

PROJECT MANUAL

For

ELKHART COUNTY COURTHOUSE WINDOW REPLACEMENT

February 24, 2025

OWNER:

Elkhart County, Indiana, Acting Through
Its Board Of County Commissioners
Buildings And Grounds Department
26861 County Road 26
Elkhart, IN, 46517



ARCHITECT / ENGINEER:

DLZ Indiana, LLC
2211 E. Jefferson Blvd.
South Bend, IN 46615



DLZ Project No.: 2561-4071-50

Elkhart County Courthouse
Window Replacement

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DLZ Indiana, LLC
2211 East Jefferson Blvd.
South Bend, Indiana 46615



Zachary J. Flagle
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Professional Architect
State of Indiana AR11900204

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FOR
ELKHART COUNTY COURTHOUSE
WINDOW REPLACEMENT**

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For

ELKHART COUNTY COURTHOUSE WINDOW REPLACEMENT

OWNERS:

ELKHART COUNTY, INDIANA, ACTING THROUGH
ITS BOARD OF COUNTY COMMISSIONERS
BUILDINGS AND GROUNDS DEPARTMENT
26861 COUNTY ROAD 26
ELKHART, IN, 46517



Elkhart County Buildings and Grounds Department 26861 County Road
26, Elkhart, IN, 46514
Phone: (574) 891-2204

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NOTICE TO BIDDERS

Notice is hereby given that the Board of County Commissioners of Elkhart County, Indiana, will receive bids up to **8:50 AM on March 23, 2026** for the **Elkhart County Courthouse Window Replacement** project. It is the responsibility of the bidder to ensure that its bid is delivered on time to the Office of the Elkhart County Commissioners, County Administration Building, 117 N. Second Street, Goshen, IN 46526.

Plans, Specifications and bidding documents may be obtained from the **Elkhart County website** at www.elkhartcounty.com starting on **February 24, 2025**. Plans, Specifications and Bidding Documents may not be obtained prior to this date.

Plans, Specifications and Bidding Documents will be available for inspection at Elkhart County Buildings and Grounds, 1905 Reliance Rd., Goshen, IN 46526 starting on **February 24, 2026**. A pre-bid meeting will be held at the Elkhart County Courthouse located at 101 N. Main St., Goshen, IN 46526 at **10:00 AM on March 15, 2026**.

Bid proposals shall be properly and completely executed on proposal forms furnished by the County in accordance with Indiana Form 96 (revised 2013) and shall be accompanied by the Contractor's Financial Statement form taken from Form 96. Said proposal shall be upon the standard bid sheets used by Elkhart County, and said sheet must contain an authorized signature of the Contractor, or the bid of the Contractor and may, at the discretion of Elkhart County, be rejected and declared invalid. Each proposal shall be accompanied by a non-collusion affidavit as required by the Statutes of Indiana. Bids shall be enclosed in a sealed envelope, bearing the title of the project and name and address of bidder.

All work may begin on **April 6, 2026** and shall be completed by **December 1, 2026**. Delays in completion beyond that date shall result in liquidated damages levied against the Contractor by Elkhart County. The damage charges shall be \$1,000 per day per item beyond the above stated date and any intermediate completion dates noted in the specifications.

A satisfactory bid bond (10% of bid), payable to the Board of County Commissioners of Elkhart County, Indiana executed by the bidder shall be submitted with each bid.

No bids shall be withdrawn after the opening of the bids without the consent of the Board of Commissioners of Elkhart County for a period of thirty (30) days after the scheduled time of closing.

Said work shall be subject to all the provisions of the plans and specifications therefore herein above referred to including the completion date thereof and penalty clause as therein set forth.

The Board of County Commissioners reserves the right to reject any and all Bids or to waive any informalities in the bidding.

Dated this 24th day of February, 2026
Board of County Commissioners of Elkhart
County By Patricia A. Pickens, Auditor

Advertise: February 25, 2026 and March 4, 2026 - Elkhart Truth and Goshen News

DEFINITIONS

The following terms, as used in these Contract Documents, are defined as follows: "ADDENDA"

Written or graphic instruments issued prior to the opening of Bids, which clarify, correct, or change the bidding documents or Contract Documents.

"APPROVED"

The words "approved", "acceptable", "satisfactory", "in the judgment of", and words of like import, shall mean approval by, acceptable to, satisfactory to, or in the judgment of, the Engineer or Owner.

"BONDS"

Bid, Performance, Payment, or Maintenance Bonds, and other instruments of security collectively or individually as applicable.

"CHANGE ORDER"

A document recommended by ENGINEER, which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time, issued on or after the Effective Date of the Agreement.

"CONTRACTOR"

The person, firm, or corporation to whom the enclosed contract is awarded by the Owner and who is subject to the terms hereof.

"COUNTY SPECIFICATIONS"

The current Elkhart County roads guidelines and standards for design and public improvements.

"DIRECTED"

The words "directed", "required", "permitted", "ordered", "designated", and words of like import shall imply the direction, requirement, permission, order of designation of the Engineer or Owner.

"ENGINEER"

The Elkhart County Buildings and Grounds Division or duly authorized representative designated by the Owner.

"FIELD ORDER"

A written order issued by ENGINEER which orders minor changes in the Work in accordance with paragraph 7.5 but which does not involve a change in the Contract Price or the Contract Time.

"FINAL ACCEPTANCE"

The date when OWNER accepts ENGINEER'S recommendation of final payment.

"GENERAL REQUIREMENTS"	Sections of Division A of the Specifications.
"LAWS AND REGULATIONS; LAWS OR REGULATIONS"	Laws, rules, regulations, ordinances, codes and/or orders.
"NOTICE TO PROCEED"	A written notice given by OWNER to CONTRACTOR (with a copy to ENGINEER) fixing the date on which the Contract Time will commence to run and on which CONTRACTOR shall start to perform CONTRACTOR'S obligations under the Contract Documents.
"OWNER"	The public body or authority, corporation, association, firm or person with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be provided. This typically being Elkhart County, Indiana, acting through its Board of County Commissioners.
"PARTIAL UTILIZATION"	Placing a portion of the Work in service for the purpose for which it is intended (or a related purpose) before reaching Substantial Completion for all the Work.
"PROJECT"	The total construction of which the Work to be provided under the Contract Documents may be the whole or a part as indicated elsewhere in the Contract Documents.
"RESIDENT PROJECT REPRESENTATIVE"	The authorized representative of ENGINEER who is assigned to the site or any part thereof
"SHOP DRAWINGS"	All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for CONTRACTOR to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and submitted by CONTRACTOR to illustrate material or equipment for some portion of the Work.
"SPECIFICATIONS"	Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

"STOP ORDER" or "STOP WORK ORDER"	Written order from OWNER or ENGINEER to stop all work covered by the Contract Documents.
"SUBCONTRACTOR"	An individual, firm or corporation having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the site.
"SUBSTANTIAL COMPLETION"	See Paragraph 12.5 of these General Conditions.
"SUPPLEMENTARY CONDITIONS"	The part of the Contract Documents which amends or supplements these General Conditions.
"SURETY"	Financial guarantee that insures the CONTRACTOR'S obligation.
"UNDERGROUND FACILITIES"	All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments. In addition, any encasement containing such facilities that have been installed underground to furnish any of the following services or materials; electricity, gases, steam, liquid petroleum products, telephone or other communication means, cable television, sewage and drainage removal, traffic or other control systems or water.
"UNIT PRICE WORK"	Work to be paid for on the basis of unit prices. "WORK" Work to be done under this Contract at the site of the improvement.
"WORK DIRECTIVE CHANGE"	A written directive to CONTRACTOR, issued on or after the Effective Date of the Agreement and signed by OWNER and recommended by ENGINEER, ordering an addition, deletion or revision in the Work, or responding to differing or unforeseen physical conditions under which the Work is to be performed.
"WRITTEN AMENDMENT"	A written amendment of the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the non-engineering or non-technical rather than strictly Work-related aspects of the Contract Documents

ARTICLE 1 PRELIMINARY MATTERS

1.1 Delivery of Bonds

1.1.1 When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as called for in the Contract Documents.

1.2 Copies of Documents

1.2.1 OWNER shall furnish to CONTRACTOR up to three (3) copies (unless otherwise specified in the Supplementary Conditions) of the Contract Documents as are reasonably necessary for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.

1.3 Contract Documents:

1.3.1 These Contract Documents are complementary and what is called for in one shall be as binding as if called for in all. The intention of these Contract Documents is to include in the Contract Price the costs of all labor and materials, water, fuel, tools, plant, equipment, light, transportation, taxes, bonds, and all other expense and profit as may be necessary for the proper and complete execution of the work.

1.4 Commencement of Contract Time; Notice to Proceed

1.4.1 The Contract Time will commence when the Contractor receives the Notice to Proceed from the Engineer. CONTRACTOR shall not be paid for any work performed prior to receiving the Notice to Proceed from the Engineer.

1.5 Starting the Project

1.5.1 CONTRACTOR shall start to perform the Work on the date when the Contract Time commences to run, but no Work shall be done at the site prior to the date on which the Contract Time commences to run unless such work is specifically approved by the owner/engineer.

1.6 Before Starting Construction

1.6.1 Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error or discrepancy in the Contract Documents, unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

1.7 Submission for Review

1.7.1 Within ten (10) days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to ENGINEER for review:

- A. An estimated progress schedule indicating the starting and completion dates of the various stages of the Work; and
- B. A preliminary schedule of Shop Drawings and/or sample submissions.

- C. CONTRACTOR shall provide an updated progress schedule at all scheduled progress meetings.

1.8 Delivery of Certificate:

- 1.8.1 Before any Work at the site is started, CONTRACTOR shall deliver to OWNER, with a copy to ENGINEER, certificates (and other evidence of insurance requested by OWNER) which CONTRACTOR is required to purchase and maintain.

1.9 Subcontracts:

- 1.9.1 The Contractor shall not execute an Agreement with any Subcontractor or permit any Subcontractor to perform any work in this Contract until he has received written approval of such Subcontractor from the Owner or Owner's appointed designee.

1.10 Preconstruction Conference:

- 1.10.1 Following the Effective Date of the Agreement, but before CONTRACTOR starts the Work at the site, a conference attended by CONTRACTOR, ENGINEER and others, as appropriate, will be held to discuss the schedules referred to in paragraph 1.7, as well as the Subcontractors proposed by Contractor for certain portions of the work, to discuss procedures for handling Shop Drawings and other submittals and for processing Applications for Payment, and to establish a working understanding among the parties as to the Work.

1.11 Non-Discrimination

- 1.11.1 In compliance with the Acts of Indiana General Assembly, 1933, Chapter 270, the Contractor hereby agrees:
 - A. That in the hiring of employees for the performance of work under this Contract or any Subcontract hereunder, no Contractor, Subcontractor, nor any person acting on behalf of such Contractor or Subcontractor shall, by reason of race or color, discriminate against any citizen qualified to do work to which the employment relates;
 - B. That no Contractor, Subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of work under this Contract on account of race or color;
 - C. That there may be deducted from the amount payable to the Contractor by the Owner under this contract, a penalty of Five Dollars (\$5.00) for each person for each calendar day during which such person was discriminated against or intimidated in violation of the provisions of this Contract; and
 - D. That this Contract may be canceled or terminated by the Owner, and all money due or to become due hereunder may be forfeited for a second or any subsequent violation of the terms or conditions of this section of the Contract.

1.12 Insurance

- 1.12.1 Contractor's Liability Insurance:
 - A. The Contractor shall maintain such insurance as well as protect himself from claims under Workmen's Compensation Acts and other employee benefit acts; from claims for damages because of bodily injury, including death, to his employees and all others; and from claims for damages to property, any or all of which may arise out of or result from the Contractor's operation under the Contract, whether such operations be by himself or by any subcontractor, or

anyone directly or indirectly employed by either of them. This insurance shall be written for not less than any limits of liability specified herein and shall name Elkhart County and the Engineer as an additional insured.

- 1.12.2 Contractor's Insurance: The types and minimum amount of insurance to be provided for by the Contractor shall be as follows:
- A. Builder's All Risk: The Contractor shall purchase and maintain Builders Risk Property Insurance upon the entire Work at the site for One Hundred percent (100%) of the full value thereof.
 - 1) Said insurance shall cover the building under construction and all materials which are incorporated into the work. The Owner and Contractors waive all rights against each other for damages caused by the perils covered by such insurance.
 - 2) Equipment of the Contractors and materials, which are not yet incorporated into the building, will not be insured by the Owner.
 - 3) Furthermore, it is the Contractor's responsibility to insure himself against those claims for theft, vandalism and other such items which are not contained in the Builder's Risk Policy. Contractor shall insure himself against claims for the theft and vandalism of his materials and equipment stored on the site in trailers, buildings, etc., which are not yet a permanent part of the work.
 - B. Workmen's Compensation and Occupational Disease Insurance: The Contractor shall provide Workmen's Compensation and Occupational Disease Insurance as required by law. Such policy shall specifically include coverage for the State of Indiana, and such adjoining states as required by the Contractor's operations.
 - C. Employer's Liability Insurance: The Contractor shall provide Employer's Liability with a minimum coverage of \$1,000,000.
 - D. Comprehensive General Liability Insurance: The Contractor shall maintain a Comprehensive General Liability form of Insurance with bodily injury of not less than \$1,000,000 for any one (1) occurrence, and \$2,000,000 aggregate. The insurance policy shall include the following:
 - 1) Premises Operations: The policy shall include coverage for the following special hazards when applicable to the project:
 - a) Property damage arising out of blasting or explosion.
 - b) Property damage arising out of collapse of or structural injury to any building or structure due to grading of land, excavation, borrowing, filling, backfilling, tunneling, pile driving, cofferdam work or caisson work or to moving, shoring, underpinning, raising, or demolition of any building or structure or rebuilding of any structural support thereof.
 - c) Injury to or destruction of wires, conduits, pipes, mains, sewers, and other similar property of any apparatus in connection therewith below the surface of ground, if caused by use of mechanical equipment.
 - 2) Contractual (Broad Form Indemnification): The Contractor agrees to indemnify and save harmless the Owner and the Engineer, their agents and employees, from and against all loss or expense (including costs and attorneys' fees) by reason of liability imposed by law upon the Owner or the Engineer for damages because of bodily injury, including death, at any time resulting there from, sustained by any person or persons or an account of damage to property is due or claimed to be due to negligence of the Contractor, his Subcontractors, employees or agents.
 - 3) Contractor's Protective: The Contractor shall maintain this type of coverage

- on a "Blanket" basis to cover the operations of any subcontractors.
- E. Automobile Liability Insurance: The Contractor shall maintain Comprehensive Automobile Liability Insurance with bodily injury liability limits of not less than \$1,000,000 for one (1) occurrence and \$2,000,000 aggregate. This coverage may be provided either as a separate policy or as part of the Comprehensive General Liability Policy described previously. The automobile insurance must include coverage for all owned, non-owned and hired vehicles.
 - F. Furnish Indiana State Forms No. 19 (Workmen's Compensation) and No.105 (Occupational Disease Act).
 - G. Umbrella Policy Insurance: The Contractor shall maintain a minimum \$3,000,000 Umbrella Policy in addition to their primary insurance.
- 1.13 Proof of Carriage Insurance: Contractor shall not commence work until he has obtained all insurance specified herein, has filed with the Owner one (1) copy of Certificate of Insurance, and such insurance has been approved by the Owner.
- 1.13.1 Should any Coverage approach expiration during the Contract period, it shall be renewed prior to its expiration, and certificate again filed with the Owner.
 - 1.13.2 If any of such policies are canceled or are changed so as to reduce the coverage evidenced by the Certificate, at least ten (10) days prior written notice by registered mail of such cancellation or change shall be sent to the Owner.
 - 1.13.3 All insurance provided for under this Section shall be written by Insurance Companies licensed to do business in Indiana and Countersigned by resident Indiana agent. The insurance company shall file with the Owner, one (1) copy of Affirmation of Authority, on the form furnished by the Engineer, as verification of the resident agent.
 - 1.13.4 All insurance shall be maintained in full force and effect until the Contract has been fully and completely performed.
- 1.14 Performance and Payment Bond:
- 1.14.1 The Contractor shall furnish a Performance and Payment Bond (form attached) equal to one hundred percent (100%) of the Contract Price.

ARTICLE 2 CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

2.1 Intent

- 2.1.1 The Contract Documents comprise the entire agreement between OWNER and CONTRACTOR concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the law of the place of the Project.
- 2.1.2 It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any Work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result will be supplied whether or not specifically called for.
- 2.1.3 If during the performance of the Work, CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, CONTRACTOR shall so report to

ENGINEER in writing at once and before proceeding with the Work affected thereby shall obtain a written interpretation or clarification from ENGINEER; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error or discrepancy in the Contract Documents unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

2.2 Amending and Supplementing Contract Documents:

2.2.1 The Contract Documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways:

- A. A formal Written Amendment,
- B. A Change Order, or
- C. A Work Directive Change (pursuant to paragraph 8.1).

2.2.2 In addition, the requirements of the Contract Documents may be supplemented and minor variations and deviations in the Work may be authorized, in one or more of the following ways:

2.2.3 A Field Order,

2.2.4 ENGINEER's approval of a Shop Drawing or sample, or

2.2.5 ENGINEER's written interpretation or clarification.

ARTICLE 3 AVAILABILITY OF LANDS; PHYSICAL CONDITIONS; REFERENCE POINTS

3.1 Availability of Lands

3.1.1 OWNER shall indicate, as shown in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by OWNER, unless otherwise provided in the Contract Documents. If CONTRACTOR believes that any delay in OWNER's furnishing these lands, rights-of-way or easements entitles CONTRACTOR to an extension of the Contract Time, CONTRACTOR may make a claim for an extension of Contract Time.

3.2 Physical Conditions - Underground Facilities

3.2.1 The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

- A. OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and,

- B. CONTRACTOR shall have full responsibility for reviewing and checking all such information and data, for locating all Underground Facilities shown or indicated in the Contract Documents, for coordination of the Work with the owners of such Underground Facilities during construction, for the safety and protection thereof, and repairing any damage thereto resulting from the Work, the cost of all of which will be considered as having been included in the Contract Price.

3.3 Assignment of Contract: The Contractor shall not assign this Contract or any part hereof without prior consent of the Owner.

ARTICLE 4 CONTRACTOR'S RESPONSIBILITIES

4.1 Supervision and Superintendence

4.1.1 CONTRACTOR shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence or procedure of construction which is indicated in and required by the Contract Documents. CONTRACTOR shall be responsible to see that the finished Work complies accurately with the Contract Documents.

4.1.2 CONTRACTOR shall keep on the Work at all times during its progress a competent resident superintendent, who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the site and shall have authority to act on behalf of CONTRACTOR. All communications given to the superintendent shall be as binding as if given to CONTRACTOR.

4.2 Labor, Materials and Equipment

4.2.1 CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the site, particularly in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents.

4.2.2 Unless otherwise specified in the General Conditions, CONTRACTOR shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.

4.2.3 All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the

instructions of the applicable Supplier except as otherwise provided in the Contract Documents.

4.3 Substitutes or "Or-Equal" Items

4.3.1 Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier the naming of the item is intended to establish the type, function and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other Suppliers may be accepted by ENGINEER if sufficient information is submitted by CONTRACTOR to allow ENGINEER to determine that the material or equipment proposed is equivalent or equal to that named. The procedure for review by ENGINEER will include the following as supplemented in the General Conditions. Requests for review of substitute items of material and equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR. If CONTRACTOR wishes to furnish or use a substitute item of material or equipment, CONTRACTOR shall make written application to ENGINEER for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as that specified. The application will state that the evaluation and acceptance of the proposed substitute will not prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by ENGINEER in evaluating the proposed substitute. ENGINEER may require CONTRACTOR to furnish at CONTRACTOR's expense additional data about the proposed substitute.

4.3.2 If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to ENGINEER, if CONTRACTOR submits sufficient information to allow ENGINEER to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents.

4.3.3 ENGINEER will be allowed a reasonable time within which to evaluate each proposed substitute. ENGINEER will be the sole judge of acceptability, and no substitute will be ordered, installed or utilized without ENGINEER's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute. ENGINEER will record time required by ENGINEER and ENGINEER's consultants in evaluating substitutions proposed by CONTRACTOR and in making changes in the Contract Documents occasioned thereby. Whether or not ENGINEER accepts a proposed substitute, CONTRACTOR shall reimburse OWNER for the charges of ENGINEER and ENGINEER's consultants for evaluating each proposed substitute.

4.4 Contractor Responsibility

4.4.1 CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractor, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other person or organization, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any monies due any such Subcontractor, Supplier or other person or organization except as may otherwise be required by Laws and Regulations.

4.5 Subcontractor Responsibility

4.5.1 All Work performed for CONTRACTOR by a Subcontractor will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER.

4.6 Permits

4.6.1 Unless otherwise provided in the General Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses.

4.7 Laws and Regulations

4.7.1 CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to furnishing and performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR's compliance with any Laws or Regulations.

4.7.2 If CONTRACTOR observes that the Specifications or Drawings are at variance with any Laws or Regulations, CONTRACTOR shall give ENGINEER prompt written notice thereof, and any necessary changes will be authorized by one of the methods indicated in paragraph 2.2. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to such Laws or Regulations, and without such notice to ENGINEER, CONTRACTOR shall bear all costs arising therefrom; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with such Laws and Regulations.

4.8 Taxes

4.8.1 CONTRACTOR shall pay all sales, consumer, use and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

4.9 Use of Premises

4.9.1 CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Project site and land and areas identified in and permitted by the Contract Documents and other land and areas permitted by Laws and Regulations, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the Work. Should any claim be made against OWNER or ENGINEER by any such owner or occupant

because of the performance of the Work, CONTRACTOR shall promptly attempt to settle with such other party by agreement or otherwise resolve the claim by arbitration or at law. CONTRACTOR shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold OWNER and ENGINEER harmless from and against all claims, damages, losses and expenses (including, but not limited to, fees of engineers, architects, attorneys and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any such other party against OWNER or ENGINEER to the extent based on a claim arising out of CONTRACTOR's performance of the Work.

4.9.2 During the progress of the Work, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work CONTRACTOR shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the site clean and ready for occupancy by OWNER. CONTRACTOR shall restore to original condition all property not designated for alteration by the Contract Documents.

4.9.3 CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

4.10 Record Documents

4.10.1 CONTRACTOR shall maintain in a safe place at the site one (1) record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Directive Changes, Field Orders and written interpretations and clarifications issued in good order and annotated to show all changes made during construction. These record documents together with all approved samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon completion of the Work these record documents, samples and Shop Drawings will be delivered to ENGINEER for OWNER.

4.11 Safety and Protection

4.11.1 CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

- A. All employees on the Work and other persons and organizations who may be affected thereby;
- B. All the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and
- C. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and Underground Facilities not designated for removal, relocation or replacement in the course of construction.

4.11.2 CONTRACTOR shall comply with all applicable Laws and Regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. All damage, injury or loss to any

property referred to in paragraph 4.11.1(b) or 4.11.1(c) caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR.

- 4.11.3 CONTRACTOR shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be CONTRACTOR's superintendent unless otherwise designated in writing by CONTRACTOR to OWNER.

4.12 Emergencies

- 4.12.1 In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, CONTRACTOR, without special instruction or authorization from ENGINEER or OWNER, is obligated to act to prevent threatened damage, injury or loss. CONTRACTOR shall give ENGINEER prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If ENGINEER determines that a change in the Contract Documents is required because of the action taken in response to an emergency, a Work Directive Change or Change Order will be issued to document the consequences of the changes or variations.

4.13 Shop Drawings and Samples

- 4.13.1 After checking and verifying all field measurements and after complying with applicable procedures specified in the General Conditions, CONTRACTOR shall digitally submit to ENGINEER for review and approval all Shop Drawings. Any Shop Drawings requiring color selection shall include physical samples sent to the ENGINEER for review and approval. All submissions will be identified as ENGINEER may require. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable ENGINEER to review the information as required.
- 4.13.2 CONTRACTOR shall also submit to ENGINEER for review and approval with such promptness as to cause no delay in Work, all samples required by the Contract Documents.
- 4.13.3 At the time of each submission, CONTRACTOR shall give ENGINEER specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on each Shop Drawing submitted to ENGINEER for review and approval of each such variation.
- 4.13.4 ENGINEER will review and approve with reasonable promptness Shop Drawings and samples, but ENGINEER's review and approval will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences or procedures of construction.
- 4.13.5 ENGINEER's review and approval of Shop Drawings or samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of submission.
- 4.13.6 Where a Shop Drawing or sample is required by the Specifications, any related Work performed prior to ENGINEER's review and approval of the pertinent

submission will be the sole expense and responsibility of CONTRACTOR.

4.14 Continuing the Work

4.14.1 CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 13.4 or as CONTRACTOR and OWNER may otherwise agree in writing.

