

## 1.4 INDUSTRY STANDARDS

- A. All work shall comply with the following standards.
  - 1. Associated Air Balance council (AABC)
  - 2. Air Conditioning and Refrigeration Institute (ARI)
  - 3. Air Diffusion council (ADC)
  - 4. Air Movement and Control Association (AMCA)
  - 5. American Gas Association (AGA)
  - 6. American National Standards Institute (ANSI)
  - 7. American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE)
  - 8. American Society of Mechanical Engineers (ASME)
  - 9. American Society of Testing Materials (ASTM)
  - 10. American Water Works Association (AWWA)
  - 11. Cooling Tower Institute (CTI)
  - 12. ETL Testing Laboratories (ETL)
  - 13. Institute of Electrical and Electronic Engineers (IEEE)
  - 14. Hydronics Institute (HI)
  - 15. Manufacturers Standardization Society of the Valve and Fitting Industry (MSS)
  - 16. National Fire Protection Association (NFPA)
  - 17. National Electrical Code (NEC)
  - 18. National Electrical Manufacturers Association (NEMA)
  - 19. National Electrical Safety code (NESC)
  - 20. Utah safety Standard (OSHA), Utah State Industrial Council.
  - 21. Sheet Metal and Air Conditioning Contractor's National Association (SMACNA)
  - 22. Underwriters Laboratories (UL)

- 23. Tubular Exchanger Manufacturers Association, Inc. (TEMA)
- 24. Heat Exchanger Institute (HEI)
- 25. Hydraulic Institute (HI)
- 26. Thermal Insulation Manufacturer=s Association (TIMA)
- 27. Scientific Apparatus Makers Association (SAMA)

## B. Compliance Verification:

- 1. All items required by code or specified to conform to the ASME code shall be stamped with the ASME seal.
- 2. Form U-1, the manufacturer=s data report for pressure vessels, is to be included in the Operation and Maintenance Manuals. National Board Register (NBR) numbers shall be provided where required by code.
- 3. Manufactured equipment which is represented by a UL classification and/or listing, shall bear the UL or equivalent ETL label.

# 1.5 UTILITIES & FEES

A. All fees for permits required by this work will be paid by this division with the understanding that any fees that are required to be paid will be reimbursed by the owner. The contractor shall obtain the necessary permits to perform this work. Unless noted otherwise, all systems furnished and or installed by this Contractor, shall be complete with all utilities, components, commodities and accessories required for a fully functioning system. This Contractor shall furnish smoke generators when required for testing, furnish glycol for glycol piping systems, full load of salt to fill brine tank for water softening system, furnish cleaners and water treatment additives.

# 1.6 SUBMITTALS AND SHOP DRAWINGS

- A. General: As soon as possible after the contract is awarded, but in no case more than 45 calendar days thereafter, the Contractor shall submit to the Architect manufacturer's data on products and materials to be used in the installation of mechanical systems for this project. The review of the submitted data will require a minimum of 14 days. The first day starts after the day they are received in the engineer's office to which the project is being constructed from. If the Contractors schedule requires return of submitted literature in less than the allotted time, the Contractor shall accelerate his submittal delivery date. The Contractor shall resubmit all items requiring re-review within 14 days of returned submittals. Refer to each specification section for items requiring submittal review. If the re-submittal is returned a 2<sup>nd</sup> time for correction the Contractor will provide the specific equipment that is specified on the drawings and/or the specifications. Written approval of the Owner's Representative shall be obtained before installing any such equipment or materials for the project.
- B. Review by the Owner's Representative is for general conformance of the submitted equipment to the project specification. In no way does such review relieve this Contractor of his obligation to furnish equipment and materials that comply in detail to the specification nor does it relieve the Contractor of his obligation to determine actual field dimensions and conditions that may affect his work. Regardless of any items overlooked by the submittal review, the requirements of the contract drawings and specifications must be followed and are not waived or superseded in any way by the review.
- C. By description, catalog number, and manufacturer's names, standards of quality have been established by the Architect and the Engineer for certain manufactured equipment items and specialties that are to be furnished by this Division. Alternate products and equipment may be proposed for use only if specifically named in the specifications or if given written prior approval in published addenda. Design equipment is the equipment

