

**PROJECT MANUAL FOR  
MICHENER LIBRARY ROOF REPLACEMENT  
PHASE 1 & 2**

**UNC PROJECT NO: 2024-080M23  
AMTECH PROJECT NO: DEN.2023.001048**

**at**

**JAMES A. MICHENER LIBRARY  
1400 22ND STREET  
GREELEY, COLORADO 80639**

**Prepared for:**

**University of Northern Colorado  
501 West 20th Street  
Greeley, CO 80639  
Notice #: UNC-IFB-003-25**



**1720 South Bellaire Street, Suite 1200  
Denver, Colorado 80222  
Phone: (303) 738-0823**

**Publication Date: September 25, 2024  
100% Construction Documents**

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This information should be included in the Project Manual or uploaded with the Solicitation if no Project Manual is provided.

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15. Specimen of Notice of Occupancy/Use (SBP-01) \*
16. Specimen of Notice of Acceptance (SBP-6.27) \*
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18. **A/E Consultants Specifications**

Items in **Bold** should be included in the electronic solicitation or attached to the Project Manual, not merely referenced

\*These documents may be referenced, examined and downloaded from the Office of the State Architect Website under State Buildings/Project Management Policies & Guidelines in lieu of including the document in the Project Manual/Solicitation.



**ADVERTISEMENT FOR BIDS**  
**Design/Bid/Build**  
**State of Colorado**  
UNIVERSITY OF NORTHERN COLORADO  
Notice Number: UNC-IFB-003-25

Project No: 2024-080M23

Project Title: Michener Library Roof Replacement – Phase I & 2

Estimated Construction Cost: \$2,000,000

**Settlement Notice**

**For all projects with a total dollar value above \$150,000 Notice of Final Settlement is required by C.R.S. §38-26-107(1). Final Settlement, if required, will be advertised in the same location as the original solicitation.**

**Project Description**

The James A. Michener Library is on the University of Northern Colorado, Greeley Campus. The Michener Library roof system is nearing the end of its service life, necessitating a Controlled Maintenance Project to replace the existing roof with a new system.

**Scope of Services**

Provide all labor, materials and equipment to perform all operations in connection with the Project Manual Bid Set and Construction Drawings dated September 26, 2024 provided by Amtech Solutions, Inc.

**Minimum Requirements**

Notice is hereby given to all interested parties that all firms will be required to meet all minimum requirements to be considered for this project. Interested bidders should be prepared to show evidence of the following to be considered as qualified, as a minimum:

1. Provided General Contracting services within the last three (3) years for at least two (2) projects each in excess of \$ 2 Million Dollars (hard costs), utilizing the expertise present in their Colorado Office; and
2. Demonstrated specific General Contracting experience in projects of similar scope and complexity; and

3. Demonstrated bonding capability up to \$ 2 million Dollars for an individual project coincidentally with current and anticipated workloads; provide letter from surety that affirms this capacity.

**Firms meeting the minimum requirements may obtain the bidding documents on the website accompanying this advertisement.**

<https://www.unco.edu/facilities/planning-and-construction/projects/construction-bids.aspx>

<https://www.bidnetdirect.com/colorado>

Email: [Alejandro.Garcia@unco.edu](mailto:Alejandro.Garcia@unco.edu)

### **Other Information**

Preference shall be given to Colorado resident bidders and for Colorado labor, as provided by law.

Per C.R.S. §24-105-201 If the construction value is \$50,000 or greater a Bid Bond and Power of Attorney or Proposal Guaranty is required in an amount not less than 5% of the total Bid.

### **Pre-Bid Meeting**

A mandatory Pre-Bid Meeting will be held at:

Address: **Parsons Hall – 501 20<sup>th</sup> St. Greeley, CO 80639**

Room: **Training Room**

Date/Time: **October 17, 2024, 10:00AM**

### **Schedule/Submission Details**

1. The schedule of events for the AFB process and an outline of the schedule for the balance of the project is as follows:

Advertisement	9/26/2024 – 10/10/2024
Mandatory Pre-Bid Conference and Tour	10/16/2024 – 10AM
Date Email Questions Due	10/31/2024 – 5PM
Date Email Answers Issued	11/4/2024 – 5PM
Sealed Bids Due/Public Bid Opening	11/13/2024 – 2PM
Anticipated Notice of Award	11/14/2024
Design/Bid/Build Agreement Assembly	11/15/2024 – 11/25/2024
Contract Approval (projected)	11/27/2024
Anticipated Contractor Start - Notice to Proceed	12/1/2024
Anticipated Construction Start/Finish	4/1/2025 – 8/18/2025

2. One ( 1 ) hard copies of the sealed bid are due **November 13,2024** and shall be received no later than **2:00PM (MST)**, and shall be submitted/accepted via **hand delivery**, at the following address:

Agency: **UNC – Facilities Management Purchasing**  
Contact Name: **Attention: Curtis Benton**  
Address: **Parsons Hall**  
**501 20<sup>th</sup> St.**  
**Greeley, CO 80639**

Comments: **Late sealed bids will be rejected without consideration. The University of Northern Colorado and the State of Colorado assume no responsibility for costs related to the preparation of submittals.**

3. The above schedule is tentative. Responding firms shall be notified of revisions in a timely manner by email or posted on ColoradoVSS website. Respondents may elect to verify times and dates by email, but no earlier than 36 hours before the scheduled date and time.

**Point of Contact/Clarification**

Name: **Alejandro Garcia**  
Agency: **University of Northern Colorado**  
Phone: **970-351-1982**  
Fax: **N/A**  
Email: **Alejandro.Garcia@unco.edu**

**APPENDICES:**

**Appendix A: Information for Bidders (SBP-6.12) – See Project Manual**

**Appendix B: Bid Form (SBP-6.13) - See Project Manual**

**Appendix B1: Bid Alternates (SBP-6.131) - See Project Manual**

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STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAMS

INFORMATION FOR BIDDERS

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Institution or Agency: University of Northern Colorado  
Project No./Name: 2024-080M23 / Michener Library Roof Replacement – Phase 1 & 2

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1. **BID FORM:** Bidders are required to use the Bid form attached to the bidding documents. Each bidder is required to bid on all alternates and indicate the time from the date of the Notice to Proceed to Substantial Completion in calendar days, and in addition, the bidder is required to indicate the period of time to finally complete the project from Substantial Completion to Final Acceptance, also in calendar days. Bids indicating times for Substantial Completion and Final Acceptance in excess of the number of days indicated in the Advertisement for Bids for completion of the entire Project may be found non-responsive and may be rejected. The bid shall not be modified or conditioned in any manner. Bids shall be submitted in sealed envelopes bearing the address and information shown below. If a bid is submitted by mail, this aforementioned sealed envelope should be enclosed in an outer envelope and sent to the following addressee:

**Agency:** UNC – Facilities Management Purchasing  
**Contact Name:** Attention: Curtis Benton  
**Address:** Parsons Hall, 501 20<sup>th</sup> St., Greeley, CO 80639

The outside of the sealed inner envelope should bear the following information:

Project #  
Project Name  
Name and Address of Bidder  
Date of Opening  
Time of Opening

2. **INCONSISTENCIES AND OMISSIONS:** Bidders may request clarification of any seeming inconsistencies, or matters seeming to require explanation, in the bidding documents at least three (3) business days prior to the time set for the opening of Bids. Decisions of major importance on such matters will be issued in the form of addendum.
3. **APPLICABLE LAWS AND REGULATIONS:** The bidder's attention is called to the fact that all work under this Contract shall comply with the provisions of all state and local laws, approved state building codes, ordinances and regulations which might in any manner affect the work to be done or those to be employed in or about the work. Labor for work shall be governed by the provisions of Colorado law which are hereinafter set forth in Articles 27 and 52 of the General Conditions. This includes the requirements for apprenticeship and prevailing wage on Public Projects. The bidder should be aware that reporting of embodied carbon emissions of eligible materials shall be governed by the provisions of Colorado State Law. This includes the requirements for Environmental Product Declarations (EPDs) that meet the maximum acceptable Global Warming Potential (GWP) limits as established by the Office of the State Architect.
4. **BID SECURITY:** A bid security of not less than 5% of the bid price is required when the price is estimated to be \$50,000 or more. The security shall be a bond by a surety company, the equivalent in cash, or otherwise supplied in a form satisfactory for the State. Noncompliance requires the bid to be rejected as nonresponsive.
5. **TAXES:** The bidder's attention is called to the fact that the Bid submitted shall exclude all applicable federal excise or manufacturers' taxes and all state sales and use taxes as hereinafter set forth in Article 9.3 of the GENERAL CONDITIONS.
6. **OR EQUAL:** The words "OR EQUAL" are applicable to all specifications and drawings relating to materials or equipment specified. Any material or equipment that will fully perform the duties specified, will be considered "equal", provided the bid submits proof that such material or equipment is of equivalent substance and function and is approved, in writing. Requests for the approval of "or equal" shall be made in writing at least five (5)



business days prior to bid opening. During the bidding period, all approvals shall be issued by the Architect/Engineer in the form of addenda at least two (2) business days prior to the bid opening date.

7. **ADDENDA:** Owner/architect initiated addenda shall not be issued later than two (2) business days prior to bid opening date. All addenda shall become part of the Contract Documents and receipt must be acknowledged on the Bid form.
8. **METHOD OF AWARD - LOWEST RESPONSIBLE BIDDER:** If the bidding documents for this project require alternate prices, additive and/or deductible alternates shall be listed on the alternates bid form provided by the Principal Representative. Bidders should note the Method of Award is applicable to this Bid as stated below.
  - A. **DEDUCTIBLE ALTERNATES:** The lowest responsible Bid, taking into account the Colorado resident bidder preference provision of Colorado law, will be determined by and the contract will be awarded on the base bid combined with deductible alternates, deducted in numerical order in which they are listed in the alternates bid form provided by the Principal Representative. The subtraction of alternates shall result in a sum total within available funds. If this bid exceeds such amount, the right is reserved to reject all bids. An equal number of alternates shall be subtracted from the base bid of each bidder within funds available for purposes of determining the lowest responsible bidder.
  - B. **ADDITIVE ALTERNATES:** The lowest responsible Bid, taking into account the Colorado resident bidder preference provision of Colorado law, will be determined by and the contract will be awarded on the base bid plus all additive alternates added in the numerical order in which they are listed in the alternates bid form provided by the Principal Representative. The addition of alternates shall result in a sum total within available funds. If this bid exceeds such amount, the right is reserved to reject all bids. An equal number of alternates shall be added to the base bid of each bidder within funds available for purposes of determining the lowest responsible bidder.
  - C. **DEDUCTIBLE AND ADDITIVE ALTERNATES:** Additive alternates will not be used if deductible alternates are used and deductible alternates will not be used if additive alternates are used.
10. **NOTICE OF CONTRACTOR'S SETTLEMENT** – Agencies/institutions must indicate in the initial Solicitation (Advertisement for Bids, Documented Quotes, or Requests for Proposals) whether settlement will be advertised in newspapers or electronic media.

**STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM**



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**COLORADO**

**CONTRACTOR'S AGREEMENT  
DESIGN/BID/BUILD (D/B/B)  
(STATE FORM SC-6.21)**

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STATE AGENCY:	<u>University of Northern Colorado</u>
DEPARTMENT ID:	<u>GKA</u>
CONTRACT ID #:	<u>UNC-IFB-003-25</u>
PROJECT #:	<u>2024-080M23</u>
PROJECT NAME:	<u>Michener Library Roof Replacement – Phase 1 &amp; 2</u>
VENDOR NAME:	<u></u>

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ATTACHMENT 1: The General Conditions of the Contractor's Design/Bid/Build (D/B/B) Agreement (SC-6.23)

**STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM**

**CONTRACTOR'S DESIGN/BID/BUILD AGREEMENT  
(STATE FORM SC-6.21)**

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**SIGNATURE PAGE**

**THE PARTIES HERETO HAVE EXECUTED THIS CONTRACT**

Each person signing this Agreement represents and warrants that the signer is duly authorized to execute this Agreement and to bind the Party authorizing such signature.

\*Persons signing for Contractor hereby swear and affirm that they are authorized to act on Contractor's behalf and acknowledge that the State is relying on their representations to that effect. **Principal is not** a recognized title and will not be accepted.

Project Number/Name: 2024-080M23 / Michener Library Roof Replacement – Phase 1 & 2  
CMS Contract ID No.: UNC-IFB-003-25

<p style="text-align: center;"><b>CONTRACTOR</b> INSERT-Legal Name of Contractor</p> <hr/> <p style="text-align: center;">By: Name &amp; Title of Person Signing for Contractor</p> <p style="text-align: center;">Date: _____</p>	<p style="text-align: center;"><b>STATE OF COLORADO</b></p> <hr/> <p style="text-align: center;"><i>By: Blaine Nickeson, Associate Vice President Administration</i></p> <p style="text-align: center;">Date: _____</p>
<p style="text-align: center;"><b>DEPARTMENT OF PERSONNEL &amp; ADMINISTRATION</b> STATE BUILDINGS PROGRAM State Architect (or authorized delegate)</p> <hr/> <p style="text-align: center;"><i>By: Nate Reinhard, Assistant Vice President, Facilities Management</i></p> <p style="text-align: center;">Date: _____</p>	
<p>In accordance with §24-30-202, C.R.S., this Contract is not valid until signed and dated below by the State Controller (or an authorized delegate) or the UNC Controller per the Fiscal Rules of the individual Institution of Higher Education</p> <p style="text-align: center;"><b>STATE CONTROLLER</b></p> <p style="text-align: center;">By: _____ <i>Alex LeBlanc, State Controller Delegate</i></p> <p style="text-align: center;">Effective Date: _____</p>	

**STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM**

**CONTRACTOR'S DESIGN/BID/BUILD (D/B/B) AGREEMENT  
(STATE FORM SC-6.21)**

Department ID: GKA Contract ID #: UNC-IFB-003-25 Project #: 2024-080M23

**1. PARTIES.** THIS AGREEMENT is entered into by and between the STATE OF COLORADO, acting by and through the Insert Department's or IHE's Full Legal Name hereinafter referred to as the State or Principal Representative, and Insert Contractor's full Legal Name including "Inc.", "LLC" etc. having its offices at Street address, City, State and Zip Code hereinafter referred to as the Contractor.

**2. EFFECTIVE DATE AND NOTICE OF NONLIABILITY.** This Agreement shall not be effective or enforceable until it is approved and signed by the State Controller or its designee (hereinafter called the "Effective Date"), but shall be effective and enforceable thereafter in accordance with its provisions. The State shall not be bound by any provision of this Contract before the Effective Date, and shall have no obligation to pay Contractor for any Work performed or expense incurred before the Effective Date.

**RECITALS:**

**WHEREAS,** the Principal Representative intends to engage the services of a Contractor for the Michener Library Roof Replacement – Phase 1 & 2 hereinafter called the Project; and

**WHEREAS,** authority exists in the Law and Funds have been budgeted, appropriated, and otherwise made available, and a sufficient unencumbered balance thereof remains available for payment.

**WHEREAS,** the State has **Appropriated** and the Principal Representative has been authorized to expend the total sum of two million six hundred eighty-two thousand six Dollars (\$2,682,006.00) for this project including all professional services, construction/improvements, project contingencies, furnishings, movable equipment, reimbursable expenses and miscellaneous expenses; and

**WITNESSETH,** that the State of Colorado and the Contractor agree as follows:

**1 ARTICLE 1 PERFORMANCE OF THE WORK**

The Contractor shall perform all of the Work required for the complete and prompt execution of everything described or shown in, or reasonably implied from the Contract Documents for the above referenced Project.

**2 ARTICLE 2 PROVISIONS OF THE CONTRACT DOCUMENTS**

The Contractor agrees to perform the Work to the highest industry standards and to the satisfaction of the State of Colorado and its contractor in strict accordance with the provisions of the Contract Documents.

**3 ARTICLE 3 TIME OF COMPLETION**

The Contractor agrees to Substantially Complete the Project within \_\_\_\_\_ calendar days from the date of the Notice to Proceed, in addition, the Contractor agrees to finally complete the Project from Substantial Completion to Final Acceptance within \_\_\_\_\_ calendar days for a total time of completion of the entire Project of \_\_\_\_\_ calendar days. The Contractor shall perform the Work with due diligence to completion.

**4 ARTICLE 4 ESSENTIAL CONDITION**

Timely completion of the Project is an essential condition of this Agreement. The Contractor shall be subject to any liquidated damages described in Article 7.6 for failure to satisfactorily complete the Work within the time periods in Article 3 above.

**5 ARTICLE 5 CONTRACT SUM**

The Contractor shall be paid for the performance of this Agreement, subject to any additions and deductions as provided for in Articles 32, 34 and 35 of The General Conditions of the Construction Contract SC-6.23, the sum of INSERT DOLLAR VALUE IN WORDS DOLLARS AND NO/100 (\$\_\_\_\_\_).

	Description of Work/Date	Dollar Amount
Base Contract Amount		
Alt. #01		
Alt. #02		
Alt. #03		
	Total Contract Sum	\$ -

**6 ARTICLE 6 CONTRACT DOCUMENTS**

The Contract Documents, as enumerated in Article 1.1 of The General Conditions of the Contractor’s Design/Bid/Build (D/B/B) Agreement (SC-6.23), (the “General Conditions”). The Contract Documents, including the General Conditions, are all essential parts of this Agreement and are fully incorporated herein.

**7 ARTICLE 7 OPTIONAL PROVISIONS AND ELECTIONS**

The provisions of this Article 7 alter or enlarge upon the following Articles (the General Conditions of the Contractor’s Design/Bid/Build Agreement SC-6.23):

7.1 MODIFICATION OF ARTICLE 2: Execution, Correlation, Intent of Documents, Communication and Cooperation.

If the box below is marked, certification of apprenticeship utilization is required for all mechanical, sheet metal, fire suppression, sprinkler fitting, electrical and plumbing work on the project.

\_\_\_\_\_ Principal Representative initial

7.2 MODIFICATION OF ARTICLE 13: Shop Drawings, Product Data and Samples

If the box is marked, the Buy Clean Colorado Act shall be applicable to the Project. The contractor is responsible for submitting Environmental Product Declaration (EPD) information for all eligible materials to be used on the project.

\_\_\_\_\_ Principal Representative initial

7.3 MODIFICATION 1 OF ARTICLE 27: Labor and Wages

If the box is marked, the Federal Davis-Bacon Act shall be applicable to the Project. The minimum wage rates to be paid on the Project shall be furnished by the Principal Representative and included in the Contract Documents.

\_\_\_\_\_ Principal Representative initial

7.4 MODIFICATION 2 OF ARTICLE 27: Labor and Wages

If the box is marked, the State prevailing wage statute shall be applicable to the Project. The minimum wage rates to be paid on the Project shall be furnished by the Principal Representative and included in the Contract Documents.

\_\_\_\_\_ Principal Representative initial

7.5 MODIFICATION OF ARTICLE 39: Non-Binding Dispute Resolution – Facilitated Negotiations

If the box is marked, and initialed by the State as noted, the requirement to participate in facilitated negotiations shall be deleted from this Contract. Article 39, Non-Binding Dispute Resolution – Facilitated Negotiations, shall be deleted in its entirety and all references to the right to the same where ever they appear in the contract shall be similarly deleted.

The box may be marked only for projects with an estimated value of less than \$500,000.

\_\_\_\_\_ Principal Representative initial

7.6 MODIFICATION OF ARTICLE 45: Guarantee Inspections After Completion

If the box below is marked the six month guarantee inspection is not required.

\_\_\_\_\_ Principal Representative initial

7.7 MODIFICATION OF ARTICLE 46: Time of Completion and Liquidated Damages

If an amount is indicated immediately below, liquidated damages shall be applicable to this Project as, and to, the extent shown below. Where an amount is indicated below, liquidated damages shall be assessed in accordance with and pursuant to the terms of The General Conditions of the Design/Bid/Build Agreement Article 46, Time of Completion And Liquidated Damages, in the amounts and as here indicated. The election of liquidated damages shall limit and control the parties right to damages as the State’s sole and exclusive remedy for delay.

7.7.1 Inability To Use The Project

For the inability to use the Project, for each day after the number of calendar days specified in the Contractor's bid for the Project and the Agreement for achievement of Substantial Completion, until the day that the Project has achieved Substantial Completion and the Notice of Substantial Completion is issued, the Contractor agrees that an amount equal NA Dollars (\$NA). shall be assessed against Contractor from amounts due and payable to the Contractor under the Contract, or the Contractor and the Contractor's Surety shall pay to the Principal Representative such sum for any deficiency, if amounts on account thereof are deducted from remaining amounts due, but amounts remaining are insufficient to cover the entire assessment.

#### 7.7.2 Damages Related to Extended Closeout

For damages related to or arising from additional administrative, technical, supervisory and professional expenses related to and arising from the extended closeout period, for each day in excess of the number of calendar days specified in the Contractor's bid for the Project and the Agreement to finally complete the Project as defined by the issuance of the Notice of Final Acceptance (after the issuance of the final Notice of Substantial Completion), the Contractor agrees that an amount equal to NA Dollars (\$NA). shall be assessed against Contractor from amounts due and payable to the Contractor under the Contract, or the Contractor and the Contractor's Surety shall pay to the Principal Representative such sum for any deficiency, if amounts on account thereof are deducted from remaining amounts due but amounts remaining are insufficient to cover the entire assessment.

## 8 ARTICLE 8 NOTICE IDENTIFICATION

All Notices pertaining to this Agreement and the General Conditions (SC-5.23) or otherwise required to be given shall be transmitted in writing, to the individuals at the addresses listed below, and shall be deemed duly given when received by the parties at their addresses below or any subsequent persons or addresses provided to the other party in writing.

### NOTICE TO PRINCIPAL REPRESENTATIVE:

Insert Name of Individual acting on the PR behalf  
Insert Street Address  
City, State Zip Code  
Insert email address

### With copies to State Buildings Program (or Delegate)

Insert Name of Individual acting on OSA/SBP behalf  
Insert Street Address  
City, State Zip Code  
Insert email address

### NOTICE TO CONTRACTOR:

Insert Name of Individual acting on the contractor behalf  
Insert Street Address  
City, State Zip Code  
Insert email address

With copies to:



File

**STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM**

**CONTRACTOR'S DESIGN/BID/BUILD AGREEMENT  
(STATE FORM SC-6.21)**

**EXHIBIT A: CONTRACTORS BID**

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**CONTRACTOR'S BID** (Form SBP-6.13)

Bid Alternates (Form SBP-6.131)

Unit Pricing (Form SBP-6.133)

Bid Bond (Form SBP-6.14)

Labor Burden Calculation (Form SBP-6.18)



STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAMS

**BID**

Institution/Agency: University of Northern Colorado

Project No./Name: 2024-080M23 / Michener Library Roof Replacement – Phase 1 & 2

Bidder Acknowledges Receipt of Addenda Numbers:

Bidder Anticipates Services outside the United States or Colorado:\*

Bidder will comply with 80% Colorado Labor on project above \$500,000:

Bidder is a Service-Disabled Veteran Owned Small Business:\*

No  Yes  If Yes see 3A below

Yes  No  If No see 3B below

No  Yes  If Yes see 3C below

**Base Bid**

\$ \_\_\_\_\_

(Refer to Bid Alternate Form SC-6.13.1 Attached, If Applicable)

Bidder's Time of Completion

a. Time Period from Notice to Proceed to Substantial Completion: \_\_\_\_\_

b. Time Period from Substantial Completion to Final Acceptance: \_\_\_\_\_

c. Total Time of Completion of Entire Project (a + b): \_\_\_\_\_

1. **BID:** Pursuant to the advertisement by the State of Colorado dated \_\_\_\_\_ the undersigned bidder hereby proposes to furnish all the labor and materials and to perform all the work required for the complete and prompt execution of everything described or shown in or reasonably implied from the Bidding Documents, including the Drawings and Specifications, for the work and for the base bid indicated above. Bidders should include all taxes that are applicable.
2. **EXAMINATION OF DOCUMENTS AND SITE:** The bidder has carefully examined the Bidding Documents, including the Drawings and Specifications, and has examined the site of the Work, so as to make certain of the conditions at the site and to gain a clear understanding of the work to be done.
3. **PARTIES INTERESTED IN BID:** The bidder hereby certifies that the only persons or parties interested in this Bid are those named herein, and that no other bidder or prospective bidder has given any information concerning this Bid.
  - A. If the bidder anticipates services under the contract or any subcontracts will be performed outside the United States or Colorado, the bidder shall provide in a written statement which must include, but need not be limited to the type of services that will be performed at a location outside the United States or Colorado and the reason why it is necessary or advantageous to go outside the United States or Colorado to perform such services. (Does not apply to any project that receives federal moneys) \*
  - B. For State Public Works projects per C.R.S. 8-17-101, Colorado labor shall be employed to perform at least 80% of the work. Colorado Labor means any person who is a resident of the state of Colorado at the time of the Public Works project. Bidders indicating that their bid proposal will not comply with the 80% Colorado Labor requirement are required to submit written justification along with the bid submission. (Does not apply to any project that receives federal moneys) \*
  - C. A Service-Disabled Veteran Owned Small Business (SDVOSB) per C.R.S. 24-103-211, means a business that is incorporated or organized in Colorado or maintains a place of business or has an office in Colorado and is officially registered and verified by the Center for Veteran Enterprise within the U.S. Department of Veteran Affairs. Attach proof of certification along with the bid submission. \*
  - D. Projects estimated to be \$1 million or more that do not receive federal funds are required to comply with the State Apprenticeship Utilization requirements C.R.S. 24-92-115
  - E. Projects estimated to be \$500,000 or more that do not receive federal funds are required to comply with the State Prevailing Wage requirements C.R.S. 24-92-201 through 210.
4. **BID GUARANTEE:** This Bid is accompanied by the required Bid Guarantee. Per C.R.S. §24-105-201 If the construction value is \$50,000 or greater a Bid Bond and Power of Attorney or Proposal Guaranty is required in an amount not less than 5% of the total Bid. You are authorized to hold said Bid Guarantee for a period of not more than thirty (30) days after the opening of the Bids for the work above indicated, unless the undersigned bidder is awarded the Contract, within said period, in which event the Office of the State Architect, may retain said Bid Guarantee, until the undersigned bidder

has executed the required Agreement and furnished the required Performance Bond, Labor and Material Payment Bond, and Insurance Policy.

5. **TIME OF COMPLETION:** The bidder agrees to achieve Substantial Completion of the Project from the date of the Notice to Proceed within the number of calendar days entered above, and in addition, further agrees that the period between Substantial Completion and Final Acceptance of the Project will not exceed the number of calendar days noted above. If awarded the Work, the bidder agrees to begin performance within ten (10) days from the date of the Notice to Proceed subject to Article 46, Time of Completion and Liquidated Damages of the General Conditions of the Contract, and agrees to prosecute the Work with due diligence to completion. The bidder represents that Article 7D of the Contractor's Agreement (SC-6.21) has been reviewed to determine the type and amount of any liquidated damages that may be specified for this contract.
6. **EXECUTION OF DOCUMENTS:** The bidder understands that if this Bid is accepted, bidder must execute the required Agreement and furnish the required Performance Bond, Labor and Material Payment Bond, Insurance Policy and Certificates of Insurance within ten (10) days from the date of the Notice of Award, and that the bidder will be required to sign to acknowledge and accept the Contract Documents, including the Drawings and Specifications.
7. **ALTERNATES:** Refer to the Information for Bidders (SC-6.12) for Method of Award for Alternates and use State Form SBP-6.13.1 Bid Alternates form to be submitted with this bid form if alternates are requested by the institution/agency in the solicitation documents.
8. **Submit wage rates** (direct labor costs) for prime contractor and subcontractor as requested by the institution/agency in the solicitation documents.
9. **The right is reserved to waive informalities and to reject any and all Bids.**

*\*Does not apply to projects for Institutions of Higher Education that have opted out of the State Procurement Code.*

SIGNATURES: If the Bid is being submitted by a Corporation, the Bid shall be signed by an officer, i.e., President or Vice-President. If a sole proprietorship or a partnership is submitting the Bid, the Bid shall so indicate and be properly signed.

Dated this \_\_\_\_\_ Day of \_\_\_\_\_, 20\_\_\_\_

THE BIDDER:

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Address (including city, state and zip)

Phone number:

\_\_\_\_\_  
Name (Print) and Title

\_\_\_\_\_  
Signature



STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM

COLORADO

**BID ALTERNATES FORM**

Institution/Agency: University of Northern Colorado  
Project No./Name: 2024-080M23 / Michener Library Roof Replacement – Phase 1 & 2

Additive alternates will not be used if deductible alternates are used and deductible alternates will not be used if additive alternates are used.

**Additive Alternates (If Applicable)**

Refer to specification section \_\_\_\_\_ for descriptions of add alternates. If the add alternates are accepted, the base bid would be modified by the amount entered by the bidder.

A.A. No. 1	<u>New 90-mil EPDM membrane in lieu of 60-mil.</u>	Add \$	_____
A.A. No. 2	<u>Concrete curb and cap coating where existing.</u>	Add \$	_____
A.A. No. 3	<u>Concrete coating at parapet wall where not existing.</u>	Add \$	_____
A.A. No. 4	_____	Add \$	_____
A.A. No. 5	_____	Add \$	_____
A.A. No. 6	_____	Add \$	_____
A.A. No. 7	_____	Add \$	_____
A.A. No. 8	_____	Add \$	_____
A.A. No. 9	_____	Add \$	_____
A.A. No. 10	_____	Add \$	_____

**Deductive Alternates (If Applicable)**

Refer to specification section \_\_\_\_\_ for descriptions of the deductive alternates. If the deductive alternates are accepted, the base bid would be modified by the amount entered by the bidder.

D.A. No. 1	_____	Deduct \$	_____
D.A. No. 2	_____	Deduct \$	_____
D.A. No. 3	_____	Deduct \$	_____
D.A. No. 4	_____	Deduct \$	_____
D.A. No. 5	_____	Deduct \$	_____
D.A. No. 6	_____	Deduct \$	_____
D.A. No. 7	_____	Deduct \$	_____
D.A. No. 8	_____	Deduct \$	_____
D.A. No. 9	_____	Deduct \$	_____
D.A. No. 10	_____	Deduct \$	_____

THE BIDDER:

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



STATE OF COLORADO  
 OFFICE OF THE STATE ARCHITECT  
 STATE BUILDINGS PROGRAM

**UNIT PRICING FORM**

Institution/Agency: University of Northern Colorado

Project No./Name: 2024-080M23 / Michener Library Roof Replacement – Phase 1 & 2

The unit prices below shall be used to determine adjustment to the contract sum when changes in the work involving said items are deemed necessary.

Unit Prices shall apply until the date of contract completion established at the time of Notice to Proceed.

All unit prices shall include the pro-rata share of all costs of materials, equipment and disposal required to complete the work item. Overhead, profit and bond will be calculated per Change Order Proposal form SC-6.312.

*(Note: Architect/Engineer should complete a brief description below based on their complete description provided in Division 01 of their specification before inserting into the solicitation)*

**UNIT PRICING**

Number	Description	Unit of Measure	Unit Price
U1	Provide unit price for replacement of one (1) full cast iron roof drain assembly	Per Drain	\$
U2	Provide unit price for installation of one (1) new retrofit drain insert.	Per Drain	\$
U3	Remove and replace hard-lid gypsum ceiling boards (minimum 5/8") as required for new drain plumbing, if damaged during installation.	Per 32 SF	\$
U4	Repair damaged concrete decking per specification requirements.	Per SF	\$
U5	Removal and replacement of damaged lightweight concrete per specification requirements.	Per SF	\$
U6	Installation of new 20-gauge L-metal for perimeter edge metal support (per 6" x 10'-0" sheet)	Per Sheet 6" x 10'-0"	\$

THE BIDDER:

\_\_\_\_\_  
 Company Name

\_\_\_\_\_  
 Signature

\_\_\_\_\_  
 Date



STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM

**COLORADO BID BOND**

Institution/Agency: University of Northern Colorado  
Project No./Name: 2024-080M23 / Michener Library Roof Replacement – Phase 1 & 2

**KNOW ALL MEN BY THESE PRESENTS:**

**WHEREAS**, \_\_\_\_\_ hereinafter called the “PRINCIPAL”, is submitting a PROPOSAL for the above described project, to the STATE OF COLORADO, hereinafter called the “OBLIGEE”.

**WHEREAS**, the Advertisement for Bids has required as a condition of receiving the Proposals that the Principal submit with the PROPOSAL GUARANTY in an amount not less than five per cent (5%) of the Proposal, which sum it is specifically agreed is to be forfeited as Liquidated Damages in the event that the Principal defaults in his obligation as hereinafter specified, and, in pursuance of which Requirement, this Bid is made, executed and delivered.

**NOW THEREFORE**, the Principal and \_\_\_\_\_ a corporation of the State of \_\_\_\_\_, duly authorized to transact business in Colorado, as Surety, are held and firmly bound unto the Obligee, in the sum of five per cent (5%) of the Principal’s total bid price, lawful money of the United States for the payment of which sum, well and truly to be made to the Obligee, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

**FURTHER THAT**, a condition of the obligation that the Principal shall maintain his Proposal in full force and effect for thirty (30) days after the opening of the proposals for the project, or, if the Principal’s Proposal is accepted, the Principal shall, within the prescribed time, execute the required Agreement, furnish the required Performance Bond, Labor and Material Payment Bond, Insurance Policy, and Certificates of Insurance, then this obligation shall be null and void, otherwise it shall remain in full force and effect, and subject to forfeiture upon demand as Liquidated Damages.

**IN WITNESS WHEREOF** said Principal and Surety have executed this Bond, this \_\_\_\_\_ day of \_\_\_\_\_, A.D., 20\_\_.

(Corporate Seal)

**THE PRINCIPAL**

\_\_\_\_\_  
Company Name

ATTEST

\_\_\_\_\_  
Address (including city, state and zip)

Secretary

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

\_\_\_\_\_  
Name (Print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name (Print) and Title

**SIGNATURES** If the “Principal” is doing business as a Corporation, the Bid Bond shall be signed by an officer, i.e., President or Vice President. The signature of the officer shall be attested to by the Secretary and properly sealed.

If the “Principal” is an individual or a partnership, the Bid Bond shall so indicate and be properly signed.

(Corporate Seal)

**THE SURETY**

\_\_\_\_\_

By \_\_\_\_\_

Secretary

Attorney-in-Fact

**THIS BOND MUST BE ACCOMPANIED BY POWER OF ATTORNEY, EFFECTIVELY DATED.  
FAILURE TO PROVIDE A PROPERLY EXECUTED BID BOND WITH A PROPERLY EXECUTED POWER OF ATTORNEY  
WILL RESULT IN THE BIDDER’S PROPOSAL BEING DEEMED NON-RESPONSIVE.**



STATE OF COLORADO  
 OFFICE OF THE STATE ARCHITECT  
 STATE BUILDINGS PROGRAM

**DIRECT LABOR BURDEN CALCULATION**

Institution/Agency: University of Northern Colorado  
 Project No./Name: 2024-080M23 / Michener Library Roof Replacement – Phase 1 & 2

This form is required to be submitted for review prior to execution of a construction agreement.

List items below by the percentage of what makes up the total labor overhead; Items include benefits that a contractor pays to employees on their payroll. Examples include taxes, pension cost, health and dental insurance etc. The Labor Burden percentage must be agreed to by both the contractor and Principal Representative and will be included in the contract as part of Exhibit A and will be used in the calculation of any future Change Order Proposals (SC-6.312) Line 2.

Major sub-contractors defined as electricians, plumbers, mechanical contractors, excavators, millwork, concrete, block layers etc. Please provide one (1) Labor Burden Calculation Sheet per contractor and for each sub-contractor. These labor burdens shall be used in the calculation of any future Change Order Proposals (SC-6.312) Line 10.

State reserves the right to require back-up confirmation of all information included in this calculation.

Contractor/Subcontractor Name:		
	Percent of Salary Paid	
Payroll Taxes		
Pension Costs		
Health Insurance		
Dental Insurance		
Life Insurance		
Other (Specify)		Description: _____
Other (Specify)		Description: _____
<b>Total Labor Burden Percentage:</b>	0%	



**STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM**

**CONTRACTOR'S DESIGN/BID/BUILD AGREEMENT  
(STATE FORM SC-6.21)**

**EXHIBIT B: PERFORMANCE BOND**

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**PERFORMANCE BOND (Form SC-6.22)**

**STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM**

**CONTRACTOR'S DESIGN/BID/BUILD AGREEMENT  
(STATE FORM SC-6.21)**

**EXHIBIT C: LABOR AND MATERIAL PAYMENT BOND**

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**LABOR AND MATERIAL PAYMENT BOND (Form SC-6.221)**

**STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM**

**CONTRACTOR'S DESIGN/BID/BUILD AGREEMENT  
(STATE FORM SC-6.21)**

**EXHIBIT D: INSURANCE CERTIFICATE(S)**

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**INSURANCE CERTIFICATE(S)** (attached)

STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM

CONTRACTOR'S DESIGN/BID/BUILD AGREEMENT  
(STATE FORM SC-6.21)

EXHIBIT E: BUILDING CODE COMPLIANCE POLICY

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**BUILDING CODE COMPLIANCE POLICY: COORDINATION OF APPROVED BUILDING CODES, PLAN REVIEWS  
AND BUILDING INSPECTIONS**

Refer to the State Architect Office's Building Codes Webpage for:

*Building Code Compliance Policy* (Rev.       ); and

*Approved State Building Codes* (Rev.       ); which is Exhibit A to the *Building Code Compliance Policy*.

The State Architect Office's Building Codes Webpage is available at:

<https://osa.colorado.gov/state-buildings/building-codes>

**STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM**

**CONTRACTOR'S DESIGN/BID/BUILD AGREEMENT  
(STATE FORM SC-6.21)**

**EXHIBIT F: STATE SALES AND USE TAX FORM**

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**STATE SALES AND USE TAX FORM**

**STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM**

**CONTRACTOR'S DESIGN/BID/BUILD AGREEMENT  
(STATE FORM SC-6.21)**

**EXHIBIT G: APPLICABLE PREVAILING WAGE DETERMINATIONS AND APPRENTICESHIP  
CONTRIBUTION RATES**

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**APPLICABLE PREVAILING WAGE DETERMINATIONS AND APPRENTICESHIP CONTRIBUTION RATES**

**STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM**

**CONTRACTOR'S DESIGN/BID/BUILD AGREEMENT  
(STATE FORM SC-6.21)**

**EXHIBIT H: APPRENTICESHIP UTILIZATION CERTIFICATIONS**

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**APPRENTICESHIP UTILIZATION CERTIFICATIONS**



STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM

**APPRENTICESHIP UTILIZATION CERTIFICATION**  
**(Public Projects of \$1 million or more)**

Institution/Agency: University of Northern Colorado  
Project No./Name: 2024-080M23 / Michener Library Roof Replacement – Phase 1 & 2  
General Contractor: \_\_\_\_\_

For each trade listed below attach documentation that all firms identified participate in apprenticeship programs as described in the Certification Statement below.

TRADE	SUBCONTRACTOR	UNION CERTIFICATION
Mechanical		
Sheet Metal		
Fire Suppression		
Sprinkler Fitting		
Plumbing		
Electrical		

**CERTIFICATION STATEMENT**                      § 24-92-115, C.R.S.                      (SB 19-196)

The above named General Contractor certifies and agrees as follows:

That all firms identified above participate in apprenticeship programs registered with the United States Department of Labor's Employment and Training Administration or state apprenticeship councils recognized by the United States Department of Labor and have a proven record of graduating apprentices at a minimum of fifteen percent of its apprentices for at least three of the past five years. The General Contractor shall supply supporting documentation from the United States Department of Labor's office of apprenticeship verifying the certification.

The above documentation shall be made publicly available by the contracting agency through its website within thirty (30) days from when it is submitted.

The General Contractor shall agree to provide additional documentation to the contracting agency regarding affected apprenticeship training programs relating to the requirements above. If a contracting agency determines that a subcontractor has willfully falsified documentation or willfully misrepresented their qualifications, the agency shall direct the General Contractor to terminate the subcontractor contract immediately and the subcontractor will be immediately removed from the public project. At the discretion of the Director of the Department of Personnel, the State may initiate the process to debar the General Contractor pursuant to § 24-109-105, C.R.S., and may pursue any other remedy provided by law.

CERTIFIED and AGREED to this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

GENERAL CONTRACTOR:

\_\_\_\_\_  
Full Legal Name  
BY: \_\_\_\_\_



**STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM**

**CONTRACTOR'S DESIGN/BID/BUILD AGREEMENT  
(STATE FORM SC-6.21)**

**SUPPLEMENTARY GENERAL CONDITIONS: FEDERAL PROVISIONS**

---

**Supplementary General Conditions Federal Provisions**

**SLFRF Federal Funds: Contractor Terms and Conditions Certification**

**SLFRF Federal Funds: Contractor Terms and Conditions**

# **SUPPLEMENTARY GENERAL CONDITIONS: FEDERAL PROVISIONS**

## **1. APPLICABILITY OF PROVISIONS.**

- 1.1. The Contract to which these Federal Provisions are attached has been funded, in whole or in part, with an Award of Federal funds. In the event of a conflict between the provisions of these Federal Provisions, the Special Provisions, the body of the Contract, or any attachments or exhibits incorporated into and made a part of the Contract, the provisions of these Federal Provisions shall control.
- 1.1. The State of Colorado is accountable to Treasury for oversight of their subrecipients, including ensuring their subrecipients comply with the SLFRF statute, SLFRF Award Terms and Conditions, Treasury's Final Rule, and reporting requirements, as applicable.
- 1.2. Additionally, any subrecipient that issues a subaward to another entity (2nd tier subrecipient), must hold the 2nd tier subrecipient accountable to these provisions and adhere to reporting requirements.
- 1.3. These Federal Provisions are subject to the Award as defined in §2 of these Federal Provisions, as may be revised pursuant to ongoing guidance from the relevant Federal or State of Colorado agency or institutions of higher education.

## **2. DEFINITIONS.**

- 2.1. For the purposes of these Federal Provisions, the following terms shall have the meanings ascribed to them below.
  - 2.1.1. "Award" means an award of Federal financial assistance, and the Contract setting forth the terms and conditions of that financial assistance that a non-Federal Entity receives or administers.
    - 2.1.1.1. Awards may be in the form of:
      - 2.1.1.1.1. Grants;
      - 2.1.1.1.2. Contracts;
      - 2.1.1.1.3. Cooperative Contracts, which do not include cooperative research and development Contracts (CRDA) pursuant to the Federal Technology Transfer Act of 1986, as amended (15 U.S.C. 3710);
      - 2.1.1.1.4. Loans;
      - 2.1.1.1.5. Loan Guarantees;
      - 2.1.1.1.6. Subsidies;
      - 2.1.1.1.7. Insurance;
      - 2.1.1.1.8. Food commodities;
      - 2.1.1.1.9. Direct appropriations;
      - 2.1.1.1.10. Assessed and voluntary contributions; and
      - 2.1.1.1.11. Other financial assistance transactions that authorize the expenditure of Federal funds by non-Federal Entities.
      - 2.1.1.1.12. Any other items specified by OMB in policy memoranda available at the OMB website or other source posted by the OMB.
    - 2.1.1.2. Award does not include:
      - 2.1.1.2.1. Technical assistance, which provides services in lieu of money;
      - 2.1.1.2.2. A transfer of title to Federally-owned property provided in lieu of money; even if the award is called a grant;

- 2.1.1.2.3. Any award classified for security purposes; or
- 2.1.1.2.4. Any award funded in whole or in part with Recovery funds, as defined in section 1512 of the American Recovery and Reinvestment Act (ARRA) of 2009 (Public Law 111- 5).
- 2.1.2. “Contract” means the Contract to which these Federal Provisions are attached and includes all Award types in §2.1.1.1 of this Exhibit.
- 2.1.3. “Contractor” means a non-Federal Entity (or a Federal agency under an Agreement to a non-Federal Entity) receiving Federal funds through a Prime Recipient to support the performance of the Federal project or program for which the Federal funds were awarded. A Contractor is subject to the terms and conditions of the Federal Award to the Prime Recipient, including program compliance requirements. The term “Contractor” includes and may be referred to as “Subcontractor”. The term does not include an individual who is a beneficiary of a federal program.
- 2.1.4. ~~“Data Universal Numbering System (DUNS) Number” means the nine digit number established and assigned by Dun and Bradstreet, Inc. to uniquely identify a business entity. Dun and Bradstreet’s website may be found at: <http://fedgov.dnb.com/webform>.~~
- 2.1.5. “Entity” means all of the following as defined at 2 CFR part 25, subpart C; 2.1.5.1. A governmental organization, which is a State, local government, or Indian Tribe; 2.1.5.2. A foreign public entity;
  - 2.1.5.3. A domestic or foreign non-profit organization;
  - 2.1.5.4. A domestic or foreign for-profit organization; and
  - 2.1.5.5. A Federal agency, but only a Subrecipient under an Award or Subaward to a non-Federal entity.
- 2.1.6. “Executive” means an officer, managing partner or any other employee in a management position.
- 2.1.7. “Federal Award Identification Number (FAIN)” means an Award number assigned by a Federal agency to a Prime Recipient.
- 2.1.8. “Federal Awarding Agency” means a Federal agency providing a Federal Award to a Recipient as described in 2 CFR §200.37
- 2.1.9. “FFATA” means the Federal Funding Accountability and Transparency Act of 2006 (Public Law 109-282), as amended by §6202 of Public Law 110-252. FFATA, as amended, also is referred to as the “Transparency Act.”
- 2.1.10. “Federal Provisions” means these Federal Provisions subject to the Transparency Act and Uniform Guidance, as may be revised pursuant to ongoing guidance from the relevant Federal or State of Colorado agency or institutions of higher education.
- 2.1.11. “OMB” means the Executive Office of the President, Office of Management and Budget.
- 2.1.12. “Prime Recipient” means a Colorado State agency or institution of higher education that receives an Award.
- 2.1.13. “Subaward” means an award by a Recipient to a Subrecipient funded in whole or in part by a Federal Award. The terms and conditions of the Federal Award flow down to the Award unless the terms and conditions of the Federal Award specifically indicate otherwise in accordance with 2 CFR §200.38. The term does not include payments to a contractor or payments to an individual that is a beneficiary of a Federal program.
- 2.1.14. Not used
- 2.1.15. “Contractor Parent UEI Number” means the subrecipient parent organization’s 9-digit Universal Entity ID (UEI) number that appears in the subrecipient’s System for Award Management (SAM) profile, if applicable.
- 2.1.16. “System for Award Management (SAM)” means the Federal repository into which an Entity must enter the information required under the Transparency Act, which may be found at <http://www.sam.gov>.
- 2.1.17. “Total Compensation” means the cash and noncash dollar value earned by an Executive during the Prime Recipient’s or Subrecipient’s preceding fiscal year and includes the following:
  - 2.1.17.1. Salary and bonus;

- 2.1.17.2. Awards of stock, stock options, and stock appreciation rights, using the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2005) (FAS 123R), Shared Based Payments;
- 2.1.17.3. Earnings for services under non-equity incentive plans, not including group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of Executives and are available generally to all salaried employees;
- 2.1.17.4. Change in present value of defined benefit and actuarial pension plans; 2.1.17.5. Above-market earnings on deferred compensation which is not tax-qualified;
- 2.1.17.6. Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the Executive exceeds \$10,000.
- 2.1.18. "Transparency Act" means the Federal Funding Accountability and Transparency Act of 2006 (Public Law 109-282), as amended by §6202 of Public Law 110-252. The Transparency Act also is referred to as FFATA.
- 2.1.19. "Uniform Guidance" means the Office of Management and Budget Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, which supersedes requirements from OMB Circulars A-21, A-87, A-110, and A-122, OMB Circulars A-89, A-102, and A-133, and the guidance in Circular A-50 on Single Audit Act follow-up. The terms and conditions of the Uniform Guidance flow down to Awards to Subrecipients unless the Uniform Guidance or the terms and conditions of the Federal Award specifically indicate otherwise.
- 2.1.20 "Unique Entity ID" means the Unique Entity ID established by the federal government for a Grantee at <https://sam.gov/content/home>.
- 2.1.20. "Vendor" means a dealer, distributor, merchant or other seller providing property or services required for a project or program funded by an Award. A Vendor is not a Prime Recipient or a Subrecipient and is not subject to the terms and conditions of the Federal award. Program compliance requirements do not pass through to a Vendor.

### **3. COMPLIANCE.**

- 3.1. Contractor shall comply with all applicable provisions of the Transparency Act, all applicable provisions of the Uniform Guidance, and the regulations issued pursuant thereto, including but not limited to these Federal Provisions. Any revisions to such provisions or regulations shall automatically become a part of these Federal Provisions, without the necessity of either party executing any further instrument. The State of Colorado may provide written notification to Contractor of such revisions, but such notice shall not be a condition precedent to the effectiveness of such revisions.
- 3.2. Per US Treasury Final Award requirements, programs or services must not include terms or conditions that undermine efforts to stop COVID-19 or discourage compliance with recommendations and CDC guidelines.

### **4. SYSTEM FOR AWARD MANAGEMENT (SAM) AND DATA UNIVERSAL NUMBERING SYSTEM (DUNS) REQUIREMENTS.**

- 4.1. SAM. Contractor shall maintain the currency of its information in SAM until the Contractor submits the final financial report required under the Award or receives final payment, whichever is later. Contractor shall review and update SAM information at least annually after the initial registration, and more frequently if required by changes in its information.
- 4.2. UEI. Grantee shall provide its Unique Entity ID to its Prime Recipient, and shall update Grantee's information in SAM.gov at least annually after the initial registration, and more frequently if required by changes in Grantee's information.