4.15 Indemnification:

4.15.1 To the fullest extent permitted by Laws and Regulations CONTRACTOR shall indemnify and hold harmless OWNER and ENGINEER and their consultants, agents and employees from and against all claims, damages, losses, and expenses, direct, indirect or consequential (including but not limited to fees and charges of engineer, architects, attorneys and other professionals and court and arbitration costs) arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense:

- A. is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting there from and
- B. is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder or arises by or is imposed by Law and Regulations regardless of the negligence of any such party.

4.15.2 In any and all claims against OWNER or ENGINEER or any of their consultants, agents or employees by any employee of CONTRACTOR, any Subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 1.12.2 (c)2 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for CONTRACTOR or any such Subcontractor or other person or organization under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

4.16 Sanitation

4.16.1 The Contractor shall introduce and enforce among his employees, such regulations in regard to cleanliness and the disposal of garbage and wastes as shall comply with the Local ordinances. The Contractor shall take such means as the Owner may direct to effectually prevent the creation of a nuisance at the work site or any part of the property of the Owner. Under no circumstances shall the Contractor create or maintain a nuisance. The Contractor shall construct toilets and maintain them in a sanitary condition, properly secluded from public observation at such points as shall be approved.

4.16.2 All waste, rubbish and debris – whether personal or from construction related processes – shall be removed from the job site and adjacent properties by hauling away and shall not be buried or discarded.

ARTICLE 5 OTHER WORK

5.1 Related Work at Site

5.1.1 OWNER may perform other work related to the Project at the site by OWNER's own forces, have work performed by utility owners, or let other direct contracts.

5.1.2 CONTRACTOR shall afford each utility owner and other contractor who is a party to such a direct contract (or OWNER, if OWNER is performing the additional work with OWNER's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect and coordinate the Work with theirs, CONTRACTOR shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work.

ARTICLE 6 OWNER'S RESPONSIBILITIES

6.1 Communication

6.1.1 OWNER shall issue all communications to CONTRACTOR through ENGINEER.

6.2 Appointment of Engineer

6.2.1 In case of termination of the employment of ENGINEER, OWNER shall appoint an engineer whom CONTRACTOR makes no reasonable objection to, whose status under the Contract Documents shall be that of the former ENGINEER. Any dispute in connection with such appointment shall be subject to arbitration.

6.3 Payment

6.3.1 OWNER shall furnish the data required of OWNER under the Contract Documents promptly and shall make payments to CONTRACTOR promptly after they are due.

6.4 Change Orders

6.4.1 OWNER is obligated to execute Change Orders as indicated in paragraph 8.4.

6.5 Inspection

6.5.1 OWNER's responsibility in respect of certain inspections, tests and approvals is set forth in paragraph 11.3.

6.6 Service Termination

6.6.1 In connection with OWNER's right to stop Work or suspend Work, see paragraphs 11.5 and 13.1. Paragraph 13.2 deals with OWNER's right to terminate services of CONTRACTOR under certain circumstances.

ARTICLE 7 ENGINEER'S STATUS DURING CONSTRUCTION

7.1 Owner's Representative

7.1.1 ENGINEER will be OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER's representative during construction are set forth in the Contract Documents and shall not be extended without written consent of OWNER and ENGINEER.

7.2 Visits to Site

7.2.1 ENGINEER will make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract

Documents.

7.2.2 ENGINEER will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work.

7.2.3 ENGINEER's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform to the Contract Documents.

7.2.4 On the basis of such visits and on-site observations as an experienced and qualified design professional, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defects and deficiencies in the Work.

7.3 Project Representation

7.3.1 If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in observing the performance of the Work.

7.4 Clarifications and Interpretations

7.4.1 ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as ENGINEER may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents.

7.5 Authorized Variations in Work

7.5.1 ENGINEER may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order and will be binding on OWNER, and also on CONTRACTOR who shall perform the Work involved promptly.

7.6 Rejecting Defective Work

7.6.1 ENGINEER will have authority to disapprove or reject Work which ENGINEER believes to be defective, and will also have authority to require special inspection or testing of the Work at CONTRACTOR'S expense.

7.7 Decisions on Disputes

7.7.1 ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work and claims under Articles 9 and 10 in respect to changes in the Contract Price or Contract Time will be referred initially to ENGINEER in writing with a request for a formal decision in accordance with this paragraph, which ENGINEER will render in writing within a reasonable time. Written notice of each such claim, dispute and other matter will be delivered by the claimant to ENGINEER and the other party to the Agreement promptly (but in no event later than thirty (30) days) after the occurrence of the event giving rise thereto, and written supporting data will be submitted to ENGINEER and the other party within sixty (60) days after such occurrence unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim.

7.7.2 When functioning as interpreter and judge under paragraphs 7.7.1 ENGINEER will

not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

7.8 Limitations on Engineer's Responsibilities

7.8.1 Neither ENGINEER's authority to act under this Article 7 or elsewhere in the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization performing any of the Work, or to any surety for any of them.

7.8.2 ENGINEER will not be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, and ENGINEER will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.

7.8.3 ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

ARTICLE 8 CHANGES IN THE WORK

8.1 Work Modifications

8.1.1 Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions or revisions in the Work; these will be authorized by a Written Amendment, a Change Order, or a Work Directive Change. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

8.2 Disagreement

8.2.1 If OWNER and CONTRACTOR are unable to agree as to the extent, if any, of an increase or decrease in the Contract Price or an extension or shortening of the Contract Time that should be allowed as a result of a Work Directive Change, a claim may be made therefore as provided in Article 9 or Article 10.

8.3 Contract Price and Time

8.3.1 CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any Work performed that is not required by the Contract Documents.

8.4 Change orders

8.4.1 OWNER and CONTRACTOR shall execute appropriate Change Orders covering:

- A. Changes in the Work which is ordered by OWNER.
- B. Changes in the Contract Price or Contract Time which are agreed to by the parties.
- C. Changes in the Contract Price or Contract Time which embody the substance of any written decision rendered by ENGINEER.

8.5 Notification of Change

8.5.1 If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents is required by the provisions of any Bond to be given to a

surety, the giving of any such notice will be CONTRACTOR's responsibility, and the amount of each applicable Bond will be adjusted accordingly.

ARTICLE 9 CHANGE OF CONTRACT PRICE

9.1 The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by CONTRACTOR shall be at his expense without change in the Contract Price.

9.2 Change Order

9.2.1 The Contract Price may only be changed by a Change Order or by a Written Amendment.

9.3 Determination of Contract Price

9.3.1 The value of any Work covered by a Change Order (extra work order) for an increase or decrease in the Contract Price shall be determined in one of the following ways:

- A. Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved.
- B. On the basis of the actual Cost of the Work, plus the allowable Contractor's mark-up as per INDOT Specification 109.05 added thereon for overhead and profit.

9.4 Cost of the Work

9.4.1 The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. The term Cost of the Work shall **not** include any of the following:

- A. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, attorneys, auditors, accountants, purchasing and contracting agents, CONTRACTOR whether at the site or in CONTRACTOR's principal or a branch office for general administration of the Work.
- B. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.
- C. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.
- D. Cost of premiums for all Bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same.
- E. Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.

ARTICLE 10 CHANGE OF CONTRACT TIME

10.1 The Contract Time may only be changed by a Change Order or a Written Amendment. Any claim for an extension or shortening of the Contract Time shall be based on written notice delivered by the party making the claim to the other party and to ENGINEER promptly (but in no event later than fifteen (15) days) after the occurrence of the event

giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within thirty (30) days after such occurrence (unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Time shall be determined by ENGINEER.

- 10.2 No extension of Contract Time shall be allowed for weather or ENGINEER review times set forth in this contract.

ARTICLE 11 WARRANTY AND GUARANTEE; TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

11.1 Warranty and Guarantee

- 11.1.1 CONTRACTOR warrants and guarantees to OWNER and ENGINEER that all Work will be in accordance with the Contract Documents and will not be defective. Prompt notice of all defects shall be given to CONTRACTOR. All defective Work, whether or not in place, may be rejected, corrected or accepted as provided in this Article 11.

11.2 Access to Work

- 11.2.1 ENGINEER and ENGINEER's representatives, other representatives of OWNER, testing agencies and governmental agencies with jurisdictional interests will have access to the Work at reasonable times for their observation, inspecting and testing. CONTRACTOR shall provide proper and safe conditions for such access.

11.3 Tests and Inspections

- 11.3.1 CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests or approvals.
- 11.3.2 If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) to specifically be inspected, tested or approved, CONTRACTOR shall assume full responsibility therefore, pay all costs in connection therewith and furnish ENGINEER the required certificates of inspection, testing or approval.
- 11.3.3 The Contractor shall assume full responsibility for paying all costs in connection with testing or certification of materials recommended by the product manufacturers specifications. In the case of failed or rejected materials or product used in construction of the project either by CONTRACTOR or SUBCONTRACTORS, independent third-party testing may be used at CONTRACTOR'S expense.
- 11.3.4 If any Work (including the work of others) that is to be inspected, tested or approved is covered without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation. Such uncovering shall be at CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover the same and ENGINEER has not acted with reasonable promptness in response to such notice.
- 11.3.5 Neither observations by ENGINEER nor inspections, tests or approvals by others shall relieve CONTRACTOR from CONTRACTOR's obligations to perform the Work in accordance with the Contract Documents.

11.4 Uncovering Work

- 11.4.1 If any Work is covered contrary to the written request of ENGINEER, it must, if

requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.

11.4.2 If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by others, CONTRACTOR, at ENGINEER's request, shall uncover, expose or otherwise make available for observation, inspection or testing as ENGINEER may require, that portion of the Work in question, furnishing all necessary labor, material and equipment.

11.5 Owner May Stop the Work

11.5.1 If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated.

11.6 Correction or Removal of Defective Work

11.6.1 If required by ENGINEER, CONTRACTOR shall promptly, as directed, either correct all defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by ENGINEER, remove it from the site and replace it with non-defective Work.

11.6.2 CONTRACTOR shall bear all direct, indirect and consequential costs of such correction or removal (including but not limited to fees and charges of engineers, attorneys and other professionals) made necessary thereby.

11.7 Three Years Correction Period

11.7.1 If, within three (3) years after the date of Final Acceptance, any Work is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions, either correct such defective Work, or, if it has been rejected by OWNER and/or Engineer remove it from the site and replace it with non-defective work. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or the rejected Work removed and replaced, and all direct, indirect and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, attorneys and other professionals) will be paid by CONTRACTOR.

11.8 Maintenance Bond

11.8.1 Each Contractor shall furnish prior to Final Acceptance a Maintenance Bond (form attached) in an amount at least equal to ten percent (10%) of the Contract Price, guaranteeing for a period of three (3) years after the date of acceptance by the Owner, that all workmanship and materials entered into the Contract are in accordance with the Plans and Specifications.

11.8.2 Each Contractor shall remove any defects due to faulty workmanship and/or materials and shall pay for any damage to other work resulting there from which shall appear within the guarantee period.

11.8.3 Should such quality assurance tests, as are called for in the contract Plans and Specifications (e.g., roll test, density, concrete strength, etc.), not be performed or if the work is not performed within reasonable conformity to the Plans and Specifications, the maintenance bond period may be extended to six (6) years.

11.9 Acceptance of Defective Work:

11.9.1 If instead of requiring correction or removal and replacement of defective Work, OWNER prefers to accept it, OWNER may do so. CONTRACTOR shall bear all direct, indirect and consequential costs attributable to OWNER's evaluation of and determination to accept such defective Work.

11.9.2 If any such acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price.

11.10 OWNER May Correct Defective Work:

11.10.1 If CONTRACTOR fails within a reasonable time after written notice of ENGINEER to proceed to correct and to correct defective Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 11.6, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven (7) days' written notice to CONTRACTOR, correct and remedy any such deficiency.

11.10.2 All direct, indirect and consequential costs of OWNER in exercising such rights and remedies will be charged against CONTRACTOR in an amount approved as to reasonableness by ENGINEER, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price.

ARTICLE 12 PAYMENTS TO CONTRACTOR AND COMPLETION

12.1 Schedule of Values

12.1.1 Coordination: Contractor shall coordinate preparation of its Schedule of Values for its part of the Work with preparation of the Contractors' Construction Schedule.

A. Correlate line items in the Schedule of Values with other required administrative schedules and forms, including:

- 1) Contractor's Construction Schedule.
- 2) Application for Payment forms, including Continuation Sheets.
- 3) List of subcontractors.
- 4) Schedule of alternates.
- 5) List of products.
- 6) List of principal suppliers and fabricators.
- 7) Schedule of submittals.

B. Submit the Schedule of Values to the Architect at the earliest possible date but no later than 14 days before the date scheduled for submittal of the initial Applications for Payment.

12.1.2 Format and Content: Use the Project Manual table of contents as a guide to establish the format for the Schedule of Values. Provide at least one-line item for each Specification Section per each work area unit.

A. Identification: Include the following Project identification on the Schedule of Values:

- 1) Project name and location.
 - 2) Name of the Architect.
 - 3) Project number.
 - 4) Contractor's name and address.
 - 5) Date of submittal.
- B. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:
- 1) Bid Package
 - 2) Related Specification Section or Division.
 - 3) Description of Work.
 - 4) Name of subcontractor.
 - 5) Name of manufacturer or fabricator.
 - 6) Name of supplier.
 - 7) Change Orders (numbers) that affect value.
 - 8) Allowance amount.

12.1.3 Dollar value: Percentage of Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.

- A. Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Break principal subcontract amounts down into several line items.
- B. Round amounts to nearest whole dollar; the total shall equal the Contract Sum.
- C. 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.
- D. Differentiate between items stored on-site and items stored off-site. Include requirements for insurance and bonded warehousing, if required.
- E. Provide separate line items for labor and material costs, mobilization and demobilization, closeout of documents.
- F. Provide separate line items on the Schedule of Values for initial cost of the materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- G. Margins of Cost: Show line items for indirect costs and margins on actual costs only when such items are listed individually in Applications for Payment. Each item in the Schedule of Values and Applications for Payment shall be complete. Include the total cost and proportionate share of general overhead and profit margin for each item.
- H. Schedule Updating: Update and resubmit the Schedule of Values prior to the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

12.2 Application for Progress Payment

- 12.2.1 At least fifteen (15) days prior to the next regularly scheduled Monday meeting of the County Commissioners, CONTRACTOR shall submit to ENGINEER for review a draft Application for Payment filled out and signed by CONTRACTOR covering the

- Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
- 12.2.2 Entries shall match data on the Schedule of Values and the Contractor's Construction Schedule. Use updated schedules if revisions were made. Include amounts of fully executed Change Orders issued prior to the last day of the construction period covered by the application.
- 12.2.3 Application Preparation: Complete every entry on the form. Upon approval of draft copy by Architect, include notarization and execution by a person authorized to sign legal documents on behalf of the Contractor. The Architect will return incomplete applications without action.
- 12.2.4 Waivers of Mechanics Lien: With each Application for Payment, submit waivers of mechanics liens from subcontractors, sub-subcontractors and suppliers for the construction period covered by the previous application.
- 12.3 Contractor's Warranty of Title
- 12.3.1 CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.
- 12.4 Review of Applications for Progress Payment
- 12.4.1 ENGINEER will, within ten (10) days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to OWNER, or return the Application to CONTRACTOR indicating in writing ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application. Ten (10) days after presentation of the Application for Payment with ENGINEER's recommendation, the amount recommended will become due and when due will be paid by OWNER to CONTRACTOR. All progress payments will be subject to a three Percent (3%) retainage that will not be released until the Project is Substantially Complete.
- 12.4.2 ENGINEER's recommendation of any payment requested in an Application for Payment will constitute a representation by ENGINEER to OWNER, based on ENGINEER's on-site observations of the Work in progress as an experienced and qualified design professional and on ENGINEER's review of the Application for Payment and the accompanying data and schedules that the Work has progressed to the point indicated; that, to the best of ENGINEER's knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents and that CONTRACTOR is entitled to payment of the amount recommended. However, by recommending any such payment ENGINEER will not thereby be deemed to have represented that exhaustive or continuous on-site inspections have been made to check the quality or the quantity of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents or that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER or OWNER to withhold payment to CONTRACTOR.
- 12.4.3 ENGINEER's recommendation of final payment will constitute an additional representation by ENGINEER to OWNER that the conditions precedent to CONTRACTOR's being entitled to final payment as set forth in paragraph 12.9 have been fulfilled.

12.4.4 ENGINEER may refuse to recommend the whole or any part of any payment if, in ENGINEER's opinion, it would be incorrect to make such representations to OWNER. ENGINEER may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:

- A. The Work is defective, or completed Work has been damaged requiring correction or replacement.
- B. The Contract Price has been reduced by Written Amendment or Change Order.
- C. OWNER has been required to correct defective Work or complete Work in accordance with paragraph 11.10, or
- D. Of ENGINEER's actual knowledge of the occurrence of any of the events enumerated in paragraphs 13.2.1 through 13.2.9 inclusive.
- E. OWNER may refuse to make payment of the full amount recommended by ENGINEER because claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work or Liens have been filed in connection with the Work or there are other items entitling OWNER to a set-off against the amount recommended, but OWNER must give CONTRACTOR immediate written notice (with a copy to ENGINEER) stating the reasons for such action.

12.5 Substantial Completion

12.5.1 When CONTRACTOR considers the entire Work ready for its intended use (that is, use by the public) and all work items are complete, CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Work is substantially complete and request that ENGINEER issue a certificate of Substantial Completion. Within seven (7) calendar days for a contract price under \$1,000,000.00 and fourteen (14) calendar days otherwise, OWNER, CONTRACTOR and ENGINEER shall make an inspection of the Work to determine the status of completion.

12.5.2 If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving the reasons therefore. If ENGINEER considers the Work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be corrected before final payment.

12.5.3 The ENGINEER may recommend to the OWNER that a Waiver of Time be provided to the CONTRACTOR for the seven (7) or fourteen (14) calendar days listed herein if the CONTRACTOR has demobilized from the site, and there are no remaining defective or incomplete Work items. A Waiver of Time is a document that waives the Liquidated Damages for the seven (7) or fourteen (14) day time-frame. A Waiver of Time may be given for part or the entirety of the seven (7) or fourteen (14) day period listed herein. The amount of time provided in the Waiver of Time is at the discretion of the OWNER.

12.6 Partial Utilization

12.6.1 Use by OWNER of any finished part of the Work, which has specifically been identified in the Contract Documents, or which OWNER, ENGINEER and

CONTRACTOR agree constitutes a separately functioning and useable part of the Work that can be used by OWNER without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following:

- A. OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees, CONTRACTOR will certify to OWNER and ENGINEER that said part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work.
 - B. CONTRACTOR at any time may notify OWNER and ENGINEER in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work.
 - C. Within a reasonable time after either such request, OWNER, CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify OWNER and CONTRACTOR in writing giving the reasons therefore. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraph 12.5 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
- 12.6.2 OWNER may at any time request CONTRACTOR in writing to permit OWNER to take over operation of any such part of the Work although it is not Substantially Complete. A copy of such request will be sent to ENGINEER and within a reasonable time thereafter OWNER, CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion and will prepare a list of the items remaining to be completed or corrected thereon before final payment. If CONTRACTOR does not object in writing to OWNER and ENGINEER that such part of the Work is not ready for separate operation by OWNER, ENGINEER will finalize the list of items to be completed or corrected and will deliver such list to OWNER and CONTRACTOR together with a written recommendation as to the division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, maintenance, utilities, insurance, warranties and guarantees for that part of the Work which will become binding upon OWNER and CONTRACTOR at the time when OWNER takes over such operation (unless they shall have otherwise agreed in writing and so informed ENGINEER). During such operation and prior to Substantial Completion of such part of the Work, OWNER shall allow CONTRACTOR reasonable access to complete or correct items on said list and to complete other related Work.

12.7 Final Inspection

- 12.7.1 Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, ENGINEER will make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to remedy such deficiencies.

12.8 Final Application for Payment

- 12.8.1 After CONTRACTOR has completed all such corrections to the satisfaction of

ENGINEER and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents and other documents--all as required by the Contract Documents, and after ENGINEER has indicated that the Work is acceptable, CONTRACTOR may make application for final payment following the procedure for progress payments.

12.9 Final Payment and Acceptance

12.9.1 If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation--all as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, ENGINEER will, within ten (10) days after receipt of final Application for Payment, indicate in writing ENGINEER's recommendation of payment and present the Application to OWNER for payment. Thereupon ENGINEER will give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 12.15. Otherwise, ENGINEER will return the Application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application. Thirty (30) days after presentation to OWNER of the Application and accompanying documentation, in appropriate form and substance, and with ENGINEER's recommendation and notice of acceptability, the amount recommended by ENGINEER will become due and will be paid by OWNER to CONTRACTOR.

12.9.2 If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted.

12.10 Contractor's Continuing Obligation

12.10.1 CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute.

12.10.2 Neither recommendation of any progress or final payment by ENGINEER, nor the issuance of a certificate of Substantial Completion, nor any payment by OWNER to CONTRACTOR under the Contract Documents, nor any use or occupancy of the Work or any part thereof by OWNER, nor any act of acceptance by OWNER nor any failure to do so, nor any review and approval of a Shop Drawing or sample submission, nor the issuance of a notice of acceptability by ENGINEER, nor any correction of defective Work by OWNER will constitute an acceptance of Work not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents (except as provided in paragraph 12.11).

12.11 Waiver of Claims

12.11.1 The making and acceptance of final payment will constitute:

- A. A waiver of all claims by OWNER against CONTRACTOR, except claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to paragraph 12.10 or from failure to comply with the Contract Documents or the terms of any special guarantees specified therein; however, it

will not constitute a waiver by OWNER of any rights in respect of CONTRACTOR's continuing obligations under the Contract Documents; and

- B. A waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled.

ARTICLE 13 SUSPENSION OF WORK AND TERMINATION

13.1 OWNER May Suspend Work

13.1.1 OWNER may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than one hundred eighty (180) days by notice in writing to CONTRACTOR and ENGINEER which will fix the date on which Work will be resumed.

13.1.2 CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an increase in the extension of the Contract Time directly attributable to any suspension.

13.2 Conditions of Termination by Owner

13.2.1 Upon the occurrence of any one or more of the following events:

- A. If CONTRACTOR commences a voluntary case under any chapter of the Bankruptcy Code (Title 11, United States Code), as now or hereafter in effect, or if CONTRACTOR takes any equivalent or similar action by filing a petition or otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency;
- B. If a petition is filed against CONTRACTOR under any chapter of the Bankruptcy Code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against CONTRACTOR under any other federal or state law in effect at the time relating to bankruptcy or insolvency;
- C. If CONTRACTOR makes a general assignment for the benefit of creditors;
- D. If a trustee, receiver, custodian or agent of CONTRACTOR is appointed under applicable law or under contract, whose appointment or authority to take charge of property of CONTRACTOR is for the purpose of enforcing Lien against such property or for the purpose of general administration of such property for the benefit of CONTRACTOR's creditors;
- E. If CONTRACTOR admits in writing an inability to pay its debts generally as they become due;
- F. If CONTRACTOR persistently fails to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 1.7 as revised from time to time);
- G. If CONTRACTOR disregards Laws or Regulations of any public body having jurisdiction;
- H. If CONTRACTOR disregards the authority of ENGINEER; or
- I. If CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents;

13.3 Termination by Owner

- 13.3.1 OWNER may, after giving CONTRACTOR and the surety, if there be one, seven (7) days' written notice and to the extent permitted by Laws and Regulations, terminate the services of CONTRACTOR, exclude CONTRACTOR from the site and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct, indirect and consequential costs of completing the Work (including but not limited to fees and charges of engineers, attorneys and other professionals and court and arbitration costs) such excess will be paid to CONTRACTOR. If such costs exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such costs incurred by OWNER will be approved as to reasonableness by ENGINEER and incorporated in a Change Order, but when exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.
- 13.3.2 Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies due CONTRACTOR by OWNER will not release CONTRACTOR from liability.
- 13.3.3 Upon seven (7) days' written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the Work and terminate the Agreement. In such case, CONTRACTOR shall be paid for all Work executed and any expense sustained plus reasonable termination expenses, which will include, but not be limited to, direct, indirect and consequential costs (including, but not limited to, fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs).

13.4 Conditions of Termination by Contractor

- 13.4.1 If, through no act or fault of CONTRACTOR, the Work is suspended for a period of more than one hundred eighty (180) days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within thirty (30) days after it is submitted, or
- 13.4.2 If OWNER fails for thirty (30) days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven (7) days' written notice to OWNER and ENGINEER, terminate the Agreement and recover from OWNER payment for all Work executed and any expense sustained plus reasonable termination expenses. In addition and in lieu of terminating the Agreement, if ENGINEER has failed to act on an Application for Payment or OWNER has failed to make any payment as aforesaid, CONTRACTOR may upon seven (7) days' written notice to OWNER and ENGINEER stop the Work until payment of all amounts then due. The provisions of this paragraph shall not relieve CONTRACTOR of the obligations under paragraph 4.14 to carry on the Work in accordance with the progress schedule and without delay during disputes and disagreements with the OWNER.

ARTICLE 14 MISCELLANEOUS

14.1 Giving Notice

14.1.1 Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

14.2 Computation of Time

14.2.1 When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

14.2.2 A calendar day of twenty-four hours measured from midnight to the next midnight shall constitute a day.

14.3 Bid Submission

14.3.1 Each bidder who submits a proposal for any portion of the work included in the Project Manual must submit with its bid this form fully completed and signed by an authorized officer of the bidder and must provide the data requested by the form. Unless this form is fully completed and signed by the bidder, the proposal made by that bidder will be incomplete and will not be considered by the Board of County Commissioners.

BID FORM

All sheet (s) must be completely filled out and submitted with the sealed bid or Elkhart County may at its discretion, reject the bid and declare the same invalid. An authorized signature of the Contractor is mandatory upon the bid sheets. All other items necessary to properly complete this project or specifically outlined, shall be included within the line items provided and will be considered as incidental. The award of this contract will be based on the sum of the items listed below.

NOTE: Any Item may be withdrawn by Elkhart County at any time prior to performing the work.

ELKHART COUNTY COURTHOUSE WINDOW REPLACEMENT

BID TOTAL _____ dollars

(\$ _____)

Acknowledge Receipt of Addenda No.(s) _____.

Acknowledge inclusion of the Indiana Form 96 (revised 2013) _____.

Acknowledge inclusion of all Bonds _____.

Acknowledge inclusion of the Schedule _____.

Acknowledge inclusion of the Financial Statement _____.

Acknowledge inclusion of all Allowances within the Bid Total _____.

Submitted by: _____
Company

Authorized Signature

Date: _____ Phone: _____

ATTEST: _____

1. Name of Bidder _____

2. Business Address _____

3. Number of years engaged in contracting business under present firm's name: _____
years.

4. *Experience in the contracting work generally similar to this project, including list of
complexes, locations and approximate contract cost thereof.

5. Have you ever defaulted on a contract? _____ Yes _____ No
If Yes, when, with whom and why? _____

6. *It is a necessary requirement of this Specification that each Contractor show evidence for
five (5) jobs guaranteed for one (1) year on workmanship, unconditionally, and where
Contractor has agreed to return and repair this work at no expense to the Owner.

7. *Have you ever filed bankruptcy or been adjudged bankruptcy?
_____ Yes _____ No

8. Do you employ any black, Hispanic, female or oriental minority persons? If yes, please state
the number of each of such minority persons you presently employ.
_____ Yes _____ No
If no, please state reasons.

9. Have you encouraged minority building subcontractors to submit proposals in connection with your bid? ___Yes ___No. If yes, state the name(s) of the minority subcontractors who have been contacted by you for the purpose of submitting a bid/proposal. If no, please state reasons.

10. Do you intend to use any minority subcontractors in performing the work or providing the materials contained within your bid? ___Yes ___No. If yes, please state the name of the subcontractor. If no, please state reasons.

11 Have you been involved in any complaints or litigation relative to the use of minority subcontractors? ___Yes ___No. If yes, what is the status of the complaints of the litigation?

12 Additional pertinent comments:

BY: _____

(Signature of official completing this form)

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned _____

_____ as PRINCIPAL, and _____

_____ as SURETY, are held and firmly bound unto the Elkhart County Board of County Commissioners, hereinafter called the "Owner", in the penal sum of

_____ Dollars (\$ _____) lawful

money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents:

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the accompanying Bid, dated _____

for: _____

NOW, THEREFORE, if the Principal shall not withdraw said bid within the period specified herein after the opening of the same, or if no period be specified within or sixty (60) days after the said opening, and shall within the period specified therefore, or, if no period be specified within ten (10) days after the prescribed forms are presented to him for signature, enter into a written contract with the Owner in accordance with the bid as accepted, and give Bond for faithful performance and proper fulfillment of such Contract; or in the event of the withdrawal of said bid within the period specified, or the failure to enter into such Contract and give such Bond within the time specified if the Principal shall

pay the Owner the difference between the amount specified in said Bid and the amount for which the Owner may procure the required work or suppliers or both, if the latter amount be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their several seals this _____ day of _____, _____ the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

IN PRESENCES OF:

INDIVIDUAL PRINCIPALS:

_____ (SEAL)
_____ (SEAL)
_____ (SEAL)
_____ (SEAL)

ATTEST:

CORPORATE PRINCIPAL:

_____ (SEAL)
_____ (SEAL)

Business Address _____

By: _____

Title: _____

ATTEST:

CORPORATE SURETY:

_____ (SEAL)
_____ (SEAL)

Business Address _____

By: _____

Title: _____

Power-of-Attorney for person signing for Surety Company must be attached to Bond.

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____
certify that I am the _____
Secretary of the Corporation named as Principal in the within Bond; that _____
_____ who signed the said Bond on behalf of the Principal was
then _____ of the corporation, that I know
his signature, and his signature thereto is genuine; and that said Bond was duly signed, sealed,
and attested to, for and in behalf of said corporation by authority of its governing body.

_____ (SEAL)

PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS,

That _____ as principal and _____ as surety, are firmly bound unto Elkhart County, Indiana, acting through its Board of County Commissioners (OWNER) in the penal sum of an amount equal to one hundred percent (100%) the amount of his bid or the contract price, if the proposal is accepted, for the payment of which, well and truly to be made, we bind ourselves, jointly and severally, and our joint and several heirs, executors, administrators, and assigns, firmly by these presents, this ____ day of _____, _____.

THE CONDITIONS OF THE ABOVE OBLIGATION ARE SUCH That, Whereas, the principal is herewith submitting a bid and proposal for the erection, construction and completion of Elkhart County Courthouse Window Replacement in accordance with the plans and specifications approved and adopted by said OWNER, which are made a part of this Bond.

NOW, THEREFORE, if the said OWNER awards said principal the contract for work and said principal promptly enter into a contract with said OWNER ("Construction Agreement") for the said work and well and faithfully does and performs the same in all respects according to the plans and specifications provided by the said OWNER, and according to

the time, terms, and conditions specified in the Construction Agreement, and in accordance with all requirements of law, and promptly pays all debts incurred by him or any subcontractor in the construction of said work, including labor, service, and materials furnished, then this obligation shall be void; otherwise to remain in full force, virtue and effect.

IT IS AGREED that the principal and surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the OWNER for the performance of the Construction Agreement including compliance with all of the plans and specifications provided by the OWNER, and according to the time, terms, and conditions specified in the Construction Agreement, and in accordance with all requirements of law. Principal and surety further agree to defend, indemnify, and hold harmless OWNER from claims, demands, liens or suits by any person or entity seeking payment for Principal's failure to perform under the Construction Agreement.

IT IS AGREED that the principal and surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the OWNER to pay for labor, materials and equipment furnished for use in the performance of the Construction Agreement, which is incorporated herein by reference. Principal and surety further agree to defend, indemnify, and hold harmless OWNER from claims, demands, liens or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Agreement. The payment bond granted to

OWNER is also for the benefit of the subcontractors, laborers, material suppliers, and those performing services.

IT IS AGREED that no modifications, omissions, or additions in or to the terms and conditions of the Construction Agreement, plans, specifications, drawings, or profile; defect in the Construction Agreement; or defect in the proceedings preliminary to the letting and awarding of the Construction Agreement will discharge or any wise affect the obligation of surety on these bonds.

IN WITNESS WHEREOF, we hereunto set our hands and seal this _____ day of _____, _____.

NAME _____ NAME _____

ADDRESS _____ ADDRESS _____

BY _____ BY _____
Signature Title Signature Title

(Printed or Typed)
Surety

(Printed or Typed)
Principal

State of Indiana, County of _____ ss:

Personally appeared before me, _____

as principal and _____

as surety and each acknowledged the execution of the above bond this _____ day

of _____, _____.

BY _____
Signature Notary Public

(Printed or Typed)

Witness my hand and notarial seal the said last named date.

My Commission Expires _____, _____.

(County of Residence)

Accepted and approved this _____ day of _____, _____.

Bradley D. Rogers, President

Suzanne M. Weirick, Vice President

Bob Barnes, Member

ATTEST: _____
Patricia A. Pickens, Auditor

MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENT: That we, _____

_____, as

Principal, _____ and

as Surety, are held and firmly bound to the _____

_____ in

the sum of _____

_____ Dollars (\$ _____)

for the payment of which sum well and truly to be made, we jointly and severally bind ourselves, our heirs, executors, administrators, and successors, firmly by these present.

THE CONDITIONS OF THE ABOVE OBLIGATION are that, whereas the Principal, entered into a contract with the Owner on the _____ day of _____, ____, to construct _____ according to the Plans and Specifications, and also warranting the work and materials as provided in the aforesaid Contract and Specifications, for a period of three (3) years from the date of final acceptance of work by the Owner.

Now, if the said Principal shall faithfully perform and fulfill all the requirements of said Warranty and Guaranty, and make all repairs required under said Guaranty and, in the manner provided for, then this Bond to be null and void, otherwise to be in full force and effect.

IN WITNESS WHEREOF, this statement is executed in two (2) counterparts, each one of which shall be deemed an original, this _____ day of _____, _____.

(SEAL) Principal

ATTEST:

_____ BY: _____

_____ Title _____ Title

(SEAL)

ATTEST:

_____ BY: _____

_____ Title _____ Title

APPROVED this _____ day of _____, _____.

ELKHART COUNTY, INDIANA
By and Through Its
BOARD OF COUNTY COMMISSIONERS

Bradley D. Rogers, President

Suzanne M. Weirick, Vice President

Bob Barnes, Member

ATTEST: _____
Patricia A. Pickens, Auditor

*** SAMPLE ***

INDEPENDENT CONTRACTOR AGREEMENT

This Independent Contractor Agreement ("Agreement") is made and entered into effective _____, by and between County of Elkhart, Indiana by and through the Elkhart County _____ ("Elkhart County") and _____, a(n) _____ ("Contractor"). Elkhart County and Contractor are collectively referred to as the "Parties."

1. The Parties agree that the Standard Contractual Language adopted by Ordinance No. CO 2025-43, currently located at https://elkhartcounty.com/documents/12240/co_2025-43_standard_contractual_language_ordinance_-_exhibit_a.pdf, is incorporated by reference herein and made a part of this Agreement.

2. Contractor will perform the services and deliver the products shown on the scope of work attached as Exhibit A.

3. The Parties agree to the term of this Agreement, fees and expenses to be paid, and the schedule for performance attached as Exhibit B.

4. Contractor will comply with the insurance requirements attached as Exhibit C.

5. The addresses for sending notice to the Parties are attached as Exhibit D.

6. The supplemental terms agreed to by the Parties are attached as Exhibit E.

The Parties are executing this Agreement with the undersigned signatories of Elkhart County and Contractor each certifying that they have been and are properly authorized on behalf of their respective Party to execute and deliver this Agreement.

ELKHART COUNTY

CONTRACTOR

Bradley D. Rogers, President
Elkhart County Board of Commissioners

Exhibit A
Scope of Work

Contractor will perform professional services and program support for Elkhart County (“Services”). Such Services will be performed to assist various Elkhart County departments and offices (collectively “Departments”) with their day-to-day operations and specific tasks. The scope of work to be performed by Contractor for each assignment will be detailed on a task order request form presented by Elkhart County Departments (“Task Order”). Contractor is not to perform, or bill for the performance of, any Services or associated goods (“Products”) not specifically requested on a Task Order submitted by Elkhart County. To the extent Contractor believes additional Services should be performed or Products delivered in connection with a Task Order, Contractor must obtain a written Task Order amendment or change order before performing such Services or delivering such Products. The County Administrator and other designated Elkhart County Purchasing Agents (“Authorized Agent”) have authority to submit a Task Order on behalf of Elkhart County to Contractor. The Elkhart County Administrator, currently Jeff Taylor, will send Contractor an email to _____ at _____ or to their designee at such email as provided by Contractor when identifying any additions or changes to the Authorized Agent list. When performing Services for Elkhart County, Contractor will advise the Authorized Agent of all steps necessary to follow any applicable permit requirements. Contractor acknowledges that it must comply with all Elkhart County policies and procedures while on Elkhart County property or while accessing Elkhart County property, including those policies and procedures associated with information technology security measures. Contractor will, upon request of Elkhart County, attend meetings to discuss its work under any Task Order and any findings or conclusions reached.

Exhibit B
Term of Agreement

This Agreement will be in effect commencing on _____. This Agreement will remain in effect through _____, and then will automatically renew, unless earlier terminated according to the Standard Contractual Language, for successive one-year terms. The term of any given Task Order may be separately established on the Task Order. This Agreement will automatically extend to the duration of any outstanding Task Order.

Fee Schedule

Contractor's fees for specific Services or Products will be established on each Task Order requested by Elkhart County. The total amount of all fees and expenses owed under a given Task Order must not exceed the total amount set forth in the Task Order without prior written approval from Elkhart County.

Schedule for Performance

Contractor will begin work immediately upon issuance of the first Task Order by Elkhart County pursuant to this Agreement. Each Task Order should establish a schedule for performance that identifies the start date and completion date for all Services to be performed under the Task Order. Similarly, each Task Order should establish a schedule for delivery that identifies the specific date of delivery, assembly, and/or installation of any Products purchased under the Task Order. Contractor agrees to perform such Services and deliver such Products according to the identified schedules.

Exhibit C
Insurance Requirements

For and during the term of this Agreement, Contractor will secure and maintain at its own expense insurance of the type and in the minimum amounts set forth below:

1. **Workers Compensation.** Workers compensation insurance in accordance with all federal and state statutory requirements;

2. **Commercial General Liability.** Commercial general liability insurance in an amount not less than \$1,000,000.00 per occurrence, subject to an amount not less than \$2,000,000.00 aggregate limit covering bodily injury (including death), personal injury, property damage including, without limitation, all contractual liability for such injury or damage assumed by Contractor under this Agreement (this policy must cover, but is not limited to, liability arising from premises and operations, independent contractors, Products/completed operations, personal and advertising injury, and blanket contractual liability). The Commercial General Liability Insurance policy must include coverage for the following special hazards when applicable to the Project:

- a. Property damage arising out of blasting or explosion;
- b. Property damage arising out of collapse of or structural injury to any building or structure due to grading of land, excavation, borrowing, filling, backfilling, tunneling, pile driving, cofferdam work, or caisson work, or to moving, shoring, underpinning, raising, or demolition of any building or structure, or rebuilding of any structural support thereof; and
- c. Injury to or destruction of wires, conduits, pipes, mains, sewers, and other similar property of any apparatus in connection therewith below the surface of the ground, if caused by use of mechanical equipment;

3. **Umbrella.** Umbrella liability insurance with respect to commercial general liability in an amount not less than \$2,000,000.00 per occurrence;

4. **Vehicle Liability Insurance.** Comprehensive Vehicle Liability Insurance with liability limits of not less than \$1,000,000 per occurrence and \$2,000,000 aggregate. This coverage may be provided either as a separate policy or as part of the Comprehensive General Liability Policy described previously. The vehicle insurance must include coverage for all owned, non-owned and hired vehicles.

Elkhart County, its elected officials, officers, directors, employees, agents, departments, and contractors must be named as additional insureds on the commercial general liability policy and, except for the Workers Compensation and Errors and Omissions policies, other policies identified above. Upon request from Elkhart County, Contractor will furnish certificates of

insurance evidencing any of the foregoing coverage and confirming Elkhart County is listed as an additional insured, as applicable.

Exhibit D
Notice Addresses

ELKHART COUNTY: Elkhart County Commissioners
Attn: County Administrator
117 N. Second St.
Goshen, IN 46526
574.534.3541

With a required copy to: Yoder Ainlay Ulmer & Buckingham, LLP
Attn: County Attorney
130 N. Main St.
Goshen, IN 46526
574.533.1171

CONTRACTOR: _____

Phone numbers included above for overnight delivery only.

Exhibit E
Supplemental Terms

A Task Order may contain Supplemental Terms that are specific to the Task Order so long as they do not conflict with or limit the rights (including remedies) and protections given to Elkhart County under these Supplemental Terms and the Standard Contractual Language incorporated into this Independent Contractor Agreement.

1. Requirements for Contractors on Public Works Projects. This supplemental term only applies to Task Orders for public works projects. By executing a Task Order for a public works project, Contractor agrees that it has met and will continue to meet the requirements for contractors on public works projects set forth in Indiana Code Chapter 5-16-13, which Chapter provisions are incorporated herein by reference. For example, Contractor must contribute at least fifteen percent (15%) of the total contract price as determined at the time the Contract is awarded in: (1) Services performed by its employees, (2) Products supplied directly by Contractor, or (3) any combination of the two.

2. No Asbestos. No asbestos containing material may be used as a building material for any project. For all materials used for any project which were marked on the material or packaging with the following or similar wording; "*May contain mineral fibers,*" Contractor will provide to Elkhart County either the manufacturer's certification that the material does not contain asbestos, or a laboratory report from an EPA accredited laboratory indicating that the material does not contain asbestos in accordance with EPA and OSHA requirements.

Task Order

Effective Date of Task Order: _____

Requesting Party: County of Elkhart, Indiana by and through the Elkhart County Board Of Commissioners.

Contractor: _____

Project: Goshen Courthouse Window Replacement

Original Contract: Independent Contractor Agreement dated

This Task Order is subject to the Original Contract, which is activated for Contractor to perform the Services and deliver the Products described in this Task Order.

Attachments (list of documents, if any, supporting Task Order:

1. The Scope of Work for this Task Order is attached as Exhibit A.
2. The Fees and Schedule of Performance for this Task Order are attached as Exhibit B.
3. The Supplemental Terms applicable to this Task Order are attached as Exhibit C.

REQUESTED:
COUNTY OF ELKHART, INDIANA

ACCEPTED:
[INSERT CONTRACTOR NAME]

Bradley D. Rogers, President
Elkhart County Board of Commissioners

[INSERT SIGNATORY], [INSERT TITLE]

Exhibit A
Scope of Work

Contractor will provide the Products and Services related to this project as set forth in the Contract Documents (see definition in Exhibit C). All such Contract Documents have been reviewed and approved by the parties hereto and all are incorporated herein by reference as a part of this Task Order consistent with the terms of the Original Contract and this Task Order. Contractor will, upon request of Elkhart County, attend meetings to discuss the Services to be performed. All undertakings, duties, obligations, and performance required of Contractor by the Contract Documents or hereinafter referred to as the "Work."

Exhibit B

Fees

The total for all charges under this Task Order will not exceed \$ _____ (This amount may not exceed the amount identified on Contractor's proposal / bid response) ("Contract Price").

Performance Schedule

All work to be performed under this Task Order must be completed pursuant to the substantial completion and final completion dates established in the Contract Documents, including any intermediate substantial and final completion dates specified for one or more of the items, phases, or milestones contained therein.

Exhibit C
Supplemental Terms

1. Contractor Representations. Contractor makes the following representations with respect to the contract documents, which include the ICA, this Task Order, Invitation to Bids, Notice to Bidders, Signed copy of the Bid and Itemized Bid Form, General Conditions and Supplementary Conditions, Construction/Technical Specifications and Related Documents, Plans and Drawings, Performance Bond (as required), Payment Bond (as required), Insurance Policies and Certificates (as required), Addendums, and any change orders ("Contract Documents"):

a. Contractor agrees that it has familiarized itself with the nature and extent of the Contract Documents, work site, locality, soil conditions (as applicable), and all local conditions, and laws and regulations that in any manner may affect cost, progress, performance or furnishings of Products or Services for this project.

b. Contractor has studied carefully any and all reports of explorations, and test of site conditions, and drawings of site conditions which are identified in the Contract Documents

c. Contractor has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests, reports and studies which pertain to the site conditions at or contiguous to the site or otherwise may affect the cost, progress, performance, or furnishing of the Products or Services for this project as Contractor considers necessary for the performance of or furnishing of the Products or Services for this project at the Contract Price, within the Performance Schedule, and in accordance with the other terms and conditions of the Contract Documents.

d. Contractor has reviewed and checked all information and data shown or indicated in the Contract Documents with respect to existing above ground or underground facilities at or contiguous to the site and assume responsibility for the accurate location of said facilities.

2. Additional Contractor Representations. Contractor represents to Elkhart County that it is fully experienced and properly qualified as an expert to render the performance required for the Work, and that it is properly equipped, organized, and financed for performance of this Task Order.

3. Project Oversight. Contractor will carry out this project and complete the Work under the direction of Elkhart County and Elkhart County's agents, the Engineer, or other consultant designated by Elkhart County. Elkhart County's designated representative during the construction period will make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents.

4. Substantial Completion Liquidated Damages. For each and every day Work contemplated in this Task Order fails to achieve substantial completion of the given task (e.g., item, phase, milestone or project as whole), beyond the substantial completion date established for the task, Contractor will owe and pay to Elkhart County the sum of \$1,000.00 per day, as liquidated damages and not as a penalty. In establishing said \$1,000.00 sum per day as and for liquidated damages owed by Contractor to Elkhart County, the parties hereto stipulate and agree that the actual damages that would be suffered by Elkhart County because of the failure of Contractor to timely complete the Work contemplated are indefinite and uncertain; however, the parties hereto stipulate that the sum herein establishes a reasonable estimate by the parties of the probable damages to be suffered by Elkhart County upon the failure of Contractor to timely complete the Work contemplated. The liquidated damages herein established will be deducted daily from the Contract Price set forth in Exhibit B, thereby reducing the amount of liquidated damages owed directly from Contractor, and hence reducing payments of the Contract Price Elkhart County would otherwise make. If an intermediate substantial completion date is specified for one or more of the items, phases, or milestones, the intermediate substantial completion date for that particular item, phase, or milestone will be used to determine the amount of liquidated damages.

5. Final Completion Liquidated Damages. For each and every day Work contemplated in this Task Order fails to achieve final completion of the given task (e.g., item, phase, milestone or project as whole), beyond the final completion date established for the task, Contractor will owe and pay to Elkhart County the sum of \$1,000.00 per day, as liquidated damages and not as a penalty. In establishing said \$1,000.00 sum per day as and for liquidated damages owed by Contractor to Elkhart County, the parties hereto stipulate and agree that the actual damages that would be suffered by Elkhart County because of the failure of Contractor to timely complete the Work contemplated are indefinite and uncertain; however, the parties hereto stipulate that the sum herein establishes a reasonable estimate by the parties of the probable damages to be suffered by Elkhart County upon the failure of Contractor to timely complete the Work contemplated. The liquidated damages herein established will be deducted daily from the Contract Price set forth in Exhibit B, thereby reducing the amount of liquidated damages owed directly from Contractor, and hence reducing payments of the Contract Price Elkhart County would otherwise make. If an intermediate final completion date is specified for one or more of the items, phases, or milestones, the intermediate final completion date for that particular item, phase, or milestone will be used to determine the amount of liquidated damages.

Supplemental Provisions

For

**ELKHART COUNTY COURTHOUSE
WINDOW REPLACEMENT**

OWNERS:

ELKHART COUNTY, INDIANA, ACTING THROUGH
ITS BOARD OF COUNTY COMMISSIONERS
BUILDINGS AND GROUNDS DEPARTMENT 26861
COUNTY ROAD 26
ELKHART, IN, 46517

Elkhart County Buildings and Grounds Department 26861 County Road
26, Elkhart, IN, 46514
Phone: (574) 891-2204

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SP1 – TIME OF COMPLETION

1. MOBILIZATION

Work on this Contract shall not begin prior to notice to proceed.

The Contractor shall notify the Owner at least two (2) weeks in advance of his intention to perform any Work on the project. The Contractor shall give the owner/inspector updated schedules of work on a bi- weekly basis or as the schedule changes.

2. SUBSTANTIAL COMPLETION

Add the following new definition to the DEFINITIONS section of the General Provisions:

“SUBSTANTIALLY COMPLETE” The time at which the Work (or a specified portion thereof) is ready for its intended use and all work items (in the specified portion thereof) are complete.

Add the following at the beginning of Section 12.5 of the General Provisions:

A project is considered Substantially Complete when the entire Work is ready for its intended use and all work items are complete.

3. CONSTRUCTION DURATION AND SITE ACCESS

Following Notice to Proceed, the Contractor shall make a written request to the Buildings and Grounds Director with the contractors preferred mobilization date. The Buildings and Grounds Director will coordinate the approval of the proposed construction schedule with the Elkhart County Courthouse. Work at the Courthouse shall be limited to a 120 calendar day window from the day of mobilization on site and shall not commence without written approval from the Owner. Permitted work hours are from 6:00 AM to 5:00 PM each day.

3. LIQUIDATED DAMAGES

The completion date as referred to in ARTICLE 3 of the agreement will be used interchangeably with the term Final Acceptance. Final Acceptance is the point in time where the Engineer provides recommendation of final payment to the Owner as outlined in Section 12.9 of the General Provisions.

Liquidated damages will apply for the following dates and intermediate dates until conclusion of said portion of project or contract.

Description	Date
Substantial Completion	120 calendar days following approved mobilization date
Final Acceptance	December 1, 2026

4. REVIEW TIMES

The Engineer is allowed the following time to produce items owed to the Owner or Contractor per this agreement and the Owner is not obligated to provide the Contractor a change of contract time therefore.

In Section 12.5 of the General Provisions, 'a reasonable time thereafter' is 14 calendar days. The Owner is not required to provide the Contractor a change in contract time therefore.

In Section 12.9 of the General Provisions, the Engineer will indicate in writing Engineer's recommendation of payment and present the Application to Owner for payment within seven (7) calendar days after receipt of final Application for Payment. The Engineer may recommend to the Owner that a Waiver of Time be provided to the Contractor for the seven (7) calendar days listed herein if the Contractor has demobilized from the site, there are no remaining defective or incomplete Work items. A Waiver of Time is document that waives the Liquidated Damages for the time-frame indicated in the document. A Waiver of Time may be given for part or the entirety of the seven (7) day period listed herein. The amount of time provided in the Waiver of Time is at the discretion of the Owner.

5. CHANGE OF CONTRACT TIME

Add the following new definition to the DEFINITIONS section of the General Provisions:

No extension of Contract Time shall be allowed for weather or changes in quantities placed.

Changes in Contract Time will only be considered if requested in writing by the Contractor in accordance with Article 10 of the General Conditions.

Determination and Extension of Contract Time for Completion and Failure to Complete on Time shall be in accordance with the Agreement and all applicable requirements of 108.08, and modified as follows.

- A. Changes in Contract Time will only be considered if requested in writing by the Contractor in accordance with Article 10 of the General Conditions

SP2 – STORAGE OF CONTRACTOR'S EQUIPMENT, MATERIALS AND TEMPORARY OFFICES

1. GENERAL

The Contractor will be permitted to store non-operating construction equipment, workmen's vehicles, materials and temporary offices within the limits of the "Equipment Staging Area" with approval from Owner.

All areas within the Equipment Staging Area that are used by the Contractor for temporary storage, of any kind, shall be restored to their original condition by the Contractor at his own expense, when no longer required for that purpose.

SP3 – HAZARD COMMUNICATIONS PROGRAM

1. GENERAL

Pursuant to the latest requirement of OSHA the bidder is obligated to inform his employees concerning the health and safety hazards of chemical substance that may be required in the performance of this contract.

SP4 – ENVIRONMENTAL RESTRICTIONS

1. PERMITS

Regulatory permits, including all related building permits required for for this project, shall be obtained by the CONTRACTOR.

The supplied materials and methods used for installation shall comply with applicable health, safety, and building costs.

SP5 – CONTRACTOR'S RESPONSIBILITY FOR MATCHING OLD WORK

1. GENERAL

Where new work is to be fitted to old work, the Contractor shall check all leading dimensions and conditions in the field and report any errors or discrepancies to the Engineer and assume responsibility for their correctness and the fit of new parts to old. If such parts do not fit properly, the Contractor shall make and pay for such alterations or new parts as may be necessary to assure proper fits and connections meeting the approval of the Engineer.

SP6 – CONTAMINATION PRECAUTION

1. GENERAL

Contractor shall take all precautions to avoid the spillage of construction-related liquids and fuels during the project.

DIVISION 01- GENERAL REQUIREMENTS

01 21 00	ALLOWANCES
01 26 00	CONTRACT MODIFICATION PROCEDURES
01 26 13	REQUESTS FOR INTERPRETATION
01 31 00	PROJECT MANAGEMENT AND COORDINATION
01 31 19	PROJECT MEETINGS
01 33 00	SUBMITTAL PROCEDURES
	Exhibit 01 33 00A_Subcontractors and Manufacturers List
	Exhibit 01 33 00B_CADD Information Request
01 33 26	SOURCE QUALITY CONTROL REPORTING
01 41 00	REGULATORY REQUIREMENTS
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01 50 00	TEMPORARY FACILITIES AND CONTROLS
01 60 00	PRODUCT REQUIREMENTS
01 62 00	PRODUCT OPTIONS
01 74 19	CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL
01 77 00	CLOSEOUT PROCEDURES
	Exhibit 01 77 00A_AIA Document G704-2017 (Certificate of Substantial Completion)
01 78 23	OPERATION AND MAINTENANCE DATA
01 78 36	WARRANTIES
01 78 39	PROJECT RECORD DOCUMENTS

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SECTION 01 21 00 - ALLOWANCES

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. Section includes administrative and procedural requirements governing allowances.
 - 1. Selected materials and equipment are specified in the Contract Documents by allowance. This allowance includes installation. The allowance has been established in lieu of additional requirements and to repair of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.
 - 2. The Architect shall provide the Contractor with a written description prior to the use of the allowance.
 - 3. The Contractor shall not use the allowance without written instruction by the Architect and approved by the Owner.

1.3 DEFINITIONS

- A. Allowance: A quantity of work or dollar amount included in the Contract, established in lieu of additional requirements, used to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.

1.4 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection, or purchase and delivery, of each product or system described by an allowance must be completed by the Owner to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Architect from the designated supplier.

1.5 ACTION SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances in the form specified for Change Orders.

1.6 COORDINATION

- A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

1.7 ALLOWANCES

- A. Use the allowance only as directed by Architect for Owner's purposes and only by Allowance Adjustments that indicate amounts to be charged to the allowance.

1. Upon acceptance of the Proposal Request, an Allowance Adjustment will be issued for execution by the Owner and Contractor.
2. Allowance Adjustments shall increase or decrease allowance amounts.
3. Allowance Adjustments shall not change the Contract amount.
4. Contractor shall include in Base Bid amount all costs associated bonds, shipping, delivery and unloading costs, small tools, overhead and profit for work performed by Contractor's own forces for items that utilize Allowances Funds. These items are not permitted as an allowance cost within Allowance Adjustment.
5. Work items associated with an Allowance Adjustment and performed by subcontractors cost of subcontractors' material and labor amount may be increased by five (5%) percent.
6. Contractor shall include each Allowance on the Schedule of Values.

- a. Upon approval of Allowance Adjustment(s), Contractor to update Schedule of Values and Application for Payment to record each Allowance Adjustment as a separate line item.

- B. At Project closeout, credit unused amounts remaining in the allowances to Owner by Change Order.

1.8 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Proposal Request based on the work.

1. Prepare explanation and documentation of all material and labor.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. Allowance No. 1: General Contingency Allowance.
Amount equal to a lump sum amount of Sixty-Five Thousand dollars (\$65,000.00), to be included within the Base Bid, to be used at the discretion of the Owner and Architect for work not included within this Project's Scope of Work.
- B. Allowance No. 2: Stained Glass and Sash Restoration Allowance.
Amount equal to a lump sum amount of Ninety-Five Thousand dollars (\$95,000.00), to be included within the Base Bid, to be used at the discretion of the Owner and Architect for work not included within this Project's Scope of Work.

1. Included in the Project's Scope of Work:

- a. Removal of half-round wood sashes with stained-glass from existing wood window system.
- b. Documentation of existing condition.
- c. Numbering of each unit.
- d. Installation of restored half-round sashes in the same openings that they were removed from, as shown on drawings.

2. Work to be covered by this Allowance:

- a. Packaging and shipment of half-round sashes.
- b. Repair of stained-glass window systems and wood sashes.
- c. Return shipment of repaired units.

END OF SECTION 01 21 00

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SECTION 01 26 00 – CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Request for pricing.
- B. Documentation of change in Contract Sum and Contract Time.
- C. Change procedures.
- D. Stipulated Sum change order.
- E. Time and material change order.
- F. Execution of change orders.
- G. Correlation of Contractor submittals.

1.2 RELATED DOCUMENTS

- A. General Conditions: Governing requirements for changes in the work, in contract sum, and contract time.
- B. Section 01 60 00 "Product Requirements"
- C. Section 01 77 00 "Closeout Procedures"

1.3 DOCUMENTATION OF CHANGE IN CONTRACT SUM AND CONTRACT TIME

- A. Maintain detailed records of work done on a time and material basis. Provide full information required for evaluation of proposed changes, and to substantiate costs of changes in the work.
- B. Document each lump sum quotation for a change in cost or time with sufficient data to allow evaluation of the quotation. Include material and labor unit cost and quantities.
- C. Provide additional data to support computations:
 - 1. Quantities of products, labor, and equipment.
 - 2. Overhead and profit.
 - 3. Justification for any change in contract time.
 - 4. Credit for deletions from contract, similarly documented.

- D. Support each claim for additional costs prior to work being done. Provide origin and date of each claim.

1.4 CHANGE PROCEDURES

- A. The Architect will advise of minor changes or clarifications in the work that may or may not involve an adjustment to contract sum or contract time as authorized by AIA A201, 2007 Edition, by issuing Architect's Supplemental Instructions on AIA Form G710. Contractor will prepare and submit an estimate within fourteen (14) days.
- B. The Architect may issue a Proposal Request which includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in contract time for executing the change and the period of time during which the requested price will be considered valid. Contractor will prepare and submit an estimate within fourteen (14) days.

1.5 CHANGE DIRECTIVE

- A. Construction Change Directive: When the Owner and the Contractor disagree on the terms of a Proposal Request, the Architect may issue a Construction Change Directive on AIA Form G714. The Construction Change Directive instructs the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. The Construction Change Directive contains a complete description of the change in the Work. It also designates the method to be followed to determine change in the Contract Sum or Contract Time.
 - 2. Change Directives are used on emergency items.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 - 1. After completion of the change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.
- C. Promptly execute the change in work.

1.6 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: The Architect will issue a detailed description of proposed changes in the Work that will require adjustment to the Contract Sum or Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Proposal requests issued by the Architect are for information only. Do not consider them as an instruction either to stop work in progress or to execute the proposed change.

2. Within fourteen (14) days of receipt of a proposal request, submit an estimate of cost necessary to execute the change to the Architect for the Owner's review.
 - a. Include a detailed list of quantities of products required and unit costs, with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include a statement indicating the effect the proposed change in the Work will have on the Contract Time.
 - d. Include breakdown of material and labor.
- B. Contractor-Initiated Proposals: When latent or unforeseen conditions require modifications to the Contract, the Contractor may propose changes by submitting a request for a change to the Architect.
 1. Include a statement outlining the 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 Contract Time.
 2. Include a detailed list of quantities of products required and unit costs, with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 4. Include breakdown of material and labor.
- B. Proposal Request Form: Use AIA Document G709 for Change Order Proposal Requests.
- C. Back-up Documentation: Contractor shall submit all back-up documentation with each proposal. The Architect reserves the right to request additional back-up documentation as needed to evaluate the proposed costs. Refer to Exhibit 002600 A1 and 002600 A2.

1.7 STIPULATED SUM CHANGE ORDER (CO)

- A. A Change Order will be issued based upon the Contractor's estimated price quotation as recommended by the Architect and approved by the Owner.

1.8 TIME AND MATERIAL CHANGE ORDER (CO)

- A. Submit itemized account and supporting data after completion of change within (15) days after completion.
- B. The Architect will determine the change allowable in contract sum and contract time as provided in the contract documents.

- C. Maintain detailed records of work done on Time and Material basis. The Contractor's on-site representative must verify and sign the contractor's daily timesheets, not as approval for payment, but for record that work was completed per the change order.
- D. Provide full information required for evaluation of proposed changes and to substantiate costs for changes in the work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXECUTION OF CHANGE ORDERS

- A. Execution of Change Orders: Architect will prepare and issue Change Orders for signatures of parties. Owner, Architect, Contractor, shall sign all change orders.

3.2 CORRELATION OF CONTRACTOR SUBMITTALS

- A. Promptly revise Schedule of Values and Application for Payment forms to record each authorized change order as a separate line item and adjust the contract sum.
- B. Promptly revise progress schedules to reflect any change in contract time, revise sub-schedules to adjust time for other items of work affected by the change and resubmit.
- C. Promptly enters changes in on-site As-Built document set.

END OF SECTION 01 26 00

SECTION 01 26 13 - REQUESTS FOR INTERPRETATION

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 governing requests for interpretation.

1.3 DOCUMENTATION OF REQUESTS FOR INTERPRETATION

- A. Contractor shall provide written requests for interpretation utilizing the Contractor's standard form.
- B. Provide full information required for Architect's review and evaluation of conditions.
- C. Provide additional supportive information to clearly identify conditions.

1.4 RESPONSE TO REQUESTS FOR INTERPRETATION

- A. The Architect will advise of minor changes or clarifications in the work that may or may not involve an adjustment to contract sum or contract time as authorized by AIA A201, 2017 Edition, by issuing Architect's Supplemental Instructions on AIA Form G710.
- B. The Architect may issue a Proposal Request which includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in contract time for executing the change and the period of time during which the requested price will be considered valid.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 26 13

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SECTION 01 31 00 – 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 other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and supervisory requirements necessary for coordinating construction operations including, but not necessarily limited to, the following:
 - 1. General project coordination procedures.
 - 2. Cleaning and protection.
 - 3. Supervisory personnel
 - 4. Limitations for use of site
 - 5. General installation provisions
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Section 01 31 19 "Project Meetings" for progress meetings, coordination meetings, and pre-installation conferences.
 - 3. Section 01 33 00 "Submittal Procedures" for preparing and submitting the Contractor's Construction Schedule.
 - 4. Section 01 60 00 "Product Requirements" for coordinating general installation.
 - 5. Section 01 77 00 "Closeout Procedures" for coordinating contract closeout.

1.3 COORDINATION

- A. Coordinate construction operations included in various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in the sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components to assure maximum accessibility for required maintenance, service, and repair.
 - 3. Make provisions to accommodate items scheduled for later installation.
- B. Where necessary, prepare memoranda for distribution to each party involved, outlining special

procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.

1. Prepare similar memoranda for the Owner and separate contractors where coordination of their work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and assure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. Preparation of schedules.
 2. Installation and removal of temporary facilities.
 3. Delivery and processing of submittals.
 4. Progress meetings.
 5. Project closeout activities.
- D. Conservation: Coordinate construction operations to assure that operations are carried out with consideration given to conservation of energy, water, and materials.
1. Salvage materials and equipment involved in performance of, but not actually incorporated in, the Work.
- E. The Contractor will manage construction of the project. The Architect will confirm compliance to contract documents.
- F. Contractor shall schedule, manage, and expedite all work under his contract, coordinating his work with all other contractors and trades so that no conflicts of timing or location occur. The work shall progress according to the approved and current construction progress schedule.
- G. Contractor shall:
1. Assume full responsibility for protection and safekeeping of products stored on premises.
 2. Move any stored products which interfere with operations of Owner or other contractors.
 3. Furnish, erect and maintain barricades, warning lights, signs, guards, and overhead protection as may be required for his work.
 4. Notify, in writing through the Architect, the Owner at least forty-eight (48) hours in advance of utility connections or shutoff.
 - a. Coordinate these operations with the Owner, and complete the work in the minimum amount of time.
 5. Shut-offs must be accomplished to accommodate the Owner's schedule. Overtime, round the clock, holiday or weekend work may be required at no additional cost to the Owner.
 6. Prepare coordination drawings where work by separate entities requires fabrication off-site of products and materials which must accurately interface. Coordination drawings shall indicate how work will interface and shall indicate installation sequence.

1.4 SUPERVISORY PERSONNEL

- A. Contractor must designate a superintendent who shall represent the contractor on the jobsite. Directions given to the superintendent shall be as binding as if given to the contractor.
- B. Once a superintendent is assigned to the project he cannot be removed or replaced without receiving the Architect and Owner's approval.
- C. The prime contractor and/or superintendent shall:
 - 1. Man, schedule, and supervise the work to meet the current construction schedule.
 - 2. Purchase and schedule delivery of materials and sublet subcontractors to meet the construction schedule.
 - 3. Inspect the work of other contractors which precedes your work and upon which your work depends. Report to the Architect any deviations from the contract documents. Commencement of work on substrate constitutes acceptance of the other contractor's work.
 - 4. Cooperate with other prime contractors doing work on this project.
 - 5. Notify the Architect of conditions that could delay the work.
 - 6. Furnish the Architect with a daily manpower report and description of work completed as requested.
 - 7. Attend coordination and progress meetings as scheduled by Architect to review coordination of various phases of work. The Contractor shall be represented by persons with full authority to act on matters pertaining to the work.

1.5 LIMITATIONS FOR USE OF SITE

- A. General: Limitations on site usage as well as specific requirements that impact utilization are indicated on the site utilization drawings and by other Contract Documents.
- B. Confine operations at site to areas permitted by law, ordinances, permits, and contract documents.
- C. Major equipment is not permitted to be stored on-site.
- D. Availability of on-site storage is limited. Contractor shall store on-site only those materials which will be installed within the following 48-hour period.
- D. Long term storage will not be allowed without prior approval from the Architect and Owner. Coordinate all installations with adjoining and related items of work. Check the scopes of work being provided by other prime contractors and their respective drawings, specifications and shop drawings for proper coordination of details. In the event of conflicting requirements, consult with the Architect prior to proceeding with the work.
- E. All work force personnel shall visibly display identification of company name.

1.6 GENERAL INSTALLATION PROVISIONS

- A. Inspection of Conditions: Require the installer of each major component to inspect both the substrate and conditions under which work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable proceed acceptable manner.
- B. Manufacturer's Instructions: Comply with manufacturer's installation instructions and recommendations, to the extent that those instructions and recommendations are more explicit or stringent than requirements contained in contract documents.
- C. Inspect materials or equipment immediately upon delivery and again prior to installation. Reject damaged and defective items.
- D. Provide attachment and connection devices and methods necessary for securing Work. Secure work true to line and level. Allow for expansion and building movement.
- E. Visual Effects: Provide uniform joint widths in exposed work. Arrange joints in exposed work to obtain the best visual effect. Refer questionable choices to the Architect/Engineer for final decision.
- F. Re-check measurements and dimensions before starting each installation.
- G. Install each component during weather conditions and project status that will ensure the best possible results. Isolate each part of the completed construction from incompatible material as necessary to prevent deterioration.
- H. Coordinate temporary enclosures with required inspections and tests to minimize necessity of uncovering completed construction for that purpose.
- I. Mounting Heights: Where mounting heights are not indicated, submit a Request for Information (RFI) to the Architect for clarification.
- J. During handling and installation, clean and protect construction in progress and adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration at substantial completion.

1.7 SUBMITTALS

- A. Coordination Drawings: Prepare coordination drawings where careful coordination is needed for installation of products and materials fabricated by separate entities. Prepare coordination drawings where limited space availability necessitates maximum utilization of space for efficient installation of different components.
 - 1. Show the relationship of components shown on separate Shop Drawings.
 - 2. Indicate required installation sequences.
- B. Staff Names: Within 15 days of commencement of construction operations, submit a list of the Contractor's principal staff assignments, including the superintendent and other personnel in attendance at the Project Site. Identify individuals and their duties and responsibilities. List

their addresses and telephone numbers.

1. Post copies of the list in the Project meeting room, the temporary field office, and each temporary telephone.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 GENERAL COORDINATION PROVISIONS

- A. Inspection of Conditions: Require the Installer of each major component to inspect both the substrate and conditions under which Work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.
- B. Coordinate temporary enclosures with required inspections and tests to minimize the necessity of uncovering completed construction for that purpose.

3.2 CLEANING AND PROTECTION

- A. Clean and protect construction in progress and adjoining materials in place, during handling and installation. Apply protective covering where required to assure protection from damage or deterioration at Substantial Completion.
- B. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to assure operability without damaging effects.
- C. 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. Where applicable, such exposures include, but are not limited to, the following:
 1. Excessive static or dynamic loading.
 2. Excessive internal or external pressures.
 3. Excessively high or low temperatures.
 4. Thermal shock.
 5. Excessively high or low humidity.
 6. Air contamination or pollution.
 7. Water or ice.
 8. Solvents.
 9. Chemicals.
 10. Light.
 11. Radiation.
 12. Puncture.
 13. Abrasion.

14. Heavy traffic.
15. Soiling, staining, and corrosion.
16. Bacteria.
17. Rodent and insect infestation.
18. Combustion.
19. Electrical current.
20. High-speed operation.
21. Improper lubrication.
22. Unusual wear or other misuse.
23. Contact between incompatible materials.
24. Destructive testing.
25. Misalignment.
26. Excessive weathering.
27. Unprotected storage.
28. Improper shipping or handling.
29. Theft.
30. Vandalism.

3.3 COMMUNICATION PROCEDURES

- A. All correspondence must go through the Architect.
- B. In the event contract document clarification is required, Contractor to submit a 'Request for Information' (RFI) must be submitted to the Architect.

END OF SECTION 01 31 00

SECTION 01 31 19 - PROJECT MEETINGS

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 for project meetings, including, but not limited to, the following:
 - 1. Preconstruction conferences.
 - 2. Progress meetings.
- B. Related Requirements:
 - 1. Section 01 31 00 "Project Management and Coordination" for procedures for coordinating project meetings with other construction activities.
 - 2. Section 01 33 00 "Submittal Procedures" for submitting the Contractor's Construction Schedule.

1.3 PRECONSTRUCTION CONFERENCE

- A. Schedule a preconstruction conference before starting construction, at a time convenient to the Owner and the Architect, but no later than 15 days after execution of the Agreement. Hold the conference at the Project Site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
- B. Attendees: Authorized representatives of the Owner, Architect, and Engineer(s); the Contractor and its superintendent; major subcontractors; manufacturers; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
- C. Agenda: Discuss items of significance that could affect progress, including the following:
 - 1. Administrative Items.
 - 2. Tentative construction schedule.
 - 3. Critical work sequencing.
 - 4. Designation of responsible personnel.

5. Procedures for processing field decisions and Change Orders.
6. Procedures for processing Applications for Payment.
7. Distribution of Contract Documents.
8. Submittal of Shop Drawings, Product Data, and Samples.
9. Preparation of record documents.
10. Use of the premises.
11. Parking availability.
12. Storage areas.
13. Equipment deliveries and priorities.
14. Safety procedures.
15. First aid.
16. Security.
17. Housekeeping.
18. Working hours.

1.4 PROGRESS MEETINGS

- A. Conduct progress meetings at the Project Site at regular intervals. Notify the Owner and the Architect of scheduled meeting dates. Coordinate dates of meetings with preparation of the payment request and review of draft payment applications.
 1. Progress meetings shall be had at two-week intervals, beginning at the mobilization on-site.
- B. Attendees: In addition to representatives of the Owner and the Architect, each subcontractor, supplier, or other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
- C. Agenda: Review and correct or approve minutes of the previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the status of the Project.
 1. Contractor's Construction Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 2. Review the present and future needs of each entity present, including the following:
 - a. Administrative items.
 - b. Completed work activities since the last meeting.
 - c. Anticipated work activities prior to next meeting.

- d. Status of submittals.
- e. Anticipated deliveries.
- f. Off-site fabrication problems.
- g. Project schedule.
- h. Status of Architect's Supplemental Instructions.
- i. Status of Proposal Requests.
- j. Status of Requests for Information.
- k. Status of Allowance Adjustments.
- l. Review of Project Schedule.
- m. Impacts of other projects.
- n. Coordination items with Owner's operations
- o. Safety and reported Injuries
- p. Housekeeping.
- q. Quality and work standards
- r. Payment Applications review
- s. Comments by contractor, Architect, and Owner.
- t. Additional applicable items.

D. Schedule Updating: The Contractor shall revise the Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue the revised schedule concurrently with the report of each meeting.

- 1. The construction schedule shall be updated monthly to reflect actual construction progress. Schedule shall be presented at Construction Progress meeting.
- 2. Contractor shall prepare a two-week 'look ahead' schedule at each Construction Progress meeting. Schedule shall provide anticipated activities, including specific areas of work, activities that may impact Owner's operations; Owner shall review and comment on anticipated activities; Contractor shall adjust schedule of activities accordingly at no additional cost to the contract or change in overall completion date of project.

1.5 PREINSTALLATION CONFERENCES

- A. Conduct a pre-installation conference at Project site before each construction activity that requires coordination with other construction.
- B. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
- C. Agenda: Review progress of other construction activities and preparations for the particular activity that is under consideration, including requirements for the following:
 - 1. Contract Documents.

2. Options.
3. Security Issues.
4. Related Change Orders.
5. Purchases.
6. Deliveries.
7. Submittals.
8. Review of mockups.
9. Possible conflicts.
10. Compatibility problems.
11. Time schedules.
12. Weather limitations.
13. Manufacturer's written recommendations.
14. Warranty requirements.
15. Compatibility of materials.
16. Acceptability of substrates.
17. Temporary facilities and controls.
18. Space and access limitations.
19. Regulations of authorities having jurisdiction.
20. Testing and inspecting requirements.
21. Required performance results.
22. Protection of construction and personnel.

D. REPORTING:

1. Contractor shall record significant conference discussions, agreements, and disagreements.
2. Do not proceed with installation if the conference cannot be successfully concluded.
3. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 31 19

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for submittal of Shop Drawings, Product Data, Samples, Construction Schedule, and other miscellaneous quality-control submittals.
 - 1. All submittals are to be provided to the Architect no later than thirty (30) days after award of contract.
- B. Shop Drawings include, but are not limited to, the following:
 - 1. Fabrication drawings.
 - 2. Installation drawings.
 - 3. Schedules.
 - a. Standard information prepared without specific reference to the Project is not considered Shop Drawings.
- C. Product Data include, but are not limited to, the following:
 - 1. Manufacturer's product specifications.
 - 2. Manufacturer's installation instructions.
 - 3. Catalog cuts.
 - 4. Standard product operating and maintenance manuals.
- D. Quality-control submittals include, but are not limited to, the following:
 - 1. Design data.
 - 2. Certifications.
 - 3. Manufacturer's instructions.
 - 4. Manufacturer's field reports.

- E. Administrative Submittals: Refer to other Division 01 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to, the following:
 - 1. Permits.
 - 2. Applications for Payment.
 - 3. Performance and Payment Bonds.
 - 4. Insurance Certificates.
 - 5. Listing of Subcontractors.

- F. Related Requirements:
 - 1. Section 01 77 00 "Closeout Procedures" specifies requirements for submittal of Project Record Documents, including copies of final Shop Drawings, at project closeout.

1.3 DEFINITIONS

- A. Coordination Drawings show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or to function as intended.
 - 1. Preparation of Coordination Drawings is specified in Section 01 31 00 "Project Management and Coordination" and may include components previously shown in detail on Shop Drawings or Product Data.

1.4 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delays.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.
 - a. Final approval will not occur until listed related submittals are received.
 - 3. Processing: Allow 14 calendar days for Architect's review time so that installation will not be delayed as a result of the time required to process submittals.
 - a. Allow no less than fourteen calendar days for initial review.
 - b. If an intermediate submittal is necessary, process the same as the initial submittal.

- c. Allow not less than seven calendar days for reprocessing each submittal.
 - d. No extension of Contract time will be authorized because of failure to transmit submittals to the Architect sufficiently in advance of the Work to permit processing.
 4. Schedule: All submittals shall be forwarded to the Architect for review no later than thirty (30) days after Award of Contract.
 5. Submittals and shop drawings must be procured in order to meet the schedule requirements and substantial completion.
- B. Submittal Preparation: Except as indicated below for Product Data and Shop Drawings, place a permanent label on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label. Apply permanent adhesive label.
 1. Provide a space approximately 4" x 5" beside the title block on Shop Drawings to record the Contractor's review and markings for the action taken.
 2. Provide a space approximately 4" x 5" beside the title block on Shop Drawings to record the Architect's review and markings for the action taken.
 3. Include the following information on the label for processing and recording action taken.
 - a. Project name and Project number.
 - b. Date.
 - c. Name and address of Architect
 - d. Name and address of Contractor
 - e. Name and address of subcontractor
 - f. Name and address of supplier
 - g. Name of manufacturer
 - h. Number and title of appropriate Specification Section
 - i. Drawing number and detail reference, as appropriate.
 4. Submittals may be produced in an electronic format (.pdf format) and transmitted electronically to Architect for review and action. Hard copies of final documents are required in addition to electronic version within final closeout documents.
- C. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from Contractor to Architect using a transmittal form. Submittals received from sources other than the Contractor will be returned without action.
 1. On the transmittal record relevant information and requests for data. In the "Stamp" of Contractor" column on submittal cover sheet record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.

1.5 PROPOSED PRODUCT LIST

- A. Within five (5) days of signing the contract submit a completed list of long lead material items and/or equipment.
1. Specification section.
 2. Name of material or equipment.
 3. Anticipated shop drawings submittal date.
 4. Fabrication duration (weeks).
 5. Anticipated delivery date.
 6. Manufacturer's name.
 7. Manufacturer's address.
 8. Manufacturer's phone numbers.

1.6 SCHEDULE

- A. Provide complete shop drawings, product data, and samples as required per technical specification section within ten (10) days upon receipt of Notice to Proceed.

1.7 SHOP DRAWINGS

- A. Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings without the Architect's permission. Standard information prepared without specific reference to the Project is not considered Shop Drawings.
1. Contractor may obtain from the Architect the electronic base drawing's that were developed for the Contract Documents; Contractor shall submit "CADD Information Request" and Disclaimer (Refer to 01 33 00B and 01 33 00C). Contractor remains responsible for preparation review and issuance of required shop drawings. Contract must properly execute forms and payment. Blind reuse of Architect provided information is no permitted.
 2. Shop drawings shall be provided in electronic format for review and action.
 3. Submittals may be produced in an electronic format (.pdf format) and transmitted electronically to Architect for review and action. Hard copies of final documents are required in addition to electronic version within final closeout documents.
- B. Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates, and similar drawings. Include the following information:
1. Dimensions.
 2. Identification of products and materials included.
 3. Compliance with specified standards.
 4. Notation of coordination requirements.

5. Notation of dimensions established by field measurement.
 6. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8 1/2" x 11", multiples of 8 1/2" x 11" when folded, but no larger than drawings of the Contract Documents.
 7. Distribution: Furnish copies of approved submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
 - a. Do not use Shop Drawings without an appropriate stamp indicating action taken in connection with construction.
- C. Coordination drawings are special types of Shop Drawings that show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or to function as intended.
1. Preparation of coordination drawings may include components previously shown in detail on Shop Drawings or Product Data.
 2. Submit coordination Drawings for integration of different construction elements. Show sequence and relationships of separate components to avoid conflicts in use of space.
 3. Transmit in same manner as indicated for Shop Drawings.

1.8 PRODUCT DATA

- A. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams and performance curves. Where Product Data must be specifically prepared because standard printed data is not suitable for use, submit as "Shop Drawing".
1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:
 - a. Manufacturer's printed recommendations
 - b. Compliance with recognized trade association standards
 - c. Compliance with recognized testing agency standards
 - d. Application of testing agency labels and seals
 - e. Notation of dimensions verified by field measurements
 - f. Notation of coordination requirements
 2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
 3. Preliminary Submittal: Submit a preliminary single-copy of Product Data where selection of options is required.

4. Minimum of five (5) copies of each shop drawing shall be provided for review and action. One copy shall be retained by the Architect. One copy shall be retained by the Contractor to be incorporated within the Record Documents.
5. Distribution: Make copies of final submittal and distribute to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
 - a. Do not proceed with installation until an applicable copy of Product Data is in the installers' possession.
 - b. Do not permit use of unmarked copies of Product Data in connection with construction.
 - c. Make copies of shop drawings and Product Data for the Operation and Maintenance Manuals and Record Documents.

1.9 MANUFACTURER'S CERTIFICATES

- A. When specified in individual Specification Sections, submit manufacturer's certificate to Architect/Engineer for review, in quantities specified for product data.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference date, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or product but must be acceptable to Architect/Engineer.

1.10 RECORD SHOP DRAWINGS

- A. A set of all record shop drawings will be kept by the Contractor for the Owner. After project completion, the Contractor will turn over a complete set over to the Owner as part of the Record Document submittal.

1.11 SCHEDULE OF VALUES

- A. Submit a detailed schedule of values separating labor and material for all individual items within (10) days of signing a contract.

1.12 CONSTRUCTION SCHEDULE

- A. General:
 1. In order to assure completion of the Work within the time stipulated, all activities of the Contractor will be scheduled and monitored by use of the critical path method, utilizing both activity diagram and computer printout.

2. The schedule, including the printout and arrow diagram shall be prepared by an expert having substantial experience in critical path scheduling.
3. The Contractor shall submit 3 copies of the schedule for approval at least 20 days prior to submitting first application for a progress payment but not later than 30 days after the date of execution of Agreement.
4. The schedule shall be detailed in nature and shall include the calendar dates of start and completion of each task on the critical path as well as dates and float times of tasks not on the critical path and of tie-ins to existing facilities, if any. The critical path diagram shall show all activities in detail, and the computer printout shall include for each activity its number, description, duration, early start, early finish, late start, late finish, and float time. Both the initial and subsequent submissions shall be time scaled.
5. In the preparation of the schedule, the Contractor shall take into consideration Shop Drawing submittal and approval time, the delivery times of equipment and materials, Subcontractors' work, availability and abilities of workmen, weather conditions, and restrictions in operations at the Work site, and all other items that may affect completion of the Work within the time requirements of the Contract Documents.
6. If the schedule as submitted by the Contractor is not sufficiently detailed, contains errors, or is unrealistic, it will be rejected in writing, and the Contractor shall submit an appropriately revised schedule within 7 days of the date of the notice of rejection. The procedure will be repeated as often as may be necessary until the schedule is found acceptable and approved by the Engineer.
7. Pending approval of the construction schedule, no progress payment will be made, except in such amounts as may be approved by the Engineer for materials received at the Project site as provided in the General Conditions.

1.13 PROGRESS REPORTS

- A. At each progress meeting, the Contractor shall present a report of operations during the preceding period, including actual starting and ending dates on activities shown on the critical path diagram. Where such starting or ending dates were delayed beyond those required by the critical path schedule, the Contractor shall describe the action he is taking to regain lost time and state the anticipated completion dates of subsequent activities affected by the delayed items. Contractor shall also point out known or anticipated delays on continuing activities and outline the action he is taking to regain lost time or avoid future delay. On the basis of the reports presented, the Contractor shall develop a current computer printout of the critical path schedule and shall furnish copies to the Architect at each progress meeting.
- B. Daily Construction Reports
 1. A daily construction report will be prepared by the Contractor recording the following information concerning events at the site. Reports will be made available upon Architects request:
 - a. List of subcontractors at the site.
 - b. Approximate count of personnel at the site.

- c. High and low temperatures, general weather condition.
 - d. Accidents and unusual events.
 - e. Meetings and significant decisions.
 - f. Stoppages, delays, shortages, losses.
 - g. Orders and requests of governing authorities.
 - h. Services connected, disconnected.
 - i. Equipment or system tests and start-ups.
 - j. Partial Completions, occupancies.
 - k. Material tests taken.
2. Daily construction logs to be submitted to Architect with closeout documents at project completion.

1.14 ARCHITECT'S ACTION

- A. Except for submittals for record, information, or similar purposes, where action and return are required, the Architect will review each submittal, mark to indicate action taken, and return within a minimum of two weeks. Record reviews may require longer time due to multi-disciplinary review.
 1. Compliance with the Contract Documents is the Contractor's responsibility. Engineer will review shop drawings solely for general conformance with design concept, and not for the purpose of reviewing or approving their accuracy, completeness, dimensions or quantities, constructability, performance, compatibility with other construction components, or their compliance with the requirements of the Contract Documents, such as Buy America requirements, all of which remain the responsibility of the Contractor. Engineer's review also is not for the purpose of reviewing or approving the Contractor's safety precautions or construction means, methods, techniques, sequences, or procedures.
- B. Action Stamp: The Architect will stamp each submittal with a uniform, action stamp. The Architect will mark the stamp appropriately to indicate the action taken, as follows:
 1. Approved for General Conformance with Design Concept: When the Engineer marks a submittal "Approved for General Conformance with Design Concept," the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents.
 2. Approved, As Noted, for General Conformance with Design Concept: When the Engineer marks a submittal "Approved, As Noted, for General Conformance with Design Concept," the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents.
 3. Revise and Resubmit: When the Engineer marks a submittal "Revise and Resubmit," do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal according to the notations; resubmit without delay.

- a. Do not use, or allow others to use, submittals marked "Revise and Resubmit" at the Project Site or elsewhere where Work is in progress.
4. Rejected: When the Engineer marks a submittal "Rejected" do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Prepare a new submittal according to the notations; resubmit without delay.
 - a. Do not use, or allow others to use, submittals marked "Rejected" at the Project Site or elsewhere where Work is in progress.
5. Not Subject to Review: Where a submittal is for information or record purposes or special processing or other activity, or otherwise does not require Engineer review and approval, the Engineer will return the submittal marked "Not Subject to Review."
6. Requires Review and Approval by General Contractor: When a submittal does not indicate that it has been reviewed and approved by the General Contractor, the Engineer will return the submittal marked "Requires Review and Approval by General Contractor." Do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery, or other activity.

1.15 SUBCONTRACTOR AND / OR MANUFACTURER LIST

- A. Submit a detailed subcontractor and/or manufacturer list using EXHIBIT '01 33 00A' that has been provided at the end of this section. This list becomes part of the contract proposal and shall be presented within 24 hours after bid opening. Subcontractor purchased material, equipment, and labor shall be under the direct management of the Prime Contractor. If dual listing of manufactures or subcontractors is herein made, it is understood the Architect/Engineer (not the Contractor) will select the manufacturer or subcontractor of his choice.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 33 00

Mishawaka-Penn-Harris Public Library
Capital Improvements - 2024 General Obligation Bond
Roof Replacement
Mishawaka Library

2461-4053-50

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CADD INFORMATION REQUEST

1. Company Information:

Company: _____

Address: _____

Telephone: _____

Fax: _____

Contact(s): _____

Job Name: Elkhart County Courthouse

Window Replacement

DLZ Project: 2561-4071-50

2. Drawings: _____

3. Method: Email: _____

4. Drawing Program: AutoCAD Version:
REVIT:
Other _____

5. Preferred Format: DWG PDF TIF JPG

Please return this form, along with the following Disclaimer, to:

DLZ Indiana, LLC
2211 E. Jefferson Blvd.
South Bend, Indiana 46615
Attn: Zachary J. Flagle, AIA

DISCLAIMER FOR USE OF CONTRACT DOCUMENT CADD DISKS

<Insert Company Name> located at <Insert mailing address>

hereafter referred to as the Requesting Company, does hereby acknowledge that DLZ Indiana LLC. has been requested to deliver to them CADD file(s) for the following items: <Insert drawing name and number> to be used by the Requesting Company, solely for the purpose of the coordination and expediting of the work for the City of Elkhart, Lerner Theatre North Roof Replacement Project and for no other purpose. Except for the preceding purpose, the Requesting Company shall make no alterations whatsoever to said CADD file(s) without the written consent and at the direction of DLZ Indiana LLC.

DLZ Indiana LLC makes no warranty, either expressed or implied, as to the quality or content of the information contained in said CADD disk(s) except as herein stated, and further DLZ Indiana LLC makes no warranty expressed or implied for the use of CADD disk(s) by the Requesting Company for any purpose other than that specifically instructed as intended use for same. Further, said CADD disk(s) shall not be assigned to any party other than the Requesting Company.

ACKNOWLEDGED AND ACCEPTED:

Signature: _____

Name: _____

Title:

Date: _____

END OF SECTION 01 33 00B

SECTION 01 33 26 – QUALITY CONTROL

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. Section Includes:
 - 1. Quality assurance and control of installation.
 - 2. References.
 - 3. Field samples.
 - 4. Inspection services.
 - 5. Manufacturers' field services and reports.
- B. Related Requirements:
 - 1. Section 01 33 00 "Submittal Procedures."

1.3 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply fully with manufacturer's instructions, including each step-in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- D. Comply with specified standards as a minimum quality for the work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform work by persons qualified to produce workmanship of specified quality.
- F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.4 REFERENCES

- A. Conform to reference standards current at date of Notice to Proceed.
- B. Obtain copies of standards when required by Contract Documents.
- C. Should specified reference standards conflict with Contract Documents, request clarification for Architect before proceeding.

1.5 FIELD SAMPLES

- A. Install field samples at the site as required by individual specifications sections for review.
- B. Acceptable samples represent a quality level for the Work.
- C. Where field sample is specified in individual sections to be removed, clear area after field sample has been accepted by Architect/Engineer.

1.6 PRODUCT AND EQUIPMENT

- A. Provide each specific product and equipment from a single manufacturer and source.
- B. Follow manufacturer's instructions and recommendations for storage, preparation and installation of product and equipment.

1.7 MANUFACTURERS' FIELD SERVICES AND REPORTS

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions or surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance of equipment, as applicable, and to initiate instructions when necessary.
- B. Individuals to report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- C. Submit report within 15 days of observation to the Architect for review.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 33 26

SECTION 01 41 00 – REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Regulations having jurisdiction over this Project and obligations with responsibilities applicable.
- B. The Architect/Engineer does not imply that all governing code and regulations are enumerated. It is Contractor's responsibility to verify own obligations.

1.2 SCOPE

- A. Permits, Fees: Contractor will secure and pay for any permits required for project.
- B. Building Codes and Regulations
 - 1. Federal
 - a. OSHA
 - b. EPA
 - c. ADA
 - 2. State of Indiana
 - a. Indiana Department of Environmental Management
 - b. Indiana Building Code
 - c. State Fire Marshal Rules
 - d. Administrative Building Council Rules
 - e. Indiana Mechanical Code
 - f. Indiana Plumbing Code
 - g. Indiana Electrical Code
 - h. Indiana Energy Conservation Code
 - 3. Comply with anti-pollution, environmental regulations, accessibility codes as applicable.
 - 4. Local zoning ordinance and other codes and regulations shall apply.
- C. Requirements for E-Verify
 - 1. Comply with Immigration Legislation SEA 590. The contractor shall enroll in and verify the work eligibility status of all newly hired employees of the contractor through the E-Verify Program, as required by law.
 - 2. Pursuant to Indiana Code 5-22-16.5 , may not contract with a person who is engaged in investment activities in Iran.

D. Safety Regulations

1. Comply with all Federal, State, and Local safety regulations applicable to project.
2. Consult specific specification sections for special safety requirements including proper precautions for fire safety.
3. The General Contractor governs program of safety on construction project. All other prime and subcontractors take precautions to observe and maintain that all requirements are in conformance with the "Safety Code #13 for the Construction Industry", State of Indiana.
4. Each employer whether prime contractor, or subcontractor is separately responsible for all specific safety requirements promulgated by any governmental authority, including without limitation, the requirements of Occupational Safety and Health Act of 1970, the Construction Safety Act of 1969, and all standards and regulations promulgated by parties or agencies which administer such acts. Each contractor and subcontractor is responsible for the acts of his employees and for appropriate record keeping and reporting.

1.3 TAXES

A. Indiana Gross Income Tax

1. Comply with Indiana Gross Income Tax Act, as amended. The Owner is withholding Agent for payment of Indiana Gross Income Tax on Contracts with the Owner. As a Withholding Agent, the Owner is required to withhold from non-resident Contractors, all Indiana Gross Income Tax.
2. A non-resident Contractor does not include a Contractor that is a corporation, organized under laws of states other than the State of Indiana, but which is duly licensed, qualified and registered with the Secretary of the State of Indiana to engage in business within the State of Indiana.
3. Any out-of-State Contractor which is qualified to do business in Indiana and fails to file proof as qualifying to do business in Indiana will have Indiana Gross Income Tax withheld and will have to claim any refund from the Indiana Department of Revenue.
4. Out-of-State Contractors who are proprietorships or partnerships will have Indiana Gross Income Tax withheld.

B. Indiana Gross Retail Tax

1. Materials and properties purchased by contracts with Owner that become a permanent part of structure of facilities constructed are not subject to Indiana Gross Retail Tax (Sales Tax). A General Exemption Certificate must be filed with vendor by Contractor for exemption from payment of tax on exempt materials and properties purchased.
2. An exemption number will be furnished by Owner upon request, for Indiana Gross Retail Tax.

1.4 PROJECT CLOSEOUT

- A. At completion, review project with Architect/Engineer for any uncompleted code compliance requirements.

END OF SECTION 01 41 00

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SECTION 01 42 00 - REFERENCES

PART 1 - GENERAL

1.1 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. Indicated: The term indicated refers to graphic representations, notes, or schedules on the drawings or other paragraphs or schedules in the Specifications, and similar requirements in the Contract Documents. Terms such as shown, noted, scheduled, and specified are used to help the reader locate the reference. There is no limitation on location.
- C. Include: The term include, includes, or included means a part of a whole. It is not a finite or all-inclusive term and shall not limit the scope of the work. It is an example or partial list only. There may be additional items required elsewhere in the Contract Documents.
- D. Directed: Terms such as directed, requested, authorized, selected, approved, required, and permitted mean directed by the Architect/Engineer, requested by the Architect/Engineer, and similar phrases. However, no implied meaning shall be interpreted to extend the Architect's/Engineer's responsibility into the Contractor's area of construction supervision.
- E. Approved: The term approved, when used in conjunction with the Architect's/Engineer's action on the Contractor's submittals, applications, and requests, is limited to the Architect's/Engineer's duties and responsibilities as stated in the Conditions of the Contract. Such approval shall not release the Contractor from responsibility to fulfill contract requirements, unless otherwise provided in the contract documents.
- F. Regulations: The term regulations include laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the work, whether or not lawfully imposed by authorities having jurisdiction.
- G. Furnish: The term furnish means supply and deliver to the project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- H. Install: The term install describes operations at the project site including the actual unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- I. Provide: The term provide means to furnish and install, complete and ready for the intended use.
- J. Installer: An installer is the Contractor, or another entity engaged by the Contractor, either as an employee, subcontractor, or contractor of the lower tier, to perform a particular construction

activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operations they are engaged to perform.

1. The term experienced, when used with the term installer, means having satisfactorily completed not less than five previous projects similar in size and scope to this project, being familiar with the special requirements necessary to successfully complete the work indicated, and having complied with requirements of the authority having jurisdiction.
 2. Trades: Using terms such as carpentry are not intended to imply that certain construction activities must be performed by accredited or union member individuals of a corresponding generic name, such as carpenter. It also does not imply that requirements specified apply exclusively to trades people of the corresponding generic name.
 3. Assigning Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by specialists who are recognized experts in those operations. The specialists must be engaged for those activities, and their assignments are requirements over which the Contractor has no choice or option. However, the ultimate responsibility for fulfilling contract requirements remains with the Contractor.
 - a. This requirement shall not be interpreted to conflict with enforcing building codes and similar regulations governing the work. It is also not intended to interfere with local trade union jurisdictional settlements and similar conventions.
- K. Project Site: The project site is the space available to the contractor for performing construction activities either exclusively or in conjunction with others performing other work as part of the project. The extent of the project site is shown on the drawings and may or may not be identical with the description of the land on which the project is to be built.
- L. Testing Agencies: A testing agency is an independent entity engaged to perform specific inspections or tests, either at the project site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.
- M. Architect: The terms "Architect", "Engineer" or "Architect/Engineer" refers to the Architect for this project. DLZ Indiana, LLC is the Architect and Engineer of Record for this Project.
- N. Owner: The term "Owner" refers to Mishawaka Penn Harris Public Library.
- 1.2 SPECIFICATION FORMAT AND CONTENT EXPLANATION
- A. Specification Format: These Specifications are organized into Divisions and Sections based on the Construction Specifications Institute's 50 Division Format and "Master-format" numbering system.
- B. Specification Content: This Specification uses certain conventions regarding the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations or circumstances. These conventions are explained as follows:

1. Abbreviated Language: Language used in Specifications and other contract documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words which are implied, but not stated, shall be interpolated as the sense requires. Singular words will be interpreted as plural and plural words interpreted as singular where applicable as the context of the contract documents indicate.
2. Imperative and Streamlined Language is used generally in the Specifications. Requirements expressed in the imperative mood are to be performed by the Contractor. At certain locations in the text, subjective language is used for clarity to describe responsibilities that must be fulfilled indirectly by the Contractor, or by others when so noted.
 - a. The words "shall be" are implied wherever a colon (:) is used within a or phrase.

1.3 INDUSTRY STANDARDS

- A. Applicability of Standards: Except where the contract documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the contract documents to the extent referenced. Such standards are made a part of the contract documents by reference.
- B. Publication Dates: Comply with the standards in effect as of the date of the contract documents.
- C. Conflicting Requirements: Where compliance with two or more standards is specified and where the standards may establish different or conflicting requirements for minimum quantities or quality levels, refer requirements which are different but apparently equal and other uncertainties to the Architect/Engineer for a decision before proceeding.
 1. Minimum Quantity or Quality Levels: The quantity of quality level indicated 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 the requirements. Refer uncertainties to the Architect/Engineer for a decision before proceeding.
- D. Copies of Standards: Each entity engaged in construction on the project is required to be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the contract documents.
 1. Where copies of standards are needed to perform a required construction activity, the Contractor shall obtain copies directly from the publication source. Maintain one copy of required standards at the project site available for reference by persons who have a reasonable need.
- E. Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. Where such acronyms or abbreviations are used in the Specifications or other contract documents, they mean the recognized name of the trade association, standards-generating organization, authority having jurisdiction, or other entity applicable to

the context of the Text provision. Refer to the Encyclopedia of Association, published by Gale Research Co., available in most libraries and are on file in the Office of the Architect.

1.4 GOVERNING REGULATIONS AND AUTHORITIES

- A. Indiana State Codes: Current issue with amendments for the work related to Contractor's contract.

1.5 SUBMITTALS

- A. Permits, Licenses, and Certificates: For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence, and records established in conjunction with compliance with standards and regulations bearing upon performance of the work. These items are to be submitted through the Architect.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 42 00

SECTION 01 50 00 - 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. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

1.3 USE CHARGES

- A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to Architect, testing agencies, and authorities having jurisdiction.
- B. Water Service from Existing System: 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 from Existing System: 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 INFORMATIONAL SUBMITTALS

- A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.
- B. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.
- C. Moisture-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage.
 - 1. Describe delivery, handling, and storage provisions for materials subject to water absorption or water damage.

2. Indicate procedures for discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and replacing water-damaged Work.
3. Indicate sequencing of work that requires water and describe plans for dealing with water from these operations. Show procedures for verifying that wet construction has dried sufficiently to permit installation of finish materials.

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.

PART 2 - PRODUCTS

2.1 TEMPORARY FACILITIES

- A. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.
 1. Store combustible materials apart from building.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

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

3.2 SUPPORT FACILITIES INSTALLATION

- A. Traffic Controls: Comply with requirements of authorities having jurisdiction.
 1. Protect existing site improvements to remain including curbs, pavement, and utilities.
 2. Maintain access for fire-fighting equipment and access to fire hydrants.
 3. Contractor to restore all damaged to site, including lawns and pavement caused by construction activities.
- B. Parking:

1. Public parking is available around the perimeter of the Courthouse. Contractor to coordinate with Owner quantity of spots required and types of vehicles to be parked.
- C. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction.
- D. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.
 2. Coordinate location of crane and on-loading/off-loading activities with owner.

3.3 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- C. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.
- D. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program.
 1. Prohibit smoking in construction areas.
 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
- E. Background Checks: Contractor to confirm with Owner if favorable background checks are required.
- F. Security: comply with security procedures. Variance to requirements must receive prior approval with the Owner and each site security operation.

3.4 MOISTURE AND MOLD CONTROL

- A. Contractor's Moisture-Protection Plan: Avoid trapping water in finished work. Document visible signs of mold that may appear during construction.
- B. Exposed Construction Phase: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
 1. Protect porous materials from water damage.

2. Protect stored and installed material from flowing or standing water.

3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
 1. Materials and facilities that constitute temporary facilities are property of Contractor.
 2. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 01 77 00 "Closeout Procedures."

END OF SECTION 01 50 00

SECTION 01 60 00 - PRODUCT REQUIREMENTS

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. Section includes:
 - 1. Products.
 - 2. Transportation and handling.
 - 3. Storage and protection.
 - 4. Product options.
 - 5. Substitutions.

1.3 PRODUCTS

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
- C. Provide interchangeable components of the same manufacturer, for similar components.

1.4 TRANSPORTATION AND HANDLING

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.5 STORAGE AND PROTECTION

- A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate-controlled enclosures.
- B. No on-site storage facilities will be permitted.
- C. Properly distribute all material which is on the roof to provide for a uniform distribution of load. DO not load roof condition beyond maximum design load.
- D. Provide ventilation to avoid condensation.
- E. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- F. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

1.6 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.
- B. Products Specified by naming one or more Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products specified by naming one or more manufacturers with a provision for substitutions: Submit a request for substitution for any manufacturer not named.

1.7 SUBSTITUTIONS

- A. Instructions to Bidders specify time restrictions for submitting requests for substitutions during the bidding period to requirements specified in this Section.
- B. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that the bidder:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.

2. Will provide the same warranty for the substitution as for the specified product.
 3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to the Owner.
 4. Waive claims for additional costs or time extension which may subsequently become apparent.
 5. Will reimburse Owner for review or redesign services associated with re-approval by authorities.
- E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 60 00

Mishawaka-Penn-Harris Public Library
Capital Improvements - 2024 General Obligation Bond
Roof Replacement
Mishawaka Library

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SECTION 01 62 00 - PRODUCT OPTIONS

PART 1 - GENERAL

1.1 RELATED REQUIREMENTS

- A. Drawings and general provisions of 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 for handling requests for substitutions made after award of the Contract.
- B. The Contractor's Construction Schedule and the Schedule of Submittals are included under Section 01 33 00 "Submittals."
- C. Standards: Refer to Section 01 42 00 "References" for applicability of industry standards to products specified.
- D. Procedural requirements governing the Contractor's selection of products and product options are included under Section 01 60 00 "Product Requirements."

1.3 DEFINITIONS

- A. Definitions used in this Article are not intended to change or modify the meaning of other terms used in the Contract Documents.
- B. Substitutions: Architect will consider requests for Substitutions if submitted 10 calendar days prior to the Bid Date. No requests will be accepted or reviewed after this time.
- C. Substitutions after the Bid Date may be considered only when a product becomes unavailable through no fault of the Contractor.
- B. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- E. A request constitutes a representation that the Bidder:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Will provide the same warranty for the Substitution as for the specified product.

3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
 4. Waives claims for additional costs or time extension which may subsequently become apparent.
- F. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals.
- G. Substitution Submittal Procedure:
1. Submit Request for Substitution for consideration to the Architect. Limit each request to one proposed Substitution.
 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer. General catalogs or manuals are not acceptable. Specific information on model, type, and series of substitute product is required. Include specified material data sheet with which submitter is requesting comparison review.
 3. The Architect will notify Bidder in the form of an addendum item of decision to accept request. If item is not approved by addendum, item it is not acceptable.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

- A. Conditions: The Contractor's substitution request will be received and considered by the Architect when one or more of the following conditions are satisfied, as determined by the Architect; otherwise requests will be returned without action except to record non-compliance with these requirements.
1. Extensive revisions to Contract Documents are not required.
 2. Proposed changes are in keeping with the general intent of Contract Documents.
 3. The request is timely, fully documented and properly submitted.
 4. The request is directly related to an "or equal" clause or similar language in the Contract Documents.
 5. The specified product or method of construction cannot be provided within Contract Time. The request will not be considered if the product or method cannot be provided as a result of failure to pursue the Work promptly or coordinate activities properly.
 6. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
 7. A substantial advantage is offered the Owner, in terms of cost, time, energy conservation or other considerations of merit, after deducting off-setting responsibilities the Owner may be required to bear. Additional responsibilities for the Owner may include additional compensation to the Architect for redesign and evaluation services, increased cost of other construction by the Owner or separate Contractors, and similar considerations.

8. The specified product or method of construction cannot be provided in a manner which is compatible with other materials, and there the Contractor certifies that the substitution will overcome the incompatibility.
 9. The specified product or method of construction cannot be coordinated with other materials, and where the Contractor certifies that he proposed substitution can be coordinated.
 10. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provide the required warranty.
- B. The Contractor's submittal and Architect's acceptance of Shop Drawings, Product Data or Samples that relate to construction activities not complying with the contract Documents does not constitute an acceptable or valid request for substitution, nor does it constitute approval.

PART 3 – EXECUTION (Not Used)

END OF SECTION 01 62 00

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SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

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. Section includes administrative and procedural requirements for the following:
 - 1. Recycling nonhazardous construction waste.
 - 2. Disposing of nonhazardous construction waste.

1.3 DEFINITIONS

- A. Construction Waste: Building, structure, and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Disposal: Removal of demolition or construction waste and subsequent salvage, sale, recycling, or deposit in landfill, incinerator acceptable to authorities having jurisdiction, or designated spoil areas on Owner's property.
- C. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.

1.4 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition and construction waste becomes property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
 - 1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.5 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with transportation and disposal regulations of authorities having jurisdiction.
 - 1. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
 - 2. Review waste management requirements for each trade.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 RECYCLING CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall accrue to Contractor.
- C. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.
- D. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
 - 1. Provide appropriately marked containers or bins for controlling recyclable waste until removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
 - a. Inspect containers and bins for contamination and remove contaminated materials if found.
 - 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
 - 4. Store components off the ground and protect from the weather.
 - 5. Remove recyclable waste from Owner's property and transport to recycling receiver or processor as often as required to prevent overfilling bins.

3.2 DISPOSAL OF WASTE

- A. General: Except for items or materials to be recycled, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

- B. Burning: Do not burn waste materials.

END OF SECTION 01 74 19

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SECTION 01 77 00 – CLOSEOUT 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.
- B. Closeout requirements for specific construction activities are also included in the appropriate Sections.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Project record document submittal.
 - 3. Submittal of warranties.
 - 4. Final cleaning.

1.3 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for certification of Substantial Completion, complete the following. List exceptions in the request.
 - 1. In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed as substantially complete.
 - a. Include supporting documentation for completion as indicated in these Contract Documents and a statement showing an accounting of changes to the Contract Sum.
 - b. If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the Work is not complete.
 - 2. Advise the Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents.
 - 4. Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 5. Submit record drawings, maintenance manuals, and similar final record information.
 - 6. Deliver tools, spare parts, extra stock, and similar items.

7. Complete testing of systems and instruction of the Owner's operation and maintenance personnel. Discontinue and remove temporary facilities from the site, along with mockups, construction tools, and similar elements.
 8. Complete final cleanup requirements, including touchup painting.
 9. Touch up and otherwise repair and restore marred, exposed finishes.
- B. Inspection Procedures: On receipt of a request for inspection, the Architect will either proceed with inspection or advise the Contractor of unfilled requirements. The Architect will prepare the Certificate of Substantial Completion following inspection or advise the Contractor of construction that must be completed or corrected before the certificate will be issued.
1. The Architect will repeat inspection when requested and assured that the Work is substantially complete.
 2. Results of the completed inspection will form the basis of requirements for final acceptance.
- C. Certificate of Substantial Completion: Refer to Exhibit 01 77 00A "AIA Document G704-2000 for Certificate of Substantial Completion."

1.4 FINAL ACCEPTANCE

- A. Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.
1. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include insurance certificates for products and completed operations where required.
 2. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
 3. Submit a certified copy of the Architect's final inspection list of items to be completed or corrected, endorsed and dated by the Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance and shall be endorsed and dated by the Architect.
 4. Submit consent of surety to final payment.
 5. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Reinspection Procedure: The Architect will reinspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except for items whose completion is delayed under circumstances acceptable to the Architect.
1. Upon completion of reinspection, the Architect will prepare a certificate of final acceptance. If the Work is incomplete, the Architect will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance.
 2. If necessary, reinspection will be repeated.

1.5 RECORD DOCUMENT SUBMITTALS

- A. General: Do not use record documents for construction purposes. Protect record documents from deterioration and loss in a secure, fire-resistant location. Provide access to record documents for the Architect's reference during normal working hours.
 - 1. One set of Record Documents shall be provided to the Owner and one copy shall be provided to the Architect.
 - 2. Refer to Section 01 78 39, Project Record Documents.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 CLOSEOUT PROCEDURES

- A. Operation and Maintenance Instructions: Arrange for each Installer of equipment that requires regular maintenance to meet with the Owner's personnel to provide instruction in proper operation and maintenance. Provide instruction by manufacturer's representatives if installers are not experienced in operation and maintenance procedures. Include a detailed review of the following items:
 - 1. Maintenance manuals.
 - 2. Record documents.
 - 3. Spare parts and materials.
 - 4. Identification systems.
 - 5. Hazards.
 - 6. Cleaning.
 - 7. Warranties and bonds.
 - 8. Tools.

3.2 FINAL CLEANING

- A. General: The General Conditions require general cleaning during construction.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Comply with manufacturer's instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion.
 - a. Remove labels that are not permanent labels.
 - b. Clean exposed exterior and interior hard-surfaced finishes to a dust-free condition, free of stains, films, and similar foreign substances.

- c. Clean the site, including landscape development areas, of rubbish, litter, and other foreign substances. Remove stains, spills, and other foreign deposits from paved areas.
- C. Removal of Protection: Remove temporary protection and facilities installed for protection of the Work during construction.
- D. Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from the site and dispose of lawfully.
 1. Where extra materials of value remain after completion of associated Work, they become the Owner's property. Dispose of these materials as directed by the Owner.

END OF SECTION 01 77 00


AIA® Document G704® – 2017
Certificate of Substantial Completion

PROJECT: *(name and address)*
Elkhart County Courthouse
101 N. Main St.
Goshen, IN 46526

CONTRACT INFORMATION:
Contract For: General Construction
Date:

CERTIFICATE INFORMATION:
Certificate Number:
Date:

OWNER: *(name and address)*
County of Elkhart, Indiana
by its Board of Commissioners

ARCHITECT: *(name and address)*
DLZ Indiana, LLC
2211 East Jefferson Blvd.
South Bend, IN 46615

CONTRACTOR: *(name and address)*

The Work identified below has been reviewed and found, to the Architect's best knowledge, information, and belief, to be substantially complete. Substantial Completion is the stage in the progress of the Work when the Work or designated portion is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use. The date of Substantial Completion of the Project or portion designated below is the date established by this Certificate.
(Identify the Work, or portion thereof, that is substantially complete.)

DLZ Indiana, LLC

ARCHITECT *(Firm Name)*

SIGNATURE

PRINTED NAME AND TITLE

DATE OF SUBSTANTIAL COMPLETION

WARRANTIES

The date of Substantial Completion of the Project or portion designated above is also the date of commencement of applicable warranties required by the Contract Documents, except as stated below:

(Identify warranties that do not commence on the date of Substantial Completion, if any, and indicate their date of commencement.)

WORK TO BE COMPLETED OR CORRECTED

A list of items to be completed or corrected is attached hereto, or transmitted as agreed upon by the parties, and identified as follows:
(Identify the list of Work to be completed or corrected.)

The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. Unless otherwise agreed to in writing, the date of commencement of warranties for items on the attached list will be the date of issuance of the final Certificate of Payment or the date of final payment, whichever occurs first. The Contractor will complete or correct the Work on the list of items attached hereto within () days from the above date of Substantial Completion.

Cost estimate of Work to be completed or corrected: \$

The responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work, insurance, and other items identified below shall be as follows:

(Note: Owner's and Contractor's legal and insurance counsel should review insurance requirements and coverage.)

The Owner and Contractor hereby accept the responsibilities assigned to them in this Certificate of Substantial Completion:

CONTRACTOR *(Firm Name)*

County of Elkhart, Indiana
by its Board of Commissioners

SIGNATURE

PRINTED NAME AND TITLE

DATE

OWNER *(Firm Name)*

SIGNATURE

PRINTED NAME AND TITLE

DATE

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SECTION 01 78 23 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation and maintenance documentation directory.
 - 2. Maintenance manuals for the care and maintenance of products, materials, and finishes.
- B. Related Sections include the following:
 - 1. Division 1 Section 01 33 00 "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.
 - 2. Division 1 Section 01 77 00 "Closeout Procedures" for submitting operation and maintenance manuals.
 - 3. Division 1 Section 01 78 39 "Project Record Documents" for preparing Record Drawings for operation and maintenance manuals.
 - 4. Divisions 2 through 33 Sections for specific operation and maintenance manual requirements for products in those Sections.

1.3 DEFINITIONS

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

1.4 SUBMITTALS

- A. Submittal: Submit 2 copies of each manual in final form at least 15 days before final inspection.

1.5 COORDINATION

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

PART 2 - PRODUCTS

2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

- A. Organization: Include a section in the directory for each of the following:
 - 1. List of documents.
 - 2. List of systems.
 - 3. List of equipment.
 - 4. Table of contents.
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
- D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.

2.2 MANUALS, GENERAL

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
 - 1. Title page.
 - 2. Table of contents.
 - 3. Manual contents.
- B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:
 - 1. Subject matter included in manual.
 - 2. Name and address of Project.
 - 3. Name and address of Owner.
 - 4. Date of submittal.
 - 5. Name, address, and telephone number of Contractor.
 - 6. Name and address of Architect.
 - 7. Cross-reference to related systems in other operation and maintenance manuals.

- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
 - 1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.

- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
 - 1. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
 - a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
 - b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
 - 2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
 - 3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
 - 4. Supplementary Text: Prepared on 8-1/2-by-11-inch, 20-lb/sq. ft. white bond paper.
 - 5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.
 - 6. All sheets, pages, drawings etc. shall have ID printed on them including contract number, volume name and number, and location

2.3 PRODUCT MAINTENANCE MANUAL

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Product Information: Include the following, as applicable:
 - 1. Revise list below to suit Project.
 - 2. Product name and model number.
 - 3. Manufacturer's name.
 - 4. Diagrams and exploded views of the product
 - 5. Installation instructions
 - 6. Alignment instructions and tolerances
 - 7. Operating instructions
 - 8. Troubleshooting instructions
 - 9. Storage requirements
 - 10. Color, pattern, and texture.
 - 11. Material and chemical composition.
 - 12. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
 - 1. Inspection procedures.
 - 2. Types of cleaning agents to be used and methods of cleaning.
 - 3. List of cleaning agents and methods of cleaning detrimental to product.
 - 4. Schedule for routine cleaning and maintenance.
 - 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties, Bonds and Service Contracts: Include copies of warranties, bonds, and service contracts issued. Also, include lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- A. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.
- B. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- C. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
 - 1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- D. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.
 - 1. Do not use original Project Record Documents as part of operation and maintenance manuals.
 - 2. Comply with requirements of newly prepared Record Drawings in Division 1 Section 01 78 39 "Project Record Documents."
- E. Comply with Division 1 Section 01 77 00 "Closeout Procedures" for the schedule for submitting operation and maintenance documentation.

END OF SECTION 01 78 23

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SECTION 01 78 36 - WARRANTIES

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 warranties required by the Contract Documents, including manufacturers' standard warranties on products and special warranties.

- 1. Refer to the General Conditions and Supplementary Conditions for terms of the Contractor's period for correction of the Work.

- B. Related Requirements:

- 1. Section 01 77 00 "Closeout Procedures" specifies contract closeout procedures.
 - 2. Divisions 02 through 33 Sections for specific requirements for warranties on products and installations specified to be warranted.
 - 3. Certifications and other commitments and agreements for continuing services to Owner are specified elsewhere in the Contract Documents.

- C. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

1.3 DEFINITIONS

- A. Standard product warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.

1.4 WARRANTY REQUIREMENTS

- A. Related Damages and Losses: When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.
 - B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
 - C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
 - D. Owner's Recourse: Expressed warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights, or remedies.
1. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
- E. Where the Contract Documents require a special warranty, or similar commitment on the Work or part of the Work, the Owner reserves the right to refuse to accept the Work, until the Contractor presents evidence that entities required to countersign such commitments are willing to do so.

1.5 SUBMITTALS

- A. Submit written warranties to the Architect prior to the date certified for Substantial Completion. If the Architect's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Architect.
1. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Architect within 15 days of completion of that designated portion of the Work.
- B. Contractor and a subcontractor, supplier, or manufacturer to execute warranty, prepare a written document that contains appropriate terms and identification, ready for execution by

the required parties. Submit a draft to the Owner, through the Architect, for approval prior to final execution.

- C. Prepare a written document ready for execution by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Submit a draft to the Owner, through the Architect, for approval prior to final execution.
 - 1. Refer to Divisions 02 through 33 Sections for specific content requirements and particular requirements for submitting special warranties.
- D. Form of Submittal:
 - 1. Prior to Substantial Completion compile one (1) draft copy of each required warranty properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer for Architect's review and comment. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 2. At Substantial Completion compile one (1) hard copy and (1) electronic version of each required warranty properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 LIST OF WARRANTIES

- A. Submit a summarized list of all project warranties, including durations of each warranty. Submit list at the time of Substantial Completion.

END OF SECTION 01 78 36

Mishawaka-Penn-Harris Public Library
Capital Improvements - 2020 General Obligation Bond
Design Release 2020-1, Bid Package 1
Roof Replacement – Mishawaka Library

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SECTION 01 78 39 - 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. As-Built Drawings.
 - 2. Record Product Data.
- B. Related Requirements:
 - 1. Section 01 77 00 "Closeout Procedures" for general closeout procedures.
 - 2. Divisions 02 through 33 Sections for specific requirements for Project Record Documents of products in those Sections.

1.3 SUBMITTALS

- A. As-Built Drawings: Comply with the following:
 - 1. Submit As-Built Drawings as follows:
 - a. Final Submittal: Submit one (1) hard copy and one (1) electronic copy (pdf format) of marked-up Record Drawings to the Architect for review. Architect will transmit set to the Owner.
- B. Record Product Data: Submit two copies of each Product Data submittal.
 - 1. Where Record Product Data is required as part of operation and maintenance manuals, submit marked-up Product Data as an insert in the manual instead of submittal as Record Product Data.
- C. Provide an electronic copy (pdf format) of as-built drawings and specifications, final reviewed shop drawings, ASIs, PR's, CD's, construction photos, and other pertinent job-related documents. Submit within a portable readable disk, (2) copies. Organize documents in a sub-directory according to information.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one original 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. Actual equipment locations.
 - d. Changes made by Change Order or Allowance Adjustment.
 - e. Changes made following Architect's written orders.
 - f. Details not on the original Contract Drawings.
 - g. Field records for variable and concealed conditions.
 - h. Record information on the Work that is shown only schematically.
 3. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.
 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
 6. Note Allowance Adjustment numbers, Architects Supplemental Instructions, Proposal Request, Change Order numbers, and similar identification, where applicable.
 7. Where revisions correlate with reference documents, indicate the document name and date issued.

2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
3. Record the name of the manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
4. For each principal product, indicate whether Record Product Data has been submitted in operation and maintenance manuals instead of submitted as Record Product Data.
5. Note related Change Orders, Allowance Adjustments, Record Drawings, and Product Data where applicable.
6. Where revisions correlate with reference documents, indicate the document name and date issued.

2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 - a. If possible, a Change Order proposal should include resubmitting updated Product Data. This eliminates the need to mark up the previous submittal.
 - b. Insert requirements for Record Samples if needed. See Evaluations.

2.4 MISCELLANEOUS RECORD SUBMITTALS

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

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
- B. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project

Mishawaka-Penn-Harris Public Library
Capital Improvements - 2024 General Obligation Bond
Roof Replacement
Mishawaka Library

2461-4053-50

Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.

END OF SECTION 01 78 39

DIVISION 2 – EXISTING CONDITIONS

02 41 19 SELECTIVE DEMOLITION

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SECTION 02 41 19 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

A. The Work of this Section Includes:

1. Demolition and removal of selected portions of exterior or interior of building.
2. Removal and salvage of existing items for delivery to Owner and removal of existing items for reinstallation.

B. Related Requirements:

1. General Conditions for restrictions on use of the premises, Owner-occupancy requirements, and phasing requirements.

1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of off-site unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Detach items from existing construction, in a manner to prevent damage, and deliver to Owner as indicated.
- C. Remove and Reinstall: Detach items from existing construction, in a manner to prevent damage; prepare for reuse; and reinstall where indicated.
- D. Existing to Remain: Existing items of construction that are not to be removed.

1.3 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.4 COORDINATION

- A. Arrange selective demolition schedule so as not to interfere with Owner's operations.

1.5 PREINSTALLATION MEETINGS

- A. Pre-demolition Conference: Conduct conference at **Project site**.
 - 1. Inspect and discuss condition of construction to be selectively demolished.
 - 2. Review and finalize selective demolition schedule and verify availability of demolition personnel, equipment, and facilities needed to make progress and avoid delays.
 - 3. Review areas where existing construction is to remain and requires protection.
 - 4. Review and finalize protection requirements.
 - 5. Review procedures for **noise control and dust control**.
 - 6. Review storage, protection, and accounting for items to be removed for salvage or reinstallation.

1.6 INFORMATIONAL SUBMITTALS

- A. Survey of Conditions at existing openings: Submit survey.
- B. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, **for dust control, and for noise control**. Indicate proposed locations and construction of barriers.
- C. Schedule of Selective Demolition Activities: Indicate the following:
 - 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure Owner's on-site operations are uninterrupted.
 - 2. Use of elevator and stairs.
 - 3. Coordination of Owner's continuing occupancy of portions of existing building and of Owner's partial occupancy of completed Work.
- D. Warranties: Documentation indicating that existing warranties are still in effect after completion of selective demolition.

1.7 CLOSEOUT SUBMITTALS

- A. Inventory: Submit a list of items that have been removed and salvaged.

1.8 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
 - 1. Before selective demolition, Owner will remove the following items:
 - a. Furniture adjacent to the opening where work is to occur.

- b. Owner will re-route existing condensation lines that go through select window frames at the Lower Level.
 - c. Owner will remove ductwork serving bathroom exhaust fans at select windows. Owner will provide an alternative method of exhausting the bathrooms that will not require a louver in the new window.
 - d. Owner will disconnect VAV boxes from adjacent louvers at select windows. Ductwork connection will be removed from the existing window. New windows will not require a louver at these locations.
- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials may be encountered in the Work:
- 1. The exterior surfaces of the existing wood-framed windows are painted. It is unknown when the coat(s) of paint were applied, and if they contain lead. The Work entails removing the existing wood window frames in their entirety.
- E. Historic Areas: Demolition and hauling equipment and other materials to be of sizes that do not impact surfaces within historic spaces, areas, rooms, and openings, including temporary protection.
- F. On-site sale of removed items or materials is not permitted.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSP A10.6 and NFPA 241.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.
- B. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs or video and **measured drawings**.

1. Inventory and record the condition of items to be removed for salvage or reinstallation. Photograph or video conditions that might be misconstrued as damage caused by removal.
2. Photograph or video existing conditions of adjoining construction including finish surfaces, that might be misconstrued as damage caused by selective demolition operations or removal of items for salvage or reinstallation.

3.2 PREPARATION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
 2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
 3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
 4. Cover and protect furniture, furnishings, and equipment that have not been removed.
 5. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Section 01 50 00 "Temporary Facilities and Controls."
- B. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location and reinstalled in their original locations after selective demolition operations are complete.

3.3 UTILITY SERVICES AND BUILDING SYSTEMS

- A. Existing Services/Systems to Remain: Maintain utilities and building systems and equipment to remain and protect against damage during selective demolition operations.
1. Maintain fire-protection facilities in service during selective demolition operations.

3.4 SALVAGE/REINSTALL

- A. Removed and Salvaged Items (to be confirmed by Owner):
1. Clean salvaged items.
 2. Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity, and location where removed.
 3. Store items in a secure area until delivery to Owner.
 4. Transport items to Owner's storage area **designated by Owner**.
 5. Protect items from damage during transport and storage.

B. Removed and Reinstalled Items:

1. Clean and repair items to functional condition adequate for intended reuse.
2. Pack or crate items after cleaning and repairing. Identify contents of containers.
3. Protect items from damage during transport and storage.
4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

3.5 SELECTIVE DEMOLITION, GENERAL

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

1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
5. Maintain fire watch during and for at least 1 hour after flame-cutting operations.
6. Maintain adequate ventilation when using cutting torches.
7. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
8. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.

B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed trafficways if required by authorities having jurisdiction.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site **and recycle or dispose of them in accordance with Section 01 74 19 "Construction Waste Management and Disposal."**
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
 - 4. Comply with requirements specified in Section 01 74 19 "Construction Waste Management and Disposal."
- B. Burning: Do not burn demolished materials.

3.7 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

3.8 SELECTIVE DEMOLITION SCHEDULE

- A. Remove: Wood-framed window systems.
- B. Remove and Reinstall:
 - 1. Stained glass windows and frames from existing wood-framed windows.
 - 2. Sash lift and sash lock hardware.
- C. Existing to Remain:
 - 1. Masonry at openings.
 - 2. Stained wood trim.
- D. Contractor's option:
 - 1. Balance pockets at window openings. Contractor may remove the pocket altogether and infill with blocking, or may simply remove the balance mechanism and infill with blocking as required.

END OF SECTION 02 41 19

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

06 10 00	ROUGH CARPENTRY
06 20 23	INTERIOR FINISH CARPENTRY

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SECTION 06 10 00 - ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Wood products.
2. Miscellaneous lumber.

B. Related Requirements:

1. Section 06 20 23 "Interior Finish Carpentry" for interior wood trim.

1.2 DEFINITIONS

A. Boards or Strips: Lumber of less than 2 inches nominal size in least dimension.

B. Dimension Lumber: Lumber of 2 inches nominal size or greater but less than 5 inches nominal size in least dimension.

C. Exposed Framing: Framing not concealed by other construction.

D. Lumber grading agencies, and abbreviations used to reference them, include the following:

1. NeLMA: Northeastern Lumber Manufacturers' Association.
2. NLGA: National Lumber Grades Authority.
3. SPIB: The Southern Pine Inspection Bureau.
4. WCLIB: West Coast Lumber Inspection Bureau.
5. WWPA: Western Wood Products Association.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.

1.4 INFORMATIONAL SUBMITTALS

A. Material Certificates:

1. For dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by the ALSC Board of Review.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Stack wood products flat with spacers beneath and between each bundle to provide air circulation. Protect wood products from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS

- A. Lumber: Comply with DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, comply with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Grade lumber by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
 - 1. Factory mark each piece of lumber with grade stamp of grading agency.
 - 2. For exposed lumber indicated to receive a stained or natural finish, omit grade stamp and provide certificates of grade compliance issued by grading agency.
 - 3. Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry wood products.
 - 4. Dress lumber, S4S, unless otherwise indicated.
- B. Maximum Moisture Content:
 - 1. Boards: 15 percent.
 - 2. Dimension Lumber: 15 percent unless otherwise indicated.

2.2 MISCELLANEOUS LUMBER

- A. Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
 - 1. Blocking.
 - 2. Nailers.
 - 3. Rooftop equipment bases and support curbs.
 - 4. Cants.
 - 5. Furring.
 - 6. Grounds.
 - 7. Utility shelving.
- B. Dimension Lumber Items: Construction or No. 2 grade lumber of any of the following species:
 - 1. Mixed southern pine or southern pine; SPIB.
 - 2. Spruce-pine-fir; NLGA.
 - 3. Spruce-pine-fir (south); NeLMA, WCLIB, or WWPA.

- C. Concealed Boards: 15 percent maximum moisture content and any of the following species and grades:
 - 1. Mixed southern pine or southern pine; No. 2 grade; SPIB.
 - 2. Spruce-pine-fir (south) or spruce-pine-fir; Construction or No. 2 Common grade; NeLMA, NLGA, WCLIB, or WWPA.
- D. For blocking not used for attachment of other construction, Utility, Stud, or No. 3 grade lumber of any species may be used provided that it is cut and selected to eliminate defects that will interfere with its attachment and purpose.

2.3 FASTENERS

- A. General: Fasteners are to be of size and type indicated and comply with requirements specified in this article for material and manufacture. Provide nails or screws, in sufficient length, to penetrate not less than 1-1/2 inches into wood substrate.
 - 1. Where rough carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide fasteners of Type 304 stainless steel.
 - 2. For redwood, use stainless steel fasteners.
- B. Nails, Brads, and Staples: ASTM F1667.
- C. Power-Driven Fasteners: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC70.
- D. Post-Installed Anchors: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC01 ICC-ES AC58 ICC-ES AC193 or ICC-ES AC308 as appropriate for the substrate.

2.4 MISCELLANEOUS MATERIALS

- A. Flexible Flashing: Composite, self-adhesive, flashing product consisting of a pliable, butyl rubber or rubberized-asphalt compound, bonded to a high-density polyethylene film, aluminum foil, or spunbonded polyolefin to produce an overall thickness of not less than 0.025 inch.
- B. Adhesives for Gluing Furring and Sleepers to Concrete or Masonry: Formulation complying with ASTM D3498 that is approved for use indicated by adhesive manufacturer.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Framing Standard: Comply with AF&PA's WCD 1, "Details for Conventional Wood Frame Construction," unless otherwise indicated.

- B. Set work to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry accurately to other construction. Locate furring, nailers, blocking, grounds, and similar supports to comply with requirements for attaching other construction.
- C. Do not splice structural members between supports unless otherwise indicated.
- D. Provide blocking and framing as indicated and as required to support facing materials, fixtures, specialty items, and trim.
 - 1. Provide metal clips for fastening gypsum board or lath at corners and intersections where framing or blocking does not provide a surface for fastening edges of panels. Space clips not more than 16 inches o.c.
- E. Sort and select lumber so that natural characteristics do not interfere with installation or with fastening other materials to lumber. Do not use materials with defects that interfere with function of member or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
- F. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
 - 1. Table 2304.10.1, "Fastening Schedule," in ICC's International Building Code (IBC).
 - 2. ICC-ES evaluation report for fastener.
- G. Use steel common nails unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood. Drive nails snug but do not countersink nail heads unless otherwise indicated.

3.2 INSTALLATION OF WOOD BLOCKING AND NAILERS

- A. Install where indicated and where required for attaching other work. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.
- B. Attach wood blocking to substrates to support applied loading. Recess bolts and nuts flush with surfaces unless otherwise indicated.
- C. Provide permanent grounds of dressed, pressure-preservative-treated, key-beveled lumber not less than 1-1/2 inches wide and of thickness required to bring face of ground to exact thickness of finish material. Remove temporary grounds when no longer required.

END OF SECTION 06 10 00

SECTION 06 20 23 - INTERIOR FINISH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Interior trim.

B. Related Requirements:

1. Section 06 10 00 "Rough Carpentry" for furring, blocking, and other carpentry work not exposed to view.

1.2 ACTION SUBMITTALS

A. Product Data:

1. Interior trim.

B. Product Data Submittals: For each type of process and factory-fabricated product. Indicate component materials, dimensions, profiles, textures, and colors and include construction and application details.

C. Samples: For each exposed product and for each color and texture specified.

D. Samples for Initial Selection: For each type of product involving selection of colors, profiles, or textures.

E. Samples for Verification:

1. For each species and cut of lumber and panel products with nonfactory-applied finish, with half of exposed surface finished; 50 sq. in. for lumber.

1.3 DELIVERY, STORAGE, AND HANDLING

A. Deliver interior finish carpentry materials only when environmental conditions comply with requirements specified for installation areas. If interior finish carpentry materials must be stored in other than installation areas, store only where environmental conditions comply with requirements specified for installation areas.

1.4 FIELD CONDITIONS

- A. Do not install finish carpentry materials that are wet, moisture damaged, or mold damaged.
 - 1. Indications that materials are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 - 2. Indications that materials are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, comply with applicable rules of any rules-writing agency certified by the American Lumber Standard Committee's (ALSC) Board of Review. Grade lumber by an agency certified by the ALSC's Board of Review to inspect and grade lumber under the rules indicated.
 - 1. Factory mark each piece of lumber with grade stamp of grading agency.
 - 2. For exposed lumber, mark grade stamp on end or back of each piece, or omit grade stamp and provide certificates of grade compliance issued by grading agency.

2.2 INTERIOR TRIM

- A. Hardwood Lumber Trim and moldings for Transparent Finish (Stain or Clear Finish):
 - 1. Species and Grade:
 - a. Species to match existing trim. Contractor to confirm
 - 2. Maximum Moisture Content: 9 percent.
 - 3. Finger Jointing: Not allowed.
 - 4. Gluing for Width: Not allowed.
 - 5. Veneered Material: Not allowed.
 - 6. Face Surface: Match existing.
 - 7. Matching: Selected for compatible grain and color.
 - 8. Finish:
 - a. Stain to match existing.
 - b. Apply sealer to match existing sheen.

2.3 MISCELLANEOUS MATERIALS

- A. Fasteners for Interior Finish Carpentry: Nails, screws, and other anchoring devices of type, size, material, and finish required for application indicated to provide secure attachment, concealed where possible.

- B. Glue: Aliphatic-resin, polyurethane, or resorcinol wood glue recommended by manufacturer for general carpentry use.

2.4 FABRICATION

- A. Back out or kerf backs of the following members, except those with ends exposed in finished work:
 - 1. Interior standing and running trim, except shoe and crown molds.
- B. Ease edges of lumber less than **1 inch** in nominal thickness to **1/16-inch** radius and edges of lumber **1 inch** or more in nominal thickness to **1/8-inch** radius.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Examine finish carpentry materials before installation. Reject materials that are wet, moisture damaged, and mold damaged.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean substrates of projections and substances detrimental to application.
- B. Before installing interior finish carpentry, condition materials to average prevailing humidity in installation areas for a minimum of 24 hours unless longer conditioning is recommended by manufacturer.

3.3 INSTALLATION, GENERAL

- A. Do not use materials that are unsound; warped; improperly treated or finished; inadequately seasoned; too small to fabricate with proper jointing arrangements; or with defective surfaces, sizes, or patterns.
- B. Install interior finish carpentry level, plumb, true, and aligned with adjacent materials.
 - 1. Use concealed shims where necessary for alignment.
 - 2. Scribe and cut interior finish carpentry to fit adjoining work. Refinish and seal cuts as recommended by manufacturer.

3. Where face fastening is unavoidable, countersink fasteners, fill surface flush, and sand unless otherwise indicated.
4. Install to tolerance of **1/8 inch in 96 inches** for level and plumb. Install adjoining interior finish carpentry with **1/32-inch** maximum offset for flush installation and **1/16-inch** maximum offset for reveal installation.
5. Coordinate interior finish carpentry with materials and systems in or adjacent to it. Provide cutouts for mechanical and electrical items that penetrate interior finish carpentry.

3.4 INSTALLATION OF INTERIOR TRIM

- A. Install trim with minimum number of joints as is practical, using full-length pieces from maximum lengths of lumber available.
 1. Do not use pieces less than **24 inches** long, except where necessary.
 2. Stagger joints in adjacent and related standing and running trim.
 3. Cope at returns, miter at outside corners, and cope at inside corners to produce tight-fitting joints with full-surface contact throughout length of joint.
 4. Use scarf joints for end-to-end joints.
 5. Plane backs of casings to provide uniform thickness across joints where necessary for alignment.
 6. Match color and grain pattern of trim for transparent finish (stain or clear finish) across joints.
 7. Install without splitting; drill pilot holes before fastening where necessary to prevent splitting.
 8. Fasten to prevent movement or warping.
 9. Countersink fastener heads on exposed carpentry work and fill holes.

3.5 ADJUSTING

- A. Replace interior finish carpentry that is damaged or does not comply with requirements.
 1. Interior finish carpentry may be repaired or refinished if work complies with requirements and shows no evidence of repair or refinishing.
- B. Adjust joinery for uniform appearance.

3.6 CLEANING

- A. Clean interior finish carpentry on exposed and semiexposed surfaces.
- B. Restore damaged or soiled areas and touch up factory-applied finishes if any.

3.7 PROTECTION

- A. Protect installed products from damage from weather and other causes during construction.
- B. Remove and replace finish carpentry materials that are wet, moisture damaged, and mold damaged.
 - 1. Indications that materials are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 - 2. Indications that materials are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION 06 20 23

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DIVISION 07 – THERMAL AND MOISTURE PROTECTION

07 92 00 JOINT SEALANTS

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SECTION 07 92 00 - JOINT SEALANTS

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:

- 1. Silicone joint sealants.
- 2. Nonstaining silicone joint sealants.
- 3. Urethane joint sealants.
- 4. Silyl-terminated polyether joint sealants.
- 5. Mildew-resistant joint sealants.
- 6. Polysulfide joint sealants.
- 7. Butyl joint sealants.
- 8. Latex joint sealants.

- B. Related Requirements:

- 1. Section 08 52 13.03 "Aluminum Clad Exterior / Wood Interior Double-Hung Windows" for glazing sealants.

1.3 ACTION SUBMITTALS

- A. Product Data: For each joint-sealant product.
- B. Samples for Initial Selection: Manufacturer's color charts consisting of strips of cured sealants showing the full range of colors available for each product exposed to view.

1.4 INFORMATIONAL SUBMITTALS

- A. Sample Warranties: For special warranties.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An authorized representative who is trained and approved by manufacturer.

- B. Mockups: Install sealant in mockups of assemblies specified in other Sections that are indicated to receive joint sealants specified in this Section. Use materials and installation methods specified in this Section.

1.6 FIELD CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
 - 1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
 - 2. When joint substrates are wet.
 - 3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
 - 4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

1.7 WARRANTY

- A. Special Installer's Warranty: Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: Two years from date of Substantial Completion.
- B. Special Manufacturer's Warranty: Manufacturer agrees to furnish joint sealants to repair or replace those joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
 - 1. Warranty Period: Five years from date of Substantial Completion.
- C. Special warranties specified in this article exclude deterioration or failure of joint sealants from the following:
 - 1. Movement of the structure caused by stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression.
 - 2. Disintegration of joint substrates from causes exceeding design specifications.
 - 3. Mechanical damage caused by individuals, tools, or other outside agents.
 - 4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

PART 2 - PRODUCTS

2.1 JOINT SEALANTS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.
- B. VOC Content of Interior Sealants: Sealants and sealant primers used inside the weatherproofing system shall comply with the following:
 - 1. Architectural sealants shall have a VOC content of 250 g/L or less.
 - 2. Sealants and sealant primers for nonporous substrates shall have a VOC content of 250 g/L or less.
 - 3. Sealants and sealant primers for nonporous substrates shall have a VOC content of 775 g/L or less.
- C. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

2.2 SILICONE JOINT SEALANTS

- A. Silicone, S, NS, 50, NT: Single-component, nonsag, plus 50 percent and minus 50 percent movement capability, nontraffic-use, neutral-curing silicone joint sealant; ASTM C920, Type S, Grade NS, Class 50, Use NT.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. GE Construction Sealants; Momentive Performance Materials Inc.
 - b. Pecora Corporation.
 - c. Sika Corporation; Joint Sealants.
 - d. The Dow Chemical Company.
- B. Silicone, S, NS, 100/50, T, NT: Single-component, nonsag, plus 100 percent and minus 50 percent movement capability, traffic- and nontraffic-use, neutral-curing silicone joint sealant; ASTM C920, Type S, Grade NS, Class 100/50, Uses T and NT.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. GE Construction Sealants; Momentive Performance Materials Inc.
 - b. Pecora Corporation.
 - c. Sika Corporation; Joint Sealants.
 - d. The Dow Chemical Company.

2.3 BUTYL JOINT SEALANTS

- A. Butyl-Rubber-Based Joint Sealants: ASTM C1311.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Bostik, Inc.
 - b. Pecora Corporation.

2.4 JOINT-SEALANT BACKING

- A. Sealant Backing Material, General: Nonstaining; compatible with joint substrates, sealants, primers, and other joint fillers; and approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. BASF Corporation.
 - b. Construction Foam Products; a division of Nomaco, Inc.
- B. Cylindrical Sealant Backings: ASTM C1330, Type C (closed-cell material with a surface skin), and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.
- C. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint. Provide self-adhesive tape where applicable.

2.5 MISCELLANEOUS MATERIALS

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

PART 3 - EXECUTION

3.1 EXAMINATION

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

3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
 - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
 - 2. Clean porous joint substrate surfaces by brushing, grinding, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:
 - a. Concrete.
 - b. Masonry.
 - 3. Remove laitance and form-release agents from concrete.
 - 4. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include the following:
 - a. Metal.
 - b. Glass.
- B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION OF JOINT SEALANTS

- A. General: Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated unless more stringent requirements apply.
- B. Sealant Installation Standard: Comply with recommendations in ASTM C1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 - 1. Do not leave gaps between ends of sealant backings.
 - 2. Do not stretch, twist, puncture, or tear sealant backings.
 - 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
- E. Install sealants using proven techniques that comply with the following and at the same time backings are installed:
 - 1. Place sealants so they directly contact and fully wet joint substrates.
 - 2. Completely fill recesses in each joint configuration.
 - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
 - 1. Remove excess sealant from surfaces adjacent to joints.
 - 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
 - 3. Provide concave joint profile per Figure 8A in ASTM C1193 unless otherwise indicated.
 - 4. Provide flush joint profile according to Figure 8B in ASTM C1193.

3.4 CLEANING

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

3.5 PROTECTION

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

3.6 JOINT-SEALANT SCHEDULE

- A. Joint-Sealant Application: Exterior joints in vertical surfaces and horizontal nontraffic surfaces.
 - 1. Joint Locations:
 - a. Joints between different materials listed above.
 - b. Perimeter joints between materials listed above and frames of doors, windows, and louvers.
 - c. Other joints as indicated on Drawings.
 - 2. Joint Sealant: Silicone, nonstaining, S, NS, 50, NT.
 - 3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors.
- B. Joint-Sealant Application: Concealed mastics.
 - 1. Joint Locations:
 - a. Aluminum thresholds.
 - b. Sill plates.
 - c. Other joints as indicated on Drawings.
 - 2. Joint Sealant: Butyl-rubber based.
 - 3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors.

END OF SECTION 07 92 00

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DIVISION 08 - OPENINGS

- 08 01 52.61 WOOD WINDOW REPAIRS
- 08 52 13.03 ALUMINUM CLAD EXTERIOR / WOOD INTERIOR DOUBLE-HUNG WINDOWS

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SECTION 08 01 52.61 - WOOD WINDOW REPAIRS

PART 1 - GENERAL

1.1 SUMMARY

A. The Work of this Section includes wood window repairs as follows:

1. Removal of half-round wood sashes with stained-glass from existing wood window system.
2. Repairing wood window frame.
3. Repairing stained-glass window system.
4. Repairing, refinishing, and replacing hardware.

B. Related Requirements:

1. Section 02 41 19 "Selective Demolition" for specific requirements relating to selectively demolishing construction, including window and trim removal.
2. Section 08 52 13.03 "Aluminum Clad Exterior Wood Interior Double-Hung Windows" for new replacement windows custom fabricated to replicate the originals.

1.2 ALLOWANCES

A. See Section 01 21 00 "Allowances" for description of allowances for wood window repairs and delineation between Project scope of work and what work is to be covered by Allowance.

1.3 DEFINITIONS

- A. Design Reference Sample: A sample that represents the Architect's prebid selection of the Work to be matched; it may be existing Work or Work specially produced for the Project.
- B. Glazing: Includes glass, glazing points, glazing tapes, glazing sealants, and glazing compounds.
- C. Replicate: To reproduce in exact detail, materials, and finish unless otherwise indicated.
- D. Window: Includes window frame, sash, trim, and hardware unless otherwise indicated by context.
- E. Window Unit: Includes window and associated hardware and accessories, unless otherwise indicated by context.
- F. Window Component Terminology: Wood window components for repair work include the following classifications:
1. Frame Components: Head, jambs, and sill.
 2. Sash Components: Stiles and rails, parting bead, stop, and muntins.

3. Exterior Trim: Exterior casing, brick mold, and cornice or drip cap.
4. Interior Trim: Casing, stool, and apron.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference Project site.

1.5 SEQUENCING AND SCHEDULING

- A. Perform window repairs in the following sequence, which includes the Work specified in this and other Sections:

1. Label each window opening with temporary opening-identification number in inconspicuous location. Maintain a digital floor plan of each level that serves as a master list of each numbered opening.
2. At the beginning of Construction, remove all half-round sashes with stained-glass. Tag with opening-identification numbers. Document condition of each unit.
3. Install temporary protection and security at resulting openings in existing window systems.
4. Carefully package units in the most efficient and safe manner feasible to ensure no damage to units.
5. Send the packaged units to a stained-glass repair specialist.
6. In the shop, label each sash with permanent opening-identification number in inconspicuous location and remove site-applied tags.
7. Remove glazing putty and stained-glass system from frame.
8. Clean surfaces.
9. General Wood Repair Sequence:
 - a. Remove paint on exterior faces to bare wood. Stain on interior faces to remain.
 - b. Repair wood frame as required by consolidation, member replacement, partial member replacement, and patching. Repairs affecting the interior surfaces shall be stained and sealed to match existing.
 - c. Refer to detail 1 on sheet A3.1 of the drawings for installation detail of the restored half-round sash within the new window system. General Contractor to provide shop drawings of the new windows to window restorer. Wood frame of restored sash to be trimmed / scribed to fit as shown on detail and allow for spacing / ventilation.
 - d. Sand, prime, fill, sand again, and prime exterior surfaces again for refinishing.
 - e. Apply paint to exterior surfaces, Architect to provide color selection.
10. Stained-Glass Repair Sequence:
 - a. Create stencil/rubbing of stained-glass unit pattern.
 - b. Repair damaged glass – epoxy pieces with clean breaks and replace missing or shattered pieces.
 - c. Replace lead comes as required – match existing profile.
 - d. Provide reinforcement bars as required.

11. Place repaired stained-glass panel into restored wood frame; cement panels with linseed-oil based waterproofing putty.
12. Carefully package repaired units and return to General Contractor.
13. General Contractor to install each restored unit according to detail 1 on sheet A3.1. Install at same window opening that it was removed from.
14. Ensure that spacing provided between restored sash and new window system, and that the gap between the two is ventilated.

1.6 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include recommendations for product application and use.
2. Include test data substantiating that products comply with requirements.

B. Shop Drawings:

1. Include plans, elevations, and sections showing locations and extent of repair and replacement work, with enlarged details of replacement parts indicating materials, profiles, joinery, reinforcing, method of splicing into or attaching to existing wood window unit, accessory items, and finishes.
2. Include field-verified dimensions and provisions as required for location.

1.7 INFORMATIONAL SUBMITTALS

A. Qualification Statements: For stained-glass repair specialist.

1.8 QUALITY ASSURANCE

A. Stained-Glass Repair Specialist Qualifications: Utilize a specialist accredited by the Stained Glass Association of America.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Pack, deliver, and store products in suitable packs, heavy-duty cartons, or wooden crates; surround with sufficient packing material to ensure that products are not deformed, broken, or otherwise damaged.
- B. Store products inside a well-ventilated area and protect from weather, moisture, soiling, abrasion, extreme temperatures, and humidity, and where environmental conditions comply with manufacturer's requirements.

PART 2 - PRODUCTS

2.1 WOOD-REPAIR MATERIALS

- A. Source Limitations: Obtain wood consolidant and wood-patching compound from single source from single manufacturer.
- B. Wood Consolidant: Ready-to-use product designed to penetrate, consolidate, and strengthen soft fibers of wood materials that have deteriorated due to weathering and decay and designed specifically to enhance the bond of wood-patching compound to existing wood.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Abatron, Inc.
 - b. ConServ Epoxy LLC.
 - c. Protective Coating Company.
 - d. System Three Resins, Inc.
- C. Wood-Patching Compound: Two-part epoxy-resin wood-patching compound; knife-grade formulation as recommended in writing by manufacturer for type of wood repair indicated, tooling time required for the detail of work, and site conditions. Compound designed for filling voids in damaged wood materials that have deteriorated due to weathering and decay. Compound capable of filling deep holes and spreading to feather edge.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Abatron, Inc.
 - b. Advanced Repair Technology, Inc.
 - c. ConServ Epoxy LLC.
 - d. Polymeric Systems, Inc.; PPG Industries, Inc.
 - e. Protective Coating Company.
 - f. System Three Resins, Inc.

PART 3 - EXECUTION

3.1 STAINED-GLASS REPAIR SPECIALIST

- A. Stained-Glass Repair Specialist Firms: Subject to compliance with requirements, provide wood window and stained-glass repairs by an SGAA accredited firm, including but not limited to:
 - 1. City Glass Specialty, Inc. (Ft. Wayne IN).
 - 2. Kokomo Opalescent Glass Co., Inc. (Kokomo, IN)
 - 3. Mominee Studios, Inc. (Evansville, IN).

3.2 EXAMINATION

- A. Examine areas, and conditions, with wood-window-repair specialist present, for compliance with requirements for environmental conditions, and other conditions affecting performance of the Work.
 - 1. If existing wood window units cannot be prepared to an acceptable condition for repair, notify Architect in writing.
 - 2. Notify Architect of undocumented detrimental conditions, including rotted wood and other deteriorated items.
- B. Begin wood window unit repair work only after unsatisfactory conditions have been corrected.

3.3 PREPARATION

- A. Protect adjacent materials from damage by performing wood window unit repairs.
- B. Clean wood window units of mildew, algae, moss, plant material, loose paint, grease, dirt, and other debris by scrubbing with bristle brush or sponge and detergent solution. Scrub mildewed areas with mildewcide. After cleaning, rinse thoroughly with fresh water. Allow to dry before repairing or painting.
- C. Condition replacement wood members and replacement units to prevailing conditions at installation areas before installing.
- D. Remove coatings and apply borate preservative treatment before repair.
- E. Protection of Openings: Where sash or windows are indicated for removal, cover resultant openings with temporary enclosures so that openings are weathertight during repair period.

3.4 WOOD WINDOW UNIT PATCH-TYPE REPAIR

- A. General: Patch wood members that exhibit depressions, holes, or similar voids and that have limited amounts of rotted or decayed wood.
 - 1. Verify that surfaces are sufficiently clean and free of paint residue before patching.
 - 2. Remove rotted or decayed wood down to sound wood.
- B. Apply borate preservative treatment to accessible surfaces after removing rotted or decayed wood and before applying wood consolidant or patching compound. Apply treatment liberally by brush to joints, edges, and ends; top, sides, and bottom. Allow treatment to dry.
- C. Apply wood-patching compound to fill depressions, nicks, cracks, and other voids created by removed or missing wood.
 - 1. Prime patch area with application of wood consolidant or manufacturer's recommended primer.
 - 2. Mix only as much patching compound as can be applied in accordance with manufacturer's written instructions.

3. Apply patching compound in layers as recommended in writing by manufacturer until the void is completely filled.
4. Sand patch surface smooth and flush with adjacent wood, without voids in patch material, and matching contour of wood member.
5. Clean spilled compound from adjacent materials immediately.

3.5 REGLAZING

- A. Replacement stained-glass shall match existing manufacturer, color, and texture of the damaged piece of glass that it is replacing.
- B. Comply with combined written instructions of manufacturers of glass, glazing systems, and glazing materials, unless more stringent requirements are indicated.
- C. Remove cracked and damaged glass and glazing materials from openings and prepare surfaces for reglazing.
- D. Install glass with proper orientation, match orientation of replaced panel.

3.6 INSTALLATION OF REPLACEMENT WOOD WINDOWS

- A. Install units, hardware, accessories, and other components as indicated on Drawings.
- B. Install units level, plumb, square, true to line, without distortion or impeding movement; anchored securely in place to structural support; and in proper relation to wall flashing, trim, and other adjacent construction.
- C. Install window units with new anchors into existing openings.
- D. Metal Protection: Separate aluminum and other corrodible surfaces from sources of corrosion or electrolytic action at points of contact with other materials.

3.7 CLEANING AND PROTECTION

- A. Protect window surfaces from contact with contaminating substances resulting from construction operations. Monitor window surfaces adjacent to and below exterior concrete and masonry during construction for presence of dirt, scum, alkaline deposits, stains, or other contaminants. If contaminating substances contact window surfaces, remove contaminants immediately.
- B. Clean exposed surfaces immediately after repairing wood windows. Avoid damage to coatings and finishes. Remove excess sealants, glazing and patching materials, dirt, and other substances.
- C. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during construction.

END OF SECTION 08 01 52.61

SECTION 08 52 13.03 - ALUMINUM CLAD EXTERIOR / WOOD INTERIOR DOUBLE-HUNG WINDOWS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Aluminum Clad Exterior / Wood Interior Double-Hung Windows with Hardware.
- B. Glazing.
- C. Accessories.

1.2 RELATED SECTIONS

- A. Section 01 33 00 "Submittal Procedures."
- B. Section 06 10 00 "Rough Carpentry."
- C. Section 06 20 23 "Interior Finish Carpentry."
- D. Section 07 92 00 "Joint Sealants."

1.3 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. ASTM C1036 - Standard Specification for Flat Glass.
 - 2. ASTM C1048 - Standard Specification for Heat-Treated Flat Glass – Kind HS, Kind FT Coated and Uncoated Glass.
 - 3. ASTM D3656 – Standard Specification for Insect Screening and Louver Cloth Woven From Vinyl-Coated Glass Yarns.
 - 4. ASTM E283 - Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.
 - 5. ASTM E330 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
 - 6. ASTM E547 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Cyclic Static Air Pressure Difference.
 - 7. ASTM E2190 - Standard Specification for Insulating Glass Unit Performance and Evaluation.
 - 8. ASTM F588 - Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact.

- B. American Architectural Manufacturers Association/Window and Door Manufacturers Association/Canadian Standards Association (AAMA/WDMA/CSA):
 - 1. AAMA/WDMA/CSA 101/I.S.2/A440-11/NAFS – North American Fenestration Standard/Specification for Windows, Doors and Skylights.
- C. American Architectural Manufacturers Association/Window and Door Manufacturers Association/Canadian Standards Association (AAMA/WDMA/CSA):
 - 1. AAMA/WDMA/CSA 101/I.S.2/A440-08/NAFS – North American Fenestration Standard/Specification for Windows, Doors and Skylights.
- D. Window and Door Manufacturers Association (WDMA):
 - 1. WDMA I.S.2 – Hallmark Certification Program.
 - 2. WDMA 4-05 - Industry Standard for Water Repellent Preservative Non-Pressure Treatment for Millwork.
- E. American Architectural Manufacturers Association (AAMA):
 - 1. AAMA 450 – Voluntary Performance Rating Method for Mullled Fenestration Assemblies.
 - 2. AAMA 611 – Voluntary Specification for Anodized Architectural Aluminum.
 - 3. AAMA 2604 - Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels.
 - 4. AAMA 2605 – Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.
- F. National Fenestration Rating Council (NFRC):
 - 1. NFRC 102 - Procedure for Measuring the Steady-State Thermal Transmittance of Fenestration Systems.
 - 2. NFRC 200 - Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence.
 - 3. NFRC 500 - Procedure for Determining Fenestration Product Condensation Resistance Values.
 - 4. ENERGY STAR Compliant Models available.
- G. Insulating Glass Certification Council (IGCC).
- H. Safety glass tested in accordance with ANSI Z97.1.
- I. Screen Manufacturers Association (SMA):
 - 1. SMA-1201-2013 – Specifications for Insect Screens for Windows, Sliding Doors and Swinging Doors.
- J. Forest Stewardship Council (FSC):

1. FSC-STD-40-003 V1-0 – Standard for Multi-site Certification of Chain of Custody Operations.
2. FSC-STD-40-004 V2-1 – Standard for Chain of Custody Certification.

1.4 PERFORMANCE REQUIREMENTS

- A. Design and performance requirements:
- B. Double-hung tilt windows shall be Hallmark certified in compliance with AAMA/WDMA/CSA 101/I.S.2/A440-11:
 1. LC-PG50-H
- C. Vertical mull, mull and applied rating: LC50.
- D. Air infiltration shall not exceed 0.30 cfm/ft² when tested at 1.57 psf according to ASTM E283.
- E. No water penetration when tested at the following pressure according to ASTM E547:
 1. LC-PG50-H – 7.50 psf
- F. Double-hung tilt windows must withstand the following positive/negative structural test pressure without damage when tested according to ASTM E330:
 1. LC-PG50-H – +/-75.0 psf
- G. Double-hung tilt windows must pass a forced entry resistance test of at least Grade 10 to meet requirements set forth in ASTM F588.

1.5 SUBMITTAL PROCEDURES

- A. Shop drawings: submit shop drawings according to Section 01 33 00 "Submittal Procedures."
- B. Product data: submit manufacturer's product catalog data and installation guides.
- C. Samples: submit samples including the following:
 1. Corner cutaway: submit corner cutaway, including glazing system, quality of construction and specified exterior/interior finishes.
 2. Exterior: submit color samples of exterior color finishes.
 3. Hardware: submit samples indicating typical hardware finishes.
- D. Quality control reporting: submit manufacturer's test results reported by independent laboratory indicating compliance with specified performance and design requirements, as listed in 1.4 Performance Requirements, according to Section 01 33 26 "Quality Control."

1.6 QUALITY ASSURANCE

- A. Single source responsibility: except for hardware mechanisms, weather strip, insulated glass and aluminum extrusions, the window manufacturer is responsible for fabrication of all components and materials including treatment of wood with acceptable wood preservatives, millwork of sash and frame members and manufacture of all sash and frames.

1.7 PRODUCT DELIVERY REQUIREMENTS

- A. Deliver windows to Project site in original, unopened packages and store them in accordance with manufacturer's written instructions. Protect windows against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination, and other causes.
- B. Handle windows in a manner that prevents damage before, during, and after installation.

1.8 WARRANTIES

- A. Workmanship and materials: 10-year limited warranty.
- B. Wood rot: 10-year warranty.
- C. Insulating glass: 20-year warranty.

PART 2 PRODUCTS

2.1 MANUFACTURED UNITS

- A. Basis of Design: Subject to compliance with requirements, provide Weather Shield Premium Series 8120 Aluminum Clad Exterior / Wood Interior Double-Hung Windows as manufactured by Weather Shield Mfg., Inc. of Medford, Wisconsin, or approved equal:
 - 1. Andersen Windows.
 - 2. Kolbe Windows and Doors.
 - 3. Marvin Windows.
 - 4. Pella Windows and Doors.

2.2 ALUMINUM CLAD EXTERIOR / WOOD INTERIOR DOUBLE-HUNG WINDOW MATERIALS

- A. Frame:
 - 1. Exterior frame members milled from ,pine, kiln dried to a moisture content of 6-12% at the time of fabrication and treated with a water-repellent preservative. Frame corners

shall be square cut, rabbeted at head, dadoed at sill, chemically and mechanically fastened.

2. Frame is clad with .050" extruded aluminum, with an integral extruded nailing fin. Top corners shall be mitered, include internal aluminum corner keys, and be chemically and mechanically fastened. Sill shall include a vinyl thermal break sill riser that interlocks into extruded aluminum sill cover.
 3. Interior frame materials to be milled from standard pine FSC-certified FSC-C095408, kiln dried to a moisture content of 6-12% at the time of fabrication and treated with a water-repellent preservative.
 4. Frame shall have standard 5-3/16" overall jamb depth with 4-9/16" from backside of nailing fin to interior of window. See details for required jamb extensions.
- B. Sash:
1. Sash shall be composed of two materials, an extruded aluminum exterior of .050" thickness, butt joined at corners, chemically and mechanically bonded to the interior wood substrate. Interior sash corners shall be mortised, tenoned and mechanically fastened.
 2. Interior sash materials to be milled from standard pine FSC-certified FSC-C095408, kiln dried to a moisture content of 6-12% at the time of fabrication and treated with a water-repellent preservative.
 3. Bottom rail shall be 4-1/4" tall. Top sash top rail shall be 2-3/4" tall; stiles for both sash shall be 2" wide.
 4. Both top and bottom sash shall interlock together using extruded aluminum interlocking cladding at the meeting rail.
 5. Top sash to be stationary. Bottom sash to be operable. Provide sash pocket stops with tamper-proof screw for bottom sash.
- C. Roof Access Panel (Window type W19):
1. Provide fully glazed "door" panel. Refer to drawings for appearance.
 2. Panel shall swing to the interior.
 3. Dimensions:
 - a. Bottom Rail: 10" high
 - b. Top Rail: minimum 5" high.
 - c. Side rails: minimum 5" wide.

2.3 FINISH:

- A. Exterior aluminum finish: silicone-modified polyester topcoat over high performance primer meets AAMA 2605 requirements.
1. Color 1: white.
 2. Color 2: Color to match adjacent wood paneling. Color to be selected from manufacturer's full range of all color lines.

- B. Interior finish: Custom Weather Shield Designer furniture grade 7 step factory stain and finish to match existing trim.

2.4 GLAZING:

- A. Glass type: Insulated glass consisting of two lites of clear tempered 1/4" glass.
 - 1. Fully Tempered Float Glass: ASTM C1048, Kind FT (fully tempered), Condition A (uncoated) unless otherwise indicated, Type I, Class 1 (clear), Quality-Q3.
 - a. Fabrication Process: By horizontal (roller-hearth) process with roll-wave distortion parallel to bottom edge of glass as installed unless otherwise indicated.
 - 2. Insulating glass IGCC certified to performance level CBA when tested in accordance with ASTM E2190.
- B. Thermal performance:
 - 1. U-value - total, NFRC 100 – (.31)
 - 2. Solar Heat Gain Coefficient (SHGC), NFRC 200 – (.20)
 - 3. Visible Light Transmittance (VLT), NFRC 200 – (.46)
 - 4. Condensation Resistance Rating (CRR), NFRC 500 – (55)
- C. Insulated glass airspace:
 - 1. Insulated glass shall be sealed with a black spacer system to meet thermal performance.
- D. Glass shall be silicone glazed at exterior to allow reglazing from the interior with standard colonial glazing bead. Back side of glazing bead to be finished black.

2.5 HARDWARE:

- A. Windows:
 - 1. Window lift handles and sash locks on existing windows are to be removed and salvaged for installation on new windows. Hardware to be cleaned / restored as required.
 - 2. If existing sash locks cannot be reused, or are not present, provide new inactive sash locks. Inactive Sash locks to be historical style and shall be zinc die cast, mounted at bottom sash check rail and factory applied. Sash lock/keeper finishes to match existing hardware finish.
- B. Roof Access Panel (Window type W19): provide manufacturer's standard hardware.
 - 1. Finish: Dark Bronze.
 - 2. Hinges: quantity and style recommended by the manufacturer to accommodate panel dimensions.

3. Cylindrical Lever Lock, Entry function. Architect to select from manufacturer's full range of standard lever styles. Coordinate with Owner's preferred cylinder manufacturer. Owner to provide cylinder.
4. Deadbolt with thumbturn at interior side, keyed cylinder at exterior. Coordinate with Owner's preferred cylinder manufacturer. Owner to provide cylinder.
5. Overhead stop and hold-open.
6. Threshold: ADA compliance is not required. Provide threshold sloping to exterior for positive drainage.
7. Door sweep.

2.6 ACCESSORIES AND TRIM

- A. Interior installation clips: size required by manufacturer for window dimensions.
- B. Custom exterior aluminum casing / brick mould to match existing. Color to match exterior frame. See drawings for required profile.
- C. Sash lugs. Die cast aluminum for top sash, and standard pine for bottom sash.
- D. Weather Stripping: Flexible vinyl weather strip shall have contact to the frame around each sash.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine openings, substrates, structural support, anchorage, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Verify rough opening dimensions, levelness of sill plate, and operational clearances.
- C. Examine wall flashings, vapor retarders, water and weather barriers, and other built-in components to ensure weathertight window installation.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install windows according to manufacturer's instructions and reviewed shop drawings to ensure proper installation and operation.
- B. Install window unit plumb, level and square with no distortion of frame members.
- C. Fill perimeter frame to wall opening cavity per manufacture's installation instructions.

- D. Apply approved sealant in accordance with Section 07 92 00 – Joint Sealants.
- E. Do not puncture aluminum cladding.

3.3 ADJUSTING AND CLEANING

- A. Adjust operating sash and hardware to provide tight fit at contact points and at the weather stripping for smooth operation and weathertight closure.
- B. Remove excess sealant materials and visible labels from glass using manufacturer's written instructions. Clean glass surfaces promptly after installation. Keep protective coverings and films in place until final cleaning.
- C. Remove and replace sashes if glass has been broken, chipped, cracked, abraded, or damaged during construction period.
- D. Initiate and maintain all protection and other precautions required to ensure windows are in acceptable condition at time of substantial completion.

END OF SECTION 08 52 13.03

DIVISION 09 - FINISHES

09 91 13 EXTERIOR PAINTING

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SECTION 09 91 13 - EXTERIOR PAINTING

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:
 - 1. Primers.
 - 2. Finish coatings.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include preparation requirements and application instructions.
 - 2. Indicate VOC content.
- B. Samples: For each type of topcoat product.
 - 1. Submit Samples on rigid backing, 8 inches square.
 - 2. Apply coats on Samples in steps to show each coat required for system.
 - 3. Label each coat of each Sample.
 - 4. Label each Sample for location and application area.
- C. Product Schedule: Use same designations indicated on Drawings and in the Exterior Painting Schedule to cross-reference paint systems specified in this Section. Include color designations.

1.4 QUALITY ASSURANCE

- A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
 - 1. Architect will select one surface to represent surfaces and conditions for application of each paint system.
 - a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft..
 - b. Other Items: Architect will designate items or areas required.

2. Final approval of color selections will be based on mockups.
 - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.
3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
 1. Maintain containers in clean condition, free of foreign materials and residue.
 2. Remove rags and waste from storage areas daily.

1.6 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.
- B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 1. Behr Paint Company; Behr Process Corporation.
 2. Benjamin Moore & Co.
 3. PPG Paints; PPG Industries, Inc.
 4. Sherwin-Williams Company (The).
- B. Products: Subject to compliance with requirements, provide one of the products listed in the Exterior Painting Schedule for the paint category indicated.

2.2 PAINT PRODUCTS, GENERAL

- A. Material Compatibility:

1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer based on testing and field experience.
2. For each coat in a paint system, provide products recommended in writing by topcoat manufacturer for use in paint system and on substrate indicated.

B. Colors: As selected by Architect from manufacturer's full range of colors.

2.3 PRIMERS

A. Quick-Drying, Alkyd Metal Primer: Corrosion-resistant, solvent-based, modified-alkyd primer; lead and chromate free; formulated for quick-drying capabilities and for use on cleaned, exterior steel surfaces.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. BEHR: Premium Plus Multi-Surface Primer, 436 (<50 g/L).
 - b. BM: Super Spec Alkyd Metal Primer P06.
 - c. PPG Paints: Devguard 4360 Rust Inhibitive Primer.
 - d. S-W: Kem Bond HS, B50 Series.

B. Water-Based, Galvanized-Metal Primer: Corrosion-resistant, pigmented, acrylic primer; formulated for use on cleaned/etched, exterior, galvanized metal to prepare it for subsequent water-based coatings.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. BEHR: Premium Plus Multi-Surface Primer, 436 (<50 g/L VOC).
 - b. Benjamin Moore: Ultra Spec HP Acrylic Metal Primer HP04 (43 g/L VOC).
 - c. PPG Paints; Pitt-Tech Plus Waterborne Acrylic Primer/Finish 4020PF (91 g/L VOC).
 - d. Sherwin-Williams: Pro Industrial Pro-Cryl Universal Primer, B66-310 (<100 g/L VOC).

C. Quick-Drying Aluminum Primer: Corrosion-resistant, solvent-based, alkyd or modified-alkyd primer formulated for quick-drying capabilities and for use on prepared exterior aluminum.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. BEHR: Premium Plus Multi-Surface Primer, 436 (<50 g/L).
 - b. BM: Ultra Spec DTM Acrylic Semi-Gloss Enamel HP29.
 - c. PPG Paints: 17-921 Seal Grip Primer.
 - d. S-W: Pro Industrial ProCryl WB Metal Primer, B66-310 Series.

2.4 FINISH COATINGS

- A. Exterior Latex Paint, Semigloss: Water-based, pigmented emulsion coating formulated for alkali, mold, microbial, and water resistance and for use on exterior surfaces, such as masonry, portland cement plaster, and primed wood and metal.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. BEHR: Direct To Metal Semi-Gloss, 3200 (<100 g/L).
 - b. BM: Ultra Spec DTM Acrylic Semi-Gloss Enamel HP29.
 - c. PPG Paints: 6-900XI Speedhide Exterior Semi-Gloss.
 - d. S-W: Pro Industrial Acrylic Semi-Gloss, B66-651 Series.

- B. Exterior Alkyd Enamel, Semigloss: Solvent-based, pigmented, alkyd enamel formulated for mold, microbial, and water resistance and for use on exterior, primed, wood and metal surfaces.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. BEHR: Oil-Base Interior/Exterior Semi-Gloss Enamel, 3800 (<380 g/L).
 - b. BM: Super Spec HP Alkyd Semi-Gloss Enamel P24.
 - c. PPG Paints: Devguard 4306 Alkyd Semi-Gloss Enamel.
 - d. S-W: Metalatex DTM, B55 Series.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Verify suitability of substrates, including surface conditions and compatibility, with finishes and primers.
- C. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions applicable to substrates and paint systems indicated.

- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems specified in this Section.
- D. Steel Substrates: Remove rust, loose mill scale, and shop primer if any. Clean using methods recommended in writing by paint manufacturer.
- E. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and areas where shop paint is abraded. Paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.
- F. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
- G. Aluminum Substrates: Remove loose surface oxidation.

3.3 INSTALLATION

- A. Apply paints in accordance with manufacturer's written instructions.
 - 1. Use applicators and techniques suited for paint and substrate indicated.
 - 2. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
 - 3. Primers specified in the Exterior Painting Schedule may be omitted on items that are factory primed or factory finished if compatible with intermediate and topcoat coatings and acceptable to intermediate and topcoat paint manufacturers.
- B. Tint undercoats same color as topcoat, but tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.4 FIELD QUALITY CONTROL

- A. Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.
 - 1. Contractor shall touch up and restore painted surfaces damaged by testing.
 - 2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written instructions, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written instructions.

3.5 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
 - 1. Do not clean equipment with free-draining water and prevent solvents, thinners, cleaners, and other contaminants from entering into waterways, sanitary and storm drain systems, and ground.
 - 2. Dispose of contaminants in accordance with requirements of authorities having jurisdiction.
 - 3. Allow empty paint cans to dry before disposal.
 - 4. Collect waste paint by type and deliver to recycling or collection facility.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 EXTERIOR PAINTING SCHEDULE

- A. Steel and Iron Substrates:
 - 1. Alkyd System:
 - a. Prime Coat: Quick-drying, alkyd metal primer.
 - b. Intermediate Coat: Matching topcoat.
 - c. Topcoat: Exterior alkyd enamel, semigloss.
- B. Galvanized-Metal Substrates:
 - 1. Latex System:

- a. Prime Coat: Water-based, galvanized-metal primer.
- b. Intermediate Coat: Matching topcoat.
- c. Topcoat: Exterior latex paint, semigloss.

C. Aluminum Substrates:

1. Latex System:

- a. Prime Coat: Quick-drying aluminum primer.
- b. Intermediate Coat: Matching topcoat.
- c. Topcoat: Exterior latex paint, semigloss.

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