- listed on the drawings or if not listed on the drawings is the equipment first named in the specifications.
- D. Submittal Format: At the contractor's discretion, project submittals may be in either of the formats described in the following paragraphs, but mixing the two formats is not acceptable.
  - 1. Electronic Submittal Format: Identify and incorporate information in each electronic submittal file as follows:
    - a. All items shall be submitted at one time except automatic temperature control drawings and seismic restraint drawings which may be submitted separately within 120 days of the contract award date. Partial submittals will not be reviewed until the complete submittal is received.
    - b. Submitted electronic file shall bear the Contractor's stamp, indicating that he has checked all equipment being submitted; that each item will fit into the available space with the accesses shown on the drawings; and, further, that each item conforms to the capacity and quality standards given in the contract documents.
    - c. Submitted electronic file shall clearly indicate performance, quality, and utility requirements; shall show dimension and size of connection points; and shall include derating factors that were applied for each item of equipment to provide capacity at job site elevation. Temperature control submittals shall include piping and wiring diagrams, sequence of operation and equipment. Equipment must fit into the available space with allowance for operation, maintenance, etc. Factory piped and wired equipment shall include shop drawings for all internal wiring and piping furnished with the unit.
    - d. Submitted electronic file shall clearly show all required field install wiring, piping, and accessory installations required by the Contractor to provide a complete operating system.
    - e. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
    - f. Name file with submittal number or other unique identifier, including revision identifier.
    - g. Electronic file shall be completely electronically searchable or it will be rejected.
    - h. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by:
      - 1) Architect.
    - i. Transmittal Form for Electronic Submittals:
      - 1) Use one of the following options acceptable to the Owner;
        - a) Software-generated form from electronic project management software.
        - b) Electronic form.
      - 2) The Electronic Submittal shall contain the following information:
        - a) Project name.
        - b) Date.
        - c) Name and address of Architect.

- d) Name of Construction Manager.
- e) Name of Contractor.
- f) Name of firm or entity that prepared submittal.
- g) Names of subcontractor, manufacturer, and supplier.
- h) Category and type of submittal.
- i) Submittal purpose and description.
- j) Specification Section number and title.
- k) Specification paragraph number or drawing designation and generic name for each of multiple items.
- I) Drawing number and detail references, as appropriate.
- m) Location(s) where product is to be installed, as appropriate.
- n) Related physical samples submitted directly.
- o) Indication of full or partial submittal.
- p) Transmittal number[, numbered consecutively].
- g) Submittal and transmittal distribution record.
- r) Other necessary identification.
- s) Remarks.
- j. Metadata: Include the following information as keywords in the electronic submittal file metadata:
  - 1) Project name.
  - 2) Number and title of appropriate Specification Section.
  - 3) Manufacturer name.
  - 4) Product name.
- E. Submittal Requirements Submittals MUST be compiled in PDF format, organized, properly labeled with specification sections, and book marked.
  - 1. Submittal files larger than 25MB must be delivered to the Mechanical Contractors office via thumb drive.
  - 2. Subcontractor/Vendor markups should be purple. GC markups will be blue, architect markups will be red, and consultant markups will be green. Any variations of sizing and/or performance shall be clearly indicated with an explanation of variation.
  - 3. Submittals must be submitted no later than two weeks from notice.
  - 4. Partial submittals will not be accepted. All required test data, certifications, qualification data, schedules, shop drawings, test reports, etc. must be included.
  - 5. Substitutions not previously accepted will not be allowed in submittals.
  - 6. All clarifications and questions about scope of work must be submitted in RFI(s) rather than in submittals
  - 7. Specific schedule of lead times for all items that are not 'off the shelf' must be submitted within 10 days of NTP. (See schedule requirements)
- 1.7 DRAWINGS AND MEASUREMENTS
  - A. Construction Drawings: The contract document drawings show the general design, arrangements, and extent of the system. In certain cases, the drawings may include