## **5. TOTAL COMPENSATION.**

- 5.1. Contractor shall include Total Compensation in SAM for each of its five most highly compensated Executives for the preceding fiscal year if:
  - 5.1.1. The total Federal funding authorized to date under the Award is \$30,000 or more; and
  - 5.1.2. In the preceding fiscal year, Contractor received:
    - 5.1.2.1. 80% or more of its annual gross revenues from Federal procurement contracts and subcontracts and/or Federal financial assistance Awards or Subawards subject to the Transparency Act; and
    - 5.1.2.2. \$25,000,000 or more in annual gross revenues from Federal procurement contracts and subcontracts and/or Federal financial assistance Awards or Subawards subject to the Transparency Act; and
  - 5.1.3. The public does not have access to information about the compensation of such Executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d) or § 6104 of the Internal Revenue Code of 1986.

## **6. REPORTING.**

- 6.1. Contractor shall report data elements to SAM and to the Prime Recipient as required in this Exhibit if Contractor is a Subrecipient for the Award pursuant to the Transparency Act. No direct payment shall be made to Contractor for providing any reports required under these Federal Provisions and the cost of producing such reports shall be included in the Contract price. The reporting requirements in this Exhibit are based on guidance from the US Office of Management and Budget (OMB), and as such are subject to change at any time by OMB. Any such changes shall be automatically incorporated into this Contract and shall become part of Contractor's obligations under this Contract.

## **7. EFFECTIVE DATE AND DOLLAR THRESHOLD FOR REPORTING.**

- 7.1. Reporting requirements in §8 below apply to new Awards as of October 1, 2010, if the initial award is \$30,000 or more. If the initial Award is below \$30,000 but subsequent Award modifications result in a total Award of \$30,000 or more, the Award is subject to the reporting requirements as of the date the Award exceeds \$30,000. If the initial Award is \$30,000 or more, but funding is subsequently de-obligated such that the total award amount falls below \$30,000, the Award shall continue to be subject to the reporting requirements. If the total award is below \$30,000 no reporting required; if more than \$30,000 and less than \$50,000 then FFATA reporting is required; and, \$50,000 and above SLFRF reporting is required.
- 7.2. The procurement standards in §9 below are applicable to new Awards made by Prime Recipient as of December 26, 2015. The standards set forth in §11 below are applicable to audits of fiscal years beginning on or after December 26, 2014.

## **8. SUBRECIPIENT REPORTING REQUIREMENTS.**

- 8.1. If Contractor is a Subrecipient, Contractor shall report as set forth below.
  - 8.1.1. To SAM. A Subrecipient shall register in SAM and report the following data elements in SAM for each Federal Award Identification Number no later than the end of the month following the month in which the Subaward was made:
    - 8.1.1.1. Subrecipient UEI Number;
    - 8.1.1.2. Subrecipient UEI Number + 4 if more than one electronic funds transfer (EFT) account;
    - 8.1.1.3. Subrecipient Parent UEI Number;
    - 8.1.1.4. Subrecipient's address, including: Street Address, City, State, Country, Zip + 4, and Congressional District;
    - 8.1.1.5. Subrecipient's top 5 most highly compensated Executives if the criteria in §4 above are met; and
    - 8.1.1.6. Subrecipient's Total Compensation of top 5 most highly compensated Executives if criteria in §4 above met.
  - 8.1.2. To Prime Recipient. A Subrecipient shall report to its Prime Recipient, upon the effective date of the Contract, the following data elements:

8.1.2.1. Subrecipient's UEI Number as registered in SAM.

8.1.2.2. Primary Place of Performance Information, including: Street Address, City, State, Country, Zip code + 4, and Congressional District.

## **9. PROCUREMENT STANDARDS.**

- 9.1. Procurement Procedures. A Subrecipient shall use its own documented procurement procedures which reflect applicable State, local, and Tribal laws and regulations, provided that the procurements conform to applicable Federal law and the standards identified in the Uniform Guidance, including without limitation, §§200.318 through 200.326 thereof.
- 9.2. Procurement of Recovered Materials (2 CFR 200.322). If a Subrecipient is a State Agency or an agency of a political subdivision of the State, its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.
- 9.3. Domestic preference for procurements (2 CFR 200.322). As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all Agreements and purchase orders for work or products under this award.

## **10. ACCESS TO RECORDS**

- 10.1. A Subrecipient shall permit Recipient and auditors to have access to Subrecipient's records and financial statements as necessary for Recipient to meet the requirements of §200.331 (Requirements for pass-through entities), §§200.300 (Statutory and national policy requirements) through 200.309 (Period of performance), and Subpart F-Audit Requirements of the Uniform Guidance. 2 CFR §200.331(a)(5).

## **11. SINGLE AUDIT REQUIREMENTS**

- 11.1. If a Subrecipient expends \$750,000 or more in Federal Awards during the Subrecipient's fiscal year, the Subrecipient shall procure or arrange for a single or program-specific audit conducted for that year in accordance with the provisions of Subpart F-Audit Requirements of the Uniform Guidance, issued pursuant to the Single Audit Act Amendments of 1996, (31 U.S.C. 7501-7507). 2 CFR §200.501.
  - 11.1.1. Election. A Subrecipient shall have a single audit conducted in accordance with Uniform Guidance §200.514 (Scope of audit), except when it elects to have a program-specific audit conducted in accordance with §200.507 (Program-specific audits). The Subrecipient may elect to have a program-specific audit if Subrecipient expends Federal Awards under only one Federal program (excluding research and development) and the Federal program's statutes, regulations, or the terms and conditions of the Federal award do not require a financial statement audit of Prime Recipient. A program-specific audit may not be elected for research and development unless all of the Federal Awards expended were received from Recipient and Recipient approves in advance a program-specific audit.
  - 11.1.2. Exemption. If a Subrecipient expends less than \$750,000 in Federal Awards during its fiscal year, the Subrecipient shall be exempt from Federal audit requirements for that year, except as noted in 2 CFR §200.503 (Relation to other audit requirements), but records shall be available for review or audit by appropriate officials of the Federal agency, the State, and the Government Accountability Office.
  - 11.1.3. Subrecipient Compliance Responsibility. A Subrecipient shall procure or otherwise arrange for the audit required by Part F of the Uniform Guidance and ensure it is properly performed and submitted when due in accordance with the Uniform Guidance. Subrecipient shall prepare appropriate financial statements, including the schedule of expenditures of Federal awards in accordance with Uniform Guidance §200.510 (Financial statements) and provide the auditor with access to personnel, accounts, books, records,

supporting documentation, and other information as needed for the auditor to perform the audit required by Uniform Guidance Part F-Audit Requirements.

## **12. CONTRACT PROVISIONS FOR CONTRACTORS AND SUBCONTRACTORS**

- 12.1. Contractors shall comply with and shall include all of the following applicable provisions in all subcontracts entered into by it pursuant to this Contract and any provisions required by 2 CFR 200 Appendix II.
  - 12.1.1. Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 shall include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 CFR part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”
    - 12.1.1.1. During the performance of this contract, the contractor agrees as follows:
      - 12.1.1.1.1. Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.
      - 12.1.1.1.2. Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
      - 12.1.1.1.3. Contractor will send to each labor union or representative of workers with which he has a collective bargaining Contract or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers’ representative of the contractor's commitments under section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
      - 12.1.1.1.4. Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
      - 12.1.1.1.5. Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
      - 12.1.1.1.6. In the event of Contractor's non-compliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
      - 12.1.1.1.7. Contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States.”

- 12.1.2. Davis-Bacon Act. Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or Subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.
- 12.1.3. Rights to Inventions Made Under a Contract or Contract. If the Federal Award meets the definition of “funding Contract” under 37 CFR §401.2 (a) and Subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding Contract,” Subrecipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Contracts,” and any implementing regulations issued by the awarding agency.
- 12.1.4. Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended. Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).
- 12.1.5. Debarment and Suspension (Executive Orders 12549 and 12689). A contract award (see 2 CFR 180.220) must not be made to parties listed on the government wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), “Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.
- 12.1.6. Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.
- 12.1.7. Prohibition on certain telecommunications and video surveillance services or equipment (2 CFR 200.216). Grantee is prohibited from obligating or expending loan or grant funds on certain telecommunications and video surveillance services or equipment pursuant to 2 CFR 200.216.
- 12.1.8. Never Contract with the Enemy (2 CFR 200.215). Federal awarding agencies and recipients are subject to the regulations implementing “Never Contract with the Enemy” in 2 CFR part 183. The regulations in 2 CFR part 183 affect covered Agreements, grants and cooperative agreements that are expected to exceed \$50,000 within the period of performance, are performed outside the United States and its territories, and



are in support of a contingency operation in which members of the Armed Forces are actively engaged in hostilities.

- 12.1.9. Title VI of the Civil Rights Act. The Subgrantee, Contractor, Subcontractor, transferee, and assignee shall comply with Title VI of the Civil Rights Act of 1964, which prohibits recipients of federal financial assistance from excluding from a program or activity, denying benefits of, or otherwise discriminating against a person on the basis of race, color, or national origin (42 U.S.C. § 2000d et seq.), as implemented by the Department of Treasury's Title VI regulations, 31 CFR Part 22, which are herein incorporated by reference and made a part of this Agreement (or agreement). Title VI also includes protection to persons with "Limited English Proficiency" in any program or activity receiving federal financial assistance, 42 U.S.C. § 2000d et seq., as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, and herein incorporated by reference and made part of this Agreement or agreement.
- 12.1.10 Contract Work Hours and Safety Standards Act ([40 U.S.C. 3701-3708](#)). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with [40 U.S.C. 3702](#) and [3704](#), as supplemented by Department of Labor regulations ([29 CFR Part 5](#)). Under [40 U.S.C. 3702](#) of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of [40 U.S.C. 3704](#) are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.
- 12.1.11 Procurement of Recovered Materials (2 CFR 200.323) See Section 9.2
- 12.1.12 Domestic preference for procurements (2 CFR 200.322) See Section 9.3
- 12.1.13 Real Property Disposition (2 CFR 200.311) When real property is no longer needed for the originally authorized purpose, the non-Federal entity must obtain disposition instructions from the Federal awarding agency or pass-through entity.

### **13. CERTIFICATIONS.**

- 13.1. Unless prohibited by Federal statutes or regulations, Recipient may require Contractor to submit certifications and representations required by Federal statutes or regulations on an annual basis. 2 CFR §200.208. Submission may be required more frequently if Contractor fails to meet a requirement of the Federal award. Contractor shall certify in writing to the State at the end of the Award that the project or activity was completed or the level of effort was expended. 2 CFR §200.201(3). If the required level of activity or effort was not carried out, the amount of the Award must be adjusted.

### **14. EXEMPTIONS.**

- 14.1. These Federal Provisions do not apply to an individual who receives an Award as a natural person, unrelated to any business or non-profit organization he or she may own or operate in his or her name.
- 14.2. A Contractor with gross income from all sources of less than \$300,000 in the previous tax year is exempt from the requirements to report Subawards and the Total Compensation of its most highly compensated Executives.

### **15. EVENT OF DEFAULT AND TERMINATION.**

- 15.1. Failure to comply with these Federal Provisions shall constitute an event of default under the Contract and the State of Colorado may terminate the Contract upon 30 days prior written notice if the default remains uncured five calendar days following the termination of the 30 day notice period. This remedy will be in addition to any other remedy available to the State of Colorado under the Contract, at law or in equity.
- 15.2. Termination (2 CFR 200.340). The Federal Award may be terminated in whole or in part as follows:
  - § By the Federal Awarding Agency or Prime Recipient, if a Contractor fails to comply with the terms and conditions of a Federal Award;

- § By the Federal awarding agency or Prime Recipient, to the greatest extent authorized by law, if an award no longer effectuates the program goals or agency priorities;
- § By the Federal awarding agency or Prime Recipient with the consent of the Contractor, in which case the two parties must agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated;
- § By the Prime Recipient upon sending to the Federal Awarding Agency or Prime Recipient written notification setting forth the reasons for such termination, the effective date, and, in the case of partial termination, the portion to be terminated. However, if the Federal Awarding Agency or Prime Recipient determines in the case of partial termination that the reduced or modified portion of the Federal Award or Contract will not accomplish the purposes for which the Federal Award was made, the Federal Awarding Agency or Prime Recipient may terminate the Federal Award in its entirety; or by the Federal Awarding Agency or Prime Recipient pursuant to termination provisions included in the Federal Award.

**End of Supplementary General Conditions: Federal Provision**

**SLFRF FEDERAL FUNDS  
CONTRACTOR TERMS AND CONDITIONS**

**FEDERAL AWARD(S) APPLICABLE TO THIS GRANT AWARD**

Federal Awarding Office	US Department of the Treasury
Grant Program	Coronavirus State and Local Fiscal Recovery Funds
Assistance Listing Number	21.027
Federal Award Number	SLFRP0126
Federal Award Date *	May 18, 2021
Federal Award End Date	December 31, 2024
Federal Statutory Authority	Title VI of the Social Security Act, Section 602
Total Amount of Federal Award (this is <u>not</u> the amount of this grant agreement)	\$3,828,761,790
Approved Expenditure Category	

\* Funds may not be available through the Federal Award End Date subject to the provisions in §2 and §5 below.

Section 602(b) of the Social Security Act (the Act), as added by section 9901 of the American Rescue Plan Act (ARPA), Pub. L. No. 117-2 (March 11, 2021), authorizes the Department of the Treasury (Treasury) to make payments to certain recipients from the Coronavirus State Fiscal Recovery Fund. As a condition of your organization receiving federal recovery funds from the State, the authorized representative below hereby (i) certifies that your organization will carry out the activities listed in section 602(c) of the Act and (ii) agrees to the terms attached hereto. Your organization also agrees to use the federal recovery funds as specified in bills passed by the General Assembly and signed by the Governor.

Under penalty of perjury, the undersigned official certifies that the authorized representative has read and understood the organization's obligations in the Assurances of Compliance and Civil Rights Requirements, that any information submitted in conjunction with this assurances document is accurate and complete, and that the organization is in compliance with the nondiscrimination requirements.

Contractor Name \_\_\_\_\_

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

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

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

## **SLFRF FEDERAL FUNDS CONTRACTOR TERMS AND CONDITIONS**

1. Use of Funds.
  - a. Contractor understands and agrees that the funds disbursed under this award may only be used in compliance with section 602(c) of the Social Security Act (the Act) and Treasury's regulations implementing that section and guidance.
  - b. Contractor will determine prior to engaging in any project using this assistance that it has the institutional, managerial, and financial capability to ensure proper planning, management, and completion of such project.
2. Period of Performance. The period of performance for this agreement is shown on page one of this Agreement. Contractor may use funds to cover eligible costs incurred, as set forth in Treasury's implementing regulations, during this period of performance.
3. Reporting. Contractor agrees to comply with any reporting obligations established by Treasury as they relate to this agreement. Contractor also agrees to comply with any reporting requirements established by the Governor's Office and Office of the State Controller. The State will provide notice of such additional reporting requirements in writing.
4. Maintenance of and Access to Records
  - a. Contractor shall maintain records and financial documents sufficient to evidence compliance with section 602(c), Treasury's regulations implementing that section, and guidance issued by Treasury regarding the foregoing.
  - b. The Treasury Office of Inspector General and the Government Accountability Office, or their authorized representatives, shall have the right of access to records (electronic and otherwise) of Contractor in order to conduct audits or other investigations.
  - c. Records shall be maintained by Contractor for a period of five (5) years after all funds have been expended or returned to Treasury, whichever is later.
5. Pre-award Costs. Pre-award costs, as defined in 2 C.F.R. § 200.458, may not be paid with funding from this award.
6. Administrative Costs. Contractor may use funds provided under this agreement to cover both direct and indirect costs.
7. Conflicts of Interest. Contractors must disclose in writing to the contracting entity, as appropriate, any potential conflict of interest affecting the awarded funds in accordance with 2 C.F.R. § 200.112.

8. Compliance with Applicable Law and Regulations.

- a. Contractor agrees to comply with the requirements of section 602 of the Act, regulations adopted by Treasury pursuant to section 602(f) of the Act, and guidance issued by Treasury regarding the foregoing. Contractor also agrees to comply with all other applicable federal statutes, regulations, and executive orders, and Contractor shall provide for such compliance by other parties in any agreements it enters into with other parties relating to this award.
  - i. Per US Treasury Final Award requirements, programs and services must not include terms or conditions that undermine efforts to stop COVID-19 or discourage compliance with recommendations and CDC guidelines.
- b. Federal regulations applicable to this award include, without limitation, the following:
  - i. Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, 2 C.F.R. Part 200, other than such provisions as Treasury may determine are inapplicable to this Agreement and subject to such exceptions as may be otherwise provided by Treasury. Subpart F – Audit Requirements of the Uniform Guidance, implementing the Single Audit Act, shall apply to this award.
  - ii. Universal Identifier and System for Award Management (SAM), 2 C.F.R. Part 25, pursuant to which the award term set forth in Appendix A to 2 C.F.R. Part 25 is hereby incorporated by reference.
  - iii. Reporting Subaward and Executive Compensation Information, 2 C.F.R. Part 170, pursuant to which the award term set forth in Appendix A to 2 C.F.R. Part 170 is hereby incorporated by reference.
  - iv. OMB Guidelines to Agencies on Government wide Debarment and Suspension (Nonprocurement), 2 C.F.R. Part 180, including the requirement to include a term or condition in all lower tier covered transactions (Agreements and Subcontractors described in 2 C.F.R. Part 180, subpart B) that the award is subject to 2 C.F.R. Part 180 and Treasury’s implementing regulation at 31 C.F.R. Part 19.
  - v. Subrecipient Integrity and Performance Matters, pursuant to which the award term set forth in 2 C.F.R. Part 200, Appendix XII to Part 200 is hereby incorporated by reference.
  - vi. Government wide Requirements for Drug-Free Workplace, 31 C.F.R. Part 20.
  - vii. New Restrictions on Lobbying, 31 C.F.R. Part 21.
  - viii. Uniform Relocation Assistance and Real Property Acquisitions Act of 1970

(42 U.S.C. §§ 4601-4655) and implementing regulations.

- ix. Generally applicable federal environmental laws and regulations.
- c. Statutes and regulations prohibiting discrimination applicable to this agreement include, without limitation, the following:
- i. Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d et seq.) and Treasury's implementing regulations at 31 C.F.R. Part 22, which prohibit discrimination on the basis of race, color, or national origin under programs or activities receiving federal financial assistance;
  - ii. The Fair Housing Act, Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§ 3601 et seq.), which prohibits discrimination in housing on the basis of race, color, religion, national origin, sex, familial status, or disability;
  - iii. Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis of disability under any program or activity receiving federal financial assistance;
  - iv. The Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101 et seq.), and Treasury's implementing regulations at 31 C.F.R. Part 23, which prohibit discrimination on the basis of age in programs or activities receiving federal financial assistance; and
  - v. Title II of the Americans with Disabilities Act of 1990, as amended (42 U.S.C. §§ 12101 et seq.), which prohibits discrimination on the basis of disability under programs, activities, and services provided or made available by state and local governments or instrumentalities or agencies thereto.
9. Remedial Actions. In the event of any noncompliance with section 602 of the Act, other applicable laws, Treasury's implementing regulations, guidance, or any reporting or other program requirements, Treasury may impose additional conditions on the receipt of a subsequent tranche of future award funds, if any, or take other available remedies as set forth in 2 C.F.R. § 200.339. In the case of a violation of section 602(c) of the Act regarding the use of funds, previous payments shall be subject to recoupment as provided in section 602(e) of the Act and any additional payments may be subject to withholding as provided in sections 602(b)(6)(A)(ii)(III) of the Act, as applicable.
10. Hatch Act. Recipient agrees to comply, as applicable, with requirements of the Hatch Act (5 U.S.C. §§ 1501-1508 and 7324-7328), which limit certain political activities of State or local government employees whose principal employment is in connection with an activity financed in whole or in part by this federal assistance.
11. False Statements. Recipient understands that making false statements or claims in connection with this award is a violation of federal law and may result in criminal, civil, or administrative

sanctions, including fines, imprisonment, civil damages and penalties, debarment from participating in federal awards or Agreements, and/or any other remedy available by law.

12. Publications. Any publications produced with funds from this award must display the following language: “This project [is being] [was] supported, in whole or in part, by federal award number SLFRF0126 awarded to the State of Colorado by the U.S. Department of the Treasury.”

13. Debts Owed the Federal Government.

- a. Any funds paid to the Contractor (1) in excess of the amount to which the Contractor is finally determined to be authorized to retain under the terms of this award; (2) that are determined by the Treasury Office of Inspector General to have been misused; or (3) that are determined by Treasury to be subject to a repayment obligation pursuant to sections 602(e) and 603(b)(2)(D) of the Act and have not been repaid by the Contractor shall constitute a debt to the federal government.
- b. Any debts determined to be owed to the federal government must be paid promptly by the Contractor. A debt is delinquent if it has not been paid by the date specified in Treasury’s initial written demand for payment, unless other satisfactory arrangements have been made or if the Contractor knowingly or improperly retains funds that are a debt as defined in paragraph 14(a). Treasury will take any actions available to it to collect such a debt.

14. Disclaimer.

- a. The United States expressly disclaims any and all responsibility or liability to Contractor or third persons for the actions of Contractor or third persons resulting in death, bodily injury, property damages, or any other losses resulting in any way from the performance of this agreement or any other losses resulting in any way from the performance of this Agreement or any Agreement, or Subcontractor under this award.
- b. The acceptance of this agreement by Contractor does not in any way establish an agency relationship between the United States and Contractor.

15. Protections for Whistleblowers.

- a. In accordance with 41 U.S.C. § 4712, Contractor may not discharge, demote, or otherwise discriminate against an employee in reprisal for disclosing to any of the list of persons or entities provided below, information that the employee reasonably believes is evidence of gross mismanagement of a federal Agreement or grant, a gross waste of federal funds, an abuse of authority relating to a federal Agreement or grant, a substantial and specific danger to public health or safety, or a violation of law, rule, or regulation related to a federal Agreement (including the competition for or negotiation of an Agreement) or grant.
- b. The list of persons and entities referenced in the paragraph above includes the following:
  - i. A member of Congress or a representative of a committee of Congress;
  - ii. An Inspector General;
  - iii. The Government Accountability Office;

- iv. A Treasury employee responsible for Agreement or grant oversight or management;
- v. An authorized official of the Department of Justice or other law enforcement agency;
- vi. A court or grand jury; or
- vii. A management official or other employee of Subrecipient, Contractor, or Subcontractor who has the responsibility to investigate, discover, or address misconduct.

c. Contractor shall inform its employees in writing of the rights and remedies provided under this section, in the predominant native language of the workforce.

16. Increasing Seat Belt Use in the United States. Pursuant to Executive Order 13043, 62 FR 19217 (Apr. 18, 1997), Prime Recipient should encourage its Contractors to adopt and enforce on-the-job seat belt policies and programs for their employees when operating company-owned, rented or personally owned vehicles.
17. Reducing Text Messaging While Driving. Pursuant to Executive Order 13513, 74 FR 51225 (Oct. 6, 2009), Prime Recipient should encourage its employees, Subrecipients, and Contractors to adopt and enforce policies that ban text messaging while driving, and Contractors should establish workplace safety policies to decrease accidents caused by distracted drivers.



## **ASSURANCES OF COMPLIANCE WITH CIVIL RIGHTS REQUIREMENTS**

### **ASSURANCES OF COMPLIANCE WITH TITLE VI OF THE CIVIL RIGHTS ACT OF 1964**

As a condition of receipt of federal financial assistance from the Department of the Treasury, through the Prime Recipient, the Contractor provides the assurances stated herein. The federal financial assistance may include federal grants, loans and Agreements to provide assistance to the Prime Recipient's residents, the use or rent of Federal land or property at below market value, Federal training, a loan of Federal personnel, subsidies, and other arrangements with the intention of providing assistance. Federal financial assistance does not encompass Agreements of guarantee or insurance, regulated programs, licenses, procurement Agreements by the Federal government at market value, or programs that provide direct benefits.

The assurances apply to all federal financial assistance from or funds made available through the Department of the Treasury, including any assistance that the Prime Recipient may request in the future.

The Civil Rights Restoration Act of 1987 provides that the provisions of the assurances apply to all of the operations of the Prime Recipient's program(s) and activity(ies), so long as any portion of the Prime Recipient's program(s) or activity(ies) is federally assisted in the manner prescribed above.

1. Contractor ensures its current and future compliance with Title VI of the Civil Rights Act of 1964, as amended, which prohibits exclusion from participation, denial of the benefits of, or subjection to discrimination under programs and activities receiving federal financial assistance, of any person in the United States on the ground of race, color, or national origin (42 U.S.C. § 2000d *et seq.*), as implemented by the Department of the Treasury Title VI regulations at 31 CFR Part 22 and other pertinent executive orders such as Executive Order 13166, directives, circulars, policies, memoranda, and/or guidance documents.
2. Contractor acknowledges that Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency," seeks to improve access to federally assisted programs and activities for individuals who, because of national origin, have Limited English proficiency (LEP). Contractor understands that denying a person access to its programs, services, and activities because of LEP is a form of national origin discrimination prohibited under Title VI of the Civil Rights Act of 1964 and the Department of the Treasury's implementing regulations. Accordingly, Contractor shall initiate reasonable steps, or comply with the Department of the Treasury's directives, to ensure that LEP persons have meaningful access to its programs, services, and activities. Contractor understands and agrees that meaningful access may entail providing language assistance services, including oral interpretation and written translation where necessary, to ensure effective communication in the Contractor's programs, services, and activities.

3. Contractor agrees to consider the need for language services for LEP persons when Contractor develops applicable budgets and conducts programs, services, and activities. As a resource, the Department of the Treasury has published its LEP guidance at 70 FR 6067. For more information on taking reasonable steps to provide meaningful access for LEP persons, please visit <http://www.lep.gov>.
4. Contractor acknowledges and agrees that compliance with the assurances constitutes a condition of continued receipt of federal financial assistance through the Prime Recipient and is binding upon Contractor and Contractor's successors, transferees, and assignees for the period in which such assistance is provided.
5. Contractor acknowledges and agrees that it must require any sub-grantees, contractors, subcontractors, successors, transferees, and assignees to comply with assurances 1-4 above, and agrees to incorporate the following language in every Agreement or agreement subject to Title VI and its regulations between the Contractor and the Contractor's sub-grantees, Contractors, Subcontractors, successors, transferees, and assignees:

*The sub-grantee, Contractor, Subcontractor, successor, transferee, and assignee shall comply with Title VI of the Civil Rights Act of 1964, which prohibits Prime Recipients and Contractors of Prime Recipients of federal financial assistance from excluding from a program or activity, denying benefits of, or otherwise discriminating against a person on the basis of race, color, or national origin (42 U.S.C. § 2000d et seq.), as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, which are herein incorporated by reference and made a part of this Agreement (or agreement). Title VI also includes protection to persons with "Limited English Proficiency" in any program or activity receiving federal financial assistance, 42 U.S.C. § 2000d et seq., as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, and herein incorporated by reference and made a part of this Agreement or agreement.*

6. Contractor understands and agrees that if any real property or structure is provided or improved with the aid of federal financial assistance by the Department of the Treasury, this assurance obligates the Prime Recipient and Contractor, or in the case of a subsequent transfer, the transferee, for the period during which the real property or structure is used for a purpose for which the federal financial assistance is extended or for another purpose involving the provision of similar services or benefits. If any personal property is provided, this assurance obligates the Contractor for the period during which it retains ownership or possession of the property.
7. Contractor shall cooperate in any enforcement or compliance review activities by the Department of the Treasury of the aforementioned obligations. Enforcement may include investigation, arbitration, mediation, litigation, and monitoring of any settlement agreements that may result from these actions. The Contractor shall

comply with information requests, on-site compliance reviews and reporting requirements.

8. Contractor shall maintain a complaint log and inform the Department of the Treasury of any complaints of discrimination on the grounds of race, color, or national origin, and limited English proficiency covered by Title VI of the Civil Rights Act of 1964 and implementing regulations and provide, upon request, a list of all such reviews or proceedings based on the complaint, pending or completed, including outcome. Contractor also must inform the Department of the Treasury if Contractor has received no complaints under Title VI.
9. Contractor must provide documentation of an administrative agency's or court's findings of non-compliance of Title VI and efforts to address the non-compliance, including any voluntary compliance or other agreements between the Contractor and the administrative agency that made the finding. If the Contractor settles a case or matter alleging such discrimination, the Contractor must provide documentation of the settlement. If Contractor has not been the subject of any court or administrative agency finding of discrimination, please so state.
10. If the Contractor makes sub-contracts to other agencies or other entities, the Contractor is responsible for ensuring that sub-contractors also comply with Title VI and other applicable authorities covered in this document Contractors that make sub-contracts must have in place standard contract assurances and review procedures to demonstrate that that they are effectively monitoring the civil rights compliance of sub- contractors.

The United States of America has the right to seek judicial enforcement of the terms of this assurances document and nothing in this document alters or limits the federal enforcement measures that the United States may take in order to address violations of this document or applicable federal law.

**STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM**



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**COLORADO**

**THE GENERAL CONDITIONS OF THE CONTRACTOR'S DESIGN/BID/BUILD (D/B/B)  
AGREEMENT**  
(STATE FORM SC-6.23)

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**STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM**

**THE GENERAL CONDITIONS OF THE CONTRACTOR’S DESIGN/BID/BUILD AGREEMENT  
(STATE FORM SC-6.23)**

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**STATE OF COLORADO  
OFFICE OF THE STATE ARCHITECT  
STATE BUILDINGS PROGRAM**

**THE GENERAL CONDITIONS OF THE CONTRACTOR'S DESIGN/BID/BUILD AGREEMENT  
(STATE FORM SC-6.23)**

**1 ARTICLE 1 DEFINITIONS**

**1.1 CONTRACT DOCUMENTS**

The Contract Documents consist of the following some of which are procedural documents used in the administration and performance of the Agreement:

- a) Contractor's Design/Bid/Build Agreement; (SC-6.21);
- b) Performance Bond (SC-6.22) and Labor and Material Payment Bond (SC-6.221);
- c) General Conditions of the Contractor's Design/Bid/Build Agreement (SC- 6.23)
- d) and if applicable, Supplementary General Conditions;
- e) Detailed Specification Requirements, including all addenda issued prior to the opening of the bids; and,
- f) Drawings, including all addenda issued prior to the opening of the bids.
- g) Change Orders (SC-6.31) and Amendments (SC-6.0), if any, when properly executed.
- h) Authorization to Bid (SBP-6.10)
- i) Information for Bidders (SBP-6.12);
- j) Bid (SBP-6.13), Bid Alternates, (SBP-6.131) and Unit Pricing (SBP-6.133) if applicable
- k) Bid Bond (SBP-6.14);
- l) Labor Burden Calculation (SBP-6.18)
- m) Notice of Award (SBP-6.15);
- n) Builder's risk insurance certificates of insurance (ACORD 25-S);
- o) Liability and Workers' compensation certificates of insurance;
- p) Notice to Proceed (Design/Bid/Build) (SBP-6.26);
- q) Notice of Approval of Occupancy/Use (SBP-01);
- r) Notice of Partial Substantial Completion (SBP-071);
- s) Notice of Substantial Completion (SBP-07);
- t) Notice of Partial Final Acceptance (SC-6.27);
- u) Notice of Final Acceptance (SBP-6.271);
- v) Notice of Partial Contractor's Settlement (SC-7.3);
- w) Notice of Contractor's Settlement (SBP-7.31);
- x) Application and Certificate for Contractor's Payment (SBP-7.2);
- y) Other Procedural and Reporting Documents or Forms

Other procedural and reporting documents or forms referred to in the General Conditions, the Supplementary General Conditions, the Specifications or required by the State Buildings Program or the Principal Representative, including but not necessarily limited to Pre-Acceptance Check List

(SBP-05) and the Building Inspection Record (SBP-BIR). A list of the current standard State Buildings Program forms applicable to this Contract may be obtained from the Principal Representative on request.

## 1.2 DEFINITIONS OF WORDS AND TERMS USED

### Agreement

The term "Agreement" shall mean the written agreement entered into by the State of Colorado acting by and through the Principal Representative and the Contractor for the performance of the Work and payment therefore, on State Form SC-6.21. The term Agreement when used without reference to State Form SC-6.21 may also refer to the entirety of the parties' agreement to perform the Work described in the Contract Documents or reasonably inferable there from. The term "Contract" shall be interchangeable with this latter meaning of the term Agreement

### Amendment

The term "Amendment" means a written order signed by the Principal Representative or its authorized agent, issued after the execution of this Agreement, authorizing a change in the Work, the method or manner of performance, an adjustment in the Contract Sum, or the Contract Time as required by State Building Program's policy Contract Modification Guidelines.

### Architect/Engineer

The term "Architect/Engineer" shall mean either the architect of record or the engineer of record under contract to the State of Colorado for the Project identified in the Contract Documents.

### Change Order

The term "Change Order" means a written order directing the Contractor to make changes in the Work, in accordance with Article 35L, The Value of Changed Work.

### Colorado Labor

The term "Colorado labor", as provided in C.R.S. § 8-17-101(2)(a), as amended, means any person who is a resident of the state of Colorado, at the time of the public Works project, without discrimination as to race, color, creed, sex, sexual orientation, marital status, national origin, ancestry, age, or religion except when sex or age is a bona fide occupational qualification. A resident of the state of Colorado is a person who can provide a valid Colorado driver's license, a valid Colorado state-issued photo identification, or documentation that he or she has resided in Colorado for the last thirty days.

### Contractor

The word "Contractor" shall mean the person, company, firm, corporation or other legal entity entering into a contract with the State of Colorado acting by and through the Principal Representative

### CORA

The term "CORA" refers to the Colorado Open Records Act, §§24-72-200.1, et seq., C.R.S.

### Days

The term "days" whether singular or plural shall mean calendar days unless expressly stated otherwise. Where the term "business days" is used it shall mean business days of the State of Colorado.

### Drawings

The term "Drawings" shall mean all drawings approved by appropriate State officials which have been prepared by the Architect/Engineer showing the Work to be done, except that where a list of drawings is specifically enumerated in the Supplementary General Conditions or division 1 of

the Specifications, the term shall mean the drawings so enumerated, including all addenda drawings.

#### Emergency Field Change Order

The term “Emergency Field Change Order” shall mean a written change order for extra Work or a change in the Work necessitated by an emergency as defined in Article 35.4 executed on State form SC 6.31 and identified as an Emergency Field Change Order. The use of such orders is limited to emergencies and to the amounts shown in Article 35.4.

#### Final Acceptance

The terms “final acceptance” or “finally complete” mean the stage in the progress of the Work, after substantial completion, when all remaining items of Work have been completed, all requirements of the Contract Documents are satisfied and the Notice of Acceptance can be issued. Discrete physical portions of the Project may be separately and partially deemed finally complete at the discretion of the Principal Representative when that portion of the Project reaches such stage of completion and a partial Notice of Acceptance can be issued.

#### Fixed Limit of Construction Cost

The term “Fixed Limit of Construction Cost” shall set forth a dollar amount available for the total Construction Cost of all elements of the Work as specified by the Principal Representative.

#### Incident

The term ‘incident’ means any accidental or deliberate event that results in or constitutes an imminent threat of the unauthorized access, loss, disclosure, modification, disruption, or destruction of any communications or information resources of the State, which are included as part of the Work, as described in §§24-37.5-401, et seq., C.R.S. Incidents include, without limitation, (i) successful attempts to gain unauthorized access to a State system or State Records regardless of where such information is located; (ii) unwanted disruption or denial of service; (iii) the unauthorized use of a State system for the processing or storage of data; or (iv) changes to State system hardware, firmware, or software characteristics without the State’s knowledge, instruction, or consent.

#### Notice

The term “Notice” shall mean any communication in writing from either contracting party to the other by such means of delivery that receipt cannot properly be denied. Notice shall be provided to the person identified to receive it in Article 8 of the Agreement. Notice Identification, or to such other person as either party identifies in writing to receive Notice Notwithstanding an email delivery or return receipt, email Notice shall not be adequate. Acknowledgment of receipt of a voice message shall not be deemed to waive the requirement that Notice, where required, shall be in writing.

#### Occupancy

The term “Occupancy” means occupancy taken by the State as Owner after the Date of Substantial Completion at a time when a building or other discrete physical portion of the Project is used for the purpose intended. The Date of Occupancy shall be the date of such first use, but shall not be prior to the date of execution of the Notice of Approval of Occupancy/Use. Prior to the date of execution of a Notice of Approval of Occupancy/Use, the state shall have no right to occupy and the project may not be considered safe for occupancy for the intended use.

#### Owner

The term “Owner” shall mean the Principal Representative.

#### PII

The term "PII" shall be defined as personally identifiable information including, without limitation, any information maintained by the State about an individual that can be used to distinguish or trace an individual's identity, such as name, social security number, date and place of birth, mother's maiden name, or biometric records; and any other information that is linked or linkable to an individual, such as medical, educational, financial, and employment information. PII includes, but is not limited to, all information defined as personally identifiable information in §§24-72-501 and 24-73-101, C.R.S. "PII" shall also mean "personal identifying information" as set forth at § 24-74-102, et. seq., C.R.S.

#### Principal Representative

The term "Principal Representative" shall be defined, as provided in C.R.S. § 24-30-1301(14), as the governing board of a state department, institution, or agency; or if there is no governing board, then the executive head of a state department, institution, or agency, as designated by the governor or the general assembly and as specifically identified in the Contract Documents, or shall have such other meaning as the term may otherwise be given in C.R.S. § 24-30-1301(14), as amended. The Principal Representative may delegate authority. The Contractor shall have the right to inquire regarding the delegated authority of any of the Principal Representative's representatives on the project and shall be provided with a response in writing when requested.

#### Product Data

The term "Product Data" shall mean all submittals in the form of printed manufacturer's literature, manufacturer's specifications, and catalog cuts.

#### Project

The "Project" is the total construction of which the Work performed under the Contract Documents is a part, and may include construction by the Principal Representative or by separate contractors.

#### Reasonably Inferable

The phrase "reasonably inferable" means that if an item or system is either shown or specified, all material and equipment normally furnished with such items or systems and needed to make a complete installation shall be provided whether mentioned or not, omitting only such parts as are specifically excepted, and shall include only components which the Contractor could reasonably anticipate based on his or her skill and knowledge using an objective, industry standard, not a subjective standard. This term takes into consideration the normal understanding that not every detail is to be given on the Drawings and Specifications. If there is a difference of opinion, the Principal Representative shall make the determination as to the standards of what reasonably inferable.

#### Samples

The term "Samples" shall mean examples of materials or Work provided to establish the standard by which the Work will be judged.

#### SBP

The term "SBP" means "State Buildings", which is used in connection with labeling applicable State form documents (e.g., "SBP-01" is the form number for Notice of Approval of Occupancy/Use).

#### SC

The term "SC" means "State Contract" which is used in connection with labeling applicable State form documents (e.g. "SC 6.23" is the State form number for these General Conditions of the Contractor's Design/Bid/Build Agreement).

#### Schedule of Values

The term "Schedule of Values" is defined as the itemized listing of description of the Work by Division and Section of the Specifications. The format shall be the same as Form SC-7.2. Included shall be the material costs, and the labor and other costs plus the sum of both.

#### Shop Drawings

The term "Shop Drawings" shall mean any and all detailed drawings prepared and submitted by Contractor, Subcontractor at any tier, vendors or manufacturers providing the products and equipment specified on the Drawings or called for in the Specifications.

#### Specifications

The term "Specifications" shall mean the requirements of the CSI divisions of the project manual prepared by the Architect/Engineer describing the Work to be accomplished.

#### State Buildings Program

Shall refer to the Office of the State Architect within the Department of Personnel & Administration of Colorado State government responsible for project administration, review, approval and coordination of plans, construction procurement policy, contractual procedures, and code compliance and inspection of all buildings, public Works and improvements erected for state purposes; except public roads and highways and projects under the supervision of the division of wildlife and the division of parks and outdoor recreation as provided in C.R.S. § 24-30-1301, *et seq.* The term State Buildings Program shall also mean that individual within a State Department agency or institution, including institutions of higher education, who has signed an agreement accepting delegation to perform all or part of the responsibilities and functions of State Buildings Program.

#### State Confidential Information

The term "State Confidential Information" shall mean any and all State Records not subject to disclosure under CORA. State Confidential Information shall include, but is not limited to, PII, and State personnel records not subject to disclosure under CORA. State Confidential Information shall not include information or data concerning individuals that is not deemed confidential but nevertheless belongs to the State, which has been communicated, furnished, or disclosed by the State to Contractor which (i) is subject to disclosure pursuant to CORA; (ii) is already known to Contractor without restrictions at the time of its disclosure to Contractor; (iii) is or subsequently becomes publicly available without breach of any obligation owed by Contractor to the State; (iv) is disclosed to Contractor, without confidentiality obligations, by a third party who has the right to disclose such information; or (v) was independently developed without reliance on any State Confidential Information.

#### State Fiscal Rules

State Fiscal Rules means the fiscal rules promulgated by the Colorado State Controller pursuant to §24-30-202(13)(a), C.R.S.

#### State Records

The term "State Records" shall mean any and all State data, information, and records, regardless of physical form, including, but not limited to, information subject to disclosure under CORA.

#### Subcontractor

The term "Subcontractor" shall mean a person, firm or corporation supplying labor, materials, equipment and/or Services for Work at the site of the Project for, and under separate contract or agreement with the Contractor.

#### Submittals

The term “submittals” means drawings, lists, tables, documents and samples prepared by the Contractor to facilitate the progress of the Work as required by these General Conditions or the Drawings and Specifications. They consist of Shop Drawings, Product Data, Samples, and various administrative support documents including but not limited to lists of subcontractors, construction progress schedules, schedules of values, applications for payment, inspection and test results, requests for information, various document logs, and as-built drawings. Submittals are required by the Contract Documents, but except to the extent expressly specified otherwise are not themselves a part of the Contract Documents.

#### Substantial Completion

The terms “substantial completion” or “substantially complete” mean the stage in the progress of the Work when the construction is sufficiently complete, in accordance with the Contract Documents as modified by any Change Orders, so that the Work, or at the discretion of the Principal Representative, any designated portion thereof, is available for its intended use by the Principal Representative and a Notice of Substantial Completion can be issued. Portions of the Project may, at the discretion of the Principal Representative, be designated as substantially complete.

#### Supplier

The term "Supplier" shall mean any manufacturer, fabricator, distributor, material man or vendor.

#### Surety

The term “Surety” shall mean the company providing the labor and material payment and performance bonds for the Contractor as obligor.

#### Value Engineering

“Value Engineering” or “VE” is defined as an analysis and comparison of cost versus value of building materials, equipment, and systems. VE considers the initial cost of construction, coupled with the estimated cost of maintenance, energy use, life expectancy and replacement cost. VE related to this Project shall include the analysis and comparison of building elements in an effort to reduce overall Project costs, while maintaining or enhancing the quality of the design intent, whenever possible.

#### Work

The term “Work” shall mean all or part of the labor, materials, equipment, and other services required by the Contract Documents or otherwise required to be provided by the Contractor to meet the Contractor’s obligations under the Contract.

#### Work Product

The phrase “Work Product” means the tangible and intangible results of the Work, whether finished or unfinished, including drafts. Work Product includes, but is not limited to, documents, text, software (including source code), research, reports, proposals, specifications, plans, notes, studies, data, images, photographs, negatives, pictures, drawings, designs, models, surveys, maps, materials, ideas, concepts, know-how, and any other results of the Work. “Work Product” does not include any material that was developed prior to the Effective Date that is used, without modification, in the performance of the Work.

## **2 ARTICLE 2 EXECUTION, CORRELATION, INTENT OF DOCUMENTS, COMMUNICATION AND COOPERATION**

### **2.1 EXECUTION**

The Contractor, within ten (10) days from the date of Notice of Award, will be required to:



- a) Execute the Agreement, State Form SC-6.21;
- b) Furnish fully executed Performance and Labor and Material Payment Bonds on State Forms SC-6.22 and SC-6.221; and
- c) Furnish certificates of insurance evidencing all required insurance on standard Acord forms designed for such purpose.
- d) Furnish certified copies of any insurance policies requested by the Principal Representative.
- e) If Article 7.1 of the Contractor's Design/Bid/Build Agreement (SC-6.21) applies, furnish documentation that identifies the subcontractors that will be used for all mechanical, sheet metal, fire suppression, sprinkler fitting, electrical, and plumbing work required on the project and certify that that all firms identified participate in apprenticeship programs registered with the United States Department of Labor's Employment and Training Administration or state apprenticeship councils recognized by the United States Department of Labor and have a proven record of graduating a minimum of fifteen percent of its apprentices for at least three of the past five years;

## 2.2 CORRELATION

By execution of the Agreement the Contractor represents that the Contractor has visited the site, has become familiar with local conditions and local requirements under which the Work is to be performed, including the building code programs of the State Buildings Program as implemented by the Principal Representative, and has correlated personal observations with the requirements of the Contract Documents.

## 2.3 INTENT OF DOCUMENTS

The Contract Documents are complementary, and what is called for by any one document shall be as binding as if called for by all. The intention of the documents is to include all labor, materials, equipment and transportation necessary for the proper execution of the Work. Words describing materials or Work which have a well-known technical or trade meaning shall be held to refer to such recognized standards.

In any event, if any error exists, or appears to exist, in the requirements of the Drawings or Specifications, or if any disagreement exists as to such requirements, the Contractor shall have the same explained or adjusted by the Architect/Engineer before proceeding with the Work in question. In the event of the Contractor's failure to give prior written Notice of any such errors or disagreements of which the Contractor or the Subcontractors at any tier are aware, the Contractor shall, at no additional cost to the Principal Representative, make good any damage to, or defect in, Work which is caused by such omission.

Where a conflict occurs between or within standards, Specifications or Drawings, which is not resolved by reference to the precedence between the Contract Documents, the more stringent or higher quality requirements shall apply so long as such more stringent or higher quality requirements are reasonably inferable. The Architect/Engineer shall decide which requirements will provide the best installation.

With the exception noted in the following paragraph, the precedence of the Contract Documents is in the following sequence:

- a) The Supplementary General Conditions, if any;
- b) The Colorado Special Provisions, Article 52 of General Conditions of the Contractor's Design/Bid/Build (State Form SC-6.23);

- c) The Agreement (SC-6.21);
- d) The General Conditions (SC-6.23);
- e) Drawings and Specifications, all as modified by any addenda; and
- f) Any additional Exhibit to this agreement

Change Orders and Amendments, if any, to the Contract Documents take precedence over the original Contract Documents.

Notwithstanding the foregoing order of precedence, the Special Provisions of Article 52 of the General Conditions, Special Provisions, shall take precedence, rule and control over all other provisions of the Contract Documents.

Unless the context otherwise requires, form numbers in this document are for convenience only. In the event of any conflict between the form required by name or context and the form required by number, the form required by name or context shall control. The Contractor may obtain State forms from the Principal Representative upon request.

#### 2.4 PARTNERING, COMMUNICATIONS AND COOPERATION

In recognition of the fact that conflicts, disagreements and disputes often arise during the performance of construction contracts, the Contractor and the Principal Representative aspire to encourage a relationship of open communication and cooperation between the employees and personnel of both, in which the objectives of the Contract may be better achieved and issues resolved in a more fully informed atmosphere.

The Contractor and the Principal Representative each agree to assign an individual who shall be fully authorized to negotiate and implement a voluntary partnering plan for the purpose of facilitating open communications between them. Within thirty days (30) of the Notice to Proceed, the assigned individuals shall meet to discuss development of an informal agreement to accomplish these goals.

The assigned individuals shall endeavor to reach an informal agreement, but shall have no such obligation. Any plans these parties voluntarily agree to implement shall result in no change to the contract amount, and no costs associated with such plan or its development shall be recoverable under any contract clause. In addition, no plan developed to facilitate open communication and cooperation shall alter, amend or waive any of the rights or duties of either party under the Contract unless and except by written Amendment to the Contract, nor shall anything in this clause or any subsequently developed partnering plan be deemed to create fiduciary duties between the parties unless expressly agreed in a written Amendment to the Contract. It is also recognized that projects with relatively low contract values may not justify the expense or special efforts required. In the case of small projects with an initial Contract value under \$500,000, the requirements of the preceding paragraph shall not apply.

### 3 ARTICLE 3 COPIES FURNISHED

The Contractor will be furnished, free of charge, the number of copies of Drawings and Specifications as specified in the Contract Documents, or if no number is specified, all copies reasonably necessary for the execution of the Work.

**4 ARTICLE 4 OWNERSHIP OF DRAWINGS**

Drawings or Specifications, or copies of either, furnished by the Architect/Engineer, are not to be used on any other Work. At the completion of the Work, at the written request of the Architect/Engineer, the Contractor shall endeavor to return all Drawings and Specifications.

The Contractor may retain the Contractor’s Contract Document set, copies of Drawings and Specifications used to contract with others for any portion of the Work and a marked up set of as-built drawings.

**5 ARTICLE 5 ARCHITECT/ENGINEER’S STATUS**

The Architect/Engineer is the representative of the Principal Representative for purposes of administration of the Contract, as provided in the Contract Documents and the Agreement. In case of termination of employment or the death of the Architect/Engineer, the Principal Representative will appoint a capable Architect/Engineer against whom the Contractor makes no reasonable objection, whose status under the Contract shall be the same as that of the former Architect/Engineer.

**6 ARTICLE 6 ARCHITECT/ENGINEER DECISIONS AND JUDGMENTS, ACCESS TO WORK AND INSPECTION**

**6.1 DECISIONS**

The Architect/Engineer shall, within a reasonable time, make decisions on all matters relating to the execution and progress of the Work or the interpretation of the Contract Documents, and in the exercise of due diligence shall be reasonably available to the Contractor to timely interpret and make decisions with respect to questions relating to the design or concerning the Contract Documents.

**6.2 JUDGMENTS**

The Architect/Engineer is, in the first instance, the judge of the performance required by the Contract Documents as it relates to compliance with the Drawings and Specifications and quality of Workmanship and materials.

The Architect/Engineer shall make judgments regarding whether directed Work is extra or outside the scope of Work required by the Contract Documents at the time such direction is first given. If, in the Contractor’s judgment, any performance directed by the Architect/Engineer is not required by the Contract Documents or if the Architect/Engineer does not make the judgment required, it shall be a condition precedent to the filing of any claim for additional cost related to such directed Work that the Contractor, before performing such Work, shall first obtain in writing, the Architect/Engineer’s written decision that such directed Work is included in the performance required by the Contract Documents. If the Architect/Engineer’s direction to perform the Work does not state that the Work is within the performance required by the Contract Documents, the Contractor shall, in writing, request the Architect/Engineer to advise in writing whether the directed Work will be considered extra Work or Work included in the performance required by the Contract Documents.

The Architect/Engineer shall respond to any such written request for such a decision within three (3) business days and if no response is provided, or if the Architect/Engineer's written decision is to the effect that the Work is included in the performance required by the Contract Documents, the Contractor may file with the Principal Representative and the Architect/Engineer a Notice of claim in accordance with Article 36, Claims. Whether or not a Notice of claim is filed, the Contractor shall proceed with the ordered Work. Disagreement with the decision of the Architect/Engineer shall not be grounds for the Contractor to refuse to perform the Work directed or to suspend or terminate performance.

### 6.3 ACCESS TO WORK

The Architect/Engineer, the Principal Representative and representatives of State Buildings Program shall at all times have access to the Work. The Contractor shall provide proper facilities for such access and for their observations or inspection of the Work.

### 6.4 INSPECTION

The Architect/Engineer has agreed to make, or that structural, mechanical, electrical engineers or other consultants will make, periodic visits to the site to generally observe the progress and quality of the Work to determine in general if the Work is proceeding in accordance with the Contract Documents. Observation may extend to all or any part of the Work and to the preparation, fabrication or manufacture of materials.

Without in any way meaning to be exclusive or to limit the responsibilities of the Architect/Engineer or the Contractor, the Architect/Engineer has agreed to observe, among other aspects of the Work, the following for compliance with the Contract Documents:

- a) Compaction testing reports based upon the findings and recommendations of the Principal Representative's testing consultant;
- b) Bearing surfaces of excavations before concrete is placed based upon the findings and recommendations of the Principal Representative's soils engineering consultant;
- c) Reinforcing steel after installation and before concrete is poured;
- d) Structural concrete;
- e) Laboratory reports on all concrete testing based upon the findings and recommendations of the Principal Representative's testing consultant;
- f) Structural steel during and after erection and prior to its being covered or enclosed;
- g) Steel welding; Principal Representative will furnish steel welding inspection consultant/agency if required or necessary for the project;
- h) Mechanical and plumbing Work following its installation and prior to its being covered or enclosed;
- i) Electrical Work following its installation and prior to its being covered or enclosed; and
- j) Any special or quality control testing required in the Contract Documents provided by the Principal Representative's testing consultant.

If the Specifications, the Architect/Engineer's instructions, laws, ordinances of any public authority require any Work to be specifically tested or approved, the Contractor shall give the Principal Representative, Architect/Engineer and appropriate testing agency (if necessary) timely notice of its readiness for observation by the Architect/Engineer or inspection by another authority, and if the inspection is by another authority, of the date fixed for such inspection,

required certificates of inspection being secured by the Contractor. The Contractor shall give all required Notices to the Principal Representative or his or her designee for inspections required for the building inspection program. It shall be the responsibility of the Contractor to determine the Notice required by the State pursuant to Building Inspection Record for the Project, according to State form SBP-B.I.R., or the equivalent form required by the Principal Representative as approved by the State Buildings Program. If any portion of the Work should be covered contrary to the reasonable request of the Architect/Engineer, or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Architect/Engineer, be uncovered for its observation and shall be replaced at the Contractor's expense.

If any other portion of the Work has been covered which the Architect/Engineer has not specifically requested to observe prior to its being covered, it may request to see such work and it shall be uncovered by the Contractor. If such work is found in accordance with the Contract Documents, the cost of uncovering and replacement shall, by appropriate Amendment or Change Order, be charged to the Principal Representative. If such work is found not in accordance with the Contract Documents, the Contractor shall pay such costs unless it is found that this condition was caused by the Principal Representative or a separate Contractor as provided in Article 18, in which event, the Principal Representative shall be responsible for the payment of such costs.

## **7 ARTICLE 7 CONTRACTOR'S SUPERINTENDENCE AND SUPERVISION**

The Contractor shall employ, and keep present (as applicable) on the Project during its progress, a competent project manager as satisfactory to the Principal Representative. The project manager shall not be changed except with the consent of the Principal Representative, unless the project manager proves to be unsatisfactory to the Contractor and ceases to be in his or her employ. The project manager shall represent the Contractor for the Project, and in the absence of the Contractor, all directions given to the project manager shall be as binding as if given to the Contractor. Directions received by the project manager shall be documented by the project manager and communicated in writing with the Contractor.

The Contractor shall employ, and keep present on the Project during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Architect/Engineer and the Principal Representative. The superintendent shall not be changed except with the consent of the Architect/Engineer and the Principal Representative, unless the superintendent proves to be unsatisfactory to the Project Manager/Contractor and ceases to be in his or her employ. The superintendent shall represent the Project Manager/Contractor in his or her absence and all directions given to the superintendent shall be as binding as if given to the Project Manager/Contractor. Directions received by the superintendent shall be documented by the superintendent and confirmed in writing with the Project Manager/Contractor.

The Contractor shall give efficient supervision to the Work, using his or her best skill and attention. He or she shall carefully study and compare all Drawings, Specifications and other written instructions and shall without delay report any error, inconsistency or omission which he or she may discover in writing to the Architect/Engineer. The Contractor shall not be liable to the Principal Representative for damage to the extent it results from errors or deficiencies in the Contract Documents or other instructions by the Architect/Engineer, unless the Contractor knew or had reason to know, that damage would result by proceeding and the Contractor fails to so advise the Architect/Engineer.

The superintendent shall see that the Work is carried out in accordance with the Contract Documents and in a uniform, thorough and first-class manner in every respect. The Contractor's superintendent shall establish all lines, levels, and marks necessary to facilitate the operations of all concerned in the Contractor's Work. The Contractor shall lay out all Work in a manner satisfactory to the Architect/Engineer, making permanent records of all lines and levels required for excavation, grading, foundations, and for all other parts of the Work.

**8 ARTICLE 8 MATERIALS AND EMPLOYEES**

Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation and other facilities necessary for the execution and completion of the Work.

Unless otherwise specified, all materials shall be new and both workmanship and materials shall be first class and of uniform quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

The Contractor is fully responsible for all acts and omissions of the Contractor's employees and shall at all times enforce strict discipline and good order among employees on the site. The Contractor shall not employ on the Work any person reasonably deemed unfit by the Principal Representative or anyone not skilled in the Work assigned to them.

**9 ARTICLE 9 SURVEYS, PERMITS, LAWS, TAXES AND REGULATIONS**

**9.1 SURVEYS**

The Principal Representative shall furnish all surveys, property lines and bench marks deemed necessary by the Architect/Engineer, unless otherwise specified.

**9.2 PERMITS AND LICENSES**

Permits and licenses necessary for the prosecution of the Work shall be secured and paid for by the Contractor. Unless otherwise specified in the Specifications, no local municipal or county building permit shall be required. However, State Buildings Program requires each Principal Representative to administer a building code inspection program, the implementation of which may vary at each agency or institution of the State. The Contractors' employees shall become personally familiar with these local conditions and requirements and shall fully comply with such requirements. State electrical and plumbing permits are required, unless the requirement to obtain such permits is altered by State Building's Programs. The Contractor shall obtain and pay for such permits.

Easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the Principal Representative, unless otherwise specified.

**9.3 TAXES**

**9.3.1 Refund of Sales and Use Taxes**

The Contractor shall pay all local taxes required to be paid, including but not necessarily limited to all sales and use taxes. If requested by the Principal Representative prior to issuance of the Notice to Proceed or directed in the Supplementary General Conditions or the Specifications, the

Contractor shall maintain records of such payments in respect to the Work, which shall be separate and distinct from all other records maintained by the Contractor, and the Contractor shall furnish such data as may be necessary to enable the State of Colorado, acting by and through the Principal Representative, to obtain any refunds of such taxes which may be available under the laws, ordinances, rules or regulations applicable to such taxes. When so requested or directed, the Contractor shall require Subcontractors at all tiers to pay all local sales and use taxes required to be paid and to maintain records and furnish the Contractor with such data as may be necessary to obtain refunds of the taxes paid by such Subcontractors. No State sales and use taxes are to be paid on material to be used in this Project. On application by the purchaser or seller, the Department of Revenue shall issue to a Contractor or to a Subcontractor at any tier, a certificate or certificates of exemption per C.R.S. § 39-26-703(2)(b), and C.R.S. § 39-26-708.

#### 9.3.2 Federal Taxes

The Contractor shall exclude the amount of any applicable federal excise or manufacturers' taxes from the proposal. The Principal Representative will furnish the Contractor, on request exemption certificates.

#### 9.4 LAWS AND REGULATIONS

The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the Work as drawn or specified. If the Contractor observes that the Drawings or Specifications require Work, which is at variance therewith, the Contractor shall, without delay, notify the Architect/Engineer in writing and any necessary changes shall be adjusted as provided in Article 35, Changes In The Work.

The Contractor shall bear all costs arising from the performance of Work required by the Drawings or Specifications that the Contractor knows to be contrary to such laws, ordinances, rules or regulations, if such Work is performed without giving Notice to the Architect/Engineer.

### **10 ARTICLE 10 PROTECTION OF WORK AND PROPERTY**

#### 10.1 GENERAL PROVISIONS

The Contractor shall continuously maintain adequate protection of all Work and materials, protect the property from injury or loss arising in connection with this Contract and adequately protect adjacent property as provided by law and the Contract Documents. The Contractor shall make good any damage, injury or loss, except to the extent:

- a) Directly due to errors in the Contract Documents;
- b) Caused by agents or employees of the Principal Representative; and,
- c) Due to causes beyond the Contractor's control and not to fault or negligence; provided such damage, injury or loss would not be covered by the insurance required to be carried by the Contractor;

#### 10.2 SAFETY PRECAUTIONS

The Contractor shall take all necessary precautions for the safety of employees on the Project, and shall comply with all applicable provisions of federal, State and municipal safety laws and building codes to prevent accidents or injury to persons on, about or adjacent to the premises where the Work is being performed. He or she shall erect and properly maintain at all times, as

required by the conditions and progress of the Work, all necessary safeguards for the protection of Workers and the public and shall post danger signs warning against the hazards created by such features of construction as protruding nails, hoists, well holes, elevator hatchways, scaffolding, window openings, stairways and falling materials; and he or she shall designate a responsible member of his or her organization on the Project, whose duty shall be the prevention of accidents. The name and position of any person so designated shall be reported to the Architect/Engineer by the Contractor.

The Contractor shall provide all necessary bracing, shoring and tying of all structures, decks and framing to prevent any structural failure of any material which could result in damage to property or the injury or death of persons; take all precautions to insure that no part of any structure of any description is loaded beyond its carrying capacity with anything that will endanger its safety at any time during the execution of this Contract; and provide for the adequacy and safety of all scaffolding and hoisting equipment. The Contractor shall not permit open fires within the building enclosure. The Contractor shall construct and maintain all necessary temporary drainage and do all pumping necessary to keep excavations and floors, pits and trenches free of water. The Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures, and for coordinating all portions of the Work, except as otherwise noted.

The Contractor shall take due precautions when obstructing sidewalks, streets or other public ways in any manner, and shall provide, erect and maintain barricades, temporary walkways, roadways, trench covers, colored lights or danger signals and any other devices necessary or required to assure the safe passage of pedestrians and automobiles.

### 10.3 EMERGENCIES

In an emergency affecting the safety of life or of the Work or of adjoining property, the Contractor without special instruction or authorization from the Architect/Engineer or Principal Representative, is hereby permitted to act, at his or her discretion, to prevent such threatened loss or injury; and he or she shall so act, without appeal, if so authorized or instructed. Provided the Contractor has no responsibilities for the emergency, if the Contractor incurs additional cost not otherwise recoverable from insurance or others on account of any such emergency Work, the Contract sum shall be equitably adjusted in accordance with Article 35, Changes In The Work.

## 11 ARTICLE 11 DRAWINGS AND SPECIFICATIONS ON THE WORK

The Contractor shall keep on the job site one copy of the Contract Documents in good order, including current copies of all Drawings and Specifications for the Work, and any approved Shop Drawings, Product Data or Samples, and as-built drawings. As-built drawings shall be updated weekly by the Contractor and Subcontractors to reflect actual constructed conditions including dimensioned locations of underground Work and the Contractor's failure to maintain such updates may be grounds to withhold portions of payments otherwise due in accordance with Article 33, Payments Withheld. All such documents shall be available to the Architect/Engineer and representatives of the State. In addition, the Contractor shall keep on the job site one copy of all approved addenda, Change Orders and requests for information issued for the Work.

The Contractor shall develop procedures to insure the currency and accuracy of as-built drawings and shall maintain on a current basis a log of requests for information and responses thereto, a Shop Drawing and Product Data submittal log, and a Sample submittal log to record the status of all necessary and required submittals.



## **12 ARTICLE 12 REQUESTS FOR INFORMATION AND SCHEDULES**

### **12.1 REQUESTS FOR INFORMATION**

The Architect/Engineer shall furnish additional instructions with reasonable promptness, by means of drawings or otherwise, necessary for the proper execution of the Work. All such drawings and instructions shall be consistent with the Contract Documents and reasonably inferable there from. The Architect/Engineer shall determine what additional instructions or drawings are necessary for the proper execution of the Work.

The Work shall be executed in conformity with such instructions and the Contractor shall do no Work without proper drawings, specifications or instructions. If the Contractor believes additional instructions, specifications or drawings are needed for the performance of any portion of the Work, the Contractor shall give Notice of such need in writing through a request for information furnished to the Architect/Engineer sufficiently in advance of the need for such additional instructions, specifications or drawings to avoid delay and to allow the Architect/Engineer a reasonable time to respond. The Contractor shall maintain a log of the requests for information and the responses provided.

### **12.2 SCHEDULES**

#### **12.2.1 Submittal Schedules**

Prior to filing the Contractor 's first application for payment, a schedule shall be prepared which may be preliminary to the extent required, fixing the dates for the submission and initial review of required Shop Drawings, Product Data and Samples for the beginning of manufacture and installation of materials, and for the completion of the various parts of the Work. It shall be prepared so as to cause no delay in the Work or in the Work of any other contractor. The schedule shall be subject to change from time to time in accordance with the progress of the Work, and it shall be subject to the review and approval by the Architect/Engineer. It shall fix the dates at which the various Shop Drawings Product Data and Samples will be required from the Architect/Engineer. The Architect/Engineer, after review and agreement as to the time provided for initial review, shall review and comment on the Shop Drawings, Product Data and Samples in accordance with that schedule. The schedule shall be finalized, prepared and submitted with respect to each of the elements of the Work in time to avoid delay, considering reasonable periods for review, manufacture or installation.

At the time the schedule is prepared, the Contractor, the Architect/Engineer and Principal Representative shall jointly identify the Shop Drawing, Product Data and Samples, if any, which the Principal Representative shall receive simultaneously with the Architect/Engineer for the purposes of owner coordination with existing facility standards and systems. The Contractor shall furnish a copy for the Principal Representative when so requested. Transmittal of Shop Drawings and Product Data copies to the Principal Representative shall be solely for the convenience of the Principal Representative and shall neither create nor imply responsibility or duty of review by the Principal Representative.

The Contractor may also, or at the direction of the Principal Representative at any time shall, prepare and maintain a schedule, which may also be preliminary and subject to change to the extent required, fixing the dates for the initial responses to requests for information or for detail drawings which will be required from the Architect/Engineer to allow the beginning of

manufacture, installation of materials and for the completion of the various parts of the Work. The schedule shall be subject to review and approval by the Architect/Engineer. The Architect/Engineer shall, after review and agreement, furnish responses and detail drawings in accordance with that schedule. Any such schedule shall be prepared and approved in time to avoid delay, considering reasonable periods for review, manufacture or installation, but so long as the request for information schedule is being maintained, it shall not be deemed to transfer responsibility to the Contractor for errors or omissions in the Contract Documents where circumstances make timely review and performance impossible.

The Architect/Engineer shall not unreasonably withhold approval of the Contractor's schedules and shall inform the Contractor and the Principal Representative of the basis of any refusal to agree to the Contractor's schedules. The Principal Representative shall attempt to resolve any disagreements.

#### 12.2.2 Schedule of Values

Within twenty-one (21) calendar days after the date of the Notice to Proceed, the Contractor shall submit to the Architect/Engineer and Principal Representative, for approval, and to the State Buildings Program when specifically requested, a complete itemized schedule of the values of the various parts of the Work, as estimated by the Contractor, aggregating the total price. The schedule of values shall be in such detail as the Architect/Engineer or the Principal Representative shall require, prepared on forms acceptable to the Principal Representative. It shall, at a minimum, identify on a separate line each division of the Specifications including the general conditions costs to be charged to the Project. The Contractor shall revise and resubmit the schedule of values for approval when, in the opinion of the Architect/Engineer or the Principal Representative, such resubmittal is required due to changes or modifications to the Contract Documents or the Contract sum.

The total cost of each line item so separately identified shall, when requested by the Architect/Engineer or the Principal Representative, be broken down into reasonable estimates of the value of:

- a) Material, which shall include the cost of material actually built into the Project plus any local sales or use tax paid thereon; and,
- b) Labor and other costs.

The cost of subcontracts shall be incorporated in the Contractor's schedule of values, and when requested by the Architect/Engineer or the Principal Representative, shall be separately shown as line items.

The Architect/Engineer shall review the proposed schedules and approve it after consultation with the Principal Representative, or advise the Contractor of any required revisions within ten (10) days of its receipt. In the event no action is taken on the submittal within ten days, the Contractor may utilize the schedule of values as its submittal for payment until it is approved or until revisions are requested.

When the Architect/Engineer deems it appropriate to facilitate certification of the amounts due to the Contractor, further breakdown of subcontracts, including breakdown by labor and materials, may be directed.

This schedule of values, when approved, will be used in preparing Contractor's applications for payment on State Form SC-7.2, Application for Payment.

### 12.2.3 Construction Schedules

Within twenty-one (21) calendar days after the date of the Notice to Proceed, the Contractor shall submit to the Architect/Engineer and the Principal Representative, and to the State Buildings Program when specifically requested, on a form acceptable to them, an overall timetable of the construction schedule for the Project. Unless the Supplementary General Conditions or the Specifications allow scheduling with bar charts or other less sophisticated scheduling tools, the Contractor's schedule shall be a critical-path method (CPM) construction schedule. The CPM schedule shall start with the date of the Notice to Proceed and include submittals activities, the various construction activities, change order Work (when applicable), close-out, testing, demonstration of equipment operation when called for in the Specifications, and acceptance. The CPM schedule shall at a minimum correlate to the schedule of values line items and shall be cost loaded if requested by the Architect/Engineer or Principal Representative. The completion time shall be the time specified in the Agreement and all Project scheduling shall allocate float utilizing the full period available for construction as specified in the Agreement on State Form SC 6.13, without indication of early completion, unless such earlier completion is approved in writing by the Principal Representative and State Building Programs.

The time shown between the starting and completion dates of the various elements within the construction schedule shall represent one hundred per cent (100%) completion of each element.

All other elements of the CPM schedule shall be as required by the Specifications. In addition, the Contractor shall submit monthly updates or more frequently, if required by the Principal Representative, updates of the construction schedule. These updates shall reflect the Contractor's "Work in place" progress.

When requested by the Architect/Engineer, the Principal Representative or the State Buildings Program, the Contractor shall revise the construction schedule to reflect changes in the schedule of values.

When the testing of materials is required by the Specifications, the Contractor shall also prepare and submit to the Architect/Engineer and the Principal Representative a schedule for testing in accordance with Article 14, Samples and Testing.

## **13 ARTICLE 13 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

### 13.1 SUBMITTAL PROCESS

The Contractor shall check and field verify all dimensions. The Contractor shall check, approve and submit to the Architect/Engineer in accordance with the schedule described in Article 12, Requests for Information and Schedules, all Shop Drawings, Product Data and Samples required by the specifications or required by the Contractor for the Work of the various trades. All Drawings and Product Data shall contain identifying nomenclature and each submittal shall be accompanied by a letter of transmittal identifying in detail all enclosures. The number of copies of Shop Drawings and Product Data to be submitted shall be as specified in the Specifications and if no number is specified then three copies shall be submitted.

The Architect/Engineer shall review and comment on the Shop Drawings and Product Data within the time provided in the agreed upon schedule for conformance with information given and the design concept expressed in, or reasonably inferred from, the Contract Documents. The nature of all corrections to be made to the Shop Drawings and Product Data, if any, shall be clearly noted,

and the submittals shall be returned to the Contractor for such corrections. If a change in the scope of the Work is intended by revisions requested to any Shop Drawings and Product Data, the Contractor shall be requested to prepare a change proposal in accordance with Article 35, Changes In The Work. On resubmitted Shop Drawings, Product Data or Samples, the Contractor shall direct specific attention in writing on the transmittal cover to revisions other than those corrections requested by the Architect/Engineer on any previously checked submittal. The Architect/Engineer shall promptly review and comment on, and return, the resubmitted items.

The Contractor shall thereafter furnish such other copies in the form approved by the Architect/Engineer as may be needed for the prosecution of the Work.

#### 13.1.1 Buy Clean Colorado (BCCO) Act

If applicable in Article 7 of the Agreement (SC-6.21), the Contractor shall submit products that comply with the State's Environmental Product Declaration (EPD) for each eligible material within the Project specifications. The BCCO Act EPD Submittal form (EE-5.2) shall be used to certify that all applicable materials have been considered. The Contractor is responsible for submitting the eligible product-specific EPDs to the Architect/Engineer for approval. Each EPD must reference the associated Product Category Rule (PCR), indicate third-party verification (Type III), and reference all ISO Standards (ISO 14025:2006, ISO 14040:2006, and ISO 14044:2006).

Contractor shall maintain and organize all approved project EPDs and waivers to be submitted in a zip folder as part of the closeout documentation.

#### 13.2 FABRICATION AND ORDERING

Fabrication shall be started by the Contractor only after receiving approved Shop Drawings from the Architect/Engineer. Materials shall be ordered in accordance with approved Product Data. Work which is improperly fabricated, whether through incorrect Shop Drawings, faulty workmanship or materials, will not be acceptable.

#### 13.3 DEVIATIONS FROM DRAWINGS OR SPECIFICATIONS

The review and comments of the Architect/Engineer of Shop Drawings, Product Data or Samples shall not relieve the Contractor from responsibility for deviations from the Drawings or Specifications, unless he or she has in writing called the attention of the Architect/Engineer to such deviations at the time of submission, nor shall it relieve the Contractor from responsibility for errors of any sort in Shop Drawings or Product Data. Review and comments on Shop Drawings or Product Data containing identified deviations from the Contract Documents shall not be the basis for a Change Order or a claim based on a change in the scope of the Work unless Notice is given to the Architect/Engineer and Principal Representative of all additional costs, time and other impacts of the identified deviation by bring it to their attention in writing at the time the submittals are made, and any subsequent change in the Contract sum or the Contract time shall be limited to cost, time and impacts so identified.

#### 13.4 CONTRACTOR REPRESENTATIONS

By preparing, approving, and/or submitting Shop Drawings, Product Data and Samples, the Contractor represents that the Contractor has determined and verified all materials, field measurements, and field construction criteria related thereto, and has checked and coordinated the information contained within each submittal with the requirements of the Work, the Project and the Contract Documents and prior reviews and approvals.

## **14 ARTICLE 14                    SAMPLES AND TESTING**

### **14.1    SAMPLES**

The Contractor shall furnish for approval, with such promptness as to cause no delay in his or her Work or in that of any other Contractor, all Samples as directed by the Architect/Engineer. The Architect/Engineer shall check and approve such Samples, with reasonable promptness, but only for conformance with the design intent of the Contract Documents and the Project, and for compliance with any submission requirements given in the Contract Documents.

### **14.2    TESTING - GENERAL**

The Contractor shall provide such equipment and facilities as the Architect/Engineer may require for conducting field tests and for collecting and forwarding samples to be tested. Samples themselves shall not be incorporated into the Work after approval without the permission of the Architect/Engineer.

All materials or equipment proposed to be used may be tested at any time during their preparation or use. The Contractor shall furnish the required samples without charge and shall give sufficient Notice of the placing of orders to permit the testing thereof. Products may be sampled either prior to shipment or after being received at the site of the Work.

Tests shall be made by an accredited testing laboratory. Except as otherwise provided in the Specifications, sampling and testing of all materials, and the laboratory methods and testing equipment, shall be in accordance with the latest standards and tentative methods of the American Society of Testing Materials (ASTM). The cost of testing which is in addition to the requirements of the Specifications shall be paid by the Contractor if so directed by the Architect/Engineer, and the Contract sum shall be adjusted accordingly by Change Order; provided however, that whenever testing shows portions of the Work to be deficient, all costs of testing including that required to verify the adequacy of repair or replacement Work shall be the responsibility of the Contractor.

### **14.3    TESTING - CONCRETE AND SOILS**

Unless otherwise specified or provided elsewhere in the Contract Documents, the Principal Representative will contract for and pay for the testing of concrete and for soils compaction testing through an independent laboratory or laboratories selected and approved by the Principal Representative. The Contractor shall assume the responsibility of arranging, scheduling and coordinating the concrete sample collection efforts and soils compaction efforts in an efficient and cost effective manner. Testing shall be performed in accordance with the requirements of the Specifications, and if no requirements are specified, the Contractor shall request instructions and testing shall be as directed by the Architect/Engineer or the soils engineer, as applicable, and in accordance with standard industry practices.

The Principal Representative and the Architect/Engineer shall be given reasonable advance notice of each concrete pour and reserve the right to either increase or decrease the number of cylinders or the frequency of tests.

Soil compaction testing shall be at random locations selected by the soils engineer. In general, soils compaction testing shall be as directed by the soils engineer and shall include all substrate prior to backfill or construction.

#### 14.4 TESTING - OTHER

Additional testing required by the Specifications will be accomplished and paid for by the Principal Representative in a manner similar to that for concrete and soils unless noted otherwise in the Specifications. In any case, the Contractor will be responsible for arranging, scheduling and coordinating additional tests. Where the additional testing will be contracted and paid for by the Principal Representative the Contractor shall give the Principal Representative not less than one-month advance written Notice of the date the first such test will be required.

### **15 ARTICLE 15 SUBCONTRACTS**

#### 15.1 CONTRACT PERFORMANCE OUTSIDE OF THE UNITED STATES OR COLORADO

After the contract is awarded, Contractor is required to provide written notice to the Principal Representative no later than twenty (20) days after deciding to perform services under this contract outside the United States or Colorado or to subcontract services under this contract to a subcontractor that will perform such services outside the United States or Colorado. The written notification must include, but need not be limited to, a statement of the type of services that will be performed at a location outside the United States or Colorado and the reason why it is necessary or advantageous to go outside the United States or Colorado to perform the services. All notices received by the State pursuant to outsourced services shall be posted on the Colorado Department of Personnel & Administration's website. If Contractor knowingly fails to notify the Principal Representative of any outsourced services as specified herein, the Principal Representative, at its discretion, may terminate this contract as provided in the Colorado Procurement Code or the applicable procurement code for institutions of higher education (Does not apply to any project that receives federal moneys)

#### 15.2 SUBCONTRACTOR LIST

Prior to the Notice to Proceed to commence construction, the Contractor shall submit to the Architect/Engineer, the Principal Representative and State Buildings Program a preliminary list of Subcontractors. It shall be as complete as possible at the time, showing all known Subcontractors planned for the Work. The list shall be supplemented as other Subcontractors are determined by the Contractor and any such supplemental list shall be submitted to the Architect/Engineer, the Principal Representative and State Buildings Program not less than ten (10) days before the Subcontractor commences Work.

#### 15.3 SUBCONTRACTOR SUBSTITUTIONS

The Contractor's list shall include those Subcontractors, if any, which the Contractor indicated in its bid, would be employed for specific portions of the Work if such indication was requested in the bid documents issued by the State. The substitution of any Subcontractor listed in the Contractor's bid shall be justified in writing not less than ten (10) days after the date of the Notice to Proceed to commence construction, and shall be subject to the approval of the Principal Representative. For reasons such as the Subcontractor's refusal to perform as agreed, subsequent unavailability or later discovered bid errors, or other similar reasons, but not including the availability of a lower Subcontract price, such substitution may be approved. The Contractor shall bear any additional cost incurred by such substitutions.

#### 15.4 CONTRACTOR RESPONSIBLE FOR SUBCONTRACTORS

The Contractor shall not employ any Subcontractor that the Architect/Engineer, within ten (10) days after the date of receipt of the Contractor's list of Subcontractors or any supplemental list, objects to in writing as being unacceptable to either the Architect/Engineer, the Principal Representative or State Buildings Program. If a Subcontractor is deemed unacceptable, the Contractor shall propose a substitute Subcontractor and the Contract sum shall be adjusted by any demonstrated difference between the Subcontractor's bids, except where the Subcontractor has been debarred by the State or fails to meet qualifications of the Contract Documents to perform the Work proposed.

The Contractor shall be fully responsible to the Principal Representative for the acts and omissions of Subcontractors and of persons either directly or indirectly employed by them. All instructions or orders in respect to Work to be done by Subcontractors shall be given to the Contractor.

#### 16 ARTICLE 16 RELATIONS OF CONTRACTOR AND SUBCONTRACTOR

The Contractor agrees to bind each Subcontractor to the terms of these General Conditions and to the requirements of the Drawings and Specifications, and any Addenda thereto, and also all the other Contract Documents, so far as applicable to the Work of such Subcontractor. The Contractor further agrees to bind each Subcontractor to those terms of the General Conditions which expressly require that Subcontractors also be bound, including without limitation, requirements that Subcontractors waive all rights of subrogation, provide adequate general commercial liability and property insurance, automobile insurance and workers' compensation insurance as provided in Article 25, Insurance.

Nothing contained in the Contract Documents shall be deemed to create any contractual relationship whatsoever between any Subcontractor and the State of Colorado acting by and through its Principal Representative.

#### 17 ARTICLE 17 MUTUAL RESPONSIBILITY OF CONTRACTORS

Should the Contractor cause damage to any separate contractor on the Work, the Contractor agrees, upon due Notice, to settle with such contractor by agreement, if he or she will so settle. If such separate contractor sues the Principal Representative on account of any damage alleged to have been so sustained, the Principal Representative shall notify the Contractor, who shall defend such proceedings if requested to do so by Principal Representative. If any judgment against the Principal Representative arises there from, the Contractor shall pay or satisfy it and pay all costs and reasonable attorney fees incurred by the Principal Representative, in accordance with Article 53.8, Indemnification, provided the Contractor was given due Notice of an opportunity to settle.

#### 18 ARTICLE 18 SEPARATE CONTRACTS

The Principal Representative reserves the right to enter into other contracts in connection with the Project or the Contract. The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their Work, and shall

properly connect and coordinate his or her Work with theirs. If any part of the Contractor's Work depends, for proper execution or results, upon the Work of any other contractor, the Contractor shall inspect and promptly report to the Architect/Engineer any defects in such Work that render it unsuitable for such proper execution and results. Failure of the Contractor to so inspect and report shall constitute an acceptance of the other contractor's Work as fit and proper for the reception of Work, except as to defects which may develop in the other Contractor's Work after the execution of the Contractor's Work.

To insure the proper execution of subsequent Work, the Contractor shall measure Work already in place and shall at once report to the Architect/Engineer any discrepancy between the executed Work and the Drawings.

## **19 ARTICLE 19 USE OF PREMISES**

The Contractor shall confine apparatus, the storage of materials and the operations of workmen to limits indicated by law, ordinances, permits and any limits lines shown on the Drawings. The Contractor shall not unreasonably encumber the premises with materials.

The Contractor shall enforce all of the Architect/Engineer's instructions and prohibitions regarding, without limitation, such matters as signs, advertisements, fires and smoking.

## **20 ARTICLE 20 CUTTING, FITTING OR PATCHING**

The Contractor shall do all cutting, fitting or patching of Work that may be required to make its several parts come together properly and fit it to receive or be received by Work of other Contractors shown upon, or reasonably inferred from, the Drawings and Specifications for the complete structure, and shall provide for such finishes to patched or fitted Work as the Architect/Engineer may direct. The Contractor shall not endanger any Work by cutting, excavating or otherwise altering the Work and shall not cut or alter the Work of any other Contractor save with the consent of the Architect/Engineer.

## **21 ARTICLE 21 UTILITIES**

### **21.1 TEMPORARY UTILITIES**

Unless otherwise specifically stated in the Specifications or on the Drawings, the Principal Representative shall be responsible for the locations of all utilities as shown on the Drawings or indicated elsewhere in the Specifications, subject to the Contractor's compliance with all statutory or regulatory requirements to call for utility locates. When actual conditions deviate from those shown the Contractor shall comply with the requirements of Article 37, Differing Site Conditions. The Contractor shall provide and pay for the installation of all temporary utilities required to supply all the power, light and water needed by him or her and other Contractors for their Work and shall install and maintain all such utilities in such manner as to protect the public and Workmen and conform with any applicable laws and regulations. Upon completion of the Work, he or she shall remove all such temporary utilities from the site. The Contractor shall pay for all consumption of power, light and water used by him or her and the other Contractors, without regard to whether such items are metered by temporary or permanent meters. The



Superintendent shall have full authority over all trades and Subcontractors at any tier to prevent waste. The cut-off date on permanent meters shall be either the agreed date of the date of the Notice of Substantial Completion or the Notice of Approval of Occupancy/Use of the Project.

#### 21.2 PROTECTION OF EXISTING UTILITIES

Where existing utilities, such as water mains, sanitary sewers, storm sewers and electrical conduits, are shown on the Drawings, the Contractor shall be responsible for the protection thereof, without regard to whether any such utilities are to be relocated or removed as a part of the Work. If any utilities are to be moved, the moving must be conducted in such manner as not to cause undue interruption or delay in the operation of the same.

#### 21.3 CROSSING OF UTILITIES

When new construction crosses highways, railroads, streets, or utilities under the jurisdiction of State, city or other public agency, public utility or private entity, the Contractor shall secure proper written permission before executing such new construction. The Contractor will be required to furnish a proper release before final acceptance of the Work.

### **22 ARTICLE 22 UNSUITABLE CONDITIONS**

The Contractor shall not Work at any time, or permit any Work to be done, under any conditions contrary to those recommended by manufacturers or industry standards which are otherwise proper, unsuited for proper execution, safety and performance. Any cost caused by ill-timed Work shall be borne by the Contractor unless the timing of such Work shall have been directed by the Architect/Engineer or the Principal Representative, after the award of the Contract, and the Contractor provided Notice of any additional cost.

### **23 ARTICLE 23 TEMPORARY FACILITIES**

#### 23.1 OFFICE FACILITIES

The Contractor shall provide and maintain without additional expense for the duration of the Project temporary office facilities, as required and as specified, for its own use and the use of the Architect/Engineer, representatives of the Principal Representative and State Buildings Program.

#### 23.2 TEMPORARY HEAT

The Contractor shall furnish and pay for all the labor, facilities, equipment, fuel and power necessary to supply temporary heating, ventilating and air conditioning, except to the extent otherwise specified, and shall be responsible for the installation, operation, maintenance and removal of such facilities and equipment. Unless otherwise specified, the permanent HVAC system shall not be used for temporary heat in whole or in part. If the Contractor desires to put the permanent system into use, in whole or in part, the Contractor shall set it into operation and furnish the necessary fuel and manpower to safely operate, protect and maintain that HVAC system. Any operation of all or any part of the permanent HVAC system including operation for testing purposes shall not constitute acceptance of the system, nor shall it relieve the Contractor of his or her one-year guarantee of the system from the date of the Notice of Substantial Completion of the entire Project, and if necessary due to prior operation, the Contractor shall

provide manufacturers' extended warranties from the date of the Contractor's use prior to the date of the Notice of Substantial Completion.

**23.3 WEATHER PROTECTION**

The Contractor shall, at all times, provide protection against weather, so as to maintain all Work, materials, apparatus and fixtures free from injury or damages.

**23.4 DUST PARTITIONS**

If the Work involves Work in an occupied existing building, the Contractor shall erect and maintain during the progress of the Work, suitable dust-proof temporary partitions, or more permanent partitions as specified, to protect such building and the occupants thereof.

**23.5 BENCH MARKS**

The Contractor shall maintain any site bench marks provided by the Principal Representative and shall establish any additional benchmarks specified by the Architect/Engineer as necessary for the Contractor to layout the Work and ascertain all grades and levels as needed.

**23.6 SIGN**

The Contractor shall erect and permit one 4' x 8' sign only at the site to identify the Project as specified or directed by the Architect/Engineer which shall be maintained in good condition during the life of the Project.

**23.7 SANITARY PROVISION**

The Contractor shall provide and maintain suitable, clean, temporary sanitary toilet facilities for any and all workmen engaged on the Work, for the entire construction period, in strict compliance with the requirement of all applicable codes, regulations, laws and ordinances, and no other facilities, new or existing, may be used by any person on the Project. When the Project is complete the Contractor shall promptly remove them from the site, disinfect, and clean or treat the areas as required. If any new construction surfaces in the Project other than the toilet facilities provided for herein are soiled at any time, the entire areas so soiled shall be completely removed from the Project and rebuilt. In no event may present toilet facilities of any existing building at the site of the Work be used by employees of any contractor.

**24 ARTICLE 24 CLEANING UP**

The Contractor shall keep the building and premises free from all surplus material, waste material, dirt and rubbish caused by employees or Work, and at the completion of the Work shall remove all such surplus material, waste material, dirt, and rubbish, as well as all tools, equipment and scaffolding, and shall wash and clean all window glass and plumbing fixtures, perform cleanup and cleaning required by the Specifications and leave all of the Work clean unless more exact requirements are specified.

**25 ARTICLE 25 INSURANCE**

**25.1 GENERAL**

The Contractor shall procure and maintain all insurance requirements and limits as set forth below, at his or her own expense, for the length of time set forth in Contract requirements. The Contractor shall continue to provide evidence of such coverage to State of Colorado on an annual basis during the aforementioned period including all of the terms of the insurance and indemnification requirements of this agreement. All below insurance policies shall include a provision preventing cancellation without thirty (30) days’ prior notice by certified mail. A completed Certificate of Insurance shall be filed with the Principal Representative and State Buildings Program within ten (10) days after the date of the Notice of Award, said Certificate to specifically state the inclusion of the coverages and provisions set forth herein and shall state whether the coverage is “claims made” or “per occurrence”.

**25.2 COMMERCIAL GENERAL LIABILITY INSURANCE (CGL)**

This insurance must protect the Contractor from all claims for bodily injury, including death and all claims for destruction of or damage to property (other than the Work itself), arising out of or in connection with any operations under this Contract, whether such operations be by the Contractor or by any Subcontractor under them or anyone directly or indirectly employed by the Contractor or by a Subcontractor. All such insurance shall be written with limits and coverages as specified below and shall be written on an occurrence form.

General Aggregate	\$2,000,000
Products – Completed Operations Aggregate	\$2,000,000
Each Occurrence	\$1,000,000
Personal Injury	\$1,000,000

The following coverages shall be included in the CGL:

- a) Per project general aggregate (CG 25 03 or similar)
- b) Additional Insured status in favor of the State of Colorado and any other parties as outlined in The Contract and must include both ONGOING Operations AND COMPLETED Operations per CG2010 10/01 and CG 2037 10/01 or equivalent as permitted by law.
- c) The policy shall be endorsed to be **primary and non-contributory** with any insurance maintained by Additional Insureds.
- d) A waiver of Subrogation in favor of all Additional Insured parties.
- e) Personal Injury Liability
- f) Contractual Liability coverage to support indemnification obligation per Article 53.8
- g) Explosion, collapse and underground (xcu)

The following exclusionary endorsements are prohibited in the CGL policy:

- a) Damage to Work performed by Subcontract/Vendor (CG 22-94 or similar)
- b) Contractual Liability Coverage Exclusion modifying or deleting the definition of an “insured contract” from the unaltered SO CG 0001 1001 policy from (CG 24 26 or similar)
- c) If applicable to the Work to be performed: Residential or multi-family
- d) If applicable to the Work to be performed: Exterior insulation finish systems
- e) If applicable to the Work to be performed: Subsidence or Earth Movement

The Contractor shall maintain general liability coverage including Products and Completed Operations insurance, and the Additional Insured with primary and non-contributory coverage as specified in this Contract for three (3) years after completion of the project.

25.3 AUTOMOBILE LIABILITY INSURANCE

Automobile and business auto liability covering liability arising out of any auto (including owned, hired and non-owned autos).

Combined Bodily Injury and Property Damage Liability (Combined Single Limit):	\$1,000,000 each accident
Coverages:	Specific waiver of subrogation

25.4 WORKERS' COMPENSATION INSURANCE

The Contractor shall procure and maintain Workers' Compensation Insurance at his or her own expense during the life of this Contract, including occupational disease provisions for all employees per statutory requirements. Policy shall contain a waiver of subrogation in favor of the State of Colorado.

The Contractor shall also require each Subcontractor to furnish Workers' Compensation Insurance, including occupational disease provisions for all of the latter's employees, and to the extent not furnished, the Contractor accepts full liability and responsibility for Subcontractor's employees.

In cases where any class of employees engaged in hazardous Work under this Contract at the site of the Project is not protected under the Workers' Compensation statute, the Contractor shall provide, and shall cause each Subcontractor to provide, adequate and suitable insurance for the protection of employees not otherwise protected.

25.5 UMBRELLA LIABILITY INSURANCE

(For construction projects exceeding \$10,000,000, provide the following coverage)

The Contractor shall maintain umbrella/excess liability insurance on an occurrence basis in excess of the underlying insurance described in Section B-D above. Coverage shall follow the terms of the underlying insurance, included the additional insured and waiver of subrogation provisions. The amounts of insurance required in Sections above may be satisfied by the Contractor purchasing coverage for the limits specified or by any combination of underlying and umbrella limits, so long as the total amount of insurance is not less than the limits specified in each section previously mentioned.

Each occurrence	\$5,000,000
Aggregate	\$5,000,000

25.6 BUILDER'S RISK INSURANCE

Unless otherwise expressly stated in the Supplementary General Conditions (e.g. where the State elects to provide for projects with a completed value of less than \$1,000,000), the Contractor shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builder's risk "all-risk" or equivalent policy form in the amount of the initial Contract Sum, plus value of subsequent

Contract Modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the site on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made or until no person or entity other than the Owner has an insurable interest in the property, or the Date of Notice specified on the Notice of Acceptance, State Form SBP-6.27 or whichever is later.

This insurance shall include interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Project as named insureds.

All associated deductibles shall be the responsibility of the Contractor. Such policy may have a deductible clause but not to exceed ten thousand dollars (\$10,000.00).

Property insurance shall be on an "all risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, false Work, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's and Contractor's services and expenses required as a result of such insured loss.

Contractor shall maintain Builders Risk coverage including partial use by Owner.

The Contractor shall waive all rights of subrogation as regards the State of Colorado and the Principal Representative, its officials, its officers, its agents and its employees, all while acting within the scope and course of their employment for damages caused by fire or other causes of loss to the extent covered by property insurance obtained pursuant to this Section or other property insurance applicable to the Work. The Contractor shall require all Subcontractors at any tier to similarly waive all such rights of subrogation and shall expressly include such a waiver in all subcontracts.

Upon request, the amount of such insurance shall be increased to include the cost of any additional Work to be done on the Project, or materials or equipment to be incorporated in the Project, under other independent contracts let or to be let. In such event, the Contractor shall be reimbursed for this cost as his or her share of the insurance in the same ratio as the ratio of the insurance represented by such independent contracts let or to be let to the total insurance carried.

The Principal Representative, with approval of the State Controller, shall have the power to adjust and settle any loss. Unless it is agreed otherwise, all monies received shall be applied first on rebuilding or repairing the destroyed or injured Work.

#### 25.7 POLLUTION LIABILITY INSURANCE

If Contractor is providing directly or indirectly Work with pollution/environmental hazards, the Contractor must provide or cause those conducting the Work to provide Pollution Liability Insurance coverage. Pollution Liability policy must include contractual liability coverage. State of Colorado must be included as additional insureds on the policy. The policy limits shall be in the amount of \$1,000,000 with maximum deductible of \$25,000 to be paid by the Subcontractor/Vendor.

## 25.8 ADDITIONAL MISCELLANEOUS INSURANCE PROVISIONS

Certificates of Insurance and/or insurance policies required under this Contract shall be subject to the following stipulations and additional requirements:

- a) Any and all deductibles or self-insured retentions contained in any Insurance policy shall be assumed by and at the sole risk of the Contractor;
- b) If any of the said policies shall fail at any time to meet the requirements of the Contract Documents as to form or substance, or if a company issuing any such policy shall be or at any time cease to be approved by the Division of Insurance of the State of Colorado, or be or cease to be in compliance with any stricter requirements of the Contract Documents, the Contractor shall promptly obtain a new policy, submit the same to the Principal Representative and State Building Programs for approval if requested, and submit a Certificate of Insurance as hereinbefore provided. Upon failure of the Contractor to furnish, deliver and maintain such insurance as provided herein, this Contract, in the sole discretion of the State of Colorado, may be immediately declared suspended, discontinued, or terminated. Failure of the Contractor in obtaining and/or maintaining any required insurance shall not relieve the Contractor from any liability under the Contract, nor shall the insurance requirements be construed to conflict with the obligations of the Contractor concerning indemnification;
- c) All requisite insurance shall be obtained from financially responsible insurance companies, authorized to do business in the State of Colorado and acceptable to the Principal Representative;
- d) Receipt, review or acceptance by the Principal Representative of any insurance policies or certificates of insurance required by this Contract shall not be construed as a waiver or relieve the Contractor from its obligation to meet the insurance requirements contained in these General Conditions.

## 26 ARTICLE 26 CONTRACTOR'S PERFORMANCE AND PAYMENT BONDS

The Contractor shall furnish a Performance Bond and a Labor and Material Payment Bond on State Forms SC-6.22, Performance Bond, and SC-6.221, Labor and Material Payment Bond, or such other forms as State Buildings Program may approve for the Project, executed by a corporate Surety authorized to do business in the State of Colorado and in the full amount of the Contract sum. The expense of these bonds shall be borne by the Contractor and the bonds shall be filed with State Buildings Program.

If, at any time, a Surety on such a bond is found to be, or ceases to be in strict compliance with any qualification requirements of the Contract Documents or the bid documents, or loses its right to do business in the State of Colorado, another Surety will be required, which the Contractor shall furnish to State Buildings Program within ten (10) days after receipt of Notice from the State or after the Contractor otherwise becomes aware of such conditions.

## 27 ARTICLE 27 LABOR AND WAGES

### 27.1 COLORADO LABOR

In accordance with laws of Colorado, C.R.S. § 8-17-101(1), as amended, Colorado labor shall be employed to perform at least eighty percent of the Work.

## 27.2 PREVAILING WAGE RATES

In accordance with laws of Colorado, C.R.S. § 24-92 Part 2, if prevailing wage rates are applicable to this project:

- a) The contractor shall in conspicuous places on the project post an owner provided poster with the current prevailing rate of payments as provided in the project solicitation.
  1. A contractor who fails to comply shall be deemed guilty of a class 3 misdemeanor and shall pay the State one hundred dollars (\$100) for each calendar day of noncompliance as determined by the State.
- b) The contractor and any subcontractors shall pay all the employees employed directly on the site of the work, unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account, the full amounts accrued at time of payment computed at wage rates not less than those stated in the competitive solicitation, regardless of any contractual relationships that may be alleged to exist between the contractor or subcontractor and the employees.
- c) The contractor and any subcontractors shall prepare and submit electronic payroll reports to the State in a format approved by OSA on a weekly basis that disclose all relevant payroll information, including the name and address of any entities to which fringe benefits are paid.
- d) The contractor and any subcontractors shall maintain on the site where public projects are being constructed a daily log of employees employed each day on the public project. The log shall include, at a minimum, for each employee his or her name, primary job title, and employer, and shall be kept on a form prescribed by the director. The log shall be available for inspection on the site at all times by the State.
- e) If the contractor or any subcontractor fails to pay wages as are required by the contract, the State shall not approve a warrant or demand for payment to the contractor until the contractor furnishes the State evidence satisfactory to such agency of government that such wages have been paid; except that the State shall approve and pay any portion of a warrant or demand for payment to the contractor to the extent the State has been furnished satisfactory evidence that the contractor or one or more subcontractors has paid such wages required by the contract, The contractor or subcontractor may use the following procedure in order to satisfy the requirements of this section:
  1. The contractor or subcontractor may submit to the State, for each employee to whom such wages are due, a check payable to that employee or to the State so it is negotiable by either party. Each such check shall be in an amount representing the difference between the accrued wages required to be paid to that employee by the contract and the wages actually paid by the contractor or subcontractor.
  2. If any check submitted cannot be delivered to the employee within a reasonable period, then it shall be negotiated by the State and the proceeds deposited in the unclaimed property trust fund created in section 38-13-116.6. Nothing in this subsection (1) shall be construed to lessen the responsibility of the contractor or subcontractor to attempt to locate and pay any employee to whom wages are due.