- details that show more nearly exact locations and arrangements; however, the locations, as shown diagrammatically, are to be regarded as general.
- B. It shall be the work of this Section to make such slight alterations as may be necessary to make adjustable parts fit to fixed parts, leaving all complete and in proper shape when done. All dimensions given on the drawings shall be verified as related to this work and with the Architect's office before work is started.
- C. This Section shall carefully study building sections, space, clearances, etc., and then provide offsets in piping or ductwork as required to accommodate the building structure without additional cost to the Owner. In any case and at any time during the construction process, a change in location required by obstacles or the installation of other trades not shown on the mechanical plans shall be made without charge.
- D. The drawings shall not be scaled for roughing in measurements nor shall they be used as shop drawings. Where drawings are required for these purposes or where drawings must be made from field measurements, the Contractor shall take the necessary measurements and prepare the drawings. Shop drawings of the various subcontractors shall be coordinated to eliminate all interferences and to provide sufficient space for the installation of all equipment, piping, ductwork, etc.
- E. The drawings and specifications have been prepared to supplement each other and they shall be interpreted as an integral unit with items shown on one and not the other being furnished and installed as though shown and called out on both.
- F. Coordination Drawings: The contractor shall provide coordination drawings for mechanical rooms, fan rooms, equipment rooms, and congested areas to eliminate conflicts with equipment, piping, or work of other trades. The drawings shall be a minimum scale of 1/4 inch= 1 foot and of such detail as may be required by the Engineer to fully illustrate the work. These drawings shall include all piping, conduit, valves, equipment, and ductwork.
- G. Sheet-metal shop drawings will be required for all ductwork in the entire building. These drawings will show all ductwork in the entire building and shall be coordinated with architectural, <u>structural</u> and electrical portions of the project. The contractor shall specifically obtain copies of the <u>structural shop drawings</u> and shall coordinate the ductwork shop drawings with approved structural members. These drawings shall be submitted to the engineer for review prior to any fabrication. The contractor is responsible for all modifications necessary to accommodate duct installation within the structural, architectural and electrical restrictions. These drawings, once reviewed by the engineer, will be made available to all mechanical, electrical, and fire sprinkler subcontractors to coordinate installation of their work.

## 1.8 CONTRACTOR'S USE OF BUILDING EQUIPMENT

A. The Contractor may use equipment such as electric motors, fans, heat exchangers, filters, etc., with the written permission of the Owner. As each piece of equipment is used (such as electric motors and fans), maintenance procedures approved by the manufacturer are to be followed. A careful record is to be kept of the length of the time the equipment is used, maintenance procedures followed, and any difficulty encountered. The record is to be submitted to the Owner upon acceptance. All fan belts and filter media (such as bearings) shall be carefully inspected just prior to acceptance. Any excessive wear noted shall require replacement. New filter media shall be installed in air handlers at the time systems are turned over to the owner.

#### 1.9 EXISTING CONDITIONS

A. The Contractor shall carefully examine all existing conditions that might affect the mechanical system and shall compare these conditions with all drawings and specifications for work included under this contract. He shall, at such time, ascertain and

check all conditions that may affect his work. No allowance shall subsequently be made in his behalf for an extra expense incurred as a result of his failure or neglect to make such examination. This Contractor shall include in his bid proposal all necessary allowances to repair or replace any item that will remain or will be removed, and any item that will be damaged or destroyed by new construction.

- B. The Contractor shall remove all abandoned piping, etc., required by new construction and cap or plug openings. No capping, etc., shall be exposed in occupied areas. All openings of items removed shall be sealed to match adjacent surfaces.
- C. The Contractor shall verify the exact location of all existing services, utilities, piping, etc., and make connections to existing systems as required or as shown on the drawings. The exact location of each utility line, together with size and elevation, shall be established before any on-site lines are installed. Should elevation or size of existing main utility lines make connections to them impossible as shown on drawings, then notification of such shall immediately be given to the Owners Representative for a decision.