## 28 ARTICLE 28 ROYALTIES AND PATENTS

The Contractor shall be responsible for assuring that all rights to use of products and systems have been properly arranged and shall take such action as may be necessary to avoid delay, at no

additional charge to the Principal Representative, where such right is challenged during the course of the Work. The Contractor shall pay all royalties and license fees required to be paid and shall defend all suits or claims for infringement of any patent rights and shall save the State of Colorado harmless from loss on account thereof, in accordance with Article 53.8, Indemnification; provided, however, the Contractor shall not be responsible for such loss or defense for any copyright violations contained in the Contract Documents prepared by the Architect/Engineer or the Principal Representative of which the Contractor is unaware, or for any patent violations based on specified processes that the Contractor is unaware are patented or that the Contractor should not have had reason to believe were patented.

## **29 ARTICLE 29 ASSIGNMENT**

Except as otherwise provided hereafter the Contractor shall not assign the whole or any part of this Contract without the written consent of the Principal Representative. This provision shall not be construed to prohibit assignments of the right to payment to the extent permitted by C.R.S. § 4-9-406, et. seq., as amended, provided that written Notice of Assignment adequate to identify the rights assigned is received by the Principal Representative and the controller for the agency, department, or institution executing this Contract (as distinguished from the State Controller). Such assignment of the right to payment shall not be deemed valid until receipt by the Principal Representative and such controller and the Contractor assumes the risk that such written Notice of assignment is received by the Principal Representative and the controller for the agency, department, or institution involved. In case the Contractor assigns all or part of any moneys due or to become due under this Contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any moneys due or to become due to the Contractor shall be subject to all claims of all persons, firms, and corporations for services rendered or materials supplied for the performance of the Work called for in this Contract, whether said service or materials were supplied prior to or after the assignment. Nothing in this Article shall be deemed a waiver of any other defenses available to the State against the Contractor or the assignee.

## **30 ARTICLE 30 CORRECTION OF WORK BEFORE ACCEPTANCE**

The Contractor shall promptly remove from the premises all Work or materials condemned or declared irreparably defective as failing to conform to the Contract Documents on receipt of written Notice from the Architect/Engineer or the Principal Representative, whether incorporated in the Work or not. If such materials shall have been incorporated in the Work, or if any unsatisfactory Work is discovered, the Contractor shall promptly replace and re-execute his or her Work in accordance with the requirements of the Contract Documents without expense to the Principal Representative, and shall also bear the expense of making good all Work of other contractors destroyed or damaged by the removal or replacement of such defective material or Work.

Should any defective Work or material be discovered during the process of construction, or should reasonable doubt arise as to whether certain material or Work is in accordance with the Contract Documents, the value of such defective or questionable material or Work shall not be included in any application for payment, or if previously included, shall be deducted by the Architect/Engineer from the next application submitted by the Contractor.



If the Contractor does not perform repair, correction and replacement of defective Work, in lieu of proceeding by issuance of a Notice of intent to remove condemned Work as outlined above, the Principal Representative may, not less than seven (7) days after giving the original written Notice of the need to repair, correct, or replace defective Work, deduct all costs and expenses of replacement or correction as instructed by the Architect/Engineer from the Contractor's next application for payment in addition to the value of the defective Work or material. The Principal Representative may also make an equitable deduction from the Contract sum by unilateral Change Order, in accordance with Article 33, Payments Withheld and Article 35, Changes In The Work.

If the Contractor does not remove such condemned or irreparably defective Work or material within a reasonable time, the Principal Representative may, after giving a second seven (7) day advance Notice to the Contractor and the Surety, remove them and may store the material at the Contractor's expense. The Principal Representative may accomplish the removal and replacement with its own forces or with another Contractor. If the Contractor does not pay the expense of such removal and pay all storage charges within ten (10) days thereafter, the Principal Representative may, upon ten (10) days' written Notice, sell such material at auction or at private sale and account for the net proceeds thereof, after deducting all costs and expenses which should have been borne by the Contractor. If the Contractor shall commence and diligently pursue such removal and replacement before the expiration of the seven-day period, or if the Contractor shall show good cause in conjunction with submittal of a revised CPM schedule showing when the Work will be performed and why such removal of condemned Work should be scheduled for a later date, the Principal Representative shall not proceed to remove or replace the condemned Work.

If the Contractor disagrees with the Notice to remove Work or materials condemned or declared irreparably defective, the Contractor may request facilitated negotiation of the issue and the Principal Representative's right to proceed with removal and to deduct costs and expenses of repair shall be suspended and tolled until such time as the parties meet and negotiate the issue

During construction, whenever the Architect/Engineer has advised the Contractor in writing, in the Specifications, by reference to Article 6, Architect/Engineer Decisions and Judgments, of these General Conditions or elsewhere in the Contract Documents of a need to observe materials in place prior to their being permanently covered up, it shall be the Contractor's responsibility to notify the Architect/Engineer at least forty-eight (48) hours in advance of such covering operation. If the Contractor fails to provide such notification, Contractor shall, at his or her expense, uncover such portions of the Work as required by the Architect/Engineer for observation, and reinstall such covering after observation. When a covering operation is continued from day to day, notification of the commencement of a single continuing covering operation shall suffice for the activity specified so long as it proceeds regularly and without interruption from day to day, in which event the Contractor shall coordinate with the Architect/Engineer regarding the continuing covering operation.

## **31 ARTICLE 31 APPLICATIONS FOR PAYMENTS**

### **31.1 CONTRACTOR'S SUBMITTALS**

On or before the first day of each month and no more than five days prior thereto, the Contractor may submit applications for payment for the Work performed during such month covering the portion of the Work completed as of the date indicated, and payments on account of this Contract

shall be due per C.R.S. § 24-30-202(24) (correct notice of amount due), within forty-five (45) days of receipt by the Principal Representative of application for payments that have been certified by the Architect/Engineer. The Contractor shall submit the application for payment to the Architect/Engineer on State forms SBP-7.2, Certificate for Contractor's Payment, or such other format as the State Buildings Program shall approve, in an itemized format in accordance with the schedule of values or a cost loaded CPM schedule when required, supported to the extent reasonably required by the Architect/Engineer or the Principal Representative by receipts or other vouchers, showing payments for materials and labor, prior payments and payments to be made to Subcontractors and such other evidence of the Contractor's right to payments as the Architect/Engineer or Principal Representative may direct.

If payments are made on account of materials not incorporated in the Work but delivered and suitably stored at the site, or at some other location agreed upon in writing, such payments shall be conditioned upon submission by the Contractor of bills of sale or such other procedure as will establish the Principal Representative's title to such material or otherwise adequately protect the Principal Representative's interests, and shall provide proof of insurance whenever requested by the Principal Representative or the Architect/Engineer, and shall be subject to the right to inspect the materials at the request of either the Architect/Engineer or the Principal Representative.

All applications for payment, except the final application, and the payments there under, shall be subject to correction in the next application rendered following the discovery of any error.

### 31.2 ARCHITECT/ENGINEER CERTIFICATION

In accordance with the Architect/Engineer's agreement with the Principal Representative, the Architect/Engineer after appropriate observation of the progress of the Work shall certify to the Principal Representative the amount that the Contractor is entitled to, and forward the application to the Principal Representative. If the Architect/Engineer certifies an amount different from the amount requested or otherwise alters the Contractor's application for payment, a copy shall be forwarded to the Contractor.

If the Architect/Engineer is unable to certify all or portions of the amount requested due to the absence or lack of required supporting evidence, the Architect/Engineer shall advise the Contractor of the deficiency. If the deficiency is not corrected at the end of ten (10) days, the Architect/Engineer may either certify the remaining amounts properly supported to which the Contractor is entitled, or return the application for payment to the Contractor for revision with a written explanation as to why it could not be certified.

### 31.3 RETAINAGE WITHHELD

Unless otherwise provided in the Supplementary General Conditions, an amount equivalent to five percent (5%) of the amount shown to be due the Contractor on each application for payment shall be withheld until the Work required by the Contract has been performed. The withheld percentage of the contract price of any such Work, improvement, or construction shall be administered according to C.R.S. § 24-91-103, as amended, and C.R.S. § 38-26-107, as amended, and Article 31.4, shall be retained until the Work or discrete portions of the Work, have been completed satisfactorily, finally or partially accepted, and advertised for final settlement as further provided in Article 41.

### 31.4 RELEASE OF RETAINAGE

The Contractor may, for satisfactory and substantial reasons shown to the Principal Representative's satisfaction, make a written request to the Principal Representative and the

Architect/Engineer for release of part or all of the withheld percentage applicable to the Work of a Subcontractor which has completed the subcontracted Work in a manner finally acceptable to the Architect/Engineer, the Contractor, and the Principal Representative. Any such request shall be supported by a written approval from the Surety furnishing the Contractor's bonds and any surety that has provided a bond for the Subcontractor. The release of any such withheld percentage shall be further supported by such other evidence as the Architect/Engineer or the Principal Representative may require, including but not limited to, evidence of prior payments made to the Subcontractor, copies of the Subcontractor's contract with the Contractor, any applicable warranties, as-built information, maintenance manuals and other customary close-out documentation. Neither the Principal Representative nor the Architect Engineer shall be obligated to review such documentation nor shall they be deemed to assume any obligations to third parties by any review undertaken.

The Contractor's obligation under these General Conditions to guarantee Work for one year from the date of the Notice of Substantial Completion or the date of any Notice of Partial Substantial Completion of the applicable portion or phase of the Project, shall be unaffected by such partial release; unless a Notice of Partial Substantial Completion is issued for the Work subject to the release of retainage.

Any rights of the Principal Representative which might be terminated by or from the date of any final acceptance of the Work, whether at common law or by the terms of this Contract, shall not be affected by such partial release of retainage prior to any final acceptance of the entire Project.

The Contractor remains fully responsible for the Subcontractor's Work and assumes any risk that might arise by virtue of the partial release to the Subcontractor of the withheld percentage, including the risk that the Subcontractor may not have fully paid for all materials, labor and equipment furnished to the Project.

If the Principal Representative considers the Contractor's request for such release satisfactory and supported by substantial reasons, the Architect/Engineer shall make a "final inspection" of the applicable portion of the Project to determine whether the Subcontractor's Work has been completed in accordance with the Contract Documents. A final punch list shall be made for the Subcontractor's Work and the procedures of Article 41, Completion, Final Inspection, Acceptance and Settlement, shall be followed for that portion of the Work, except that advertisement of the intent to make final payment to the Subcontractor shall be required only if the Principal Representative has reason to believe that a supplier or Subcontractor to the Subcontractor for which the request is made, may not have been fully paid for all labor and materials furnished to the Project.

## **32 ARTICLE 32 CERTIFICATES FOR PAYMENTS**

State Form SBP-7.2, Certificate For Contractor's Payment, and its continuation detail sheets, when submitted, shall constitute the Certificate of Contractor's Application for Payment, and shall be a representation by the Contractor to the Principal Representative that the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and materials for which payment is requested have been incorporated into the Project except as noted in the application. If requested by the Principal Representative the Certificate of Contractor's Application for Payment shall be sworn under oath and notarized.

### **33 ARTICLE 33 PAYMENTS WITHHELD**

The Architect/Engineer, the Principal Representative or State Buildings Program may withhold, or on account of subsequently discovered evidence nullify, the whole or any part of any application on account of, but not limited to any of the following:

- a) Defective Work not remedied;
- b) Claims filed or reasonable evidence indicating probable filing of claims;
- c) Failure of the Contractor to make payments to Subcontractors for material or labor;
- d) A reasonable doubt that the Contract can be completed for the balance of the contract price then unpaid;
- e) Damage or injury to another contractor or any other person, persons or property except to the extent of coverage by a policy of insurance;
- f) Failure to obtain necessary permits or licenses or to comply with applicable laws, ordinances, codes, rules or regulations or the directions of the Architect/Engineer;
- g) Failure to submit a monthly construction schedule;
- h) Failure of the Contractor to keep Work progressing in accordance with the time schedule;
- i) Failure to keep a superintendent on the Work;
- j) Failure to maintain as built drawings of the Work in progress;
- k) Unauthorized deviations by the Contractor from the Contract Documents; or
- l) On account of liquidated damages.

In addition, the Architect Engineer, Principal Representative or State Buildings Program may withhold or nullify the whole or any part of any application for any reason noted elsewhere in these General Conditions of the Contractor's Design/Bid/Build Agreement. Nullification shall mean reduction of amounts shown as previously paid on the application. The amount withheld or nullified may be in such amount as the Architect/Engineer or the Principal Representative estimates to be required to allow the State to accomplish the Work, cure the failure and cover any damages or injuries, including an allowance for attorneys' fees and costs where appropriate. When the grounds for such withholding or nullifying are removed, payment shall be made for the amounts thus withheld or nullified on such grounds.

### **34 ARTICLE 34 DEDUCTIONS FOR UNCORRECTED WORK**

If the Architect/Engineer and the Principal Representative deem it inexpedient to correct Work damaged or not performed in accordance with the Contract Documents, the Principal Representative may, after consultation with the Architect/Engineer and ten (10) days' Notice to the Contractor of intent to do so, make reasonable reductions from the amounts otherwise due the Contractor on the next application for payment. Notice shall specify the amount or terms of any contemplated reduction. The Contractor may during this period correct or perform the Work. If the Contractor does not correct or perform the Work, an equitable deduction from the Contract sum shall be made by Change Order, in accordance with Article 35, Changes in The Work, unilaterally if necessary. If either party elects' facilitation of this issue after Notice is given, the ten-day (10) notice period shall be extended and tolled until facilitation has occurred.

### **35 ARTICLE 35 CHANGES IN THE WORK**

The Principal Representative may designate, without invalidating the Agreement, and with the approval of State Buildings Program and the State Controller, may order extra Work or make changes with or without the consent of the Contractor as hereafter provided, by altering, adding to or deducting from the Work, the Contract sum being adjusted accordingly. All such changes in the Work shall be within the general scope of and be executed under the conditions of the Contract, except that any claim for extension of time made necessary due to the change or any claim of other delay or other impacts caused by or resulting from the change in the Work shall be presented by the Contractor and adjusted by Change Order to the extent known at the time such change is ordered and before proceeding with the extra or changed Work. Any claims for extension of time or of delay or other impacts, and any costs associated with extension of time, delay or other impacts, which are not presented before proceeding with the change in the Work, and which are not adjusted by Change Order to the extent known, shall be waived.

The Architect/Engineer shall have authority to make minor changes in the Work, not involving extra cost, and not inconsistent with the intent of the Contract Documents, but otherwise, except in an emergency endangering life or property, no extra Work or change in the Contract Documents shall be made unless by 1) a written Change Order, approved by the Principal Representative, State Buildings Program, and the State Controller prior to proceeding with the changed Work; or 2) by an Emergency Field Change Order approved by the Principal Representative and State Buildings Program as hereafter provided in Article 35.4 Emergency Field Ordered Changed Work; or 3) by an allocation in writing of any allowance already provided in the encumbered contract amount, the Contract sum being later adjusted to decrease the Contract sum by any unallocated or unexpended amounts remaining in such allowance. No change to the Contract sum shall be valid unless so ordered.

#### **35.1 THE VALUE OF CHANGED WORK**

The value of any extra Work or changes in the Work shall be determined by agreement in one or more of the following ways:

- a) By estimate and acceptance of a lump-sum amount;
- b) By unit prices specified in the Agreement, or subsequently agreed upon, that are extended by specific quantities;
- c) By actual cost plus a fixed fee in a lump sum amount for profit, overhead and all indirect and off-site home office costs, the latter amount agreed upon in writing prior to starting the extra or changed Work.

Where the Contractor and the Principal Representative cannot agree on the value of extra Work, the Principal Representative may order the Contractor to perform the changes in the Work and a Change Order may be unilaterally issued based on an estimate of the change in the Work prepared by the Architect/Engineer. The value of the change in the Work shall be the Principal Representative's determination of the amount of equitable adjustment attributable to the extra Work or change. The Principal Representative's determination shall be subject to appeal by the Contractor pursuant to the claims process in Article 36, Claims.

Except as otherwise provided in Article 35.2, Detailed Breakdown, the Cost Principles of the Colorado Procurement Code or the applicable procurement code for institutions of higher education, shall govern all Contract changes.

### 35.2 DETAILED BREAKDOWN

In all cases where the value of the extra or changed Work is not known based on unit prices in the Contractor's bid or the Agreement, a detailed change proposal shall be submitted by the Contractor on a Change Order Proposal (SC-6.312), or in such other format as the State Buildings Program approves, with which the Principal Representative may require an itemized list of materials, equipment and labor, indicating quantities, time and cost for completion of the changed Work.

Such detailed change proposals shall be stated in lump sum amounts and shall be supported by a separate breakdown, which shall include estimates of all or part of the following when requested by the Architect/Engineer or the Principal Representative:

- a) Materials, indicating quantities and unit prices including taxes and delivery costs if any (separated where appropriate into general, mechanical and electrical and/or other Subcontractors' Work; and the Principal Representative may require in its discretion any significant subcontract costs to be similarly and separately broken down).
- b) Labor costs, indicating hourly rates and time and labor burden to include Social Security and other payroll taxes such as unemployment, benefits and other customary burdens.
- c) Costs of project management time and superintendence time of personnel stationed at the site, and other field supervision time, but only where a time extension, other than a weather delay, is approved as part of the Change Order, and only where such project management time and superintendence time is directly attributable to and required by the change; provided however that additional cost of on-site superintendence shall be allowable whenever in the opinion of the Architect/Engineer the impact of multiple change requests to be concurrently performed will result in inadequate levels of supervision to assure a proper result unless additional superintendence is provided.
- d) Construction equipment (including small tools). Expenses for equipment and fuel shall be based on customary commercially reasonable rental rates and schedules. Equipment and hand tool costs shall not include the cost of items customarily owned by workers.
- e) Workers' compensation costs, if not included in labor burden.
- f) The cost of commercial general liability and property damage insurance premiums but only to the extent charged the Contractor as a result of the changed Work.
- g) Overhead and profit, as hereafter specified.
- h) Builder's risk insurance premium costs.
- i) Bond premium costs.
- j) Testing costs not otherwise excluded by these General Conditions.
- k) Subcontract costs.

Unless modified in the Supplementary General Conditions, overhead and profit shall not exceed the percentages set forth in the table below.

	OVERHEAD	PROFIT	COMMISSION
To the Contractor or to Subcontractors for the portion of Work performed with their own forces:	10%	5%	0%
To the Contractor or to Subcontractors for Work performed by others at a tier immediately below either of them:	5%	0%	5%

Overhead shall include: a) insurance premium for policies not purchased for the Project and itemized above, b) home office costs for office management, administrative and supervisory personnel and assistants, c) estimating and change order preparation costs, d) incidental job burdens, e) legal costs, f) data processing costs, g) interest costs on capital, h) general office expenses except those attributable to increased rental expenses for temporary facilities, and all other indirect costs, but shall not include the Social Security tax and other direct labor burdens. The term "Work" as used in the proceeding table shall include labor, materials and equipment and the "Commission" shall include all costs and profit for carrying the subcontracted Work at the tiers below except direct costs as listed in items a through k above if any.

On proposals for Work involving both additions and credits in the amount of the Contract sum, the overhead and profit will be allowed on the net increase only. On proposals resulting in a net deduct to the amount of the Contract sum, profit on the deducted amount shall be returned to the Principal Representative at fifty percent (50%) of the rate specified. The inadequacy of the profit specified shall not be a basis for refusal to submit a proposal.

Except in the case of Change Orders or Emergency Field Change Orders agreed to on the basis of a lump sum amount or unit prices as described in paragraphs 35.1a and 35.2a above, The Value of Changed Work, the Contractor shall keep and present a correct and fully auditable account of the several items of cost, together with vouchers, receipts, time cards and other proof of costs incurred, summarized on a Change Order form (SC-6.31) using such format for supporting documentation as the Principal Representative and State Buildings Program approve. This requirement applies equally to Work done by Subcontractors. Only auditable costs shall be reimbursable on Change Orders where the value is determined on the basis of actual cost plus a fixed fee pursuant to paragraph 35A3 above, or where unilaterally determined by the Principal Representative on the basis of an equitable adjustment in accordance with the Procurement Rules, as described above in Article 35.1, The Value of Changed Work.

Except for proposals for Work involving both additions and credits, changed Work shall be adjusted and considered separately for Work either added or omitted. The amount of adjustment for Work omitted shall be estimated at the time it is directed to be omitted, and when reasonable to do so, the agreed adjustment shall be reflected on the schedule of values used for the next Contractor's application for payment.

The Principal Representative reserves the right to contract with any person or firm other than the Contractor for any or all extra Work; however, unless specifically required in the Contract Documents, the Contractor shall have no responsibility without additional compensation to

supervise or coordinate the Work of persons or firms separately contracted by the Principal Representative.

### 35.3 HAZARDOUS MATERIALS

The Principal Representative represents that it has undertaken an examination of the site of the Work and has determined that there are no hazardous substances, as defined below, which the Contractor could reasonably encounter in its performance of the Work. In the event the Principal Representative so discovers hazardous substances, the Principal Representative shall render harmless such hazards before the Contractor commences the Work.

In the event the Contractor encounters any materials reasonably believed to be hazardous substances which have not been rendered harmless, the Contractor shall immediately stop Work in the area affected and report the condition to the Principal Representative, in writing. For purposes of this Agreement, "hazardous substances" shall include asbestos, lead, polychlorinated biphenyl (PCB) and any or all of those substances defined as "hazardous substance", "hazardous waste", or "dangerous or extremely hazardous wastes" as those terms are used in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA), and shall also include materials regulated by the Toxic Substances Control Act (TSCA), the Clean Air Act, the Air Quality Act, the Clean Water Act, and the Occupational Safety and Health Act. The Work in the affected area shall not therefore be resumed except by written agreement of the Principal Representative and the Contractor, if in fact materials that are hazardous substances have not been rendered harmless. The Work in the affected area shall be resumed only in the absence of the hazardous substances or when it has been rendered harmless or by written agreement of the Principal Representative and the Contractor.

The contractor shall not be required to perform Work without consent in any areas where it reasonably believes hazardous substances that have not been rendered harmless are present.

### 35.4 EMERGENCY FIELD CHANGE ORDERED WORK

The Principal Representative, without invalidating the Agreement, and with the approval of State Buildings Program and without the approval of the State Controller, may order extra Work or make changes in the case of an emergency that is a threat to life or property or where the likelihood of delays in processing a normal Change Order will result in substantial delays and or significant cost increases for the Project. Emergency Field Orders are not to be used solely to expedite normal Change Order processing absent a clear showing of a high potential for significant and substantial cost or delay. Such changes in the Work may be directed through issuance of an Emergency Field Change Order signed by the Contractor, the Principal Representative (or by a designee specifically appointed to do so in writing), and approved by the Director of State Buildings Program or his or her delegate. The change shall be directed using an Emergency Field Change Order form (SC-6.31E).

If the amount of the adjustment of the Contract price and time for completion can be determined at the time of issuance of the Emergency Field Change Order, those adjustments shall be reflected on the face of the Emergency Field Change Order. Otherwise, the Emergency Field Change Order shall reflect a not to exceed (NTE) amount for any schedule adjustment (increasing or decreasing the time for completion) and an NTE amount for any adjustment to Contract sum, which NTE amount shall represent the maximum amount of adjustment to which the Contractor will be entitled, including direct and indirect costs of changed Work, as well as any direct or indirect costs attributable to delays, inefficiencies or other impacts arising out of the change. Emergency Field



Change Orders directed in accordance with this provision need not bear the approval signatures of the State Controller.

On Emergency Field Change Orders where the price and schedule have not been finally determined, the Contractor shall submit final costs for adjustment as soon as practicable. No later than seven (7) days after issuance, except as otherwise permitted, and every seven days thereafter, the Contractor shall report all costs to the Principal Representative and the Architect/Engineer. The final adjustment of the Emergency Field Change Order amount and the adjustment to the Project time for completion shall be prepared on a normal Change Order from (SC-6.31) in accordance with the procedures described in Article 35.1, The Value of Changed Work, and B, Detailed Breakdown, above. Unless otherwise provided in writing signed by the Director of State Buildings Program to the Principal Representative and the Contractor, describing the extent and limits of any greater authority, individual Emergency Field Change Orders shall not be issued for more than \$25,000, nor shall the cumulative value of Emergency Field Change Orders exceed an amount of \$100,000.

**35.5 APPROPRIATION LIMITATIONS - C.R.S. § 24-91-103.6, as amended**

The amount of money appropriated, as shown on the Contractor's Design/Bid/Build Agreement (SC 6.21), is equal to or in excess of the Contract amount. No Change Order, Emergency Field Change Order, or other type of order or directive shall be issued by the Principal Representative, or any agent acting on his or her behalf, which directs additional compensable Work to be performed, which Work causes the aggregate amount payable under the Contract to exceed the amount appropriated for the original Contract, as shown on the Agreement (SC-6.21), unless one of the following occurs: (1) the Contractor is provided written assurance from the Principal Representative that sufficient additional lawful appropriations exist to cover the cost of the additional Work; or (2) the Work is covered by a contractor remedy provision under the Contract, such as a claim for extra cost. By way of example only, no assurance is required for any order, directive or instruction by the Architect/Engineer or the Principal Representative to perform Work which is determined to be within the performance required by the Contract Documents; the Contractor's remedy shall be as described elsewhere in these General Conditions.

Written assurance shall be in the form of an Amendment to the Contract reciting the source and amount of such appropriation available for the Project. No remedy granting provision of this Contract shall obligate the Principal Representative to seek appropriations to cover costs in excess of the amounts recited as available to pay for the Work to be performed.

**36 ARTICLE 36 CLAIMS**

It is the intent of these General Conditions to provide procedures for speedy and timely resolution of disagreements and disputes at the lowest level possible. In the spirit of on the job resolution of job site issues, the parties are encouraged to use the partnering processes of Article 2.4, Partnering, Communications and Cooperation, before turning to the more formal claims processes described in this Article 36, Claims. The use of non-binding dispute resolution, whether through the formal processes described in Article 39, Non-Binding Dispute Resolution – Facilitated Negotiations, or through less formal alternative processes developed as part of a partnering plan, are also encouraged. Where such process cannot resolve the issues in dispute, the claims process that follows is intended to cause the issues to be presented, decided and where necessary, documented in close proximity to the events from which the issues arise. To that end, and in summary of the remedy granting process that follows commencing with the next paragraph of

this Article 36, Claims, the Contractor shall 1) first, seek a decision by the Architect/Engineer, and 2) shall second, informally present the claim to Principal Representative as described hereafter, and 3) failing resolution in the field, give Notice of intent to exercise statutory rights of review of a formal contract controversy, and 4) seek resolution outside the Contract as provided by the Colorado Procurement Code or the applicable procurement code for institutions of higher education.

If the Contractor claims that any instructions, by detailed drawings, or otherwise, or any other act or omission of the Architect/Engineer or Principal Representative affecting the scope of the Contractor's Work, involve extra cost, extra time or changes in the scope of the Work under this Contract, the Contractor shall have the right to assert a claim for such costs or time, provided that before either proceeding to execute such Work (except in an emergency endangering life or property), or filing a Notice of claim, the Contractor shall have obtained or requested a written decision of the Architect/Engineer following the procedures as provided in Article 6.1 and 6.2, Architect/Engineer Decisions and Judgments, respectively; provided, however, that in the case of a directed change in the Work pursuant to Article 35, no written judgment or decision of the Architect/Engineer is required. If the Contractor is delayed by the lack of a response to a request for a decision by the Architect/Engineer, the Contractor shall give Notice in accordance with Article 38, Delays and Extensions of Time.

Unless it is the Architect/Engineer's judgment and determination that the Work is not included in the performance required by the Contract Documents, the Contractor shall proceed with the Work as originally directed. Where the Contractor's claim involves a dispute concerning the value of Work unilaterally directed pursuant to Article 35.A.2 the Contractor shall also proceed with the Work as originally directed while his or her claim is being considered.

The Contractor shall give the Principal Representative and the Architect/Engineer Notice of any claim promptly after the receipt of the Architect/Engineer's decision, but in no case later than three (3) business days after receipt of the Architect/Engineer's decision (or no later than ten (10) days from the date of the Contractor's request for a decision when the Architect/Engineer fails to decide as provided in Article 6). The Notice of claim shall state the grounds for the claim and the amount of the claim to the extent known in accordance with the procedures of Article 35, Changes in the Work. The period in which Notice must be given may be extended by the Principal Representative if requested in writing by the Contractor with good cause shown, but any such extension to be effective shall be in writing.

The Principal Representative shall respond in writing, with a copy to the Architect/Engineer, within a reasonable time, and except where a request for facilitation of negotiation has been made as hereafter provided, in no case later than seven (7) business days (or at such other time as the Contractor and Principal Representative agree) after receipt of the Contractor's Notice of claim regarding such instructions or alleged act or omission. If no response to the Contractor's claim is received within seven (7) business days of Contractor's Notice (or at such other time as the Contractor and Principal Representative agree) and the instructions have not been retracted, it shall be deemed that the Principal Representative has denied the claim.

The Principal Representative may grant or deny the claim in whole or in part, and a Change Order shall be issued if the claim is granted. To the extent any portion of claim is granted where costs are not clearly shown, the Principal Representative may direct that the value of that portion of the Work be determined by any method allowed in Article 35.1, The Value of Changed Work. Except in the case of a deemed denial, the Principal Representative shall provide a written explanation regarding any portion of the Contractor's claim that is denied.

If the Contractor disagrees with the Principal Representative's judgment and determination on the claim and seeks an equitable adjustment of the Contract sum or time for performance, he or she shall give Notice of intent to exercise his or her statutory right to seek a decision on the contract controversy within ten (10) days of receipt of the Principal Representative's decision denying the claim. A "contract controversy," as such term is used in the Colorado Procurement Code or the applicable procurement code for institutions of higher education, shall not arise until the initial claim process described above in this Article 36 has been properly exhausted by the Contractor. The Contractor's failure to proceed with Work directed by the Architect/Engineer or to exhaust the claim process provided above in this Article 36, shall constitute an abandonment of the claim by the Contractor and a waiver of the right to contest the decision in any forum.

At the time of filing the Notice of intent to exercise his or her statutory right to seek a decision on the contract controversy, the Contractor may request that the Principal Representative defer a decision on the contract controversy until a later date or until the end of the Project. If the Principal Representative agrees, he or she shall so advise the Contractor in writing. If no such request is made, or if the Principal Representative does not agree to such a request, the Principal Representative shall render a written decision within twenty (20) business days and advise the Contractor of the reasons for any denial. Unless the claim has been decided by the Principal Representative (as opposed to delegates of the Principal Representative), the person who renders the decision on this statutory contract controversy shall not be the same person who decided the claim. To the extent any portion of the contract controversy is granted where costs are not clearly shown, the Principal Representative may direct that the value of that portion of the Work be determined by any method allowed in Article 35.1, The Value of Changed Work. In the event of a denial, the Principal Representative shall give Notice to the Contractor of his or her right to administrative and judicial reviews as provided in the Colorado Procurement Code or the applicable procurement code for institutions of higher education. If no decision regarding the contract controversy is issued within twenty (20) business days of the Contractor's giving Notice (or such other date as the Contractor and Principal Representative have agreed), and the instructions have not been retracted or the alleged act or omission have not been corrected, it shall be deemed that the Principal Representative has ruled by denial on the contract controversy. Except in the case of a deemed denial, the Principal Representative shall provide an explanation regarding any portion of the contract controversy that involves denial of the Contractor's claim.

Either the Contractor or the Principal Representative may request facilitation of negotiations concerning the claim or the contract controversy, and if requested, the parties shall consult and negotiate before the Principal Representative decides the issue. Any request for facilitation by the Contractor shall be made at the time of the giving of Notice of the claim or Notice of the contract controversy. Facilitation shall extend the time for the Principal Representative to respond by commencing the applicable period at the completion of the facilitated negotiation, which shall be the last day of the parties' meeting, unless otherwise agreed in writing.

Disagreement with the decision of the Architect Engineer, or the decision of the Principal Representative to deny any claim or denying the contract controversy, shall not be grounds for the Contractor to refuse to perform the Work directed or to suspend or terminate performance. During the period that any claim or contract controversy decision is pending under this Article 36, Claims, the Contractor shall proceed diligently with the Work directed.

In all cases where the Contractor proceeds with the Work and seeks equitable adjustment by filing a claim and or statutory appeal, the Contractor shall keep a correct account of the extra cost, in accordance with Article 35.2, Detailed Breakdown supported by receipts. The Principal

Representative shall be entitled to reject any claim or contract controversy whenever the foregoing procedures are not followed and such accounts and receipts are not presented.

The payments to the Contractor in respect of such extra costs shall be limited to reimbursement for the current additional expenditure by the Contractor made necessary by the change in the Work, plus a reasonable amount for overhead and profit, determined in accordance with Article 35.2, Detailed Breakdown, determined solely with reference to the additional Work, if any, required by the change.

### **37 ARTICLE 37                    DIFFERING SITE CONDITIONS**

#### **37.1    NOTICE IN WRITING**

The Contractor shall promptly, and where possible before conditions are disturbed, give the Architect/Engineer and the Principal Representative Notice in writing of:

- a) Subsurface or latent physical conditions at the site differing materially from those indicated in or reasonably assumed from the information provided in the Contract Documents; and,
- b) Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract Documents.

The Architect/Engineer shall promptly investigate the conditions, and if it is found that such conditions do materially so differ and cause an increase or decrease in the Contractor's costs of performance of any part of the Work required by the Contract Documents, whether or not such Work is changed as a result of such conditions, an equitable adjustment shall be made and the Contract sum shall be modified in accordance with Article 35, Changes in the Work.

If the time required for completion of the Work affected by such materially differing conditions will extend the Work on the critical path as indicated on the CPM schedule, the time for completion shall also be equitably adjusted.

#### **37.2    LIMITATIONS**

No claim of the Contractor under this clause shall be allowed unless the Contractor has given the Notice required in Article 37.1, Notice in Writing, above. The time prescribed for presentation and adjustment in Articles 36, Claims and 38, Delays and Extensions of Time, shall be reasonably extended by the State to the extent required by the nature of the differing conditions; provided, however, that even when so extended no claim by the Contractor for an equitable adjustment hereunder shall be allowed if not quantified and presented prior to the date the Contractor requests a final inspection pursuant to Article 41.1, Notice of Completion.

### **38 ARTICLE 38                    DELAYS AND EXTENSIONS OF TIME**

If the Contractor is delayed at any time in the progress of the Work by any act or neglect of the State of Colorado or the Architect/Engineer, or of any employee or agent of either, or by any separately employed Contractor or by strikes, lockouts, fire, unusual delay in transportation, unavoidable casualties or any other causes beyond the Contractor's control, including weather delays as defined below, the time of Completion of the Work shall be extended for a period equal

to such portion of the period of delays directly affecting the completion of the Work as the Contractor shall be able to show he or she could not have avoided by the exercise of due diligence.

The Contractor shall provide Notice in writing to the Architect/Engineer, the Principal Representative and State Buildings Program within three (3) business days from the beginning of such delay and shall file a written claim for an extension of time within seven (7) business days after the period of such delay has ceased, otherwise, any claim for an extension of time is waived.

Provided that the Contractor has submitted reasonable schedules for approval when required by Article 12, Requests for Information and Schedules, if no schedule is agreed to fixing the dates on which the responses to requests for information or detail drawings will be needed, or Shop Drawings, Product Data or Samples are to be reviewed as required or allowed by Article 12.2, Schedules, no extension of time will be allowed for the Architect/ Engineer's failure to furnish such detail drawings as needed, or for the failure to initially review Shop Drawings, Product Data or Samples, except in respect of that part of any delay in furnishing detail drawings or instructions extending beyond a reasonable period after written demand for such detailed drawings or instructions is received by the Architect/Engineer. In any event, any claim for an extension of time for such cause will be recognized only to the extent of delay directly caused by failure to furnish detail drawings or instructions or to review Shop Drawings, Product Data or Samples pursuant to schedule, after such demand.

All claims for extension of time due to a delay claimed to arise or result from ordered changes in the scope of the Work, or due to instructions claimed to increase the scope of the Work, shall be presented to the Architect/Engineer, the Principal Representative and State Buildings Program as part of a claim for extra cost, if any, in accordance with Article 36, Claims, and in accordance with the Change Order procedures required by Article 35, Changes in The Work.

Except as otherwise provided in this paragraph, no extension of time shall be granted when the Contractor has failed to utilize a CPM schedule or otherwise identify the Project's critical path as specified in Article 12, Requests for Information and Schedules, or has elected not to do so when allowed by the Supplementary General Conditions or the Specifications to use less sophisticated scheduling tools, or has failed to maintain such a schedule. Delay directly affecting the completion of the Work shall result in an extension of time only to the extent that completion of the Work was affected by impacts to the critical path shown on Contractor's CPM schedule. Where the circumstances make it indisputable in the opinion of the Architect/Engineer that the delay affected the completion of the Work so directly that the additional notice of the schedule impact by reference to a CPM schedule was unnecessary, a reasonable extension of time may be granted.

Extension of the time for completion of the Work will be granted for delays due to weather conditions only when the Contractor demonstrates that such conditions were more severe and extended than those reflected by the ten-year average for the month, as evidenced by the Climatological Data, U. S. Department of Commerce, for the Project area.

Extensions of the time for completion of the Work due to weather will be granted on the basis of one and three tenths (1.3) calendar days for every day that the Contractor would have Worked but was unable to Work, with each separate extension figured to the nearest whole calendar day.

For weather delays and delays caused by events, acts or omissions not within the control of the Principal Representative or any person acting on the Principal Representative's behalf, the Contractor shall be entitled to an extension of time only and shall not be entitled to recovery of additional cost due to or resulting from such delays. This Article does not, however, preclude the recovery of damages for delay by either party under other provisions in the Contract Documents.

### 39 ARTICLE 39

### NON-BINDING DISPUTE RESOLUTION – FACILITATED NEGOTIATIONS

The Contractor and Principal Representative agree to designate one or more mutually acceptable persons willing and able to facilitate negotiations and communications for the resolution of conflicts, disagreements or disputes between them at the specific request of either party with regard to any Project decision of either of them or any decision of the Architect/Engineer. The designation of such person(s) shall not carry any obligation to use their services except that each party agrees that if the other party requests the intervention of such person(s) with respect to any such conflict, dispute or disagreement, the non-requesting party shall participate in good faith attempts to negotiate a resolution of the issue in dispute. If the parties cannot agree on a mutually acceptable person to serve in this capacity one shall be so appointed; provided, however, that either party may request the director of State Buildings Program to appoint such a person, who, if appointed, shall be accepted for this purpose by both the Contractor and the Principal Representative.

The cost, if any, of the facilitative services of the person(s) so designated shall be shared if the parties so agree in any partnering plan; or in the absence of agreement the cost shall be borne by the party requesting the facilitation of negotiation.

Any dispute, claim, question or disagreement arising from or relating to the Contract or an alleged breach of the Contract may be subject to a request by either party for facilitated negotiation subject to the limitations hereafter listed, and the parties shall participate by consultation and negotiation with each other, as guided by the facilitator and with recognition of their mutual interests, in an attempt to reach an equitable solution satisfactory to both parties.

The obligation to participate in facilitated negotiations shall be as described above and elsewhere in these General Conditions, as by way of example in Article 36, Claims, or Article 34, Deductions for Uncorrected Work and to the extent not more particularly described or limited elsewhere, each party's obligations shall be as follows:

- a) A party shall not initiate communication with the facilitator regarding the issues in dispute; except that any request for facilitation shall be made in writing with copies sent, faxed or delivered to the other party;
- b) A party shall prepare a brief written description of its position if so requested by the facilitator (who may elect to first discuss the parties' positions with each party separately in the interest of time and expense);
- c) A party shall respond to any reasonable request for copies of documents requested by the facilitator, but such requests, if voluminous, may consist of an offer to allow the facilitator access to the parties' documents;
- d) A party shall review any meeting agenda proposed by a facilitator and endeavor to be informed on the subjects to be discussed;
- e) A party shall meet with the other party and the facilitator at a mutually acceptable place and time, or, if none can be agreed to, at the time and place designated by the facilitator for a period not to exceed four hours unless the parties agree to a longer period;
- f) A party shall endeavor to assure that any facilitation meeting shall be attended by any other persons in their employ that the facilitator requests be present, if reasonably available, including the Architect/Engineer;

- g) Each party shall participate in such facilitated face-to-face negotiations of the issues in dispute through persons fully authorized to resolve the issue in dispute;
- h) Each party shall be obligated to participate in negotiations requested by the other party and to perform the specific obligations described in paragraphs (a) through (j) this Article 39, Facilitated Negotiation, no more than three times during the course of the Project;
- i) Neither party shall be under any obligation to resolve any issue by facilitated negotiation, but each agrees to participate in good faith and the Principal Representative shall direct the Architect/Engineer to appropriately document any resolution or agreement reached and to execute any Amendment or Change Order to the Contract necessary to implement their agreement; and,
- j) Any discussions and documents prepared exclusively for use in the negotiations shall be deemed to be matters pertaining to settlement negotiations and shall not be subsequently available in further proceedings except to the extent of any documented agreement.

In accordance with State Fiscal Rules and Article 52.6, Choice of Law; No Arbitration, nothing in this Article 39 shall be deemed to call for arbitration or otherwise obligate the State to participate in any form of binding alternative dispute resolution.

A partnering plan developed as described in Article 2.4, Partnering, Communications and Cooperation, may modify or expand the requirements of this Article but may not reduce the obligation to participate in facilitated negotiations when applicable. In the case of small projects estimated to be valued under \$500,000, the requirements of this Article may be deleted from this Contract, by modification in Article 7 (Contractor's Agreement SC-6.21), Optional Provisions and Elections. When so modified, the references to the parties' right to elect facilitated negotiation elsewhere in these General Conditions shall be deleted.

#### **40 ARTICLE 40 RIGHT OF OCCUPANCY**

The Principal Representative shall have the right to take possession of and to use any completed or partially completed portions of the Work, even if the time for completing the entire Work or portions of the Work has not expired and even if the Work has not been finally accepted, and the Contractor shall fully cooperate with the Principal Representative to allow such possession and use. Such possession and use shall not constitute an acceptance of such portions of the Work.

Prior to any occupancy of the Project, an inspection shall be made by the Principal Representative, State Buildings Program and the Contractor. Such inspection shall be made for the purpose of ensuring that the building is secure, protected by operation safety systems as designed, operable exits, power, lighting and HVAC systems, and otherwise ready for the occupancy intended and the Notice of Substantial Completion has been issued for the occupancy intended. The inspection shall also document existing finish conditions to allow assessment of any damage by occupants. The Contractor shall assist the Principal Representative in completing and executing State Form SBP-01, Approval of Occupancy/Use, prior to the Principal Representative's possession and use. Any and all areas so occupied will be subject to a final inspection when the Contractor complies with Article 41, Completion, Final Inspection, Acceptance and Settlement.

## **41 ARTICLE 41 COMPLETION, FINAL INSPECTION, ACCEPTANCE AND SETTLEMENT**

### **41.1 NOTICE OF COMPLETION**

When the Work, or a discrete physical portion of the Work (as hereafter described) which the Principal Representative has agreed to accept separately, is substantially complete and ready for final inspection, the Contractor shall file a written Notice with the Architect/Engineer that the Work, or such discrete physical portion, in the opinion of the Contractor, is substantially complete under the terms of the Contract. The Contractor shall prepare and submit with such Notice a comprehensive list of items to be completed or corrected prior to final payment, which shall be subject to review and additions as the Architect/Engineer or the Principal Representative shall determine after inspection. If the Architect/Engineer or the Principal Representative believe that any of the items on the list of items submitted, or any other item of Work to be corrected or completed, or the cumulative number of items of Work to be corrected or completed, will prevent a determination that the Work is substantially complete, those items shall be completed by the Contractor and the Notice shall then be resubmitted.

### **41.2 FINAL INSPECTION**

Within ten (10) days after the Contractor files written Notice that the Work is substantially complete, the Architect/Engineer, the Principal Representative, and the Contractor shall make a "final inspection" of the Project to determine whether the Work is substantially complete and has been completed in accordance with the Contract Documents. State Buildings Program shall be notified of the inspection not less than three (3) business days in advance of the inspection. The Contractor shall provide the Principal Representative and the Architect/Engineer an updated punch list in sufficient detail to fully outline the following:

- a) Work to be completed, if any; and
- b) Work not in compliance with the Drawings or Specifications, if any.

A final punch list shall be made by the Architect/Engineer in sufficient detail to fully outline to the Contractor:

- a) Work to be completed, if any;
- b) Work not in compliance with the Drawings or Specifications, if any; and
- c) Unsatisfactory Work for any reason, if any.

The required number of copies of the final punch list will be countersigned by the authorized representative of the Principal Representative and will then be transmitted by the Architect/Engineer to the Contractor, the Principal Representative, and State Buildings Program. The Architect/Engineer's final punch list shall control over the Contractor's preliminary punch list.

### **41.3 NOTICE OF SUBSTANTIAL COMPLETION**

Notice of Substantial Completion shall establish the date of substantial completion of the Project. The Contractor acknowledges and agrees that because the departments, agencies and institutions of the State of Colorado are generally involved with the business of the public at large, greater care must be taken in establishing the date of substantial completion than might otherwise be the case to ensure that a project or building or discrete physical portion of the Work is fully usable and safe for public use, and that such care necessarily raises the standard by which the concept of substantial completion is applied for a public building.



The Notice of Substantial Completion shall not be issued until the following have been fully established:

- a) All required building code inspections have been called for and the appropriate code officials have affixed their signatures to the Building Inspection Record indicating successful completion of all required code inspections;
- b) All required corrections noted on the Building Inspection Record shall have been completed unless the Architect/Engineer, the Principal Representative and State Buildings Program, in their complete and absolute discretion, all concur that the condition requiring the remaining correction is not in any way life threatening, does not otherwise endanger persons or property, and does not result in any undue inconvenience or hardship to the Principal Representative or the public;
- c) The building, structure or Project can be fully and comfortably used by the Principal Representative and the public without undue interference by the Contractor's employees and Workers during the completion of the final punch list taking into consideration the nature of the public uses intended and taking into consideration any stage or level of completion of HVAC system commissioning or other system testing required by the Specifications to be completed prior to issuance of the Notice of Substantial Completion;
- d) The Project has been fully cleaned as required by these General Conditions, and as required by any stricter requirements of the Specifications, and the overall state of completion is appropriate for presentation to the public; and
- e) The Contractor has provided a schedule for the completion of each and every item identified on the punch list which specifies the Subcontractor or trade responsible for the Work, and the dates the completion or correction of the item will be commenced and finished; such schedule will show completion of all remaining final punch list items within the period indicated in the Contract for final punch list completion prior to Final Acceptance, with the exception of only those items which are beyond the control of the Contractor despite due diligence. The schedule shall provide for a reasonable punch list inspection process. Unless liquidated damages have been specified in Article 7.6 of the Contractor's Design/Bid/Build Agreement SC-6.21), the cost to the Principal Representative, if any, for re-inspections due to failure to adhere to the Contractor's proposed punch-list completion schedule shall be the responsibility of the Contractor and may be deducted by the Principal Representative from final amounts due to the Contractor.

Substantial completion of the entire Project shall not be conclusively established by a decision by the Principal Representative to take possession and use of a portion, or all of the Project, where portions of the Project cannot meet all the criteria noted above. Notice of Substantial Completion for the entire Project shall, however, only be withheld for substantial reasons when the Principal Representative has taken possession and uses all of the Project in accordance with the terms of Article 40, Right of Occupancy. Failure to furnish the required completion schedule shall constitute a substantial reason for withholding the issuance of any Notice of Substantial Completion.

The Contractor shall have the right to request a final inspection of any discrete physical portion of the Project when in the opinion of the Principal Representative, The Architect/Engineer and State Buildings Program a final punch list can be reasonably prepared, without confusion as to which portions of the Project are referred to in any subsequent Notice of Partial Final Settlement which might be issued after such portion is finally accepted. Discrete physical portions of the Project may be, but shall not necessarily be limited to, such portions of the Project as separate

buildings where a Project consists of multiple buildings. Similarly, an addition to an existing building where the Project also calls for renovation or remodeling of the existing building may constitute a discrete physical portion of the Project. In such circumstances, when in the opinion of the Principal Representative, the Architect/Engineer and State Buildings Program, the requirements for issuance of a Notice of Substantial Completion can be satisfied with respect to the discrete portion of the Project, a partial Notice of Substantial Completion may be issued for such discrete physical portion of the Project.

#### 41.4 NOTICE OF ACCEPTANCE

The Notice of Acceptance shall establish the completion date of the Project. It shall not be authorized until the Contractor shall have performed all of the Work to allow completion and approval of the Pre-Acceptance Checklist (SBP-05).

Where partial Notices of Substantial Completion have been issued, partial Notices of Final Acceptance may be similarly issued when appropriate for that portion of the Work. Partial Notice of Final Acceptance may also be issued to exclude the Work described in Change Orders executed during late stages of the Project where a later completion date for the Change Ordered Work is expressly provided for in the Contract as amended by the Change Order, provided the Work can be adequately described to allow partial advertisement of any Notice of Partial Final Settlement to be issued without confusion as to the Work included for which final payment will be made.