## 1.10 EQUIPMENT CAPACITIES

- A. Capacities shown for equipment in the specifications and on the drawings are the minimum acceptable. No equipment shall be considered as an alternate that has capacities or performance less than that of design equipment.
- B. All equipment shall give the specified capacity and performance at the job-site elevation. Manufacturers' standard ratings shall be adjusted accordingly. All capacities and performances listed on drawings or in specifications are for job-site conditions.

## 1.11 SEISMIC REQUIREMENTS FOR EQUIPMENT

A. All equipment shall be furnished structurally adequate to withstand seismic forces as outlined in the International Building Code. Refer to section Mechanical Vibration Controls and Seismic Restraints. Equipment bases shall be designed for direct attachment of seismic snubbers and/or seismic anchors.

# 1.12 COOPERATION WITH OTHER TRADES

- A. The Contractor shall refer to other drawings and parts of this specification that cover work of other trades that is carried on in conjunction with the mechanical work such that all work can proceed without interference resulting from lack of coordination.
- B. The Contractor shall properly size and locate all openings, chases, sleeves, equipment bases, and accesses. He shall provide accurate wiring diagrams to the Electrical Contractor for all equipment furnished under this Division.
- C. The ceiling cavity must be carefully reviewed and coordinated with all trades. In the event of conflict, the installation of the mechanical equipment and piping shall be in the following order: plumbing, waste, and soil lines; supply, return, and exhaust ductwork; water piping; medical gases; fire protection piping; and pneumatic control piping.
- D. The mechanical Contractor shall insure that the installation of all piping, ducts and equipment is in compliance with Articles 110-16 and 384-4 of the National Electrical Code relative to proper clearances in front of and over all electrical panels and equipment. No piping or ductwork will be allowed to run over electrical panel.

## 1.13 RESPONSIBILITY OF CONTRACTOR

A. The Contractor is responsible for the installation of a satisfactory piece of work in accordance with the true intent of the drawings and specifications. He shall provide, as a part of his work and without expense, all incidental items required even though these items are not particularly specified or indicated. The installation shall be made so that its several component parts will function together as a workable system and shall be left with all equipment properly adjusted and in working order. The Contractor shall familiarize the

Owner's Representative with maintenance and lubrication instructions as prepared by the Contractor and shall explain and fully instruct him relative to operating, servicing, and maintenance of them.

B. If a conflict arises between the drawings and the specifications the most stringent procedure/action shall be followed. A clarification to the engineer will help to determine the course of action to be taken. If a conflict arises between specification sections the engineer will determine which course of action is to be followed.

## 1.14 PIPE AND DUCT OPENINGS AND EQUIPMENT RECESSES

- A. Pipe and duct chases, openings, and equipment recesses shall be provided by others only if shown on architectural or structural drawings. All openings for the mechanical work, except where plans and specifications indicate otherwise, shall be provided as work of this Division. Include openings information with coordination drawings.
- B. Whether chases, recesses, and openings are provided as work of this Division or by others, this Contractor shall supervise their construction and be responsible for the correct size and location even though detailed and dimensioned on the drawings. This Contractor shall pay for all necessary cutting, repairing, and finishing if any are left out or incorrectly made. All necessary openings thru existing walls, ceilings, floors, roofs, etc. shall be provided by this Contractor unless indicated otherwise by the drawing and/or specifications.

## 1.15 UNFIT OR DAMAGED WORK

A. Any part of this installation that fails, is unfit, or becomes damaged during construction, shall be replaced or otherwise made good. The cost of such remedy shall be the responsibility of this Division.

#### 1.16 WORKMANSHIP

A. Workmanship shall be the best quality of its kind for the respective industries, trades, crafts, and practices, and shall be acceptable in every respect to the Owner's representative. Nothing contained herein shall relieve the Contractor from making good and perfect work in all details in construction.