#### 41.5 SETTLEMENT

Final payment and settlement shall be made on the date fixed and published for such payment except as hereafter provided. The Principal Representative shall not authorize final payment until all items on the Pre-Acceptance check list (SBP-05) have been completed, the Notice of Acceptance issued, and the Notice of Contractors Settlement published. If the Work shall be substantially completed, but Final Acceptance and completion thereof shall be prevented through delay in correction of minor defects, or unavailability of materials or other causes beyond the control of the Contractor, the Principal Representative in his or her discretion may release all amounts due to the Contractor except such amounts as may be in excess of three times the cost of completing the unfinished Work or the cost of correcting the defective Work, as estimated by the Architect/Engineer and approved by State Buildings Program. Before the Principal Representative may issue the Notice of Contractor's Settlement and advertise the Project for final payment, the Contractor shall have corrected all items on the punch list except those items for which delayed performance is expressly permitted, subject to withholding for the cost thereof, and shall have delivered to the Principal Representative:

- a) All guarantees and warranties;
- b) All statements to support local sales tax refunds, if any;
- c) Required operating maintenance instructions as per the Principal Representative; and,
- d) One (1) set of hard copy as-built Contract Documents, and one (1) electronic copy showing all job changes.
- e) Demonstrated to the operating personnel of the Principal Representative the proper operation and maintenance of all equipment.
- f) A written disclosure of the Five Most Costly Goods incorporated into the project, including iron, steel, or related manufactured goods and the total cost and country of origin of those five goods and whether the project was subject to any existing domestic content preferences.
- g) All approved project Environmental Product Declarations (EPDs) and waivers for products incorporated into the project in a zip folder.

h) If applicable, the signed BCCO Act EPD Submittal & Sign-Off (EE-5.2) forms.

Upon completion of the foregoing the Project shall be advertised in accordance with the Notice of Contractor's Settlement by two publications of Notice, the last publication appearing at least ten (10) days prior to the time of final settlement. Publication and final settlement should not be postponed or delayed solely by virtue of unresolved claims against the Project or the Contractor from Subcontractors, suppliers or materialmen based on good faith disputes; the resolution of the question of payment in such cases being directed by statute.

Except as hereafter provided, on the date of final settlement thus advertised, provided the Contractor has submitted a written Notice to the Architect/Engineer that no claims have been filed, and further provided the Principal Representative shall have received no claims, final payments and settlement shall be made in full. If any unpaid claim for labor, materials, rental machinery, tools, supplies or equipment is filed before payment in full of all sums due the Contractor, the Principal Representative and the State Controller shall withhold from the Contractor on the date established for final settlement, sufficient funds to insure the payment of such claim, until the same shall have been paid or withdrawn, such payment or withdrawal to be evidenced by filing a receipt in full or an order for withdrawal signed by the claimant or his or her duly authorized agent or assignee. The amount so withheld may be in the amount of 125% of the claims or such other amount as the Principal Representative reasonably deems necessary to cover expected legal expenses. Such withheld amounts shall be in addition to any amount withheld based on the cost to compete unfinished Work or the cost to repair defective Work. However, as provided by statute, such funds shall not be withheld longer than ninety (90) days following the date fixed for final settlement with the Contractor, as set forth in the published Notice of Contractor's Settlement, unless an action at law shall be commenced within that time to enforce such unpaid claim and a Notice of such action at law shall have been filed with the Principal Representative and the State Controller. At the expiration of the ninety (90) day period, the Principal Representative shall authorize the State Controller to release to the Contractor all other money not the subject of such action at law or withheld based on the cost to compete unfinished Work or the cost to repair defective Work.

Notices of Partial Final Settlement may be similarly advertised, provided all conditions precedent have been satisfied as though that portion of the Work affected stood alone, a Notice of Partial Acceptance has been issued, and the consent of surety to the partial final settlement has been obtained in writing. Thereafter, partial final payments may be made to the Contractor subject to the same conditions regarding unpaid claims.

#### **42 ARTICLE 42 GENERAL WARRANTY AND CORRECTION OF WORK AFTER ACCEPTANCE**

The Contractor warrants that the materials used and the equipment furnished shall be new and of good quality unless specified to the contrary. The Contractor further warrants that the Work shall, in all respects, be free from material defects not permitted by the Specifications and shall be in accordance with the requirements of the Contract Documents. Neither the final certificate for payment nor any provision in the Contract Documents shall relieve the Contractor of responsibility for defects or faulty materials or Workmanship. The Contractor shall be responsible to the Principal Representative for such warranties for the longest period permitted by any applicable statute of limitations.

In addition to these general warranties, and without limitation of these general warranties, for a period of one year after the date of any Notice of Substantial Completion, or any Notice of Partial Substantial Completion if applicable, the Contractor shall remedy defects, and faulty Workmanship or materials, and Work not in accordance with the Contract Documents which was not accepted at the time of the Notice of Final Acceptance, all in accordance with the provisions of Article 44, One-Year Guarantee And Special Guarantees And Warranties.

#### **43 ARTICLE 43 LIENS**

Colorado statutes do not provide for any right of lien against public buildings. In lieu thereof, C.R.S. § 38-26-107, provides adequate relief for any claimant having furnished labor, materials, rental machinery, tools, equipment, or services toward construction of the particular public Work in that final payment may not be made to a Contractor until all such creditors have been put on Notice by publication in the public press of such pending payment and given opportunity for a period of up to ninety (90) days to stop payment to the Contractor in the amount of such claims.

#### **44 ARTICLE 44 ONE-YEAR GUARANTEE AND SPECIAL GUARANTEES AND WARRANTIES**

##### **44.1 ONE-YEAR GUARANTEE OF THE WORK**

The Contractor shall guarantee to remedy defects and repair or replace the Work for a period of one year from the date of the Notice of Substantial Completion or from the dates of any partial Notices of Substantial Completion issued for discrete physical portions of the Work. The Contractor shall remedy any defects due to faulty materials or Workmanship and shall pay for, repair and replace any damage to other Work resulting there from, which shall appear within a period of one year from the date of such Notice(s) of Substantial Completion. The Contractor shall also remedy any deviation from the requirements of the Contract Documents which shall later be discovered within a period of one year from the date of the Notice of Substantial Completion; provided, however, that the Contractor shall not be required to remedy deviations from the requirements of the Contract Documents where such deviations were obvious, apparent and accepted by the Architect/Engineer or the Principal Representative at the time of the Notice of Final Acceptance. The Principal Representative shall give Notice of observed defects or other Work requiring correction with reasonable promptness. Such Notice shall be in writing to the Architect/Engineer and the Contractor.

The one year guarantee of the Contractor's Work may run separately for discrete physical portions of the Work for which partial Notices of Substantial Completion have been issued, however, it shall run from the last Notice of Substantial Completion with respect to all or any systems common to the Work to which more than one Notice of Substantial Completion may apply.

This one-year guarantee shall not be construed to limit the Contractor's general warranty described in Article 42, General Warranty and Correction of Work After Acceptance, that all materials and equipment are new and of good quality, unless specified to the contrary, and that the Work shall in all respects be free from material defects not permitted by the Specifications and in accordance with the requirements of the Contract Documents.

#### 44.2 SPECIAL GUARANTEES AND WARRANTIES

In case of Work performed for which product, manufacturers or other special warranties are required by the Specifications, the Contractor shall secure the required warranties and deliver copies thereof to the Principal Representative through the Architect/Engineer upon completion of the Work.

These product, manufacturers or other special warranties, as such, do not in any way lessen the Contractor's responsibilities under the Contract. Whenever guarantees or warranties are required by the Specifications for a longer period than one year, such longer period shall govern.

#### 45 ARTICLE 45 GUARANTEE INSPECTIONS AFTER COMPLETION

The Architect/Engineer, the Principal Representative and the Contractor together shall make at least two (2) complete inspections of the Work after the Work has been determined to be substantially complete and accepted. One such inspection, the "Six-Month Guarantee Inspection," shall be made approximately six (6) months after date of the Notice of Substantial Completion, unless in the case of smaller projects valued under \$500,000 this inspection is declined in Article 7.5 (Contractor's Agreement SC-6.21), Modification of Article 45, in which case the inspection to occur at six months shall not be required. Another such inspection, the "Eleven-Month Guaranty Inspection" shall be made approximately eleven (11) months after the date of the Notice of Substantial Completion. The Contractor shall schedule and so notify all parties concerned, and the Principal Representative shall so notify State Buildings Program, of these inspections. If more than one Notice of Substantial Completion has been issued at the reasonable discretion of the Principal Representative separate eleven month inspections may be required where the one year guarantees do not run reasonably concurrent.

Written punch lists and reports of these inspections shall be made by the Architect/Engineer and forwarded to the Contractor, the Principal Representative, State Buildings Program, and all other participants within ten (10) days after the completion of the inspections. The punch list shall itemize all guarantee items, prior punch list items still to be corrected or completed and any other requirements of the Contract Documents to be completed which were not waived by final acceptance because they were not obvious or could not reasonably have been previously observed. The Contractor shall immediately initiate such remedial Work as may be necessary to correct any deficiencies or defective Work shown by this report, and shall promptly complete all such remedial Work in a manner satisfactory to the Architect/Engineer, the Principal Representative and State Buildings Program.

If the Contractor fails to promptly correct all deficiencies and defects shown by this report, the Principal Representative may do so, after giving the Contractor ten (10) days written Notice of intention to do so.

The State of Colorado, acting by and through the Principal Representative, shall be entitled to collect from the Contractor all costs and expenses incurred by it in correcting such deficiencies and defects, as well as all damages resulting from such deficiencies and defects.

#### 46 ARTICLE 46

#### TIME OF COMPLETION AND LIQUIDATED DAMAGES

It is hereby understood and mutually agreed, by and between the parties hereto, that the date of beginning, rate of progress, and the time for completion of the Work to be done hereunder are ESSENTIAL CONDITIONS of this Agreement, and it is understood and agreed that the Work embraced in this Contract shall be commenced at the time specified in the Notice to Proceed (SC-6.26).

It is further agreed that time is of the essence of each and every portion of this Contract, and of any portion of the Work described on the Drawings or Specifications, wherein a definite and certain length of time is fixed for the performance of any act whatsoever. The parties further agree that where under the Contract additional time is allowed for the completion of the Work or any identified portion of the Work, the new time limit or limits fixed by such extension of the time for completion shall be of the essence of this Agreement.

The Contractor acknowledges that subject to any limitations in the Advertisement for Bids, issued for the Project, the Contractor's bid is consistent with and considers the number of days to substantially complete the Project and the number of days to finally complete the Project to which the parties may have stipulated in the Agreement, which stipulation was based on the Contractor's bid. The Contractor agrees that Work shall be prosecuted regularly, diligently and uninterruptedly at such rate of progress as will ensure the Project will be substantially complete, and fully and finally complete, as recognized by the issuance of all required Notices of Substantial Completion and Notices of Final Acceptance, within any times stipulated and specified in the Agreement, as the same may be amended by Change Order or other written modification, and that the Principal Representative will be damaged if the times of completion are delayed.

It is expressly understood and agreed, by and between the parties hereto, that the times for the Substantial Completion of the Work or for the final acceptance of the Work as may be stipulated in the Agreement, and as applied here and in Article 7.6 of the Contractor's Design/Bid/Build Agreement SC-6.21), Modifications of Article 46, are reasonable times for these stages of completion of the Work, taking into such consideration all factors, including the average climatic range and usual industrial conditions prevailing in the locality of the building operations.

If the Contractor shall neglect, fail or refuse to complete the Work within the times specified in the Agreement, such failure shall constitute a breach of the terms of the Contract and the State of Colorado, acting by and through the Principal Representative, shall be entitled to liquidated damages for such neglect, failure or refusal, as specified in Article 7.6 of the Contractor's Design/Bid/Build Agreement SC-6.21, Modification of Article 46.

The Contractor and the Contractor's Surety shall be jointly liable for and shall pay the Principal Representative, or the Principal Representative may withhold, the sums hereinafter stipulated as liquidated damages for each calendar day of delay until the entire Project is 1) substantially completed, and the Notice (or all Notices) of Substantial Completion are issued, 2) finally complete and accepted and the Notice (or all Notices) of Acceptance are issued, or 3) both. Delay in substantial completion shall be measured from the Date of the Notice to Proceed and delay in final completion and acceptance shall be measured from the Date of the Notice of Substantial Completion.

In the first instance, specified in Article 7.6.1 of the Contractor's Design/Bid/Build Agreement SC-6.21, Modification of Article 46, liquidated damages, if any, shall be the amount specified therein, for each calendar day of delay beginning after the stipulated number of days for Substantial Completion from the date of the Notice to Proceed, until the date of the Notice of Substantial

Completion. Unless otherwise specified in any Supplementary General Conditions, in the event of any partial Notice of Substantial Completion, liquidated damages shall accrue until all required Notices of Substantial Completion are issued.

In the second instance, specified in Article 7.6.2 of the Contractor's Design/Bid/Build Agreement SC-6.21, Modification of Article 46, liquidated damages, if any, shall be the amount specified in Article 7.6.2 of the Contractor's Design/Bid/Build Agreement SC-6.21, Modification of Article 46, for each calendar day in excess of the number of calendar days specified in the Contractor's bid for the Project and stipulated in the Agreement to finally complete the Project (as defined by the issuance of the Notice of Acceptance) after the final Notice of Substantial Completion has been issued.

In the third instance, when so specified in both Articles 7.6.1 and 7.6.2 of the Contractor's Agreement SC-6.21, both types of liquidated damages shall be separately assessed where those delays have occurred.

The parties expressly agree that said amounts are a reasonable estimate of the presumed actual damages that would result from any of the breaches listed, and that any liquidated damages that are assessed have been agreed to in light of the difficulty of ascertaining the actual damages that would be caused by any of these breaches at the time this Contract was formed; the liquidated damages in the first instance representing an estimate of damages due to the inability to use the Project; the liquidated damages in the second instance representing an estimate of damages due to the additional administrative, technical, supervisory and professional expenses related to and arising from the extended closeout period including delivery of any or all guarantees and warranties, the submittals of sales and use tax payment forms, the calling for the final inspection and the completion of the final punch list.

The parties also agree and understand that the liquidated damages to be assessed in each instance are separate and distinct, although potentially cumulative, damages for the separate and distinct breaches of delayed substantial completion or final acceptance. Such liquidated damages shall not be avoided by virtue of the fact of concurrent delay caused by the Principal Representative, or anyone acting on behalf of the Principal Representative, but in such event the period of delay for which liquidated damages are assessed shall be equitably adjusted in accordance with Article 38, Delays and Extensions of Time.

#### **47 ARTICLE 47 DAMAGES**

If either party to this Contract shall suffer damage under this Contract in any manner because of any wrongful act or neglect of the other party or of anyone employed by either of them, then the party suffering damage shall be reimbursed by the other party for such damage. Except to the extent of damages liquidated for the Contractor's failure to achieve timely completion as set forth in Article 46, Time of Completion and Liquidated Damages, the Principal Representative shall be responsible for, and at his or her option may insure against, loss of use of any existing property not included in the Work, due to fire or otherwise, however caused. Notwithstanding the foregoing, or any other provision of this Contract, to the contrary, no term or condition of this contract shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protection, or other provisions of the Colorado Governmental Immunity Act, Section 24-10-101, *et seq.*, CRS, as now or hereafter amended. The parties understand and agree that liability for claims for injuries to persons arising out of negligence of the State of Colorado, its departments, institutions, agencies, boards, officials and employees is

controlled and limited by the provisions of Section 24-101-101, *et seq.*, CRS, as now or hereafter amended and the risk management statutes, Section 24-30-1501, *et seq.*, CRS, as now or hereafter amended.

Notice of intent to file a claim under this clause shall be made in writing to the party liable within a reasonable time of the first observance of such damage and not later than the time of final payment, except that in the case of claims by the Principal Representative involving warranties against faulty Work or materials Notice shall be required only to the extent stipulated elsewhere in these General Conditions. Claims made to the Principal Representative involving extra cost or extra time arising by virtue of instructions to the Contractor to which Article 36, Claims, applies shall be made in accordance with Article 36. Other claims arising under the Contract involving extra cost or extra time which are made to the Principal Representative under this clause shall also be made in accordance with the procedures of Article 36, whether or not arising by virtue of instructions to the Contractor; provided however that it shall not be necessary to first obtain or request a written judgment of the Architect/Engineer.

Provided written Notice of intent to file a claim is provided as required in the preceding paragraph, nothing in this Article shall limit or restrict the rights of either party to bring an action at law or to seek other relief to which either party may be entitled, including consequential damages, if any, and shall not be construed to limit the time during which any action might be brought. Nothing in these General Conditions shall be deemed to limit the period of time during which any action may be brought as a matter of contract, tort, warranty or otherwise, it being the intent of the parties to allow any and all actions at law or in equity for such periods as the law permits. All such rights shall, however be subject to the obligation to assert claims and to appeal denials pursuant to Article 36, Claims, where applicable.

**48 ARTICLE 48 STATE'S RIGHT TO DO THE WORK; TEMPORARY SUSPENSION OF WORK; DELAY DAMAGES**

**48.1 STATE'S RIGHT TO DO THE WORK**

If after receipt of Notice to do so, the Contractor should neglect to prosecute the Work properly or fail to perform any provision of the Contract, the Principal Representative, after a second seven (7) days' advance written Notice to the Contractor and the Surety may, without prejudice to any other remedy the Principal Representative may have, take control of all or a portion of the Work, as the Principal Representative deems necessary and make good such deficiencies deducting the cost thereof from the payment then or thereafter due the Contractor, as provided in Article 30, Correction Of Work Before Acceptance and Article 33, Payments Withheld, provided, however, that the Architect/Engineer shall approve the amount charged to the Contractor by approval of the Change Order.

**48.2 TEMPORARY SUSPENSION OF WORK**

The State, acting for itself or by and through the Architect/Engineer, shall have the authority to suspend the Work, either wholly or in part, for such period or periods as may be deemed necessary due to:

- a) Unsuitable weather;
- b) Faulty Workmanship;
- c) Improper superintendence or project management;



- d) Contractor's failure to carry out orders or to perform any provision of the Contract Documents;
- e) Loss of, or restrictions to, appropriations;
- f) Conditions, which may be considered unfavorable for the prosecution of the Work.

If it should become necessary to stop Work for an indefinite period, the Contractor shall store materials in such manner that they will not become an obstruction or become damaged in any way; and he or she shall take every precaution to prevent damage to or deterioration of the Work, provide suitable drainage and erect temporary structures where necessary.

Notice of suspension of Work shall be provided to the Contractor in writing stating the reasons therefore. The Contractor shall again proceed with the Work when so notified in writing.

The Contractor understands and agrees that the State of Colorado cannot predict with certainty future revenues and could ultimately lack the revenue to fund the appropriations applicable to this Contract. The Contractor further acknowledges and agrees that in such event that State may, upon Notice to the Contractor, suspend the Work in anticipation of a termination of the Contract for the convenience of the State, pursuant to Article 50, Termination for Convenience of State. If the Contract is not so terminated the Contract sum and the Contract time shall be equitably adjusted at the time the Principal Representative directs the Work to be recommenced and gives Notice that the revenue to fund the appropriation is available.

#### 48.3 DELAY DAMAGES

The Principal Representative and the State of Colorado shall be liable to the Contractor for the payment of any claim for extra costs, extra compensation or damages occasioned by hindrances or delays encountered in the Work only when and to the limited extent that such hindrance or delay is caused by an act or omission within the control of the Principal Representative, the Architect/Engineer or other persons or entities acting on behalf of the Principal Representative. Further, the Principal Representative and the State of Colorado shall be liable to the Contractor for the payment of such a claim only if the Contractor has provided required Notice of the delay or impact, or has presented its claim for an extension of time or claim of other delay or other impact due to changes ordered in the Work before proceeding with the changed Work. Except as otherwise provided, claims for extension of time shall be Noticed and filed in accordance with Article 38, Delays and Extensions of Time, within three (3) business days of the beginning of the delay with any claim filed within seven (7) days after the delay has ceased, or such claim is waived. Claims for extension of time or for other delay or other impact resulting from changes ordered in the Work shall be presented and adjusted as provided in Article 35, Changes in the Work.

### **49 ARTICLE 49 STATE'S RIGHTS TO TERMINATE CONTRACT**

#### 49.1 GENERAL

If the Contractor should be adjudged bankrupt, or if he or she should make a general assignment for the benefit of his or her creditors, or if a receiver should be appointed to take over his affairs, or if he or she should fail to prosecute his or her Work with due diligence and carry the Work forward in accordance with the construction schedule and the time limits set forth in the Contract Documents, or if he or she should fail to subsequently perform one or more of the provisions of the Contract Documents to be performed by them, the Principal Representative may serve written

Notice on the Contractor and the Surety on performance and payment bonds, stating his or her intention to exercise one of the remedies hereinafter set forth and the grounds upon which the Principal Representative bases his or her right to exercise such remedy.

In such event, unless the matter complained of is satisfactorily cleared within ten (10) days after delivery of such Notice, the Principal Representative may, without prejudice to any other right or remedy, exercise one of such remedies at once, having first obtained the concurrence of the Architect/Engineer in writing that sufficient cause exists to justify such action.

## 49.2 CONDITIONS AND PROCEDURES

### 49.2.1 Termination

The Principal Representative may terminate the services of the Contractor, which termination shall take effect immediately upon service of Notice thereof on the Contractor and his or her Surety, whereupon the Surety shall have the right to take over and perform the Contract. If the Surety does not provide Notice to the Principal Representative of its intent to commence performance of the Contract within ten (10) days after delivery of the Notice of termination, the Principal Representative may take over the Work, take possession of and use all materials, tools, equipment and appliances on the premises and prosecute the Work to completion by such means as he or she shall deem best. In the event of such termination of his or her service, the Contractor shall not be entitled to any further payment under the Contract until the Work is completed and accepted. If the Principal Representative takes over the Work and if the unpaid balance of the contract price exceeds the cost of completing the Work, including compensation for any damages or expenses incurred by the Principal Representative through the default of the Contractor, such excess shall be paid to the Contractor. If, however, the cost, expenses and damages as certified by the Architect/Engineer exceed such unpaid balance of the contract price, the Contractor and his or her Surety shall pay the difference to the Principal Representative.

### 49.2.2 Use of Surety

The Principal Representative may require the Surety on the Contractor's bond to take control of the Work and see to it that all the deficiencies of the Contractor are made good, with due diligence within ten (10) days of delivery of Notice to the Surety to do so. As between the Principal Representative and the Surety, the cost of making good such deficiencies shall all be borne by the Surety. If the Surety takes over the Work, either by election upon termination of the services of the Contractor pursuant to Section 49.2.1 of this Article 49, State's Right To Terminate Contract, or upon instructions from the Principal Representative to do so, the provisions of the Contract Documents shall govern the Work to be done by the Surety, the Surety being substituted for the Contractor as to such provisions, including provisions as to payment for the Work, the times of completion and provisions of this Article as to the right of the Principal Representative to do the Work or to take control of all or a portion of the Work.

### 49.2.3 Correcting Deficiencies

The Principal Representative may take control of all or a portion of the Work and make good the deficiencies of the Contractor, or the Surety if the Surety has been substituted for the Contractor, with or without terminating the Contract, employing such additional help as the Principal Representative deems advisable in accordance with the provisions of Article 48.1, State's Right to Do the Work; Temporary Suspension of Work; Delay Damages. In such event, the Principal Representative shall be entitled to collect from the Contractor and his or her Surety, or to deduct from any payment then or thereafter due the Contractor, the costs incurred in having such

deficiencies made good and any damages or expenses incurred through the default of Contractor, provided the Architect/Engineer approves the amount thus charged to the Contractor.

If the Contract is not terminated, a Change Order to the Contract shall be executed, unilaterally if necessary, in accordance with the procedures of Article 35, Changes in The Work.

#### 49.3 ADDITIONAL CONDITIONS

If any termination by the Principal Representative for cause is later determined to have been improper, the termination shall be automatically converted to and deemed to be a termination by the Principal Representative for convenience and the Contractor shall be limited in recovery to the compensation provided for in Article 50, Termination for Convenience of State. Termination by the Contractor shall not be subject to such conversion.

### **50 ARTICLE 50 TERMINATION FOR CONVENIENCE OF STATE**

#### 50.1 NOTICE OF TERMINATION

The performance of Work under this Contract may be terminated, in whole or from time to time in part, by the State whenever for any reason the Principal Representative shall determine that such termination is in the best interest of State. Termination of Work hereunder shall be effected by delivery to the Contractor of a Notice of such termination specifying the extent to which the performance of Work under the Contract is terminated and the date upon which such termination becomes effective.

#### 50.2 PROCEDURES

After receipt of the Notice of termination, the Contractor shall, to the extent appropriate to the termination, cancel outstanding commitments hereunder covering the procurement of materials, supplies, equipment and miscellaneous items. In addition, the Contractor shall exercise all reasonable diligence to accomplish the cancellation or diversion of all applicable outstanding commitments covering personal performance of any Work terminated by the Notice. With respect to such canceled commitments, the Contractor agrees to:

- a) Settle all outstanding liabilities and all claims arising out of such cancellation of commitments, with approval or ratification of the Principal Representative, to the extent he or she may require, which approval or ratification shall be final for all purposes of this clause; and,
- b) Assign to the State, in the manner, at the time, and to the extent directed by the Principal Representative, all of the right, title, and interest of the Contractor under the orders and subcontracts so terminated, in which case the State 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.

The Contractor shall submit his or her termination claim to the Principal Representative promptly after receipt of a Notice of termination, but in no event later than three (3) months from the effective date thereof, unless one or more extensions in writing are granted by the Principal Representative upon written request of the Contractor within such three-month period or authorized extension thereof. Upon failure of the Contractor to submit his or her termination claim within the time allowed, the Principal Representative may determine, on the basis of

information available to them, the amount, if any, due to the Contractor by reason of the termination and shall thereupon pay to the Contractor the amount so determined.

Costs claimed, agreed to, or determined pursuant to the preceding and following paragraph shall be in accordance with the provisions of the Colorado Procurement Code or the applicable procurement code for institutions of higher education.

Subject to the preceding provisions, the Contractor and the Principal Representative may agree upon the whole or any part of the amount or amounts to be paid to the Contractor by reason of the termination under this clause, which amount or amounts may include any reasonable cancellation charges thereby incurred by the Contractor and any reasonable loss upon outstanding commitments for personal services which he or she is unable to cancel; provided, however, that in connection with any outstanding commitments for personal services which the Contractor is unable to cancel, the Contractor shall have exercised reasonable diligence to divert such commitments to other activities and operations. Any such agreement shall be embodied in an Amendment to this Contract and the Contractor shall be paid the agreed amount.

The State may from time to time, under such terms and conditions as it may prescribe, make partial payments against costs incurred by the Contractor in connection with the termination portion of this Contract, whenever, in the opinion of the Principal Representative, the aggregate of such payments is within the amount to which the Contractor will be entitled hereunder.

The Contractor agrees to transfer title and deliver to the State, in the manner, at the time, and to the extent, if any, directed by the Principal Representative, such information and items which, if the Contract had been completed, would have been required to be furnished to the State, including:

- a) Completed or partially completed plans, Drawings and information; and,
- b) Materials or equipment produced or in process or acquired in connection with the performance of the Work terminated by the Notice.

Other than the above, any termination inventory resulting from the termination of the Contract may, with written approval of the Principal Representative, be sold or acquired by the Contractor under the conditions prescribed by and at a price or prices approved by the Principal Representative. The proceeds of any such disposition shall be applied in reduction of any payments to be made by the State to the Contractor under this Contract or shall otherwise be credited to the price or cost of Work covered by this Contract or paid in such other manners as the Principal Representative may direct. Pending final disposition of property arising from the termination, the Contractor agrees to take such action as may be necessary, or as the Principal Representative may direct, for the protection and preservation of the property related to this Contract which is in the possession of the Contractor and in which the State has or may acquire an interest.

Any disputes as to questions of fact, which may arise hereunder, shall be subject to the Remedies provisions of the Colorado Procurement Code or the applicable procurement code for institutions of higher education.

**51 ARTICLE 51 CONTRACTOR'S RIGHT TO STOP WORK AND/OR TERMINATE CONTRACT**

If the Work shall be stopped under an order of any court or other public authority for a period of three (3) months through no act or fault of the Contractor or of any one employed by them, then the Contractor may on seven (7) days' written Notice to the Principal Representative and the Architect/Engineer stop Work or terminate this Contract and recover from the Principal Representative payment for all Work executed, any losses sustained on any plant or material, and a reasonable profit only for the Work completed. If the Architect/Engineer shall fail to issue or otherwise act in writing upon any certificate for payment within ten (10) days after it is presented and received by the Architect/Engineer, as provided in Article 31, Applications For Payments, or if the Principal Representative shall fail to pay the Contractor any sum certified that is not disputed in whole or in part by the Principal Representative in writing to the Contractor and the Architect/Engineer within thirty (30) days after the Architect/Engineer's certification, then the Contractor may on ten (10) days' written Notice to the Principal Representative and the Architect/Engineer stop Work and/or give written Notice of intention to terminate this Contract.

If the Principal Representative shall thereafter fail to pay the Contractor any amount certified by the Architect/Engineer and not disputed in writing by the Principal Representative within ten (10) days after receipt of such Notice, then the Contractor may terminate this Contract and recover from the Principal Representative payment for all Work executed, any losses sustained upon any plant or materials, and a reasonable profit only for the Work completed. The Principal Representative's right to dispute an amount certified by the Architect/Engineer shall not relieve the Principal Representative of the obligation to pay amounts not in dispute as certified by the Architect/Engineer.

**52 ARTICLE 52 COLORADO SPECIAL PROVISIONS**

**52.1 CONTROLLER'S APPROVAL, C.R.S. § 24-30-202(1)**

This contract shall not be valid until it has been approved by the Colorado State Controller or designee.

**52.2 FUND AVAILABILITY, C.R.S. § 24-30-202(5.5)**

Financial obligations of the State payable after the current fiscal year are contingent upon funds for that purpose being appropriated, budgeted, and otherwise made available.

**52.3 GOVERNMENTAL IMMUNITY**

Liability for claims for injuries to persons or property arising from the negligence of the State, its departments, boards, commissions committees, bureaus, offices, employees and officials shall be controlled and limited by the provisions of the Colorado Governmental Immunity Act, §24-10-101, et seq., C.R.S.; the Federal Tort Claims Act, 28 U.S.C. Pt. VI, Ch. 171 and 28 U.S.C. 1346(b), and the State's risk management statutes, §§24-30-1501, et seq. C.R.S. No term or condition of this Contract shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections, or other provisions, contained in these statutes.

**52.4 INDEPENDENT CONTRACTOR**

Contractor shall perform its duties hereunder as an independent Contractor and not as an employee. Neither Contractor nor any agent or employee of Contractor shall be deemed to be an agent or employee of the State. Contractor shall not have authorization, express or implied, to bind the State to any agreement, liability or understanding, except as expressly set forth herein.

**Contractor and its employees and agents are not entitled to unemployment insurance or workers compensation benefits through the State and the State shall not pay for or otherwise provide such coverage for Contractor or any of its agents or employees. Contractor shall pay when due all applicable employment taxes and income taxes and local head taxes incurred pursuant to this Contract. Contractor shall (i) provide and keep in force workers' compensation and unemployment compensation insurance in the amounts required by law, (ii) provide proof thereof when requested by the State, and (iii) be solely responsible for its acts and those of its employees and agents.**

52.5 COMPLIANCE WITH LAW

Contractor shall comply with all applicable federal and State laws, rules, and regulations in effect or hereafter established, including, without limitation, laws applicable to discrimination and unfair employment practices.

52.6 CHOICE OF LAW, JURISDICTION, AND VENUE

Colorado law, and rules and regulations issued pursuant thereto, shall be applied in the interpretation, execution, and enforcement of this Contract. Any provision included or incorporated herein by reference which conflicts with said laws, rules, and regulations shall be null and void. All suits or actions related to this Contract shall be filed and proceedings held in the State of Colorado and exclusive venue shall be in the City and County of Denver.

52.7 PROHIBITED TERMS

Any term included in this Contract that requires the State to indemnify or hold Contractor harmless; requires the State to agree to binding arbitration; limits Contractor's liability for damages resulting from death, bodily injury, or damage to tangible property; or that conflicts with this provision in any way shall be void ab initio. Nothing in this Contract shall be construed as a waiver of any provision of §24-106-109, C.R.S.

52.8 SOFTWARE PIRACY PROHIBITION. SOFTWARE PIRACY PROHIBITION

State or other public funds payable under this Contract shall not be used for the acquisition, operation, or maintenance of computer software in violation of federal copyright laws or applicable licensing restrictions. Contractor hereby certifies and warrants that, during the term of this Contract and any extensions, Contractor has and shall maintain in place appropriate systems and controls to prevent such improper use of public funds. If the State determines that Contractor is in violation of this provision, the State may exercise any remedy available at law or in equity or under this Contract, including, without limitation, immediate termination of this Contract and any remedy consistent with federal copyright laws or applicable licensing restrictions.

52.9 EMPLOYEE FINANCIAL INTEREST/CONFLICT OF INTEREST

C.R.S. § 24-18-201 and C.R.S. § 24-50-507

The signatories aver that to their knowledge, no employee of the State has any personal or beneficial interest whatsoever in the service or property described in this contract. Contractor has no interest and shall not acquire any interest, direct or indirect, that would conflict in any manner or degree with the performance of Contractor services and Contractor shall not employ any person having such known interests.

52.10 VENDOR OFFSET AND ERRONEOUS PAYMENTS

C.R.S. § 24-30-202(1) & C.R.S. § 24-30-202.4

Subject to §24-30-202.4(3.5), C.R.S., the State Controller may withhold payment under the State's vendor offset intercept system for debts owed to State agencies for: (i) unpaid child support debts

or child support arrearages; (ii) unpaid balances of tax, accrued interest, or other charges specified in §§39-21-101, et seq., C.R.S.; (iii) unpaid loans due to the Student Loan Division of the Department of Higher Education; (iv) amounts required to be paid to the Unemployment Compensation Fund; and (v) other unpaid debts owing to the State as a result of final agency determination or judicial action. The State may also recover, at the State's discretion, payments made to Contractor in error for any reason, including, but not limited to, overpayments or improper payments, and unexpended or excess funds received by Contractor by deduction from subsequent payments under this Contract, deduction from any payment due under any other contracts, grants or agreements between the State and Contractor, or by any other appropriate method for collecting debts owed to the State.

### **53 ARTICLE 53 MISCELLANEOUS PROVISIONS**

#### **53.1 PROFESSIONAL ASSOCIATION PERMITTED**

The Contractor may, with the prior written consent of the Principal Representative, join with them in the performance of this Agreement any other duly licensed Architect or Architects or registered Engineers with whom he may, in good faith, and enter into an association.

#### **53.2 DISSOLUTION OF PROFESSIONAL ASSOCIATION**

In the event there is dissolution of the association, other than by death of a member, the State of Colorado, acting by and through the Principal Representative, shall designate which former member shall continue with the work and may make all payments thereafter falling due in connection with the work directly to the person or persons so designated and without being required to look to the application of such payments as among the former members.

#### **53.3 PUBLIC ART LAW**

In recognition of the Public Art Law, C.R.S. § 24-48.5-312, as amended, if the State determines that this project is eligible for the acquisition of artworks in accordance with this law, the Contractor agrees to participate in the art selection process as an art jury member and to cooperate with and to advise the State in working with the commissioned artist(s) for this Capital Construction Project.

#### **53.4 ASSIGNMENT**

Contractor's rights and obligations under this Contract are personal and may not be transferred or assigned without the prior, written consent of the State. Any attempt at assignment or transfer without such consent shall be void. Any assignment or transfer of Contractor's rights and obligations approved by the State shall be subject to the provisions of this Contract.

#### **53.5 SUBCONTRACTS**

Contractor shall not enter into any subcontract in connection with its obligations under this Contract without the prior, written approval of the State. Contractor shall submit to the State a copy of each such subcontract upon request by the State. All subcontracts entered into by Contractor in connection with this Contract shall comply with all applicable federal and state laws and regulations, shall provide that they are governed by the laws of the State of Colorado, and shall be subject to all provisions of this Contract.

53.6 BINDING EFFECT

Except as otherwise provided in §17.A, all provisions of this Contract, including the benefits and burdens, shall extend to and be binding upon the Parties' respective successors and assigns.

53.7 AUTHORITY

Each Party represents and warrants to the other that the execution and delivery of this Contract and the performance of such Party's obligations have been duly authorized.

53.8 CAPTIONS AND REFERENCES

The captions and headings in this Contract are for convenience of reference only, and shall not be used to interpret, define, or limit its provisions. All references in this Contract to sections (whether spelled out or using the § symbol), subsections, exhibits or other attachments, are references to sections, subsections, exhibits or other attachments contained herein or incorporated as a part hereof, unless otherwise noted.

53.9 COUNTERPARTS

This Contract may be executed in multiple, identical, original counterparts, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement.

53.10 ENTIRE UNDERSTANDING

This Contract represents the complete integration of all understandings between the Parties related to the Work, and all prior representations and understandings related to the Work, oral or written, are merged into this Contract. Prior or contemporaneous additions, deletions, or other changes to this Contract shall not have any force or effect whatsoever, unless embodied herein.

53.11 DIGITAL SIGNATURES

If any signatory signs this Contract using a digital signature in accordance with the Colorado State Controller Contract, Grant and Purchase Order Policies regarding the use of digital signatures issued under the State Fiscal Rules, then any agreement or consent to use digital signatures within the electronic system through which that signatory signed shall be incorporated into this Contract by reference.

53.12 MODIFICATION

Except as otherwise provided in this Contract, any modification to this Contract shall only be effective if agreed to in a formal amendment to this Contract, properly executed and approved in accordance with applicable Colorado State law and State Fiscal Rules. Modifications permitted under this Contract, other than contract amendments, shall conform to the policies issued by the Colorado State Controller.

53.13 STATUTES, REGULATIONS, FISCAL RULES AND OTHER AUTHORITY

Any reference in this Contract to a statute, regulation, State Fiscal Rule, fiscal policy or other authority shall be interpreted to refer to such authority then current, as may have been changed or amended since the Effective Date of this Contract.

53.14 EXTERNAL TERMS AND CONDITIONS

Notwithstanding anything to the contrary herein, the State shall not be subject to any provision included in any terms, conditions, or agreements appearing on Contractor's or a Subcontractor's website or any provision incorporated into any click-through or online agreements related to the Work unless that provision is specifically referenced in this Contract.



53.15 SEVERABILITY

The invalidity or unenforceability of any provision of this Contract shall not affect the validity or enforceability of any other provision of this Contract, which shall remain in full force and effect, provided that the Parties can continue to perform their obligations under this Contract in accordance with the intent of this Contract.

53.16 SURVIVAL AND CERTAIN CONTRACT TERMS

Any provision of this Contract that imposes an obligation on a Party after termination or expiration of this Contract shall survive the termination or expiration of this Contract and shall be enforceable by the other Party.

53.17 TAXES

The State is exempt from federal excise taxes under I.R.C. Chapter 32 (26 U.S.C., Subtitle D, Ch. 32) (Federal Excise Tax Exemption Certificate of Registry No. 84-730123K) and from State and local government sales and use taxes under §§39-26-704(1), et seq., C.R.S. (Colorado Sales Tax Exemption Identification Number 98-02565). The State shall not be liable for the payment of any excise, sales, or use taxes, regardless of whether any political subdivision of the state imposes such taxes on Contractor. Contractor shall be solely responsible for any exemptions from the collection of excise, sales or use taxes that Contractor may wish to have in place in connection with this Contract.

53.18 THIRD PARTY BENEFICIARIES

Except for the Parties' respective successors and assigns described in § 17.A, this Contract does not and is not intended to confer any rights or remedies upon any person or entity other than the Parties. Enforcement of this Contract and all rights and obligations hereunder are reserved solely to the Parties. Any services or benefits which third parties receive as a result of this Contract are incidental to this Contract, and do not create any rights for such third parties.

53.19 WAIVER

A Party's failure or delay in exercising any right, power, or privilege under this Contract, whether explicit or by lack of enforcement, shall not operate as a waiver, nor shall any single or partial exercise of any right, power, or privilege preclude any other or further exercise of such right, power, or privilege.

53.20 CORA DISCLOSURE

To the extent not prohibited by federal law, this Contract and the performance measures and standards required under §24-106-107, C.R.S., if any, are subject to public release through the CORA.

53.21 STANDARD AND MANNER OF PERFORMANCE

Contractor shall perform its obligations under this Contract in accordance with the highest standards of care, skill and diligence in Contractor's industry, trade, or profession.

53.22 LICENSES, PERMITS, AND OTHER AUTHORIZATIONS

Contractor shall secure, prior to the Effective Date, and maintain at all times during the term of this Contract, at its sole expense, all licenses, certifications, permits, and other authorizations required to perform its obligations under this Contract, and shall ensure that all employees, agents and Subcontractors secure and maintain at all times during the term of their employment, agency or subcontract, all license, certifications, permits and other authorizations required to perform their obligations in relation to this Contract.

## 53.23 INDEMNIFICATION

### 53.23.1 General Indemnification

Contractor shall indemnify, save, and hold harmless the State, its employees, agents and assignees (the "Indemnified Parties"), against any and all costs, expenses, claims, damages, liabilities, court awards and other amounts (including attorneys' fees and related costs) incurred by any of the Indemnified Parties in relation to any act or omission by Contractor, or its employees, agents, Subcontractors, or assignees in connection with this Contract.

### 53.23.2 Confidential Information Indemnification

Disclosure or use of State Confidential Information by Contractor in violation of Article 54 may be cause for legal action by third parties against Contractor, the State, or their respective agents. Contractor shall indemnify, save, and hold harmless the Indemnified Parties, against any and all claims, damages, liabilities, losses, costs, expenses (including attorneys' fees and costs) incurred by the State in relation to any act or omission by Contractor, or its employees, agents, assigns, or Subcontractors in violation of Article 54.

### 53.23.3 Intellectual Property Indemnification

Contractor shall indemnify, save, and hold harmless the Indemnified Parties, against any and all costs, expenses, claims, damages, liabilities, and other amounts (including attorneys' fees and costs) incurred by the Indemnified Parties in relation to any claim that any Deliverable, Good or Service, software, or Work Product provided by Contractor under this Contract (collectively, "IP Deliverables"), or the use thereof, infringes a patent, copyright, trademark, trade secret, or any other intellectual property right. Contractor's obligations hereunder shall not extend to the combination of any IP Deliverables provided by Contractor with any other product, system, or method, unless the other product, system, or method is (a) provided by Contractor or Contractor's subsidiaries or affiliates; (b) specified by Contractor to work with the IP Deliverables; (c) reasonably required in order to use the IP Deliverables in its intended manner and the infringement could not have been avoided by substituting another reasonably available product, system, or method capable of performing the same function; or (d) is reasonably expected to be used in combination with the IP Deliverables.

### 53.23.4 Accessibility Indemnification

Contractor shall indemnify, save, and hold harmless the state, its employees, agents and assignees (collectively, the "Indemnified Parties"), against any and all costs, expenses, claims, damages, liabilities, court awards and other amounts (including attorneys' fees and related costs) incurred by any of the Indemnified Parties in relation to Contractor's failure to comply with §§24-85-101, et seq., C.R.S., or the Accessibility Standards for Individuals with a Disability as established by the Office of Information Technology pursuant to Section §24-85-103 (2.5), C.R.S.

## 53.24 ACCESSIBILITY

Contractor shall comply with and the Work Product provided under this Contract shall be in compliance with all applicable provisions of §§24-85-101, et seq., C.R.S., and the Accessibility Standards for Individuals with a Disability, as established by the Governor's Office Of Information Technology (OIT), pursuant to Section §24-85-103 (2.5), C.R.S. Contractor shall also comply with all State of Colorado technology standards related to technology accessibility and with Level AA of the most current version of the Web Content Accessibility Guidelines (WCAG), incorporated in the State of Colorado technology standards.

53.24.1 The State may require Contractor's compliance to the State's Accessibility Standards to be determined by a third party selected by the State to attest to Contractor's Work Product and software is in compliance with §§24-85-101, et seq., C.R.S., and the Accessibility Standards for Individuals with a Disability as established by the Office of Information Technology pursuant to Section §24-85-103 (2.5), C.R.S.

## **54 ARTICLE 54 CONFIDENTIAL INFORMATION-STATE RECORDS**

### **54.1 CONFIDENTIALITY**

Contractor shall keep confidential, and cause all Subcontractors to keep confidential, all State Records, unless those State Records are publicly available. Contractor shall not, without prior written approval of the State, use, publish, copy, disclose to any third party, or permit the use by any third party of any State Records, except as otherwise stated in this Contract, permitted by law or approved in writing by the State. Contractor shall provide for the security of all State Confidential Information in accordance with all policies promulgated by the Colorado Office of Information Security and all applicable laws, rules, policies, publications, and guidelines. Contractor shall immediately forward any request or demand for State Records to the State's Principal Representative.

### **54.2 OTHER ENTITY ACCESS AND NONDISCLOSURE AGREEMENTS**

Contractor may provide State Records to its agents, employees, assigns and Subcontractors as necessary to perform the Work, but shall restrict access to State Confidential Information to those agents, employees, assigns and Subcontractors who require access to perform their obligations under this Contract. Contractor shall ensure all such agents, employees, assigns, and Subcontractors sign agreements containing nondisclosure provisions at least as protective as those in this Contract, and that the nondisclosure provisions are in force at all times the agent, employee, assign or Subcontractor has access to any State Confidential Information. Contractor shall provide copies of those signed nondisclosure provisions to the State upon execution of the nondisclosure provisions if requested by the State.

### **54.3 USE, SECURITY, AND RETENTION**

Contractor shall use, hold, and maintain State Confidential Information in compliance with any and all applicable laws and regulations only in facilities located within the United States, and shall maintain a secure environment that ensures confidentiality of all State Confidential Information. Contractor shall provide the State with access, subject to Contractor's reasonable security requirements, for purposes of inspecting and monitoring access and use of State Confidential Information and evaluating security control effectiveness. Upon the expiration or termination of this Contract, Contractor shall return State Records provided to Contractor or destroy such State Records and certify to the State that it has done so, as directed by the State. If Contractor is prevented by law or regulation from returning or destroying State Confidential Information, Contractor warrants it will guarantee the confidentiality of, and cease to use, such State Confidential Information.

### **54.4 INCIDENT NOTICE AND REMEDIATION**

If Contractor becomes aware of any Incident, Contractor shall notify the State immediately and cooperate with the State regarding recovery, remediation, and the necessity to involve law enforcement, as determined by the State. Unless Contractor can establish that Contractor and its Subcontractors are not the cause or source of the Incident, Contractor shall be responsible for the

cost of notifying each person who may have been impacted by the Incident. After an Incident, Contractor shall take steps to reduce the risk of incurring a similar type of Incident in the future as directed by the State, which may include, but is not limited to, developing and implementing a remediation plan that is approved by the State at no additional cost to the State. The State may adjust or direct modifications to this plan in its sole discretion, and Contractor shall make all modifications as directed by the State. If Contractor cannot produce its analysis and plan within the allotted time, the State, in its discretion, may perform such analysis and produce a remediation plan, and Contractor shall reimburse the State for the actual costs thereof. The State may, in its sole discretion and at Contractor's sole expense, require Contractor to engage the services of an independent, qualified, State-approved third party to conduct a security audit. Contractor shall provide the State with the results of such audit and evidence of Contractor's planned remediation in response to any negative findings.

54.5 DATA PROTECTION AND HANDLING

Contractor shall ensure that all State Records and Work Product in the possession of Contractor or any Subcontractors are protected and handled in accordance with the requirements of this Contract, including the requirements of any Exhibits hereto, at all times.

54.6 SAFEGUARDING PERSONAL IDENTIFIABLE INFORMATION (PII)

If Contractor or any of its Subcontractors will or may receive PII under this Contract, Contractor shall provide for the security of such PII, in a manner and form acceptable to the State, including, without limitation, State non-disclosure requirements, use of appropriate technology, security practices, computer access security, data access security, data storage encryption, data transmission encryption, security inspections, and audits. Contractor shall be a "Third-Party Service Provider" as defined in §24-73-103(1)(i), C.R.S. and shall maintain security procedures and practices consistent with §§24-73-101 et seq., C.R.S. In addition, as set forth in § 24-74-102, et. seq., C.R.S., Contractor, including, but not limited to, Contractor's employees, agents and Subcontractors, agrees not to share any PII with any third parties for the purpose of investigating for, participating in, cooperating with, or assisting with Federal immigration enforcement. If Contractor is given direct access to any State databases containing PII, Contractor shall execute, on behalf of itself and its employees, a certification as provided by the Office of the State Controller on an annual basis Contractor's duty and obligation to certify shall continue as long as Contractor has direct access to any State databases containing PII. If Contractor uses any Subcontractors to perform services requiring direct access to State databases containing PII, the Contractor shall require such Subcontractors to execute and deliver the certification to the State on an annual basis, so long as the Subcontractor has access to State databases containing PII.



UNIVERSITY OF  
**NORTHERN COLORADO**

**Facilities Management – Planning & Construction**

Supplementary General Conditions

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Paragraph 35.3 Hazardous Materials from the General Conditions of the Contractor's Design/Bid/Build Agreement (SC-6.23). Add the following:

**Certification of Non-Asbestos Materials**

The Contractor will confirm (see attached form) that to the best of their knowledge, all products incorporated into the project, and used during the construction process, are free of any type of asbestos containing materials (ACM).

The contractor shall provide proof via a manufacture statement about the product when available.



UNIVERSITY OF  
**NORTHERN COLORADO**

**General Contractor Asbestos Free Affidavit**

Company Name	Date:
Building Name:	Facility Address (if known)
Contractor Employee Name (print):	UNC Work Order / Project Number (if known):

I, \_\_\_\_\_ as the duly authorized  
representative  
(Contractor Employee Signature)

for \_\_\_\_\_ certify that pursuant to Colorado  
(Company Name)

Department of Public Health and Environment, Air Quality Control Commission  
Regulation No.8 Part B – Asbestos, Section V.H.1.d, hereby certifies that to the best of  
his/her knowledge, information and belief, the materials incorporated into the project, and  
as used during the construction process, are free of any type of asbestos containing  
materials (ACM).



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
09/07/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER ABC Insurance Company PO Box 1234 Anywhere, USA	CONTACT NAME:		
	PHONE (A/C, No, Ext):	FAX (A/C, No):	
	E-MAIL ADDRESS:		
	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A: Financial Rating of A		
INSURED  Sample Certificate - Including Builders Risk General Conditions	INSURER B:		
	INSURER C:		
	INSURER D:		
	INSURER E:		
	INSURER F:		

COVERAGES CERTIFICATE NUMBER: SAMPLE REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
<input checked="" type="checkbox"/>	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			<b>SAMPLE</b>			EACH OCCURRENCE	\$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 50,000
							MED EXP (Any one person)	\$ 5,000
							PERSONAL & ADV INJURY	\$ 1,000,000
							GENERAL AGGREGATE	\$ 2,000,000
							PRODUCTS - COMP/OP AGG	\$ 2,000,000
								\$
<input checked="" type="checkbox"/>	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
							BODILY INJURY (Per person)	\$
							BODILY INJURY (Per accident)	\$
							PROPERTY DAMAGE (Per accident)	\$
								\$
<input checked="" type="checkbox"/>	UMBRELLA LIAB EXCESS LIAB DED RETENTION \$			OPTIONAL (Required for projects over \$10,000,000)			EACH OCCURRENCE	\$ 5,000,000
							AGGREGATE	\$ 5,000,000
								\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER	
							E.L. EACH ACCIDENT	\$ 100,000
							E.L. DISEASE - EA EMPLOYEE	\$ 100,000
							E.L. DISEASE - POLICY LIMIT	\$ 500,000
	Builders Risk						Limit Deductible	(MAX \$10,000)

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

The State of Colorado and the University of Northern Colorado are named as Additional Insured on the General Liability Policy including ongoing and completed operations (Endorsement - CG 2010 10/01, CG 2037 (See Attached Descriptions))

CERTIFICATE HOLDER  University of Northern Colorado Purchasing Department Greeley, CO 80639 Fax (970-351-1142)	CANCELLATION  SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

## DESCRIPTIONS (Continued from Page 1)

10/01, or equivalent) and Automobile Liability Policy. This coverage is primary and non-contributory over any insurance or self-insurance programs carried by the State of Colorado or the University of Northern Colorado. All policies contain a waiver of subrogation in favor of the State of Colorado and the University of Northern Colorado. All policies include a 30 day notice of cancellation.

SAMPLE



**SECTION 00 7303  
SUPPLEMENTARY CONDITIONS**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes the Supplementary Conditions for the Contractor for this project.
- B. Descriptions of Parties:

- 1. Owner's Representative:
  - University of Northern Colorado
  - Alejandro Garcia
  - Project Manager
  - Parsons Hall 501 20th St.
  - Campus Box 59
  - Greeley, CO 80639
  - Office Phone: (970) 351-1982
  - Mobile Phone: (303-726-2192
- 2. Design Professional:
  - Amtech Solutions, Inc.**
  - 1720 South Bellaire Street, Suite 1200
  - Denver, Colorado 80222
  - Office Phone: (303) 738-0823

1.3 CONTRACTOR'S REPRESENTATIONS

- A. The Contractor represents and warrants by submission of a Proposal that they:
  - 1. are financially solvent;
  - 2. meet the qualifications specified in Individual Specifications;
  - 3. are experienced in and competent to perform the Work covered by Contract Documents and to provide the plant, materials, supplies, equipment, and manpower to perform the Work in the amount of Contract Time specified;
  - 4. are familiar with all applicable Federal, State, County, and Municipal laws, ordinances, and regulations that may affect the Work or those employed to perform the Work.
- B. The Contractor shall make reasonable attempts to interpret the Contract Documents before asking the Roof Consultant for assistance in interpretation and has carefully read and understands the Bidding Documents or Contract Documents, relating to the Work for which the Proposal is submitted.

1.4 SPECIFIC PROJECT REQUIREMENTS

- A. All personnel on this Project will be required to maintain **proper attire** while at the facility. Appropriate attire includes shoes, full-length trousers, and shirts.
- B. **Profanity** on the facility will not be tolerated.
- C. Entrance into Buildings will be limited to reasons of necessity and will be further limited to Contractor's Superintendent or Foreman, unless specifically approved by Owner's Representative or for emergency situations.
- D. The Contractor will be responsible for enforcement of all Rules and Regulations on the Project Site, including over Sub-Contractors, Material delivery personnel, and all others visiting the site for Project purposes.

1.5 TAXES

- A. It is the Contractor's responsibility to confirm with the Owner any applicable State of Colorado tax-exemptions for construction projects at schools, governmental entities, and charitable organizations.

**PART 2 - PRODUCTS (NOT USED)**

**PART 3 - EXECUTION (NOT USED)**

**END OF SECTION 00 7303**

**SECTION 01 1000**  
**STATEMENT OF WORK**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes the following:
  - 1. Project Contacts.
  - 2. Work covered by the Contract Documents.
  - 3. Work under other contracts.
  - 4. Use of premises.
  - 5. Owner's/Tenant's occupancy requirements.
  - 6. Work restrictions.

1.3 PROJECT CONTACTS

- A. Project Identification:
  - Michener Library Roof Replacement
  - UNC Project Number: 2024-080M23
  - Amtech Project Number: DEN.2023.001048
  - University of Northern Colorado
  - 1400 22<sup>nd</sup> Street
  - Greeley, CO 80639
- 1. Owner's Representative:
  - University of Northern Colorado
  - Alejandro Garcia
  - Project Manager
  - Parsons Hall 501 20<sup>th</sup> St.
  - Campus Box 59
  - Greeley, CO 80639
  - Office Phone: (970) 351-1982
  - Mobile Phone: (303-726-2192
- B. Design Professional:
  - Amtech Solutions, Inc.
  - 1720 South Bellaire Street, Suite 1200
  - Denver, Colorado 80222
  - Office Phone: (303) 738-0823

1.4 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work generally consists of the following at the subject property:
  - 1. This project is for a complete roof tear-off and replacement at the Michener Library. . Refer to the Roof Plans and Detail Drawings, as well as Divisions 06, and 07 within the Specifications for roof assembly installation.
  - 2. Removal of the existing ballast, roof membrane, cover board, insulation, substrate board, and vapor barrier.
  - 3. Installation of new vapor retarder, insulation, hard boards, and roofing membrane.
  - 4. Removal and replacement of wall flashings.
  - 5. Removal and replacement of curb flashings.
  - 6. Removal and replacement of electrical penetration flashings.
  - 7. Removal and disposal of unused items as noted by the Owner and where shown on the drawings.

## 1.5 WORK UNDER OTHER CONTRACTS

- A. General: Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract. Coordinate the Work of this Contract with work performed under separate contracts.

## 1.6 USE OF PREMISES

- A. General: Each Contractor shall have limited use of premises for construction operations, including use of Project site, during construction period. Each Contractor's use of premises is limited only by Owner's/Tenant's occupancy and right to perform work or to retain other contractors on portions of Project.
- B. Use of Site: Limit use of premises to work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
1. Limits: Confine constructions operations to building areas where work is indicated and immediately surrounding site areas, as agreed upon by Owner/Tenant.
- C. Use of Existing Building: Maintain existing building in a weathertight condition throughout construction period. Repair damage caused by construction operations. Protect building and its occupants during construction period.

## 1.7 OWNER'S/TENANT'S OCCUPANCY REQUIREMENTS

- A. The site and building will be occupied during entire construction period. Cooperate with Owner/Tenants during construction operations to minimize conflicts and facilitate usage. Perform the Work so as not to interfere with users' day-to-day operations. Maintain existing exits, unless otherwise indicated.
1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner.
2. Provide not less than 72 hours' notice to Owner of activities that will affect users' operations.

## 1.8 WORK RESTRICTIONS

- A. On-Site Work Hours: Work shall be generally performed outside the existing building during normal business working hours of:
1. 7:00 a.m. to 7:00 p.m., Monday through Friday, except otherwise indicated.
2. Weekend Hours: 8:00 a.m. to 5:00 p.m. Contractor must coordinate with Owner and given approval for both weekend work and interior access if required.
3. Early Morning Hours: Comply with City Ordinances.
4. Hours for Utility Shutdowns: Only with Owner's written permission.
5. Interior Work: As scheduled with Owner and Tenant.
- B. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by users or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
1. Notify Consultant and Owner not less than four (4) days in advance of proposed utility interruptions.
2. Do not proceed with utility interruptions without Owner's written permission.

## PART 2 - PRODUCTS (NOT USED)

## PART 3 - EXECUTION

### 3.1 DESIGN NOTES

- A. Base Bid:
1. Furnish and install a new 60-mil fully adhered EPDM membrane and new coverboard recover over the existing roof assembly, with new PVC flashings and new sheet metal (fascia metal,

parapet cap, counter-flashings, roof jacks, etc.) as shown per deck assemblies on drawings. Perform all work as specified in accordance with the design drawings, specifications, and governing building code.

B. Additive Alternate #1:

1. In lieu of the proposed 60-mil EPDM membrane, furnish and install a new 90-mil black EPDM membrane fully adhered to the proposed base bid roof assemblies at all in-scope roof areas.

C. Additive Alternate #2:

1. Remove existing coating, patch repair damaged concrete, and clean and prepare concrete curbs and interior/top of concrete where coating exists for installation of a new silicone coating per the requirements of the project drawings and specifications.

D. Additive Alternate #3:

1. Clean and prepare uncoated concrete parapet walls, patching damaged concrete, for installation of a new silicone coating per the requirements of the project drawings and specifications.

**END OF SECTION 01 1000**

**SECTION 01 2500  
SUBSTITUTION PROCEDURE**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.

1.3 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and Project Manual as proposed by Contractor.
  - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability (discontinued) of product, regulatory changes, or unavailability of required warranty terms.
  - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required, in order to, meet other Project requirements but may offer advantage to the Owner by ways of significant cost reduction, reduction of schedule, and improved life-cycle durability.

1.4 SUBMITTALS

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Substitution Request Form: Use forms provided by the Office of the State Architect.
  - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
    - a. Statement indicating why specified product, fabrication, or installation cannot be provided, if applicable.
    - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
    - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable specification section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
    - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
    - e. Samples, where applicable or requested.
    - f. Certificates and qualification data, where applicable or requested.
    - g. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
    - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
    - i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
    - j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's

- letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
- k. Cost information, including a proposal of change, if any, in the Contract Sum.
  - l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
  - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Designers Action: If necessary, the Designer will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Designer will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order, Construction Change Directive, or Designer's Supplemental Instructions for minor changes in the Work.
  - b. Use product specified if Designer does not issue a decision on use of a proposed substitution within time allocated.
  - c. All time spent by the Designer used for evaluating the proposed substitution can be back charged to the contractor's reduction of retainage draw application.

## **PART 2 - PRODUCTS**

### **2.1 SUBSTITUTIONS**

- A. Substitutions for Cause: Submit requests for substitution immediately upon discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
1. Conditions: Designer will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Designer will return requests without action, except to record noncompliance with these requirements:
- a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
  - b. Substitution request is fully documented and properly submitted.
  - c. Requested substitution will not adversely affect Contractor's construction schedule.
  - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
  - e. Requested substitution is compatible with other portions of the Work.
  - f. Requested substitution has been coordinated with other portions of the Work.
  - g. Requested substitution provides significant reduction of cost or project duration.
  - h. Requested substitution provides meets or exceeds specified warranty.
  - i. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Designer will consider requests for substitution if received within 7 days prior to bid date, or by the question's deadline, whichever comes first. Requests received after that time may be considered or rejected at discretion of Designer.
1. Conditions: Designer will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
- a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.





**SECTION 01 2600  
CONTRACT MODIFICATION PROCEDURE**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements necessary to prepare and process Contract Modifications.

1.3 MINOR CHANGES IN THE WORK

- A. Designer will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on Office of the State Architect's provided forms as an "Architect's Supplemental Instructions".

1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Designer will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
  - 1. Proposal Requests issued by Designer are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
  - 2. Within time specified in Proposal Request after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
    - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    - c. Include costs of labor and supervision directly attributable to the change.
    - d. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change to Designer.
  - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
  - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
  - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - 4. Include costs of labor and supervision directly attributable to the change.
  - 5. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- C. Proposal Request Form: Refer to the Office of the State Architect's official website for forms to be utilized with Proposal requests.

1.5 CHANGE ORDER PROCEDURES

- A. Change Order Procedures to utilize forms and sequencing as required by the Office of the State Architect.

1.6 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Per Owner request and approval, the Designer may issue a Construction Change Directive on approved Office of the State Architect procedural forms. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
  - 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
  - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

**PART 2 - PRODUCTS (NOT USED)**

**PART 3 - EXECUTION (NOT USED)**

**END OF SECTION 01 2600**

**SECTION 01 2900  
CONTRACT PAYMENT PROCEDURES**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.3 DEFINITIONS

- A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Total Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment and percent of work complete.

1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule.
  - 1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including the following:
    - a. Application for Payment forms with Continuation Sheets.
    - b. Submittals Schedule.
    - c. Contractor's Construction Schedule.
  - 2. Submit the Schedule of Values to Designer at earliest possible date but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
- B. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the Schedule of Values. Provide at least one-line item for each Specification Section.
  - 1. Identification: Include the following Project identification on the Schedule of Values:
    - a. Project name and location.
    - b. Name of Designer.
    - c. Designer's project number.
    - d. Contractor's name and address.
    - e. Date of submittal.
  - 2. Submit draft Schedule of Values and Payment breakout on the Office of the State Architect's Certificate for Contractor's Payment and Contractor's Application for Payment.
  - 3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide several line items for principal subcontract amounts, where appropriate.
  - 4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
  - 5. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
    - a. Differentiate between items stored on-site and items stored off-site. If specified, include evidence of insurance or bonded warehousing.
  - 6. Contingency Allowances: Provide a separate line item in the Schedule of Values for each contingency allowance.
  - 7. Complete each item in the Schedule of Values and Applications for Payment.

8. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

#### 1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Designer and paid for by Owner.
  1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction Work covered by each Application for Payment is the period indicated in the Agreement.
- C. Payment Application Forms: Certificate for Contractor's Payment and Contractor's Application for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Designer will return incomplete applications without action.
  1. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions were made.
  2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- E. Transmittal: Submit 1 signed and notarized original copy of each Application for Payment to Designer by a method ensuring receipt within 24 hours. Electronic submissions will be accepted.
- F. Waivers of Mechanic's Lien: Prior to the release of the payment the contractor shall submit with each Application for Payment, waivers of mechanic's lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
  1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
  2. When an application shows completion of an item, submit final or full waivers.
  3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
  4. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.
- G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
  1. List of subcontractors.
  2. Schedule of Values.
  3. Contractor's Construction Schedule (preliminary if not final).
  4. Products list.
  5. List of Contractor's staff assignments.
  6. Copies of building permits.
  7. Initial progress report.
  8. Report of preconstruction conference.
  9. Certificates of insurance and insurance policies.
  10. Performance and payment bonds.
  11. Data needed to acquire Owner's insurance.
  12. Initial settlement survey and damage report if required.
- H. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.

1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
- I. Final Payment Application – Refer to the Office of the State Architect's website for procedural form requirements regarding final payment.
  1. Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
    - a. Evidence of completion of Project closeout requirements.
    - b. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
    - c. Updated final statement, accounting for final changes to the Contract Sum.
    - d. Evidence that claims have been settled.
    - e. Final, liquidated damages settlement statement.

**PART 2 - PRODUCTS (NOT USED)**

**PART 3 - EXECUTION (NOT USED)**

**END OF SECTION 01 2900**

**SECTION 01 3100  
PROJECT MANAGEMENT AND COORDINATION**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - 1. Administrative and supervisory personnel.
  - 2. Project meetings.
  - 3. Requests for Information (RFIs).
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility will be assigned to a specific contractor.

1.3 COORDINATION

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.
- B. Prepare memoranda for distribution to all parties involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.

1.4 SUBMITTALS

- A. Key Personnel Names: Within 7 days of Notice from Owner of Intent to Award Contract, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities and office and cell telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project. Contractor to keep copy of list on project site for Owner or Consultant reference as needed. Keep list current at all times.

1.5 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
  - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Designer of scheduled meeting dates and times.
  - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  - 3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Designer, within three work days of the meeting.
- B. Pre-Construction Conference: Schedule a Pre-Construction Conference before starting construction, at a time convenient to Owner and Designer, but no later than 7 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
  - 1. Attendees: Authorized representatives of Owner, Designer, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 2. Agenda: Discuss items of significance that could affect progress, including the following:

- a. Tentative construction schedule.
- b. Critical work sequencing and long-lead items.
- c. Designation of key personnel and their duties.
- d. Procedures for processing field decisions and Change Orders.
- e. Procedures for RFIs.
- f. Procedures for testing and inspecting.
- g. Procedures for processing Applications for Payment.
- h. Distribution of the Contract Documents.
- i. Submittal procedures.
- j. Preparation of Record Documents.
- k. Use of the premises and existing building.
- l. Work restrictions.
- m. Owner's occupancy requirements.
- n. Responsibility for temporary facilities and controls.
- o. Construction waste management and recycling.
- p. Parking availability.
- q. Office, work, and storage areas.
- r. Equipment deliveries and priorities.
- s. First aid.
- t. Security.
- u. Progress cleaning.
- v. Working hours.
- w. Minutes: Contractor will record and distribute meeting minutes.

#### 1.6 REQUESTS FOR INFORMATION (RFIs)

- A. Procedure: Immediately on discovery of the need for information/interpretation of the Contract Documents, and if not possible to request information/interpretation at Project meeting, prepare and submit an RFI in the form specified.
  1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
  2. Coordinate and submit RFIs in a prompt manner to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
  1. Project name.
  2. Date.
  3. Name of Contractor.
  4. Name of Designer.
  5. RFI number, numbered sequentially.
  6. Specification Section number and title and related paragraphs, as appropriate.
  7. Drawing number and detail references, as appropriate.
  8. Field dimensions and conditions, as appropriate.
  9. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
  10. Contractor's signature.
  11. Attachments:
    - a. Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
    - b. Supplementary drawings prepared by Contractor shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.

- C. Designer's Action: Designer will review each RFI, determine action required, and return it. Allow three working days for Designer's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day.
1. The following RFIs will be returned without action:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for coordination information already indicated in the Contract Documents.
    - d. Requests for adjustments in the Contract Time or the Contract Sum.
    - e. Incomplete RFIs or RFIs with numerous errors.
  2. Designer's action may include a request for additional information, in which case Designer's time for response will start again.
  3. Designer's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."
    - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Designer in writing within 5 days of receipt of the RFI response.
- D. On receipt of Designer's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Designer within three days if Contractor disagrees with response.
- E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log monthly. Use log with not less than the following:
1. Project name.
  2. Name and address of Contractor.
  3. Name and address of Designer.
  4. RFI number including RFIs that were dropped and not submitted.
  5. RFI description.
  6. Date the RFI was submitted.
  7. Date Designer's response was received.
  8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.

**PART 2 - PRODUCTS (NOT USED)**

**PART 3 - EXECUTION (NOT USED)**

**END OF SECTION 01 3100**



**SECTION 01 3200  
CONSTRUCTION PROGRESS DOCUMENTATION**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
  - 1. Contractor's Construction Schedule.
  - 2. Daily construction log.
  - 3. Field condition reports.
  - 4. Special reports.

1.3 SUBMITTALS

- A. Contractor's Construction Schedule: Submit electronic PDF file format of the initial schedule, large enough to show entire schedule for entire construction period.
- B. Daily Construction Log: Have available for review at Status Meetings.
- C. Field Condition Reports: Submit electronic PDF file format document at time of discovery of issue/differing conditions.
- D. Special Reports: Submit electronic PDF file format document at time of unusual event.

1.4 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
  - 1. Secure time commitments for performing critical elements of the Work from parties involved.
  - 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

**PART 2 - PRODUCTS**

2.1 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Procedures: Comply with industry procedures for "Construction Planning & Scheduling."
- B. Time Frame: Extend schedule from date established for the Notice of Award to date of Final Completion. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- C. Activities: Treat each roof level or separate work area as a separate numbered activity for each principal element of the Work. Comply with the following:
  - 1. Activity Duration: Define activities so no activity is longer than 5 days, unless specifically allowed by Designer.
  - 2. Submittal Review Time: Include review and resubmittal times indicated in Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with Submittals Schedule.
  - 3. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Designer's administrative procedures necessary for certification of Substantial Completion.









**SECTION 01 3300  
SUBMITTAL PROCEDURES**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

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

1.3 SUBMITTAL PROCEDURES

A. General:

1. Electronic copies of CAD Drawings of the Contract Drawings will not be provided by Designer for Contractor's use in preparing submittals.

B. Coordination:

1. Coordinate preparation and processing of submittals with performance of construction activities.
2. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
3. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
4. Designer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

C. Submittals:

1. All submittals, except samples, will be submitted electronically using a PDF file format. Each submittal will be broken apart by the Division number at a file level. For example: all Division 05 will be one file and Division 07 will be a different file.

D. Processing Time:

1. Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Designer's receipt of submittal on the following work day. 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.
2. Initial Review:
  - a. Allow 14 work days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Designer will advise Contractor when a submittal being processed must be delayed for coordination.
3. Intermediate Review:
  - a. If intermediate submittal is necessary, process it in same manner as initial submittal.
4. Resubmittal Review:
  - a. Allow 14 work days for review of each resubmittal.

E. Identification:

1. Place a title block on each submittal for identification.
2. Indicate name of firm or entity that prepared each submittal on title block.
3. Provide a space beside title block to record Contractor's review and approval markings and action taken by Designer.

4. Include the following information on label for processing and recording action taken:
    - a. Project name.
    - b. Date.
    - c. Name and address of Designer.
    - 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.
      - 1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 06 1000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 06 1000.01.A).
    - 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.
    - l. Other necessary identification.
- F. Deviations:
1. Highlight, encircle, or otherwise specifically identify deviations from the Contract Documents on submittals.
- G. Resubmittals:
1. Make resubmittals in same form and electronic PDF files as initial submittal.
  2. Note date and content of previous submittal.
  3. Note date and content of revision on title block and clearly indicate extent of revision.
  4. Resubmit submittals until they are marked "Approved" or "Approved as Corrected."
- H. Distribution:
1. Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- I. Use for Construction:
1. Use only final submittals with mark indicating "Approved" or "Approved as Corrected" taken by Designer.

## **PART 2 - PRODUCTS**

### **2.1 ACTION SUBMITTALS**

- A. General:
1. Prepare and submit Action Submittals required by individual Specification Sections.
- B. Product List:
1. Prepare list of products that Contractor intends to utilize for Project, based on Part 2 for each Specification Section. List by paragraph and subparagraph number every Product included in Part 2 of each Section. For Product not required for the Work, indicate "Not Applicable" or "N/A" to indicate Contractor believes Product is not required to comply with Contract Documents and manufacturer's written installation instructions.
- C. Product Data:
1. Collect information into a single submittal for each element of construction and type of product or equipment.

2. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
3. Indicated or mark each submittal to show which products and options are applicable.
4. 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. Mill reports.
  - g. Standard product operation and maintenance manuals.
  - h. Compliance with specified referenced standards.
  - i. Testing by recognized testing agency.
  - j. Application of testing agency labels and seals.
  - k. Notation of coordination requirements.
5. Submit Product Data before or concurrent with Samples.

D. Shop Drawings:

1. Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
2. Preparation:
  - a. Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - 1) Dimensions.
    - 2) Identification of products.
    - 3) Fabrication and installation drawings.
    - 4) Roughing-in and setting diagrams.
    - 5) Shop work manufacturing instructions.
    - 6) Templates and patterns.
    - 7) Schedules.
    - 8) Design calculations.
    - 9) Compliance with specified standards.
    - 10) Notation of coordination requirements.
    - 11) Notation of dimensions established by field measurement.
    - 12) Relationship to adjoining construction clearly indicated.
    - 13) Seal and signature of professional engineer if specified.
3. Sheet Size:
  - a. Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 24 by 36 inches.

E. Samples:

1. 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.
2. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
3. Identification:
  - a. Attach label on unexposed side of Samples that includes the following:
    - 1) Generic description of Sample.
    - 2) Product name and name of manufacturer.
    - 3) Sample source.
    - 4) Number and title of appropriate Specification Section.





1. Comply with requirements specified in Division 01 Section "Quality Requirements."
- D. Qualification Data:
  1. Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of Designers and owners, and other information specified.
- E. Welding Certificates:
  1. Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.
- F. Installer Certificates:
  1. Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- G. Manufacturer Certificates:
  1. Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- H. Product Certificates:
  1. Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- I. Material Certificates:
  1. Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- J. Material Test Reports:
  1. Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- K. Product Test Reports:
  1. Prepare written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- L. Research/Evaluation Reports:
  1. Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
    - a. Name of evaluation organization.
    - b. Date of evaluation.
    - c. Time period when report is in effect.
    - d. Product and manufacturers' names.
    - e. Description of product.
    - f. Test procedures and results.
    - g. Limitations of use.
- M. Field Test Reports:



## 2.3 DELEGATED DESIGN

### A. Performance and Design Criteria:

1. Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Designer.

### B. Delegated-Design Submittal:

1. In addition to Shop Drawings, Product Data, and other required submittals, submit an original copy or electronic PDF file of a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

## 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 Designer.

#### B. Approval Stamp:

1. Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

### 3.2 DESIGNER'S / ACTION

#### A. General:

1. Designer will not review submittals that do not bear Contractor's approval stamp and will return them without action.

#### B. Action Submittals:

1. Designer will review each submittal, make marks to indicate corrections or modifications required, and return it. Designer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:
  - a. "Approved": Fabrication / installation may be undertaken. Approval does not authorize changes to Contract Sum or Contract Time.
  - b. "Approved as Corrected": Fabrication / installation may be undertaken by including notations and corrections indicated. Approval does not authorize changes to Contract Sum or Contract Time.
  - c. "Revise and Resubmit": Fabrication and / or installation MAY NOT be undertaken. In resubmitting, limit corrections to items marked.
  - d. "Rejected": Fabrication and / or installation MAY NOT be undertaken. In resubmitting, limit corrections to items marked.

#### C. Informational Submittals:

1. Designer will review each submittal and will not return it, or will return it if it does not comply with requirements. Designer will forward each submittal to appropriate party.

- #### D. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.

- #### E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.



**SECTION 01 4000**  
**QUALITY REQUIREMENTS**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
  - 1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
  - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
  - 3. Requirements for Contractor to provide quality-assurance and -control services required by Designer, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Designer.
- C. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.
- D. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.
- E. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- F. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- G. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
  - 1. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespeople of the corresponding generic name.
- H. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

#### 1.4 CONFLICTING REQUIREMENTS

- A. General: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Designer for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Designer for a decision before proceeding.

#### 1.5 SUBMITTALS

- A. Qualification Data: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. Reports: Prepare and submit certified written reports that include the following:
  - 1. Date of issue.
  - 2. Project title and number.
  - 3. Name, address, and telephone number of testing agency.
  - 4. Dates and locations of samples and tests or inspections.
  - 5. Names of individuals making tests and inspections.
  - 6. Description of the Work and test and inspection method.
  - 7. Identification of product and Specification Section.
  - 8. Complete test or inspection data.
  - 9. Test and inspection results and an interpretation of test results.
  - 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
  - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
  - 12. Name and signature of laboratory inspector.
  - 13. Recommendations on retesting and re-inspecting.
- C. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

#### 1.6 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.
- F. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according

to ASTM E 548; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.

1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.

- G. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

## 1.7 QUALITY CONTROL

- A. Contractor Responsibilities: When specified in individual sections, restrict execution of specified Work to Applicators and Personnel meeting indicated qualifications.

1. Install all roofing materials using personnel directly employed by Roofing Contractor with NDL certification from roofing material manufacturer - no Sub-Contracting permitted.
2. Assign a qualified, full time, non-working supervisor to be on Project site at all times during installation of Work. This supervisor to have good communication skills and be able to communicate with Owner and Applicator's workers.
3. Designate a responsible Project Manager or Superintendent to inspect all installed Work, particularly tie-ins and temporary flashings, at end of each working day and as otherwise required to ensure water-tightness. Inspection to be verified by signature on a Form signifying installation is in accordance with specified requirements.

- B. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.

1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
2. Payment for these services will be made from testing and inspecting allowances, as authorized by Change Orders.
3. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.

- C. Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.

1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
  - a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.

- D. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 01 Section "Submittal Procedures."



- E. Retesting/Re-inspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and re-inspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- F. Testing Agency Responsibilities: Cooperate with Designer and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
  - 1. Notify Designer and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
  - 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
  - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
  - 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
  - 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
  - 6. Do not perform any duties of Contractor.
- G. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
  - 1. Access to the Work.
  - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
  - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
  - 4. Facilities for storage and field curing of test samples.
  - 5. Delivery of samples to testing agencies.
  - 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
  - 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- H. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
  - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.

## **PART 2 - PRODUCTS (NOT USED)**

## **PART 3 - EXECUTION**

### **3.1 TEST AND INSPECTION LOG**

- A. Prepare a record of tests and inspections. Include the following:
  - 1. Date test or inspection was conducted.
  - 2. Description of the Work tested or inspected.
  - 3. Date test or inspection results were transmitted to Designer.
  - 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and modifications as they occur. Provide access to test and inspection log for Designer's reference during normal working hours.

### **3.2 REPAIR AND PROTECTION**

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.

1. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

**END OF SECTION 01 4000**

**SECTION 01 5000  
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 01 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, including, but not limited to, Designer, occupants of Project, testing agencies, and Authorities Having Jurisdiction.
- B. Water Service: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- C. Electric Power Service: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

1.4 SUBMITTALS

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

1.5 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.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.6 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

**PART 2 - PRODUCTS**

2.1 MATERIALS

- A. Portable Chain-Link Fencing: Minimum 2-inch, 9-gage, galvanized steel, chain-link fabric fencing; minimum 6 feet high with galvanized steel pipe posts; minimum 2-3/8-inch- OD line posts and 2-7/8-inch- OD corner and pull posts, with 1-5/8-inch- OD top and bottom rails. Provide concrete or galvanized steel bases for supporting posts.

2.2 TEMPORARY FACILITIES

- A. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations. Store combustible materials apart from building in appropriate UL rated cabinets.

2.3 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

**PART 3 - EXECUTION**

3.1 TEMPORARY UTILITY INSTALLATION

- A. 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.
- B. Electric Power Service: Use of Owner's existing electric power service will be permitted, as long as equipment is maintained in a condition acceptable to Owner.

3.2 SUPPORT FACILITIES INSTALLATION

- A. Parking: Onsite Campus parking is not free and will require daily fees or monthly permitting.
  - 1. Parking on a day-by-day basis is accessed via the Passport App that can be downloaded to mobile devices. Once downloaded, the Contractor will need to use the App to enter the zone their vehicle(s) have been parked in along with the vehicle(s) plate number. Each lot has a unique zone number, which can be found on the Passport App signage located at lot entrances and throughout the lots themselves. Payment will require a credit card.
  - 2. Daily pricing is as follows:

Time	Price
30 minutes	\$0.75
1.5 hours	\$2.00
2.5 hours	\$3.25
3.5 hours	\$4.50
4.5 hours	\$5.75
All Day (9 hours)	\$6.00

- 3. Permitting:
  - a. Short-term permits are available to purchase at the 2nd floor information desk of the University Center and start at \$44.00 per month.
  - b. Scratch-off permits are available for \$7.00 and are valid for one day only in regular spaces and meter spaces in all campus lots. To use the Scratch-off Permits, the driver will need to scratch off the date the permit will be used. The permit must be hung from the rear-view mirror with the date facing out.
- 4. Refer to the University of Northern Colorado's website for additional information.
  - a. <https://www.unco.edu/parking/permits/visitor-permits.aspx>
- 5. Restrict Contractors' personnel to assigned areas.
- 6. When site space is not adequate, provide additional off-site parking.
- B. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of the Project Manual and Authorities Having Jurisdiction.
- C. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.



**SECTION 01 7300  
EXECUTION**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
1. General installation of products.
  2. Progress cleaning.
  3. Protection of installed construction.
  4. Correction of the Work.

**PART 2 - PRODUCTS (NOT USED)**

**PART 3 - EXECUTION**

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work. Before construction, verify the location and points of connection of utility services.
- B. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.
1. Before construction, verify the location and points of connection of utility services.
  2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- C. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
1. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
    - a. Description of the Work.
    - b. List of detrimental conditions, including substrates.
    - c. List of unacceptable installation tolerances.
    - d. Recommended corrections.
  2. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
  3. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
  4. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
  5. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.



2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F.
  3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
1. Remove liquid spills promptly.
  2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.
- 3.5 PROTECTION OF INSTALLED CONSTRUCTION
- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
  - B. Comply with manufacturer's written instructions for temperature and relative humidity.
- 3.6 CORRECTION OF THE WORK
- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 01 Section "Cutting and Patching."
    1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
  - B. Restore permanent facilities used during construction to their specified condition.
  - C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
  - D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
  - E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

**END OF SECTION 01 7300**







2. PDF files should include the name of the referenced information as well as the date of Substantial Completion for clarification.
3. Arrangement: Internally subdivide PDF contents into logically organized parts as described below.
  - a. Part 1: Directory, listing names, addresses, and telephone numbers of Consultant, Contractor, Subcontractors, and major equipment suppliers.
  - b. Part 2: Items Required by Document 00 0700 "General Conditions" including:
    - 1) Certificate of Substantial Completion.
    - 2) Contractor's Affidavit of Payment of Debts and Claims (where applicable).
    - 3) Contractor's Affidavit of Release of Liens (where applicable).
    - 4) Release of Lien from all Subcontractors.
    - 5) Release of Lien from all Suppliers.
    - 6) Certificate of Liability Insurance (ACORD 25-S 1/95).
  - c. Part 3: Project documents and certificates, including the following:
    - 1) Declaration, Certificates and other submittals listed above.
    - 2) Original and photocopies of Contractor's and Manufacturers' warranties.
    - 3) Shop drawings and product data.
  - d. Part 4 (if required): Operation and maintenance instructions arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
    - 1) Significant design criteria.
    - 2) List of equipment.
    - 3) Parts list for each component.
    - 4) Operating instructions.
    - 5) Maintenance instructions for equipment and systems.
    - 6) Maintenance instructions for finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents.

### 2.3 OPERATION AND MAINTENANCE DATA

- A. Operations and Maintenance (O+M) Manuals are to be submitted in a PDF file format electronically to the Consultant for review and approval, prior to forwarding onto the Owner.
- B. Submit PDF's in final form ten (10) days prior to final inspection. This copy will be returned after final inspection, with Owner comments. Revise content of documents as required prior to final submittal.
- C. Submit PDF of final volumes revised, within ten (10) days after final inspection.

## PART 3 - EXECUTION

### 3.1 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
    - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
    - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.



**SECTION 01 7839  
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 01 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 Condition Drawings.
  2. Record Condition Specifications.
  3. Record Product Data.

1.3 SUBMITTALS

- A. Record Condition Drawings: Submit one set of marked-up Record Condition Drawing in a PDF file format.
- B. Record Condition Specifications: Submit one set of marked-up Project Record Condition Specifications, including addenda and contract modifications in a PDF file format.
- C. Record Product Data: Submit one set of each Product Data submittal. 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 CONDITION DRAWINGS

- A. Record Condition 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. Revisions to routing of piping and conduits.
    - d. Revisions to electrical circuitry.
    - e. Actual equipment locations.
    - f. Locations of concealed internal utilities.
    - g. Changes made by Change Order or Construction Change Directive.
    - h. Changes made following Designer's written orders.
    - i. Details not on the original Contract Drawings.
    - j. Field records for variable and concealed conditions.
    - k. Record information on the Work that is shown only schematically.



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 Designer's reference during normal working hours.

**END OF SECTION 01 7839**

**SECTION 05 5000  
METAL FABRICATIONS**

**PART 1 - GENERAL**

1.1 SUMMARY

A. Related Documents:

1. Drawings and general provisions of the Subcontract apply to this Section.
2. Review these documents for coordination with additional requirements and information that apply to work under this Section.

B. Section Includes: Provide metal fabrications, miscellaneous metal, and related accessory items, galvanized and prime painted, complete, as shown and specified. The work includes, but is not limited to, the following:

1. Steel railings, guardrails, handrails, brackets, and sockets.
2. Ladders.
3. Elevator hoist way door sill angles, sump grates, and frames.
4. Embedding edge angles in concrete.
5. Steel supports for coiling door.
6. Supportive framing for sunshade panels.
7. Miscellaneous steel framing, supporting angles, plates, brackets, clips, anchors and bolts for equipment, and other work which is not specifically included in Division 05 Section "Structural Steel Framing", but which is required to complete the Project.

C. Related Sections:

1. Section 07 0150 – Minor Demolition and Renovation Work.

1.2 REFERENCES

A. General:

1. The following documents form part of the Specifications to the extent stated. Where differences exist between codes and standards, the one affording the greatest protection shall apply.
2. Unless otherwise noted, the referenced standard edition is the current one at the time of commencement of the Work.

B. AISC, "Specifications for the Design of Cold-Formed Steel Structural Members."

C. AWS, "Structural Welding Code, D1.1."

D. SSPC, "Steel Structures Painting Council."

1.3 SUBMITTALS

A. Product Data for each product specified.

1. Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories.

B. Submit certification that manufactured products (including bolts, nuts and washers) meet or exceed specified requirements. Certification numbers must appear on product containers for bolts, nuts and washers and the numbers shall correspond to the identification numbers on the Manufacturer's Certificate. The Manufacturer's symbol and grade markings must appear on bolts, nuts and washers.

1.4 QUALITY ASSURANCE

A. Structural Performance:

1. Provide railings capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
2. Handrails and Top Rails of Guards:





- E. Fit and shop assemble in largest practical sections, for delivery to site and handling through building openings.
- F. Provide components required for anchorage of metal fabrications. Fabricate anchorage and related components of same material and finish as metal fabrication, except where specifically noted otherwise.

## 2.3 FABRICATION ASSEMBLIES

- A. Vertical Ladders:
  - 1. Comply with ANSI A14.3 except as otherwise indicated.
  - 2. Install ladders in accordance with **[[Specification Section 05 5133 and]]** O'Keeffe's manufacturer requirements.
- B. Edge Angles: Provide anchors welded to angle for embedding in concrete construction, spaced no more than 6 inches (150 mm) from each end and 24 inches (600 mm) on center, unless otherwise shown.

## 2.4 WELDING

- A. All surfaces shall be clean, free of rust, paint, and foreign matter of any kind. Burned edges to be welded shall be chipped clean and wire brushed before welding. Clamp members as required, space and alternate welds, as may be necessary to prevent warping or misalignment.
- B. Weld Metal: Weld metal shall be thoroughly fused with the base metal along surfaces and edges of the union. Penetration shall be 1/8 inch (4 mm) minimum and shall be into the root of the joint.
- C. Weld Quality: Welds shall present a uniform surface, free of imperfections, without undercutting or overlapping, and free from excessive oxides, gas pockets, and nonmetallic inclusions. Welds shall be made with the proper number of beads or passes to secure sound, thoroughly fused joints. Provide backup bars, temporary backup bars, or backup welds for full-penetration butt welds. Each deposit shall not exceed 1/2 inch (12 mm) of weld for each pass of bead. Preceding layers shall be cleaned by wire brushing or preening to remove scale and slag before placing new weld material.  
Faulty and Defective Welding: Welding showing cracks, slag inclusion, lack of fusion, bad undercut, or other defects ascertained by visual or other means of inspection, shall be chipped out and properly replaced.

## 2.5 FINISH

- A. Cleaning: Thoroughly clean mill scale, rust, dirt, grease, and other foreign matter from ferrous metal prior to galvanizing, hot-phosphate treatment, powder coating or painting.
  - 1. Remove oil, grease, and similar contaminants in accordance with SSPC SP-1, "Solvent Cleaning. "
- B. Shop Priming: Shop-paint metal work except members or portions of members to be embedded in concrete, surfaces and edges to be field welded, and galvanized surfaces.
  - 1. Immediately after surface preparation, brush or spray on primer in accordance with the paint manufacturer's instructions and at a rate to provide uniform dry-film thickness of 2.0 mils for each coat. Use painting methods which will result in full coverage of joints, corners, edges, and exposed surfaces.
  - 2. Apply one shop coat to metal items, except apply two coats to surfaces inaccessible after assembly or erection. Change color of the second coat to distinguish it from the first.
- C. Galvanizing: Provide a zinc coating for exposed exterior items (unless specified to be powder coated) and items to be embedded in concrete, complying with the following:
  - 1. For galvanizing iron and steel hardware, ASTM A153.
  - 2. For galvanizing rolled, pressed, and forged steel shapes, plates, bars, and strips 3mm thick and heavier, ASTM A123.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Examine the substrate and conditions in which the work is to be installed. Correct unsatisfactory substrate and conditions prior to start of installation.

### **3.2 PREPARATION**

- A. Furnish setting drawings, diagrams, templates, instructions, and directions for installation of anchorages, such as concrete inserts, anchor bolts, and miscellaneous items having integral anchor, which are to be embedded in concrete construction. Coordinate delivery of such items to project site.
- B. Coordinate metalwork with adjoining work. Do cutting, shearing, drilling, punching, threading, tapping, etc., required for metal work and for attachment of adjacent work. Drill or punch holes; do not use cutting torch. Shearing and punching shall leave true lines and surfaces.
- C. Obtain Architect-Engineer's review prior to site cutting or making adjustments to structural members not indicated to be cut or adjusted.
- D. Clean and strip primed steel items to bare metal where site welding is to be done.
- E. Make provision for erection loads with temporary bracing. Keep work in alignment.

### **3.3 INSTALLATION**

- A. Fastening to In-Place Construction: Provide anchorage devices and fasteners for securing metal work to in-place construction, including threaded fasteners for concrete inserts, through bolts, lag bolts, screws, and other connectors as required.
  - 1. Conceal fastenings where practical. Thickness of metal and details of assembly and supports shall give ample strength and stiffness. Form joints exposed to weather to exclude water.
- B. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installation of metal work. Set work accurately in location, alignment, and elevation, plumb, level, true, and free of rack, measured from established lines and levels. Provide temporary bracing anchors in formwork for items which are to be built into concrete or similar construction.
  - 1. Fit exposed connections accurately together to form tight hairline joints. Weld connections which are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Grind exposed joints smooth and touch up shop paint coat. Do not weld, cut, or abrade the surfaces of exterior units which have been hot-dip galvanized after fabrication and are intended for bolted or screwed field connections.
- C. Field Welding: Comply with AWS D1.1 for procedures of manual shielded metal-arc welding, appearance and quality of welds made, and methods used in correcting welding work.
- D. Corrosion Protection: Protect dissimilar metals from galvanic corrosion by pressure tapes, coating, or isolators as acceptable to Architect-Engineer.
- E. Grouting: Do grouting of frames, plates, sills, bolts, and similar items with nonshrink grout.
- F. Alignment: Verify alignment of items with adjacent construction. Coordinate related work.
- G. Handrails: Secure steel handrails with bracket. Unless otherwise noted, locate brackets 6 inches (150 mm) from ends of handrail, 6 feet (1.8 m) on center maximum, and space brackets equidistant at each handrail. Where bracket is fastened to stud wall, provide steel plate backing securely fastened to studs; toggle bolt secured to gypsum wallboard is not acceptable.

### **3.4 CLEAN AND TOUCH-UP**

- A. Immediately after erection, clean field welds, bolted connections, and abraded areas and paint exposed areas with same material as used for shop painting. Apply by brush or spray to provide a minimum dry-film thickness of 2.0 mils.

**END OF SECTION 05 5000**

**SECTION 06 1000  
ROUGH CARPENTRY**

**PART 1 - GENERAL**

1.1 SECTION REQUIREMENTS

- A. Submittals: Model code ICC-Evaluation Service Evaluation Service Report (ESR) for treated wood and wood structural panels.

1.2 SUBSTITUTION REQUIREMENTS

- A. OSB and Plywood structural panels are NOT interchangeable. Switching to OSB panels from the design requirement of plywood panels is not allowed within this project.

**PART 2 - PRODUCTS**

2.1 WOOD PRODUCTS, GENERAL

- A. Lumber: Provide dressed lumber, S4S, marked with grade stamp of inspection agency.
- B. Wood Structural Panels shall meet the following standards:
  - 1. NIST Department of Commerce (DOC) Voluntary Product Standard PS 1.
  - 2. NIST Department of Commerce (DOC) Voluntary Product Standard PS 2.
  - 3. Engineered Wood Association "Engineered Wood Construction Guide" APA Form No. E30W (2016).

2.2 TREATED MATERIALS

- A. Preservative-Treated Materials shall follow the American Wood Protection Association (AWPA) standards defined in the "Use Category System: User Specification for Treated Wood" U1 (2018). Wood products shall be treated for the following Use Codes:
  - 1. Organism Protection:
    - a. UC3A – Protected environment, no direct exposure to weather.
    - b. UC3B – Direct exposure to weather.
  - 2. Fire Protection:
    - a. UCFA – Protected environment, no direct exposure to weather.
    - b. UCFB - Direct exposure to weather.
- B. All wood products will be labeled by an inspection agency approved by American Lumber Standard Committee (ALSC) Board of Review.
- C. Preservatives used shall contain no compounds containing no arsenic or chromium unless approved in writing by the Owner and Engineer in writing or defined on the drawings as a specifically defined compound.
- D. All wood after preservative treatment shall have the following properties:
  - 1. Moisture content after treatment,
    - a. Kiln-dry lumber 19 %.
    - b. OSB & Plywood 15 %
  - 2. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
  - 3. The following building uses, and types require all wood in roof structures to meet this sub-section:
    - a. School projects
    - b. Government projects
    - c. Residential of two or more units under one roof.



1. Use anchors made from hot-dip galvanized steel complying with ASTM F2329, G60 coating designation for interior locations where stainless steel is not indicated.
  2. Use anchors made from stainless steel complying with ASTM A666, Type 304 for exterior locations and where indicated.
- C. Building Paper:
1. Asphalt-saturated organic felt complying with ASTM D226, Type I (No. 30 asphalt felt), unperforated.
  2. Flexible weather barrier consisting of spunbonded high density polyethylene fibers complying with ASTM D779.
- D. Adhesives for Field Gluing Panels to Framing: APA AFG-01.

### **PART 3 - EXECUTION**

#### **3.1 INSTALLATION**

- A. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- B. Securely attach rough carpentry to substrates, complying with the following:
1. ICC-Evaluation Service (ES) ESR-1539 for nail and staple fasteners driven by hand or pneumatic.
  2. ICC-Evaluation Service for power-driven fasteners:
    - a. ICC-ES ESR-1955 – ITW Ramset
    - b. ICC-ES ESR-1752 – Hilti
    - c. ICC-ES ESR-2024 – DeWalt/Powers
    - d. ICC-ES ESR-3833 – Aerosmith Fastening Systems
  3. Published requirements of metal framing anchor manufacturer.
  4. As defined by 2021 International Building Code:
    - a. Table 2304.8(1) – Roof Sheathing Spans for Lumber Floor and Roof Sheathing.
    - b. Table 2304.8(2) – Sheathing Lumber, Minimum Grade Requirements, Board Grade.
    - c. Table 2304.8(3) – Allowable Spans and Loads for Wood Structural Panel Sheathing and Single-Floor Grade Continuous Over Two or More Spans with Strength Axis Perpendicular to Supports
    - d. Table 2304.8(5) – Allowable Load (PSF) for Wood Structural Panel Roof Sheathing Continuous Over Two or More Spans and Strength Axis Parallel to Supports.
    - e. Table 2304.10.1 – Fastening Schedule.

**END OF SECTION 06 1000**

**SECTION 06 1600  
ROOF SHEATHING**

**PART 1 - GENERAL**

1.1 SECTION REQUIREMENTS

- A. Submittals: Model code ICC-Evaluation Service Evaluation Service Report (ESR) for preservative-treated plywood.

1.2 SUBSTITUTION REQUIREMENTS

- A. OSB and Plywood structural panels are NOT interchangeable. Switching to OSB panels from the design requirement of plywood panels is not allowed within this project.

**PART 2 - PRODUCTS**

2.1 WOOD PANEL PRODUCTS, GENERAL

- A. Wood Structural Panels shall meet the following standards:
1. NIST Department of Commerce (DOC) Voluntary Product Standard PS 1.
  2. NIST Department of Commerce (DOC) Voluntary Product Standard PS 2.
  3. Engineered Wood Association "Engineered Wood Construction Guide" APA Form No. E30W (2016).