#### 1.17 SAFETY REGULATION

A. The Contractor shall comply with all local, Federal, and OSHA safety requirements in performance with this work. (See General Conditions). This Contractor shall be required to provide equipment, supervision, construction, procedures, and all other necessary items to assure safety to life and property.

# 1.18 ELECTRICAL SERVICES

- A. All equipment control wiring and all automatic temperature control wiring including all necessary contacts, relays, and interlocks, whether low or line voltage, except power wiring, shall be furnished and installed as work of this Division unless shown to be furnished by Division 26. All such wiring shall be in conduit as required by electrical codes. Wiring in the mechanical rooms, fans rooms and inaccessible ceilings and walls shall be installed in conduit as well. Installation of any and all wiring done under Division 21, 22 and 23 shall be in accordance with the requirements of Division 26, Electrical.
- B. All equipment that requires an electrical connection shall be furnished so that it will operate properly and deliver full capacity on the electrical service available.
- C. Refer to the electrical control equipment and wiring shown on the diagrams. Any changes or additions required by specific equipment furnished shall be the complete responsibility of the Contractor furnishing the equipment.

D. The Mechanical Contractor must coordinate with the Electrical Contractor to insure that all required components of control work are included and fully understood. No additional cost shall accrue to the Owner as a result of lack of such coordination.

## 1.19 WORK, MATERIALS, AND QUALITY OF EQUIPMENT

- A. Unless otherwise specified, all materials shall be new and of the best quality of their respective kinds and all labor shall be done in a most thorough and workmanlike manner.
- B. Products or equipment of any of the manufacturers cited herein or any of the products approved by the Addenda may be used. However, where lists of products are cited herein, the one first listed in the design equipment used in drawings and schedules to establish size, quality, function, and capacity standards. If other than design equipment is used, it shall be carefully checked for access to equipment, electrical and control requirements, valving, and piping. Should changes or additions occur in piping, valving, electrical work, etc., or if the work of other Contractors would be revised by the alternate equipment, the cost of all changes shall be borne as work of this Division.
- C. The Execution portions of the specifications specify what products and materials may be used. Any products listed in the Product section of the specification that are not listed in the Execution portion of the specification may not be used without written approval by the Engineer.
- D. The access to equipment shown on the drawings is the minimum acceptable space requirements. No equipment that reduces or restricts accessibility to this or any other equipment will be considered.
- E. All major items of equipment are specified in the equipment schedules on the drawings or in these specifications and shall be furnished complete with all accessories normally supplied with the catalog item listed and all other accessories necessary for a complete and satisfactory installation.
- F. All welders shall be certified in accordance with Section IX of the ASME Boiler and Pressure Vessel Code, latest Edition.

## 1.20 PROTECTION AGAINST WEATHER AND STORING OF MATERIALS

- A. All equipment and materials shall be properly stored and protected against moisture, dust, and wind. Coverings or other protection shall be used on all items that may be damaged or rusted or may have performance impaired by adverse weather or moisture conditions. Damage or defect developing before acceptance of the work shall be made good at the Contractor's expense.
- B. All open duct and pipe openings shall be adequately covered at all times.

# 1.21 INSTALLATION CHECK

- A. An experienced, competent, and authorized representative of the manufacturer or supplier of each item of equipment indicated in the equipment schedule and the seismic supplier shall visit the site of the work and inspect, check, adjust if necessary, and approve the equipment installation. In each case, the equipment supplier's representative shall be present when the equipment is placed in operation. The equipment supplier's representative shall revisit the job site as often as necessary until all trouble is corrected and the equipment installation and operation is satisfactory to the Engineer.
- B. Each equipment supplier's representative shall furnish to the Owner, through the Engineer, a written report certifying that the equipment (1) has been properly installed and lubricated; (2) is in accurate alignment; (3) is free from any undue stress imposed by connecting piping or anchor bolts; and, (4) has been operated under full load conditions and that it operated satisfactorily.
- C. All costs for this work shall be included in the prices quoted by equipment suppliers.

#### 1.22 EQUIPMENT LUBRICATION

- A. The Contractor shall properly lubricate all pieces of equipment before turning the building over to the Owner. A linen tag shall be attached to each piece of equipment, showing the date of lubrication and the lubricant used. No equipment shall be started until it is properly lubricated.
- B. Necessary time shall be spent with the Owner's Representative to thoroughly familiarize him with all necessary lubrications and maintenance that will be required of him.
- C. Detergent oil as used for automotive purposes shall not be used for this work.

## 1.23 CUTTING AND PATCHING

- A. No cutting or drilling in structural members shall be done without written approval of the Architect. The work shall be carefully laid out in advance, and cutting, channeling, chasing, or drilling of floors, walls, partitions, ceilings, or other surfaces necessary for the mechanical work shall be carefully done. Any damage to building, piping, or equipment shall be repaired by professional plasterers, masons, concrete workers, etc., and all such work shall be paid for as work of this Division.
- B. When concrete, grading, etc., is disturbed, it shall be restored to original condition as described in the applicable Division of this Specification.

#### 1.24 ACCESS

- A. Provide access doors in walls, ceilings and floors by this division unless otherwise noted. For access to mechanical equipment such as valves, dampers, VAV boxes, fans, controls, etc. Refer to Division 8 for door specifications. All access doors shall be 24" x 24" unless otherwise indicated or required. Coordinate location of doors with the Architect prior to installation. If doors are not specified in Division 8, provide the following: Doors in ceilings and wall shall be equal to JR Smith No. 4760 bonderized and painted. Doors in tile walls shall be equal to JR Smith No. 4730 chrome plated. Doors in floors shall be equal to JR Smith No. 4910
- B. Valves: Valve must be installed in locations where access is readily available. If access is compromised, as judged by the Mechanical Engineer, these valves shall be relocated where directed at the Contractors expense.
- C. Equipment: Equipment must be installed in locations and orientations so that access to all components requiring service or maintenance will not be compromised. If access is compromised, as judged by the Mechanical Engineer, the contractor shall modify the installation as directed by the Engineer at the Contractors expense.
- D. It is the responsibility of this division to install terminal boxes, valves and all other equipment and devices so they can be accessed. If any equipment or devices are installed so they cannot be accessed on a ladder a catwalk and ladder system shall be installed above the ceiling to access and service this equipment.

## 1.25 CONCRETE BASES AND INSERTS

- A. Bases: The concrete bases shall be provided and installed as work by this division. This Division shall be responsible for the proper size and location of bases and shall furnish all required anchor bolts and sleeves with templates to be installed as work of Division 3, Concrete.
- B. All floor-mounted mechanical equipment shall be set on 6-inch high concrete bases, unless otherwise noted or shown on drawings. Such bases shall extend 6 inches beyond equipment or mounting rails on all sides or as shown on the drawings and shall have a 1-inch beveled edge all around.

- C. Inserts: Where slotted or other types of inserts required for this work are to be cast into concrete, they shall be furnished as work of this Division
- D. Concrete inserts and pipe support systems shall be equal to Unistrut P3200 series for all piping where more than one pipe is suspended at a common location. Spacing of the inserts shall match the size and type of pipe and of ductwork being supported. The Unistrut insert and pipe support system shall include all inserts, vertical supports, horizontal support members, clamps, hangers, rollers, bolts, nuts, and any other accessory items for a complete pipe-supporting system.

## 1.26 CLEANING AND PAINTING

- A. Cleaning: After all tests and adjustments have been made and all systems pronounced satisfactory for permanent operation, this Contractor shall clean all exposed piping, ductwork, insulated members, fixture, and equipment installed under this Section and leave them ready for painting. He shall refinish any damaged finish and leave everything in proper working order. The Contractor shall remove all stains or grease marks on walls, floors, glass, hardware, fixtures, or elsewhere, caused by his workman or for which he is responsible. He shall remove all stickers on plumbing fixtures, do all required patching up and repair all work of others damaged by this division of the work, and leave the premises in a clean and orderly condition.
- B. Painting: Painting of exposed pipe, insulated pipe, ducts, or equipment is work of Division 9, Painting.
- C. Mechanical Contractor: All equipment which is to be furnished in factory prefinished conditions by the mechanical Contractor shall be left without mark, scratch, or impairment to finish upon completion of job. Any necessary refinishing to match original shall be done. Do not paint over nameplates, serial numbers, or other identifying marks.
- D. Removal of Debris, Etc: Upon completion of this division of the work, remove all surplus material and rubbish resulting from this work, and leave the premises in a clean and orderly condition.

# 1.27 CONTRACT COMPLETION

- A. Maintenance Instructions: The Contractor shall furnish the Owner complete printed and illustrated operating and maintenance instructions covering all units of mechanical equipment, together with parts lists.
- B. Instructions To Owner's Representatives: In addition to any detailed instructions called for, the mechanical Contractor must provide, without expense to the Owner, competent instructors to train the Owner's representatives who will be in charge of the apparatus and equipment, in the care, adjustment, and operation of all parts on the heating, air conditioning, ventilating, plumbing, fire protection, and automatic temperature control equipment. Instruction dates shall be scheduled at time of final inspection. A written report specifying times, dates, and name of personnel instructed shall be forwarded to the Architect. A minimum of four 8-hour instruction periods shall be provided. The instruction periods will be broken down to shorter periods when requested by the Owner. The total instruction hours shall not reduced. The ATC Contractor shall provide 4 hours of instructions. The remaining hours shall be divided between the mechanical and sheet metal Contractor.
- C. Guarantee: By the acceptance of any contract award for the work herein described or shown on the drawings, the Contractor assumes the full responsibility imposed by the guarantee as set forth herein and in the General Conditions, and should protect himself through proper guarantees from equipment and special equipment Contractors and from subcontractors as their interests may appear.
- D. The guarantee so assumed by the Contractor and as work of this Section is as follows:

- 1. That the entire mechanical system, including plumbing, heating, and airconditioning system shall be quiet in operation.
- 2. That the circulation of water shall be complete and even.
- 3. That all pipes, conduit, and connections shall be perfectly free from foreign matter and pockets and that all other obstructions to the free passage of air, water, liquid, sewage, and vent shall be removed.
- 4. That he shall make promptly and free of charge, upon notice from the Owner, any necessary repairs due to defective workmanship or materials that may occur during a period of one year from date of Substantial Completion.
- 5. That all specialties, mechanical, and patent devices incorporated in these systems shall be adjusted in a manner that each shall develop its maximum efficiency in the operation of the system; i.e., diffusers shall deliver the designed amount of air shown on drawings, thermostats shall operate to the specified limits, etc.
- 6. All equipment and the complete mechanical, ductwork, piping and plumbing systems shall be guaranteed for a period of one year from the date of the Architect's Certificate of Substantial Completion, this includes all mechanical, ductwork, piping and plumbing equipment and products and is not limited to boiler, chillers, coils, fans, filters etc. Any equipment supplier not willing to comply with this guarantee period shall not submit a bid price for this project. The Contractor shall be responsible for a 100-percent guarantee for the system and all items of equipment for this period. If the contractor needs to provide temporary heating or cooling to the building and or needs to insure systems are installed properly and or to meet the project schedule the guaranteed of all systems and equipment shall be as indicated above, on year from the date of the Architect's Certificate of Substantial Completion.
- 7. All filters used during construction shall be replaced just before equipment is turned over to the Owner, and all required equipment and parts shall be oiled. Any worn parts shall also be replaced.
- 8. If any systems or equipment is used for temporary heating or cooling the systems shall be protected so they remain clean. I.e. if the ductwork systems are used temporary filters and a filter holder (not duct-taped to ducts or grilles) shall be installed to insure the systems and the equipment remain clean.

## 1.28 TEST RUN

A. The Mechanical Contractor shall operate the mechanical system for a minimum of 30 days to prove the operation of the system.

## 1.29 EQUIPMENT STARTUP AND CHECKOUT:

- A. Each major piece of equipment shall be started and checked out by an authorized representative of the equipment manufacturer. A certificate indicating the equipment is operating to the satisfaction of the manufacturer shall be provided and shall be included in the commissioning report.
- B. This contractor shall coordinate commissioning procedures and activities with the commissioning agent.

#### 1.30 DEMOLITION

A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:

- B. Proceed with demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
- C. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
- D. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
- E. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
- F. Maintain adequate ventilation when using cutting torches.
- G. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
- H. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
- I. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- J. Dispose of demolished items and materials promptly.
- K. Return elements of construction and surfaces that are to remain to condition existing before selective demolition operations began.
- L. Existing Facilities: Comply with building manager's requirements for using and protecting elevators, stairs, walkways, loading docks, building entries, and other building facilities during selective demolition operations.
- M. Concrete: Demolish in sections. Cut concrete full depth at junctures with construction to remain and at regular intervals, using power-driven saw, then remove concrete between saw cuts.
- N. Masonry: Demolish in small sections. Cut masonry at junctures with construction to remain, using power-driven saw, and then remove masonry between saw cuts.
- O. Concrete Slabs-on-Grade: Saw-cut perimeter of area to be demolished, then break up and remove.
- P. Air-Conditioning Equipment: Remove equipment without releasing refrigerants.

# **END OF SECTION**

## SECTION 230550 - OPERATION AND MAINTENANCE OF HVAC SYSTEMS

#### PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS
  - A. All pertinent sections of Division 21, 22, & 23 Mechanical General Requirements, are part of the work of this Section. Division 1 is part of this and all other sections of these specifications.
    - 1. Testing and Balancing is specified in section 230594.
    - 2. Training and Instructions to Owner's Representative is specified in section 230100.
- 1.2 SCOPE OF WORK
  - A. Submission of Operating and Maintenance Manuals complete with Balancing reports. (Coordinate with Division 1).
  - B. Coordination of work required for system commissioning.
  - C. Provide a hard copy and an electronic copy on CD of the O and M manual fully searchable in PDF format.
- 1.3 SUBMITTALS
  - A. Submit product data in accordance with Division 1 and Section 230100. Submit the following:
    - 1. Sample of O and M manual outline.

# **PART 2 - PRODUCTS**

- 2.1 O & M MANUALS
  - A. The operating and maintenance manuals shall be as follows:
    - 1. Searchable and bookmarked PDFs with the first page providing the following description: (coordinate with Division 01)

OPERATING AND MAINTENANCE MANUAL

FOR THE

(INSERT PROJECT NAME)

(INSERT PROJECT COMPLETION YEAR)

VBFA, INC.
MECHANICAL ENGINEER

(INSERT ARCHITECT)

## **PART 3 - EXECUTION**

- 3.1 OPERATING AND MAINTENANCE MANUALS:
  - A. Work under this section shall be performed in concert with the contractor performing the system testing and balancing. Digital copies of the manual shall be furnished to the Architect for distribution to the owner.

- B. The "Start-Up and Operation" section is one of the most important in the manual. Information in this section shall be complete and accurately written and shall be verified with the actual equipment on the job, such as switches, starters, relays, automatic controls, etc. A step-by-step start-up procedure shall be described.
- C. The manuals shall include air balancing reports, system commissioning procedures, start-up tests and reports, equipment and system performance test reports, warranties, and certificates of training given to the owner's representatives.

An index sheet shall be provided in the front of the PDF. The manual shall be include the following:

SYSTEM DESCRIPTIONS

START-UP PROCEDURE AND OPERATION OF SYSTEM

MAINTENANCE TABLE

**OPERATION AND MAINTENANCE BULLETINS** 

AIR SYSTEM BALANCING REPORTS

**EQUIPMENT WARRANTIES AND TRAINING CERTIFICATES** 

SYSTEM COMMISSIONING REPORTS

**EQUIPMENT START-UP CERTIFICATES** 

**END OF SECTION**