2.2 TREATED PLYWOOD

- A. Preservative-Treated Materials shall follow the American Wood Protection Association (AWPA) standards defined in the "Use Category System: User Specification for Treated Wood" U1 (2018). Wood products shall be treated for the following Use Codes:
1. Organism Protection:
    - a. UC3A – Protected environment, no direct exposure to weather.
    - b. UC3B – Direct exposure to weather.
  2. Fire Protection:
    - a. UCFA – Protected environment, no direct exposure to weather.
    - b. UCFB – Direct exposure to weather.
- B. All wood products will be labeled by an inspection agency approved by American Lumber Standard Committee (ALSC) Board of Review.
- C. Preservatives used shall contain no compounds containing arsenic or chromium unless approved in writing by the Owner and Engineer in writing or defined on the drawings as a specifically defined compound.
- D. All wood after preservative treatment shall have the following properties:
1. Moisture content after treatment,
    - a. OSB & Plywood 15 %
  2. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
  3. The following building uses, and types require all wood in roof structures to meet this sub-section:
    - a. School projects
    - b. Government projects
    - c. Residential of two or more units under one roof.
- E. Provide preservative treated plywood for items indicated on Drawings and plywood in contact with masonry or concrete or used with roofing, flashings, vapor barriers, and water proofing.
1. Provide organism preservative-treated materials for all rough carpentry, unless otherwise

indicated, and the following:

- a. Wood members, in connection, with roofing, flashing, vapor barriers, and waterproofing.
  - b. Concealed members in contact with masonry or concrete.
  - c. Wood framing members that are less than 18 inches above the ground.
  - d. Wood floor plates that are installed over concrete slabs-on-grade.
2. Provide fire-retardant-treated materials for all rough carpentry, unless otherwise indicated, and the following:
- a. All framing as defined by the applicable IBC based on the use and classification of the structures and the exemptions defined in the code for roofing and re-roof applications.

## 2.3 ROOF SHEATHING

- A. Plywood Roof Sheathing: APA CDX Exposure 1 plywood.

## 2.4 MISCELLANEOUS PRODUCTS

- A. Fasteners:

1. Size and type indicated by building code or engineering. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A153.
2. Power-Driven Fasteners: ICC-ES-ESR-1539.
3. Bolts: Steel bolts complying with ASTM A307, Grade A (ISO 898-1, Property Class 4.6); with ASTM A563 hex nuts and, where indicated, flat washers.

- B. Metal Framing Anchors: Hot-dip galvanized steel of structural capacity, type, and size indicated.

1. Use anchors made from hot-dip galvanized steel complying with ASTM F2329, G60 coating designation for interior locations where stainless steel is not indicated.
2. Use anchors made from stainless steel complying with ASTM A666, Type 304 for exterior locations and where indicated.

- C. Building Paper:

1. Asphalt-saturated organic felt complying with ASTM D226, Type I (No. 30 asphalt felt), unperforated.
2. Flexible weather barrier consisting of spunbonded high density polyethylene fibers complying with ASTM D779.

- D. Adhesives for Field Gluing Panels to Framing: APA AFG-01.

- E. Flexible Flashing: Adhesive rubberized asphalt compound, bonded to polyethylene film, with an overall thickness of 0.030 inch.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Securely attach rough carpentry to substrates, complying with the following:

1. ICC-Evaluation Service (ES) ESR-1539 for nail and staple fasteners driven by hand or pneumatic.
2. ICC-Evaluation Service for power-driven fasteners:
  - a. ICC-ES ESR-1955 – ITW Ramset
  - b. ICC-ES ESR-1752 – Hilti
  - c. ICC-ES ESR-2024 – DeWalt/Powers
  - d. ICC-ES ESR-3833 – Aerosmith Fastening Systems
3. Published requirements of metal framing anchor manufacturer.





**SECTION 07 0150**  
**MINOR DEMOLITION, RENOVATION WORK, AND ROOF RECOVER PREPARATION**

**PART 1 - GENERAL**

1.1 SECTION INCLUDES:

- A. Required demolition for reroofing work.
- B. Required renovation for reroofing work.
- C. Partial roof tear-off.
- D. Temporary roofing membrane
- E. Roof re-cover preparation.
- F. Protection of existing roofing system that is not replaced.
- G. Modify Rooftop appurtenances where required to achieve minimum recommended heights and clearances as required for new roof installation.

1.2 RELATED SECTIONS:

- A. Section 06 1000 – Rough Carpentry.
- B. Section 06 1600 – Roof Sheathing.
- C. Section 07 5300 – EPDM Membrane Roofing.
- D. Section 07 6200 – Sheet Metal Flashing and Trim.

1.3 SUBMITTALS:

- A. Product Data: Submit manufacturer's product data sheets for each product in accordance with General Conditions and Division Seven.
- B. Product List: Submit list of proposed Products and manufacturers, including all items specified in Part 2 – Products or otherwise required by the Work.
- C. Product Data: For each type of product indicated or required to perform the Work.
  - 1. Provide data for each required product indicating characteristics, performance criteria, mixing and preparation requirements, limitations, and Material Safety Data Sheets (MSDS).
- D. Demolition and Removal Procedures and Schedule: Outline all work tasks and schedule them, showing clearly when each area is to be performed. Coordinate with Owner and other contractors to avoid impact to other work Owner's occupancy.
- E. Temporary Roofing: Submit Product Data and description of temporary roofing system. If temporary roof will remain in place, submit surface preparation requirements needed to receive permanent roof, and submit a letter from roofing membrane manufacturer stating acceptance of temporary membrane, and that its inclusion will not adversely affect the roofing system's resistance to fire and wind or its FM Global rating.
- F. Test Reports:
  - 1. Fastener Pull Test Results: Provide complete testing results in an organized and understandable format, including:
    - a. Roof plan indicating location and designation for each pullout test;
    - b. Fastener type(s), installation method(s) used, and value result for each test performed.
    - c. Type of tester (equipment) used and calibration certification by Independent Laboratory within previous 12 months.
- G. Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including exterior and interior finish surfaces that might be misconstrued as having been damaged by roof replacement operations. Submit before Work begins.
- H. Landfill Records: Indicate receipt and acceptance of hazardous wastes, such as asbestos-containing material, by a landfill facility licensed to accept hazardous wastes.

- I. Project Kickoff Conference: Conduct conference at Project site to comply with requirements of the specifications. Review methods and procedures related to roofing system tear-off and replacement including, but not limited to, the following:
  1. Meet with Owner; Architect; Owner's insurer if applicable; testing and inspecting agency representative; roofing system manufacturer's representative; deck Installer; roofing Installer including project manager, superintendent, and foreman; and installers whose work interfaces with or affects roof replacement including installers of roof accessories and roof-mounted equipment.
  2. Methods and procedures related to roof replacement preparation, including membrane roofing system manufacturer's written instructions.
  3. Temporary protection requirements for existing roofing system that is to remain, during and after installation.
  4. Roof drainage during each stage of roof replacement and roof drain plugging and plug removal requirements.
  5. Construction schedule and availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
  6. Existing deck removal procedures and Owner notifications.
  7. Condition and acceptance of existing roof deck and base flashing substrate for reuse.
  8. Structural loading limitations of deck during roof replacement.
  9. Base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that will affect roof replacement.
  10. HVAC shutdown and sealing of air intakes.
  11. Shutdown of fire-suppression, -protection, -alarm, and -detection systems.
  12. Asbestos removal and discovery of asbestos-containing materials.
  13. Governing regulations and requirements for insurance and certificates if applicable.
  14. Existing conditions that may require notification of Architect before proceeding.
- J. Shop Drawings, Product Data, Samples, or Similar Submittals:
  1. The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been approved by the Consultant.
  2. The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Consultants approve of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Consultant of such deviation at the time of submittal and
    - a. The Consultant has given written approval of the specified deviation as a minor change in the Work, or
    - b. A Change Order or Construction Change Directive has been issued authorizing the deviation.
  3. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Consultant's approval thereof.
  4. The Contractor shall direct specific attention, in writing or on a resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Consultant on previous submittals. In the absence of such notice, the Consultant's approval of a resubmission shall not apply to such revisions.
  5. Requirements set forth by Specification Section 07 0150 – Part 1 – (1.3)(J) shall be applied to all Contract Document Specification Sections requiring Shop Drawings, Product Data, Samples, or similar submittal submission by the Contractor and review by the Consultant.

#### 1.4 PROTECTIONS:

- A. Prior to starting minor demolition operations, provide necessary protections as specified in General Conditions and Division Seven.

## 1.5 COORDINATION:

- A. Sequence minor demolition and renovation with work sequence of reroofing work.
- B. Coordinate with reroofing work so that no more existing roofing and sheet metal items are removed in one day than can be replaced along with new roofing work in same day.

## 1.6 PROJECT CONDITIONS

- A. Owner will occupy portions of building immediately below roof replacement area. Conduct roof replacement so Owner's operations will not be disrupted. Provide Owner with not less than 72 hours' notice of activities that may affect Owner's operations.
  - 1. Coordinate work activities daily with Owner so Owner can place protective dust or water leakage covers over sensitive equipment or furnishings, shut down HVAC and fire-alarm or -detection equipment if needed, and evacuate occupants from below the work area.
  - 2. Before working over structurally impaired areas of deck, notify Owner to evacuate occupants from below the affected area. Verify that occupants below the work area have been evacuated before proceeding with work over the impaired deck area.
  - 3. Protect buildings scheduled for roof replacement, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from roof replacement operations.
- B. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.
  - 1. Conditions existing at time of inspection for bidding will be maintained by Owner as far as practical.
- C. Limit construction loads on roof to 200 lb rooftop equipment wheel loads and 20 PSF for uniformly distributed loads.
- D. Construction Drawings and Project Manual for existing roofing system are provided for Contractor's reference. Contractor is responsible for conclusions derived from existing documents.
- E. Weather Limitations: Proceed with roof replacement preparation only when existing and forecasted weather conditions permit Work to proceed without water entering existing roofing system or building.

## 1.7 WARRANTY

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

## **PART 2 - PRODUCTS**

### 2.1 INFILL MATERIALS

- A. Use infill materials matching existing membrane roofing system materials, unless otherwise indicated.
- B. Deck Repair Materials:
  - 1. Steel Deck (Where Applicable): Match existing deck in design, profile, gage and finish. Deck to nest into existing deck with trimmed edges.
- C. All Decks: Align top plane with existing deck.
- D. Curbs and Support Members: Wood or metal curbs and support items as indicated and required for existing conditions.
- E. Miscellaneous Metals: Conform to existing Products and installations.

## 2.2 TEMPORARY ROOFING MATERIALS

- A. Design and selection of materials for temporary roofing are responsibilities of Contractor.
  - 1. Materials selection and design of temporary roofing to be acceptable to selected roofing materials manufacturer.

## 2.3 AUXILIARY ROOF REPLACEMENT MATERIALS

- A. General: Auxiliary roof replacement preparation materials recommended by roofing system manufacturer for intended use and compatible with components of existing and new membrane roofing system.

## 2.4 MATERIALS

- A. Wood Nailers and Blocking: Utility grade lumber, any commercial softwood species, kiln dried and preservative treated.
- B. Fasteners:
  - 1. Screws: Fluorocarbon coated screws, i.e. Roofgrip Climaseal™.
  - 2. Nails: Nonferrous, cement-coated, or hot-dip galvanized ring-shank nails.
  - 3. Concrete and Masonry: Stainless steel or galvanized screws with lead expansion anchor, Acceptable fasteners:
    - a. DeWALT Zamac Nailin or approved equal.
- C. Concrete Splash Blocks:
  - 1. Precast concrete, minimum 3,000 psi strength, 18-inch x 30-inch size, with water channel.
- D. Concrete Roof Pavers:
  - 1. Heavyweight, high density reinforced, hydraulically pressed, concrete units, with top edges beveled 3/16 inch, factory cast for use as roof pavers; absorption not greater than 5 percent, ASTM C 140; no breakage and maximum 1 percent mass loss when tested for freeze-thaw resistance, ASTM C 67; and as follows:
    - a. Size: 24 by 24 inches. Manufacture pavers to dimensional tolerances of plus or minus 1/16 inch in length, height, and thickness.
    - b. Compressive Strength: 6500 psi, minimum; ASTM C 140.
    - c. Colors and Textures: As indicated by manufacturer's designations.
    - d. Manufactured by Westile or approved equivalent.
- E. Electrical Conduit Supports:
  - 1. Miro Industries electrical conduit supports:
    - a. Typical Model Numbers include 12-BASE STRUT-8-SS or 12-BASE STRUT-12-SS.
    - b. Verify in field and size as required for specific electrical conduits on roof.
    - c. All electrical conduits are to be clamped per National Electric Code requirements.
  - 2. Miro Industries Pillow Block Pipe Stands Model 1.5 with 1.5 Spacer (for electrical conduits 3-inch or less above finished roof height).

## 2.5 CONCRETE CORE DRILLING

- A. Concrete Penetration:
  - 1. Scanning tools: Pacometer, Ground Penetrating Radar (GPR), or other suitable method to locate existing reinforcing in the vicinity of the proposed opening.
  - 2. Hammer Drill or Core Drill
    - a. Where possible for smaller openings, hammer drilling is preferred over core drilling to minimize accidental cutting of the concrete reinforcing.

## 2.6 PATCHING AND MIXING:

- A. Lightweight Concrete Repairs:

1. Furnish and install Siplast "Zonopatch", USG Securock Brand Gypsum-Concrete Patch, or Architect approved equal for lightweight insulation concrete repair. Fill holes, divots, gouges, etc. Finish to smooth surface. Trowel finish the feathered edges to a smooth transition to the existing surface in a workman-like manner.
  2. Mixing and procedures:
    - a. Follow manufacturer's requirements.
  3. Curing:
    - a. Follow Manufacturer's requirements.
- B. Structural Concrete Repairs (Where Applicable):
1. Furnish and install rapid hardening, structural concrete, corrosion resistant concrete repair mix, such as "SikaQuick-1000 by Sika", or Architect approved equal for concrete repairs. Fill holes, divots, gouges, etc. Finish to smooth surface. Trowel finish the feathered edges to a smooth transition to the existing surface in a workman-like manner.
  2. Follow manufacturer's requirements for:
    - a. Surface Preparation and Priming.
    - b. Mixing, extension with aggregates, and application procedures.
    - c. Curing, protection, and cleaning.

### **PART 3 - EXECUTION**

#### **3.1 EXAMINATION**

- A. Verify that areas to be demolished are clear of encumbrances.
- B. Examine existing mechanical and electrical items to determine conditions and operability.
- C. Verify existing roof drains and drain piping are clear of debris, open and functional, that piping is properly connected and sealed to drain bowls and all drain components are in serviceable condition.
- D. Notify Owner's Representative in writing of any inoperable items or unsafe conditions.
- E. Beginning work indicates acceptance of existing conditions, including operability of mechanical and electrical items.

#### **3.2 PREPARATION:**

- A. Verify that required barricades and other protective measures are in place.
- B. Protect existing membrane roofing system that is indicated not to be reroofed.
  1. Limit traffic and material storage to areas of existing roofing membrane that have been protected.
  2. Maintain temporary protection and leave in place until roofing work has been completed.
- C. Prevent movement or settlement of adjacent structures and paving. Provide bracing and shoring.
- D. Protect existing landscaping materials, appurtenances, structures, paving, roofing and siding, roof mounted equipment, roof deck and structures which are not to be demolished.
- E. Coordinate with Owner to shut down air-intake equipment in the vicinity of the Work. Cover air-intake louvers before proceeding with roof replacement work that could affect indoor air quality or activate smoke detectors in the ductwork.
- F. During removal operations, have sufficient and suitable materials on-site to facilitate rapid installation of temporary protection in the event of unexpected rain.
- G. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors. Use roof-drain plugs specifically designed for this purpose. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.
  1. If roof drains are temporarily blocked or unserviceable due to roofing system removal or partial installation of new membrane roofing system, provide alternative drainage method

to remove water and eliminate ponding. Do not permit water to enter into or under existing membrane roofing system components that are to remain.

- H. Verify that rooftop utilities and service piping have been shut off before beginning the Work.

### 3.3 FASTENER PULL-OUT TESTING

- A. Perform fastener pull-out tests according to SPRI FX-1, and submit test report to membrane manufacturer to confirm and/or determine fastener pattern required to resist uplift pressure at corners, perimeter, and field of roof as indicated Article on Performance Requirements.
  - 1. Obtain Architect's approval to proceed with membrane manufacturer's recommended fastening pattern. Architect may furnish revised fastener or fastening pattern design to commensurate with pull-out test results.

### 3.4 WITHDRAWAL AND ADHESION TESTING

- A. Withdrawal resistance and adhesion testing may be conducted by an independent laboratory, fastener or adhesive manufacturer, or a representative of the roofing manufacturer for the defined roof work and existing substrates / conditions. Testing must be completed by a party which is approved by the manufacturer. Result documentation of previously completed withdrawal resistance or adhesion tests may be provided for Contractor reference. Contractor to provide documentation of manufacturer acceptance of withdrawal resistance or adhesion tests (tests either previously completed or coordinated by the Contractor) to Owner and Amtech confirming the withdrawal resistance and adhesion tests meet the design, warranty, and project requirements.

### 3.5 FASTENING STRIPS, NAILERS, BLOCKING

- A. Install new continuous treated wood nailers at the perimeter of the entire roof and around roof projections and penetrations as detailed.
- B. Nailers shall be anchored to resist a minimum force of 250 pounds per lineal foot in any direction. Individual nailer lengths shall not be less than 3 feet long. Nailer fastener spacing shall be at 12-inches on center or 16-inches on center if necessary, to match the structural framing. Fasteners shall be staggered 1/3 the nailer width and installed within 6-inches of each end. Two (2) fasteners shall be installed at ends of nailer lengths. Nailer attachment shall meet this requirement and that of the current Factory Mutual Loss Prevention Data Sheet 1-49.
- C. Total nailer height must be a minimum of 2-inches above the finished roof surface at all perimeter locations. Install with 1/8-inch gap between each length and ensure each subsequent layer has a minimum 12-inch material stagger.
- D. Thickness shall be as required to match substrate or insulation height to allow a smooth transition at eaves and gutter edges.
- E. Taper nailer, where applicable, to be flush at point of contact with membrane in either the vertical or horizontal applications.
- F. Any existing nailer woodwork which is to remain shall be firmly anchored in place to resist a minimum force of 250 pounds per lineal foot in any direction and shall be free of rot, excess moisture or deterioration. Only woodwork shown to be reused in Detail Drawings shall be left in place. All other nailer woodwork shall be removed.

### 3.6 ROOF RE-COVER PREPARATION

- A. Repair blisters and other substrate irregularities that inhibit the successful application of lightweight concrete topping.
- B. Spud and remove all aggregate from aggregate-surfaced, built-up bituminous roofing, per manufacturer requirements. Repair all damage to the remaining membrane caused by spudding.
- C. Broom clean remaining existing substrate.
- D. Coordinate with Manufacturer to schedule times for tests and inspections before proceeding with installation of Lightweight insulating concrete.
- E. Verify that existing substrate is dry before proceeding with installation of Light Weight Insulating Concrete. Spot check substrates with an electrical capacitance moisture-detection meter.

- F. Remove materials that are wet or damp. Removal will be paid for by adjusting the Contract Sum according to unit prices included in the Contract Documents.
- G. At areas scheduled for overlay, where moisture has been detected by the contractor. Remove existing roofing membrane and immediately check for presence of moisture by visually observing cover boards, roof insulation and other substrate boards that will remain.
  - 1. With an electrical capacitance moisture-detection meter, spot check substrate boards that will remain.
  - 2. Remove wet or damp boards and roof insulation and replace in kind.
  - 3. Bitumen and felts that are firmly bonded to concrete decks are permitted to remain if felts are dry. Remove unadhered bitumen and felts and wet felts.
  - 4. Remove excess asphalt from steel deck. A maximum of 15 lb/100 sq. ft. of asphalt is permitted to remain on steel decks.
  - 5. Remove fasteners from deck or cut fasteners off slightly above deck surface.
  - 6. Do NOT use power cutting tools on materials identified as ACRM.

### 3.7 DECK PREPARATION

- A. Inspect deck after tear-off of membrane roofing system.
- B. If broken or loose fasteners that secure deck panels to one another or to structure are observed, or if deck appears or feels inadequately attached, immediately notify Owner and Owner's Consultant. Do not proceed with installation until directed by Owner and Owner's Consultant.
- C. If exposed metal deck panels are observed to be corroded, immediately notify architect. Do not proceed with installation until directed by Owner and Owner's Consultant.
- D. If exposed concrete, lightweight concrete, or gypsum deck is not suitable for receiving new roofing, repair concrete/lightweight concrete/gypsum to make clean, smooth, and dry as recommended by roofing system manufacturer.
- E. If deck surface or substrate is not suitable for receiving new roofing, or if structural integrity of deck is suspect to be inadequate or failing, immediately notify Owner and Owner's Consultant. Do not proceed with installation until directed by Owner and Owner's Consultant.

### 3.8 INFILL MATERIALS INSTALLATION

- A. Immediately after removal of selected portions of existing membrane roofing system, and inspection and repair of deck, if needed, fill in the tear-off areas to match existing membrane roofing system construction.
  - 1. Install new roofing membrane patch over roof infill area. If new roofing membrane is installed the same day tear-off is made, roofing membrane patch is not required.

### 3.9 DECK AND SUPPORT REPLACEMENT AND REPAIR

- A. Replace damaged and deteriorated deck under Unit Prices as required. Replacement deck to match existing.
- B. Install new deck and accessories as required and directed by Architect.
- C. Remove damaged and deteriorated deck by cutting in straight lines. Coordinate cuts with structural supports to ensure proper installation of replacement materials.
- D. Where necessary, grind away existing welds and protrusions. Provide smooth and even surface for new deck on existing structural framing.
- E. Install new deck repair materials with all edges properly supported on structural members or adjacent decking. Secure with approved fasteners, spaced as indicated or maximum 8-inches on center.

### 3.10 DECK INFILL FOR ABANDONED OPENINGS

- A. Prepare openings as indicated in previous Article on Deck and Support Replacement and Repair.
- B. Infill roof deck openings where abandoned equipment is removed and not replaced.
  - 1. Install angles or "Z" clips on all sides of opening to receive new roof deck.
  - 2. Provide fire-rated thermal barrier (gypsum board, Dens-Deck®, or approved alternate) on Steel decking under polyisocyanurate insulation.



### 3.11 INTERIOR FINISHES REPAIR

- A. Where a curb/skylight is raised or modified that is visible from interior spaces, Contractor to furnish and install new drywall to cover the exposed wood blocking or framing components. Contractor to paint new drywall and interior repairs to match existing finishes, as approved by Owner.

### 3.12 TEMPORARY ROOFING MEMBRANE

- A. Install approved temporary roofing membrane over area to be reroofed.
- B. Remove temporary roofing membrane before installing new roofing membrane.
- C. Prepare the temporary roof to receive lightweight insulating concrete fill and new roofing membrane according to approved temporary roofing membrane proposal by patching and repairing temporary roofing membrane. Restore temporary roofing membrane to watertight condition. Obtain approval for temporary roof substrate from roofing membrane manufacturer and Architect before installing new roof.

### 3.13 EXISTING BASE FLASHINGS

- A. Remove existing base flashings around parapets, curbs, walls, and penetrations.
- B. Clean substrates of contaminants such as asphalt, sheet materials, dirt, and debris.
- C. Do not damage existing curbs, counter-flashings, metal roofing panels, or other components or equipment that are to remain. Replace items damaged during removal with new Products of same design and quality.
- D. Inspect parapet sheathing for deterioration and damage. If parapet sheathing has deteriorated, immediately notify Architect.

### 3.14 EXISTING MECHANICAL AND ELECTRICAL ITEMS MODIFICATIONS

- A. When required to achieve recommended clearances, minimum curb heights, or other modifications, disconnect, modify, and reconnect mechanical and electrical services using qualified and licensed personnel.
- B. Do not disrupt any services unless specifically approved by Owner's Representative and on-site personnel.
- C. Restore services and verify proper operational conditions to satisfaction of Owner's Representative.
- D. Where service lines exist or where new services lines will be installed, Contractor to ensure all service lines are raised as necessary to meet the minimum clearances above the finished roof surface as defined by the design documents, local AHJ, and adopted building codes. Service lines include, but are not limited to, gas lines, electrical conduit lines, and water lines.

### 3.15 CONCRETE PENETRATION REQUIREMENTS

- A. Locate and avoid all steel reinforcing or structural members prior to any cutting or coring.
- B. No floor, wall, or foundation/grade beam penetrations may be installed without prior review and approval of the Engineer.
- C. Provide the locations of the proposed penetrations to the Engineer to review and assess whether further structural evaluation is required by a structural engineer.
- D. Prior to penetrating a floor or wall, scan the existing structure with a Pacometer, Ground Penetrating Radar (GPR) or other suitable method to locate existing reinforcing in the vicinity of the proposed opening. Identify the proposed location of the penetration to determine if the proposed location is acceptable or if the penetration will need to be shifted to clear critical reinforcing or structural members.
- E. Do not cut or core concrete decks without prior approval from consultant and/or owner.
- F. The cutting of any existing reinforcement is not acceptable without review and approval by a structural engineer. Indiscriminately cutting through reinforcing to install penetrations without prior structural consideration is not acceptable as it could cause structural failure of the floor, roof or wall.
- G. Where possible for smaller openings, hammer drilling is preferred over core drilling to minimize accidental cutting of the concrete reinforcing.
- H. Once determined that a penetration size and location is acceptable:

1. For circular penetrations, install by hammer-drilling or core-drilling.
  2. For rectangular penetrations, install by hammer drilling or core-drilling the four corners, followed by saw-cutting between the corners. Overcutting at the corners is not acceptable.
  3. Pneumatic impact tools not allowed without prior approval.
- I. Restore work with new products, as required for original installation, and in accordance with requirements of Contract Documents.
  - J. Fit work air and watertight to adjacent elements and around penetrating elements.
- 3.16 MINOR DEMOLITION OPERATIONS:
- A. General:
    1. Comply with precautions and procedures specified in General Conditions and Division Seven.
    2. Cut and remove materials as designated on Drawings.
    3. Execute demolition in a careful and orderly manner with least possible disturbance or damage to adjoining surfaces and structure.
    4. Avoid excessive vibrations in demolition procedures that would be transmitted through existing structure and finish materials.
  - B. ABANDONED EQUIPMENT CURBS SUPPORTS AND VENTS:
    1. Completely remove abandoned curb supports.
    2. Remove abandoned piping and vent penetrations, electrical conduit and switch gear. Cap-off at roof deck level.
  - C. ABANDONED CURBS/EQUIPMENT DEMOLITION:
    1. Completely remove existing abandoned curbs and/or equipment.
    2. Remove curbs to deck level, and patch hole in roof deck to match existing roof deck.
  - D. PITCH PANS:
    1. Remove existing pitch pans and wood blocking supporting piping.
    2. Remove existing pitch pans at conduit and pipe penetrations.
    3. Remove existing pitch pans and wood blocking supporting at mechanical equipment.
  - E. ROOF DRAINS:
    1. Replace all existing (or missing) drain strainers and clamping rings with new. New clamping ring and strainer colors to be submitted to and approved in writing by Owner.
    2. Clean, prime, and paint existing drain bowl assemblies. Existing drain bowls found to be damaged must be documented by the Contractor and submitted in writing to both the Owner and Consultant for review and approval, prior to commencement of potential repair or replacement work.
    3. Tap and die existing drain bowls as necessary for new bolt connections to ensure drain flashings and new clamping rings are adequately sealed and made watertight.
    4. All roof drains are to be water tested for potential leaks/blockages prior to construction. All findings shall be documented and reported to the Owner and Owner's Consultant. Any leaks/blockages found during construction that were not reported by the Contractor, prior to construction, will fall under the responsibility of the Contractor to repair and/or replace any parts as necessary at no expense to the Owner.
    5. Contractor to confirm drain bowls, clamping rings, and associated bolts/accessories are intact and in working order. All broken/damaged components that could compromise the integrity of the drain assembly shall be documented and reported to the Owner and Owners Consultant prior to construction.
    6. Lower drain to the roof deck as necessary to provide for sump.
    7. Securely tighten clamping rings and securely install strainers.















and other relevant parties to observe preparation of mock-ups and to witness adhesion test.

6. Obtain Architect, Owner, Consultant, or other authorized representative's approval of mock-ups.
7. Retain mock-ups to establish intended standards by which coating will be evaluated.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. The product delivery, storage, and handling requirements of Specification Section 07 5300 – EPDM Membrane Roofing apply to this section.
- B. Owner/owner's representative shall reject damaged or non-conforming materials. Rejected materials must be removed immediately from the job site
- C. Delivery: Deliver manufacturer's unopened containers to the work site. Packaging shall bear the manufacturer's name, label, and the following list of information.
  1. Product name, and type (description).
  2. Application and use instructions.
  3. Surface preparation.
  4. VOC content.
  5. Environmental handling.
  6. Batch date.
  7. Color number.
- D. Storage: Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.
- E. Store the coating materials as recommended by the manufacturer and conforming to applicable safety regulatory agencies: town or city, state, and federal. Refer to all applicable data including, but not limited to: Safety Data Sheets, Product Data Sheets, product labels, and specific instructions for personal protection.
- F. Provide adequate ventilation, protection from hazardous fumes, and overspray potential to workers and associated trades in close proximity of the site application.
- G. Store materials in an area that is within the acceptable temperature range, per manufacturer's instructions. Protect from freezing.
- H. Handling: Maintain a clean, dry storage area, to prevent contamination or damage to the coatings.

#### 1.6 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results.
- B. Do not install products under environmental conditions outside manufacturer's recommended limits.
- C. These minimum recommendations for material usage are for ideal conditions. The number of gallons per 100 square feet may need to increase due to uneven application, rough surface texture, wind conditions when spraying or other variables.
- D. Structural cracks should be referred to the appropriate Technical Consultant representative for the manufacturer.
- E. Do not apply materials unless surface to receive Weatherproofing System is clean and dry.
- F. Install all material in strict accordance with all published safety, weather, or applicable regulations of the manufacturer and/or local, state, or federal agencies which have jurisdiction.
- G. This installation guide specification assumes that the walls and substrates are structurally sound and stable.
- H. The entire system shall be fully adhered to the surface on which it is applied. Voids left under the system by creating bridges are not acceptable.
- I. Do not proceed with application of coating or sealing materials when surface temperature is less than 40°F or if frost or moisture is present on the surface to be coated. No coating system shall be applied if weather will not permit it to dry prior to exposure to precipitation or freezing temperatures.
- J. Instructions for use of all materials and application equipment should be read and followed at

- all times.
- K. Application not recommended to surfaces above 120° F (49° C). The time to complete cure of this product is dependent upon temperature and humidity. Under basic conditions [72 °F (22° C) and 50% RH] this material can attain a tack-free surface in 1-2 hours. As temperatures drop towards freezing, application should proceed with caution due to the possibility of moisture (dew, frost) on surfaces to be coated as well as longer curing times relative to application of a second or touchup coat (recoat), (and vice versa as temperatures increase).
- L. When spraying coating in windy conditions, take precautionary measures to avoid excessive overspray. It is suggested to withhold spraying when wind speeds exceed 10 mph.
- M. Prior to application, ensure that a minimum of 4 hours of adequate temperature and cure time are available when inclement weather is predicted. Contact manufacturer technical services for additional time-related precautionary measure when application is proceeding under winter temperatures and conditions.

## 1.7 WARRANTY

- A. Provide maximum Manufacturer's standard material warranty in which manufacturer agrees to repair or replace architectural coating that demonstrates deterioration or failure within warranty period specified due to material failure under normal use, as available.
  - 1. Minimum Warranty Period:
    - a. Silicone: A ten (10) year material to be supplied by product manufacturer.
  - 2. Contractor must be eligible for and make application to manufacturer for warranty, prior to the start of the work under this section
- B. Workmanship Warranty: The Contractor shall warrant all materials and workmanship furnished for a period of two (2) years from the date placing the Work in service regardless of the terms of any manufacturer or supplier warranties. This warranty is in addition to and not a replacement of Owner's statutory rights under Colorado law to discover a construction defect and take action to correct same.

## 1.8 EXTRA MATERIALS

- A. Furnish extra coating materials from the same production run as the materials applied and, in the quantities, described below. Package with protective covering for storage and identify with labels describing contents. Deliver extra materials to Owner.
- B. Furnish Owner with an additional one percent of each material and color, but not less than 1 gal (3.8 l) or 1 case, as appropriate.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS AND MATERIALS

- A. Silicone Elastomeric Coating:
  - 1. One-component, high-adhesion, high-solids, elastomeric moisture-curing silicone, UV resistant coating system.
  - 2. Approved Systems and Manufacturers:
    - a. Basis of Design: Gaco Coatings GacoFlex S42 100% Silicone Coating.
    - b. Approved equivalents.
  - 3. Requests for substitutions will be considered in accordance with provisions of Section 01 2500 – Substitution Procedures.
  - 4. Properties, As Supplied:
    - a. Solids Content, By Volume, ASTM D2697: 95 percent.
    - b. Solids Content, By Weight, ASTM D1644: 96 percent.
    - c. Volatile Organic Content (VOC), EPA Method 24: <50 g/L.
  - 5. Properties, As Cured:
    - a. Tensile Strength at 0 deg. and 73 deg. F, ASTM D2370: 275 psi.
    - b. Elongation at Break at 0 deg. and 73 deg. F, ASTM D2370: 196 percent.
    - c. Tear Resistance (Die C), ASTM D624: 24 lbs/inch.
    - d. Water Vapor Permeability (20 Mils DET) ASTM E96: 6.40 perms

- e. Water Swelling, Mass %, ASTM D471: 0%
- f. Color: to best match existing coating or concrete substrate.
  - 1) Tan or Oyster as selected and approved by Owner.
- 6. Primer: Compatible with surfaces and coating. Approved by manufacturer. Not all coating applications require the use of a primer. Verify coating adhesion to substrate as specified under Field Quality Control in Part 3-Execution.
- 7. Requests for substitutions will be considered in accordance with the provisions of Section 01 2500 – Substitution Procedures.
- 8. Contractor to procure additional material for rough or irregular surfaces.
- 9. Coating Properties, As Supplied:
  - a. Solids Content, By Volume, ASTM D2697: 80 percent.
  - b. Volatile Organic Content (VOC): 150 g/L < 250 g/L max for roof coatings.
- 10. Coating Properties, As Cured:
  - a. Flash Point, ASTM D56 (closed cup): 100 deg. F
  - b. Hardness, ASTM D2240: 90 +/- 5 Shore A.
  - c. Hardness at 70 deg. F, ASTM C836: 77 Shore A.
  - d. Tear Resistance, ASTM D624: 360 lbs/inch.
  - e. Tensile Strength, ASTM D412: 2600 psi.
    - 1) Elongation: 350 percent.
    - 2) Permanent Set at Break: 7% max.
  - f. Water Vapor Permeability, ASTM E96 Procedure B max 100% RH difference at 73 deg. F: 0.02 perm inches
- 11. Color: to best match existing coating or concrete substrate.
  - a. Oyster or Adobe as selected and approved by Owner.
- 12. Primer: Compatible with substrate surfaces and coating as required by manufacturer.
  - a. Three component (Parts A, B & water), 32% volume solids, waterborne-epoxy penetrating sealer and primer used to promote adhesion of elastomeric coatings.

## 2.2 APPLICATIONS/SCOPE

### A. Exterior Coatings:

- 1. Exposed concrete curbs, louver vent caps, and coated areas of perimeter walls; including horizontal slab and vertical edge faces above roof membrane system.

### B. Coatings:

- 1. Unless otherwise indicated, provide factory-mixed coatings. When required, mix coatings to correct consistency in accordance with manufacturer's instructions before application. Do not reduce, thin, or dilute coatings or add materials to coatings unless such procedure is specifically described in manufacturer's product instructions.
- 2. For opaque finishes, tint each coat including primer coat and intermediate coats, one-half shade lighter than succeeding coat, with final finish coat as base color. Or follow manufacturer's product instructions for optimal color conformance.

## 2.3 ACCESSORIES AND RELATED MATERIALS

### A. Adhesives, thinners, architectural sealants, primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials and similar materials shall be approved by the manufacturer of the coatings. All materials used shall be applied in accordance with the manufacturer's recommendations.

### B. Elastomeric Sealants

- 1. Silicone:
  - a. Butter grade, one-part moisture cure sealant consisting of silicone rubber
  - b. Standard grade, one-part moisture cure sealant consisting of silicone rubber
  - One-component, high-strength, neutral cure silicone sealant.
  - c. Fibered grade, one-part moisture cure sealant consisting of silicone rubber

### C. Concrete repair material: Acrylic Resurfacer / Modified Topping over structurally sound concrete to repair damaged or worn concrete surface.

- 1. Basis of Design: GacoFlex A-17 GacoCrete Acrylic Resurfacer

2. Applied Product Properties:
  - a. Solids content, %: 46 to 48
  - b. pH, when packed: 9.5 to 10.0
  - c. Specific gravity: 1.059
  - d. Pounds per gallon: 8.8
  - e. Freeze/thaw stability: 5 cycles
  - f. Minimum film-formation temperature: 50°F (10°C)
3. Cement Type: Type I Portland cement (Cement marked "Type I & II" is also acceptable).
4. Silica Type: Washed and Graded (40 – 50 Mesh) – available in approx. 100 lbs (45.4 kg) container.
5. Primer as recommended by the manufacturer.

## **PART 3 - EXECUTION**

### **3.1 MANUFACTURER'S INSTRUCTIONS**

- A. Compliance: Comply with manufacturer's product data, including product technical bulletins and product installation guide specification instructions.

### **3.2 EXAMINATION**

- A. Do not begin installation until substrates have been properly prepared; notify Owner and Owner's Representative of unsatisfactory conditions before proceeding. If substrate preparation is the responsibility of another installer, notify Owner and Owner's Representative of unsatisfactory preparation before proceeding.
- B. Inspect surfaces which will receive the Weatherproofing System to make sure they are clean, smooth, sound, properly prepared, and free of moisture, dirt and debris.
- C. Verify that all penetrations, flashings, and other items are in place and secure.
- D. Verify that all critical areas around the immediate vicinity of the spray area are suitably protected.
- E. Proceed with work only after conditions have been corrected and approved by all parties, otherwise application of coatings will be considered as an acceptance of surface conditions.
- F. Previously Painted/Coated Surfaces: Verify that existing painted surfaces do not contain lead based paints, notify Owner and Owner's Representative immediately if lead based paints are encountered.

### **3.3 SURFACE PREPARATION**

- A. General: Prepare surfaces in accordance with manufacturer's instructions.
- B. Remove dirt, dust, oil, grease, rust, mildew, chalk, efflorescence, concrete laitance, concrete form release agents, concrete curing compounds, loose particles, other bond breaking contaminants, and unsound materials.
- C. All existing coatings and sealants and paints of unknown composition are to be removed prior to new coating system application to not impede adhesion and performance of the new system. New sealants and associated backing materials to be applied in accordance with manufacturer installation instructions prior to new coating application.
- D. All related metal work that is to receive coating shall be clean, sound and oil-free. Prime ferrous metal with Water Based Rust-Inhibitive Primer.
- E. Solvents shall not be used on concrete without consulting with manufacturer technical services. Concrete must be free of release agents, curing compounds, or other adhesion inhibiting contaminants.
- F. Allow concrete and mortar to cure for a minimum of 30 days before coating.
- G. Repair deteriorated concrete with resurfacing material in strict accordance with manufacturer instructions. Fill cracks and holes with approved patching materials and sand smooth.
  1. Apply latex modified cementitious overlay system to provide hard durable surface for coating application. Prepare, mix, prime, and apply repair materials at coverage rate specified by the manufacturer.
  2. All cracks greater than hairline width, approximately 1.5 mm (1/ 16 inch), must be ground out and patched with elastomeric sealant, or an appropriate masonry patching compound.

3. Structural cracks of any thickness must be repaired with approved material and stabilized to prevent movement.
- H. Protect surrounding areas and surfaces not intended to be coated from damage during surface preparation and application.
1. Misapplied uncured or partially cured coating on non-porous surfaces shall be removed by wiping with dry cloths, or cloths wet with mineral spirits followed by dry cloths. Cured coating may be removed from nonporous surfaces such as glass or metal by razor scraping. Removal from porous surfaces such as stone, concrete or wood should be attempted as described above for nonporous surfaces. It may be necessary to abrade, sandblast or sand the cleaned porous surface to remove all traces of coating residue. Plants and animal life should be removed from exposure or provided with positive protection from overspray or misapplication of coating.
  2. Removal of misapplied coatings is the responsibility of the applicator.
  3. After the coating is applied, the contractor shall remove all masking and other protection and clean up any remaining defacement caused by this work

### 3.4 APPLICATION

- A. Technical Advice: The installation of this system shall be accomplished in the presence or with the advice of the manufacturer's technical representative.
- B. General Notes:
1. Apply all coatings and materials with the manufacturer's specifications in mind. Mix and thin coatings according to manufacturer's recommendations.
  2. Apply coatings using methods recommended by manufacturer.
  3. Uniformly apply coatings without runs, drips, or sags, without brush marks, and with consistent sheen.
  4. Apply coatings at spreading rate required to achieve the manufacturer's recommended dry film thickness.
  5. Regardless of number of coats specified, apply as many coats as necessary for complete hide, and uniform appearance.
  6. Inspection: The coated surface must be inspected and approved by the Owner and Owner's Representative just prior to the application of each coat.
- C. Ensure surfaces to receive coating are clean, dry, structurally sound, and free of frost and frozen materials. As temperatures drop towards freezing, application should proceed with caution due to the possibility of moisture (dew, frost) on surfaces to be coated as well as longer curing times relative to application of a second or touchup coat (recoat).
- D. Silicone Coating:
1. Apply uniform, pinhole-free coating at spreading rate required to achieve a total minimum dry film thickness of 18 mils. Apply coating in accordance with manufacturer's instructions.
    - a. Detail all cracks, transitions, or deficiencies in concrete substrate with butter grade, standard grade, fiber grade or three-course detailing as recommended by the Manufacturer.
    - b. Apply one (1) coat of high-solids Silicone Coating at the average rate of 1.25 gal / 100 ft<sup>2</sup> (4.7 L / 9.25 m<sup>2</sup>) to obtain 20 mil Wet Film Thickness (WFT) / 18 mil Dry Film Thickness (DFT). Coat all surfaces. At all edges and penetrations, an extra pass must be applied.
    - c. Apply architectural coating from top to bottom of substrate. Work down vertical surface and cover rundown in process. Avoid excessive overlapping.
    - d. Apply architectural coating free of cloudiness, spotting, laps, brush marks, roller tracks, and other surface imperfections. Cut in color breaks and terminations with sharp lines.
    - e. Apply additional coats as required to provide cured film with uniform coverage, finish, color, and appearance.
    - f. Do not dilute coating without consulting with manufacturer technical services.
- E. Keep containers closed when not in use to avoid contamination.

- F. Apply primer, if required, on wood and metallic surfaces in accordance with manufacturer's instructions. Allow primer to dry before applying coating.
- G. Avoid over spray of coating. Over spray and misapplied coating should be removed immediately in accordance with manufacturer's instructions while it is still uncured. Repair or replace surfaces damaged by overspray or misapplied coating as determined by Architect
- H. Sealant Application:
  - 1. Remove and dispose of existing sealant joints and backing material. Ensure profile of substrates are cleaned and prepared to allow for application of new sealants.
  - 2. If the depth of a joint exceeds ½ inch, use a dry, non-asphaltic back-up filler material.
  - 3. Prime joint substrates as recommended by the manufacturer.
  - 4. Apply and tool sealant in strict accordance with manufacturer recommendations.
  - 5. Before curing, excess sealant can be removed with a damp cloth. After curing, it may be cut or scraped away.
- I. Primer Application:
  - 1. Apply in strict accordance with manufacturer recommendations.
  - 2. May be applied by spray, brush, or roller.
  - 3. All surfaces must be clean, dry, and free of dirt, grease, oil, or other contaminants that would interfere with proper adhesion.
  - 4. Apply at temperatures above 50°F.
  - 5. Apply only when weather conditions will permit drying before rain, dew or freezing temperatures.
  - 6. Cool temperatures and high humidity retard cure.

### 3.5 FIELD QUALITY REQUIREMENTS

- A. Manufacturer's Field Services: Inspection by the coating manufacturer's representative shall be made to verify the proper installation of the system. Any areas that do not meet the minimum standards for application as specified herein shall be corrected at the contractor's expense. Manufacturer's inspection or verification shall not constitute acceptance of responsibility for any improper application of material.
  - 1. Inspections: A minimum of three (Substrate, Application and Final) Inspections, by an approved manufacturer's representative, will be required on all projects requiring a warranty.
- B. Verify total dry film thickness of applied coating in accordance with specified requirements using a dry film gauge. Coating thickness may be verified by measuring the thickness of the cured coating piece with a micrometer.
- C. Visually assess coating for film characteristics or defects that would adversely affect performance or appearance.
- D. Verify coating adhesion to substrate following full cure.
  - 1. If the Contractor submitted an alternate equivalent product that was accepted, adhesion testing prior to construction is required and will be the responsibility of the Contractor.
  - 2. After substrate preparation, apply one coat at 6-8 wet mils in an unobtrusive area.
  - 3. While the coating is still wet, embed a 1" x 6" length of mesh screen / piece of gauze into the coating leaving an approximate 2" tab accessible for hand pull. Allow product to become tack-free.
  - 4. Once the first coat is tack-free, apply a second coat at 6-8 wet mils over the mesh screen / gauze. Allow product to cure for 72 hours before performing adhesion testing.
  - 5. Grasp the mesh screen / gauze tab and pull it away from the surface at a 90-degree angle. Pull until it tears cohesively (or releases from the surface) and photograph / document results. Good adhesion will be evidenced by breaking of coating film. Touch up adhesion test area with more coating.
  - 6. Refer to manufacturer technical services for any questions.
- E. Any variations from the specified limits found by the Applicator or owner's representative shall be corrected by the Applicator.

- F. Minimum dry film thickness (DFT) requirement:
1. The contractor is to add a 10 % variance factor to meet the minimum Dry Film Thickness (DFT) mil requirement. It is the Applicator's responsibility to calculate the amount of coating needed to obtain the minimum Dry Film Thickness (DFT) mil thickness.

### 3.6 CLEANING

- A. Surfaces not intended to receive elastomeric coating materials shall be protected during the application of the system. If this protection is ineffective or not provided, the respective surfaces shall be restored to their proper conditions by cleaning, repairing, or replacing at no additional cost to the Owner. All debris from completion of work shall be completely removed from the project site.
- B. Remove temporary coverings and protection of surrounding areas and surfaces.

### 3.7 PROTECTION

- A. Protect finished coatings from rain or damage until fully cured.
- B. No traffic or material storage shall be permitted on the coated surface for a minimum of three (3) days. Damage to the surface by other trades shall not be the responsibility of the Applicator.
- C. Protect finished coatings from damage throughout work until the completion of the project.
- D. Touch-up damaged coatings after substantial completion, following manufacturer's recommendation for touch up or repair of damaged coatings. Repair any defects that will hinder the performance of the coatings.

**END OF SECTION 07 1813**





- A. Polyisocyanurate Insulation Composite Board with Coated Glass Facers.
1. Cover Board Insulation:
    - a. ASTM C1289, Type II, Class 4, Grade 1 (80-psi) minimum, Standard Specification for Polyurethane and Polyisocyanurate Roof Insulation.
  2. Base Insulation:
    - a. ASTM C1289, Type II, Class 2, Grade 2 (20-psi) minimum, Standard Specification for Polyurethane and Polyisocyanurate Roof Insulation.
  3. Maximum board size to be 48-inches x 48-inches in size.
  4. Insulation board thicknesses:
    - a. High Density Board: 0.5-inches.
    - b. Insulation Board: 2.5-inches.
    - c. Total Board Thickness: 3.0-inches.
  5. Minimum composite board thermal resistance value:
    - a. R-16.9
  6. Approved flat polyisocyanurate insulation are:
    - a. Carlisle – SecurShield HD Composite
    - b. Elevate – ISOGUARD HD Composite
    - c. Johns Manville – ProtectoR HD Cover Board adhered with low-rise foam to ENRGY 3 CGF Polyisocyanurate insulation. Refer to 2.1.B and 2.1.C below.
- B. Flat High Density Polyisocyanurate Insulation with Coated Glass Facers:
1. ASTM C1289, Type II, Class 4, Grade 1 (80-psi) minimum, Standard Specification for Polyurethane and Polyisocyanurate Roof Insulation.
  2. ASTM D1621 Standard for Compressive Properties of Polyisocyanurate Roof Insulation.
  3. FM Severe Hail Rating (SH)
  4. Overall Thickness: Zero-point-five inches (0.5-inches) thick.
  5. Maximum board size: 48-inches x 48-inches.
  6. Minimum R-Value: 2.5.
  7. Approved flat high density polyisocyanurate insulation are:
    - a. Carlisle – SecurShield HD Polyisocyanurate
    - b. Elevate – ISOGARD HD Cover Board.
    - c. Johns Manville – ProtectoR HD Polyisocyanurate
- C. Flat and Fully Tapered Polyisocyanurate Insulation with Glass Facers:
1. ASTM C1289, Type II, Class 1 Standard Specification for Polyurethane and Polyisocyanurate Roof Insulation.
  2. Fill Taper Board Thickness: Maximum thickness of fill boards is 2-inches thick with a maximum board size to be 48-inches x 48-inches in size.
  3. Taper Slope shall be by the design documents to provide positive drainage off of the roof surfaces. Typical slopes are:
    - a. ¼-inch to 12-inches slope.
    - b. ½-inch to 12-inches slope.
  4. Minimum Board Thickness:
    - a. Zero-point-five-inch (0.5-inch) thick.
  5. Approved taper polyisocyanurate insulation are:
    - a. Carlisle – SecurShield Flat and Tapered Polyisocyanurate
    - b. Elevate – ISOGUARD GL Flat and Tapered Polyisocyanurate
    - c. Johns Manville – ENRGY 3 CGF Flat and Tapered Polyisocyanurate

## 2.2 TAPERED OVERLAY CRICKETS:

- A. Where shown on drawings and behind the high side of all roof curbs.
- B. Tapered Polyisocyanurate Overlay Crickets with Glass Facers:
  - 1. ASTM C1289, Type II, Class 2 Standard Specification for Polyurethane and Polyisocyanurate Roof Insulation.
  - 2. Minimum Thickness: ½-inch or one slope greater than the existing roof slope, whichever is more stringent.
    - a. Tapered Insulation panels are to be pre-fabricated sloped panels with a slope of ½-inch to 12-inches slope (where indicated on roof plans and at the high side of all curbs).
    - b. Install 6-inch T.E.S. (tapered edge strip) at the low side of the tapered crickets.
  - 3. Approved cricket polyisocyanurate insulation are:
    - a. Carlisle – SecurShield Tapered Polyisocyanurate
    - b. Elevate – ISOGUARD GL Tapered Polyisocyanurate
    - c. Johns Manville – ENRGY 3 CGF Tapered Polyisocyanurate

## 2.3 ACCESSORIES

- A. Tapered Edge Strip (TES):
  - 1. 1½-inch x 18-inch tapered edge strip (at high side of roof curbs, at scuppers/roof drains, etc.)
  - 2. ½-inch x 6-inch tapered edge strip at start of taper cricket system.
- B. Low-Rise Foam Insulation and Cover Board Adhesive:
  - 1. Two-part manufacturer provided Low Rise, Low VOC foam adhesive in cartridges, 5-gal jugs, 15-gal drums, or 50-gal drums for installation of polyisocyanurate insulation, tapered insulation, and cover board:
    - a. Carlisle – Flexible FAST Adhesive.
    - b. Elevate – I.S.O. Spray R Adhesive.
    - c. Johns Manville – JM Two-Part Urethane Insulation Adhesive

## PART 3 - EXECUTION

### 3.1 SUBSTRATE EXAMINATION:

- A. Verify that deck/substrate is dry, clean, smooth and free of sharp edges, burrs, deep depressions, loose material, oil, grease or other foreign material.
- B. Verify proper placement of all roof openings, pipes, curbs, sleeves, ducts, vents and drains.
- C. Beginning installation means acceptance of all existing surfaces conditions.

### 3.2 SUBSTRATE PREPARATION:

- A. Comply with manufacturer's instructions for preparation of substrate to receive elastomeric sheet roofing.
- B. Preparation (or removal) of existing roof insulation.
- C. Metal Roof Decks:
  - 1. Remove existing roof membrane, wood fiber board, and insulation, down to the existing metal roof deck. Prepare the existing metal roof deck to receive the proposed new roof assembly.
- D. Clean substrate of dust, debris, and other substances detrimental to elastic sheet roofing work.
- E. Beginning of installation means acceptance of conditions as satisfactory.
- F. Remove old membrane flashings, pitch pans, metal and lead flashings.
- G. A positive slope is recommended to provide adequate drainage. No ponding water should remain on the roofing system 48 hours after rain has stopped.



**SECTION 07 5300  
EPDM MEMBRANE ROOFING**

**PART 1 - GENERAL**

1.1 SECTION INCLUDES

A. Membrane Installation:

1. Furnish and install new fully adhered 0.060-inch (60 mil) non-reinforced Black EPDM roof membrane with factory applied seam tape.

B. Membrane Flashing:

1. Furnish and install new elastomeric roof flashings per contract documents and manufacturers requirements.

C. Install new 6-inch "semi-cured" cover tape over all vertical and horizontal EPDM seams.

D. Installation of new EPDM base, curb, and penetration flashings.

1.2 RELATED SECTIONS:

A. Section 06 1000 – Rough Carpentry.

B. Section 06 1600 – Roof Sheathing.

C. Section 07 0150 – Minor Demolition, Renovation Work, and Roof Recover Preparation.

D. Section 07 6200 – Sheet Metal Flashing and Trim.

1.3 SUBSTITUTIONS

A. Substitutions shall comply with procedures specified in Division One.

1.4 SEQUENCING AND SCHEDULING

A. Coordinate work with owner so as to not disrupt tenants.

B. Access to roof areas for construction, disposal, etc., will be as directed by the owner.

C. Coordinate the work of installing associated metal flashing while roofing operations proceed.

1.5 REFERENCES

A. ASTM D4637-87 Standard Specification for Vulcanized Rubber Sheet Used in Single-Ply Roof Membrane.

B. Underwriters Laboratories, Inc. (UL).

C. Local and National Regulatory Agencies.

D. ICC Evaluation Service Reports.

1.6 SYSTEM DESCRIPTION

A. EPDM Membrane Roofing System – Fully Adhered.

1.7 QUALITY ASSURANCE

A. All materials used in the Work shall meet the requirements of the respective Specification and shall be new materials and no material shall be used until it has been approved by the Owner. All materials not otherwise specifically indicated shall be furnished by the Contractor.

B. Current proof of Installers status letter from the proposed Manufacturer, showing that the installer is a:

1. Carlisle Centurion Contractor.
2. Elevate Master Contractor.
3. Johns Manville Summit Level Contractor.

C. Installer:

1. Roofing Contractor shall be approved in writing by manufacturer of accepted roofing system prior to submitting bid for the project.
2. Contractor must have completed a minimum of ten (10) 0.060-inch (60 mil), manufacturer warranty issued, installations, within the last 10-years, prior to bidding this project.

- a. **Additive Alternate #1 Only** – Contractor must have completed a minimum of ten (10) 0.090-inch (90 mil), manufacturer warranty issued, installations, within the last 10-years, prior to bidding this project.
- 3. A single Installer with a minimum of 10-years previous successful experience in installation of similar systems with five (5) roofs of like size completed within the past 2-years.
- D. A technical representative of the approved manufacturer shall visit the job site on a weekly basis during the application of the roofing system to confirm its application is proceeding in compliance with the specifications and in a manner that will permit issuance of the specified manufacturer's system warranty.
- E. Upon completion of the installation and the delivery to the manufacturer by the Installer of a certification that all work has been done in strict accordance with the contract specifications, building permit, and the manufacturer's requirements, an inspection shall be made by a Technical Representative of the manufacturer to review the installed roof system.
- F. There shall be no deviation made from the Project Specification or the approved shop drawings without prior written approval by the Owner, the Owner's Representative, and the manufacturer.
- G. All work pertaining to the installation of the manufacturer membrane and flashings shall only be completed by Installer's personnel trained and authorized by the manufacturer in those procedures.
- H. Daily Job Reports:
  - 1. Contractor is responsible for providing daily job reports which will include a minimum of the following information: Crew size, weather conditions, description of work completed, date, change order items, job problems, etc. Contractor will email daily job reports daily to the roof consultant.
- I. Work in this Section to conform to:
  - 1. Manufacturer's instructions.
  - 2. National Roofing Contractors Association (NRCA): Roofing Manual Consisting of:
  - 3. NRCA Roofing Manual: Membrane Roof Systems 2019
  - 4. NRCA Roofing Manual: Architectural Metal Flashing, Condensation & Air Leakage, and Reroofing 2022
  - 5. Sheet Metal and Air Conditioning Contractor's National Association (SMACNA): Architectural Sheet Metal Manual, 7 Edition, 2012.

## 1.8 CODE REQUIREMENTS

- A. The Installer shall submit evidence that the proposed roof system meets the requirements of the local building code, project code requirements, and has been tested and approved or listed by the following test organizations. These requirements are minimum standards and no roofing work shall commence without written documentation of the system's compliance, as required in the "Submittals" section of this specification.
- B. Governing Building Department is the Colorado Office of the State Architect, meeting all applicable local, state and national building code requirements. The Colorado Office of the State Architect has codified the 2021 family of "Codes" by International Code Council (ICC).
  - 1. 2021 International Existing Building Code.
  - 2. 2021 International Building Code.
    - a. Class A Exterior Fire Exposure Rating
    - b. Severe Hail (SH) exposure rating.
  - 3. 2021 International Energy Conservation Code.
- C. Roof Membrane shall meet or exceed the requirements of ASTM D4637, Type I, Grade I, Class U.
- D. Factory Mutual Research Corporation (FM) - Class 1-90 (for high wind exposure)
- E. Underwriters Laboratories, Inc. - Class A assembly
- F. ICC-ES ESR Report stating the roof system meets the wind loads defined on Drawing.

## 1.9 SUBMITTALS

### A. Shop Drawings:

1. Digitally submit, in PDF format, roof drawing indicating roof size, location and type of penetrations, perimeter and penetration details. Hard copies are to be available upon request at no expense to the Owner or Owner's Consultant. Indicate complete installation details of roofing and flashing, including roof slopes, flashing details, penetration details and accessories. Reproduced copies of the consultant's drawings and details do not constitute acceptable shop drawings.
  - a. Dimensioned shop drawings which shall include:
    - 1) Outline of roof with roof size and elevations above grade shown.
    - 2) Details of flashing methods for penetrations.
    - 3) Technical acceptance from approved Manufacturer.
2. Digitally submit, in PDF format, MSDS data directly to the owner for their files, on all roofing, insulation and flashing materials. Hard copies are to be available upon request at no expense to the Owner or Owner's Consultant.
3. Submit samples of:
  - a. Roof Membrane and Flashing: Three (3) pieces each, 12-inch x 12-inch, taken from rolls on the roof.
  - b. Insulation Board: Two (2) pieces, 6-inch X 6-inch.
  - c. Sheet metal in conjunction with roofing: Two pieces of each type, 4-inch X 4-inch.
  - d. Cover Tape: Two (2) pieces, minimum 3-inch wide.
  - e. Provide "Lot Numbers" from roll goods taken from rolls on the roof.

### B. Product Data:

1. Digitally submit, in PDF format, the latest edition of manufacturer's roofing and flashing specifications (deleting non-applicable information), including list of materials proposed for use, and manufacturer's data sheets for other products. Hard copies are to be available upon request at no expense to the Owner or Owner's Consultant.

### C. Progress Schedule Plan:

1. At the Pre-Construction Conference on site the Installer shall provide their Work Plan defining the areas they are to work from the start to the end defined by work week.
2. Submit a complete progress schedule and phasing plan indicating complete sequence of removal and replacement of roofing for each area.
3. Include roof plan with layout indicating amount of roof area included in each day's work.
4. Indicate dates for beginning and completing each activity.
5. Identify other related work affecting roof replacement and phasing.

### D. Warranty:

1. Submit specimen copy of contractor and/or manufacturer's roofing warranty with Product Data submittal, including evidence of application/approval for guaranty to maintain existing warranties.

### E. Manufacturer's Review:

1. Concurrent with Shop Drawings submittal; submit (in writing) roof manufacturer's review and acceptance of Contract Documents (plans, specifications, application requirements, etc.) and approval of Installer. Certifications by manufacturers of roofing and insulating materials that all materials supplied exceed the requirements of the identified ASTM and industry standards or practices.
2. Certification from the Installer that the system specified meets all identified code and insurance requirements as required by the Specification.

### F. Manufacturer's Reports:

1. Concurrent with Shop Drawing submittal; submit roof manufacturer's review of Contract Documents and acceptance of applicator.
- G. Maintenance Data:
1. Compile and submit maintenance instructions in accordance with General Provisions. Include complete manufacturer's instructions for periodic inspection and maintenance of roofing system, including precautions and warnings to prevent damage and deterioration to roofing system.
- 1.10 PRODUCT DELIVERY, STORAGE AND HANDLING
- A. Deliver materials in manufacturer's original, unopened containers or packages with labels intact and legible, including required fire resistance classification labels.
  - B. Materials utilized are to be newly manufactured and project specific. Materials with fabrication dates greater than three (3) months of age from the mobilization date for construction shall be marked and removed from the project site.
  - C. Store broken down stacked bundles and rolled goods on end on clean raised palleted platforms with weather protective covering. Load roof daily to prevent damage to the existing roof system. Visqueen/plastic is not an acceptable watertight material for protecting roof materials.
  - D. Provide continuous protection of materials against wetting and absorption; remove wet materials and marked materials that have been wet, from project site.
  - E. Materials loaded on roof levels for immediate (same week) use shall be:
    1. Broken down and distributed across the roof surface to prevent concentrated loads that would impose excessive strain on deck or structural members. Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of the deck.
      - a. Do not store more materials on roof than can be installed within two days.
      - b. Maximum Allowable Loading on Roof: 20 pounds per square foot.
    2. Positively secured to prevent displacement by excessive wind forces.
  - F. Deliver materials in sufficient time and quantity to allow continuity of work.
  - G. All materials, except membrane and metal, must be stored between 60° F and 80° F. If exposed to lower temperatures, restore at 60° F minimum temperature before using.
    1. Bonding adhesives, caulking, mastics, low-rise foams, etc. are not allowed to freeze. Materials exposed to prolonged freezing temperatures are to be marked and removed from the project site and replaced at no cost to the Owner.
  - H. Material rolls and bundles shall be stored lying down on pallets and fully protected from the weather and UV exposure with clean canvas tarpaulins. Unvented polyethylene tarpaulins are not accepted due to the accumulation of moisture beneath the tarpaulin in certain weather conditions that may affect the ease of membrane weldability.
  - I. Tarpaulins shall be installed in a manner that prevents ponding of moisture on top of and at the base of the stored materials goods and promotes positive drainage away from all stored materials.
  - J. Provide continuous protection of materials against wetting and absorption. All materials which are determined to be damaged (i.e. wet materials and marked materials that have been wet) by the Owner's Representative or the manufacturer are to be removed from the job site and replaced at no cost to the Owner.
  - K. All flammable materials shall be stored in a cool, dry area away from sparks and open flames. Follow precautions outlined on containers or supplied by material manufacturer/supplier.
  - L. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing manufacturer. Protect stored liquid material from direct sunlight.
    1. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.

## 1.11 JOB CONDITIONS

- A. Consult Material Safety Data Sheets (MSDS) for applicable cautions and warnings prior to the use of materials.
  - 1. Complete roof installation during dry weather on a roof surface that is free of ponded water, ice, or snow.
    - a. Proceed with roofing only when existing forecasted weather conditions are in compliance with manufacturer's recommendations and warranty requirements.
  - 2. Avoid traffic on completed work.
- B. Existing Conditions:
  - 1. Examine existing building and existing roofing to determine existing physical conditions that affect removal of existing roofing and installation of new roofing.
  - 2. Photographically document all work areas prior to starting the work.
- C. Only as much of the new roofing as can be made weathertight each day, including all flashing and detail work, shall be installed. Do not remove existing roofing and flashing in inclement weather or when rain is predicted (30% or more possibility). All seams shall be cleaned, and fully adhered together before leaving the job site that day.
- D. All work shall be scheduled and executed without exposing the interior building areas to the effects of inclement weather. The existing building and its contents shall always be protected against all risks at ALL times.
- E. All surfaces to receive new insulation, membrane, or flashings shall be dry. Should surface moisture occur, the Installer shall provide the necessary equipment to dry the surface prior to application.
- F. All new and temporary construction, including equipment and accessories, shall be secured in such a manner as to preclude wind blow-off and subsequent roof or equipment damage.
- G. Uninterrupted water-stops shall be installed at the end of each day's work and shall be completely removed before proceeding with the next day's work. Water-stops shall not emit dangerous or unsafe fumes and shall not remain in contact with the finished roof as the installation progresses. Contaminated membrane shall be replaced at no cost to the Owner.
- H. The Installer is cautioned that certain roof membranes are incompatible with asphalt, coal tar, heavy oils, roofing cements, creosote and some preservative materials. Such materials shall not remain in contact with the manufacturer membranes. The Installer shall consult the manufacturer regarding compatibility, precautions and recommendations.
- I. Arrange work sequence to avoid use of newly constructed roofing as a walking surface or for equipment movement and storage. Where such access is absolutely required, the Installer shall provide all necessary protection and barriers to segregate the work area and to prevent damage to adjacent areas. A substantial protection layer consisting of plywood over tarps or plywood over insulation board shall be provided for all new and existing roof areas that receive rooftop traffic during construction.
- J. Prior to and during application, all dirt, debris and dust shall be removed from surfaces by vacuuming, sweeping, blowing with compressed air and/or similar methods.
- K. The Installer shall follow all safety regulations as required by OSHA and any other applicable authority having jurisdiction.
- L. All roofing, insulation, flashings and metal work removed during construction shall be immediately taken off site to a legal dumping area authorized to receive such materials. Hazardous materials, such as materials containing asbestos, are to be removed and disposed of in strict accordance with applicable City, State and Federal requirements.
- M. All new roofing waste material (i.e., scrap roof membrane, empty cans of adhesive) shall be immediately removed from the site by the Installer and properly transported to a legal dumping area authorized to receive such material.
- N. The Installer shall take precautions that storage and/or application of materials and/or equipment does not overload the roof deck or building structure.
- O. Flammable adhesives and deck primers shall not be stored and not be used in the vicinity of open flames, sparks and excessive heat.





1. Base Bid:
    - a. The Manufacturer's Twenty-Year (20) No Dollar Limit (NDL) Total System Warranty for 60-mil EPDM membranes.
    - b. Warranty shall include hail up to 1.0-inch coverage with a 60-mil membrane.
  2. Additive Alternate #1:
    - a. The Manufacturer's Thirty-Year (20) No Dollar Limit (NDL) Total System Warranty for 90-mil EPDM membranes.
    - b. Warranty shall include hail up to 2.0-inch coverage with a 90-mil membrane.
  3. Warranty letter shall be issued covering all materials and workmanship including the following:
    - a. Repairs required to maintain roof and flashing in a watertight condition.
    - b. Make repairs at no expense to Owner.
    - c. Warranty coverage to include:
      - 1) All roof insulations, insulation fasteners, vapor retarders, membrane fasteners and adhesives.
      - 2) Roof membrane components and adhesives. All accessory products required for installation of membrane roofing system, including bonding adhesive, flashing membrane, stripping plies, clad metal, pipe boots, pourable sealant pockets, etc.
    - d. Warranty shall not exclude coverage, as a result of, small areas of standing or ponding water.
  4. Warranty shall not exclude coverage, as a result, of winds less than 72-mph basic wind speed.
  5. Pre-Engineered sheet metal detail shall be warranted by the manufacturer for a minimum 120 mph ultimate windspeed.
  6. Warranty shall not be limited by a dollar amount.
- C. Owner Responsibility
1. Owner shall notify both the manufacturer and the Installer of any leaks as they occur during the warranty time period when both warranties are in effect.

## PART 2 - PRODUCTS

### 2.1 ETHYLENE-PROPYLENE-DIENE-MONOMER SHEET ROOFING COMPONENTS

- A. Manufacturers of 0.060-inch (60 mil) and 0.090-inch (90 mil) Non-Reinforced EPDM Membrane:
1. Carlisle SynTec – Sure Seal EPDM SAT.
  2. Elevate – Rubbergard PT.
  3. Johns Manville – JM EPDM NR FIT.
- B. Membrane Material Type: Ethylene Propylene Diene Terpolymer (EPDM) Membrane.

Physical Properties	ASTM Test Method	Value
Typical Values Tensile Strength	D-412	
Before Aging*		1,500 psi
After Aging		1,650 psi
Elongation	D-412	
Before Aging		425%
After Aging		450%
Tear Resistance	D-624 Die C	275 lbs/in.
Dimensional Stability	D-1204 After Aging	1%

Brittleness Temperature	D-746	-
67° F Ozone Resistance	D-1149 (7 days @ 100pphm @ 104° F, 50% Ext.)	No Cracks @ 7X Mag.
Water Absorption	D-471 (7 days @ 158° F)	1%
Permanent Set @ Break	D-412	10%
Permeability (24 hours)	E-96 Proc. A	1.8g/m2
*Aging = 7 Days		

- C. Roof Flashing: Manufacturer's Uncured EPDM Membrane
- D. Accessories: Contact Manufacturer for a complete listing of accessories.

## 2.2 RELATED MATERIALS AND ATTACHMENT COMPONENTS

- A. Membrane flashings will be 0.060-inch (60 mil) thick EPDM.
- B. Russ-Strip:
  - 1. 6-inch pressure sensitive 45-mil reinforced EPDM membrane strip with a 3-inch wide adhesive strip along one side.
- C. Russ-Strip Plates:
  - 1. 2-inch round stamping of SAE 1010 steel with an AZ 55 Galvalume coating.
- D. Russ-Strip Fasteners:
  - 1. Number 15 (minimum) corrosion-resistant fastener with a buttress thread, used with seam fastening plates to attach the russ-strip to the appropriate vertical substrate:
    - a. Carlisle – HP-X Fastener
    - b. Elevate – Heavy Duty Fastener
    - c. Johns Manville – All Purpose Fasteners.
  - 2. Insulation fasteners protruding through an exposed roof decks SHALL best match the existing inside color of the roof deck.
- E. Bonding Adhesive for Horizontal and Vertical Membrane Application:
  - 1. Low-VOC, solvent-based contact adhesive for bonding of EPDM membranes to appropriate substrates, with the use of minimum 9-inch-wide medium nap rollers.
  - 2. Approved manufacturers are:
    - a. Carlisle – Low-VOC Bonding Adhesive.
    - b. Elevate – RubberGard EPDM Solvent-Free Bonding Adhesive
    - c. Johns Manville – JM LVOC Membrane Adhesive.
- F. Liquid Flashing:
  - 1. A two-component polyurethane-based resin or polymethyl methacrylate-based resin, cold-applied with a reinforced flashing fleece.
    - a. Carlisle – LIQUISEAL Liquid Flashing.
    - b. Elevate – UltraFlash One-Part Liquid Flashing.
    - c. Johns Manville – JM SP Liquid Flashing Resin.
- G. Seam Tape:
  - 1. Factory applied tape wherever possible (supplied by the roofing system manufacturer).
- H. Cover Tape:
  - 1. 6-inch Semi-cured self-adhered cover tape.
- I. Seam adhesive:
  - 1. Supplied by the roofing system manufacturer.

- J. Caulks and sealants for use at T-Joint laps, membrane laps, and terminations as supplied by the roofing manufacturer for use with the approved system.
- K. Pourable Sealer and Sealer Pockets:
  1. Pourable Sealer – A one-component or two-component, solvent-free, polyurethane-based product compatible with EPDM membranes.
  2. Sealer Pocket – A prefabricated pressure-sensitive sealer pocket for irregular and close grouped roof penetrations in conjunction with EPDM membrane systems.
  3. Refer to the manufacturer for additional materials and installation requirements to ensure watertight and warrantable conditions are met.
- L. Concrete Roof Paver:
  1. Refer to Section 07 0150 – Minor Demolition, Renovation Work, and Roof Recover Preparation.

## 2.3 MISCELLANEOUS ACCESSORIES

- A. Miscellaneous accessories for the project are as follows, but not limited to:
  1. Manufacturer Approved – Termination Bar, Prefabricated Vent Pipe Flashings, T-Joint Membrane Patches, Urethane Sealants, Prefabricated Inside and Outside Corner Flashings, Sealing Tape Strip, Multi-Purpose Tape, Solvent Cleaner, Caulking/Sealant.

## 2.4 MISCELLANEOUS FASTENERS AND ANCHOR

- A. All fasteners, anchors, nails, straps, bars, etc. shall be post-galvanized steel, aluminum or stainless steel. Mixing metal types and methods of contact shall be assembled in such a manner as to avoid galvanic corrosion. Fasteners for attachment of metal to masonry shall be expansion type fasteners with stainless steel pins. All concrete fasteners and anchors shall have a minimum embedment of 1¼-inch and shall be approved for such use by the fastener manufacturer. All miscellaneous wood fasteners and anchors used for flashings shall have a minimum embedment of 1-inch and shall be approved for such use by the fastener manufacturer.

## PART 3 - EXECUTION

### 3.1 SUBSTRATE CONDITION/EXAMINATION

- A. Installer shall be responsible for acceptance or provision of proper substrate to receive new roofing materials.
  1. Beginning installation means acceptance of all existing surfaces conditions.
- B. Installer shall verify that the work done under related sections meets the following conditions:
  1. Roof drains and/or scuppers have been reconditioned and/or replaced and installed properly.
  2. Roof curbs, nailers, equipment supports, vents and other roof penetrations are properly secured, prepared to receive new roofing materials, and have proper placement.
  3. All deck/substrate surfaces are dry, clean, smooth and free of sharp edges, burrs, deep depressions, loose material, oil, grease or other foreign material.
  4. All roof surfaces shall be free of water, ice and snow.

### 3.2 SUBSTRATE PREPARATION

- A. Comply with manufacturer's instructions for preparation of substrate to receive repair elastomeric sheet roofing.
- B. Preparation (or removal) of existing roof insulation, flashing, etc. down to the existing substrate.
- C. Inspect existing roof insulation, (that is scheduled to remain) and repair/replace all deteriorated/damaged roof insulation to ensure that the substrate is suitable to receive the new roofing system.
- D. Clean substrate of dust, debris, and other substances detrimental to elastic sheet roofing work.
- E. Beginning of installation means acceptance of conditions as satisfactory.

- F. Thoroughly clean all surfaces against or into which work will be installed. Ensure that all surfaces are clean and dry before starting and during performance of work. Follow roofing system manufacturer's recommendations.
- G. The roof deck and existing roof construction must be structurally sound to provide support for the new roof system. The Installer shall load materials on the rooftop in such a manner to eliminate risk of deck overload due to concentrated weight.
- H. Reroofing with Removal of Existing Roofing:
  - 1. All existing roofing, base flashing, deteriorated wood blocking or deteriorated metal flashings shall be removed down to the existing structural substrate diaphragm. Remove only that amount of roofing and flashing which can be made weathertight with new materials during a one-day period and before the onset of inclement weather.
  - 2. Exercise care in removal so as not to damage existing roof deck or adjacent surfaces.
  - 3. Do not stockpile debris on roof surface. Promptly remove debris each day. Use chutes to transfer debris from roof surface.
  - 4. Do not haul debris over newly installed roof membranes. Keep debris well downwind of prevailing wind.
  - 5. Provide a clean tarp over the previous days roofing, prior to tear-off start, to protect new roofing from dust, dirt, debris, etc., and from current days tear-off.
  - 6. Poured Structural Concrete Deck:
    - a. The roof deck shall be smooth, even, free of dust, dirt, excess moisture or oil and be structurally sound. Sharp ridges, other projections and accumulations of bitumen above the surface shall be removed to ensure a smooth surface before roofing. Any deteriorated decking shall be repaired.
  - 7. Poured Lightweight Structural Concrete Substrate:
    - a. The roof deck shall be smooth, even, free of dust, dirt, excess moisture or oil and be structurally sound. Sharp ridges, other projections and accumulations of bitumen above the surface shall be removed to ensure a smooth surface before roofing. Any deteriorated decking shall be repaired.
  - 8. Precast/Prestressed Concrete Deck:
    - a. The roof deck shall be smooth, even, free of dust, dirt, excess moisture or oil and be structurally sound. All joints between precast units shall be grouted. Any differentials in height between precast units shall be feathered for a smooth transition. Any deteriorated decking shall be repaired.
  - 9. Insulating Fill Substrate:
    - a. All wet or deteriorated insulating fill shall be removed and replaced. All accumulations of bitumen shall be removed, and the surface of the deck shall be smooth, and free of ridges and depressions. See steel/concrete requirements.

### 3.3 EPDM MEMBRANE APPLICATION

- A. Install elastomeric sheet roofing in accordance with manufacturer's current instructions.
- B. Loosely lay sheet membrane over roof insulation and allow the membrane to relax 30 minutes minimum before bonding, splicing or attaching. Evenly fold sheet back on itself after it is in its final position, to expose the underside. Apply bonding adhesive evenly to both the substrate and the membrane. Apply simultaneously to allow equal drying time; allow to dry until tacky (not to stick or string by touch of a dry finger). Starting at the fold, slowly roll the coated membrane into the coated substrate evenly, so as to prevent wrinkles. Compress with a clean stiff push broom to assure full contact. Splice adjoining sheets by lapping the edges and splicing with 3" splice tape.
- C. Over top of 3-inch taped splice, install one layer of 6-inch semi-cured cover-tape.
- D. Complete splice between flashing and sheet roofing before bonding the flashing to vertical surface. Flash all penetrations passing through the sheet membrane.
- E. Shingle joints on sloped substrate in direction of drainage.
- F. Extend membrane up onto vertical surfaces minimum required by roofing manufacturer.
- G. Seal membrane around roof penetrations.

- H. Temporarily seal any loose edges of membrane at the completion of each day's application to prevent moisture from entering the system.

### 3.4 FLASHING AND ACCESSORIES

- A. When feasible, flash all penetrations and walls with cured EPDM membrane. Uncured EPDM flashing shall be limited to; overlay vertical seams (as required at angle changes) or to flash inside and outside corners, scuppers, pourable sealer pockets, and other penetrations or unusually shaped walls where the use of cured membrane flashing is not practical. EPDM manufacturer's prefabricated accessories should be used whenever feasible.

- 1. Pourable Sealer Pockets:

- a. Pitch pans are not allowed.
- b. Sealer pockets filled with roof cement are not allowed.
- c. Sealer pockets with one-part or two-part pourable sealants produced by the manufacturer are allowed:
  - 1) Install only where specifically indicated or approved by Consultant.
  - 2) Fill with pourable sealant to below top of flange.
  - 3) Top off with pourable sealant creating a flow off non-ponding surface.

- B. Apply EPDM membrane flashing as recommended by the EPDM Manufacturer per their standard roofing details and project documents.

### 3.5 INSPECTION

- A. Verify that all work of subcontractors which penetrates the roof deck or requires men and equipment to traverse the roof deck, has been completed.
- B. Examine all surfaces for inadequate anchorage, foreign material, moisture, unevenness or other conditions which would prevent execution and quality of installation of specified roofing and flashing system and accessory items.

### 3.6 FIELD QUALITY CONTROL:

- A. Roofing Contractor's Quality Control:

- 1. During construction, contractor is to provide daily supervision of the project, performed by the contractor's field superintendent (not to be confused with the project foreperson who is to be on site at all times).
- 2. Contractor's project manager is to perform regular site inspections at the minimum rate of one site visit per week.
- 3. Upon completion of installation, contractor is to perform their own final inspection by their quality control person to confirm that roofing system has been installed in accordance with the construction documents and manufacturer's requirements. Contractor is to produce a written punch list and roof diagram of deficiencies found during their final inspection. Correct identified defects and/or irregularities. A copy of this punch list, diagram and signed completion letter along with confirming digital photos, will be provided to the consultant prior to the owner and consultant performing their final inspection.

- B. Manufacturer's Field Service:

- 1. Roofing system manufacturer shall provide on-site observation (a minimum of two site visits during installation) and instructions during installation, and as the manufacturer deems necessary.
- 2. Upon completion of installation, provide a final inspection by a technical representative of roofing manufacturer to confirm that roofing system has been installed in accordance with manufacturer's requirements. The roofing contractor, owner and roof consultant are required to be present for this inspection. The manufacturer is to produce a written punch list and roof diagram of deficiencies found during their final inspection. A copy of this punch list, diagram and signed completion letter, will be provided to the owner's roof consultant prior to the owner and consultant performing their final inspection. Consultant and owner to attend final inspection. Installer is responsible for notifying both the owner and consultant



**SECTION 07 6200  
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 01 Specification Sections, apply to this Section.

1.2 RELATED SECTIONS:

- A. Section 06 1000 – Rough Carpentry.
- B. Section 06 1600 – Roof Sheathing.
- C. Section 07 5300 – EPDM Membrane Roofing.

1.3 SECTION INCLUDES:

- A. Shop or field-formed sheet metal work for moisture protection including:
  - 1. Formed sheet metal work for moisture protection.
  - 2. Formed roof drainage sheet metal fabrications.
  - 3. Formed low-slope roof sheet metal fabrications.
  - 4. Formed flashing and counterflashing.
  - 5. Reglet flashing.
  - 6. Formed expansion-joint cover flashings.
  - 7. Miscellaneous sheet metal accessories.

1.4 ALTERNATES:

- A. Work specified in this Section may be affected by Alternates. Refer to General Conditions and the bid form.

1.5 REFERENCES:

- A. American Society for Testing and Materials (ASTM):
  - 1. ASTM A525 – Steel Sheet, Zinc-Coated (Galvanized), General Requirements.
  - 2. ASTM A526 – Steel Sheet, Zinc-Coated (Galvanized), Commercial Quality.
  - 3. ASTM B32 – Solder Metal.
  - 4. ASTM D4586 –Asphalt Roof Cement.
- B. Federal Specifications (GSA):
  - 1. GSA A-A-1922A – Single Lead Expansion Shield Anchor
  - 2. GSA A-A-1923A – External Fastener Expansion Shield Anchor
  - 3. GSA A-A-1924A – Self Drilling Expansion Shield Anchor
  - 4. GSA A-A-1925A –Nail-In Shield Expansion Anchor
  - 5. GSA A-A-55614 – Non-Drilling Expansion Shield Anchor
  - 6. GSA TT-S-00230C – Sealing Compound, Elastomeric Type, Single Component (For Caulking, Sealing and Glazing in Buildings and Other Structures).
    - a. Type II Class A Joint movement 50%.
- C. National Roofing Contractors Association (NRCA): Roofing Manual Consisting of:
  - 1. NRCA Roofing Manual: Architectural Metal Flashing, Condensation & Air Leakage, and Reroofing 2022
- D. Sheet Metal and Air Conditioning Contractor's National Association (SMACNA): Architectural Sheet Metal Manual, 7 Edition, 2012.
- E. Drawings



1.6 SUBMITTALS:

- A. Product Data: Submit manufacturer's product data sheets for each product in accordance with applicable Section.
- B. Shop Drawings:
  - 1. Submit in accordance with applicable Section.
  - 2. Show fabrication and installation layouts of sheet metal flashing and trim, including plans, elevations, expansion-joint locations, and keyed details. Distinguish between shop-assembled and field-assembled work. Include the following:
    - a. Identification of material, thickness, weight, and finish for each item and location in Project.
    - b. Details for forming sheet metal flashing and trim, including profiles, shapes, seams, and dimensions.
    - c. Details for joining, supporting, and securing sheet metal flashing and trim, including layout of fasteners, cleats, clips, and other attachments. Include pattern of seams.
    - d. Details of termination points and assemblies, including fixed points.
    - e. Details of expansion joints and expansion-joint covers, including showing direction of expansion and contraction.
    - f. Details of edge conditions, including eaves, ridges, valleys, rakes, crickets, and counter flashings as applicable.
    - g. Details of special conditions.
    - h. Details of connections to adjoining work.
    - i. Detail formed flashing and trim at a scale of not less than 3-inches per 12-inches.
  - 3. Contractor to provide their own "shop drawings" for review. Manufacturer's standard details, as well as, submission of contract documents will not be accepted as project specific shop drawings.

1.7 PERFORMANCE REQUIREMENTS

- A. General: Sheet metal flashing and trim assemblies as indicated to withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight.
- B. Wind Design: Fabricate and install parapet copings that are identical to systems that have been successfully tested by a qualified testing and inspecting agency to resist roof edge design pressure (P) as identified in ANSI/SPRI-ES-1, as calculated according to ASCE 7-16 strength design.
  - 1. Building Location: 1400 22<sup>nd</sup> Street, Greeley, CO 80631
  - 2. Roof Surface Height: 70'-0"
  - 3. Wind Speed: 115 mph Design 3-second Gust Wind Speed
  - 4. Exposure Category: C
  - 5. Occupancy Category: III – University
  - 6. Building Configuration: Enclosed
  - 7. Estimated Calculated Wind Design Ultimate Pressures: (Note: The Wind Up-lift Pressures identified below are being provided as a courtesy solely for bidding purposes. It is the responsibility of the Contractor to verify the accuracy of these estimates and to provide systems that resist the loads required by the applicable Building Code. These estimates do not constitute "engineering" studies and the use of the information provided below does not relieve the Manufacturer or the Contractor from providing and installing code compliant systems). The following design values are provided as strength design values in accordance with ASCE 7-16.
    - a. Low-slope Roof Area as designated by the design drawings.

1) Roof Field (Zone 1):	53.4 psf.
2) Roof Perimeter (Zone 2):	83.8 psf.
3) Roof Corner (Zone 3):	114.2 psf.

- 4) Wall Field (Zone 4): 43.2 psf.
- 5) Wall Corner (Zone 5): 66.9 psf.

C. Thermal Movements: Provide sheet metal flashing and trim that allows for thermal movements from ambient and surface temperature changes.

- 1. Temperature Change (Range):
  - a. 120 degrees Fahrenheit, ambient air temperature
  - b. 180 degrees Fahrenheit, material surface temperature

D. Water Infiltration: Provide sheet metal flashing and trim that will not allow water infiltration into the building interior.

## 1.8 WARRANTY:

A. Provide Owner a written warranty for the sheet metal work to be free of leaks and defects in materials and workmanship for two (2) years after date of completion and acceptance of project by owner.

- 1. The Contractor shall warrant all materials and workmanship furnished for a period of two (2) years for the date placing the Work in service regardless of the terms of any manufacturer or supplier warranties. This warranty is in addition to and not a replacement of Owner's statutory rights under Colorado law to discover a construction defect and take action to correct same.

B. Base Bid and Additive Alternate #1 – Provide Owner with manufacturer's twenty (20) year Warranty covering wind blow off, leaking, and membrane failure, up to and including, winds of 120 miles per hour ultimate wind speed on One-Edge fascia/coping system as defined within the project documents.

C. Special Warranty on Finishes: Provide sheet metal manufacturer's standard thirty (30) year Kynar coating warranty.

- 1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:
  - a. Color fading more than 5 Hunter units when tested according to ASTM D2244.
  - b. Chalking in excess of a No. 8 rating when tested according to ASTM D4214.
  - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
- 2. Finish Warranty Period: 30 years from date of Substantial Completion.

## 1.9 PRODUCT DELIVERY, STORAGE AND HANDLING

A. The product delivery, storage, and handling requirements of Specification Section 07 5300 – EPDM Membrane Roofing apply to this section.

## PART 2 - PRODUCTS

### 2.1 SHEET METAL MATERIAL:

- A. Galvanized Steel: ARMCO Zincgrip Paintgrip, ASTM A526 commercial quality, coating designation G90, ASTM A525, gauge as scheduled.
- B. Pre-Finished Metal: Kynar Coated 24-gauge (0.0276-inch) metal as scheduled. Color as selected by Owner.

### 2.2 FASTENERS:

- A. Nails: Galvanized steel material, 3/8-inch flathead, wire, barbed, slating type. For washers use silicone, EPDM, or neoprene.
- B. Screws: Self-tapping sheet metal type and wood screws, cadmium or zinc plated.
- C. Rivets: Stainless steel or aluminum material, type and size as recommended by sheet metal manufacturer.
- D. Concrete Fasteners: Round-head stainless steel screw and neoprene washer with "Nail-In" expansion anchor. Acceptable fasteners:

1. Powers Fasteners' Zamac Hammer-Screw

## 2.3 RELATED MATERIAL:

- A. Solder: ASTM B32, alloy grade 58, 50% tin, 50% lead.
- B. Flux: Phosphoric acid type, manufacturer's standard.
- C. Sealant: Polyurethane, GSA TT-S-00230C, Type II, Class A.
- D. Bituminous Plastic Cement: ASTM D4586, Type I, asbestos free.

## 2.4 FABRICATION – GENERAL:

- A. Fabricate work in accordance with SMACNA Sheet Metal Manual and reviewed Shop Drawings.
- B. Form sheet metal on bending brake.
- C. Shape, trim and hand seam metal on bench insofar as practicable.
- D. Make angle bends and folds for interlocking metal with full regard for expansion and contraction to avoid buckling or fullness in metal after installation.
- E. Form materials with straight lines, sharp angles and smooth curves.
- F. Fold back edges on concealed side of exposed edge to form a ½-inch hem.
- G. Weld or solder joints on parts that are to be permanently and rigidly assembled.

## 2.5 FABRICATED ITEMS:

- A. Pre-Manufactured One-Edge Fascia Metal:
  1. 24-gauge (0.0276-inch) Galvanized Kynar coated sheet steel; One-Edge ® by Metal-Era, as detailed, in minimum 12-foot lengths.
  2. Slotted Fastening Holes: 12 inches (305 mm) on center.
  3. Spring Clips: 6-inch (102-mm) width, 0.020-inch (0.508-mm) stainless steel, at 4'-0" (1.22 m) on center maximum.
  4. Face Size: 8-inches – Verify in field.
  5. Provide factory mitered corners, end-caps and end-terms.
  6. Lap joints and seal per manufacturer requirements.
  7. Pre-Manufactured One-Edge Retainer Bar:
    - a. 20-gauge (0.0375-inch) Galvanized formed retainer bar by Metal-Era, in minimum 12-foot lengths.
    - b. Provide factory mitered corners, end-caps and end-terms.
- B. Drip Edge/Eave and Gravel-Stop Edge Metal:
  1. 24-gauge (0.0276-inch) Galvanized Kynar coated sheet steel, in minimum 12-foot lengths.
  2. Lap joints and seal per SMACNA requirements.
- C. Cleat Metal:
  1. 20-gauge (0.03125-inch) Galvanized continuous steel, in minimum 12-foot lengths.
  2. Lap joints and seal per SMACNA requirements.
- D. Fascia Extender Metals:
  1. 24-gauge (0.0276-inch) Galvanized Kynar coated prefinished steel Formed Fascia Extender, in minimum 12-foot lengths.
  2. Lap joints and seal per SMACNA requirements.
- E. Through-Wall (and overflow) Scuppers:
  1. 24-gauge (0.0276-inch) Galvanized steel, SMACNA Figure 1-26 & 1-27, joints welded per manufacturer requirements.
- F. Counter flashings:
  1. 24-gauge (0.0276-inch) Galvanized Kynar coated prefinished sheet steel, formed in minimum 10 feet lengths.
- G. Roof Penetration Flashing Pipes:

1. 24-gauge (0.0276-inch) Galvanized Kynar coated prefinished sheet steel, in accordance with the design documents and per SMACNA Figures 8-8, 8-9, 8-10, and 8-11.
- H. Metal Penetration Dams:
1. Fabricate as detailed from 24-gauge (0.0239-inch) PVC coated steel.
- I. Umbrella Counter flashing:
1. 24-gauge (0.0276-inch) Galvanized sheet steel, similar to SMACNA Figure 8-9C, two-piece construction, fabricated as detailed.
- J. Downspouts and Accessories:
1. 24-gauge (0.0276-inch), Open Face, Galvanized Kynar coated prefinished sheet steel, sealed per SMACNA requirements.
  2. Provide minimum 2-foot-long closure plate with a ½-inch kick back at top and bottom of the open face gutter.
  3. Provide Style A and B downspout elbows, outlet thimbles, downspout strainers, and wall mounted anchor straps.
  4. Color: As selected and approved by Owner – To best match perimeter edge metals.
- K. Collector Head:
1. 24-gauge (0.0276-inch) Galvanized Kynar coated prefinished sheet steel, seal per SMACNA requirements and Figures 1-25, 1-27, and 1-28.
- L. Splash Blocks:
1. Precast concrete of size and profile indicated; minimum 3,000 psi at 28 days, with minimum 5 percent air entrainment; suitable for downspouts discharging at grade level or onto roof surface.

## 2.6 UNDERLAYMENT MATERIALS

### A. Self-Adhered Sheet:

1. Grace Ice and Water Shield Vycor Ultra.
2. Approved Equivalent.

## 2.7 FINISHES

- A. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- B. Appearance of Finished Work:
1. 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.
- C. Exposed to View (Unfinished) Galvanized Steel Components:
1. Paint to match pre-painted metallic-coated steel prior to installation (where applicable)
  2. Clean: Comply with SSPC-1 - Solvent Wipe.
  3. Primer: Apply specified or finish paint manufacturer's recommended primer in accordance with manufacturer's instructions.
  4. Finish Coat: Apply powder coating or approved urethane enamel in accordance with manufacturer's instructions.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that substrates are smooth and clean to extent needed for sheet metal work.

- B. Verify that reglets, nails, cants, and blocking to receive sheet metal are installed and free of concrete and soil.
- C. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
  - 1. **WARNING:** Confirm nailers provided by others are adequate for fastening Sheet Metal to and meet wind load structural requirements for Component & Cladding.
- D. Do not start sheet metal work until conditions are satisfactory.

### 3.2 GENERAL

- A. Remove all existing sheet metal and properly dispose of prior to installation of new sheet metal.
- B. Install work watertight without waves, warps, buckles, fastening stresses or distortion, allowing for expansion and contraction.
- C. Install fabricated sheet metal items in accordance with SMACNA Sheet Metal Manual and Drawing Details.
- D. Coat contact surfaces of dissimilar metals with Zinc chromate paint or isolation vinyl tape.
- E. Installation Tolerances:
  - 1. Shim and align sheet metal flashing and trim within installed tolerance of 1/4 inch in 20 feet on slope and location lines as indicated and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.

### 3.3 INSTALLATION

- A. General:
  - 1. Install sheet metal items to produce complete roof drainage system according to SMACNA recommendations and as indicated.
  - 2. Coordinate installation of roof perimeter flashing with installation of waterproofing membrane.
  - 3. For prefabricated metal components, Contractor to refer to Metal-Era's installation instructions provided with shipped materials. Installation instructions can also be found on Metal-Era's website at:
    - a. <https://www.metalera.com/products/types/fascia>
- B. Pre-Manufactured Fascia/Edge Metal and Retainer Bar:
  - 1. Prior to installation, apply a continuous 3/8-inch bead of non-curing sealant to the inside face of the 12'-0" Metal-Era base rail.
  - 2. Along the exterior face of all parapet walls, install new 12'-0" Metal-Era base rails from right-to-left as seen from the roof top, lapping the previous section 1-inch.
  - 3. Fasten base rails to new wood nailers, using the provided slots within the base rails at a maximum of 12-inches on center.
  - 4. Install new 6-inch spring clips every 48-inches on center. Ensure there is a spring clip under each fascia cover end.
  - 5. Fascia covers shall be installed from left-to-right as seen from the roof top. Place splice plates in right end of the cover. Snap right cover onto base rail by applying downward pressure with palm of hand until the fascia cover is fully engaged along the entire length.
  - 6. Lap joints and seal per manufacturer and contract requirements.
- C. Drip Edge/Eave and Gravel-Stop Metal:
  - 1. Where indicated within the project drawings, install the new drip edge or gravel-stop metals with associated continuous anchor cleats.
  - 2. After extension of new membrane over the side of wall/roof, install the new continuous 20-gauge cleat metal, face fastened to the new perimeter blocking at a maximum rate of 6-inches on center, unless otherwise noted.
  - 3. Hang new prefinished drip edge or gravel stop metal assembly over new continuous anchor cleat and hook to bottom of cleat.

4. Set horizontal flanges over reinforced securement strip and/or new membrane, and top fasten to wood blocking with 2-rows at 3 to 4 -inch O.C. staggered.
5. Install edge metal to ensure even/plumb appearance, allowing for expansion as required by SMACNA.

D. Fascia Metal:

1. Where indicated within the project drawings, install the new fascia metals with associated continuous anchor cleats.
2. After extension of new membrane over the side of wall/roof, install the new continuous 20-gauge cleat metal, face fastened to the new perimeter blocking at a maximum rate of 6-inches on center, unless otherwise noted.
3. Hang the new prefinished fascia metal assembly over new continuous anchor cleat and hook to bottom of cleat.
4. Face-fasten the top of the new fascia metal at a maximum spacing of 12-inches on center, unless otherwise noted, prior to the installation of the new pre-manufacturer edge metal.
5. Ensure that fascia metal is installed to allow for movement, and to prevent warping, buckling and/or oil- canning.

E. Scuppers:

1. Install with joints fully soldered. Extend flanges 4 -inch in each direction. Install wood nailers under flange.
2. Paint exposed steel of overflow scuppers to best match Kynar coated metal colors for the project.

F. Downspouts:

1. Install plumb and level, attached to wall with 1¼ -inch wide 24-gauge (0.0276-inch) prefinished galvanized sheet steel straps at top, bottom, and a minimum of two (0) straps per 10-foot length of downspout.
2. Provide Style A discharge elbows as the base of all downspouts, unless otherwise noted.
3. Set splash pans in lap sealant on roof at bottom of down spouts.

G. Splash Blocks: Install where downspouts discharge on low-slope roofs or onto grade.

1. Roof Discharge: Set on traffic pads compatible with roofing membrane.
2. Grade Discharge: Set on a bed of compacted fill.
3. Fire Test Nozzles: Set on traffic pads compatible with roofing membrane.

### 3.4 ROOF FLASHING INSTALLATION

A. General:

1. Install sheet metal flashing and trim to comply with performance requirements and SMACNA's "Architectural Sheet Metal Manual."
2. Provide concealed fasteners where possible, set units true to line, and level as indicated.
3. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.
4. Install starter and edge strips, and cleats before starting installation.
5. Strip in all sheet metal flanges the same day they are installed.

B. Roof Edge Flashing:

1. Fasten to resist uplift and outward forces specified in Part 1 and as indicated.
2. Backer Plates:
  - a. Secure with fasteners suitable for substrate, 6-inches O.C. each face.
3. Interlock bottom edge of roof edge flashing with continuous cleats anchored to substrate at 12-inch centers.
4. Apply 1/4-inch bead of sealant between each layer of metal at each edge.
5. Cover Plates:







