



Addition & Renovation
Nathaniel Jones Early Learning Center

Addendum No. 4

April 9, 2026

The following additions, clarifications and revisions have been made to the Contract Documents:

REVISIONS:

1. The attached Trade Package Manual has been incorporated into the project as Project Manual V1.

Project Manual V1



Project No. 25-10-913

Bid Release 02

**Addition and Renovation
Nathaniel Jones Early Learning Center
Indianapolis, Indiana**

Trade Package Manual

April 9, 2026

Owner

MSD of Pike Township
6901 Zionsville Road
Indianapolis, IN 46268

Construction Manager

CORE Construction
833 W Lincoln Hwy #120
Schererville, IN 46375

Architect

Fanning/Howey Associates Architects
350 E. New York Street
Suite 300
Indianapolis, IN 46204

CORE CONSTRUCTION

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Prepared By:
Greg Campen
CORE Construction
Date: 4/09/2026



SECTION 00 11 13 – ADVERTISEMENT TO BID

1.1 PROJECT INFORMATION

- A. Notice to Bidders: **MSD of Pike Township** is inviting sealed Bid Proposals from interested and qualified parties for work at **Nathaniel Jones Early Learning Center – Addition & Renovation**. Qualified bidders may submit bids for the project as described in this document. Submit bids according to Section 00 21 13 Instruction to Bidders.

- B. Project Identification: Nathaneil Jones Early Learning Center – Addition and Renovation – Bid Release #2
 - 1. Architecture Project No: 225036.00
 - 2. CORE Project No: 25-10-913
 - 3. Project Location: Nathaniel Jones Early Learning Center
7839 New Augusta Road
Indianapolis, IN 46268

- C. Owner:
 - 1. Owner: MSD of Pike Township
6901 Zionsville Road
Indianapolis, IN 46258

- D. Architect:
 - 1. Project Architect: Paul Miller
Fanning/Howey Associates
350 E New York Street, Suite 300
Indianapolis, IN, 46204

- E. Construction Manager:
 - 1. Construction Manager: CORE Construction
833 West Lincoln Hwy #120
Schererville, IN 46375

- F. Project Description:
 - 1. Project consists of 40,765 SF addition to existing Early Learning Center along with renovations to existing site.

- G. Construction Contract: Bids will be received for the following Work:
 - 1. Multiple Contract Project consisting of the following prime contracts:
 - a. Bid Package 01 – GENERAL TRADES
 - b. Bid Package 03 – ASPHALT PAVING
 - c. Bid Package 04 – LANDSCAPING
 - d. Bid Package 09 – ARCHITECTURAL CASEWORK
 - e. Bid Package 11 – ALUMINUM STOREFRONT & GLAZING
 - f. Bid Package 12 – METAL STUDS, DRYWALL AND CEILINGS
 - g. Bid Package 13 – SOFT FLOORING
 - h. Bid Package 14 – HARD FLOORING
 - i. Bid Package 15 – PAINTING
 - j. Bid Package 17 – FOOD SERVICE EQUIPMENT
 - k. Bid Package 19 – FIRE PROTECTION



1.2 BID SUBMITTAL AND OPENING

- A. The Owner will receive sealed lump sum bids until the bid time and date at the location given below. Bids will be received by **MSD of Pike Township Schools** until the date and time listed below, at which time bids will be publicly opened and read aloud. The Owner will consider bids prepared in compliance with the Instructions to Bidders issued by Owner, and delivered as follows:
 - 1. Bid Date: **April 23, 2026**
 - 2. Bid Time: **1:00 PM (EST)**Location: **CORE Construction**
8440 Woodfield Crossing Blvd
Suite 165
Indianapolis, IN 46250
- B. **DO NOT SUBMIT BIDS ELECTRONICALLY.** Bids submitted to the Construction Manager via email will **NOT** be considered.
- C. Bids will thereafter be publicly opened and read aloud.

1.3 BID SECURITY

- A. Bid Security shall be submitted with each bid package in the amount of **five percent (5%)** of the bid amount. No bids may be withdrawn for a period of 30 days after the opening of bids.
- B. The Bid Security shall be addressed to the Owner as follows:
MSD of Pike Township
6901 Zionsville Road
Indianapolis, IN 46258
- C. Refer to 00 21 13 Instructions to Bidders for Additional Information.

1.4 PREBID MEETING

- A. See Section 00 25 13 – Prebid Meetings

1.5 RFI'S AND SUBSTITUTION REQUESTS

- A. All Requests for Information (RFI's), Substitution Requests, and Bid Package Scope questions shall be sent via email to:

Greg Campen CORE Construction Phone: 309-404-4700 Email: gregcampen@coreconstruction.com	Greg Delagrange CORE Construction Phone: 317-557-3565 Email: gregdelagrange@coreconstruction.com
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- B. Questions shall be addressed via addenda.

- C. Substitution requests shall utilize the substitution request form included in Section 00 26 00.01 Pre-Bid Substitution Request Form and provide all requested technical information as required by Section 00 26 00.01. Substitution requests sent without approved form shall not be considered.

1.6 DOCUMENTS

Online procurement and Contracting Documents: Documents will be available online through an electronic bid site managed by CORE Construction. Obtain access by contacting:

Greg Campen
CORE Construction
Phone: 309-404-4700
Email: gregcampen@coreconstruction.com

1.7 TIME OF COMPLETION

- A. The successful bidder shall begin the work upon receipt of a Notice to Proceed and shall complete the work per the requirements in Specification Section 00 31 13.a - Project Schedule.

1.8 STIPULATIONS

- A. Owner reserves the right to reject any and all Bids or portion(s) of bid, to waive any irregularities in the Bidding, and award contract in the Owner's best interest. After receipt of bids and completion of the review process, **MSD of Pike Township** may award a contract to the bidder that, in its opinion, will provide a combination of the best services and reasonable cost.
- B. The selected bidder is required to provide a satisfactory performance bond and labor & material payment bond covering the full performance of the contract, irrevocable letter of credit, or other security. The costs of the bonds are to be included in each Bidding Multiple Prime Contractor's Bid Proposal.
- C. Bidders must be properly licensed under the laws governing their respective trades and be able to obtain required insurance and bonds required for the Work. A Performance Bond, separate Labor and Material Payment Bond, and Insurance in a form acceptable to Owner will be required of the successful bidder.
- D. The Owner requires all contractors and vendors doing business with the Owner not to discriminate against anyone on the basis of race, age, color, religion, gender, sexual orientation, ancestry, non-job-related handicaps or national origin.
- E. Bidding Multiple Prime Contractors shall comply with all applicable laws of the State of Indiana and the United States of America.

1.9 NOTIFICATION

- A. This Advertisement for Bids document is issued by CORE Construction

END OF SECTION 00 11 13

SECTION 00 21 13 - INSTRUCTIONS TO BIDDERS

1.1 DEFINITIONS

- A. Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Advertisement to Bid, Instructions to Bidders, Supplementary Instructions to Bidders, the Bid Form, and other sample bidding and contract forms. The proposed Contract Documents consist of the form of Agreement between the Owner and Construction Manager, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, and all Addenda issued prior to the execution of the Contract.
- B. Definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201, or in other Contractor Documents are applicable to the Bidding Documents.
- C. The Subcontractor is a person or entity submitting a bid for a bid package, performing construction under contracts administered by the Construction Manager, and shall be an assigned Subcontractor to the Construction Manager. Subcontractor shall be synonymous with "Bidder" and "Multiple Prime Contractor".
- D. The Construction Manager (CM) is the entity holding the Bid Package agreements with the Bidding Subcontractors and is synonymous with "Contractor".
- E. Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract, which modifies or interprets the Bidding Documents by additions, deletions, clarifications, or corrections.
- F. A Bid is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- G. The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.
- H. An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding changes in the Work, as described in the Bidding Documents.
- I. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment, or services or a portion of the Work as described in the Bidding Documents and complying with the provisions of Section 00 43 22 Unit Prices.
- J. A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.
- K. A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment, or labor for a portion of the Work.
- L. A Sub-tier Subcontractor is a person or entity performing work under a Subcontractor.
- M. The term "responsible bidder" for construction contracts means a bidder who meets at least all of the following applicable criteria and submits evidence of such compliance:
 - a. All applicable laws pre-requisite to doing business in Indiana.
 - b. Evidence of compliance with:

- i. Federal Employer Tax Identification Number or social security number (for individuals).
- ii. Provisions of Section 2000(3) of Chapter 21, Title 42 of the United States Code and Federal Executive Order No. 11246 as amended by Executive Order No. 11375 (known as the Equal Opportunity Employer provisions.)
- iii. Certificates of Insurance indicating the following coverage's:
 1. Refer 00 52 00 Sample Subcontract Attachment E - Insurance Conditions for required coverage.

1.2 BIDDER'S REPRESENTATIONS

- A. Submission of Bid represents that Bidder:
- a. The Bidder has read and understands the Bidding Documents or Contract Documents, to the extent that such documentation relates to the Work for which the Bid is submitted, and for other portions of the Project, if any, being bid concurrently or presently under construction.
 - b. The Bid is made in compliance with the Bidding Documents.
 - c. The Bidder has become familiar with local conditions under which the work is to be performed and has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents.
 - d. The Bid is based upon the materials, equipment, and systems required by the Bidding Documents without exception.
 - e. The bidder has included all Provisions contained in Sections 00 and 01 of the Project Manual.

1.3 BIDDING DOCUMENTS

- A. Copies of Bidding Documents will be issued to prospective bidders and will be available for examination at the Architect's office and other offices for the use of prospective sub-bidders, as set forth in 00 11 13 Advertisement to Bid.

1.4 INTERPRETATIONS/CORRECTIONS

- A. The Bidder shall carefully study and compare the Bidding Documents with each other, and with other work being bid concurrently or presently under construction to the extent that it relates to the Work for which the Bid is submitted and shall at once report to the Architect errors, inconsistencies or ambiguities discovered.
- B. Bidders and Sub-bidders requiring clarification or interpretation of the Bidding Documents shall make a written request which shall reach the Architect at least five (5) days prior to the date for receipt of Bids.
- C. Interpretations, corrections, and changes of the Bidding Documents will be made by an Addendum. Interpretations, corrections, and changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon them.

1.5 SUBSTITUTIONS

- A. Substitution requests shall be submitted in compliance with 00 11 13 Advertisement to Bid.
- B. Substitution requests shall be submitted in compliance with Section 00 43 25 – Substitution Procedure.

1.6 ADDENDA

- A. Addenda will be transmitted to all who are known by the issuing office to have received a complete set of Bidding Documents.
- B. Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.
- C. Addenda will be issued no later than two days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes the postponement of the date for receipt of Bids.
- D. Each Bidder shall ascertain prior to submitting a Bid that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt in the Bid.

1.7 BIDDING PROCEDURE

- A. All blanks on the bid form shall be legibly executed in a non-erasable medium.
- B. Sums shall be expressed in both words and figures. In case of discrepancy, the amount written in words shall govern.
- C. Interlineations, alterations, and erasures must be initialed by the signer of the Bid.
- D. All requested Alternates shall be bid. If no change in the Base Bid is required, enter "No Change."
- E. Each copy of the Bid shall state the legal name of the Bidder and the nature of the legal form of the Bidder. The Bidder shall provide evidence of legal authority to perform within the jurisdiction of the Work. Each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a Corporation shall further give the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current Power of Attorney attached certifying the Agent's authority to bind the Bidder.
- F. Bids shall be delivered by the specified time and at the specified location noted in section 00 11 13 Advertisement to Bid.

1.8 BID SECURITY

- A. Each Bid shall be accompanied by a bid security in the form and amount required if so stipulated in Section 00 11 13 Advertisement to Bid. The Bidder pledges to enter into a Contract with the Contractor on the terms stated in the Bid and will, if required, furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty. The amount of the bid security shall not be forfeited to the Owner in the event the Owner fails to enter into a contract.
- B. If a Surety Bond is required, it shall be written on AIA Document A310, Bid Bond, unless otherwise provided in the Bidding Documents, and the Attorney-in-Fact who executes the bond on behalf of the Surety shall affix to the bond a certified and current copy of the Power of Attorney.

- C. The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until either (a) the Contract has been executed and bonds, have been furnished, or (b) the specified time has elapsed so that Bids may be withdrawn or (c) all Bids have been rejected.
- D. Bid Security shall be addressed to the Owner: **MSD of Pike Township**

1.9 BIDDER REQUIREMENTS

- A. This project is tax-exempt.
- B. Oracle Payment Management will be utilized by the Construction Manager for management of Contractor billing. **Bidders are required to include applicable costs for Textura fees per section 00 50 00c Oracle-Textura.** Bidders acknowledge the use of the Textura Payment System for all billing and payment processes in accordance with information to be provided by the Contractor. The bidder is responsible for all fees associated with billing and payment applications submitted through the Textura Payment System. Training sessions will be made available upon the written request from the bidder.
- C. The Construction Manager will be utilizing PROCORE, a web-based software, on this project to maintain project documents including, Contract Documents, RFI's, Submittals, an electronic set of As-Built Documents, and other project documents.
 - a. The Contractor shall electronically furnish all as-built documents, appropriate warranties and guarantee information, equipment manuals, operations, and maintenance manuals as a condition to and prior to final completion and final payment. A Project within Procore has been created for this project and access will be given to all Contractors. All construction documents will be accessible to Contractors through the Procore web-based application. It shall be the responsibility of the Contractor to electronically as-built the documents in the field in lieu of providing hard copies. It shall also be the responsibility of the Contractor to coordinate its work with all other trades, suppliers, and Subcontractors on the Project and to obtain any and all shop drawings, product data, or other documents necessary for the coordination of the Contractor's work with that of other Contractor and suppliers working on the Project. The Construction Manager shall provide adequate training and support on the Procore web-based application to all Contractors.
- D. Bidders shall include all licenses, permits, fees, and inspections required for its Scope of Work unless explicitly stated otherwise. Contractor shall coordinate all required inspections associated with Contractor's Scope of Work. A 24-hour notice must be provided to the Construction Manager prior to scheduling any inspections. The Construction Manager may require a preconstruction quality assurance meeting with the Contractor prior to the Contractor commencing work on the project. The Contractor shall work with the Construction Manager to coordinate mock-ups, in-situ mock-ups, and inspections necessary to establish and verify adherence with Owner and designer quality standards and expectations. In the event that the Contractor believes the Contract Documents relating to the Contractor's Scope of Work are not in accordance with applicable laws, ordinances, codes, or similar regulations, Subcontractor shall promptly report the same to the Construction Manager and Design Professionals
- E. Insurance Requirements - Refer to insurance requirements incorporated into Section 00 50 00a Standard Form of Agreement Between Owner and Contractor. Bidders to include insurance costs as specified with bid.

- F. Refer to Section 00 50 00a Standard Form of Agreement Between Owner and Contractor for additional bidder scope requirements.
- G. Bidders shall review the site logistics plan (refer to Section 00 31 13b - Site Logistics Plan) and comply with all requirements shown.
- H. Bidder shall review the Schedule (refer to Section 00 31 13 - Schedule) and provide all labor material and equipment as necessary to comply with the specified dates **including acceleration by means of off-time or overtime labor.**

1.10 SUBMISSION OF BIDS

- A. All copies of the Bid, the bid security, if any, and any other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the party receiving the Bids and shall be identified with the Project name, the Bidder's name and address and, if applicable, the designated bid packager for which the Bid is submitted. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.
- B. Bids shall be deposited at the designated location prior to the time and date for receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.
- C. The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.
- D. Oral, telephonic, telegraphic, facsimile, or other electronically transmitted bids will not be accepted or considered.
- E. Bids received with letters of omission, clarification, or forms other than the bid form included with these bid documents shall not be accepted or considered. Refer to Section 01 1200 Bid Packages for additional information.

1.11 MODIFICATION OR WITHDRAWAL OF BID

- A. A Bid may not be modified, withdrawn, or canceled by the Bidder during the stipulated time period following the time and date designated for the receipt of Bids, and each Bidder so agrees in submitting a Bid.
- B. Prior to the time and date designated for receipt of Bids, a Bid submitted may be modified or withdrawn by notice to the party receiving Bids at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder. Written confirmation over the signature of the Bidder shall be received, and date and time stamped by the receiving party on or before the date and time set for receipt of Bids. A change shall be so worded as not to reveal the amount of the original Bid.
- C. Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids provided that they are then fully in conformance with these Instructions to Bidders.
- D. Bid security, if required, shall be in an amount sufficient for the Bid as resubmitted.

1.12 CONSIDERATION OF BIDS

A. OPENING OF BIDS

1. The properly identified Bids received on time will be publicly opened and will be read aloud. An abstract of the Bids may be made available to Bidders.

B. REJECTION OF BIDS

1. The Owner shall have the right to waive informalities and irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's own best interests. A Bid not accompanied by the required bid security or by other data required by the Bidding Documents, or a Bid which is in any way incomplete, or irregular is subject to rejection.

1.13 ACCEPTANCE OF BID (AWARD)

- A. It is the intent of the Owner to award a Contract to the lowest qualified Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The Owner shall have the right to waive informalities and irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's own best interests.

- B. The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted.

1.14 POST-BID INFORMATION

A. SUBMITTALS

1. The Bidder shall, within 2 business days, or as stipulated in the Bidding Documents, after notification of selection for the award of a Contract, furnish to the Owner through the Construction Manager in writing:
 - a. A designation of the Work to be performed with the Bidder's own forces.
 - b. A listing of any sub-tier subcontractors the bidder is utilizing under their bid package.
 - c. A listing of the names of the manufacturers, products, and the suppliers of principal items or systems of materials and equipment proposed for the Work.
 - d. A listing of the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work.
 - e. The information above shall be furnished utilizing the form provided in **Section 00 43 36 - Subcontractor & Supplier Disclosure Form**
2. The Bidder will be required to establish to the satisfaction of the Construction Manager, Architect, and Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.

Prior to the execution of the Contract, the Contractor will notify the Bidder in writing if either the Contractor, Owner, or Architect, after due investigation, has reasonable objection to a person or entity proposed by the Bidder. If the Contractor, Owner, or Architect has reasonable objection to a proposed person or entity, the Bidder may, at the Bidder's option, (1) withdraw the Bid or (2) submit an acceptable substitute person or entity with an adjustment in the Base Bid or Alternate Bid to cover the difference in cost occasioned by such substitution. The Owner may accept the adjusted bid price or disqualify the Bidder. In the event of either withdrawal or disqualification, bid security will not be forfeited.

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

1.15 PERFORMANCE BOND AND PAYMENT BOND

- A. The Contractor shall furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Bonds may be secured through the Bidder's usual sources.
- B. The furnishing of such bonds is hereby stipulated in the Bidding Documents, and the cost shall be included in the Bid. If the furnishing of such bonds is required after receipt of bids and before the execution of the Subcontract, the cost of such bonds shall be added to the Bid in determining the Contract Sum.
- C. If the Owner requires that bonds be secured from other than the Bidder's usual sources, changes in cost will be adjusted as provided in the Contract Documents.

1.16 TIME OF DELIVERY AND FORM OF BONDS

- A. The Bidder shall deliver the required bonds to the Owner not later than ten days following the date of execution of the Contract. If the Work is to be commenced prior thereto in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished and delivered in accordance with this Section.
- B. Unless otherwise provided, the bonds shall be written on AIA Document A312, Performance Bond, and Payment Bond. Bonds shall be written in the amount of the Contract Sum.
- C. The bonds shall be dated on or after the date of the Contract.
- D. The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

1.17 AVAILABLE DOCUMENTS

- A. The following documents shall be made available to bidders upon request and are incorporated into the bidding documents by reference:
 - a. CORE Construction Official Safety Manual

END OF SECTION 00 21 13

SECTION 00 24 13 – BID PACKAGES – BID RELEASE 1 (Previously Bid)

1.1 GENERAL

- A. This section provides a guideline of the scope of work to be included with each bid package. This section includes scope and instructions which may not be specifically called out elsewhere in the Project Manual, Plans or Specifications. All bidders should read this section carefully in its entirety. This section is not all inclusive and is to be read in conjunction with the entire set of project documents. It is each subcontractor's responsibility to submit a complete bid.
- B. Subcontractors may submit a bid on more than one (1) bid package but **a separate signed bid form in a separate envelope is required for each bid package** submitted complying with the provisions of Section 00 11 13 – Advertisement to Bid and Section 00 21 13 – Instructions To Bidders.
- C. Where items are noted to be “provide(d)” or “include(s)” that shall indicate furnish, install, unloading, shake-out, fasteners, incidentals, equipment, and all work necessary for a complete system.
- D. This specification shall have precedence for assignment of Scope of Work prior to and above any assignments of Scope of Work in the Drawings, Specifications, or elsewhere in the Contract Documents.
- E. Subcontractor shall provide as many mobilizations as required to complete the Scope of Work as per the dates set forth on the monthly baseline and weekly look-ahead schedules.
- F. This Project will perform a daily huddle and weekly workplan meetings, in which your competent foreman's participation will be required.
- G. Each Subcontractor is solely responsible for the coordination, accuracy, and completeness of each submittal provided by your company, as it relates to the intent of the plans and specifications. Each shop drawing and/or product data sheet, etc. shall be stamped by you to indicate your review and approval. Any deviation from the Contract Documents shall be clearly identified and appropriate material substitution request forms completed. All submittals shall be submitted in electronic format online using Procore, www.procore.com. Training is available online upon request. The subcontractor may request up to six (6) physical hard copies of submittals.
- H. **PROVIDE NECESSARY COORDINATION AND PARTICIPATION IN BIM COORDINATION**

1.2 BID PACKAGES:

- A. List of bid packages under this solicitation for Bid Release #1
 - 1. Bid Package 02 – SITE CLEARING, EARTHWORK & **SITE UTILITIES**
 - 2. Bid Package 06 – BUILDING & SITE CONCRETE
 - 3. Bid Package 07 – MASONRY
 - 4. Bid Package 08 – STRUCTURAL STEEL
 - 5. Bid Package 10 – ROOFING
 - 6. Bid Package 16 – PLUMBING & HVAC
 - 7. Bid Package 18 – ELECTRICAL, FIRE ALARM, SYSTEMS & TECHNOLOGY

- B. List of bid packages which will be issued for bid at a later date:
1. Bid Package 01 – GENERAL TRADES
 2. Bid Package 03 – ASPHALT PAVING
 3. Bid Package 04 – LANDSCAPING
 4. Bid Package 05 – PLAYGROUND TURF & EQUIPMENT
 5. Bid Package 09 – ARCHITECTURAL CASEWORK
 6. Bid Package 11 – METAL STUDS, DRYWALL AND CEILINGS
 7. Bid Package 12 – SOFT FLOORING
 8. Bid Package 13 – HARD FLOORING
 9. Bid Package 14 – PAINTING
 10. Bid Package 15 – FOOD SERVICE EQUIPMENT
 11. Bid Package 17 – FIRE PROTECTION

1.3 BID PACKAGE SCOPES OF WORK

- A. General notes applicable to **ALL** bid packages
1. All trade packages are responsible for daily clean-up of general construction debris generated from their scope of work to the dumpster provided by the Construction Manager.
 2. All trade packages are responsible for clean-up of areas disturbed by them during completion of their final punch list work.
 3. All trade packages shall provide all survey, staking and layout as necessary to complete the bid package Scope of Work
 4. All trade packages shall provide all field measuring necessary for fabrication, installation, and as-built drawings as necessary to complete the bid package Scope of Work
 5. All trade packages shall provide all unloading, hoisting, shakeout, and material handling of items installed in the Scope of Work
 6. All trade packages shall provide all scaffolding, temporary shoring, guying, supports, bracing, and additional means and methods necessary to complete the bid package Scope of Work
 7. All trade packages shall provide testing as specified for your Scope of Work
 8. All trade packages shall provide scheduling and coordination of any Owner third party testing agencies for all specified testing by Others pertaining to your Scope of Work
 9. All trade packages shall provide all training and owner demonstration as required as specified for your Scope of Work
 10. All trade packages shall provide full dust control measures to contain dust from spreading outside the contract work areas. Cost for dust control shall be included by each bid package as it pertains to your Scope of Work. All areas dirtied due to insufficient dust control shall be remedied by the responsible contractor/bid package contractor.
 11. All trade packages shall provide all attic stock/extra materials as specified for your Scope of Work
 12. All trade packages shall provide all delegated design as specified for your Scope of Work. This includes all engineering (by a licensed engineer) as well as the cost of design.
 13. All trade packages shall provide all mockups as specified for your Scope of Work including removal of any non-in-situ mockups.
 14. All trade packages shall obtain criminal background checks for all on-site personnel. The costs of criminal background checks shall be included. Background checks shall be submitted to CORE prior to start of work.
 15. All trade packages shall provide all costs associated with Textura Payment Management System (Reference Section 00 50 00c – Oracle’s Textura Payment Management
 16. All trade packages shall provide all costs associated with meeting minimum insurance requirements outlined in 00 50 00b – Standard Form of Agreement Between Owner and Contractor. This includes

- the costs of additional waivers and endorsements that might be required to meet specified requirements.
17. All bids shall reflect the project schedule (Reference Section 00 31 13a – Schedule) and site logistics plan (Reference Section 00 31 13b – Site Logistics Plan) including adequate staffing, timely material procurement, acceleration, and additional mobilizations.
 18. All items shall be provided per Contract Documents. Manufacturer’s standard details, finishes, insurance, etc. shall not be relied upon as the basis for pricing.
 19. During the performance of work, Contractor shall protect from harm all existing structures to remain. Any damage to existing structures to remain shall be corrected at the Subcontractor’s expense
 20. All prime contractors are required to protect all flooring and floor coverings from damage by their construction operations, dropped items, and wheeled traffic

B. Bid Package 02 – SITE CLEARING, EARTHWORK & SITE UTILITIES

1. Overview. – Bidder shall perform a complete Scope of Work for all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
2. Applicable Specifications:
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Specification Section 31 10 00 – SITE CLEARING
 - d. Specification Section 31 20 00 – EARTH MOVING
 - e. Specification Section 31 23 19 – DEWATERING
 - f. Specification Section 32 25 00 – EROSION CONTROL
 - g. Specification Section 33 05 00 – COMMON WORK RESULTS FOR UTILITES
 - h. Specification Section 33 11 13 – FACILITY WATER DISTRIBUTION FOR PIPING
 - i. Specification Section 33 42 00 – STORMWATER CONVEYANCE
 - j. Specification Section 33 46 05 – SUBDRAINAGE
3. **Scope of Work**
 - a. **SITE CLEARING & EARTHWORK**
 - 1) Refer to part 1.3.A – General notes applicable to **ALL** bid packages for additional scope applicable to this bid package
 - 2) Secure and purchase all permits and licensing for your work.
 - 3) This Contractor shall review the Landscaping series and Playground series of drawings and coordinate them with the Civil series of drawings.
 - 4) This Contractor shall review Civil series of drawings and coordinate them with Landscape and Site Utility series of drawings.
 - 5) This Contractor shall review and understand the site logistic plan (Reference Section 00 31 13b – Site Logistics Plan). This project will be phased.
 - 6) Includes haul off and disposal of all site demolition debris. Including all trees, bushes, etc. Also includes removal of all associated stumps.
 - 7) Provide all saw-cutting as required for your scope of work.
 - 8) Provide all tree protection as required for trees called out to remain.
 - 9) Include utilizing a vacuum truck where standard excavations cannot be completed.
 - 10) By submission of a bid for this Bid Package, this Contractor confirms that all onsite/existing conditions have been thoroughly reviewed and accounted for.

- 11) This Contractor shall be fully responsible for all layout, field measurements, grades, elevations, and horizontal control required for execution of its work. CM will provide 3 control points for reference only. This contractor shall verify all control points and establish all additional layout necessary to complete its work. This contractor shall be solely responsible for accuracy of its layout and installation. Any work found to be out of alignment, out of plumb/level, or otherwise not in conformance with construction documents shall be corrected at no additional cost to Construction Manager or Owner.
- 12) This Contractor shall further be responsible for any resulting impacts and non-conformance to other trades, including but not limited to delay, rework, any required premium time to maintain project schedule, or disruption of their work
- 13) This Contractor is responsible for locating underground utilities (contacting Indiana 811.) prior to the execution of any earthwork, utility, and/or excavation work. This includes private locates.
- 14) This Contractor is responsible for the repair of any damage to existing utilities and utility structures, curbs, sidewalks, and paving, which are damaged as the result of this work.
- 15) This Contractor shall coordinate with local authorities having jurisdiction of ALL inspection required. The Construction Manager will NOT be making calls for inspections for your work.
- 16) Include access to and around the construction site including installation and removal of construction entrance(s), temporary roads, road plates, and protection of sidewalks as needed. Reference Section 00 31 13b – Site Logistics Plan in addition to civil plans for determining scope of work
- 17) Legally remove and dispose of all demolition items in this Scope of Work. Provide any dumpsters required for demolition and for daily clean-up debris removal as needed for this Scope of Work.
- 18) Include capping/sealing and abandoning site utilities in place for removing site utilities where required.
- 19) Remove and salvage flagpole.
- 20) Include all street cutting and patch per City of Indianapolis standards as required for this Scope of Work, this includes any damaged curbs, sidewalks, etc. Includes any site restoration as required.
- 21) Include all site grading, earthwork, compaction, subgrade preparations and all work necessary to bring site to specified grades including within +/- 0.1' of finish elevation for all asphalt paving, concrete paving, concrete sidewalks and concrete curbs. Include importing/exporting of all fills/cuts as necessary
- 22) Include proof rolling of all required areas
- 23) Include dust control measures as needed, include all temporary water costs including water connection, metering, trucking, and fees as necessary.
- 24) Include trench backfill for utilities under paved areas.
- 25) Include buildup of building pad to subgrade using suitable fill material in lifts per specifications. Grade to +/- 0.1'
- 26) Include spreading and regrading of topsoil, Grade to +/- 0.1', as well as importing of additional topsoil if necessary.
- 27) Include tapping saddle, traffic control, pavement patching, and all costs necessary to connect to existing water service.
- 28) Include dewatering of rainwater for your Scope of Work.
- 29) Include providing stone for the mechanical yards
- 30) Include traffic control and pedestrian control as required for this Scope of Work.

- 31) This Contractor shall include all costs associated with carrying out work in accordance with the project schedule and site logistics plan.
- 32) Include scheduling and coordination of Owner's 3rd party testing agency for all specified testing pertaining to this Scope of Work unless noted otherwise.
- 33) For debris tracked on streets by this Contractor's operations, this contractor shall provide all street sweeping as required for maintaining clean streets and adjacent drives within 4 hours and provide flagman as necessary.
- 34) This Contractor shall backfill all the exterior footing foundations and wall (if applicable). All interior of footing and interior foundations to be backfilled by Bid Package 06 Contractor.
- 35) This Contractor shall provide ALL aggregate bases under playground surfaces per details on drawing G4.00.

b. EROSION CONTROL

- 1) Include and maintain **all erosion control measures**, including but not limited to, silt fence, inlet protection, ditch checks, erosion control blankets, maintenance, SWPPP reporting.
- 2) Include temporary seeding as needed per SWPPP and for stabilization on any ponds, embankments, and slopes
- 3) Removal of all erosion control measures prior to project completion and final inspection.
- 4) Include construction entrance and FODS composite mat trackout control system

c. SANITARY SEWER SYSTEM

- 1) Include **complete sanitary sewer system** including but not limited to connection to existing structures, new structures, cleanouts, two-way monitoring cleanout, all new piping, fittings, tracer wire and all necessary components for a complete sanitary system to within 5' of building. Make final connection to the plumbers building stub out if it is already in place.
- 2) Includes all excavation and imported backfill, removal of spoils, tapping fees, testing, pavement removal and replacement as required for this scope of work.
- 3) This Contractor shall coordinate sanitary elevations with plumbing documents and plumbing contractor prior to installation of sanitary pipe.
- 4) Bid Package 03 Contractor will provide 18" concrete collar per detail N on drawing G1-07.

d. WATER AND FIRE SERVICE

- 1) Include complete **water/fire service**, water piping, boring, indicator valves, valves, hydrant work, thrust blocks, water meters, tracer wires, castings, pressure/leak testing, and sterilization. Include all water samples, blow-off, disinfection, and testing as required.
- 2) This Contractor shall extend the domestic water line into the Mechanical Room D114 in Unit D and extend the domestic water line to 12" above the floor with a flange. Test and flush this line from the street to the flange. Provide test results for local board of health.
- 3) This Contractor shall furnish and install fire line and PIV into the Mech Room D114 in Unit D and extend the fire line to 12" above the floor with a flange. Test and flush this line from the street to the flange. Provide test results.
- 4) FDC connection will be by Fire Protection Contractor.
- 5) Includes all excavation and imported backfill, removal of spoils, tapping fees, testing, pavement removal and replacement as required for this scope of work.

e. **STORM SEWER PIPING**

- 1) Include **complete storm sewer system.**
- 2) Provide and install all storm sewer piping including all structures, castings, piping, flared ends, connection to existing structures, cleanouts, etc.
- 3) Includes all piping to within 5' of building and making final connections to the plumbers stub out if it's already in place.
- 4) Includes all excavation and importing of backfill. Haul off spoils associated with this scope of work as required.
- 5) Provide complete ADS Stormtech SC-310 underground detention systems
- 6) Include playground underdrain system
- 7) Include concrete headwall for existing CMP culvert
- 8) Include diversion structures and outlet control structures
- 9) Include swale underdrain per Detail T/SU2-2
- 10) Includes all pavement removal and replacement for this scope of work.
- 11) Includes all testing of piping as required.
- 12) Provide stub-ups to finish grade for building downspouts. After downspouts are installed , this Contractor shall furnish and install connections to downspouts.
- 13) Bid Package 03 Contractor will provide 18" concrete collar per detail N on drawing G1-07
- 14) This Contractor shall include Playground Underdrain system per detail 1/G4.00.

B. **Bid Package 06 – SITE AND BUILDING CONCRETE**

1. Overview. – Bidder shall perform a complete Scope of Work for all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
2. Applicable Specifications:
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Specification Section – 031000 – CONCRETE FORMWORK
 - d. Specification Section – 032000 – CONCRETE REINFORCEMENT
 - e. Specification Section – 033000 – CAST IN PLACE CONCRETE
 - f. Specification Section – 033500 – CONCRETE SURFACE TREATMENT
 - g. Specification Section – 036000 – EPOXY GROUT
 - h. Specification Section – 036001 - GROUTING
 - i. Specification Section – 036200 – NON-SHRINK GROUTING
 - j. Specification Section – 321726 – TACTILE WARNING SURFACES
 - k. Specification Section – 321313 – CONCRETE PAVING
 - l. Specification Section – 321373 – CONCRETE PAVING JOINT SEALANTS
3. **Scope of Work**
 - a. **SITE CONCRETE**
 - 1) Refer to part 1.3.A - General Notes applicable to **ALL** bid packages for additional scope applicable to this bid package.
 - 2) SITE CONCRETE including, but not limited to, sidewalks, ADA ramps, speed control table, flagpole base, concrete equipment pads, pipe bollards (install only), stoops, aprons, and concrete collars at inlets.
 - 3) This Contractor shall review and understand the site logistic plan (Reference Section 00 31 13b – Site Logistics Plan). This project will be phased.

- 4) This Contractor shall be fully responsible for all layout, field measurements, grades, elevations, and horizontal control required for execution of its work. CM will provide 3 control points for reference only. This contractor shall verify all control points and establish all additional layout necessary to complete its work. This contractor shall be solely responsible for accuracy of its layout and installation. Any work found to be out of alignment, out of plumb/level, or otherwise not in conformance with construction documents shall be corrected at no additional cost to Construction Manager or Owner.
- 5) This Contractor shall further be responsible for any resulting impacts and non-conformance to other trades, including but not limited to delay, rework, any required premium time to maintain project schedule, or disruption of their work
- 6) Standing concrete curbs at paving (details F & G/G1-07) to be provided by Asphalt Contractor
- 7) Include concrete work as show on Playground G1 and G4 drawings
- 8) Include coordination and scheduling of testing required for this Scope of Work with Owner's Testing and Inspection Agency
- 9) For debris tracked on streets by this Contractor's operations, the contractor shall provide all street sweeping as required for maintaining clean streets and adjacent drives within 4 hours and provide flagman as necessary.
- 10) Include daily clean-up of debris, waste, dirt, dust, waste, or other Construction impediments generated by this Scope of Work to the dumpsters supplied by the Construction Manager.
- 11) Include clean-up of areas disturbed by this Contractor during completion of this Contractors final punch list work.
- 12) Include maintenance, clean-up, and removal of a concrete wash out area.
- 13) Include All reinforcing steel and dowels associated with the site concrete work.
- 14) Include all caulking and isolation joints between site pavements and proposed building.
- 15) Refer to site logistics plan and schedule for multiple mobilizations needed.
- 16) Include all sawing, jointing, and sealants for site concrete.
- 17) Include granular fill and fine grade for site concrete work.
- 18) Include setting of site bollards furnished by others for both traffic control and site signage.
- 19) Contractor to include hand tooled joints for all concrete sidewalks per note 3 on detail C of drawing G1-07.
- 20) Bid Package 03 Contractor to provide and install 18" concrete collar per detail N on drawings G1-07.
- 21) Contractor shall install all site bollards per not 26 on drawings G1-01, G1-02, G1-03, and G1-04.

b. BUILDING CONCRETE

- 1) Include all **BUILDING CONCRETE**, including but not limited to, footings, foundation, walls, and slabs on grade.
- 2) Include excavation and backfill for foundation work. Include all haul-off and import as required.
- 3) This Contractor shall be fully responsible for all layout, field measurements, grades, elevations, and horizontal control required for execution of its work. CM will provide 3 control points for reference only. This contractor shall verify all control points and establish all additional layout necessary to complete its work. This contractor shall be solely responsible for accuracy of its layout and installation. Any work found to be out

- of alignment, out of plumb/level, or otherwise not in conformance with construction documents shall be corrected at no additional cost to Construction Manager or Owner.
- 4) This Contractor shall further be responsible for any resulting impacts and non-conformance to other trades, including but not limited to delay, rework, any required premium time to maintain project schedule, or disruption of their work
 - 5) Provide necessary coordination and participation in BIM Coordination.
 - 6) Include all reinforcement as required.
 - 7) Include concrete pump placement as required to comply with specifications for slabs.
 - 8) Include field and office coordination with MEPFP trades. Include coordination to determine slab and foundation wall openings.
 - 9) Include coordination and scheduling of testing required for this Scope of Work with Owner's Testing and Inspection Agency
 - 10) For debris tracked on streets by this Contractor's operations, the contractor shall provide all street sweeping as required for maintaining clean streets and adjacent drives within 4 hours and provide flagman as necessary.
 - 11) Include daily clean-up of debris, waste, dirt, dust, waste, or other Construction impediments generated by this Scope of Work to the dumpsters supplied by the Construction Manager.
 - 12) Include under slab granular fill, fine grading and under slab vapor barrier for building concrete work.
 - 13) Include maintenance, clean-up, and removal of a concrete wash out area.
 - 14) Refer to site logistics plan and schedule for multiple mobilizations needed.
 - 15) Furnish and install all foundation insulation.
 - 16) Include all forming, shoring, bracing, anchorage, boxouts, form removal, form design, water stops, and concrete accessories.
 - 17) Include layout and setting of anchor bolts, sleeves, all steel embeds, and all items intended to be cast into concrete assemblies provided under this Scope of Work furnished by other bid packages. Provide anchor bolt survey by a licensed surveyor. Provide survey to Steel Erection & Fabricator Contractor.
 - 18) Provide concrete curing per Contract Documents for cast-in-place concrete furnished under this Scope of Work.
 - 19) Include all sawing, jointing, and sealants for cast-in-place concrete furnished under this Scope of Work.
 - 20) Provide all grouting of column baseplates.
 - 21) Contractor shall include any excavation of thickened slabs, foundations inside the building footprint, and freezer/cooler slab. Plumbing and Electrical contractors are responsible for their own excavation and backfill.
 - 22) Contractor shall install anchor bolts provided by Bid Package 08 Contractor. This contractor shall set (1) nut at proper elevation. Provide as-built survey for all anchor bolts for Structural Steel Contractor.

c. **FLAGPOLE**

- 1) Install Ground-Set Flagpoles Concrete Base, Flagpole provided by Bid Package #01

C. **Bid Package #07 – MASONRY**

1. Overview. – Bidder shall perform a complete Scope of Work for all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.

2. Applicable Specifications:
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Division 04 – Masonry
 - d. Specification Section 072100 – THERMAL INSULATION
 - e. Specification Section 072726.00 – CLOSED-CELL, MEDIUM-DENSITY, SPRAY FOAM AIR BARRIER
 - f. Specification Section 072726.02 – FLUID APPLIED MEMBRANE AIR BARRIER
 - g. Specification Section 076200 – SHEET METAL FLASHING and TRIM
 - h. Specification Section 078413 – PENETRATION FIRESTOPPING
 - i. Specification Section 078443 – JOINT FIRESTOPPING
 - j. Specification Section 079200 – JOINT SEALANTS
 - k. Specification Section 081213 – HOLLOW METAL FRAMES (As Applicable)
 - l. Specification Section 089119 – FIXED LOUVERS (As Applicable)

3. **Scope of Work**
 - a. **MASONRY**
 - 1) Refer to part 1.3.A - General Notes applicable to **ALL** bid packages for additional scope applicable to this bid package.
 - 2) Include insulation and fluid applied air barrier behind masonry
 - 3) This Contractor shall review and understand the site logistic plan (Reference Section 00 31 13b – Site Logistics Plan). This project will be phased.
 - 4) Provide necessary coordination and participation in BIM Coordination.
 - 5) This Contractor shall be fully responsible for all layout, field measurements, grades, elevations, and horizontal control required for execution of its work. CM will provide 3 control points for reference only. This contractor shall verify all control points and establish all additional layout necessary to complete its work. This contractor shall be solely responsible for accuracy of its layout and installation. Any work found to be out of alignment, out of plumb/level, or otherwise not in conformance with construction documents shall be corrected at no additional cost to Construction Manager or Owner.
 - 6) This Contractor shall further be responsible for any resulting impacts and non-conformance to other trades, including but not limited to delay, rework, any required premium time to maintain project schedule, or disruption of their work
 - 7) Include furnishing and installing all below-grade masonry as indicated by the contract documents grout and reinforcement related to these masonry assemblies.
 - 8) Include installation of all steel lintels per the contract documents. Lintels made of steel are to be provided by Structural Steel contractor, under Bid Package #08.
 - 9) Include caulking of all expansion joints as it relates to masonry work.
 - 10) Furnish and install all rigid insulation when installed behind masonry per the contract documents. Include all taping, flashing and sealing of joints, penetrations, door/window openings, etc, as required by manufacturer.
 - 11) This contractor shall be responsible for street cleaning/street sweeping of public/private streets/approaches/walks for dirt/mud/debris/etc. tracked onto these surfaces by their operations.
 - 12) Include all washdown/clean-up of installed masonry to remove excess mortar, stains, etc.
 - 13) Install masonry in such a manner to avoid excessive mortar; remove excessive mortar in all locations where present. All CMU that receives thermal insulation/air barrier is to have joints struck flush. Remove all mortar droppings from wall ties, shelf angles, and brick shelves prior to the thermal insulation/air barrier installation.
 - 14) Include all clean-up debris associated with this scope of work on a daily basis including scraping and sweeping of floors.

- 15) Includes all colored mortar as required.
- 16) Includes all bull nose block as required.
- 17) Includes all joint sealants required for your scope of work. Includes caulking of masonry to Hollow Metal Frames.
- 18) Includes all water repellent in mortar as required.
- 19) All flashings for your scope of work, prefinished as required. Colors to be selected from manufacturer's full range.
- 20) Protection of surrounding areas and adjacent surfaces to prevent damage.
- 21) Includes all expansion joints per contract documents and industry standards.
- 22) Furnish and install all through wall flashing.

D. Bid Package #08 – STRUCTURAL STEEL

1. Overview. – Bidder shall perform a complete Scope of Work for all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
2. Applicable Specifications:
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Specification Section 051200 – STRUCTURAL STEEL FRAMING
 - d. Specification Section 052100 – STEEL JOIST FRAMING
 - e. Specification Section 053100 – STEEL DECKING
 - f. Specification Section 055000 – METAL FABRICATIONS
3. **Scope of Work**
 - a. **STRUCTURAL STEEL AND STEEL ERECTION**
 - 1) Refer to part 1.3.A - General Notes applicable to **ALL** bid packages for additional scope applicable to this bid package.
 - 2) Provide necessary coordination and participation in BIM Coordination.
 - 3) This Contractor shall review and understand the site logistic plan (Reference Section 00 31 13b – Site Logistics Plan). This project will be phased.
 - 4) Furnish and install all structural steel and metal fabrications
 - 5) This Contractor shall be fully responsible for all layout, field measurements, grades, elevations, and horizontal control required for execution of its work. CM will provide 3 control points for reference only. This contractor shall verify all control points and establish all additional layout necessary to complete its work. This contractor shall be solely responsible for accuracy of its layout and installation. Any work found to be out of alignment, out of plumb/level, or otherwise not in conformance with construction documents shall be corrected at no additional cost to Construction Manager or Owner.
 - 6) This Contractor shall further be responsible for any resulting impacts and non-conformance to other trades, including but not limited to delay, rework, any required premium time to maintain project schedule, or disruption of their work
 - 7) Provide steel reinforcement including any frames and rooftop opening for HVAC, kitchen equipment or other equipment.
 - 8) Furnish all anchor bolts, lintels, embeds, bollards, and miscellaneous steel components where they are to be installed by others unless noted otherwise.
 - 9) Furnish and install all epoxy and expansion anchors as required for your scope of work.
 - 10) Include all clean-up debris associated with this scope of work on a daily basis.

- 11) Include touch-up paint/galvanizing coat and patching at connections and other areas damaged by this contractor. Include touch up painting of field welds.
- 12) Includes all outriggers and spacers.
- 13) Includes all engineered shop drawings.
- 14) Includes all coordination with all trades for chases, openings, frames and penetrations.
- 15) Provide a complete Steel Erection scope of work.
- 16) Includes all mats and temporary supports required for crane.
- 17) Include steel and bracing for operable partitions support. Include pre-punching holes in steel for hanger rod attachment.
- 18) Includes cribbing under all materials when stockpiled on site as required.
- 19) Provide all brick support angles. Installation by Bid Package 07 Contractor.
- 20) Includes setting of leveling nuts as needed at anchor bolts.
- 21) Includes install and maintenance of safety cables and posts. Includes removal when required.
- 22) All field welds shall be wire brushed and cleaned, then touched up painted as required.
- 23) Furnish and install roof support frames.
- 24) ~~Furnish and install any steel not sized on drawings. (note deleted)~~
- 25) All prime contractors are required to protect all flooring and floor coverings from damage by their construction operations, dropped items, and wheeled traffic.
- 26) Plumbing Contractor shall furnish all roof drain sump pans sized and configured to accommodate the specified roof drains and roof assembly thickness. This Contractor shall be responsible for installation of sump pans, including cutting of deck openings, framing, support and attachment to the structure.

E. Bid Package #10 – ROOFING

1. Overview. – Bidder shall perform a complete Scope of Work for all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
2. Applicable Specifications:
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Specification Section 072100 – THERMAL INSULATION
 - d. Specification Section 074113.16 – STANDING-SEAM METAL ROOF PANELS
 - e. Specification Section 074293 – MANUFACTURED SOFFIT SYSTEMS
 - f. Specification Section 075400 – THERMOPLASTIC MEMBRANE ROOFING (PVC AND KEE)
 - g. Specification Section 076200 – SHEET METAL FLASHING AND TRIM
 - h. Specification Section 077100 – ROOF SPECIALTIES
 - i. Specification Section 077129 – MANUFACTURED ROOF EXPANSION JOINTS
 - j. Specification Section 077200 – ROOF ACCESSORIES
3. **Scope of Work**
 - a. **ROOFING, SOFFITING AND ROOF SPECIALTIES**
 - 1) Refer to part 1.3.A - General Notes applicable to **ALL** bid packages for additional scope applicable to this bid package.
 - 2) Furnish and install complete Roofing Systems, Soffit Systems and Roof Specialty Systems as specified in the Contract Documents
 - 3) This Contractor shall review and understand the site logistic plan (Reference Section 00 31 13b – Site Logistics Plan). This project will be phased.

- 4) This Contractor shall be fully responsible for all layout, field measurements, grades, elevations, and horizontal control required for execution of its work. CM will provide 3 control points for reference only. This contractor shall verify all control points and establish all additional layout necessary to complete its work. This contractor shall be solely responsible for accuracy of its layout and installation. Any work found to be out of alignment, out of plumb/level, or otherwise not in conformance with construction documents shall be corrected at no additional cost to Construction Manager or Owner.
- 5) This Contractor shall further be responsible for any resulting impacts and non-conformance to other trades, including but not limited to delay, rework, any required premium time to maintain project schedule, or disruption of their work
- 6) Include removal of existing coping and cleats per detail 2/AR101
- 7) Include prefabricated roof curbs for all items supplied by this Scope of Work including roof hatches.
- 8) Include underlayment/nailbase insulation as required under standing seam metal roofing.
- 9) Include all fascia, gutters and downspouts
- 10) Provide rood expansion joints as required per manufacturer and/or contract documents.
- 11) Include specified manufacturer's warranty.
- 12) Include all required flashings and boots for items on the roof including MEPPF equipment.
- 13) Include temporary roofing measures required to maintain a fully watertight roof at all times.
- 14) Includes all roofing modifications resultant from work performed under Plumbing and HVAC.
- 15) Include field testing per manufacturers' requirements and Contract Documents.
- 16) Include coordination and scheduling with roofing manufacturer for field inspections.
- 17) Include clean-up of areas disturbed by this subcontractor during completion of this subcontractor's final punch list work.
- 18) Haul and dispose of clean up debris to dumpsters provided by Construction Manager.

F. Bid Package #16 – PLUMBING and HVAC

1. Overview. – Bidder shall perform a complete Scope of Work for all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
2. Applicable Specifications:
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Specification Section 078413 – PENETRATION FIRESTOPPING
 - d. Specification Section 078443 – JOINT FIRESTOPPING
 - e. Specification Section 079200 – JOINT SEALANTS
 - f. Specification Section 083113 – ACCESS DOORS AND FRAMES
 - g. Specification Section 089119 – FIXED LOUVERS
 - h. Division 22 – Complete
 - i. Division 23 – Complete
3. **Scope of Work**
 - a. **PLUMBING**
 - 1) Refer to part 1.3.A - General Notes applicable to **ALL** bid packages for additional scope applicable to this bid package.
 - 2) Provide necessary coordination and participation in BIM coordination.

- 3) This Contractor shall review and understand the site logistic plan (Reference Section 00 31 13b – Site Logistics Plan). This project will be phased.
- 4) This Contractor shall be fully responsible for all layout, field measurements, grades, elevations, and horizontal control required for execution of its work. CM will provide 3 control points for reference only. This contractor shall verify all control points and establish all additional layout necessary to complete its work. This contractor shall be solely responsible for accuracy of its layout and installation. Any work found to be out of alignment, out of plumb/level, or otherwise not in conformance with construction documents shall be corrected at no additional cost to Construction Manager or Owner.
- 5) This Contractor shall further be responsible for any resulting impacts and non-conformance to other trades, including but not limited to delay, rework, any required premium time to maintain project schedule, or disruption of their work
- 6) Include all PLUMBING demolition indicated on drawings.
- 7) Include all hookups and connections for Owner provided equipment.
- 8) Include furnish and install of any additional access panels not shown on drawings that would be required for a complete system installation and maintenance.
- 9) This contractor is responsible for any required housekeeping pads as required for your scope of work.
- 10) Include coordination for commissioning.
- 11) This contractor shall provide daily clean-up associated with their scope of work to the dumpster provided by the Construction Manager.
- 12) Locate existing underground utilities in areas of work. If utilities are to remain in place, provide adequate means of protection during this Contractor's operations. This Contractor shall be responsible for Scheduling, Contacting and Coordinating with 811 for utility locations within their area of work.
- 13) Include utilizing a vacuum truck or hand digging to verify utility location prior to excavations within 5' of an existing utility.
- 14) Provide any necessary coring or sleeves required for this bid package.
- 15) All start-up, owner training and demonstration.
- 16) Coordinate all shutdowns with the Construction Manager.
- 17) All permits and fees for your scope of work.
- 18) All prime contractors are required to protect all flooring and floor coverings from damage by their construction operations, dropped items, and wheeled traffic.
- 19) Furnish and install complete Plumbing systems as outlined in plans and specifications, including all related excavation, spoil haul-off, backfill and compaction of plumbing trenches.
- 20) Bid Package 02 – Site Utility Contractor shall extend the domestic water line into the Mechanical Room D114 in Unit D and extend the domestic water line to 12" above the floor with a flange. This Contractor shall connect to 12" flange. Include flushing, testing and disinfection of lines.
- 21) Include all labeling, joint sealant, caulking, fire caulking and firestopping as required for your work.
- 22) Provide all core drilling, cutting, and patching for your scope of work.
- 23) Furnish and install all final connections to equipment, including equipment provided by others, as required.
- 24) Final connections of natural gas piping for HVAC Equipment
- 25) All underground layout to be performed by subcontractor.
- 26) Include connection of storm and sanitary sewer piping to piping 5'0" outside the building.

- 27) Provide owner training as required per specifications.
- 28) Provide final connections for HVAC.
- 29) Column lines shall be pinned by this Contractor's subcontractor surveyor.
- 30) Include coordination with Food Service Equipment Contractor for necessary connections.
- 31) Furnish and install all boots for through-roof penetrations with temporary water proofing until Roofing Contractor permanently flashes in.
- 32) Contractor shall include all plumbing and kitchen hook-ups as called out on 'K' Series or Food Service Drawings by Reitano.
- 33) Contractor shall include all excavation and backfill of the Grease Trap shown on drawing PF10C. This Contractor shall furnish the GI-1 Grease Interceptor as called out on drawing P-501 Plumbing Equipment Schedule.

b. HVAC

- 1) Refer Refer to part 1.3.A - General Notes applicable to **ALL** bid packages for additional scope applicable to this bid package.
- 2) Provide necessary coordination and participation in BIM coordination drawings.
- 3) Provide complete HVAC system per Contract Documents.
- 4) This Contractor shall review and understand the site logistic plan (Reference Section 00 31 13b – Site Logistics Plan). This project will be phased.
- 5) This Contractor shall be fully responsible for all layout, field measurements, grades, elevations, and horizontal control required for execution of its work. CM will provide 3 control points for reference only. This contractor shall verify all control points and establish all additional layout necessary to complete its work. This contractor shall be solely responsible for accuracy of its layout and installation. Any work found to be out of alignment, out of plumb/level, or otherwise not in conformance with construction documents shall be corrected at no additional cost to Construction Manager or Owner.
- 6) This Contractor shall further be responsible for any resulting impacts and non-conformance to other trades, including but not limited to delay, rework, any required premium time to maintain project schedule, or disruption of their work
- 7) Furnish and install prefabricated roof curbs for items furnished under this Bid Package. units. Include insulated roof curb caps as shown on mechanical drawings. Include cutting of necessary openings in metal roof deck.
- 8) Furnish and install all louvers. Include all fasteners, filler panels, flashing and sealants at louver openings.
- 9) Include all start-up, Owner training, and maintenance service per Contract Documents.
- 10) Include all manufacturer field services per Contract Documents
- 11) Include all controls, including rough-in and wiring, and programming, certified testing, and balancing as required for a fully functioning system.
- 12) Include all fire and smoke dampers as required.
- 13) Include all condensate piping as required.
- 14) Include extended warranties as required to meet Specifications in conjunction with the Project Schedule. Warranties shall start on the day the certificate of Substantial Completion is executed. Units to be started prior to Substantial Completion in accordance with the project schedule for startup, test and balance, and commissioning.
- 15) Include all construction filters for equipment provided under this Scope of Work. Filters are to be replaced immediately prior to occupancy.
- 16) Include coordination with the Owner's Commissioning Agent.
- 17) Include all hookups and connections for Owner provided equipment.

- 18) Include cutting/patching, sleeves, and/or core drilling of all walls, floor, and roof penetrations and/or openings for this Scope of Work
- 19) Include all firestop and sound sealant at all pipe penetrations through rated walls, ceilings, floors, and roofs for penetrations by this subcontractor.
- 20) Include any necessary concrete housekeeping or equipment pads for equipment installed under this Scope of Work.
- 21) Include access doors as required to access items installed under this Scope of Work.
- 22) All starters, disconnects, service outlets, etc. are to be reviewed during the bidding period and are to be provided as a part of the unit from the equipment manufacturer wherever possible.
- 23) Include all requirements for fire alarm tie in. This includes duct smoke detectors and controllers that integrate with fire alarm systems.
- 24) Include daily clean-up of debris, waste, dirt, dust, waste, or other Construction impediments generated by this Scope of Work to the dumpsters supplied by the Construction Manager.
- 25) Include clean-up of areas disturbed by this subcontractor during completion of this subcontractor's final punch list work.
- 26) Include joint sealants as they relate to this Scope of Work.
- 27) Included cutting the deck for any new equipment.
- 28) Include all trade permit and inspection fees.
- 29) Provide all layout for your scope of work.
- 30) Coordinate with Masonry Contractor for in wall rough-ins.

G. Bid Package #18 – ELECTRICAL, FIRE ALARM, SYSTEMS & TECHNOLOGY.

1. Overview. – Bidder shall perform a complete Scope of Work for all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
2. Applicable Specifications:
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Specification Section 078413 – PENETRATION FIRESTOPPING
 - d. Specification Section 078443 – JOINT FIRESTOPPING
 - e. Specification Section 079200 – JOINT SEALANTS
 - f. Specification Section 083113 – ACCESS DOORS AND FRAMES
 - g. Division 26 - Complete
 - h. Division 27 - Complete
 - i. Division 28 - Complete
3. **Allowances: See section 00 43 21 – Project Specific Allowances**
 - a. Include Light Fixture WL6 (4 fixtures): \$45,000
4. **Scope of Work**
 - a. Refer to part 1.3.A - General Notes applicable to **ALL** bid packages for additional scope applicable to this bid package.
 - b. Provide necessary coordination and participation in BIM coordination.
 - c. This Contractor shall review and understand the site logistic plan (Reference Section 00 31 13b – Site Logistics Plan). This project will be phased.

- d. This Contractor shall be fully responsible for all layout, field measurements, grades, elevations, and horizontal control required for execution of its work. CM will provide 3 control points for reference only. This contractor shall verify all control points and establish all additional layout necessary to complete its work. This contractor shall be solely responsible for accuracy of its layout and installation. Any work found to be out of alignment, out of plumb/level, or otherwise not in conformance with construction documents shall be corrected at no additional cost to Construction Manager or Owner.
- e. Provide complete Electrical system, Communications system and Electronic Safety & Security systems as outlined in the contract documents
- f. Include all ELECTRICAL demolition indicated on drawings.
- g. Furnish and/or install all disconnects as indicated on the contract documents.
- h. This subcontractor is responsible for layout and cutting of electrical decking penetrations.
- i. Include single phase and (3) three-phase temporary power connections for other trades. Include removal of temporary power.
- j. Include installation and removal of temporary power connection at construction trailer.
- k. Include temporary lighting at all areas of construction per OSHA standards and removal when directed by construction manager.
- l. Include conduit, wiring, install final connections, testing, and adjusting for all electrified door hardware.
- m. Include electrical conduit, wiring and final connections for all HVAC, Fire Suppression, plumbing equipment, and kitchen equipment.
- n. Include inspections/testing as specified.
- o. Provide cutting/coring of all openings and penetrations required to install your work.
- p. Include coordinating and scheduling with all local utilities and authorities having jurisdiction.
- q. Include all trade permit and inspection fees.
- r. Include extended warranties as required to meet Specifications in conjunction with the Project Schedule. Warranties shall start on the day the certificate of Substantial Completion is executed. Equipment to be started prior to Substantial Completion in accordance with the project schedule for startup, test and balance, and commissioning.
- s. Include coordination with the Owner's Commissioning Agent.
- t. Include all excavation, backfill, compaction, and spoil removal for this Scope of Work. Include import of backfill material as required.
- u. Include all hookups and connections for Owner provided equipment.
- v. Include all firestop and sound sealant at all pipe penetrations through rated walls, ceilings, floors, and roofs for penetrations by this Contractor.
- w. Include access doors/panels as required to access items installed under this Scope of Work.
- x. Lights, exit signage, and smoke detector must be centered in the ceiling panels in which they occur.
- y. Include daily clean-up of debris, waste, dirt, dust, waste, or other Construction impediments generated by this Scope of Work to the dumpsters supplied by the Construction Manager.
- z. All prime contractors are required to protect all flooring and floor coverings from damage by their construction operations, dropped items, and wheeled traffic
- aa. Include clean-up of areas disturbed by this Contractor during completion of this Contractors final punch list work.
- bb. Include all labeling, caulking, fire caulking and firestopping as required for your work.
- cc. Provide all interior and exterior concrete pads required for your work.
- dd. Provide all light pole bases, generator pads and transformer pads.

- ee. Include all start-up, commissioning, demonstration, and training as required prior to substantial completion.
- ff. Install variable frequency drives furnished by the HVAC Systems contractor.
- gg. Furnish and install all conduit, wiring and final connections to HVAC equipment and components unless noted otherwise. Control wiring will be furnished and installed by the HVAC Systems contractor. Provide electrical power per HVAC schedules as indicated.
- hh. Furnish and install all boots for through-roof penetrations with temporary water proofing until Roofing Contractor permanently flashes in.
- ii. Provide all data/communications rough-in and wiring as specified.
- jj. Reroute existing electrical and technology as
- kk. Include coordination/shop drawings depicting all equipment, conduit and related components. Coordinate with the Fire Protection Contractor, Plumbing Contractor and HVAC Contractor.
- ll. This Contractor shall include all Electrical, Fire Alarm, Systems & Technology associated with the kitchen and kitchen equipment as per 'K' Series or Food Service Drawings that were developed by Reitano. This Contractor shall provide all final equipment hook-ups.
- mm. This Contractor shall complete electrical work in coordination with requirements of Section 21 100.1.3.

END OF SECTION 00 24 13

SECTION 00 24 13.01 – BID PACKAGES (Bid Release 2)**1.1 GENERAL**

- A. This section provides a guideline of the scope of work to be included with each bid package. This section includes scope and instructions which may not be specifically called out elsewhere in the Project Manual, Plans or Specifications. All bidders should read this section carefully in its entirety. This section is not all inclusive and is to be read in conjunction with the entire set of project documents. It is each subcontractor's responsibility to submit a complete bid.
- B. Subcontractors may submit a bid on more than one (1) bid package but **a separate signed bid form in a separate envelope is required for each bid package** submitted complying with the provisions of Section 00 11 13 – Advertisement to Bid and Section 00 21 13 – Instructions To Bidders.
- C. Where items are noted to be “provide(d)” or “include(s)” that shall indicate furnish, install, unloading, shake-out, fasteners, incidentals, equipment, and all work necessary for a complete system.
- D. This specification shall have precedence for assignment of Scope of Work prior to and above any assignments of Scope of Work in the Drawings, Specifications, or elsewhere in the Contract Documents.
- E. Subcontractor shall provide as many mobilizations as required to complete the Scope of Work as per the dates set forth on the monthly baseline and weekly look-ahead schedules.
- F. This Project will perform a daily huddle and weekly workplan meetings, in which your competent foreman's participation will be required.
- G. Each Subcontractor is solely responsible for the coordination, accuracy, and completeness of each submittal provided by your company, as it relates to the intent of the plans and specifications. Each shop drawing and/or product data sheet, etc. shall be stamped by you to indicate your review and approval. Any deviation from the Contract Documents shall be clearly identified and appropriate material substitution request forms completed. All submittals shall be submitted in electronic format online using Procore, www.procore.com. Training is available online upon request. The subcontractor may request up to six (6) physical hard copies of submittals.
- H. **PROVIDE NECESSARY COORDINATION AND PARTICIPATION IN BIM COORDINATION**

1.2 BID PACKAGES:

- A. List of bid packages under this solicitation for Bid Release #2:
 - 1) Bid Package 01 – GENERAL TRADES
 - 2) Bid Package 03 – ASPHALT PAVING
 - 3) Bid Package 04 – LANDSCAPING
 - 4) Bid Package 09 – ARCHITECTURAL CASEWORK
 - 5) Bid Package 11 – ALUMINUM STOREFRONT & GLAZING
 - 6) Bid Package 12 – METAL STUDS, DRYWALL AND CEILINGS
 - 7) Bid Package 13 – SOFT FLOORING
 - 8) Bid Package 14 – HARD FLOORING
 - 9) Bid Package 15 – PAINTING
 - 10) Bid Package 17 – FOOD SERVICE EQUIPMENT
 - 11) Bid Package 19 – FIRE PROTECTION

B. See Section 00 24 13 for description of bid packages previously released under Bid Release 1. List of bid packages previously bid under Bid Release 1:

1. Bid Package 02 – SITE CLEARING, EARTHWORK & UTILITIES
2. Bid Package 06 – BUILDING & SITE CONCRETE
3. Bid Package 07 – MASONRY
4. Bid Package 08 – STRUCTURAL STEEL
5. Bid Package 10 – ROOFING
6. Bid Package 16 – PLUMBING & HVAC
7. Bid Package 18 – ELECTRICAL, FIRE ALARM, SYSTEMS & TECHNOLOGY

1.3 BID PACKAGE SCOPES OF WORK

A. General notes applicable to **ALL** bid packages

1. All trade packages are responsible for daily clean-up of general construction debris generated from their scope of work to the dumpster provided by the Construction Manager.
2. All trade packages are responsible for clean-up of areas disturbed by them during completion of their final punch list work.
3. All trade packages shall provide all survey, staking and layout as necessary to complete the bid package Scope of Work
4. All trade packages shall provide all field measuring necessary for fabrication, installation, and as-built drawings as necessary to complete the bid package Scope of Work
5. All trade packages shall provide all unloading, hoisting, shakeout, and material handling of items installed in the Scope of Work
6. All trade packages shall provide all scaffolding, temporary shoring, guying, supports, bracing, and additional means and methods necessary to complete the bid package Scope of Work
7. All trade packages shall provide testing as specified for your Scope of Work
8. All trade packages shall provide scheduling and coordination of any Owner third party testing agencies for all specified testing by Others pertaining to your Scope of Work
9. All trade packages shall provide all training and owner demonstration as required as specified for your Scope of Work
10. All trade packages shall provide full dust control measures to contain dust from spreading outside the contract work areas. Cost for dust control shall be included by each bid package as it pertains to your Scope of Work. All areas dirtied due to insufficient dust control shall be remedied by the responsible contractor/bid package contractor.
11. All trade packages shall provide all attic stock/extra materials as specified for your Scope of Work
12. All trade packages shall provide all delegated design as specified for your Scope of Work. This includes all engineering (by a licensed engineer) as well as the cost of design.
13. All trade packages shall provide all mockups as specified for your Scope of Work including removal of any non-in-situ mockups.
14. All trade packages shall obtain criminal background checks for all on-site personnel. The costs of criminal background checks shall be included. Background checks shall be submitted to CORE prior to start of work.
15. All trade packages shall provide all costs associated with Textura Payment Management System (Reference Section 00 50 00c – Oracle’s Textura Payment Management
16. All trade packages shall provide all costs associated with meeting minimum insurance requirements outlined in 00 50 00b – Standard Form of Agreement Between Owner and Contractor. This includes the costs of additional waivers and endorsements that might be required to meet specified requirements.

17. All bids shall reflect the project schedule (Reference Section 00 31 13a – Schedule) and site logistics plan (Reference Section 00 31 13b – Site Logistics Plan) including adequate staffing, timely material procurement, acceleration, and additional mobilizations.
18. All items shall be provided per Contract Documents. Manufacturer’s standard details, finishes, insurance, etc. shall not be relied upon as the basis for pricing.
19. During the performance of work, Contractor shall protect from harm all existing structures to remain. Any damage to existing structures to remain shall be corrected at the Subcontractor’s expense.
20. All prime contractors are required to protect all flooring and floor coverings from damage by their construction operations, dropped items, and wheeled traffic.
21. Unless otherwise specifically noted, the term ‘provide’ shall mean furnish, deliver, install, assemble, connect, test, and place into full operation all labor, materials, equipment, and incidentals required for a complete and functional system. The term ‘furnish’ shall mean supply and deliver materials or equipment to the project site, ready for installation, but shall not include installation. In the absence of clear delineation between trades or scopes responsibilities, the Contractor shall include all work necessary to deliver a complete and operational installation consistent with the intent of the Contract Documents.

B. Bid Package 01 – GENERAL TRADES

1. **Overview:** Bidder shall perform a complete Scope of Work for all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
2. **Applicable Specifications:**
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Section 02 41 19 – Selective Demolition
 - d. Section 06 10 00 – Rough Carpentry
 - e. Section 06 16 00 – Sheathing
 - f. Section 07 21 00 – Thermal Insulation (as applicable)
 - g. Section 07 27 26 – Closed-Cell, Medium Density, Spray Polyurethane Foam Air Barrier (as applicable)
 - h. Section 07 27 26.02 – Vapor-Permeable, Fluid-Applied Membrane Air Barrier
 - i. Section 07 42 13.23 – Metal Composite Material Wall Panels
 - j. Section 07 84 13 – Firestopping (as applicable)
 - k. Section 07 84 43 – Joint Firestopping (as applicable)
 - l. Section 07 91 00 – Preformed Joint Seals (as applicable)
 - m. Section 07 92 00 – Joint Sealants (as applicable)
 - n. Section 07 95 13.13 – Interior Expansion Control Joint Cover Assemblies
 - o. Section 08 12 13 – Hollow Metal Frames
 - p. Section 08 14 16 – Flush Wood Doors
 - q. Section 08 31 13 – Access Doors And Frames (as applicable)
 - r. Section 08 33 23 – Overhead Coiling Doors
 - s. Section 08 71 00 – Door Hardware
 - t. Section 08 83 00 – Mirrors
 - u. Section 08 91 19 – Fixed Louvers
 - v. Section 09 67 11 – Fluid Applied Cementitious Urethane Flooring
 - w. Section 09 84 33 – Sound Absorbing Wall Units
 - x. Section 10 11 00 – Visual Display Surfaces
 - y. Section 10 14 23.16 – Interior Panel Signage
 - z. Section 10 21 13.17 – Phenolic Toilet Compartments

- aa. Section 10 21 23 – Cubicles
- bb. Section 10 22 39 – Operable (Folding Panel) Partitions
- cc. Section 10 26 00 – Wall and Door Protection
- dd. Section 10 28 00 – Toilet, Bath And Laundry Accessories
- ee. Section 10 44 13 – Fire Extinguisher Cabinets
- ff. Section 10 44 16 – Fire Extinguishers
- gg. Section 11 52 13 – Front Projection Screens
- hh. Section 12 24 13 – Roller Window Shades
- ii. Section 32 31 13.20 – Fences and Gates
- jj. Section 32 31 19 – Playground Ornamental Fences and Gates
- kk. Specifications listed above are “complete” unless noted otherwise

3. **Scope of Work**

- a. Refer to part 1.3 A - items applicable to all bid packages for additional scope applicable to this bid package.
- b. Allowances
 - 1) Include \$50,000 allowance for additional work as directed by Construction Manager.
 - 2) Include \$50,000 allowance for temporary roads and laydown areas as directed by Construction Manager.
- c. Selective Demolition
 - 1) Include all architectural and structural demolition indicated on the Contract Documents. Site demolition is NOT included in this scope of work.
 - 2) Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent structures to remain.
 - 3) Patch, repair and repaint surfaces adjacent to demolition in accordance with the Contract Documents.
 - 4) Includes removal of all adhesives and mortar beds.
- d. Fencing & Gates
 - 1) Include all Playground Fences and Gates including foundations and all items as necessary for a complete fencing system including card reader.
 - 2) Include all Playground Ornamental Fences and Gates including foundations and all items as necessary for a complete fencing system.
 - 3) Include all spoils removal generated by this Scope of Work.
 - 4) Provide all fencing grounding and bonding.
 - 5) Includes core drilling for the fence posts since concrete sidewalks will be placed prior to fencing installation.
 - 6) Contractor shall review both ‘Site’ series drawings and ‘Playground’ series drawings for fencing layout.
- e. Grouting of Base Plates
 - 1) Include grouting of structural steel column baseplates
- f. Interior Expansion Joint Cover Assemblies
 - 1) Provide all metal-plate wall joint covers assemblies.
- g. Rough Carpentry & Wood Trim
 - 1) Include all interior and exterior wood blocking, backing, nailers, and framing.
 - 2) Include all interior and exterior wood sheathing/plywood. Provide pressure treated/fire treated where required.
 - 3) Include all 3” plywood-surfaced polyisocyanurate foam wall sheathing. 5/8” Glass mat sheathing by Bid Package 12 contractor

- 4) Include all plywood wall sheathing.
 - 5) Include all parapet, roof edge, louver and window blocking
 - 6) Include blocking for cubicle curtain track.
 - 7) Include blocking for millwork and undercounter support brackets as needed even if not specifically shown on the drawings.
 - 8) Provide wood blocking for all specialties, food service equipment and Owner wall mounted items as required for proper mounting of items.
 - 9) Include all interior wood trim per Contract Documents
- h. Insulation
- 1) Include 3.1" plywood-surfaced polyisocyanurate foam wall sheathing
 - 2) Include spray polyurethane foam insulation and thermal barrier at building eaves and rakes (e.g. details 1, 2, 3 & 4/AR102). Do not include polyurethane foam air barrier behind brick which is to be installed by Masonry contractor.
 - 3) Include flexible vapor retarder with compressible insulation per detail 2D/A-530 and similar locations.
- i. Fluid Applied Membrane Air Barrier
- 1) Include fluid-applied membrane air barrier as indicated in the Contract Documents.
 - 2) Provide field quality control in accordance with the Contract Documents.
 - 3) Provide adequate coverage per manufacturer requirements. Limit UV exposure per manufacturer's recommendations. Re-apply per requirements prior to covering.
- j. Metal Composite Wall Panel System
1. Provide delegated design submittal signed and sealed by a qualified Design Professional.
 2. Include all warranties and special warranties.
 3. Include complete system in accordance with the Contract Documents.
 4. Include field quality control in accordance with the Contract Documents.
 5. Include all mock-ups in accordance with the Contract Documents.
 6. Include all joint sealants were metal composite wall panel system butts to adjacent materials.
 7. Include all flashings and closure trims associated with metal composite wall panel system
 8. Metal panels to be confirmed for trueness/square from manufacturer.
- k. HM Frames, Wood Doors, & Hardware
- 1) Include all hollow metal frames, wood doors, and finish hardware.
 - 2) Wood doors to be supplied prefinished
 - 3) Include factory door glazing per specifications.
 - 4) Include construction cores and control keys for use during construction at exterior doors.
 - 5) Include coordination with owner's security supplier
 - 6) Include supply of aluminum door hardware for installation by Glazing contractor.
 - 7) Include coordination of all doors and frames hardware prep including for access controls and aluminum doors. Coordinate with other contractors regarding placement of wiring in frames.
 - 8) Provide all door and window bucks, spreaders, etc. for masonry and drywall installations to occur and maintain openings

- 9) Include all specified keying and keying meetings with the Owner. Include collaboration in keying meeting with the Subcontractor and Owner representatives.
 - 10) Provide all field welding necessary to install hollow metal storefronts and borrow lites.
 - 11) Provide rated doors and frames, and all associated labels and tagging, as required for those in rated assemblies.
- l. Access Doors
- 1) Include access doors where noted on plans. Confirm with HVAC contractor access door requirements in gypsum board ceilings prior to framing.
- m. Overhead Coiling Doors
- 1) Include all overhead coiling doors in accordance with Contract Documents.
 - 2) Include complete operators and control stations/switches installation. Coordinate with the electrical Subcontractor for power.
 - 3) Include Owner demonstration and training as required.
 - 4) Include field measuring to confirm proper sizing and clearances.
 - 5) Include coordination of clearances with other building systems.
- n. Architectural Louvers
- 1) Include architectural louvers.
- o. Sound Absorbing Wall Units
- 1) Contractor shall provide all acoustical wall tiles per Contract Documents.
- p. Urethane Flooring
- 1) Include all urethane flooring with integral cove base per Contract Documents
 - 2) Include all cleaning and caulking of joints, sealants, transition strips, trims, accessories, and attic stock as required.
 - 3) Include all required, minor floor preparation as necessary to prepare for flooring installation, including machine scrub, filling slab control & construction joints and minor leveling and grinding. Include sweeping and cleaning of flooring areas prior to flooring installation.
 - 4) If Subcontractor determines an area requires excessive floor prep, written notification approval from the Construction manager is required before proceeding with the additional floor prep work. Extra floor prep done without Construction Manager's prior approval is not entitled to additional compensation.
 - 5) Protect surrounding finishes as needed during installation.
 - 6) Provide moisture testing as required per manufacturer instructions prior to installation; provide results to the Construction Manager in writing.
- q. Visual Display Units
- 1) Include all markerboards, tackboards, tackable wall surfaces and all associated accessories.
 - 2) Install all TV and Monitor wall brackets per Contract Documents.
- r. Signage Package
- 1) Include dedication plaque.
 - 2) Include panel signs.
 - 3) Include field applied, vinyl character signs.
 - 4) Include directories/evacuation plan holders.
- s. Toilet Partitions/Accessories
- 1) Include all toilet compartments and urinal screens.
 - 2) Include all toilet accessories, childcare/special needs accessories, and custodial accessories.

- 3) Include all mirrors in contract drawings (see detail 7/AQ201)
- t. Cubicles
 - 1) Include cubicle curtain tracks and curtains.
- u. Operable (Folding Panel) Partitions
 - 1) Include operable (folding panel) partitions.
- v. Wall & Door Protection
 - 1) Include all corner guards.
 - 2) Impact-resistant wall coverings by Bid Package 15 contractor.
- w. Fire Extinguishers & Cabinets
 - 1) Include all fire extinguishers and specialties.
- x. Lockers
 - 1) Include lockers in Room C103B. See drawing K-102 for layout.
- y. Projection Screens
 - 1) Include all projection screens.
- z. Window Shades & Curtains
 - 1) Include all roller shades.
 - 2) Include field measuring of openings.
 - 3) Include special framing/blocking as needed for mounting roller shades
- aa. Final Cleaning
 - 1) Cleaning of all interior glass, storefront glazing, windows, and surrounding frames.
 - 2) Cleaning of windows & surrounding frames on exterior. Includes wipe down of all outside windows, frames, and sills. Any lifts required to be included.
 - 3) Sweeping, vacuuming, mopping, and/or machine-clean all flooring and stairs.
 - 4) Dust and wipe down all finish carpentry, including but not limited to casework, cabinets, shelves, tops, wall protection, window shades and tracks, markerboards, toilet/bath accessories, partitions, lockers, benches, etc.
 - 5) Dust and wipe off all doors, frames, and hardware.
 - 6) Dust and wipe down all mechanical equipment, electrical panels, and piping.
 - 7) Dust and clean walls; wet clean where needed.
 - 8) Clean and wipe down all plumbing fixtures and kitchen appliances.
 - 9) Clean and wipe down all restroom flooring tile and grout. Including wall tile and grout.
 - 10) Remove dust and dirt from overhead light fixtures as needed.
 - 11) Includes all materials and equipment required for complete Scope of Work.
 - 12) Includes touch ups after punch list as needed.
 - 13) Rooms with exposed ceiling; include wiping down light fixtures, duct work, and exposed steel items.
 - 14) Remove and dispose of any incidental trash. Dumpsters by others.
 - 15) All cleaning of guardrails, handrails, etc.
 - 16) Cleaning of all mirrors.
 - 17) Removal all of shipping labels and stickers that are not required to be left behind.
 - 18) Clean glass on landings and stairs.

C. Bid Package 03 – ASPHALT PAVING

1. **Overview:** Bidder shall perform a complete Scope of Work for all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
2. **Applicable Specifications:**
 - a. Division 00 – Complete
 - b. Division 01 – Complete

- c. Section 31 10 00 – Site Clearing (as applicable)
- d. Section 31 20 00 – Earthwork (as applicable)
- e. Section 32 12 16 – Asphalt Paving
- f. Section 32 17 23 – Pavement Markings

3. **Scope of Work:**

- a. Refer to part 1.3.A - General Notes applicable to **ALL** bid packages for additional scope applicable to this bid package.
- b. This Contractor shall review and understand the site logistic plan (Reference Section 00 31 13b – Site Logistics Plan). This project will be phased.
- c. This Contractor shall be fully responsible for all layout, field measurements, grades, elevations, and horizontal control required for execution of its work. CM will provide 3 control points for reference only. This contractor shall verify all control points and establish all additional layout necessary to complete its work. This contractor shall be solely responsible for accuracy of its layout and installation. Any work found to be out of alignment, out of plumb/level, or otherwise not in conformance with construction documents shall be corrected at no additional cost to Construction Manager or Owner.
- d. Include verification of grades prior to installation of paving
- e. Include compacted aggregate bases per asphalt pavement details. Proof-roll base upon completion.
- f. Include standalone concrete curbs at paving per details F & G/G1-07. Integral turndown curbs by Concrete Contractor.
- g. Include asphalt paving in accordance with plans and specifications.
- h. Include all pavement markings in accordance with plans and specifications.
- i. Include handicap parking signage and traffic signage (includes posts).
- j. For debris tracked on streets by this Contractor's operations, the contractor shall provide all street sweeping as required for maintaining clean streets and adjacent drives within 4 hours and provide flagman as necessary.
- k. Include daily clean-up of debris, waste, dirt, dust, waste, or other Construction impediments generated by this Scope of Work to the dumpsters supplied by the Construction Manager.
- l. Contractor shall follow City of Indianapolis requirements for all work done in the Right-Of-Way.
- m. Provide all traffic control for your work.

D. Bid Package 04 – LANDSCAPING

- 1. Overview. – Bidder shall perform a complete Scope of Work for all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
- 2. Applicable Specifications:
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Section 32 92 00 – Site Turf and Grasses
 - d. Section 32 93 00 – Site Landscaping Plantings
 - e. Section 32 93 13 – Site Ground Covering and Mulches
- 3. **Scope of Work**
 - a. GENERAL NOTES
 - 1) Refer to part 1.3.A - General Notes applicable to **ALL** bid packages for additional scope applicable to this bid package.

- 2) This Contractor shall review and understand the site logistic plan (Reference Section 00 31 13b – Site Logistics Plan). This project will be phased.
- 3) This contractor shall be responsible for street cleaning/street sweeping of public/private streets/approaches/walks for dirt/mud/debris/etc. tracked onto these surfaces by their operations.

b. SITE TURFS AND GRASSES

- 1) Furnish and install SITE TURFS AND GRASSES in accordance with the plans and specifications.
- 2) Include renovation or replacement of bare or thin turf areas disturbed by site and building renovations/addition.
- 3) Include topsoil analysis.
- 4) Include maintenance, warranty and replacement in accordance with plans and specifications.
- 5) Contractor shall include seeding and straw. Contractor shall provide any additional seeding where areas greater than 6" diameter did not establish turf.
- 6) Fine grade and remove stones/debris from topsoil placed by Earthwork contractor.

c. SITE LANDSCAPE PLANTINGS

- 1) Furnish and install all SITE LANDSCAPE PLANTINGS in accordance with the plans and specifications.
- 2) Include topsoil analysis.
- 3) Include planting bed preparation and soil amendments
- 4) Include maintenance, warranty and replacement in accordance with plans and specifications.

d. SITE GROUND COVERING AND MULCHES

- 1) Furnish and install all SITE GROUND COVERING AND MULCHES in accordance with the plans and specifications.
- 2) Include shredded hardwood bark mulch, 2" river gravel, weed control barriers, landscape edgings, and soil amendments.
- 3) Include maintenance, warranty and replacement in accordance with plans and specifications.

E. Bid Package 09 – ARCHITECTURAL CASEWORK

1. **Overview:** Bidder shall perform a complete Scope of Work for all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
2. **Applicable Specifications:**
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Section 06 61 16 – Solid Surface Fabrications
 - d. Section 07 92 00 – Joint Sealants (as applicable)
 - e. Section 12 32 16 – Manufactured Plastic Laminate-Faced (Educational) Casework
3. **Scope of Work**
 - a. Refer to part 1.3A – General Notes applicable to ALL bid package for additional scope applicable to this bid package.
 - b. Furnish and install all ARCHITECTURAL CASEWORK as specified in the Contract Documents. Scope of work includes, but is not limited to:
 - 1) Plastic laminate cabinets
 - 2) Plastic laminate countertops

- 3) Solid surface countertops & window sills
- 4) Wardrobe cabinets and student cubbies
- 5) Slope top assemblies
- 6) Low wall caps
- 7) Support brackets
- c. Include seaming of countertops and all caulking as required. Include caulking at dissimilar materials.
- d. Include cardboard protection overall all countertops.
- e. Include all field measuring.
- f. Contractor shall provide all cabinet door chains were doors are adjacent to walls or other equipment.

F. Bid Package 11 – ALUMINUM STOREFRONT & GLAZING

1. **Overview:** Bidder shall perform a complete Scope of Work for all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
2. **Applicable Specifications:**
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Section 07 92 00 – Joint Sealants (as applicable)
 - d. Section 08 13 16.16 – Flush Aluminum Doors
 - e. Section 08 41 13 – Aluminum-Framed Entrances and Storefronts
 - f. Section 08 44 13 – Glazed Aluminum Curtainwalls
 - g. Section 08 71 00 – Door Hardware (as applicable)
 - h. Section 08 80 00 – Glazing
 - i. Section 08 83 00 – Mirrors
3. **Scope of Work:**
 - a. Refer to part 1.3.A – General Notes applicable to ALL bid packages for additional scope applicable to this bid package.
 - b. Include all flush aluminum doors, aluminum-framed entrances and storefronts, glazed curtain walls .
 - c. Include glazing at hollow metal frames, hollow metal doors and wood doors in accordance with the Contract Documents.
 - d. Install all hardware and cores for aluminum doors. Hardware and cores furnished by others. Card reader, power supplies, wall switches, battery backups, will be installed by others. Furnish and install all pull/push sets, thresholds and weatherstripping.
 - e. Include installation of auto operators.
 - f. This Subcontractor is responsible for reviewing the door hardware submittal to confirm compatibility with material supplied by this Subcontractor and notifying the Construction Manager of any discrepancies. Include coordination of raceways with access controls.
 - g. Include all sealants, backer rods, break metal, gasketing, and flashings necessary for complete systems provided under this Scope of Work. This includes primary interior and exterior caulk as shown and specified.
 - h. Include all necessary field measuring.

G. Bid Package 12 – METAL STUDS, DRYWALL AND CEILINGS

1. **Overview:** Bidder shall perform a complete Scope of Work for all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
2. **Applicable Specifications:**
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Section 05 40 00 – Cold Formed Metal Framings
 - d. Section 06 16 00 – Sheathing (as applicable)
 - e. Section 07 21 00 – Thermal Insulation (as applicable)
 - f. Section 07 84 13 – Joint Firestopping (as applicable)
 - g. Section 07 92 00 – Joint Sealants (as applicable)
 - h. Section 09 21 16 – Gypsum Board Assemblies
 - i. Section 09 51 13 – Acoustical Panel Ceilings
3. **Scope of Work:**
 - a. Refer to part 1.3.A – General Notes applicable to ALL bid packages for additional scope applicable to this bid package.
 - b. Include all light and heavy gauge metal framing, gypsum boards, tile backing board, suspensions systems, batt insulation, flat strap and backing plates, drywall finishing, aluminum reveal trims, isolation strips, and acoustical panel ceilings.
 - c. Provide level 5 finish at walls to receive wall protection per Contract Documents.
 - d. Contractor shall provide all bulkheads, gypsum ceiling (complete system) and all walls shown on food service drawings but may not be shown on architectural drawings.
 - e. Include glass-mat gypsum wall sheathing.
 - f. Include delegated design and engineering by licensed engineer for cold-formed metal stud framing.
 - g. Include firestopping at head and base of wall as required for rated assemblies.
 - h. Include all work associated with stud wall control joints (detail 7/A-501).
 - i. Include daily clean-up of debris and waste and place in dumpsters provided by Construction Manager.

H. Bid Package 13 – SOFT FLOORING

1. **Overview:** Bidder shall perform a complete Scope of Work for all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
2. **Applicable Specifications:**
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Section 09 01 91 – Moisture Resistant/Water-Proof Flooring Adhesives for Slabs
 - d. Section 09 05 16 – Existing Substrate Preparation for Floor Finishes
 - e. Section 09 65 13 – Resilient Base and Accessories
 - f. Section 09 65 16 – Resilient Sheet Flooring
 - g. Section 09 65 19 – Resilient Tile Flooring
 - h. Section 09 68 13 – Tile Carpeting
 - i. Section 12 48 26.01 – Entrance Carpet Tile
3. **Alternates:**
 - a. Alternate BP 13 - 01 – Provide Moisture Resistant/Water-proof Adhesives at Soft Flooring
 - 1) Provide lump sum cost to provide moisture resistant/water-proof flooring adhesive under all Bid Package 13 flooring

4. **Scope of Work:**
- a. Refer to part 1.3.A - General Notes applicable to **ALL** bid packages for additional scope applicable to this bid package.
 - b. Include carpet tile.
 - c. Include all entrance carpet tile and/or walk off mats
 - d. Include all resilient sheet flooring.
 - e. Provide all resilient tile flooring.
 - f. Include all resilient base and accessories.
 - g. Provide all transitions strips per Contract Documents.
 - h. Provide all floor expansion joints as required for this Scope of Work.
 - i. Provide all required minor floor preparation as necessary to prepare for flooring installation, including filling saw cuts in slabs (control joints), filling construction joints and nail holes in slabs, filling column diamond box outs, and minor leveling and grinding. Include sweeping and cleaning flooring areas prior to floor installation.
 - j. Provide all substrate testing per specifications prior to installation; provide results to the Construction Manager in writing.
 - k. Include caulking to all adjacent materials as required.
 - l. Provide all maintenance stock/extra materials – refer to items applicable to all bid packages.
 - m. Include waxing and sealing of resilient flooring per manufacturer's recommendations.
- I. **Bid Package 14 – HARD FLOORING**
1. Overview. – Bidder shall perform a complete Scope of Work per all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
 2. Applicable Specifications:
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Section 09 01 91 – MOISTURE RESISTANT/WATER-PROOF FLOORING ADHESIVE FOR SLABS
 - d. Section 09 05 16 – EXISTING SUBSTRATE PREPARATION for FLOOR FINISHES
 - e. Section 09 30 00 – TILING
 - f. Section 09 30 20 – HYBRID TILING FINISHING SYSTEM
 3. **Alternates:**
 - a. Alternate BP 14 – 01 – Provide Moisture Mitigation
 - 1) Provide lump sum cost to provide necessary moisture mitigation measures if floor slab RH levels exceed allowable limits.
 4. **Scope of Work:**
 - a. Refer to part 1.3.A - General Notes applicable to **ALL** bid packages for additional scope applicable to this bid package.
 - b. Include ceramic wall tile and all associated materials.
 - c. Include glazed wall tile and all associated materials.
 - d. Include all metal edge strips, Schluter pieces and all associated materials.
 - e. Include hybrid tile finishing system including porcelain tile, crack suppression membrane, metal edge strips and all associated material.
 - f. Provide all required minor floor preparation as necessary to prepare for flooring installation, including filling saw cuts in slabs (control joints), filling construction joints and nail holes in slabs, filling column diamond box outs, and minor leveling and grinding. Include sweeping and cleaning flooring areas prior to floor installation.
 - g. Provide transition strips per contract drawings.

- h. Provide all substrate testing per specifications prior to installation; provide results to the Construction Manager in writing.
- i. Include caulking to all adjacent materials as required.
- j. Provide all maintenance stock/extra materials – refer to items applicable to all bid packages.
- k. Provide final protection to ensure that tile and grout are without damage and time of final completion.
- l. Before final inspection, remove protective coatings and rinse tile surfaces with neutral cleaner.

J. Bid Package 15 – PAINTING

1. **Overview:** – Bidder shall perform a complete Scope of Work per all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
2. **Applicable Specifications:**
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Section 03 30 00 – Cast-In-Place Concrete (2.11.B - Floor Sealer)
 - d. Section 07 92 00 – Joint Sealants
 - e. Section 09 72 16 – Vinyl-Coated Fabric Wall Coverings
 - f. Section 09 91 23 – Interior Painting
 - g. Section 09 96 00 – High Performance Coatings
 - h. Section 10 26 00 – Wall and Door Protection
3. **Scope of Work:**
 - a. Refer to part 1.3.A - General Notes applicable to **ALL** bid packages for additional scope applicable to this bid package.
 - b. Include all interior and exterior painting and high performance coatings. Include as necessary preparation of substrates, primers, block fillers, etc. for a complete system.
 - c. Include floor sealer on areas schedule to receive concrete floor sealer.
 - d. Include painting of hollow metal doors and frames.
 - e. Include all vinyl-coated fabric wall coverings. Include as necessary preparation of substrates, primers, block fillers, etc. for a complete system.
 - f. Include painting of exposed ductwork. See mechanical ventilation drawings for ductwork layout.
 - g. Include painting of exposed storm piping and water piping.
 - h. Include painting of exposed conduit.
 - i. Include prepping and painting of all exposed steel including columns, beams, bracing, steel joists and decking.
 - j. Include painting of exposed lintels.
 - k. Include painting of pipe bollards.
 - l. Include all joint sealants required for a complete painting package including, but not limited to, all caulking of hollow metal doors and frames to adjacent surfaces, caulking of drywall to adjacent surfaces, caulking of drywall to masonry, caulking of all storefront doors and windows to drywall.
 - m. Painter shall notify Construction Manager of any unacceptable substrates prior to painting them.
 - n. Include impact-resistant wall coverings and impact resistant wall coverings with graphics per Section 10 26 00.

K. Bid Package 17 – FOOD SERVICE EQUIPMENT

1. **Overview:** Bidder shall perform a complete Scope of Work per all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
2. **Applicable Specifications:**
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Section 11 40 00 – FOOD SERVICE EQUIPMENT
 - d. Division 22 – PLUMBING (as applicable)
 - e. Division 23 – HEATING, VENTILATING AND AIR CONDITIONING (as applicable)
 - f. Division 26 – ELECTRICAL (as applicable)
3. **Scope of Work:**
 - a. Refer to part 1.3.A - General Notes applicable to **ALL** bid packages for additional scope applicable to this bid package.
 - b. Include furnishing and installing all FOOD SERVICE equipment in accordance with Contact Documents.
 - c. Include fire suppressions systems for kitchen equipment in accordance with Contact Documents.
 - d. Include receiving and warehousing equipment and fixtures until ready for installation.
 - e. Include protection of equipment from damage during and after installation.
 - f. Include verification of, and coordination with, conditions at the building site, particularly door and/or wall openings and passages to assure access for all equipment.
 - g. Include verification of, and coordination with, conditions at the building site in regard to utility connections, loads and physical sizes.
 - h. Include verification and coordination of kitchen equipment drawings with architectural, plumbing, HVAC and electrical drawings.
 - i. Include stainless steel wall panels per Contract Documents.
 - j. Include all refrigeration and associated condensate pipint.
 - k. Include all warranties and extended warranties per Contract Documents.
 - l. Include start-up, testing and demonstration per Contract Documents.
 - m. Include final cleaning of equipment after testing and start-up.

L. Bid Package 19 – FIRE PROTECTION

1. **Overview:** Bidder shall perform a complete Scope of Work per all contract documents, drawings, specifications, and the elaborations below. This Scope of Work shall include all labor, materials, equipment, and related items necessary to complete the work.
2. **Applicable Specifications:**
 - a. Division 00 – Complete
 - b. Division 01 – Complete
 - c. Section 07 84 13 – PENETRATION FIRESTOPPING (as applicable)
 - d. Section 07 92 00 – JOINT SEALANTS (as applicable)
 - e. Section 08 31 13 – ACCESS DOORS AND FRAMES (as applicable)
 - f. Division 21 – FIRE SUPPRESSION
 - g. Division 22 – PLUMBING (as applicable)
 - h. Division 26 – ELECTRICAL (as applicable)

3. **Scope of Work:**
- a. Refer to part 1.3.A - General Notes applicable to **ALL** bid packages for additional scope applicable to this bid package.
 - b. Include complete fire suppression system in accordance with Contact Documents.
 - c. Provide necessary coordination and participation in BIM Coordination.
 - d. Include delegated design, drawings and hydraulic calculations in accordance with Contract Documents and NFPA state and local requirements.
 - e. Include testing and provision of test reports and certificates.
 - f. Connect at piping flange in Mech Room D114.
 - g. Include bagging exposed heads in areas noted to be painted.
 - h. Furnish, install and certify double check valve assembly.
 - i. Furnish and install all tamper, flow and pressure switches. Switches to be wired by Electrical Contractor.
 - j. Include all cutting, core-drilling and patching as required for your Scope of Work.
 - k. Include all required permits and associated fees.
 - l. Include all required firestopping for your penetrations through rated wall and floor assemblies.
 - m. Include labeling and identification required for this scope of work

END OF SECTION 00 24 13

SECTION 00 25 13.01 - PREBID MEETINGS (Bid Release 2)

1.1 PREBID MEETING

- A. Contractor and the Architect will conduct a Prebid meeting as indicated below:
1. Meeting Date: April 9, 2026
 2. Meeting Time: 1:00 PM, EST
 3. Location: Pike Township Bus Transportation
3950 W 56th Street, Indianapolis, IN 46254
- B. Attendance:
1. Attendance at Prebid meeting is highly recommended but is not mandatory
- C. Bidder Questions: Questions will be addressed at prebid, questions not submitted in writing and not clarified via addenda shall not be considered binding. Oral clarifications made at prebid shall not be relied upon by bidders.
- D. Agenda: Prebid meeting agenda will include review of topics that may affect proper preparation and submittal of bids, including the following:
1. Review of Project Scope
 2. Advertisement for Bids
 - 1) Bids are due April 23, 2026 at 1:00 PM EST
 - 2) Bids should be turned in at the following location:
CORE Construction
8440 Woodfield Crossing Blvd
Suite 165
Indianapolis, IND 46240
- b. Instructions to Bidders.
- 1) Bids should be submitted in an envelope that has **the bid form and the bid bond only**
 - 2) Include Textura fees
 - 3) Bids will be publicly opened and read aloud.
- c. Bonding.
- 1) Payment and performance bonds are required. Include cost with base bid. There's a deduct line item on the bid form.
- d. Insurance.
- 1) Refer to 00 50 00b attachment E, prime bidders should review as CORE's minimum insurance requirements are typically in excess of standard policies. Include all additional costs and premiums to provide specified coverage in base bid.

- e. Bid Security.
 - 1) **5.0 % bid bond is required.** Address bond to owner
 - f. Bid Form and Attachments.
 - 1) See 00 41 23 Bid Form in trade package manual.
 - 2) 1 bid form/envelope/bond per bid package
 - g. Communication during Bidding Period:
 - 1) Access to BuildingConnected.
 - a) Drawings/specs will be sent through BuildingConnected. An account is required but it is free to set up. Addenda will be sent through this as well.
 - 2) Bidder's Requests for Information.
 - a) Send all RFIs to gregcampen@coreconstruction.com
 - 3) Bidder's Substitution Request/Prior Approval Request.
 - a) Same as above
 - h. Site Logistics/Schedule: Schedule - 00 31 13a Schedule
 - i. Site Logistics Plan - 00 31 13b Schedule
 - 1) Temp Fence
 - 2) Job trailer location – temp electric hookups
 - 3) Parking, toilets, dumpsters, etc
 - j. Safety
 - k. All contractor personnel must go through CORE's safety orientation prior to starting work
 - l. DAHAs must be turned in daily prior to beginning work to CORE
 - m. Hard hats, safety glasses, hi-vis clothing required by all at all times
 - n. Please review safety requirements in all contracts
 - o. Turn in all Company safety policies and SDS sheets to CORE prior to starting onsite
 - p. Smoking/tobacco product usage is not permitted on the jobsite.
 - q. All work to be per OSHA regulations
 - k. Site/facility Visit
 - l. Post-Meeting Addendum.
- E. Minutes: Construction Manager will record and distribute meeting minutes to attendees and others known by the issuing office to have received a complete set of Procurement and Contracting Documents. Minutes of meeting are issued as Available Information and do not constitute a modification to the Procurement and Contracting Documents. Modifications to the Procurement and Contracting Documents are issued by written Addendum only.
- 1. Sign-in Sheet: Minutes will include list of meeting attendees.

END OF SECTION 00 25 13

DOCUMENT 00 26 00.00 - PROCUREMENT SUBSTITUTION PROCEDURES

1.1 DEFINITIONS

- A. Procurement Substitution Requests: Requests for changes in products, materials, equipment, and methods of construction from those indicated in the Procurement and Contracting Documents, submitted prior to receipt of bids.
- B. Substitution Requests: Requests for changes in products, materials, equipment, and methods of construction from those indicated in the Contract Documents, submitted following Contract award.

1.2 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.3 PROCUREMENT SUBSTITUTIONS

- A. Procurement Substitutions, General: By submitting a bid, the Bidder represents that its bid is based on materials and equipment described in the Procurement and Contracting Documents, including Addenda. Bidders are encouraged to request approval of qualifying substitute materials and equipment when the Specifications Sections list materials and equipment by product or manufacturer name.
- B. Procurement Substitution Requests will be received and considered by Owner when the following conditions are satisfied, as determined by A/E; otherwise requests will be returned without action:
 - 1. Extensive revisions to the Contract Documents are not required.
 - 2. Proposed changes are in keeping with the general intent of the Contract Documents, including the level of quality of the Work represented by the requirements therein.
 - 3. The request is fully documented and properly submitted.

1.4 SUBMITTALS

- A. Procurement Substitution Request: Submit to A/E. Procurement Substitution Request must be made in writing in compliance with the following requirements:
 - 1. Requests for substitution of materials and equipment will be considered if received no later than 10 days prior to date of bid opening.
 - 2. Submittal Format: Electronically submit each written Procurement Substitution Request, using form bound in Project Manual in accordance with Division 00 Section "Instructions to Bidders".
 - a. Identify the product or the fabrication or installation method to be replaced in each request. Include related Specifications Sections and drawing numbers.
 - b. Provide complete documentation on both the product specified and the proposed substitute, including the following information as appropriate:
 - 1) Point-by-point comparison of specified and proposed substitute product data, fabrication drawings, and installation procedures.
 - 2) Copies of current, independent third-party test data of salient product or system characteristics.
 - 3) Samples where applicable or when requested by A/E.
 - 4) Detailed comparison of significant qualities of the proposed substitute with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.

- 5) Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - 6) Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, which will become necessary to accommodate the proposed substitute.
 - c. Provide certification by manufacturer that the substitute proposed is equal to or superior to that required by the Procurement and Contracting Documents, and that its in-place performance will be equal to or superior to the product or equipment specified in the application indicated.
 - d. Bidder, in submitting the Procurement Substitution Request, waives the right to additional payment or an extension of Contract Time because of the failure of the substitute to perform as represented in the Procurement Substitution Request.
- B. A/E's Action:
- 1. A/E may request additional information or documentation necessary for evaluation of the Procurement Substitution Request. A/E will notify all bidders of acceptance of the proposed substitute by means of an Addendum to the Procurement and Contracting Documents.
- C. A/E's approval of a substitute during bidding does not relieve Contractor of the responsibility to submit required shop drawings and to comply with all other requirements of the Contract Documents.

END OF DOCUMENT 00 26 00

DOCUMENT 00 26 00.01 - SUBSTITUTION REQUEST FORM
(During Procurement)

To _____ Date: _____

Project _____

We hereby submit for your consideration the following product instead of the specified item(s) for the above project:

<u>Section</u>	<u>Article/Paragraph (Page)</u>	<u>Specified Item</u>
_____	_____	_____

Proposed Substitution: _____ Model: _____

Manufacturer: _____ Phone: _____

Attach complete technical data including laboratory tests if applicable.

Include complete information changes to Drawings and/or Specifications which proposed substitution require for proper installation.

Fill in Blanks Below, use additional sheets if necessary:

A. Does the substitution affect dimensions shown on Drawings?

B. Will the undersigned pay for changes to building design, including engineering and detailing costs caused by substitution, if any?

C. What effect does substitution have on other trades? _____

D. Differences between proposed substitution and specified item?

E. Manufacturer's guarantees of proposed and specified items are:
_____ Same _____ Different (explain on attachment)

The undersigned certifies that the function, appearance and quality are equivalent or superior to the specified item.

Submitted By:

Signature

Firm

Address

Telephone

Fax

Email

For Use by Design Consultant:

Accepted _____ Accepted as Noted _____
Not Accepted _____ Received too Late _____
PM _____
Specifier _____
Date _____
Remarks _____
Telephone _____

END OF SECTION 00 26 00.01

DOCUMENT 00 31 00 - AVAILABLE PROJECT INFORMATION

1.1 GEOTECHNICAL DATA

- A. This Document with its referenced attachments is part of the Procurement and Contracting (Bidding) Requirements for Project. They provide Owner's information for Bidders' convenience and are intended to supplement rather than serve in lieu of Bidders' own investigations. They are made available for Bidder's convenience and information. This Document and its attachments are not part of the Contract Documents.
- B. Because subsurface conditions indicated by the soils borings are a sampling in relation to the entire construction area, and for other reasons, the Owner, the A/E, the A/E's consultants, and the firm reporting the subsurface conditions do not warranty the conditions below the depths of the borings or that the strata logged from the borings are necessarily typical of the entire site. Any party using the information described in the soil borings and geotechnical report shall accept full responsibility for its use.
- C. The Soils Exploration Report and Soil Boring Logs were prepared for the Owner by Patriot Engineering and Environmental, Inc., 6150 E. 75th Steet, Indianapolis, In 46250 for use in design. The following Subsurface Investigation Report is not a part of the construction Contract Documents and is enclosed within this document for informational use only.
1. The opinions expressed in this report are those of a geotechnical engineer and represent interpretations of subsoil conditions, tests, and results of analyses conducted by geotechnical engineer.
 2. The enclosed report and Log of Borings, and any interpolations of conditions between test borings is not a warrant or guarantee by the Owner or Architect/Engineer of subsurface conditions.
 3. The Contractor should visit the site and acquaint himself with all existing conditions. Prior to bidding, bidders may make their own subsurface investigations to satisfy themselves as to the site and subsurface conditions, but such subsurface investigations shall be performed only under the time schedules and arrangements approved in advance by the Owner. Any additional information, needed by the Contractor, shall be obtained by the Contractor at no cost to the Owner.
 4. Structural design has been based on the report and assumes that existing soils are clean and can be compacted and will achieve the densities specified in the earthwork section. It shall be the Contractor's responsibility to determine for himself existing Site and or soil conditions.
- D. Existing Site Survey Information: A Site survey can be found within the construction drawings. It is not however, part of the Construction Contract Documents and is for informational use only. Information found is not a warrant or guarantee by the Owner or Project Consultant. The Contractor should visit the Site and acquaint himself with all existing conditions.

END OF DOCUMENT 00 31 00

**REPORT OF
GEOTECHNICAL ENGINEERING EXPLORATION**

**NATHANIEL JONES EARLY LEARNING CENTER ADDITION
INDIANAPOLIS, INDIANA
25-0530-01G**

**PREPARED FOR:
TLF ENGINEERS
3901 WEST 86TH STREET, SUITE 200
INDIANAPOLIS, INDIANA 46268**

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JUNE 18, 2025



June 18, 2025

Ms. Tracy Chariton, P.E.
TLF Engineers
3901 West 86th Street, Suite 200
Indianapolis, Indiana 46268

Re: Report of Geotechnical Engineering Exploration
Nathaniel Jones Early Learning Center Addition
7839 New Augusta Road
Indianapolis, Indiana
Patriot Project No.: 25-0530-01G

Dear Tracy:

Attached is the report of our geotechnical engineering exploration for the above referenced project. This exploration was completed in general accordance with our Proposal No.: P25-0669-01G dated March 26, 2025.

This report includes detailed and graphic logs of thirteen (13) soil borings drilled at the proposed project site. Also included in the report are the results of laboratory tests performed on samples obtained from the site, and geotechnical recommendations pertinent to the site development, foundation design, and construction.

We appreciate the opportunity to perform this geotechnical engineering exploration and are looking forward to working with you during the construction phase of the project. If you have any questions regarding this report or if we may be of any additional assistance regarding any geotechnical aspect of the project, please do not hesitate to contact our office.

Respectfully submitted,
Patriot Engineering and Environmental, Inc.



Logan Young, P.E.
Project Engineer



William D. Dubois, P.E.
Senior Principal Engineer



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REPORT OF GEOTECHNICAL ENGINEERING EXPLORATION

**Nathaniel Jones Early Learning Center Addition
7839 New Augusta Road
Indianapolis, Indiana
*Patriot Project No.: 25-0530-01G***

1.0 INTRODUCTION

1.1 GENERAL

MSD of Pike Township, in conjunction with TLF Engineers, are planning the construction of an addition to the Nathaniel Jones Early Learning Center located at 7839 New Augusta Road in Indianapolis, Indiana. The results of our geotechnical engineering exploration for the project are presented in this report.

1.2 PURPOSE AND SCOPE

The purpose of this exploration is to determine the general near surface and subsurface conditions within the project area and to develop the geotechnical engineering recommendations necessary for the design and construction of the proposed addition. This was achieved by drilling soil borings, and by conducting laboratory tests on samples taken from the borings. This report contains the results of our findings, an engineering interpretation of these results with respect to the available project information, and recommendations to aid in the design and construction of the proposed addition.

2.0 PROJECT INFORMATION

The proposed project is located at the Nathaniel Jones Early Learning Center at 7839 New Augusta Road in Indianapolis, Indiana. The project consists of a high, single story structure of slab-on-grade construction. The addition will be approximately 300 feet by 121 feet in plan dimension and will include a gymnasium and classrooms.

Based on information provided by TLF Engineers, we understand that the proposed structures will have wall loads not exceeding 3,500 pounds per lineal feet (plf), isolated column loads not exceeding 100 kips, and that floor loads will not exceed 150 pounds per square foot (psf). Additionally, based on visual observations of the existing site, it is assumed that any grade raised fill to complete the construction of the project (e.g.,

building pads, finished pavement subgrades, etc.), will not exceed 2 feet above the existing ground surface.

3.0 SITE AND SUBSURFACE CONDITIONS

3.1 SITE CONDITIONS

The project site is presently the existing Nathaniel Jones Early Learning Center. The surrounding area is generally an area of residential and commercial development. The topography in the area proposed for construction is generally relatively flat with ground surface elevations ranging from 844 to 848 feet based on Google Earth imagery. The elevations provided from Google Earth should be considered estimates as accuracy can vary.

3.2 GENERAL SUBSURFACE CONDITIONS

Our interpretation of the subsurface conditions is based upon thirteen (13) soil borings drilled at the approximate locations shown on the Boring Location Map (Figure No. 2) in Appendix "A". All depths discussed below refer to depths below the existing ground surface. Based on the results of the soil borings completed at the site, the following subsurface profile is presented. A description of each general soil unit has been identified and is described below.

Topsoil, a surficial layer of material that is a blend of silts, sands, and clays, with varying amounts of organic matter, was encountered at the ground surface at the thirteen (13) boring locations. The topsoil layer was about 12 inches thick in the borings.

The surficial material is generally underlain by medium stiff to hard, **SILTY or SANDY CLAY (CL)**. The silty or sandy clay layers typically extend to predetermined boring termination depths of 10 to 20 feet below the existing ground surface. The natural moisture content of this material ranges from 8 to 28 percent (%). The silty or sandy clay layers have unconfined compressive strengths, as determined by a hand penetrometer, of 0.5 to greater than 6.0 tons per square foot (tsf). Standard Penetration Test N-values (blow counts) in this material varied from 7 to more than 50 blows per foot (bpf).

UNDOCUMENTED FILL, consisting of sandy clay, gravel and brick, was encountered in Boring B-7 from below the surficial material to approximately 3 ½ feet below existing grade.

Below the surficial material and within the silty or sandy clays, loose to medium dense, **CLAYEY SAND (SC)** was encountered to approximately 3 ½ to predetermined boring

termination depth of 10 feet below existing grade in three (3) of the thirteen (13) borings. Standard Penetration Test N-values (blow counts) in this material varied from 8 to 18 bpf.

Within the silty or sandy clay layers, loose to medium dense, **SAND (SP-SM) or SILTY SAND (SM)** was encountered from 3 ½ to 18 ½ feet below existing grade. Standard Penetration Test N-values in this sand varied from 9 to 20 bpf.

The soil conditions described above are general, and some variations in the descriptions should be expected; for more specific information, please refer to the borings logs presented in Appendix “A”. It should be noted that the dashed stratification lines shown on the soil boring logs indicate approximate transitions between soil types. In-situ stratification changes could occur gradually or at different depths.

As previously mentioned, unsuitable undocumented fills was encountered in Boring B-7 from below the surficial material to a depth of approximately 3 ½ feet below the existing ground surface.

3.3 GROUNDWATER CONDITIONS

The term groundwater pertains to any water that percolates through the soil found on site. This includes any overland flow that permeates through a given depth of soil, perched water that occurs below the “water table”, a zone that remains saturated and water-bearing year-round.

Table No. 1: Groundwater Summary Table

Boring Number	Groundwater Level During Drilling (feet)*	Groundwater Level After Drilling (feet)*	24-Hour Groundwater Level (feet)*
B-1	10	4.5	N/A
B-2	10	5	N/A
B-3	10	6	N/A
B-4	Dry	Dry	5
B-5	Dry	Dry	N/A
B-6	Dry	Dry	N/A
B-7	Dry	Dry	N/A
B-8	Dry	12	N/A
B-9	Dry	15	N/A
B-10	7 ½	6	N/A
B-11	Dry	Dry	N/A
B-12	Dry	Dry	N/A
B-13	Dry	Dry	N/A

* Represents depth below existing ground surface.

Groundwater was observed during drilling in four (4) of the thirteen (13) soil borings performed at the site at depths between 7 ½ and 10 feet below the existing ground surface. Groundwater was not observed in the remaining borings during drilling. Immediately after the borings were completed and the augers were removed from the boreholes, groundwater was observed at depths between 4 ½ and 15 feet below the existing ground surface in six (6) of the thirteen (13) soil borings. The remaining borings were dry at the cave-in depths shown on the boring logs. A 24-hour groundwater reading was completed in Boring B-4. Groundwater was encountered in this boring at a depth of 5 feet after 24-hours.

It should be recognized that fluctuations in the groundwater level should be expected over time due to variations in rainfall and other environmental or physical factors. The true static groundwater level can only be determined through observations made in cased holes over a long period of time, the installation of which was beyond the scope of this exploration.

4.0 DESIGN RECOMMENDATIONS

4.1 BASIS

Our recommendations are based on data presented in this report, which include soil borings, laboratory testing, and our experience with similar projects. Subsurface variations that may not be indicated by a dispersive exploratory boring program can exist on any site. If such variations or unexpected conditions are encountered during construction, or if the project information is incorrect or changed, we should be informed immediately since the validity of our recommendations may be affected.

4.2 FOUNDATIONS

As previously mentioned, **undocumented fill was encountered in Boring B-7 to a depth of 3 ½ feet below existing grade. If existing fill materials or other unsuitable materials are encountered at the footing level or below, they must be undercut and replaced with well-compacted structural fill prior to construction of foundations or footings can be extended to suitable natural soils.** Following the excavation of the footing areas, the foundations subgrade should be visually inspected by a *Patriot* representative and probed at multiple locations at isolated footings and at every 10 feet (maximum) along wall footings using a Dynamic Cone Penetrometer (DCP) to a minimum depth of 5 feet below the footing subgrade to verify that the underlying soil has a SPT blow count of 7 or more or unconfined compressive strength of 1.0 tsf or more. Any unsuitable soils encountered at the footing subgrade or below should be removed and replaced with well-compacted structural fill.

Provided the above recommendations are followed, the proposed structure can be supported on spread footings bearing on the medium stiff or better clays (N-value of 7 or greater) or loose or better sands (N-value of 8 or greater) encountered at shallow depths or on new well-compacted structural fill overlying the same. These footings should be proportioned using a net allowable soil bearing pressure not exceeding 2,500 pounds per square feet (psf) for column footings or 2,000 psf for wall (strip) footings. For proper performance at the recommended design bearing pressure, foundations must be constructed in compliance with the recommendations discussed in Section 5.0 "Construction Considerations".

In using the above net allowable soil bearing pressures, the weight of the foundation and backfill over the foundation need not be considered. Hence, only loads applied at or above the minimum finished grade adjacent to the footing need to be used for dimensioning the foundations. Each new foundation should be positioned so it does not induce significant pressure on adjacent foundations; otherwise, the stress overlap must be considered in the design.

All exterior foundations and foundations in unheated areas should be located at a depth of at least 30 inches below final exterior grade for frost protection. However, interior foundations in heated areas can bear at depths of approximately 24 inches below the finished floor. We recommend that wall (strip) footings be at least 18 inches wide and column footings be at least 24 inches wide for bearing capacity considerations.

We estimate that the total foundation settlement should not exceed approximately 1 inch, and that differential settlement should not exceed about $\frac{3}{4}$ inch. Careful field control during construction is necessary to minimize the actual settlement that will occur.

4.3 FLOOR SLABS

As previously mentioned, undocumented fill was encountered in Boring B-7 to a depth of 3 $\frac{1}{2}$ feet below existing grade. ***If existing fill materials or other unsuitable materials are encountered at the floor slab level or below, they must be undercut and replaced with well-compacted structural fill prior to construction of floor slabs.***

Depending on the weather conditions at the time of construction, scarifying and drying and/or chemical modification (Refer to Section 5.5 "Chemical Modification Considerations") may be necessary to manage moisture contents in the clays in order to achieve the necessary subgrade soil support prior to the placement of floor slabs or any grade raise fill.

We recommend that all floor slabs be designed as “floating”, that is, fully ground supported and not structurally connected to walls or foundations. This is to minimize the possibility of cracking and displacement of the floor slabs because of differential movements between the slab and the foundation. Although the movements are estimated to be within the tolerable limits for structural safety, such movements could be detrimental to the slabs if they were rigidly connected to the foundations. Additionally, we recommend that all slabs should be liberally jointed and designed with the appropriate reinforcement for the anticipated loading conditions.

The building floor slabs should be supported on a minimum 6-inch-thick well-compacted granular base course (i.e. Indiana Department of Transportation (INDOT) No. 53 crushed stone) bearing on a suitably prepared subgrade (Refer to Section 5.0 “*Construction Considerations*”). The granular base course is expected to help distribute loads and equalize moisture conditions beneath the slab.

Provided that the recommendations above for floor slab design and construction are followed, a modulus of subgrade reaction, “ K_{30} ” value of 80 pounds per cubic inch (pci), is recommended for the design of ground supported floor slabs. It should be noted that the “ K_{30} ” modulus is based on a 30-inch diameter plate load empirical relationship.

4.4 PAVEMENTS

As previously mentioned, undocumented fill was encountered in Boring B-7 to a depth of 3 ½ feet below existing grade. ***If existing fill materials or other unsuitable materials are encountered at the pavement section level or below, they must be undercut and replaced with well-compacted structural fill prior to construction of pavements.***

Depending on the weather conditions at the time of construction, scarifying and drying and/or chemical modification (Refer to Section 5.5 “*Chemical Modification Considerations*”) may be necessary to manage moisture contents in the clays in order to achieve the necessary subgrade soil support prior to the placement of floor slabs or any grade raise fill.

If construction is performed during a wet or cold period, the contract will need to exercise care during the grading and fill placement activities in order to achieve the necessary subgrade soil support for the pavement section refer to Section 5.0 “*Construction Considerations*”. The base soil for the pavement section will need to be firm and dry. The subgrade should be sloped properly in order to provide good base drainage. To minimize the effects of groundwater or surface water conditions, the base section for the pavement system should be sufficiently high above adjacent ditches and properly graded to provide pavement surface and pavement base drainage.

As requested, *Patriot* is providing minimum design recommendations for flexible (Hot-Mix Asphalt (HMA)) pavement sections. Our recommended minimum pavement design sections provided below are based on a soil support evaluation performed in accordance with generally accepted procedures set forth by the American Association of State Highway Transportation Officials (AASHTO) "Guide for Design of Pavement Structures, 1993". **Because actual traffic loading conditions determined from a traffic study were not available for the project, traffic loading conditions considered and utilized for design purposes were estimated based on information provided by the Client and our previous experience with similar projects. Provided below is a summary of our design assumptions:**

- Design life of 15 years
- 18-kips Equivalent Single Axle Loading (ESAL) estimated design values:
 - Flexible Standard Duty Pavement = 200,000 ESAL
- Initial Serviceability:
 - Flexible Pavement = 4.2
- Terminal Serviceability:
 - Flexible Pavement = 2.5
- Reliability of 80 percent (%) (for both flexible and rigid pavements)
- Standard Deviation
 - Flexible Pavement = 0.45
- California Bearing Ration (CBR) = 3.0
- The crushed stone base course will not contain more than 10 percent (%) fines and must be compacted to at least 100% of the maximum Standard Proctor dry density.
- Asphalt will be placed and compacted in accordance with the current INDOT Standard Specification Requirements.
- Pavement design was performed for the Good to Excellent Drainage Conditions
 - We recommend installing longitudinal subsurface drains throughout the length of the proposed pavement areas. Additionally, we recommend the installation of series of finger drains within the proposed pavement areas, which if appropriate and feasible, could be connected to storm-sewer inlets.
 - In addition to providing good drainage, the installation of underdrains underlying pavement sections founded over low permeability soils will generally aid in improving long-term performance of the pavement sections, as well as helping lower maintenance costs.
- Periodic Maintenance
 - We recommend that cracking should be filled and sealed to INDOT Standard Specification Section 408 periodically after the installation of the pavement. Inspection can also be performed at these times for any isolated

- areas of excessive fatigue cracking, which could necessitate full-depth patching.
- Underdrain outlets shall be inspected annually to ensure that there are no man-made or natural obstructions to the flow.

Based on the above design parameters, provided below is the calculated minimum pavement design thickness for rigid (PCC) pavement and flexible (HMA) pavement based on the assumed loading. Refer to Appendix “B” for detailed calculations.

Table No. 2: Flexible Standard Duty Pavement Design (Minimum Thickness)

Traffic Loading Conditions*	Pavement Type	Asphalt Surface Course HMA 9.5 mm (inches)**	Asphalt Base Course HMA 19 mm (inches)**	Aggregate Base Course (inches)***	Design Life (years)
200,000	HMA	1 ½	4 ½	6	15

* Estimated ESAL based on estimated number of vehicle traffic passes per day.

** INDOT Specified HMA

*** INDOT No. 53 Crushed Stone, containing no more than 10% fines.

The pavement analysis does not include conditions for loading of dumpster trucks which generate high stresses in the pavement. For the dumpster loading area, we recommend using a reinforced concrete pad at least 8 inches thick underlain by a least 8 inches of crushed stone. Prior to placing the crushed base for the rigid pavement, the dumpster and truck approach areas should be thoroughly proofrolled. We recommend the concrete pad be large enough to accommodate the entire length of the truck while loading. In addition, we recommend a thickened curb be constructed around the perimeter of the dumpster pad to reduce the potential for further pad damage typically associated with overstressing of the pad edges.

4.5 SEISMIC CONSIDERATIONS

For structural design purposes, we recommend using a **Site Classification of “C”** as defined by the current Indiana Building Code (modified International Building Code (IBC)). Furthermore, along with using a Site Classification of “C”, we recommend the use of the maximum considered spectral response acceleration and design spectral response acceleration coefficients provided in Table No. 3 below. Refer to Appendix “C” for the “*Seismic Site Class Evaluation*” report summary.

Table No. 3: Seismic Design Spectral Response Acceleration Coefficients

Period (seconds)	Maximum Considered Spectral Response Acceleration Coefficient	Soil Factor	Design Spectral Response Acceleration Coefficient
0.2	$S_s = 0.154 \text{ g}$	1.2	$S_{DS} = 0.082 \text{ g}$
1.0	$S_1 = 0.084 \text{ g}$	1.7	$S_{D1} = 0.045 \text{ g}$

These values were obtained from the “OSHPD Seismic Design Maps” program for seismic design, developed by the Structural Engineers Association (SEA), utilizing latitude 39.89541° (degrees) north and longitude 86.23521° west as the designation for identifying the location of the parcel. Other earthquake resistant design parameters should be applied consistent with the minimum requirements of the current Indiana Building Code.

4.6 SUBSURFACE UTILITIES

For installation of subsurface utilities (e.g., water lines, storm-sewers lines, sanitary-sewer lines, manholes, culverts, etc.) the soil conditions encountered in our borings should be readily excavated using conventional earthwork equipment. However, some additional effort may be necessary to excavate very stiff to hard clay layers, which were encountered in the upper 15 feet of soil, along with isolated cobbles or boulders. ***Additionally, depending on the invert elevations of the proposed subsurface utilities, sand layers and seams could be encountered, which are expected to be free-flowing and will tend to readily cave and/or slough into excavations; therefore, over-excavation, benching, and/or shoring should be expected in order to maintain the side slopes of the trench excavations.***

Depending on seasonal conditions and the invert elevation of the proposed detention basin, localized and sporadic groundwater infiltration should be expected to be encountered in the subsurface utility excavation (Refer to Section 5.4 “Groundwater Considerations”). Furthermore, it should be noted that there may be the potential for encountering heaving sand layers near the groundwater elevations during construction.

In regards to bearing and support of the subsurface utilities, the soil conditions encountered in the borings, if properly prepared, are suitable for support of the subsurface utilities. ***It should be recognized though, that depending on the invert elevations of the proposed subsurface utilities, undocumented fill layers may be encountered at the bearing grade, which require undercutting and replacement with compacted structural backfill to achieve suitable bearing for support of utilities.***

4.7 EXCAVATION OF EXISTING FOUNDATIONS/UNDERGROUND UTILITIES

We recommend that an attempt be made to obtain drawings of all past or existing underground structures onsite. We recommend that these documents including this report be made available to the project contractors. Buried foundations and slabs may prove to be obstructions for the proposed construction at the project site. We recommend that existing foundations, pavements, utilities, and backfill be excavated at least 2 feet beyond the proposed structures construction and underground utility limits. Backfill required to reach the design subgrade should be performed in accordance with Section 5.3 “*Structural Fill and Fill Placement Control*”.

No structural elements of the proposed project should be placed over old foundations or slabs, which can create “hard spots” or over vacated utility lines or “voids”, unless structurally designed to handle the hard and soft spots. In addition, if basement walls are encountered, we recommend cutting these 2 feet below proposed subgrade and backfilling with structural fill as specified above.

It should be noted that the sandy soils encountered in the borings should be expected to be free-flowing and tend to readily cave and/or slough into excavations; therefore, over-excavation, benching and/or shoring may be required in order to maintain the side slopes within isolated portions of excavations.

5.0 CONSTRUCTION CONSIDERATIONS

5.1 SITE PREPARATION

All areas that will support foundations, floors, pavements, or newly placed structural fill must be properly prepared. All loose surficial soil or “topsoil” and other unsuitable materials must be removed. Unsuitable materials include frozen soil, relatively soft material, relatively wet soils, deleterious material, or soils that exhibit a high organic content.

Approximately 12 inches of loose surficial topsoil was encountered in the borings. The topsoil was measured at discrete locations as shown on the Boring Location Map (Figure No. 2) in Appendix “A”. The topsoil thickness measured at the boring locations may or may not be representative of the overall average topsoil thickness at the site. Therefore, it is possible that the actual stripping depth could significantly vary from this data. The data presented should be viewed only as a guide to the minimum stripping depth that will be required to remove organic material at the surface. Additional field exploration by *Patriot* would be required to provide an accurate estimate of the stripping depth. This limited data indicates that a minimum stripping depth will be required to remove the

organic material at the surface, followed by the potential for additional stripping and/or scarification and recompaction as may be required to achieve suitable subgrade support. **Additionally, if saturated conditions exist with the surface soils, light tracked equipment could be required to avoid pushing organics deeper into the suitable subgrade soils.** A *Patriot* representative should verify the stripping depth at the time grading operations occur.

Prior to construction of floor slabs, pavements, or the placement of new structural fill, the exposed subgrade must be evaluated by a *Patriot* representative, which will include proofrolling of the subgrade. Proofrolling should consist of repeated passes of a loaded, pneumatic-tired vehicle such as a tandem-axle dump-truck or scraper. The proofrolling operations should be observed by a *Patriot* representative, and the proofrolling vehicle should be loaded as directed by *Patriot*. Any area found to rut, pump, or deflect excessively should be compacted in-place or, if necessary, undercut and replaced with structural fill, compacted as specified in Section 5.3 “*Structural Fill and Fill Placement Control*”.

Care must be exercised during grading and fill placement operations. **The combination of heavy construction equipment traffic and excess surface moisture can cause pumping and deterioration of the near surface soils. The severity of this potential problem depends to a great extent on the weather conditions prevailing during constructions.** The contractor must exercise discretion when selecting equipment sizes and make a concerted effort to control construction traffic and surface water while the subgrade soils are exposed. We recommend that heavy construction equipment (e.g., dump trucks, scrapers, etc.) be routed away from the building and pavement areas. If such problems do arise, the operations in the affected area should be halted and the *Patriot* representative contacted to evaluate the condition.

5.2 FOUNDATION EXCAVATION

Excavation may be performed on sandy soils that can be easily disturbed. If the subgrade soil is disturbed, it should be re-compacted, or crushed stone layer should be placed at the subgrade level.

Upon completion of the foundation excavations and prior to the placement of reinforcing steel, a *Patriot* representative should check the exposed subgrade to confirm that a bearing surface of adequate strength has been reached. Any localized soft soil zones encountered at the bearing elevations should be further excavated until adequate support soils are encountered. The cavity should be backfilled with structural fill as defined below, or the footing can be poured at the excavated depth. Structural fill used as backfill beneath footings should be limited to lean concrete, well-graded sand and gravel, or crushed stone

placed and compacted in accordance with Section 5.3 “*Structural Fill and Fill Placement Control*”.

If it is necessary to support spread footings on structural fill, the fill pad must extend laterally a minimum distance beyond the edge of the footing. The minimum structural pad width would correspond with a point at which an imaginary line extending downward from the outside edge of the footing at a 1H:2V (horizontal: vertical) slope intersects the surface of the natural soils. For example, if the depth to the bottom of excavation is 4 feet below the bottom of the foundation, the excavation would need to extend laterally beyond the edge of the footing at least 2 feet, as shown in Illustration “A” found at the conclusion of this report.

Excavation slopes should be maintained within all requirements set-forth by the Occupational Safety and Health Standards (OSHA), but specifically Section 1926 Subpart “P” – “*Excavations*”. We recommend that any surcharge fill or heavy equipment be kept at least 5 feet away from the edge of the excavation.

In addition, excavations that occur near existing in-use foundations should be carefully performed making a conscious effort not to undermine the support of the in-use foundations. If it is necessary to excavate soil adjacent to and below the bearing elevation of any in-use foundations, *Patriot* should be contacted to make further recommendations regarding these excavations. Please refer to Illustration “B” at the end of the report for further details.

Construction traffic on the exposed surface of the bearing soil will potentially cause some disturbance of the subgrade and consequently loss of bearing capacity. However, the degree of disturbance can be minimized by proper protection of the exposed surface.

5.3 STRUCTURAL FILL AND FILL PLACEMENT CONTROL

Structural fill, defined as any fill which will support structural loads, should be clean and free of organic material, debris, deleterious materials, and frozen soils. Samples of the proposed fill materials should be tested prior to initiating the earthwork and backfilling operations to determine the classification, the natural and optimum moisture contents and maximum dry density and overall suitability as a structural fill. ***Structural fill should have a liquid limit less than 40 and a plasticity index less than 20.***

All structural fill beneath floor slabs, adjacent to foundations and over foundations, should be compacted to at least 95 percent (%) of its maximum Standard Proctor dry density (ASTM D-698). This minimum compaction requirement should be increased to 100 percent (%) of the maximum Standard Proctor dry density for fill supporting footings, provided these are designed as outlined Section 4.0 “*Design Recommendations*”.

Structural fill supporting, around and over utilities should be compacted to at least 95 percent (%) of its maximum Standard Proctor dry density (ASTM D-698) for utilities underlying structural areas (i.e., buildings, pavements, sidewalks, etc.). However, the minimum compaction requirement can be reduced for backfill around and over the utilities to 90 percent (%) of the maximum Standard Proctor dry density where utilities underlie greenbelt areas (i.e., grassy lawns, landscaping, etc.). It is recommended that a clean well-graded granular material be utilized as the bedding material, as well as the backfill material around and over the utility lines.

In cut areas, where pavement sections are planned, the upper 10 inches of subgrade should be scarified and compacted to a dry density of at least 100 percent (%) of the Standard Proctor maximum dry density (ASTM D-698). Any grade-raise fill placed within 1 foot of the base of the pavement section should also be compacted to at least 100 percent (%) of the Standard Proctor maximum dry density. This can be reduced to 95 percent (%) for structural fill placed more than 1 foot below the base of the pavement section.

To achieve the recommended compaction of the structural fill, we suggest that the fill be placed and compacted in layers not exceeding 8 inches in loose thickness (the loose lift thickness should be reduced to 6 inches when utilizing small hand compactors) and within the range of 2 percentage (%) points below or above the optimum moisture content value. All fill placements should be monitored by a *Patriot* representative. ***Each lift should be tested for proper compaction at a frequency of at least one (1) test every 2,500 square feet (ft²) per lift for the building areas, at least one (1) test every 10,000 square feet (ft²) per lift for the parking and roadway areas, and at a frequency of at least one (1) test for every 50 lineal feet of utility installation.***

5.4 GROUNDWATER CONSIDERATIONS

Groundwater was observed during our field activities at depths between about 4 ½ and 15 feet below the existing ground surface (Refer to the “*Groundwater Summary Table*”), which is expected to be below the anticipated foundation excavation depths, though the groundwater observations could potentially be within the anticipated trench excavation depths for subsurface utilities. Therefore, groundwater infiltration should be expected into the subsurface utility excavations, and depending on seasonal conditions, localized and sporadic groundwater infiltration may occur into the building foundation excavations on this site.

Groundwater inflow into shallow excavations **above** the groundwater table is expected to be adequately controlled by conventional methods such as gravity drainage and/or pumping from sumps. More significant inflow can be expected in deeper excavations **below** the

groundwater table requiring more aggressive dewatering techniques, such as well or wellpoint systems. For groundwater to have minimal effects on the construction, foundation excavations should be constructed and poured in the same day, if possible.

5.5 CHEMICAL MODIFICATION CONSIDERATIONS

The addition of lime or lime kiln dust (LKD) to clay soils of moderate to high plasticity generally results in the reduction of the plasticity properties of the soil, reduction in moisture holding capacity, swell reduction, and increased soil strength. Prior to the application of the lime or lime kiln dust (LKD), a number of representative samples of soils should be obtained from the final graded subgrade soils to determine the lime or lime kiln dust (LKD) reactivity and percentage (%) of lime or lime kiln dust (LKD) needed for modification of the soils (usually 5 to 8 percent (%)). A specialty contractor experienced in lime modification should apply and determine the rate at which hydrated lime or lime kiln dust (LKD) is mixed into the existing soils. Mixing depths of 12 to 18 inches is typical. A *Patriot* representative should monitor the mixing and compaction processes.

It should be noted that in areas where chemical modification of the natural subgrade soil is completed prior to the placement of grade raise fill and the grade raise fill is less than 18 inches in thickness, we recommend that any cohesive grade raise fill be modified similar to the natural subgrade. It has been our experience that untreated cohesive structural fill, in less than 18 inches in thickness, placed on top of chemically modified soil may become unstable over time due to excessive moisture accumulation. The underlying chemically modified soil may act as a barrier to natural water seepage into the soil profile, thereby trapping the water within the structural fill to the point of saturation.

6.0 CONSTRUCTION CONSIDERATIONS

6.1 FIELD WORK

A total of thirteen (13) soil borings were drilled, sampled, and tested at the project site between May 28 and 29, 2025, at the approximate locations shown on the Boring Location Map (Figure No. 2) in Appendix "A". The depths that the soil borings were advanced to are shown on the Boring Logs in Appendix "A". All depths are given as feet below the existing ground surface.

The borings were advanced using 3¼ inch inside diameter hollow-stem augers. Samples were recovered in the undisturbed material below the bottom of the augers using the standard drive sample technique in accordance with ASTM D 1586-74. A 2 inch outside diameter by 1³/₈ inch inside diameter split-spoon sampler was driven a total of 18 inches

with the number of blows of a 140-pound hammer falling 30 inches recorded for each 6 inches of penetration. The sum of blows for the final 12 inches of penetration is the Standard Penetration Test result commonly referred to as the N-value (or blow-count). Split-spoon samples were recovered at 2.5 feet intervals, beginning at a depth of 1 foot below the existing surface grade, extending to a depth of 10 feet, and at 5 feet intervals thereafter to the termination of the boring.

Water levels were monitored at each borehole location during drilling and upon completion of the boring. The boreholes were backfilled with auger cuttings prior to demobilization.

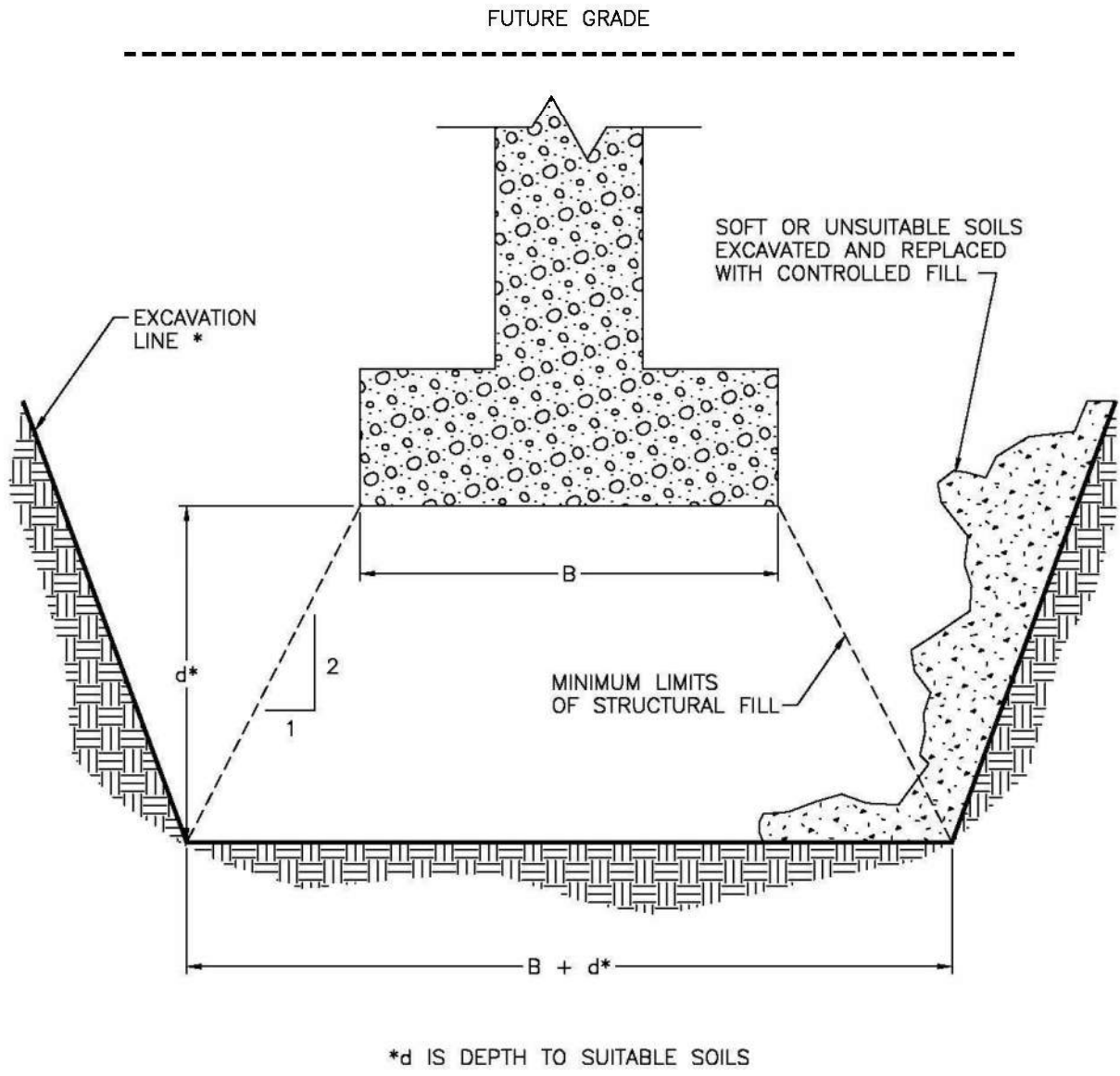
Upon completion of the boring program, samples retrieved during drilling were returned to *Patriot's* soil testing laboratory where they were visually examined and classified. A laboratory-generated log of each boring was prepared based upon the driller's field log, laboratory test results, and our visual examination. Test boring logs and a description of the classification system are included in Appendix "A" in this report. Indicated on each log are the primary strata encountered, the depth of each stratum change, the depth of each sample, the Standard Penetration Test results, groundwater conditions, and selected laboratory test data. The laboratory logs were prepared for each boring giving the appropriate sample data and the textural description and classification.

6.2 LABORATORY TESTING

Representative samples recovered in the borings were selected for testing in the laboratory to evaluate their physical properties and engineering characteristics. Laboratory analysis included natural moisture content determinations (ASTM D 2216) and an estimate of the cohesive soil strength was determined utilizing a calibrated hand penetrometer (q_p). The results of laboratory tests are summarized in Section 3.2 "*General Subsurface Conditions*". Soil descriptions on the boring logs are in accordance with the Unified Soil Classification System (USCS).

7.0 ILLUSTRATIONS

See Illustrations "A" and "B" on the following pages. These illustrations are presented to further visually clarify several of the construction considerations presented in Section 5.2 "*Foundation Excavations*".

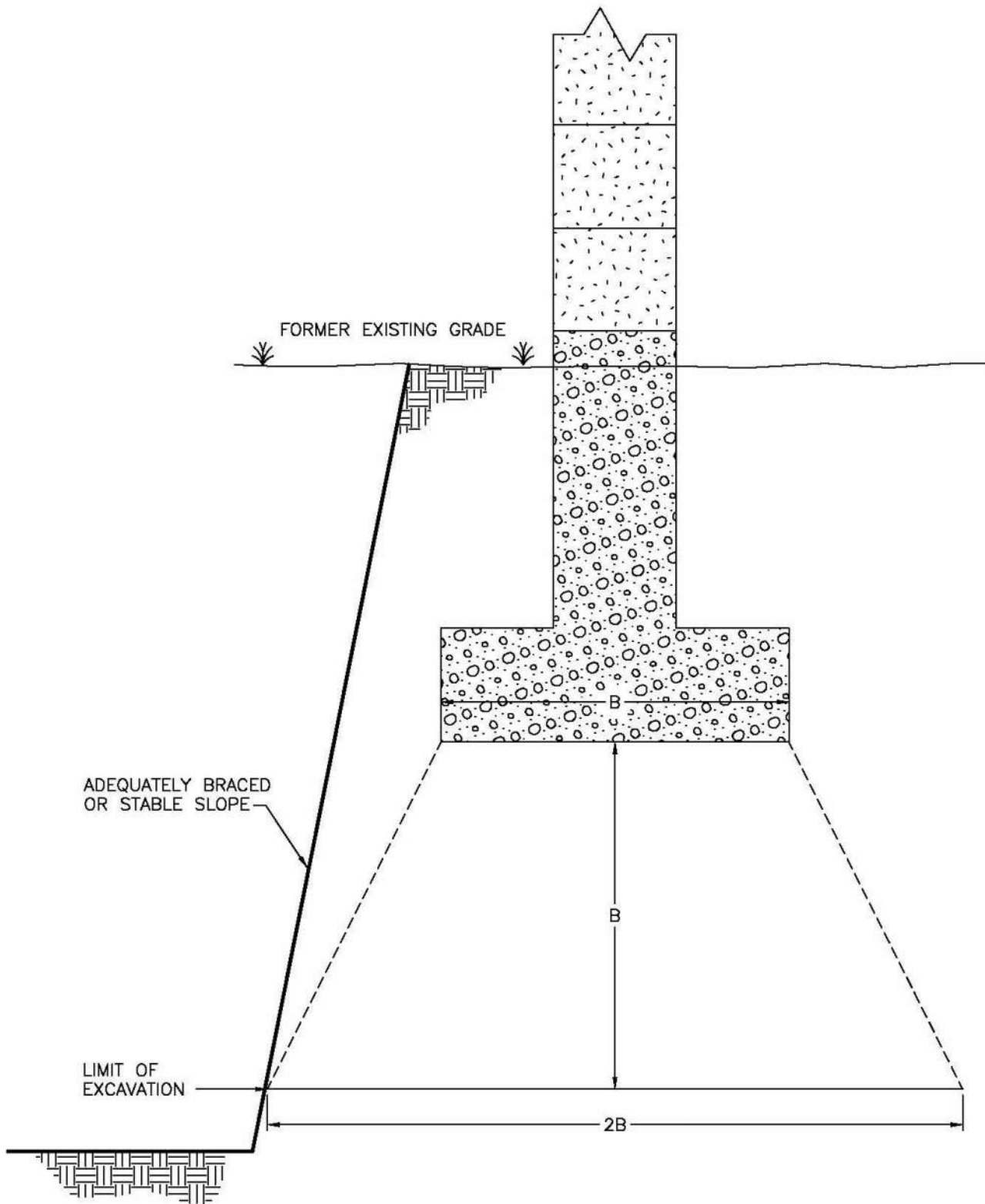


* IN COMPLIANCE WITH OSHA STANDARDS

PATRIOT ENGINEERING and Environmental, Inc.
Engineering Value for Project Success
Consulting Environmental, Geotechnical and Materials Engineers

Excavation for Footings
 In an Area of Fill
 ILLUSTRATION A

job. no.: _____ figure: _____



ADEQUATELY BRACED
OR STABLE SLOPE

LIMIT OF
EXCAVATION

FORMER EXISTING GRADE

B

2B

Excavation Near Existing
In Use Foundations
ILLUSTRATION B



**PATRIOT ENGINEERING
and Environmental, Inc.**

*Engineering Value for Project Success
Consulting Environmental, Geotechnical
and Materials Engineers*

job. no.:

figure:

APPENDIX A

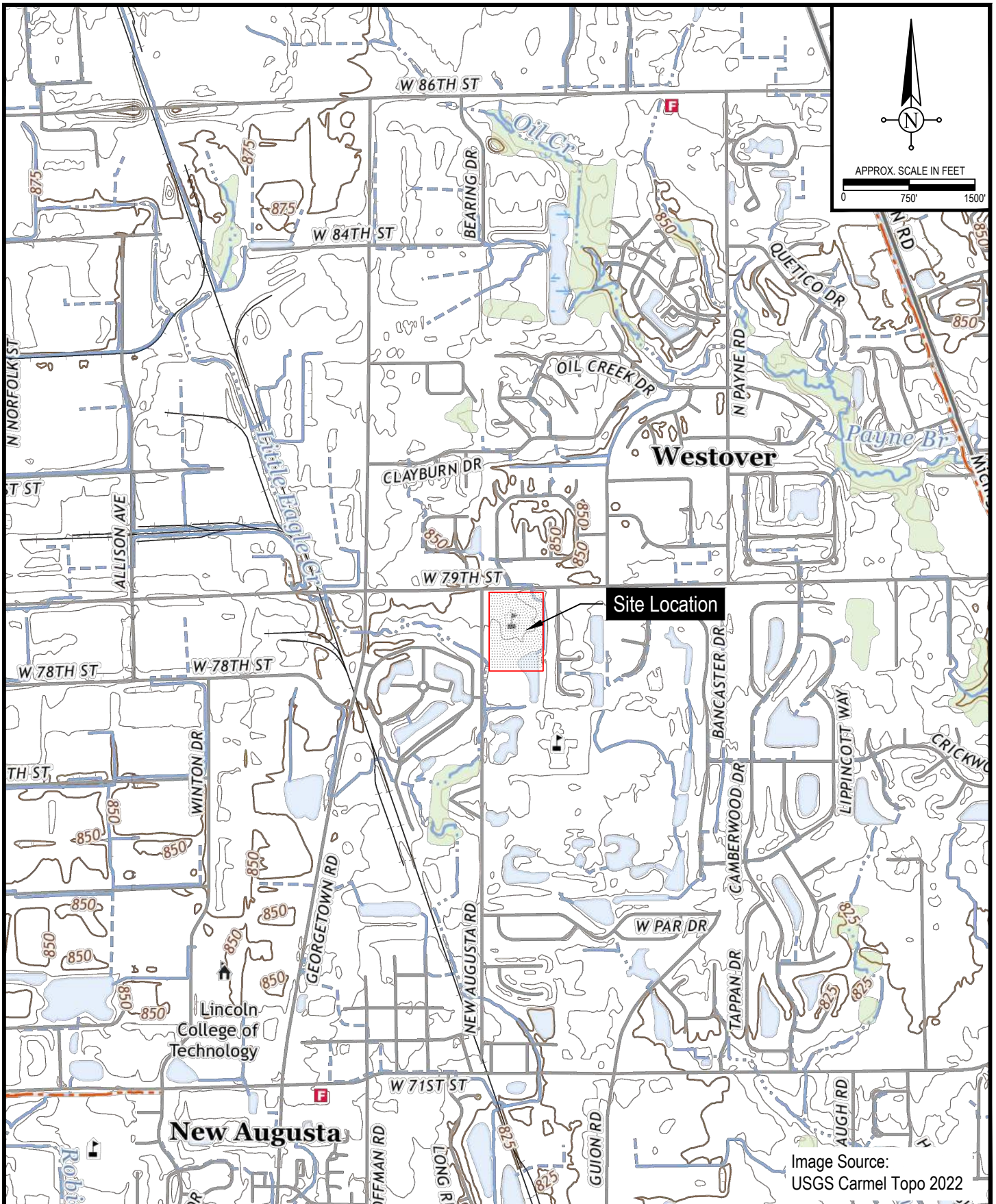
SITE VICINITY MAP (FIGURE NO. 1)

BORING LOCATION MAP (FIGURE NO. 2)

BORING LOGS

BORING LOG KEY

UNIFIED SOIL CLASSIFICATION SYSTEM (USCS)

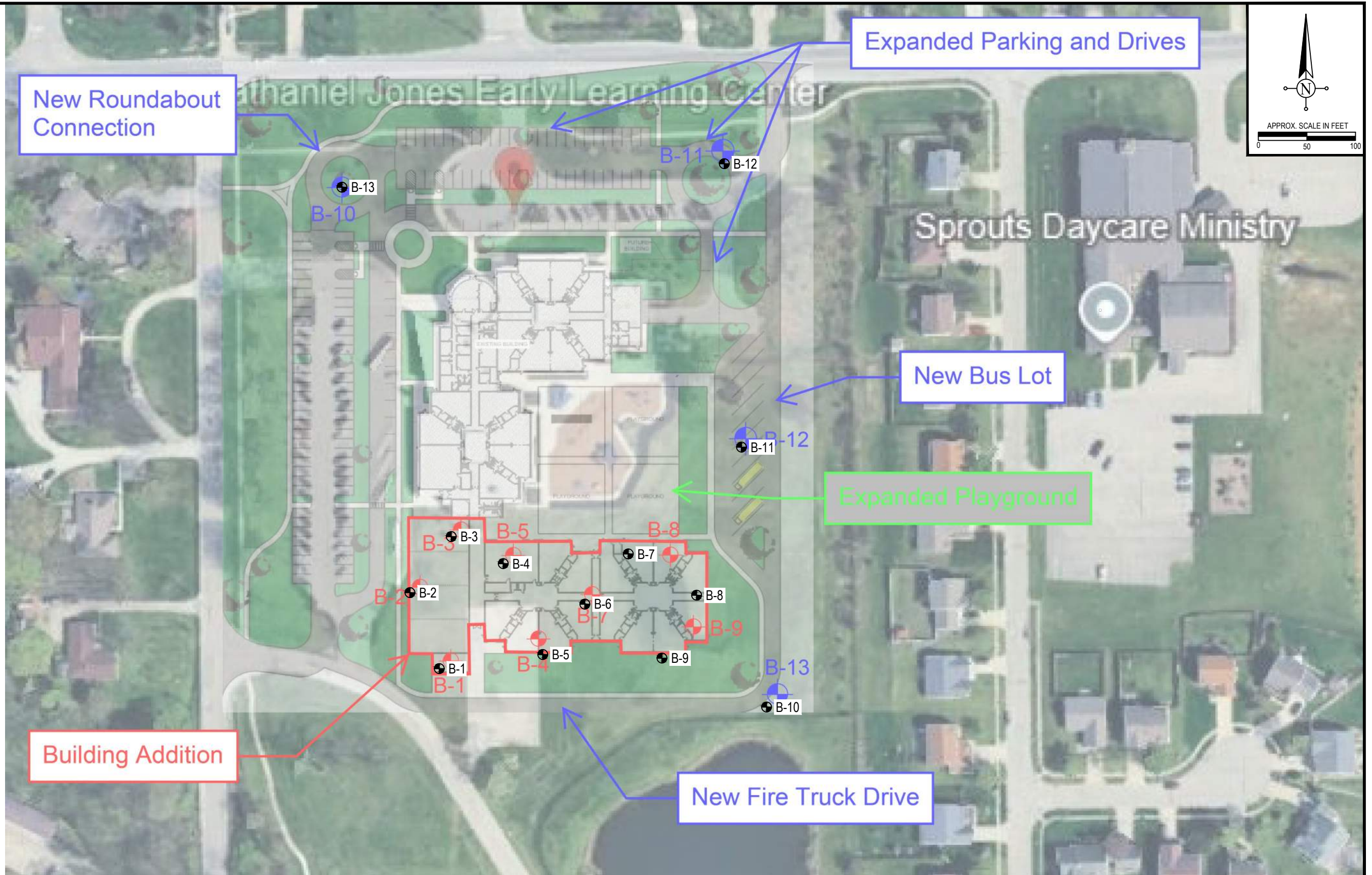


Project: Nathaniel Jones Early Learning Center Add.
7839 New Augusta Road
Indianapolis, Indiana

Project Number: 25-0530-01	Drawn By: J. DuMond
Date: June 9, 2025	Approved: L. Young
	DWG: 25-0530-01_geo

Figure 1

Site Vicinity Map



LEGEND
 ● PATRIOT Soil Boring
 B-1 Soil Boring ID

NOTES:
 1. Boring locations were staked by PATRIOT. All locations are shown as approximate.
 2. All locations were determined in the field with references to existing landmarks.
 3. Image Source: Client's Site Plan
 4. Scale as shown.

Project: Nathaniel Jones Early Learning Center Add.
 7839 New Augusta Road
 Indianapolis, Indiana









Project Number: 25-0530-01	Drawn By: J. DuMond
Date: June 9, 2025	Approved: L. Young
	DWG: 25-0530-01_geo

Figure 2
 Soil Boring Location Map







Nathaniel Jones Early Learning Center Addition
7839 New Augusta Road
Indianapolis, Indiana

Client Name : Ms. Tracy Chariton, P.E.
Project Number : 25-0530-01G
Logged By : L. Young
Start Date : 05/28/2025
Drilling Method : HSA

Driller : E. Thomas
Sampling : Splitspoon
Approx. Elevation : +/- 844 feet
Latitude : 39°53'42.52"N
Longitude : 86°14'8.20"W

Depth (Feet)	Elevation (Feet)	Water Level	USCS	GRAPHIC	DESCRIPTION	Samples	Rec %	SPT Results	qp tsf	w %	REMARKS	
												Water Levels ▼ During Drilling - 10 feet ▽ After Completion - 4.5 feet ◆ After 24 Hours - N/A
0	844				TOPSOIL (12")							
			SC		Grey and brown, slightly moist, loose, CLAYEY SAND with little gravel	1	44	3/3/5	1.2			
	840	▽	SP-SM		Brown, slightly moist, medium dense, fine to medium grained, SAND with little gravel and trace silt	2	44	3/5/8				
5			SP-SM		Brown, saturated, medium dense, fine to medium grained, fine grained, SAND with little gravel and trace silt							
			SM		Brown, saturated, medium dense, SILTY SAND with trace gravel	3	67	3/6/12				
	835	▼			Grey, saturated, medium dense, SILTY SAND with little gravel	4	67	2/3/10				
10			SM									
	830		SP-SM		Brown, saturated, medium dense, fine to medium grained, SAND with trace gravel and trace silt	5	44	5/10/10				
15											Boring caved to 15 feet upon auger removal.	
	825		CL		Grey, slightly moist, stiff to very stiff, SANDY CLAY with trace gravel	6	83	8/6/6	2.0	11		
20			Boring terminated at 20 feet.									
	820											
25												

Nathaniel Jones Early Learning Center Addition 7839 New Augusta Road Indianapolis, Indiana	Client Name	: Ms. Tracy Chariton, P.E.	Driller	: E. Thomas
	Project Number	: 25-0530-01G	Sampling	: Splitspoon
	Logged By	: L. Young	Approx. Elevation	: +/- 844 feet
	Start Date	: 05/28/2025	Latitude	: 39°53'43.29"N
	Drilling Method	: HSA	Longitude	: 86°14'8.60"W

Depth (Feet)	Elevation (Feet)	Water Level	USCS	GRAPHIC	Water Levels					REMARKS					
					▼ During Drilling - 10 feet	▽ After Completion - 5 feet	◆ After 24 Hours - N/A	Samples	Rec %		SPT Results	qp tsf	w %		
DESCRIPTION															
0	844				TOPSOIL (12")										
			CL		Brown, moist, medium stiff, SANDY CLAY with trace gravel and trace roots					1	67	3/3/4	18		
			CL		Brown, moist, stiff, SANDY CLAY and little gravel					2	67	2/3/8	18		
		▽	CL							3	83	3/5/13	18		
			CL		Brown, saturated, medium dense, fine to medium grained, SAND with trace gravel and trace silt					4	83	8/8/8			
		▼	SP-SM							5	67	8/9/10			
			CL		Grey and brown, slightly moist, stiff to very stiff, SANDY CLAY with trace gravel					6	83	9/6/8	2.8	10	
Boring terminated at 20 feet.															

Boring caved to 10 feet upon auger removal.



LOG OF BORING B-3

Nathaniel Jones Early Learning Center Addition
7839 New Augusta Road
Indianapolis, Indiana

Client Name : Ms. Tracy Chariton, P.E.
Project Number : 25-0530-01G
Logged By : L. Young
Start Date : 05/28/2025
Drilling Method : HSA

Driller : E. Thomas
Sampling : Splitspoon
Approx. Elevation : +/- 845 feet
Latitude : 39°53'43.86"N
Longitude : 86°14'8.06"W

Depth (Feet)	Elevation (Feet)	Water Level	USCS	GRAPHIC	DESCRIPTION	Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
0	845				TOPSOIL (12") Brown, moist, stiff to very stiff, SILTY CLAY with trace gravel and trace sand	1	83	3/3/5	2.3	24	
			CL			2	83	2/3/5	1.7	17	
5	840	▽			Grey and brown, saturated, loose, fine to medium grained, SAND with trace gravel and trace silt	3	44	2/4/6			
			SP-SM			4	83	4/4/6	2.0	14	
10	835	▼			Brown, slightly moist, stiff to very stiff, SANDY CLAY with little gravel	5	83	6/22/25		11	Boring caved to 14 feet upon auger removal.
			CL			6	33	8/13/15	1.4	10	
15	830				Grey, slightly moist, hard, SANDY CLAY, with some gravel						
			CL								
20	825				Grey and brown, slightly moist, stiff to very stiff, SANDY CLAY and gravel						
			CL								
25					Boring terminated at 20 feet.						



LOG OF BORING B-4

(Page 1 of 1)

Nathaniel Jones Early Learning Center Addition 7839 New Augusta Road Indianapolis, Indiana	Client Name	: Ms. Tracy Chariton, P.E.	Driller	: E. Thomas
	Project Number	: 25-0530-01G	Sampling	: Splitspoon
	Logged By	: L. Young	Approx. Elevation	: +/- 844 feet
	Start Date	: 05/28/2025	Latitude	: 39°53'43.59"N
	Drilling Method	: HSA	Longitude	: 86°14'7.37"W

Depth (Feet)	Elevation (Feet)	Water Level	USCS	GRAPHIC	Water Levels					REMARKS					
					▼	▽	◆	During Drilling - Dry	After Completion - Dry		After 24 Hours - 5 feet				
DESCRIPTION					Samples	Rec %	SPT Results	qp tsf	w %						
0	844				TOPSOIL (12")										
			CL		Brown, moist, stiff to very stiff, SILTY CLAY with trace gravel and trace sand					1	83	3/4/5	1.9	26	
			CL		Brown, moist, medium stiff, SILTY CLAY with trace gravel and trace sand					2	83	2/3/4		22	
5	839	◆	CL		Brown, slightly moist, stiff to very stiff, SANDY CLAY with trace gravel					3	83	3/6/7	4.2	8	
			CL		Brown, slightly moist, stiff to very stiff, SANDY CLAY with trace gravel					4	83	5/6/12		8	
10	834		CL		Brown, slightly moist, stiff to very stiff, SANDY CLAY with trace gravel					5	83	7/7/8	3.4	17	
			CL		Grey, slightly moist to moist, very stiff, SANDY CLAY with trace gravel					6	89	7/7/7	2.7	10	
15	829														
20	824				Boring terminated at 20 feet.										
25															

Boring caved to 17 feet upon auger removal.

06-13-2025 C:\Users\lyoung\Patriot_Engineering\GEO - Documents\Mtech\0530-01G\lb4_bor



LOG OF BORING B-5

Nathaniel Jones Early Learning Center Addition
7839 New Augusta Road
Indianapolis, Indiana

Client Name : Ms. Tracy Chariton, P.E.
Project Number : 25-0530-01G
Logged By : L. Young
Start Date : 05/28/2025
Drilling Method : HSA

Driller : E. Thomas
Sampling : Splitspoon
Approx. Elevation : +/- 844 feet
Latitude : 39°53'42.66"N
Longitude : 86°14'7.11"W

Depth (Feet)	Elevation (Feet)	Water Level	USCS	GRAPHIC	Water Levels					REMARKS					
					▼ During Drilling - Dry	▽ After Completion - Dry	◆ After 24 Hours - N/A	Samples	Rec %		SPT Results	qp tsf	w %		
DESCRIPTION															
0	844				TOPSOIL (12")										
			CL		Brown, moist, medium stiff to stiff, SILTY CLAY and gravel					1	67	4/4/5	0.8	24	
	840		CL		Grey and brown, very moist, medium stiff, SILTY CLAY with trace gravel					2	67	2/2/5		27	
	5		CL		Brown, slightly moist, very stiff to hard, SANDY CLAY with trace gravel					3	89	6/10/13	4.4	8	
	835		CL		Grey, slightly moist, very stiff to hard, SANDY CLAY with trace gravel					4	83	4/6/11	>6.0	8	
	10		CL												
	830		CL							5	83	5/10/16	>6.0	10	
	15														Boring caved to 15 feet upon auger removal.
	825		CL		Grey, slightly moist, stiff to very stiff, SANDY CLAY with little gravel					6	83	3/6/7	3.2	10	
	20		Boring terminated at 20 feet.												Groundwater was not encountered during drilling, nor upon completion.
	820														
	25														








LOG OF BORING B-6

Nathaniel Jones Early Learning Center Addition
7839 New Augusta Road
Indianapolis, Indiana

Client Name : Ms. Tracy Chariton, P.E.
Project Number : 25-0530-01G
Logged By : L. Young
Start Date : 05/29/2025
Drilling Method : HSA

Driller : E. Thomas
Sampling : Splitspoon
Approx. Elevation : +/- 845 feet
Latitude : 39°53'43.19"N
Longitude : 86°14'6.29"W

Depth (Feet)	Elevation (Feet)	Water Level	USCS	GRAPHIC	Water Levels					REMARKS					
					▼ During Drilling - Dry	▽ After Completion - Dry	◆ After 24 Hours - N/A	Samples	Rec %		SPT Results	qp tsf	w %		
DESCRIPTION															
0	845				TOPSOIL (12")										
			CL		Brown, moist, medium stiff to stiff, SILTY CLAY with trace gravel and trace sand					1	67	3/3/4	2.1	21	
5	840		CL		Brown, slightly moist, medium stiff, SANDY CLAY with little gravel					2	67	1/3/5	0.8	22	
			CL		Brown, slightly moist, medium stiff, SANDY CLAY with little gravel					3	56	2/4/4		7	
10	835		CL		Grey, slightly moist, stiff to very stiff, SANDY CLAY with trace to little gravel					4	67	4/5/7	3.2	10	
15	830		CL							5	67	5/5/7	4.5	11	
20	825				Boring terminated at 20 feet.					6	67	6/7/9	5.5	9	Boring caved to 17.5 feet upon auger removal.
25															Groundwater was not encountered during drilling, nor upon completion.








Nathaniel Jones Early Learning Center Addition
7839 New Augusta Road
Indianapolis, Indiana

Client Name : Ms. Tracy Chariton, P.E.
Project Number : 25-0530-01G
Logged By : L. Young
Start Date : 05/29/2025
Drilling Method : HSA

Driller : E. Thomas
Sampling : Splitspoon
Approx. Elevation : +/- 845 feet
Latitude : 39°53'43.70"N
Longitude : 86°14'5.72"W

Depth (Feet)	Elevation (Feet)	Water Level	USCS	GRAPHIC	Water Levels					REMARKS					
					▼ During Drilling - Dry	▽ After Completion - Dry	◆ After 24 Hours - N/A	Samples	Rec %		SPT Results	qp tsf	w %		
DESCRIPTION															
0	845				TOPSOIL (12")										
			FILL		FILL - Brown, slightly moist, very stiff to hard, SANDY CLAY with some gravel and brick					1	67	5/5/7	5.5	12	
					Brown, slightly moist, stiff to very stiff, SANDY CLAY with trace gravel					2	33	4/3/8	3.5	14	
5	840		CL						3	67	4/6/10	2.3	9		
					Grey, slightly moist, medium stiff, SANDY CLAY with trace gravel					4	67	4/3/4	0.6	12	
10	835		CL						5	67	3/3/5	0.5	11		
					Brown, slightly moist, hard, SANDY CLAY and gravel					6	33	12/25/33	-	10	
15	830														
20	825				Boring terminated at 20 feet.										Groundwater was not encountered during drilling, nor upon completion.
25															

Nathaniel Jones Early Learning Center Addition 7839 New Augusta Road Indianapolis, Indiana	Client Name	: Ms. Tracy Chariton, P.E.	Driller	: E. Thomas
	Project Number	: 25-0530-01G	Sampling	: Splitspoon
	Logged By	: L. Young	Approx. Elevation	: +/- 844 feet
	Start Date	: 05/29/2025	Latitude	: 39°53'43.28"N
	Drilling Method	: HSA	Longitude	: 86°14'4.81"W

Depth (Feet)	Elevation (Feet)	Water Level	USCS	GRAPHIC	Water Levels					REMARKS					
					▼ During Drilling - Dry	▽ After Completion - 12 feet	◆ After 24 Hours - N/A	Samples	Rec %		SPT Results	qp tsf	w %		
DESCRIPTION															
0	844				TOPSOIL (12")										
			CL		Brown, slightly moist to moist, stiff to very stiff, SANDY CLAY with little to some gravel					1	33	3/6/9	4.3	13	
5	839		CL		Grey and brown, slightly moist, stiff to very stiff, SANDY CLAY with little gravel					2	33	4/8/8		17	
			CL		Grey and brown, slightly moist, stiff to very stiff, SANDY CLAY with little gravel					3	33	3/9/6	2.5	10	
10	834		CL		Brown, slightly moist, hard, SANDY CLAY with trace gravel					4	44	6/7/11	>6.0	10	
		▽													
			CL		Grey, slightly moist, stiff to very stiff, SANDY CLAY with trace gravel					5	67	8/6/7	1.4	9	
15	829														Boring caved to 15 feet upon auger removal.
20	824				Boring terminated at 20 feet.					6	83	3/3/5	2.0	10	
25															



Nathaniel Jones Early Learning Center Addition
7839 New Augusta Road
Indianapolis, Indiana




Client Name : Ms. Tracy Chariton, P.E.
Project Number : 25-0530-01G
Logged By : L. Young
Start Date : 05/29/2025
Drilling Method : HSA

Driller : E. Thomas
Sampling : Splitspoon
Approx. Elevation : +/- 844 feet
Latitude : 39°53'42.64"N
Longitude : 86°14'5.27"W

Depth (Feet)	Elevation (Feet)	Water Level	USCS	GRAPHIC	Water Levels					REMARKS						
					▼ During Drilling - Dry	▽ After Completion - 15 feet	◆ After 24 Hours - N/A	Samples	Rec %		SPT Results	qp tsf	w %			
DESCRIPTION																
0	844				TOPSOIL (12")											
			CL		Brown, moist, medium stiff, SANDY CLAY with trace gravel					1	67	3/3/5	0.7	17		
	840		CL		Grey, moist, stiff to very stiff, SANDY CLAY with trace gravel and little sand					2	67	2/3/4	2.0	28		
5			SC		Grey and brown, moist, loose, CLAYEY SAND with little gravel					3	67	1/2/7	-	21		
	835		CL		Brown, slightly moist, medium stiff to stiff, SANDY CLAY with little gravel					4	67	3/3/5	1.0	11		
10			CL		Brown, slightly moist, medium stiff to stiff, SANDY CLAY with little gravel					4	67	3/3/5	1.0	11		
	830	▽	CL		Grey, slightly moist, stiff, SANDY CLAY with trace gravel					5	67	3/5/8	1.5	11		
15			CL		Grey, slightly moist, stiff, SANDY CLAY with trace gravel					5	67	3/5/8	1.5	11		
	825		CL		Grey, slightly moist, medium stiff to stiff, SANDY CLAY with trace gravel					6	67	4/5/7	0.8	12		
20			Boring terminated at 20 feet.													Boring caved to 17 feet upon auger removal.
	820															
25																





LOG OF BORING B-10

Nathaniel Jones Early Learning Center Addition 7839 New Augusta Road Indianapolis, Indiana	Client Name	: Ms. Tracy Chariton, P.E.	Driller	: E. Thomas
	Project Number	: 25-0530-01G	Sampling	: Splitspoon
	Logged By	: L. Young	Approx. Elevation	: +/- 844 feet
	Start Date	: 05/29/2025	Latitude	: 39°53'42.15"N
	Drilling Method	: HSA	Longitude	: 86°14'3.88"W

Depth (Feet)	Elevation (Feet)	Water Level	USCS	GRAPHIC	Water Levels					REMARKS	
					▼ During Drilling - 7.5 feet	▽ After Completion - 6 feet	◆ After 24 Hours - N/A	Samples	Rec %		SPT Results
DESCRIPTION											
0	844				TOPSOIL (12")						
			CL		Grey, moist to very moist, medium stiff to stiff, SILTY CLAY with trace gravel	1	44	2/3/4	1.5	22	
5		▽				2	33	4/4/4	0.8	28	
		▼	SP-SM		Brown, saturated, loose, fine to medium grained, SAND with trace silt and little gravel	3	44	4/4/5			Boring caved to 7 feet upon auger removal.
10	835		CL		Grey, slightly moist, stiff, SANDY CLAY with little gravel	4	44	4/4/5	1.0	10	
					Boring terminated at 10 feet.						
15	830										
20	825										
25	820										

LOG OF BORING B-11

Nathaniel Jones Early Learning Center Addition 7839 New Augusta Road Indianapolis, Indiana	Client Name	: Ms. Tracy Chariton, P.E.	Driller	: E. Thomas
	Project Number	: 25-0530-01G	Sampling	: Splitspoon
	Logged By	: L. Young	Approx. Elevation	: +/- 845 feet
	Start Date	: 05/29/2025	Latitude	: 39°53'44.79"N
	Drilling Method	: HSA	Longitude	: 86°14'4.23"W

Depth (Feet)	Elevation (Feet)	Water Level	USCS	GRAPHIC	Water Levels					REMARKS					
					▼ During Drilling - Dry	▽ After Completion - Dry	◆ After 24 Hours - N/A	Samples	Rec %		SPT Results	qp tsf	w %		
DESCRIPTION															
0	845				TOPSOIL (12")										
			SC		Brown, slightly moist, loose, CLAYEY SAND with little gravel					1	33	4/4/4		15	
			CL		Brown, moist, medium stiff to stiff, SANDY CLAY with trace gravel					2	33	3/4/5	0.7	21	
5	840		CL		Brown, slightly moist, very stiff to hard, SANDY CLAY with little gravel					3	83	5/7/9	4.4	11	
			SC		Brown, slightly moist, medium dense, CLAYEY SAND with little gravel					4	67	5/8/10			
10	835		Boring terminated at 10 feet.												Groundwater was not encountered during drilling, nor upon completion.
15	830														
20	825														
25															



PATRIOT ENGINEERING
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Indianapolis, Terre Haute, Evansville,
Fort Wayne, Lafayette, Bloomington
Louisville, KY Dayton, Cincinnati, OH

LOG OF BORING B-12

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Nathaniel Jones Early Learning Center Addition
7839 New Augusta Road
Indianapolis, Indiana

Client Name : Ms. Tracy Chariton, P.E.
Project Number : 25-0530-01G
Logged By : L. Young
Start Date : 05/29/2025
Drilling Method : HSA

Driller : E. Thomas
Sampling : Splitspoon
Approx. Elevation : +/- 844 feet
Latitude : 39°53'47.67"N
Longitude : 86°14'4.48"W

Depth (Feet)	Elevation (Feet)	Water Level	USCS	GRAPHIC	Water Levels					REMARKS					
					▼ During Drilling - Dry	▽ After Completion - Dry	◆ After 24 Hours - N/A	Samples	Rec %		SPT Results	qp tsf	w %		
DESCRIPTION															
0	844				TOPSOIL (12")										
			CL		Brown, slightly moist, stiff to very stiff, SANDY CLAY with trace gravel					1	56	3/3/4	2.5	10	
	840		CL		Grey and brown, slightly moist, stiff to very stiff, SANDY CLAY with trace gravel					2	67	4/3/5	5.0	11	
			CL							3	56	3/4/6		11	
	835		CL		Grey and brown, moist, stiff, SANDY CLAY with some gravel					4	67	4/4/6		23	
10			Boring terminated at 10 feet.												Boring caved to 8 feet upon auger removal.
															Groundwater was not encountered during drilling, nor upon completion.
	830														
15															
	825														
20															
	820														
25															



LOG OF BORING B-13

Nathaniel Jones Early Learning Center Addition
7839 New Augusta Road
Indianapolis, Indiana

Client Name : Ms. Tracy Chariton, P.E.
Project Number : 25-0530-01G
Logged By : L. Young
Start Date : 05/29/2025
Drilling Method : HSA

Driller : E. Thomas
Sampling : Splitspoon
Approx. Elevation : +/- 848 feet
Latitude : 39°53'47.41"N
Longitude : 86°14'9.53"W

Depth (Feet)	Elevation (Feet)	Water Level	USCS	GRAPHIC	Water Levels					REMARKS					
					▼ During Drilling - Dry	▽ After Completion - Dry	◆ After 24 Hours - N/A	Samples	Rec %		SPT Results	qp tsf	w %		
DESCRIPTION															
0	848				TOPSOIL (12")										
			CL		Grey and brown, moist, stiff, SILTY CLAY with trace gravel and trace sand					1	56	3/4/5	1.6	21	
845			CL		Brown, moist, stiff, SILTY CLAY with trace sand and some gravel					2	67	3/3/5	1.2	24	
5			CL		Grey and brown, moist, medium stiff, SILTY CLAY with trace sand					3	67	3/4/5	0.5	23	
840			CL							4	67	4/4/4	0.8	22	Boring caved to 8 feet upon auger removal.
10					Boring terminated at 10 feet.										Groundwater was not encountered during drilling, nor upon completion.
835															
15															
830															
20															
825															
25															

BORING LOG KEY

UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) FIELD CLASSIFICATION SYSTEM FOR SOIL EXPLORATION

NON-COHESIVE SOILS (Silt, Sand, Gravel, and Combinations)

Density	Field Identification (SPT Blows/ft)	Grain Size Terminology		
		<u>Soil Fraction</u>	<u>Particle Size</u>	<u>US Standard Sieve Size</u>
Very Loose	0 - 4	Boulders	> 12 inches	> 12 inches
Loose	5 - 10	Cobbles	3 - 12 inches	3 - 12 inches
Medium Dense	11 - 30	Gravel: Coarse	¾ - 3 inches	¾ - 3 inches
Dense	31 - 50	Small	4.76 mm - ¾ inch	No. 4 - ¾ inches
Very Dense	> 51	Sand: Coarse	2.00 - 4.76 mm	No. 10 - No. 4
		Medium	0.42 - 2.00 mm	No. 40 - No. 10
		Fine	0.074 - 0.42 mm	No. 200 - No. 40
		Silt	0.005 - 0.074 mm	< No. 200
		Clay	< 0.005 mm	< No. 200

RELATIVE PROPORTIONS FOR SOILS

<u>Descriptive Term</u>	<u>Percent</u>
Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

COHESIVE SOILS (Clay, Silt and Combinations)

<u>Consistency</u>	<u>Unconfined Compressive Strength (tons/ft²)</u>	<u>Field Identification (SPT Blows/ft)</u>
Very Soft	Less than 0.25	0 - 2
Soft	0.25 - < 0.5	3 - 4
Medium Stiff	0.5 - < 1.0	5 - 8
Stiff	1.0 - < 2.0	9 - 15
Very Stiff	2.0 - < 4.0	16 - 30
Hard	Over 4.0	> 30

Classification: Provided on Boring Logs are made by visual inspection.

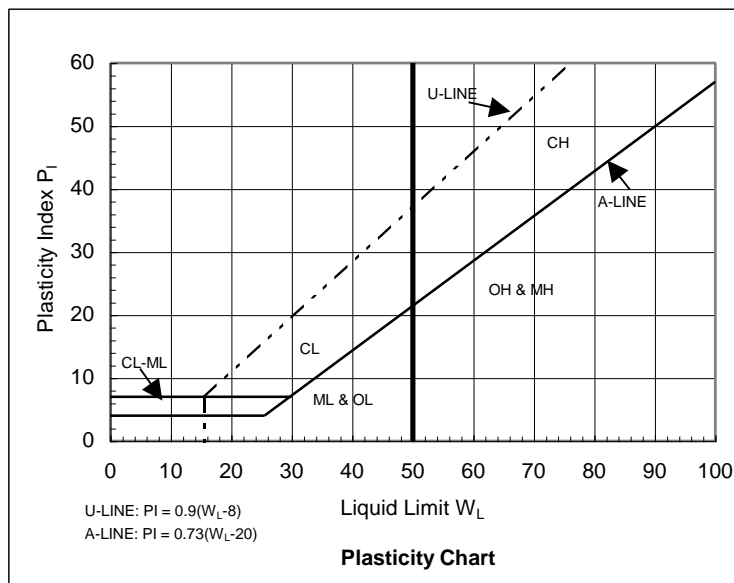
Standard Penetration Test: Driving a 2 inch outer-diameter (O.D.) by 1½ inch inner-diameter (I.D.) split-spoon sampler a total of 18 inches into undisturbed soil with the number of blows of a 140 pound hammer free-falling a distance of 30 inches recorded for each 6 inches of penetration. The sum of blows for the final 12 inches of penetration is the Standard Penetration Test result commonly referred to as the "N"-value (or blow-count).

Strata Changes: In the column "Descriptions" on the Boring Logs the horizontal lines represent strata changes. A solid line (——) represents an observed change, a dashed line (- - - -) represents an estimated change.

Groundwater: Observations were made at the times indicated on the Boring Logs. Fluctuations in the groundwater level should be expected over time due to variations in rainfall and other environmental or physical factors. *Groundwater symbols:* (▼)-observed groundwater level and/or elevation during drilling; (▽)-observed groundwater level and/or elevation upon completion of boring.

Unified Soil Classification System (USCS)

Major Divisions		Group Symbol	Typical Names	Classification Criteria for Coarse-Grained Soils				
Coarse-grained soils (more than half of material is larger than No. 200)	Gravels (more than half of coarse fraction is larger than No. 4 sieve size)	Clean gravels (little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines	$C_u \geq 4$ $1 \leq C_c \leq 3$	$C_u = \frac{D_{60}}{D_{10}}$	$C_c = \frac{D_{30}^2}{D_{10} D_{60}}$	
		GP	Poorly graded gravels, gravel-sand mixtures, little or no fines	Not meeting all gradation requirements for GW ($C_u < 4$ or $1 > C_c > 3$)				
		Gravels with fines (appreciable amount of fines)	GM	$\frac{U}{d}$	Silty gravels, gravel-sand-silt mixtures	Atterberg limits below A line or $P_l < 4$		Above A line with $4 < P_l < 7$ are borderline cases requiring use of dual symbols
			GC	Clayey gravels, gravel-sand-clay mixtures	Atterberg limits above A line or $P_l > 7$			
	Sands (more than half of coarse fraction is smaller than No. 4 sieve size)	Clean sands (little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines	$C_u \geq 6$ $1 \leq C_c \leq 3$	$C_u = \frac{D_{60}}{D_{10}}$	$C_c = \frac{(D_{30})^2}{D_{10} D_{60}}$	
			SP	Poorly graded sands, gravelly sands, little or no fines	Not meeting all gradation requirements for SW ($C_u < 6$ or $1 > C_c > 3$)			
		Sands with fines (appreciable amount of fines)	SM	$\frac{U}{d}$	Silty sands, sand-silt mixtures	Atterberg limits below A line or $P_l < 4$		Limits plotting in hatched zone with $4 \leq P_l \leq 7$ are borderline cases requiring use of dual symbols
			SC	Clayey sands, sand-clay mixtures	Atterberg limits above A line with $P_l > 7$			
	Fine-grained soils (more than half of material is smaller than No. 200)	Silt and clays (liquid limit <50)	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity	<ol style="list-style-type: none"> Determine percentages of sand and gravel from grain size curve. Depending on percentages of fines (fraction smaller than 200 sieve size), coarse-grained soils are classified as follows: Less than 5% - GW, GP, SW, SP More than 12% - GM, GC, SM, SC 5-12% - Borderline cases requiring dual symbols 			
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays				
OL			Organic silts and organic silty clays of low plasticity					
Silt and clays (liquid limit >50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts					
		CH	Inorganic clays or high plasticity, fat clays					
		OH	Organic clays of medium to high plasticity, organic silts					
Highly organic soils		PT	Peat and other highly organic soils					



APPENDIX B

FLEXIBLE STANDARD DUTY PAVEMENT DESIGN

WinPAS

Pavement Thickness Design According to
1993 AASHTO Guide for Design of Pavements Structures
American Concrete Pavement Association

Flexible Design Inputs

Project Name: Nathaniel Jones Early Learning Center Additions
Route: 7839 New Augusta Road
Location: Indianapolis, Indiana
Owner/Agency:
Design Engineer:

Flexible Pavement Design/Evaluation

Structural Number	3.04	Subgrade Resilient Modulus	4,500.00 psi
Total Flexible ESALs	200,000	Initial Serviceability	4.20
Reliability	80.00 percent	Terminal Serviceability	2.50
Overall Standard Deviation	0.45		

Layer Pavement Design/Evaluation

Layer Material	Layer Coefficient	Drainage Coefficient	Layer Thickness	Layer SN
Asphalt Cement Concrete	0.39	1.00	1.50	0.58
Asphalt Cement Concrete	0.36	1.00	4.50	1.62
Crushed Stone Base	0.14	1.00	6.00	0.84
			Σ SN	3.04

APPENDIX C

SEISMIC SITE CLASS EVALUATION



Latitude, Longitude: 39.89541491, -86.23521593



Date	6/17/2025, 8:04:58 PM
Design Code Reference Document	IBC-2012
Risk Category	II
Site Class	A

Type	Value	Description
S_S	0.154	MCE_R ground motion. (for 0.2 second period)
S_1	0.084	MCE_R ground motion. (for 1.0s period)
S_{MS}	0.124	Site-modified spectral acceleration value
S_{M1}	0.067	Site-modified spectral acceleration value
S_{DS}	0.082	Numeric seismic design value at 0.2 second SA
S_{D1}	0.045	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	A	Seismic design category
F_a	0.8	Site amplification factor at 0.2 second
F_v	0.8	Site amplification factor at 1.0 second
PGA	0.071	MCE_G peak ground acceleration
F_{PGA}	0.8	Site amplification factor at PGA
PGA_M	0.057	Site modified peak ground acceleration
T_L	12	Long-period transition period in seconds
S_{sRT}	0.154	Probabilistic risk-targeted ground motion. (0.2 second)
S_{sUH}	0.17	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
S_{sD}	1.5	Factored deterministic acceleration value. (0.2 second)
S_{1RT}	0.084	Probabilistic risk-targeted ground motion. (1.0 second)
S_{1UH}	0.097	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S_{1D}	0.6	Factored deterministic acceleration value. (1.0 second)
$PGAd$	0.6	Factored deterministic acceleration value. (Peak Ground Acceleration)
PGA_{UH}	0.071	Uniform-hazard (2% probability of exceedance in 50 years) Peak Ground Acceleration
C_{RS}	0.909	Mapped value of the risk coefficient at short periods

Type	Value	Description
C_{R1}	0.865	Mapped value of the risk coefficient at a period of 1 s
C_V		Vertical coefficient

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APPENDIX D

GENERAL QUALIFICATIONS

STANDARD CLAUSE FOR UNANTICIPATED SUBSURFACE
CONDITIONS

GENERAL QUALIFICATIONS
of Patriot Engineering's Geotechnical Engineering Investigation

This report has been prepared at the request of our client for his use on this project. Our professional services have been performed, findings obtained, and recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties either expressed or implied.

The scope of our services did not include any environmental assessment or investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, groundwater, or surface water within or beyond the site studied. Any statements in this report or on the test borings logs regarding vegetation types, odors or staining of soils, or other unusual conditions observed are strictly for the information of our client and the owner.

This report may not contain sufficient information for purposes of other parties or other uses. This company is not responsible for the independent conclusions, opinions or recommendations made by others based on the field and laboratory data presented in this report. Should there be any significant differences in structural arrangement, loading or location of the structure, our analysis should be reviewed.

The recommendations provided herein were developed from the information obtained in the test borings, which depict subsurface conditions only at specific locations. The analysis, conclusions, and recommendations contained in our report are based on site conditions as they existed at the time of our exploration. Subsurface conditions at other locations may differ from those occurring at the specific drill sites. The nature and extent of variations between borings may not become evident until the time of construction. If, after performing on-site observations during construction and noting the characteristics of any variation, substantially different subsurface conditions from those encountered during our explorations are observed or appear to be present beneath excavations, we must be advised promptly so that we can review these conditions and reconsider our recommendations where necessary.

If there is a substantial lapse of time between the submission of our report and the start of work at the site, or if conditions have changed due to natural causes or construction operations at or adjacent to the site, we urge that our report be reviewed to determine the applicability of the conclusions and recommendations considering the changed conditions and time lapse.

We urge that Patriot be retained to review those portions of the plans and specifications that pertain to earthwork and foundations to determine whether they are consistent with our recommendations. In addition, we are available to observe construction, particularly the compaction of structural backfill and preparation of the foundations, and such other field observations as may be necessary.

In order to fairly consider changed or unexpected conditions that might arise during construction, we recommend the following verbiage (Standard Clause for Unanticipated Subsurface Conditions) be included in the project contract.

STANDARD CLAUSE FOR UNANTICIPATED SUBSURFACE CONDITIONS

"The owner has had a subsurface exploration performed by a soils consultant, the results of which are contained in the consultant's report. The consultant's report presents his conclusions on the subsurface conditions based on his interpretation of the data obtained in the exploration. The contractor acknowledges that he has reviewed the consultant's report and any addenda thereto, and that his bid for earthwork operations is based on the subsurface conditions as described in that report. It is recognized that a subsurface exploration may not disclose all conditions as they actually exist and further, conditions may change, particularly groundwater conditions, between the time of a subsurface exploration and the time of earthwork operations. In recognition of these facts, this clause is entered in the contract to provide a means of equitable additional compensation for the contractor if adverse unanticipated conditions are encountered and to provide a means of rebate to the owner if the conditions are more favorable than anticipated.

At any time during construction operations that the contractor encounters conditions that are different than those anticipated by the soils consultant's report, he shall immediately (within 24 hours) bring this fact to the owner's attention. If the owner's representative on the construction site observes subsurface conditions which are different than those anticipated by the consultant's report, he shall immediately (within 24 hours) bring this fact to the contractor's attention. Once a fact of unanticipated conditions has been brought to the attention of either the owner or the contractor, and the consultant has concurred, immediate negotiations will be undertaken between the owner and the contractor to arrive at a change in contract price for additional work or reduction in work because of the unanticipated conditions. The contract agrees that the following unit prices would apply for additional or reduced work under the contract. For changed conditions for which unit prices are not provided, the additional work shall be paid for on a time and materials basis."

Another example of a changed conditions clause can be found in paper No. 4035 by Robert F. Borg, published in ASCE Construction Division Journal, No. CO2, September 1964, page 37.

SECTION 00 31 13 – PROJECT SCHEDULE

1.1 PROJECT SCHEDULE

- A. This Document with its referenced attachments is part of the Procurement and Contracting Requirements for Project. They provide the Owner’s information for Bidders’ convenience and are intended to supplement rather than to serve in lieu of Bidders’ own investigations. They are made available for Bidders’ convenience and information but do not affect Contract Time requirements. This document and its attachments are part of the Contract Documents.
- B. Available Project information includes the following:
 - 1. 00 31 13a Schedule – Pike ELC Schedule
 - 2. 00 31 13b Schedule – Pike ELC Site Logistics Plan
- C. The project schedule, including design and construction milestones, is included in the bid documents. The Contractor’s Project Schedule is attached to this Section.
- D. Bidders are to include the following within their proposal:
 - 1. All required multiple shifts, overtime, and crew changes as required to meet the project schedule. Bidder acknowledges that a one-day duration on the schedule is equal to as many hours within the workday required to maintain the project schedule.
 - 2. Inspections must be scheduled to take place during the municipalities’ standard working hours with 72 hours advanced notice. The Subcontractor is responsible for scheduling all inspections pertaining to their scope of work; schedule inspections to ensure that the Subcontract is maintaining the project schedule.
 - 3. The Subcontractor has 72 hours from issuance of Subcontract via DocuSign to execute and return to Construction Manager in order to maintain the project schedule.
- E. Related Requirements:
 - 1. Section 01 10 00 “Summary” for phased construction requirements.

END OF SECTION 00 31 13



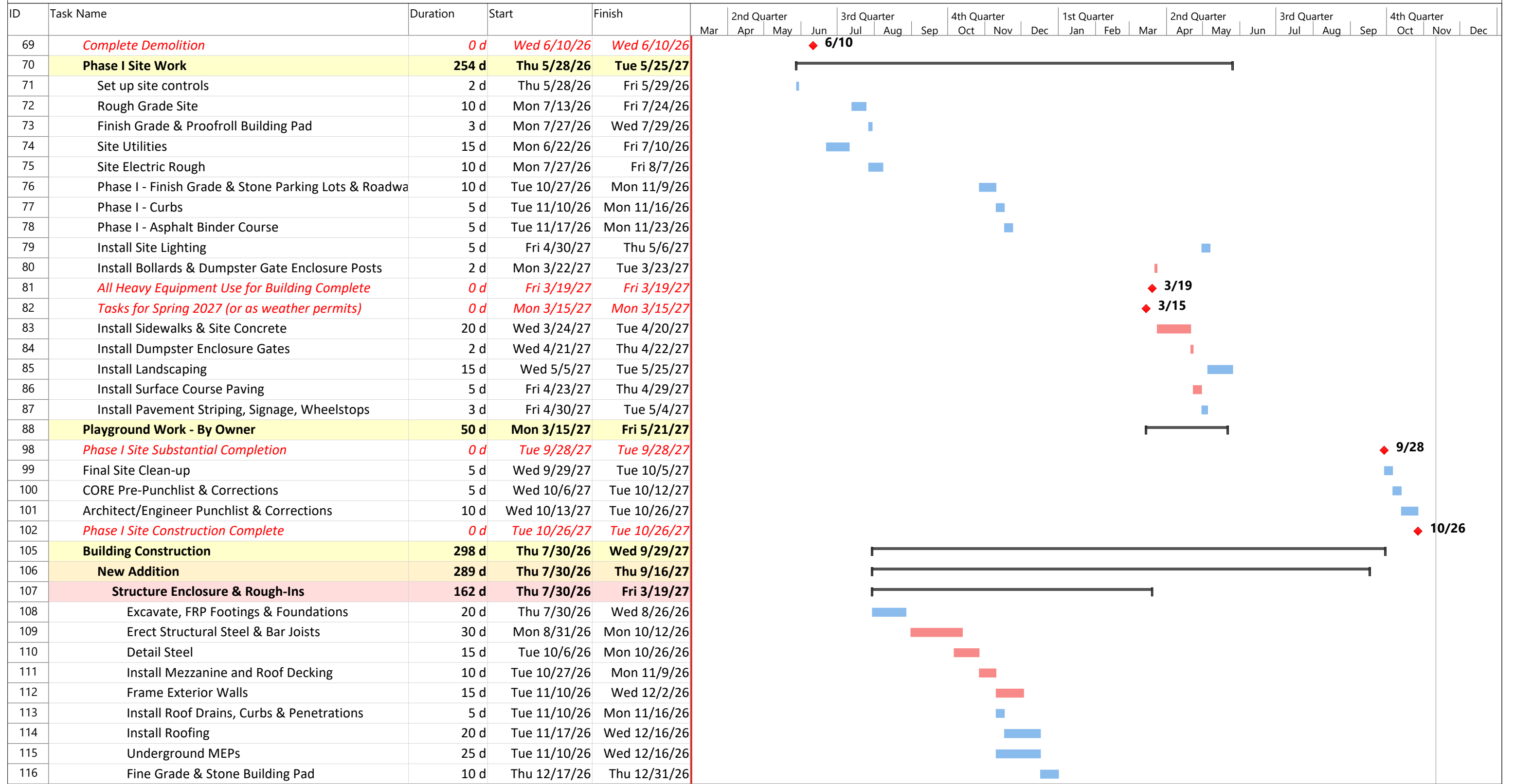
PIKE - NJ Early Learning Center
PRELIMINARY BID SCHEDULE

ID	Task Name	Duration	Start	Finish	2nd Quarter												3rd Quarter			4th Quarter			1st Quarter			2nd Quarter			3rd Quarter			4th Quarter																				
					Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec														
0	PIKE - NJ Early Learning Center	426 d	Fri 3/13/26	Wed 11/10/27																																																
1	Preconstruction	50 d	Fri 3/13/26	Thu 5/21/26																																																
2	Public Bid Process - Early Bid Package(s)	15 d	Fri 3/13/26	Thu 4/2/26																																																
3	<i>Public Bid Opening</i>	<i>0 d</i>	<i>Thu 4/2/26</i>	<i>Thu 4/2/26</i>																																																
4	Bid Scope Reviews	7 d	Fri 4/3/26	Mon 4/13/26																																																
5	Letter of Recommendation to Owner	1 d	Tue 4/14/26	Tue 4/14/26																																																
6	Owner Approval of Contracts	7 d	Wed 4/15/26	Thu 4/23/26																																																
7	Trade Partner Contracts	5 d	Fri 4/24/26	Thu 4/30/26																																																
8	<i>Receive Final Construction Documents</i>	<i>1 d</i>	<i>Fri 3/13/26</i>	<i>Fri 3/13/26</i>																																																
9	1st Public Notice	1 d	Tue 4/7/26	Tue 4/7/26																																																
10	Pre-Bid Meeting - Final Bid Package	2 d	Wed 4/8/26	Thu 4/9/26																																																
11	2nd Public Notice	5 d	Wed 4/8/26	Tue 4/14/26																																																
12	Public Bid Process - Final Bid Package (s)	12 d	Wed 4/8/26	Thu 4/23/26																																																
13	<i>Public Bid Opening - Final Bid Package (s)</i>	<i>0 d</i>	<i>Thu 4/23/26</i>	<i>Thu 4/23/26</i>																																																
14	Bid Scope Reviews	5 d	Fri 4/24/26	Thu 4/30/26																																																
15	Letter of Recommendation to Owner	3 d	Thu 4/30/26	Mon 5/4/26																																																
16	Owner Approval of Contracts	8 d	Tue 5/5/26	Thu 5/14/26																																																
17	<i>MSC Board Meeting Approval</i>	<i>0 d</i>	<i>Thu 5/14/26</i>	<i>Thu 5/14/26</i>																																																
18	Trade Partner Contracts	5 d	Fri 5/15/26	Thu 5/21/26																																																
19	<i>Preconstruction Complete</i>	<i>1 d</i>	<i>Fri 5/22/26</i>	<i>Fri 5/22/26</i>																																																
20	Permitting	50 d	Mon 3/16/26	Fri 5/22/26																																																
21	State Design Release	30 d	Mon 3/16/26	Fri 4/24/26																																																
22	City of Indianapolis Drainage Permit	45 d	Mon 3/16/26	Fri 5/15/26																																																
23	Demolition Permit	5 d	Fri 5/1/26	Thu 5/7/26																																																
24	Building Permit	25 d	Mon 4/20/26	Fri 5/22/26																																																
25	<i>Permitting Complete</i>	<i>0 d</i>	<i>Fri 5/22/26</i>	<i>Fri 5/22/26</i>																																																
26	Procurement	150 d	Fri 5/1/26	Wed 12/2/26																																																
27	Submittals	30 d	Fri 5/1/26	Fri 6/12/26																																																
39	Deferred Submittals	30 d	Fri 5/1/26	Fri 6/12/26																																																
44	Submittal Reviews	30 d	Fri 5/15/26	Fri 6/26/26																																																
53	Long Lead Materials	130 d	Mon 6/1/26	Wed 12/2/26																																																
63	<i>Procurement Complete</i>	<i>0 d</i>	<i>Wed 12/2/26</i>	<i>Wed 12/2/26</i>																																																
64	Phase I Project Construction	364 d	Fri 5/22/26	Tue 10/26/27																																																
65	Phase I Site Demolition	12 d	Fri 5/22/26	Wed 6/10/26																																																
66	<i>CORE Contracted Work Begins</i>	<i>0 d</i>	<i>Fri 5/22/26</i>	<i>Fri 5/22/26</i>																																																
67	Establish Site Boundaries / Limits of Disturbance	2 d	Tue 5/26/26	Wed 5/27/26																																																
68	Demo Existing Site Improvements	10 d	Thu 5/28/26	Wed 6/10/26																																																

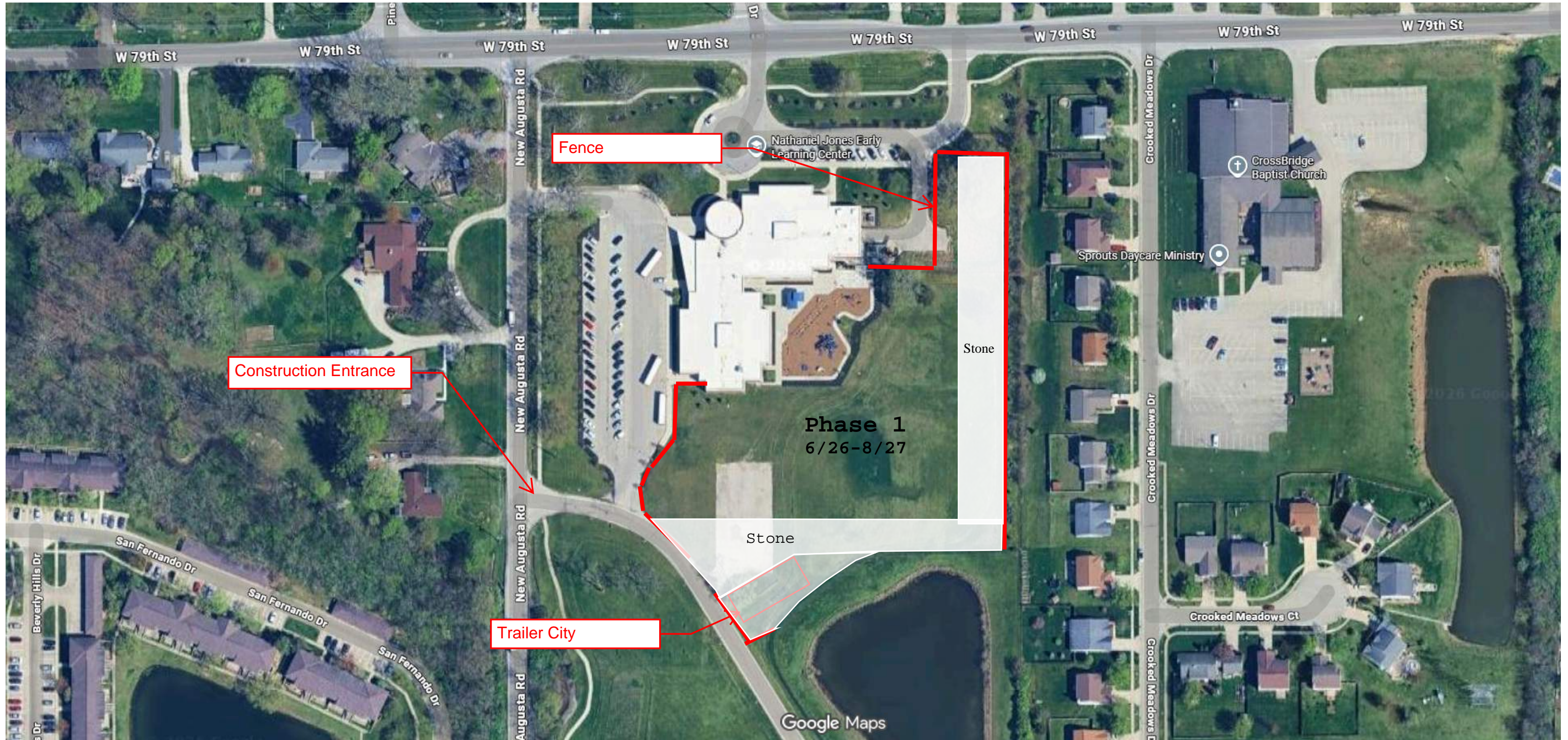
Task Milestone Summary Project Summary Deadline Critical Progress



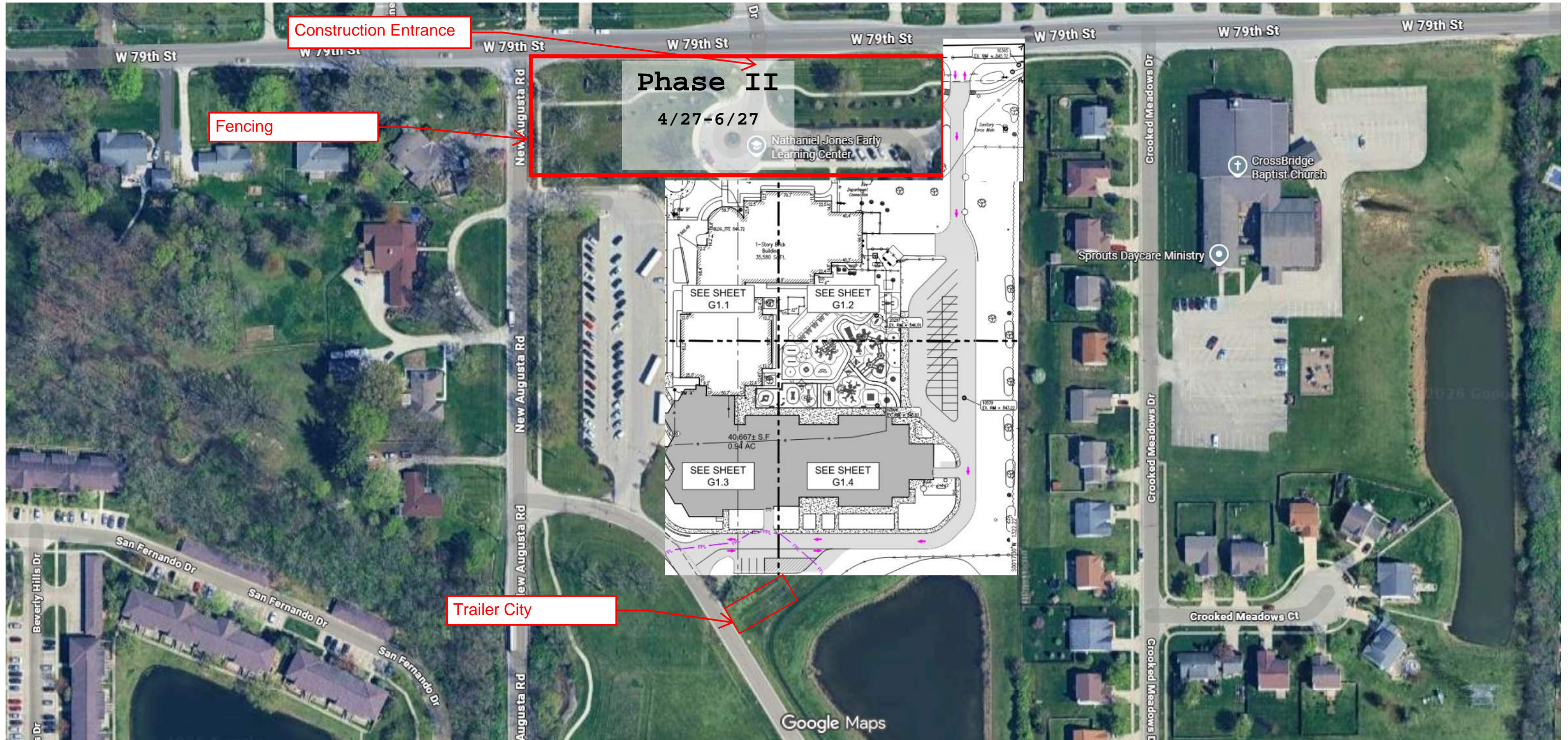
PIKE - NJ Early Learning Center
PRELIMINARY BID SCHEDULE



Task █ Milestone ◆ Summary Project Summary Deadline ↓ Critical █ Progress █

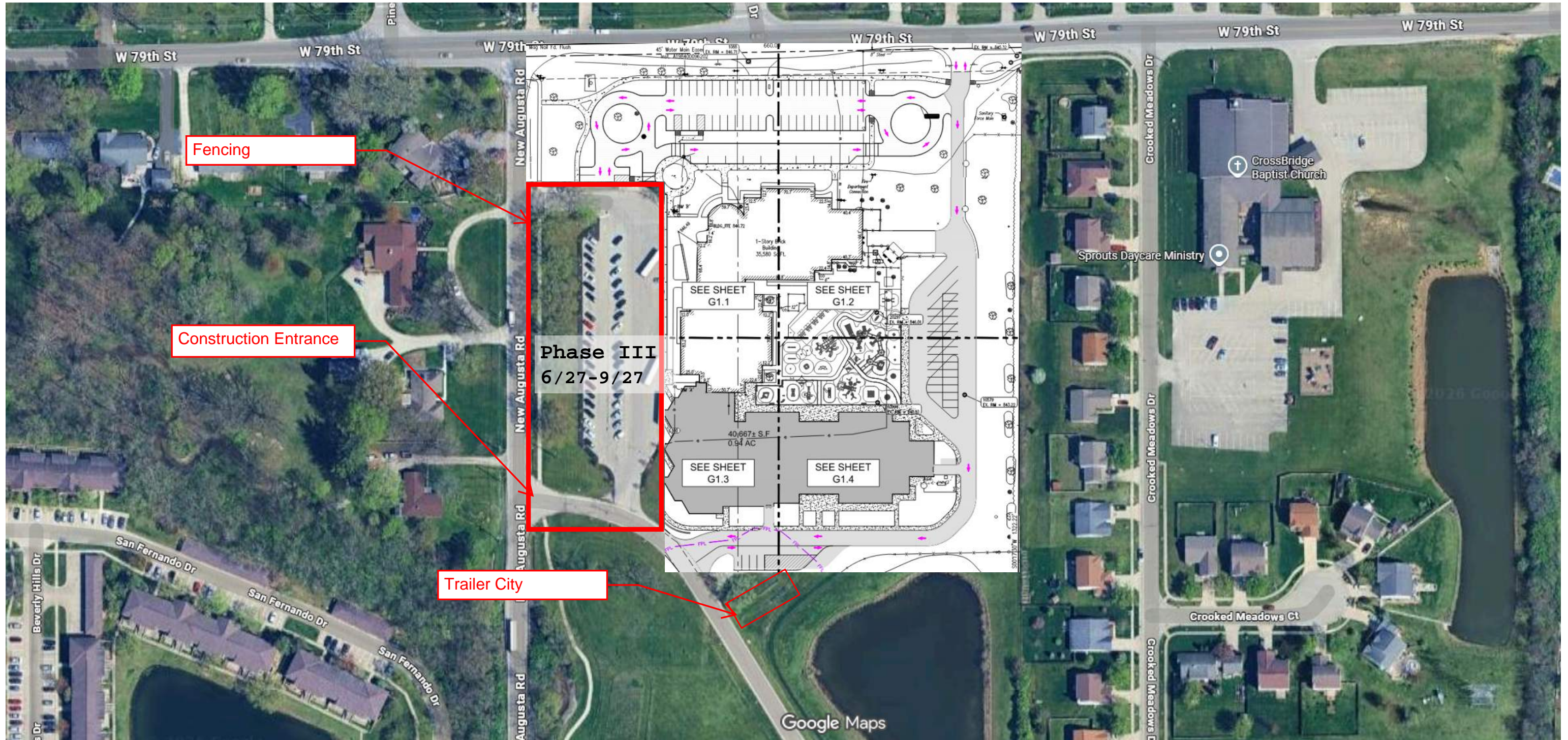


Site Logistics Plan



Imagery ©2026 Airbus, Maxar Technologies, Map data ©2026 Google 100 ft

Site Logistics Plan



Imagery ©2026 Airbus, Maxar Technologies, Map data ©2026 Google 100 ft

Site Logistics Plan



CONTRACTOR'S BID FOR PUBLIC WORK - FORM 96

State Form 52414 (R2 / 2-13) / Form 96 (Revised 2013)

Prescribed by State Board of Accounts

PART I

(To be completed for all bids. Please type or print)

Date (month, day, year): _____

1. Governmental Unit (Owner): _____

2. County : _____

3. Bidder (Firm): _____

Address: _____

City/State/ZIPcode: _____

4. Telephone Number: _____

5. Agent of Bidder (if applicable): _____

Pursuant to notices given, the undersigned offers to furnish labor and/or material necessary to complete the public works project of _____

(Governmental Unit) in accordance with plans and specifications prepared by _____

_____ and dated _____ for the sum of

_____ \$ _____

The undersigned further agrees to furnish a bond or certified check with this bid for an amount specified in the notice of the letting. If alternative bids apply, the undersigned submits a proposal for each in accordance with the notice. Any addendums attached will be specifically referenced at the applicable page.

If additional units of material included in the contract are needed, the cost of units must be the same as that shown in the original contract if accepted by the governmental unit. If the bid is to be awarded on a unit basis, the itemization of the units shall be shown on a separate attachment.

The contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS

(If applicable)

I, the undersigned bidder or agent as a contractor on a public works project, understand my statutory obligation to use steel products made in the United States (I.C. 5-16-8-2). I hereby certify that I and all subcontractors employed by me for this project will use U.S. steel products on this project if awarded. I understand that violations hereunder may result in forfeiture of contractual payments.

ACCEPTANCE

The above bid is accepted this _____ day of _____, _____, subject to the following conditions: _____

Contracting Authority Members:

PART II (For projects of \$150,000 or more – IC 36-1-12-4)

Governmental Unit: _____

Bidder (Firm) _____

Date (month, day, year): _____

These statements to be submitted under oath by each bidder with and as a part of his bid. Attach additional pages for each section as needed.

SECTION I EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed for the period of one (1) year prior to the date of the current bid?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

2. What public works projects are now in process of construction by your organization?

Contract Amount	Class of Work	Expected Completion Date	Name and Address of Owner

3. Have you ever failed to complete any work awarded to you? _____ If so, where and why?

4. List references from private firms for which you have performed work.

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed work. *(Examples could include a narrative of when you could begin work, complete the project, number of workers, etc. and any other information which you believe would enable the governmental unit to consider your bid.)*

2. Please list the names and addresses of all subcontractors *(i.e. persons or firms outside your own firm who have performed part of the work)* that you have used on public works projects during the past five (5) years along with a brief description of the work done by each subcontractor.

3. If you intend to sublet any portion of the work, state the name and address of each subcontractor, equipment to be used by the subcontractor, and whether you will require a bond. However, if you are unable to currently provide a listing, please understand a listing must be provided prior to contract approval. Until the completion of the proposed project, you are under a continuing obligation to immediately notify the governmental unit in the event that you subsequently determine that you will use a subcontractor on the proposed project.

4. What equipment do you have available to use for the proposed project? Any equipment to be used by subcontractors may also be required to be listed by the governmental unit.

5. Have you entered into contracts or received offers for all materials which substantiate the prices used in preparing your proposal? If not, please explain the rationale used which would corroborate the prices listed.

SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of bidder's financial statement is mandatory. Any bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the contract must be specific enough in detail so that said governing body can make a proper determination of the bidder's capability for completing the project if awarded.

SECTION 00 41 00b - Bid Form 2 of 3
SUPPLEMENTAL BID FORM to FORM 96:

1. BID FORM

1.1 DESCRIPTION

- A. This form shall be used as a supplement to Indiana State Form 96 (2013), and shall be included by all bidders, within their sealed bid envelopes.
- B. The following documents shall be included with each Bidders Proposal to qualify as a responsible bid.
 - 1. FORM 96 (rev. 2013)
 - 2. Supplemental Bid Form to FORM 96 (BID FORM 2 OF 3)
 - 3. Section IV Contractor's Non-Collusion Affidavit
 - 4. 5% Bid Bond

1.2 BID INFORMATION

- A. **Bidding Subcontractor:** _____.
- B. **Project Name:** Nathaniel Jones Early Learning Center – Addition and Renovation
- C. **Project Location:** 7839 New Augusta Rd., Indianapolis, IN 46268
- D. **Owner:** MSD of Pike Township Schools
- E. **Architect:** Fanning Howey Associates Inc.
- F. **Architect Project Number:** 225036.00
- G. **Construction Manager:** CORE Construction
- H. **Construction Manager Project Number:** 25-10-913

1.3 BID PACKAGES

- A. The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by Architect and the Architect's consultants, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment, and services for the following bid package (**check only the applicable bid package, limit 1 bid package per bid form**), including all scheduled allowances, necessary to complete the construction of above-named Project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:

- Bid Package 01 – GENERAL TRADES**
- Bid Package 03 – ASPHALT PAVING**
- Bid Package 04 – LANDSCAPING**
- Bid Package 09 – ARCHITECTURAL CASEWORK**
- Bid Package 11 – ALUMINUM STOREFRONT & GLAZING**
- Bid Package 12 – METAL STUDS, DRYWALL & CEILINGS**
- Bid Package 13 – SOFT FLOORING**
- Bid Package 14 – HARD FLOORING**
- Bid Package 15 – PAINTING**
- Bid Package 17 – FOOD SERVICE EQUIPMENT**
- Bid Package 19 – FIRE PROTECTION**

1.4 BID PACKAGE BASE BID TOTAL

_____ Dollars (\$ _____)

The above base bid amount may be modified by the amounts indicated by the Bidder for Alternates.

Note bidders submitting on multiple bid packages must do so with **separate bid forms** for each bid package.

1.5 BID GUARANTEE

- A. The undersigned Bidder agrees to execute a contract for this Work in the above amount and to furnish surety as specified within **10** days after a written Notice of Award, if offered within **60** days after receipt of bids, and on failure to do so agrees to forfeit to Owner the attached cash, cashier's check, certified check, U.S. money order, or bid bond, as liquidated damages for such failure, in the following amount constituting five percent (5%) of the Base Bid amount above.
- B. In the event Owner does not offer a Notice of Award within the time limits stated above, Owner will return to the undersigned the cash, cashier's check, certified check, U.S. money order, or bid bond.

1.6 TIME OF COMPLETION

- A. The undersigned Bidder proposes and agrees hereby to complete the Work of the Contract Documents as shown in the schedule Section 00 31 13 – Project Schedule.

1.7 ACKNOWLEDGEMENT OF ADDENDA

- A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:

1. Addendum No. 1, dated _____.
2. Addendum No. 2, dated _____.
3. Addendum No. 3, dated _____.
4. Addendum No. 4, dated _____.
5. Addendum No. 5, dated _____.
6. Addendum No. 6, dated _____.
7. Addendum No. 7, dated _____.

- B. Note all addenda issued. If addendum number is not applicable or was not issued for the project write “NA” or leave that line blank

1.8 ACKNOWLEDGEMENT OF SECTION 00 24 13.13 - BID PACKAGES

- A. The undersigned Bidder acknowledges receipt of and use of the following:
1. “SECTION 00 24 13 – BID PACKAGES in the preparation of this Bid:

- B. Acknowledgement:

1. Date of Acknowledgement: _____
2. Signature: _____

1.9 ALTERNATES

- A. Refer to Section 01 23 00 - 23 PROJECT SPECIFIC ALTERNATES for additional information.

- B. Alternate BP 13-01 – Provide Moisture Resistant/Water-Proof Flooring Adhesive at Soft Flooring
_____ Dollars (\$ _____)

- C. Alternate BP 14-01 – Provide Moisture Mitigation Measures for Tile Floors
_____ Dollars (\$ _____)

1.10 UNIT PRICES (N/A)

Refer to Section 01 22 00 - PROJECT SPECIFIC UNIT PRICES for additional information.

1.11 CONTRACTOR'S LICENSE

- A. The undersigned further states that it is a duly licensed contractor for the type of work proposed, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.

1.12 SUBMISSION OF BID

- A. Respectfully submitted this ____ day of _____, 2026.
- B. Submitted By: _____
(Name of Bidding Firm or Corporation)
- C. Signature: _____
(Handwritten/Digital Signature)
- D. Signed By: _____
(Type or Print Name)
- E. Title: _____
(Owner/Partner/President/Vice President)
- F. Street Address: _____
- G. City, State, Zip: _____
- H. Email: _____
- I. Phone: _____

END OF SECTION 00 41 00b

CRIMINAL BACKGROUND CERTIFICATION

To:

Subcontractor hereby represents, warrants, and certified that no officer or director thereof has any knowledge that any employee thereof has been convicted of committing or attempting to commit any offense in any state of against the laws of the United States, which if committed or attempted in any State, would have been punishable as one or more of the foregoing offenses.

Subcontractor further agrees that it shall not employ any person who have or may have direct, daily contact with the pupils of any school in the district, and for whom a criminal background investigation has not been conducted pursuant hereto, and further represents and agrees that all applicants for any such employment shall furnish with their applications the attached written "Authorization for Criminal Background Information" form authorizing the Board of Education to request a criminal background investigation of said applicant and to receive criminal history record information pursuant thereto to determine if the applicant has been convicted of committing or attempting to commit any of the criminal or drug offenses. Each individual contractor will be responsible for any costs and expenses associated with the criminal background investigation.

Subcontractor will coordinate with Office of Education and **MSD of Pike Township Schools**. All criminal background checks shall be performed by the Indiana State Police. Subcontractor is responsible for coordinating with the Indiana State Police, receiving criminal background checks conducted by the Indiana State Police and paying for any and all costs and expenses associated with securing criminal background checks from the Indiana State Police.

Subcontractor further represents, warrants, and certifies that no applicant for employment with respect to whom the criminal investigation reveals any conviction for committing and/or attempting to commit any of the offenses, shall be employed thereby in any position that involves or may involve contact with the students of the school district.

This certification is executed on the date hereinafter indicated by the designated Subcontractor by its duly authorized officer.

SUBMITTED BY:

Company Name

Address

City

State

Zip

Authorized Signature

Typed or Printed Name of Authorized Person and Title

Dated: _____

The undersigned herby authorizes the Board of Education of **MSD of Pike Township Schools**, to request a criminal background investigation from the Indiana State Police and to receive criminal history record information pursuant thereto.

Printed or Typed Name of Applicant Employee)

Signature of Applicant or Employee

Dated: _____

00 43 36 – Subcontractor & Supplier Disclosure Form

- This form shall be submitted within 48 hours of bid opening.
- Once submitted, any changes to this list must be approved in writing by CORE Construction

Subcontractor: _____

Bid Package Name/Number: _____

Work to Be performed By with Bidder’s own forces:

Sub-tier subcontractors the bidder is utilizing under their bid package:

Suppliers of materials and equipment proposed for the Work:

XBE Utilization Form

Prime Vendor						Total Breakdown \$	% of Total Contract
Project Name					Labor		%
Project No. /Contract No.					Expenses		%
Prime Vendor	MBE (Y/N)	WBE (Y/N)	VBE (Y/N)	DOBE (Y/N)	Description of Work	Prime Contract Amount	
Subcontractors / Suppliers	MBE (Y/N)	WBE (Y/N)	VBE (Y/N)	DOBE (Y/N)	Description of Work	Total Subcontract Amount	% of Total Contract
							%
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							%
							%
							%
							%
Prime Vendor Signature						Total XBE Participation Dollars	XBE %
Prime Vendor Printed Name							%

SECTION 004393 – BID SUBMITTAL CHECKLIST

1.1 CONTRACTOR LIST OF ITEMS

PROPERLY FILL OUT & INCLUDE IN SEALED BID ENVELOPE:

- A. Form 96
- B. Non-Collusion Affidavit
- C. Supplemental Bid Form
- D. Bid Security

NOTE: Pre-Qualification must be completed online in advance of or by Bid Date

END OF SECTION 004393

Section 00 45 13 – Bidder’s Qualifications

1.1 Bidder’s Qualifications

- A. By submitting a bid, all bidders agree to filling out a prequalification via Trade Tapp prior to award.**
- B. Please email gregdelagrang@coreconstruction.com who the invite should be emailed to via Trade Tapp to begin the process.**


AIA® Document A132® – 2019
**Standard Form of Agreement Between Owner and Contractor, Construction
Manager as Adviser Edition**

AGREEMENT made as of the Second day of March in the year Two Thousand Twenty-Six

(In words, indicate day, month, and year.)

BETWEEN the Owner:

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

MSD of Pike Township
6901 Zionsville Road
Indianapolis, IN 46268

and the Contractor:

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

for the following Project:

(Name, location, and detailed description)

MSDPT Nathaniel Jones ELC Expansion

7839 New Augusta Road

Indianapolis, IN 46268

Provide expansion and renovation of the Nathaniel Jones Early Learning Center for the Metropolitan School District of Pike Township.

The Construction Manager:

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

CORE Construction Indiana, LLC
833 Lincoln Highway, Suite 120W
Scherville, IN 46375-4612
219-961-4325

The Architect:

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

Fanning Howey Associates, Inc.
350 East New York Street, Suite 300
Indianapolis, IN 46204

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS:

The author of this document may have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added to or deleted from the original AIA text.

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

This document is intended to be used in conjunction with AIA Documents A232™–2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition; B132™–2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132™–2019, Standard Form of Agreement Between Owner and Construction Manager as Adviser.

AIA Document A232™–2019 is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

TABLE OF ARTICLES

- 1 THE CONTRACT DOCUMENTS
- 2 THE WORK OF THIS CONTRACT
- 3 DATE OF COMMENCEMENT AND DATES OF SUBSTANTIAL COMPLETION
- 4 CONTRACT SUM
- 5 PAYMENTS
- 6 DISPUTE RESOLUTION
- 7 TERMINATION OR SUSPENSION
- 8 MISCELLANEOUS PROVISIONS
- 9 ENUMERATION OF CONTRACT DOCUMENTS

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than Modifications, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

The Work of this Contract covers: Bid Package XX

The Scope of the Work shall be as identified for this Bid Package in the Contract Documents. Through this Agreement, Contractor is one of Multiple Prime Contractors as defined in the AIA Document A232–2009 General Conditions of the Contract for Construction.

ARTICLE 3 DATE OF COMMENCEMENT AND DATES OF SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be:

- The date of this Agreement.
- A date set forth in a notice to proceed issued by the Owner.
- Established as follows:
(Insert a date or a means to determine the date of commencement of the Work.)

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work.

§ 3.3 Substantial Completion of the Project or Portions Thereof

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the date of Substantial Completion of the Work of all of the Contractors for the Project will be the date identified in the Project Schedule

which is attached as an Exhibit to this Agreement.

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work of all of the Contractors for the Project are to be completed prior to Substantial Completion of the entire Work of all of the Contractors for the Project, the Contractors shall achieve Substantial Completion of such portions by the following dates:

Portion of Work	Substantial Completion Date
Not Applicable	

§ 3.4 When the Work of this Contract, or any Portion Thereof, is Substantially Complete

§ 3.4.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall substantially complete the entire Work of this Contract by the date(s) identified for this scope of work in the Project Schedule

- Not later than () calendar days from the date of commencement of the Work.
- By the following date:

§ 3.4.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work of this Contract are to be substantially complete prior to when the entire Work of this Contract shall be substantially complete, the Contractor shall substantially complete such portions by the following dates:

Portion of Work	Date to be substantially complete
Not Applicable	

§ 3.4.3 If the Contractor fails to substantially complete the Work of this Contract, or portions thereof, as provided in this Section 3.4, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be one of the following:

(Check the appropriate box.)

- Stipulated Sum, in accordance with Section 4.2 below
- Cost of the Work plus the Contractor's Fee, in accordance with Section 4.3 below
- Cost of the Work plus the Contractor's Fee with a Guaranteed Maximum Price, in accordance with Section 4.4 below

(Based on the selection above, complete Section 4.2, 4.3 or 4.4 below.)

§ 4.2 Stipulated Sum

§ 4.2.1 The Contract Sum shall be Zero Dollars and Zero Cents (\$ 0.00), subject to additions and deductions as provided in the Contract Documents.

§ 4.2.2 Alternates

§ 4.2.2.1 Alternates, if any, included in the Contract Sum:

Item	Price
See Attachment A - Alternates, Unit Prices, & Break-Out Pricing	

§ 4.2.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement.

(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Item	Price	Conditions for Acceptance
See Attachment A - Alternates, Unit Prices, & Break-Out Pricing		

§ 4.2.3 Allowances, if any, included in the Contract Sum:
(Identify each allowance.)

Item	Price
See Attachment A - Alternates, Unit Prices, & Break-Out Pricing	

§ 4.2.4 Unit prices, if any:
(Identify the item and state the unit price, and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit (\$0.00)
See Attachment A - Alternates, Unit Prices, & Break-Out Pricing		

§ 4.3 Intentionally Deleted

§ 4.4 Intentionally Deleted

§ 4.5 Liquidated damages, if any:
(Insert terms and conditions for liquidated damages, if any, to be assessed in accordance with Section 3.4.)

Not Applicable

§ 4.6 Other:

(Insert provisions for bonus, cost savings or other incentives, if any, that might result in a change to the Contract Sum.)

Overhead and Profit for Change Orders shall be determined in accordance with Section 7.2.1 of the A232 General Conditions, as modified.

ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

§ 5.1.1 Based upon Applications for Payment submitted to the Construction Manager by the Contractor, and Certificates for Payment issued by the Construction Manager and Architect, the Owner shall make progress payments on account of the Contract Sum, to the Contractor, as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month.

§ 5.1.3 Provided that an Application for Payment is received by the Construction Manager not later than the Thirtieth day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the Thirtieth day of the following month. If an Application for Payment is received by the Construction Manager after the application date fixed above, payment of the amount certified shall be made by the Owner not later than Forty-Five (45) days after the Construction Manager receives the Application for Payment.

(Federal, state or local laws may require payment within a certain period of time.)

§ 5.1.4 Progress Payments Where the Contract Sum is Based on a Stipulated Sum

§ 5.1.4.1 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Construction Manager and Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 5.1.4.2 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.4.3 In accordance with AIA Document A232™–2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.4.3.1 The amount of each progress payment shall first include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- .3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

§ 5.1.4.3.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A232–2019;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A232–2019; and
- .5 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.5 Intentionally Deleted

§ 5.1.6 Intentionally Deleted

§ 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to when the Work of this Contract is substantially complete, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

5%

§ 5.1.7.1.1 The following items are not subject to retainage:

(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

Not Applicable

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section 5.1.7.1 is to be modified prior to when the entire Work of this Contract is substantially complete, including modifications for completion of portions of the Work as provided in Section 3.4.2, insert provisions for such modifications.)

Not Applicable

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, when the Work of this Contract is substantially complete, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted when the Work of this Contract is substantially complete shall not include retainage as follows:

(Insert any other conditions for release of retainage when the Work of this Contract is substantially complete, or upon Substantial Completion of the Work of all Contractors on the Project or portions thereof.)

For an amount equal to 200% of the estimated value of any outstanding punchlist work which has not been completed at the time the Pay Application is submitted.

§ 5.2 Final Payment

§ 5.2.1 Final Payment Where the Contract Sum is Based on a Stipulated Sum

§ 5.2.1.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A232–2019, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Certificate for Payment or Project Certificate for Payment has been issued by the Architect.

§ 5.2.1.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the final Certificate for Payment or Project Certificate for Payment, or as follows:

§ 5.2.2 Intentionally Deleted

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Initial Decision Maker

The Architect will serve as Initial Decision Maker pursuant to Article 15 of AIA Document A232–2019, unless the parties appoint below another individual, not a party to this Agreement, to serve as Initial Decision Maker.

(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

§ 6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A232–2019, the method of binding dispute resolution shall be as follows:

(Check the appropriate box.)

- Arbitration pursuant to Article 15 of AIA Document A232–2019.
- Litigation in a court of competent jurisdiction.
- Other: *(Specify)*

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 Where the Contract Sum is a Stipulated Sum

§ 7.1.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A232–2019.

§ 7.1.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A232–2019.

§ 7.2 Intentionally Deleted

§ 7.3 Suspension

The Work may be suspended by the Owner as provided in Article 14 of AIA Document A232–2019; in such case, the Contract Sum and Contract Time shall be increased as provided in Article 14 of AIA Document A232–2019, except that the term “profit” shall be understood to mean the Contractor’s Fee as described in Section 4.3.2 or 4.4.2, as applicable, of this Agreement.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A232–2019 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 The Owner’s representative:

(Name, address, email address, and other information)

Clayton Gruber, Director of Facilities & Security
MSD of Pike Township
3950 W 56th Street
Indianapolis, IN 46254
317-280-2425
CGruber@pike.k12.in.us

§ 8.3 The Contractor’s representative:

(Name, address, email address, and other information)

§ 8.4 Neither the Owner’s nor the Contractor’s representative shall be changed without ten days’ prior notice to the other party.

§ 8.5 Insurance and Bonds

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in Attachment E - Insurance Conditions, and elsewhere in the Contract Documents.

§ 8.5.2 The Contractor shall provide bonds as set forth in in the Contract Documents.

§ 8.6 Notice in electronic format, pursuant to Article 1 of AIA Document A232–2019, may be given in accordance with a building information modeling exhibit, if completed, or as otherwise set forth below:
(If other than in accordance with a building information modeling exhibit, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)

§ 8.7 Relationship of the Parties

Where the Contract is based on the Cost of the Work plus the Contractor’s Fee, with or without a Guaranteed Maximum Price, the Contractor accepts the relationship of trust and confidence established by this Agreement and covenants with the Owner to cooperate with the Architect and exercise the Contractor’s skill and judgment in furthering the interests of the Owner; to furnish efficient business administration and supervision; to furnish at all times an adequate supply of workers and materials; and to perform the Work in an expeditious and economical manner consistent with the Owner’s interests. The Owner agrees to furnish and approve, in a timely manner, information required by the Contractor and to make payments to the Contractor in accordance with the requirements of the Contract Documents.

§ 8.8 Other provisions:

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A132™–2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition
- .2 Attachment A - Alternates, Unit Prices, & Break-Out Pricing
- .3 AIA Document A232™–2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition
- .4

.5 Drawings

Number	Title	Date
See Attachment C - Enumeration of Documents		

.6 Specifications

Section	Title	Date	Pages
See Attachment C - Enumeration of Documents			

.7 Addenda, if any:

Number	Date	Pages
See Attachment C - Enumeration of Documents		

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.

.8 Other Exhibits:

(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

- AIA Document A132™–2019, Exhibit B, Determination of the Cost of the Work
- AIA Document E235™–2019, Sustainable Projects Exhibit, Construction Manager as Adviser Edition, dated as indicated below:
(Insert the date of the E235-2019 incorporated into this Agreement.)

- The Sustainability Plan:

Title	Date	Pages
-------	------	-------

- Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages
----------	-------	------	-------

- .9** Other documents, if any, listed below:
(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A232–2019 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor’s bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

Attachment D - Project Schedule
Attachment E - Insurance Conditions

This Agreement is entered into as of the day and year first written above.

OWNER (Signature)
 BY: Monet Gray, CFO

 (Printed name and title)

CONTRACTOR (Signature)

 (Printed name and title)

Attachment A
Alternates, Unit Prices, & Break-Out Pricing

Bid Package XX - Description

BID ALTERNATES:

Alternate 1:

Alternate 2:

ALLOWANCES:

Allowance 1:

Allowance 2:

VOLUNTARY ALTERNATES:

NONE

UNIT PRICES:

The Following are unit prices for specific portions of the work as listed and are applicable to authorized variations from the Contract Documents:

1.

BREAK-OUT PRICING

None

ATTACHMENT E INSURANCE CONDITIONS

Project Name: MSDPT Nathaniel Jones ELC Expansion

CORE Project No: 26-20-9XX

Prior to starting work on the project site, Contractor shall provide, subject to the approval of Construction Manager, certificates and endorsements evidencing the insurance required within this Attachment. Any acceptance of Certificates of Insurance or endorsements by Owner or Construction Manager, or failure of Contractor to provide Certificates of Insurance or endorsements, shall in no way limit or relieve Contractor of its duties and responsibilities under this Agreement. All insurance policies shall remain in full force and effect throughout the contract duration.

CORE is now using a third-party vendor, JONES, to assist with tracking certificates of insurance. You will receive an email from **compliance@gaisb.com** containing a link through which you must upload your certificate of insurance, with required endorsements, for consideration. **DO NOT EMAIL COIs TO compliance@gaisb.com, ONLY UPLOAD COIs VIA THE LINK WHICH YOU WILL RECEIVE.** You will receive additional communications from this email address for various compliance issues such as expiration notices, deficiencies or "Gaps" in coverage, as well as a notification when you are compliant.

Should you have any questions, please direct them to:

compliance@gaisb.com

Please ensure that the certificates include the Project Name, CORE Project Number and all additional insureds as required by the Contract Documents. Endorsements, if not blankets, must also include the names of all additional insureds. Your submission will otherwise be rejected.

Required Additional Insured(s) listed below:

- CORE Construction Indiana, LLC (Construction Manager)
- MSD of Pike Township (Owner)
- Fanning Howey Associates, Inc. (Architect)

The Certificate Holder will be:

MSD of Pike Township
6901 Zionsville Road
Indianapolis, IN 46268

Should you have any questions, please contact Claire Fabrizio at the office of the Construction Manager:

O – (469) 430-1450
clairefabrizius@GAISB.com

INSURANCE REQUIREMENTS:

1. Workers' Compensation:

Coverage A. Statutory Benefits, in required statutory limits for the state in which the work is to be performed.

Coverage B. Employer's Liability.

Bodily Injury by accident	\$1,000,000 each accident
Bodily Injury by disease	\$1,000,000 policy limit
Bodily Injury by disease	\$1,000,000 each employee

Coverage must include a Waiver of Subrogation endorsement.

Where applicable, U.S. Longshore and Harbor Workers Compensation Act Endorsement shall be attached to the policy.

2. Commercial Auto Coverage:

Auto Liability limits of not less than \$1,000,000 each accident, combined Bodily Injury and Property Damage Liability insurance. Certificate to reflect coverage for "Any Auto" or "All Owned, Hired and Non-Owned".

If the Contract Documents require Contractor to remove and haul hazardous waste from the Project site, or if the Project involves such similar environmental exposure, pollution liability coverage equivalent to that provided under the ISO Pollution Liability-Broadened Coverage for Covered Autos Endorsement shall be provided, and the Motor Carrier Act Endorsement (MCS 90) shall be attached.

3. Commercial General Liability:

Limits must meet the minimums set forth below, or the policy limit, whichever is greater:

Per Occurrence	\$1,000,000
Personal Injury/Advertising Injury	\$1,000,000
Products/Completed Operations Aggregate	\$2,000,000
General Aggregate (other than Products/Completed Operations)	\$2,000,000

Coverage must include a Waiver of Subrogation endorsement.

Both policy forms must include:

- a) Premises and Operations coverage with no explosion, collapse or underground damage (XCU) exclusions.
- b) Products and Completed Operations coverage shall be maintained from the Substantial Completion date of the project through the expiration of the statute of repose for the jurisdiction in which the project is located.
- c) Blanket contractual coverage for the indemnity/hold harmless agreements assumed in this Contract and in the Prime Contract. Any Employee Exclusion will be deleted.
- d) Broad Form Property Damage coverage, including completed operations or its equivalent.

- e) An endorsement naming Construction Manager, Owner and any other parties in interest as Additional Insured(s) under the coverage specified under Comprehensive General Liability or Commercial General Liability. The endorsement shall be on both ISO forms CG2010 10/01 and CG2037 10/01, or their equivalent. Any form that does not grant additional insured status for both the ongoing operations and products/completed operations coverages IS NOT ACCEPTABLE. The Additional Insured endorsements must be submitted with the certificate of insurance.
- f) An endorsement stating: "Such coverage as is afforded by this policy for the benefit of the additional insured(s) is primary and any other coverage maintained by such additional insured(s) shall be non-contributing with the coverage provided under this policy."
- g) Coverage on an "Occurrence" form. "**Claims Made**" and "**Modified Occurrence**" forms are not acceptable.
- h) Coverage to include general aggregate limits on a "per project" basis.

4. Excess Liability:

Contractor shall obtain the following umbrella or excess liability insurance (must cover over WC, GL, and Auto) in addition to the above liability amounts with limits, both per occurrence and in the aggregate, not less than:

Piling Contractors	\$5,000,000
Electrical Contractors	\$5,000,000
HVAC Contractors	\$5,000,000
Masonry/Concrete/Pre-cast Contractors	\$5,000,000
Elevator Contractors	\$5,000,000
Site Utility Contractors	\$5,000,000
Plumbing Contractors	\$5,000,000
Curtain Wall Contractors	\$5,000,000
Roofing Contractors	\$5,000,000
Structural Steel Contractors	\$5,000,000
Fire Protection Contractors	\$5,000,000
All Other Contractors	\$2,000,000

5. Errors & Omissions Liability: \$1,000,000 per claim

If Contractor has design or engineering responsibility in the execution of the Contract obligations, Contractor shall provide Errors & Omissions Liability coverage with limited contractual liability coverage in favor of Owner and a deductible of no greater than \$50,000 per claim. Any self-insured retention (SIR) must be clearly identified on the certificate of insurance and is subject to Owner and Constuction Manager's approval. This insurance shall be maintained for not less than the duration of the project and five (5) years following completion of construction. Retroactive date of such coverage must be on or before the date Contractor (and its consultants/sub-subcontractors) began providing professional services for the project.

6. Pollution Legal Liability: \$1,000,000 per occurrence (or per claim if Claims Made)

Contractor shall maintain insurance covering losses caused by pollution conditions that arise from the Contract Work. If the scope of the "Work" involves the delivery, protection, or containment of water in any manner or form whatsoever or the protection from water intrusion, then no "mold", "fungi", "bacteria" or "water intrusion" or similar exclusion may be attached to the Contractor's Commercial General Liability

policy. In the alternative, "mold", "fungi", "bacteria" coverage may be provided under a separate policy. If coverage is provided on a claims-made basis, a minimum of a five-year extended reporting period is required.

7. Other Requirements:

- a) All policies shall be endorsed to provide Owner a thirty (30) day notice prior to any insurance policy, represented therein, being cancelled or modified.
- b) All policies must be written by insurance companies whose rating, in the most recent Best's Rating Guide, is not less than A- VII. All coverage forms must be acceptable to Contractor.
- c) Certificates of Insurance with the required endorsements (as stated above) evidencing the required coverages must be delivered to the Construction Manager prior to commencement of any Contract Work. Failure of Construction Manager or Owner to demand such certificate or other evidence of full compliance with these insurance requirements or failure of Construction Manager or Owner to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance. Construction Manager and Owner shall have the right, but not the obligation, to prohibit Contractor or any of its subcontractors from entering the Project site until such certificates or other evidence that insurance has been placed in complete compliance with these requirements is received and approved by Construction Manager or Owner.
- d) Contractor shall be responsible to satisfy any deductible or self-insured retention with respect to any of the coverages required by this Contract.
- e) Owner reserves the right, in its sole discretion, to require higher limits of liability coverage if, in Owner's opinion, operations by or on behalf of Contractor create higher than normal hazards and, to require Contractor to name additional parties in interest to be Additional Insureds. In the event Contractor is requested to provide such additional limits of liability coverage, Contractor will be allowed to submit a Change Order Request so that it may be compensated for any such change.
- f) In the event that rental of equipment is undertaken to complete and/or perform the Contract Work, Contractor agrees that it shall be solely responsible for such rental equipment. Such responsibility shall include, but not be limited to, theft, fire, vandalism and use by unauthorized persons.
- g) If the Work involves the design, construction, fabrication, preparation, installation, application, maintenance or repair (including remodeling, service, correction, or replacement) of any "exterior insulation finish system" (EIFS) or any part thereof, or substantially similar system, the Contractor's CGL policy shall not include exclusions for such work. Alternatively, "EIFS" coverage may be provided under a separate policy.
- h) In the event that the insurance coverages provided by the Contractor pursuant to the Contract Documents exceed the minimums set forth in the Contract Documents, then in that event, Owner shall have the benefit of all such excess coverages.
- i) Contractor shall require any entity it hires to provide any services under the Contract Documents to provide evidence of insurance equivalent to the requirements of Contractor under this Attachment.

8. Property Insurance:

- A. Unless otherwise provided, the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builders risk "all-risk" or equivalent policy form in the amount of the initial contract sum, plus value of subsequent contract modifications and cost of materials supplied or installed by others, comprising total value for the entire Project, at the site, on a replacement cost basis. This insurance shall include interests of the Owner, the Construction Manager, Contractors and their subcontractors in the Project, and shall include, without limitation, insurance against the perils of fire and physical loss or damage including, without

duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and startup, temporary buildings and debris removal, including demolition occasioned by enforcement of any applicable legal requirements. Any deductible amount applied to any loss payable under the Builder's Risk or Property insurance shall be borne by the insured whose work is damaged in direct proportion as its individual loss bears to the total loss. However, if the Owner, at its discretion, determines the loss is caused solely by Contractor, Owner shall have the ability to assess the entire deductible amount to Contractor.

Such property insurance maintained by Owner does not cover tools or equipment owned or rented by Contractor including trailers, excavators, scaffoldings, or forms. Contractor is responsible for providing insurance coverage for such items.

- B. Construction Manager and Contractor waive all rights against each other and against Owner, Architect/Engineer, separate contractors, and all other Contractors for damages caused by fire or other perils covered by Builder's Risk or any other property insurance, except such rights as they may have to the proceeds of such insurance. Such insurance may be subject to an amount deductible from the sums otherwise payable thereunder and the burden of such deduction shall be borne by the party receiving the direct benefit of such insurance.

AIA[®] Document A232[®] – 2019

General Conditions of the Contract for Construction, Construction Manager as Adviser Edition

for the following PROJECT:

(Name, and location or address)

MSDPT Nathaniel Jones ELC Expansion
7839 New Augusta Road
Indianapolis, IN 46268

THE CONSTRUCTION MANAGER:

(Name, legal status, and address)

CORE Construction Indiana, LLC
833 Lincoln Highway, Suite 120W
Schererville, IN 46375-4612

THE OWNER:

(Name, legal status, and address)

MSD of Pike Township
6901 Zionsville Road
Indianapolis, IN 46268

THE ARCHITECT:

(Name, legal status, and address)

Fanning Howey
350 East New York Street, Suite 300
Indianapolis, IN 46204

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- 10 PROTECTION OF PERSONS AND PROPERTY**

ADDITIONS AND DELETIONS:

The author of this document may have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added to or deleted from the original AIA text.

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

This document is intended to be used in conjunction with AIA Documents A132™–2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition; B132™–2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132™–2019, Standard Form of Agreement Between Owner and Construction Manager as Adviser.

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- 13 MISCELLANEOUS PROVISIONS
- 14 TERMINATION OR SUSPENSION OF THE CONTRACT
- 15 CLAIMS AND DISPUTES

ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Basic Definitions

§ 1.1.1 The Contract Documents. The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of addenda relating to bidding or proposal requirements.

§ 1.1.2 The Contract. The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and the Construction Manager or the Construction Manager's consultants, (3) between the Owner and the Architect or the Architect's consultants, (4) between the Contractor and the Construction Manager or the Construction Manager's consultants, (5) between the Owner and a Subcontractor or Sub-subcontractor (6) between the Construction Manager and the Architect, or (7) between any persons or entities other than the Owner and Contractor. The Construction Manager and Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of their duties.

§ 1.1.3 The Work. The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

§ 1.1.4 The Project. The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by other Contractors, and by the Owner's own forces and Separate Contractors.

§ 1.1.5 Contractors. Contractors are persons or entities, other than the Contractor or Separate Contractors, who perform Work under contracts with the Owner that are administered by the Architect and Construction Manager.

§ 1.1.6 Separate Contractors. Separate Contractors are persons or entities who perform construction under separate contracts with the Owner not administered by the Architect and Construction Manager.

§ 1.1.7 The Drawings. The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

§ 1.1.8 The Specifications. The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.9 Instruments of Service. Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.1.10 Initial Decision Maker. The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.

§ 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the

Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 1.2.1.1 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

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

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

§ 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 Interpretation

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service

§ 1.5.1 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants.

§ 1.6 Notice

§ 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement.

§ 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.7 Digital Data Use and Transmission

The parties shall agree upon written protocols governing the transmission and use of, and reliance on, Instruments of Service or any other information or documentation in digital form.

§ 1.8 Building Information Models Use and Reliance

Any use of, or reliance on, all or a portion of a building information model without agreement to written protocols governing the use of, and reliance on, the information contained in the model shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

ARTICLE 2 OWNER

§ 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Construction Manager and the Architect do not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

§ 2.1.2 The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

§ 2.2 Evidence of the Owner's Financial Arrangements - Intentionally Deleted

§ 2.3 Information and Services Required of the Owner

§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. Unless otherwise provided under the Contract Documents, the Owner, assisted by the Construction Manager, shall secure and pay for the building permit.

§ 2.3.2 The Owner shall retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.3 The Owner shall retain a construction manager adviser lawfully practicing construction management in the jurisdiction where the Project is located. That person or entity is identified as the Construction Manager in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.4 If the employment of the Construction Manager or Architect terminates, the Owner shall employ a successor construction manager or architect to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Construction Manager or Architect, respectively.

§ 2.3.5 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 2.3.6 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

§ 2.3.7 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

§ 2.3.8 The Owner shall forward all communications to the Contractor through the Construction Manager. Other communication shall be made as set forth in Section 4.2.6.

§ 2.4 Owner's Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner

may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

§ 2.5 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to review by the Construction Manager and prior approval of the Architect, and the Construction Manager or Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Construction Manager's and Architect's and their respective consultants' additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

ARTICLE 3 CONTRACTOR

§ 3.1 General

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

§ 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents. The plural term "Multiple Prime Contractors" refers to persons or entities who perform construction under contracts with the Owner that are administered by the Construction Manager. The term does not include the Owner's own forces, including persons or entities under separate contracts not administered by the Construction Manager.

§ 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Construction Manager or Architect in their administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor

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

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.3.5, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Construction Manager and Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information submitted to the Construction Manager in such form as the Construction Manager and Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Construction Manager and Architect any nonconformity discovered by or made known to the Contractor as a request for information submitted to Construction Manager in such form as the Construction Manager and Architect may require.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the

Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to section 15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

§ 3.3 Supervision and Construction Procedures

§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner, the Construction Manager, and the Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. The Construction Manager shall review the proposed alternative for sequencing, constructability, and coordination impacts on the other Contractors. Unless the Architect or the Construction Manager objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of the Project already performed to determine that such portions are in proper condition to receive subsequent Work.

§ 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 Except in the case of minor changes in the Work approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 7.4, the Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect, in consultation with the Construction Manager, and in accordance with a Change Order or Construction Change Directive.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

§ 3.5 Warranty

§ 3.5.1 The Contractor warrants to the Owner, Construction Manager, and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Construction Manager or Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

§ 3.5.2 All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4.

§ 3.6 Taxes

The Contractor shall pay sales, consumer, use and similar taxes for the Work or portions thereof provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

§ 3.7 Permits, Fees, Notices, and Compliance with Laws

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Owner, assisted by the Construction Manager, shall secure and pay for the building permit. The Contractor shall secure and pay for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

§ 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 Concealed or Unknown Conditions. If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner, Construction Manager, and the Architect before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Architect and Construction Manager will promptly investigate such conditions and, if the Architect, in consultation with the Construction Manager, determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Architect, in consultation with the Construction Manager, determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner, Construction Manager, and Contractor, stating the reasons. If the Owner or Contractor disputes the Architect's determination or recommendation, either party may submit a Claim as provided in Article 15.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner, Construction Manager, and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 3.8 Allowances

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§ 3.8.2 Unless otherwise provided in the Contract Documents:

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

§ 3.8.3 Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

§ 3.9 Superintendent

§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect, through the Construction Manager, of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Construction Manager may notify the Contractor, stating whether the Owner, the Construction Manager, or the Architect (1) has reasonable objection to the proposed superintendent or (2) require additional time for review. Failure of the Construction Manager to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner, Construction Manager, or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

§ 3.10 Contractor's Construction and Submittal Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner's and Architect's information, and the Construction Manager's use in developing the Project schedule, a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project. The Contractor shall cooperate with the Construction Manager in scheduling and performing the Contractor's Work to avoid conflict with, and as to cause no delay in, the work or activities of other Contractors, or the construction or operations of the Owner's own forces or Separate Contractors.

§ 3.10.2 The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Construction Manager's and Architect's approval. The Architect and Construction Manager's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Construction Manager and Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall participate with other Contractors, the Construction Manager, and the Owner in reviewing and coordinating all schedules for incorporation into the Project schedule that is prepared by the Construction Manager. The Contractor shall make revisions to the construction schedule and submittal schedule as deemed necessary by the Construction Manager to conform to the Project schedule.

§ 3.10.4 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner, Construction Manager, and Architect, and incorporated into the approved Project schedule.

§ 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Construction Manager, Architect, and Owner, and delivered to the Construction Manager for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

§ 3.12 Shop Drawings, Product Data, and Samples

§ 3.12.1 Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and

other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§ 3.12.3 Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect and Construction Manager is subject to the limitations of Sections 4.2.10 through 4.2.12. Informational submittals upon which the Construction Manager and Architect are not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Construction Manager or Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Construction Manager, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the Project submittal schedule approved by the Construction Manager and Architect or, in the absence of an approved Project submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of other Contractors, Separate Contractors, or the Owner's own forces. The Contractor shall cooperate with the Construction Manager in the coordination of the Contractor's Shop Drawings, Product Data, Samples, and similar submittals with related documents submitted by other Contractors.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner, Construction Manager, and Architect, that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been reviewed and approved by the Architect.

§ 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Construction Manager and Architect of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Architect's approval thereof.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Construction Manager and Architect on previous submittals. In the absence of such notice, the Architect's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

§ 3.12.10.1 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner, the Architect, and the Construction Manager shall be entitled to rely upon the adequacy and

accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Construction Manager shall review submittals for sequencing, constructability, and coordination impacts on other Contractors.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Construction Manager and Architect at the time and in the form specified by the Architect.

§ 3.13 Use of Site

§ 3.13.1 The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 3.13.2 The Contractor shall coordinate the Contractor's operations with, and secure the approval of, the Construction Manager before using any portion of the site.

§ 3.14 Cutting and Patching

§ 3.14.1 The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner, Separate Contractors, or of other Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner, Separate Contractors, or by other Contractors except with written consent of the Construction Manager, Owner, and such other Contractors or Separate Contractors. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Separate Contractors, other Contractors, or the Owner, its consent to cutting or otherwise altering the Work.

§ 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner, or Construction Manager with the Owner's approval, may do so and the Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 Access to Work

The Contractor shall provide the Owner, Construction Manager, and Architect with access to the Work in preparation and progress wherever located.

§ 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner, Construction Manager, and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner, Architect, or Construction Manager. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect through the Construction Manager.

§ 3.18 Indemnification

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Construction Manager, and Construction Manager's consultants, and agents and employees of any of them from and against all claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting

from performance of the work, provided that such claim, damage, loss or expense: (1) 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 therefrom; and (2) is caused or is alleged to have been caused, in whole or in part by any negligent act, omission or fault of Contractor or any of Contractor's subcontractors, anyone directly or indirectly employed by any of them or for anyone for whose acts any of them may be liable, regardless of whether it is caused in part by the fault of a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

ARTICLE 4 ARCHITECT AND CONSTRUCTION MANAGER

§ 4.1 General

§ 4.1.1 The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

§ 4.1.2 The Construction Manager is the person or entity retained by the Owner pursuant to Section 2.3.3 and identified as such in the Agreement.

§ 4.1.3 Duties, responsibilities, and limitations of authority of the Construction Manager and Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Construction Manager, Architect, and Contractor. Consent shall not be unreasonably withheld.

§ 4.2 Administration of the Contract

§ 4.2.1 The Construction Manager and Architect will provide administration of the Contract as described in the Contract Documents and will be the Owner's representatives during construction until the date the Architect issues the final Certificate for Payment. The Construction Manager and Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of the site visits, the Architect will keep the Owner and the Construction Manager reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner and Construction Manager known deviations from the Contract Documents and defects and deficiencies observed in the Work.

§ 4.2.3 The Construction Manager shall provide one or more representatives who shall be in attendance at the Project site whenever the Work is being performed. The Construction Manager will determine in general if the Work observed is being performed in accordance with the Contract Documents, will keep the Owner and Architect reasonably informed of the progress of the Work, and will promptly report to the Owner and Architect known deviations from the Contract Documents and the most recent Project schedule, and defects and deficiencies observed in the Work.

§ 4.2.4 The Construction Manager will schedule and coordinate the activities of the Contractor and other Contractors in accordance with the latest approved Project schedule.

§ 4.2.5 The Construction Manager, except to the extent required by Section 4.2.4, and Architect will not have control over, charge of, or responsibility for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents, and neither will be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. Neither the Construction Manager nor the Architect will have control over or charge of, or be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or of any other persons or entities performing portions of the Work.

§ 4.2.6 Communications. The Owner shall communicate with the Contractor and the Construction Manager's consultants

through the Construction Manager about matters arising out of or relating to the Contract Documents. The Owner and Construction Manager shall include the Architect in all communications that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Construction Manager otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with other Contractors shall be through the Construction Manager. Communications by and with the Owner's own forces and Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

§ 4.2.7 The Construction Manager and Architect will review and certify all Applications for Payment by the Contractor, in accordance with the provisions of Article 9.

§ 4.2.8 The Architect and Construction Manager have authority to reject Work that does not conform to the Contract Documents, and will notify each other about the rejection. Whenever the Construction Manager considers it necessary or advisable, the Construction Manager will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, upon written authorization of the Owner, whether or not the Work is fabricated, installed or completed. The foregoing authority of the Construction Manager will be subject to the provisions of Sections 4.2.18 through 4.2.20 inclusive, with respect to interpretations and decisions of the Architect. However, neither the Architect's nor the Construction Manager's authority to act under this Section 4.2.8 nor a decision made by either of them in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect or the Construction Manager to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons performing any of the Work.

§ 4.2.9 Utilizing the submittal schedule provided by the Contractor, the Construction Manager shall prepare, and revise as necessary, a Project submittal schedule incorporating information from other Contractors, the Owner, Owner's consultants, Owner's Separate Contractors and vendors, governmental agencies, and participants in the Project under the management of the Construction Manager. The Project submittal schedule and any revisions shall be submitted to the Architect for approval.

§ 4.2.10 The Construction Manager will receive and promptly review for conformance with the submittal requirements of the Contract Documents, all submittals from the Contractor such as Shop Drawings, Product Data, and Samples. Where there are other Contractors, the Construction Manager will also check and coordinate the information contained within each submittal received from the Contractor and other Contractors, and transmit to the Architect those recommended for approval. By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Construction Manager represents to the Owner and Architect that the Construction Manager has reviewed and recommended them for approval. The Construction Manager's actions will be taken in accordance with the Project submittal schedule approved by the Architect or, in the absence of an approved Project submittal schedule, with reasonable promptness while allowing sufficient time to permit adequate review by the Architect.

§ 4.2.11 The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Upon the Architect's completed review, the Architect shall transmit its submittal review to the Construction Manager.

§ 4.2.12 Review of the Contractor's submittals by the Construction Manager and Architect is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Construction Manager and Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Construction Manager and Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 4.2.13 The Construction Manager will prepare Change Orders and Construction Change Directives.

§ 4.2.14 The Construction Manager and the Architect will take appropriate action on Change Orders or Construction

Change Directives in accordance with Article 7, and the Architect will have authority to order minor changes in the Work as provided in Section 7.4. The Architect, in consultation with the Construction Manager, will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.15 Utilizing the documents provided by the Contractor, the Construction Manager will maintain at the site for the Owner one copy of all Contract Documents, approved Shop Drawings, Product Data, Samples, and similar required submittals, in good order and marked currently to record all changes and selections made during construction. These will be available to the Architect and the Contractor, and will be delivered to the Owner upon completion of the Project.

§ 4.2.16 The Construction Manager will assist the Architect in conducting inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion in conjunction with the Architect pursuant to Section 9.8; and receive and forward to the Owner written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10. The Construction Manager will forward to the Architect a final Application and Certificate for Payment or final Project Application and Project Certificate for Payment upon the Contractor's compliance with the requirements of the Contract Documents.

§ 4.2.17 If the Owner and Architect agree, the Architect will provide one or more Project representatives to assist in carrying out the Architect's responsibilities at the site. The Owner shall notify the Construction Manager of any change in the duties, responsibilities and limitations of authority of the Project representatives.

§ 4.2.18 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of the Construction Manager, Owner, or Contractor through the Construction Manager. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.19 Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either, and will not be liable for results of interpretations or decisions so rendered in good faith.

§ 4.2.20 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

§ 4.2.21 The Construction Manager will receive and review requests for information from the Contractor, and forward each request for information to the Architect, with the Construction Manager's recommendation. The Architect will review and respond in writing, through the Construction Manager, to requests for information about the Contract Documents. The Construction Manager's recommendation and the Architect's response to each request will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

ARTICLE 5 SUBCONTRACTORS

§ 5.1 Definitions

§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include other Contractors or Separate Contractors or the subcontractors of other Contractors or Separate Contractors.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work

§ 5.2.1 Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall notify the Construction Manager, for review by the Owner, Construction Manager and Architect, of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Construction Manager may notify the Contractor whether the Owner, the Construction Manager or the Architect (1) has reasonable objection to any such proposed person or entity or, (2) requires additional time for review. Failure of the Construction Manager to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner, Construction Manager or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.3 If the Owner, Construction Manager or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner, Construction Manager or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner, Construction Manager or Architect makes reasonable objection to such substitution.

§ 5.3 Subcontractual Relations

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, that the Contractor, by these Contract Documents, assumes toward the Owner, Construction Manager and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner, Construction Manager and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.4 Contingent Assignment of Subcontracts

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

§ 5.4.3 Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor Contractor or other entity. If the Owner assigns the subcontract to a successor Contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor Contractor's obligations under the subcontract.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 6.1 Owner's Right to Perform Construction with Own Forces and to Award Other Contracts

§ 6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

§ 6.1.2 When the Owner performs construction or operations with the Owner's own forces or Separate Contractors, the

Owner shall provide for coordination of such forces and Separate Contractors with the Work of the Contractor, who shall cooperate with them.

§ 6.1.3 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

§ 6.2 Mutual Responsibility

§ 6.2.1 The Contractor shall afford the Owner's own forces, Separate Contractors, Construction Manager and other Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner's own forces, Separate Contractors or other Contractors, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Construction Manager and Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor or other Contractors that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Construction Manager and the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's or other Contractors' completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractors or other Contractors that are not apparent.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs, including costs that are payable to a Separate Contractors or to other Contractors, because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of delays, improperly timed activities, damage to the Work or defective construction by the Owner's own forces, Separate Contractors, or other Contractors.

§ 6.2.4 The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction, or to property of the Owner, Separate Contractors, or other Contractors as provided in Section 10.2.5.

§ 6.2.5 The Owner, Separate Contractors, and other Contractors shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

§ 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, Separate Contractors, other Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Construction Manager, with notice to the Architect, will allocate the cost among those responsible.

ARTICLE 7 CHANGES IN THE WORK

§ 7.1 General

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Construction Manager, Architect and Contractor. A Construction Change Directive requires agreement by the Owner, Construction Manager and Architect and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Architect alone.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

§ 7.2 Change Orders

A Change Order is a written instrument prepared by the Construction Manager and signed by the Owner, Construction Manager, Architect, and Contractor, stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.

§ 7.2.1 Overhead and Profit Rates for Change Orders

For any adjustments to the Contract Sum, the Contractor agrees to charge and accept payment for their overhead and profit at the following maximum percentages of the cost attributable to the Change on the Work:

- .1 For each Contractor or subcontractor involved, for any Labor performed by that firm's own forces, twenty-five percent (25%) of the documented cost (reference section 7.2.1.4).
- .2 For each Contractor or subcontractor involved, for any Material or Equipment for work performed by that firm's own forces, ten percent (10%) of the documented cost.
- .3 For each Contractor or subcontractor involved, for work performed by that firm's subcontractors or sub subcontractors, ten percent (10%) of the documented cost due to the subcontractor or sub subcontractor.
- .4 Each Contractor and Subcontractor shall submit wage rates to be used for Changes in Work upon award of the Contract. Wage rates shall only include straight time scale wages, benefits, FICA, State Unemployment, Federal Unemployment, and Worker's Compensation cost. No other costs or mark-ups will be allowed in determining the wages used for Changes in the Work. Examples of costs that are not allowed include, but are not limited to, vehicles, phones, fuel, tools, vacation, overhead, bonuses, incentive pay, safety bonuses, etc.
- .5 In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including labor, materials, and Subcontracts. Labor, materials, and equipment shall be itemized in the manner prescribed above. Where major cost items are Subcontracts, they shall also be itemized as described herein. In no case will a change involving over \$200.00 be approved without such itemization.
- .6 For deleted work, the credit shall be the net cost.

The overhead and profit charges referred to in the preceding subparagraphs 1-6 shall constitute full reimbursement for all costs of supervision, engineering, field and main office expenses, premiums on insurance and bonds, small tools, incidental job burdens, etc.

§ 7.3 Construction Change Directives

§ 7.3.1 A Construction Change Directive is a written order prepared by the Construction Manager and signed by the Owner, Construction Manager and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

§ 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.4.

§ 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Construction Manager shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Construction Manager may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom,

- workers' compensation insurance, and other employee costs approved by the Construction Manager and Architect;
- .2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
 - .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
 - .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and
 - .5 Costs of supervision and field office personnel directly attributable to the change.

§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

§ 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Construction Manager of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Construction Manager and Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Construction Manager and Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Construction Manager and Architect determine to be reasonably justified. The interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree with a determination made by the Construction Manager and Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Construction Manager shall prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.4 Minor Changes in the Work

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Construction Manager and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Construction Manager that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

ARTICLE 8 TIME

§ 8.1 Definitions

§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.

§ 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

§ 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.3 Delays and Extensions of Time

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner, Architect, Construction Manager, or an employee of any of them, or of the Owner's own forces, Separate Contractors, or other Contractors; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts and the Architect, based on the recommendation of the Construction Manager, determines justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Owner and Construction Manager mutually agree.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.

§ 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

§ 8.3.4 Adverse Weather

§ 8.3.4.1 If a Claim is made for an extension of time based upon weather delays in accordance with the Contract Documents, an extension may be granted only for Adverse Weather Days which were not allotted in the project schedule and which impact the project's critical path as determined by the Construction Manager.

§ 8.3.4.2 Adverse Weather is defined as the occurrence of one or more of the following conditions within a twenty-four (24) hour day that prevents construction activity exposed to weather conditions or access to the Project Site:

- Precipitation (rain, snow, or ice) in excess of one-tenth inch (0.10") liquid measure.
- Temperatures that are more severe than the monthly daily average for the day's construction activity, if such temperature requirement is specified or accepted as standard industry practice.
- Sustained wind in excess of twenty-five (25) m.p.h.
- Frost in the ground which prevents excavation or earthwork activities.
- other weather conditions which require cessation of work by subcontractors.

§ 8.3.4.3 Adverse Weather Days may include, if appropriate, "dry-out" or "mud" days:

- resulting from precipitation related days that occur beyond the Adverse Weather Days;
- only if there is a hinderance to Project site access or sitework and Contractor has taken all reasonable accommodations to avoid such hinderance.

§ 8.3.4.4 Adverse Weather Days may include, if appropriate:

- any weather condition that requires cessation of construction activities as required by the recommendations promulgated by OSHA or by union contracts; or
- an extension granted by the Owner, in the Owner's sole discretion, to avoid working in conditions which could have a negative impact on the Project quality.

§ 8.3.4.5 An Adverse Weather Day may be counted if adverse weather prevents the performance of Work for fifty percent (50%) or more of the Contractor's scheduled work day and critical path construction activities were included in the day's schedule, including a weekend day or holiday if the Contractor has scheduled construction activity that day.

§ 8.3.4.6 The number of actual Adverse Weather Days shall include days impacted by actual adverse weather and shall be calculated chronologically and shall be recorded as full days. If the number of actual Adverse Weather Days exceeds the Allotted Adverse Weather Days, such delay shall constitute a Delay in accordance with 8.3.1. In the event the actual Adverse Weather Days are less than the Allotted Adverse Weather Days, the excess time shall be considered time gained by the Contractor on the Project Schedule shall not be offset against any delays described in 8.3.1.

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 Contract Sum

§ 9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 9.2 Schedule of Values

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Construction Manager, before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Construction Manager and the Architect. This schedule, unless objected to by the Construction Manager or Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. The Construction Manager shall forward to the Architect the Contractor's schedule of values. Any changes to the schedule of values shall be submitted to the Construction Manager and supported by such data to substantiate its accuracy as the Construction Manager and the Architect may require, and unless objected to by the Construction Manager or the Architect, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.

§ 9.3 Applications for Payment

§ 9.3.1 At least fifteen days before the date established for each progress payment, the Contractor shall submit to the Construction Manager an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner, Construction Manager or Architect require, such as copies of requisitions, and releases of waivers of lien from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Construction Manager and Architect, but not yet included in Change Orders.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, suppliers, or other persons or entities that provided labor, materials and equipment relating to the Work.

§ 9.4 Certificates for Payment

§ 9.4.1 Where there is only one Contractor, the Construction Manager will, within seven days after the Construction Manager's receipt of the Contractor's Application for Payment, review the Application, certify the amount the Construction Manager determines is due the Contractor, and forward the Contractor's Application and Certificate for Payment to the Architect. Within seven days after the Architect receives the Contractor's Application for Payment from

the Construction Manager, the Architect will either (1) issue to the Owner a Certificate for Payment, in the full amount of the Application for Payment, with a copy to the Construction Manager; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Construction Manager and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Construction Manager and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1. The Construction Manager will promptly forward to the Contractor the Architect's notice of withholding certification.

§ 9.4.2 Where there is more than one Contractor performing portions of the Project, the Construction Manager will, within seven days after the Construction Manager receives all of the Contractors' Applications for Payment: (1) review the Applications and certify the amount the Construction Manager determines is due each of the Contractors; (2) prepare a Summary of Contractors' Applications for Payment by combining information from each Contractor's application with information from similar applications for progress payments from the other Contractors; (3) prepare a Project Application and Certificate for Payment; (4) certify the amount the Construction Manager determines is due all Contractors; and (5) forward the Summary of Contractors' Applications for Payment and Project Application and Certificate for Payment to the Architect.

§ 9.4.2.1 Within seven days after the Architect receives the Project Application and Project Certificate for Payment and the Summary of Contractors' Applications for Payment from the Construction Manager, the Architect will either (1) issue to the Owner a Project Certificate for Payment, with a copy to the Construction Manager; or (2) issue to the Owner a Project Certificate for Payment for such amount as the Architect determines is properly due, and notify the Construction Manager and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Project Application for Payment, and notify the Construction Manager and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1. The Construction Manager will promptly forward the Architect's notice of withholding certification to the Contractors.

§ 9.4.3 The Construction Manager's certification of an Application for Payment or, in the case of more than one Contractor, a Project Application and Certificate for Payment, shall be based upon the Construction Manager's evaluation of the Work and the data in the Application or Applications for Payment. The Construction Manager's certification will constitute a representation that, to the best of the Construction Manager's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is, or Contractors are, entitled to payment in the amount certified.

§ 9.4.4 The Architect's issuance of a Certificate for Payment or, in the case of more than one Contractor, Project Application and Certificate for Payment, shall be based upon the Architect's evaluation of the Work, the recommendation of the Construction Manager, and data in the Application for Payment or Project Application for Payment. The Architect's certification will constitute a representation that, to the best of the Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is, or Contractors are, entitled to payment in the amount certified.

§ 9.4.5 The representations made pursuant to Sections 9.4.3 and 9.4.4 are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Construction Manager or Architect.

§ 9.4.6 The issuance of a Certificate for Payment or a Project Certificate for Payment will not be a representation that the Construction Manager or Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 9.5 Decisions to Withhold Certification

§ 9.5.1 The Construction Manager or Architect may withhold a Certificate for Payment or Project Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Construction Manager's or Architect's opinion the representations to the Owner required by Section 9.4.3 and 9.4.4 cannot be made. If the Construction Manager or Architect is unable to certify payment in the amount of the Application, the Construction Manager will notify the Contractor and Owner as provided in Section 9.4.1 and 9.4.2. If the Contractor, Construction Manager and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment or

a Project Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Construction Manager or Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment or Project Certificate for Payment previously issued, to such extent as may be necessary in the Construction Manager's or Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from the acts and omissions described in Section 3.3.2 because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a Separate Contractor or other Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.

§ 9.5.2 When either party disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15.

§ 9.5.3 When the reasons for withholding certification are removed, certification will be made for amounts previously withheld.

§ 9.5.4 If the Architect or Construction Manager withholds certification for payment under Section 9.5.1, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Construction Manager, and both will reflect such payment on the next Certificate for Payment.

§ 9.6 Progress Payments

§ 9.6.1 After the Architect has issued a Certificate for Payment or Project Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Construction Manager and Architect.

§ 9.6.2 The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.3 The Construction Manager will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Owner, Construction Manager and Architect on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner, Construction Manager nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

§ 9.6.5 The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

§ 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under

contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

§ 9.6.8 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

§ 9.7 Failure of Payment

If the Construction Manager and Architect do not issue a Certificate for Payment or a Project Certificate for Payment, through no fault of the Contractor, within fourteen days after the Construction Manager's receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents, the amount certified by the Construction Manager and Architect or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' notice to the Owner, Construction Manager and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 Substantial Completion

§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall notify the Construction Manager, and the Contractor and Construction Manager shall jointly prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§ 9.8.3 Upon receipt of the list, the Architect, assisted by the Construction Manager, will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect, assisted by the Construction Manager, to determine Substantial Completion.

§ 9.8.4 When the Architect, assisted by the Construction Manager, determines that the Work of all of the Contractors, or designated portion thereof, is substantially complete, the Construction Manager will prepare, and the Construction Manager and Architect shall execute, a Certificate of Substantial Completion that shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 9.9 Partial Occupancy or Use

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in

writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor and Construction Manager shall jointly prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect after consultation with the Construction Manager.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner, Construction Manager, Contractor, and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§ 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon completion of the Work, the Contractor shall forward to the Construction Manager a notice that the Work is ready for final inspection and acceptance, and shall also forward to the Construction Manager a final Contractor's Application for Payment. Upon receipt, the Construction Manager shall perform an inspection to confirm the completion of Work of the Contractor. The Construction Manager shall make recommendations to the Architect when the Work of all of the Contractors is ready for final inspection, and shall then forward the Contractors' notices and Application for Payment or Project Application for Payment, to the Architect, who will promptly make such inspection. When the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Construction Manager and Architect will promptly issue a final Certificate for Payment or Project Certificate for Payment stating that to the best of their knowledge, information and belief, and on the basis of their on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Construction Manager's and Architect's final Certificate for Payment or Project Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect through the Construction Manager (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys' fees.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Construction Manager and Architect so confirm, the Owner shall, upon application by the Contractor and certification by the Construction Manager and Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect through the Construction Manager prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

§ 9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;

- .2 failure of the Work to comply with the requirements of the Contract Documents;
- .3 terms of special warranties required by the Contract Documents; or
- .4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 Safety Precautions and Programs

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall submit the Contractor's safety program to the Construction Manager for review and coordination with the safety programs of other Contractors. The Construction Manager's responsibilities for review and coordination of safety programs shall not extend to direct control over or charge of the acts or omissions of the Contractors, Subcontractors, agents or employees of the Contractors or Subcontractors, or any other persons performing portions of the Work and not directly employed by the Construction Manager.

§ 10.2 Safety of Persons and Property

§ 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor;
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction; and
- .4 construction or operations by the Owner, Separate Contractors, or other Contractors.

§ 10.2.2 The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.

§ 10.2.3 The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner, Construction Manager or Architect or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner, Construction Manager and Architect.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 Injury or Damage to Person or Property

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ 10.3 Hazardous Materials

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner, Construction Manager and Architect of the condition.

§ 10.3.2 Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor, Construction Manager and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor, the Construction Manager and the Architect will promptly reply to the Owner in writing stating whether or not any of them has reasonable objection to the persons or entities proposed by the Owner. If the Contractor, Construction Manager or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor, the Construction Manager and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Construction Manager, Architect, their consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

§ 10.3.5 The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

§ 10.3.6 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

§ 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 Contractor's Insurance and Bonds

§ 11.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner, Construction Manager and Construction Manager's consultants, and the Architect and Architect's consultants, shall be named as additional insureds under the Contractor's commercial general liability policy or as otherwise described in the Contract Documents.

§ 11.1.2 The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Contract Documents. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 11.1.3 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

§ 11.1.4 **Notice of Cancellation or Expiration of Contractor's Required Insurance.** Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice directly to the Owner, and separately to the Construction Manager, of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 11.2 Owner's Insurance

§ 11.2.1 The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.

§ 11.2.2 **Failure to Purchase Required Property Insurance.** If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform both the Contractor and the Construction Manager, separately and in writing, prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.

§ 11.2.3 **Notice of Cancellation or Expiration of Owner's Required Property Insurance.** Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice directly to the Contractor, and separately to the Construction Manager, of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

§ 11.3 Waivers of Subrogation

§ 11.3.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Construction Manager and Construction Manager's consultants; (3) the Architect and Architect's consultants; (4) other Contractors and any of their subcontractors, sub-

subcontractors, agents, and employees; and (5) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Construction Manager, Construction Manager's consultants, Architect, Architect's consultants, other Contractors, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this Section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 11.3.2 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Contractor, Architect, and Construction Manager for loss of use of the Owner's property, due to fire or other hazards however caused.

§ 11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner shall pay the Construction Manager, Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Construction Manager, Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

§ 11.5.2 Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Construction Manager's or Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by either, be uncovered for their examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Construction Manager or Architect has not specifically requested to examine prior to its being covered, the Construction Manager or Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

§ 12.2 Correction of Work

§ 12.2.1 Before Substantial Completion

The Contractor shall promptly correct Work rejected by the Construction Manager or Architect or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion, and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner, Construction Manager or Architect, the Owner may correct it in accordance with Section 2.5.

§ 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner, Separate Contractors, or other Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§ 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located excluding that jurisdiction's choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

§ 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.

§ 13.3 Rights and Remedies

§ 13.3.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

§ 13.3.2 No action or failure to act by the Owner, Construction Manager, Architect, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

§ 13.4 Tests and Inspections

§ 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Construction Manager and Architect timely notice of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 13.4.2 If the Construction Manager, Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Construction Manager and Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Construction Manager and Architect of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

§ 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Construction Manager's and Architect's services and expenses, shall be at the Contractor's expense.

§ 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Construction Manager for transmittal to the Architect.

§ 13.4.5 If the Construction Manager or Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Construction Manager or Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.5 Interest

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate the parties agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

§ 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be

- stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
- .3 Because the Construction Manager has not certified or the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or
- .4 The Owner has failed to furnish to the Contractor reasonable evidence as required by Section 2.2.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' notice to the Owner, Construction Manager and Architect, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit on Work not executed, and costs incurred by reason of such termination.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees, or any other persons performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner, Construction Manager and Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

§ 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, after consultation with the Construction Manager, and upon certification by the Architect that sufficient cause exists to justify such action, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall, upon application, be certified by the Initial Decision Maker after consultation with the Construction Manager, and this obligation for payment shall survive termination of the Contract.

§ 14.3 Suspension by the Owner for Convenience

§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and the Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent:

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of this Contract.

§ 14.4 Termination by the Owner for Convenience

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly executed; costs incurred by reason of the termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement.

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 Claims

§ 15.1.1 Definition. A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.

§ 15.1.2 Time Limits on Claims

The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in the Agreement and within the period specified by applicable law. The Owner and Contractor waive all Claims and causes of action not commenced in accordance with this Section 15.1.2.

§ 15.1.3 Notice of Claims

§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party and to the Initial Decision Maker with a copy sent to the Construction Manager and Architect, if the Architect is not serving as the Initial Decision Maker. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

§ 15.1.4 Continuing Contract Performance

§ 15.1.4.1 Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 15.1.4.2 The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

§ 15.1.5 Claims for Additional Cost. If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4. Contractor's failure to meet these notice requirements will result in a waiver of said claim.

§ 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary. Contractor's failure to meet these notice requirements will result in a waiver of said claim.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated and had an adverse effect on the scheduled construction.

§ 15.1.7 - Intentionally Deleted

§ 15.2 Initial Decision

§ 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties, the Construction Manager, and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

§ 15.2.6 Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.

§ 15.2.6.1 Either party may, within 30 days from the date of receipt of an initial decision, demand in writing that the other party file for mediation. If such a demand is made and the party receiving the demand fails to file for mediation within 30 days of receipt thereof, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.

§ 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 15.2.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 15.3 Mediation

§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.7, shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 15.3.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 15.3.3 Either party may, within 30 days from the date that mediation has been concluded without resolution of the dispute or 60 days after mediation has been demanded without resolution of the dispute, demand in writing that the other party file for binding dispute resolution. If such a demand is made and the party receiving the demand fails to file for binding dispute resolution within 60 days after receipt thereof, then both parties waive their rights to binding dispute resolution proceedings with respect to the initial decision.

§ 15.3.4 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 15.4 Arbitration

§ 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. The Arbitration shall be conducted in the place where the Project is located, unless another location is mutually agreed upon. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

§ 15.4.2 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 15.4.3 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement, shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

§ 15.4.4 Consolidation or Joinder

§ 15.4.4.1 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 15.4.4.2 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

§ 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as those of the Owner and Contractor under this Agreement.

Oracle's Textura Payment Management: Work Faster and More Efficiently

What Is Textura Payment Management (TPM®)?

Oracle's TPM is an Internet-based construction invoicing and payment solution. With the TPM system, subcontractors can electronically sign and submit their pay applications—including invoices, sworn statements, and conditional and/or unconditional lien waivers. Payments are made electronically via ACH (Automated Clearing House) resulting in faster access to your funds. In addition, TPM facilitates submission and tracking of compliance documents and sub-tier waivers. In short, TPM has revolutionized the construction payment process. Thousands of subcontractors currently use TPM to submit their pay applications every month.

Sign Pay Applications and Submit Electronically

TPM automatically generates the required Pay Application documents and transmits them to your GC electronically at the click of a button.

- Invoices are created by simply entering a percent complete or dollar value by line item of your budget
- Electronic submission of documents eliminates the expense and inconvenience of fax or hand delivery
- Invoice amounts are verified with lien waiver and payment amounts, reducing the risk of error

Receive Payments via ACH

TPM uses the secure ACH network for electronic deposit of funds to accelerate draw payments.

- ACH will deliver funds faster than a manual check. Payments are made through TPM directly by the GC and are subject to the terms of your contract.
- ACH works like direct deposit. Funds are immediately available, no waiting for checks to clear.
- TPM alerts you via email that payment has been disbursed.

Know What is Happening, When It Happens

TPM offers complete visibility throughout the draw process and notifies users of critical events.

- Receive real-time notifications when a draw is opened, change order issued, payment disbursed, etc.
- Receive email reminders to update expiring insurance documents and notification of non-compliance.
- Online invoice approval and rejection ensures that both parties are informed of final invoice amounts.

Manage Documents Online

Project documents created in or uploaded to the system are available for viewing, printing or downloading to your computer. TPM will store these documents for a minimum of ten years.

- Pay Application backup documents are submitted quickly and easily via an upload attachment feature.
- Electronic submission & tracking of legal documents such as insurance certificates reduces payment holds.
- Possibility for lost or delayed documents resulting in held payments is virtually eliminated

What Does It Cost to Use TPM?

0.22 % of contract value*

- Maximum – \$5,000
- Sub-tier subcontractors – \$100

Payment Methods

- ACH (default) or Credit Card

**Plus applicable taxes*

Technical Requirements:

TPM is completely web-based- there is no software to install. Users need only:

- Internet access (high-speed recommended)
- Email access for each user
- Adobe Acrobat Reader 6.0 or higher (free download)

Free Training & Support:

Our Training Supports your training needs with:

- Free webinars
- Individual training by phone
- Training videos
- Live in-app chat

Support representatives are available to answer your questions at 866 -TEXTURA (866-839-8872).



Virtual Construction BIM Coordination Standards

Virtual Construction Coordination Scopes of Work

Concrete/Masonry:

1. All concrete and/or masonry walls with detailed openings and penetrations
2. All rebar & dowel placements
3. Control joints & expansion joints
4. All wall openings and clearance zone
5. Rebar around openings modeled as clearances
 - Bond beam and lintel regions
 - Reinforcing and embed regions.
 - Jam regions

Structural Steel:

1. All columns, baseplates, anchor bolts and accessories
2. Correct depth and location of all beams and joist (with joist spacing modeled to actual conditions)
3. Joist webbing layout as soon as available
4. All bracing, stiffeners, and connections necessary for fabrication and installation
5. Accurate embed size and location.

Wood Framing:

1. All Framing: King Studs, Corner Studs, Headers, Kickers, Framed Ceilings, and any openings required
2. All critical stud clearances
3. Joists correctly spaced with any openings required correctly shown
4. Any support blocking (RTU Screens, LVL Support for RTU) including the correct depth

Metal Stud Framing:

1. All Framing: King Studs, Corner Studs, Headers, Kickers & Openings.
2. All Critical stud clearances to be shown.

HVAC Ductwork:

1. All HVAC families and systems shall be modeled and named with the correct "System Names" per their properties/layers i.e. (VAV, SAV, FCU, AHU, Supply Air, Return Air etc.)
2. All ducts and related accessories, including but not limited to dampers, VAV boxes, and diffusers. Ducts should be modeled to outside diameter and when it exists, duct insulation around the outside of the ducts shall be modeled. Model all flanges, hangers, and bracing, etc.
3. Model all HVAC equipment. Each piece should be modeled to its overall height, width, and depth. In the event the detailed piece of equipment exists from the manufacture use that 3D item. All equipment should be modeled with a transparent red space for all the clearances needed for that piece of equipment.
4. All gas fired equipment vents, flu vents & intake combustion air, needs to be shown and modeled per the approved equipment manufacturer.
5. All access panels/hatches in hard lid ceilings need to be modeled and shown.
6. All units above ceilings should have a clearance zone shown at least 3" above and side of units and shown extended down to the floor.
7. All VaV's should have an access of 30"x30" or per AHJ requirements.
8. All SaV's should have an access of 24"x24" or per AHJ requirements.
9. All hangers, sleeves and penetrations will be modeled.

HVAC Piping:

1. All HVAC families and systems shall be modeled and named with the correct "System Names" per their properties/layers.
2. All piping with an outside diameter of 3/4" or greater and related accessories will be modeled and shown. All piping shall be modeled to its outside diameter or, if it exists, to the outside of pipe insulation.
3. All equipment including, but not limited to chillers, cooling towers, condensers, and pumps. Each piece shall be modeled to its overall height, width, and depth. In the event the detailed piece of equipment exists from the manufacture use that 3D item
4. All access panels, including clearance zones above and shown extended down to the floor.
5. All drip pans/trays will be modeled if needed.
6. All hanger/supports, sleeves and penetrations will be modeled.

Plumbing:

1. All plumbing families and systems shall be modeled and named with the correct "System Names" per their properties/layers i.e. (Boiler, Pump, CHW, DCW, DHW, DHWR etc.)
2. All sloped pipe regardless of diameter will be modeled and shown. Pressure pipes with outside diameter of 3/4" or larger. All related accessories. Pipes should be modeled to outside diameter or outside of the insulation if it exists. Pipe slopes shall be modeled.
3. All plumbing equipment. Each piece shall be modeled to its overall height, width, and depth. In the event the detailed piece of equipment exists from the manufacturer use that 3D item
4. Model all valves, access zones for equipment, fixtures, and clean outs.
5. All plumbing valves will be modeled no greater than 24" above ceiling with a clearance zone shown extended down to the floor.
6. All hanger/supports, sleeves and penetrations will be modeled.

Electrical:

1. All electrical families and systems shall be modeled and named with the correct "System Names" per their properties/layers i.e. (PNL-X, MSB, SWBD-X, Disc. etc.)
2. All conduit and MC cabling 1" and larger or any two or more parallel conduits
3. All Electrical equipment including, but not limited to MSB's, MCC's, Panelboards, and junction/pull boxes. Each piece shall be modeled to its overall height, width, and depth. In the event the detailed piece of equipment exists from the manufacture use that 3D item
4. All Equipment: panels, junction boxes, pull stations, access panels and clearance zones per NEC requirements.
5. All light fixtures will be modeled with a top clearance of a min. of 3" and recommended clearances for canned lights per manufacturer.
6. All cable trays will be modeled with a min. Top Clearance of 6" and max 12", with a side clearance on either side of a min. of 18".
7. All hanger/supports, sleeves and penetrations will be modeled.

Fire Protection:

1. All fire protection families and systems will be modeled and named with the correct "System Names" per their properties/layers.
2. All fire protection equipment including controllers, piping, valves, fire pumps, sprinkler heads, FDC cabinets. In the event the detailed piece of equipment exists from the manufacture use that 3D item.
3. All access zones/clearance zones for equipment fixtures, valves, and controllers
4. All hanger/supports, sleeves and penetrations will be modeled.

BIM / Virtual Construction Coordination General Scope

- Trade Partner shall provide BIM coordination for this Trade Scope of Work and shall participate in the BIM review process led by CORE.
- BIM Schedule is tied to Site Superintendent's construction sequence schedule/ Master Schedule.
- Virtual Construction shall have a line item in Schedule of Values for billing of percentage complete. Each modeling trade shall attend all Virtual Construction BIM Coordination meetings. Each trade modeling shall have a representative that can manipulate that trades' model, as well as the trade construction foreman.
- Each trade shall update its model a minimum of (24) hours before the coordination meeting. All clashes will be updated before the meeting. The meeting will be a time for resolution, not discovery, of the conflicts.
- Each trade shall agree to install their content based on the BIM Coordination model. Any conflict caused by a deviation from the model will be resolved at the expense of the trade that deviated from the model.
- Each area must be completely coordinated prior to shop drawings or material release for fabrication.
- All trades will export and submit their shop/installation drawings for all trades to reference.
- All trades will sign off on the model at this point and provide installation drawings to their workers and all other trades for reference. The installation drawings shall include all information needed to accurately install all items and equipment based on the coordinated sign off model. Items shall include, at a minimum: Heights, lengths, and distances from a measurable point in the field that can be referred to by all.

CORE CONSTRUCTION GENERAL SAFETY RULES FOR SUBCONTRACTORS

The health, welfare and safety of workers are prime objectives for all CORE projects. The following rules and regulations have been selected as a minimum standard only, as they do not cover all hazards a contractor/employee may encounter in the course of their work. These work rules in no way relieve the contractor/employee from complying with rules and regulations set forth by the client, OSHA and/or any national or local governing authority. Work as carefully as possible with the knowledge that each contractor/employee are responsible for their own safety. CONTRACTORS ARE RESPONSIBLE FOR COSTS OF ALL PPE AND HIGH VISIBILITY SHIRTS/VESTS.

1. Prior to starting work on the project, the contractor shall provide CORE with a copy of its company safety program, site-specific safety plan, safety data sheet and shall attend a preconstruction safety meeting.
2. Each contractor will be required to complete a Daily Activity Hazard Analysis (DAHA) prior to starting work on the project each day. The DAHA will describe the contractor's tasks to be completed that day, the potential hazards and exposures associated with those tasks, and the safety measures the contractor will employ to mitigate the hazards. The DAHA will be reviewed with and signed by the contractor's Foreman and all members of the contractor's crew prior to starting work. A copy of the completed and signed DAHA shall be submitted to the CORE Project Superintendent each day.
3. Hardhats shall be worn at all times by all personnel on the project site and/or the client's property with the bill in the front and the ratchet in the rear.
4. Safety glasses shall be worn at all times by all personnel on the project site and/or the client's property. Prescription safety glasses are only acceptable with side shields attached. Dark glasses are not allowed in enclosed buildings. Face shields are required when sawing, chipping, grinding, etc.
5. All personnel on the project site and/or the client's property must wear a high visibility vest, shirt, or jacket (ANSI/ISEA 107-2004 class II or greater) as their outermost garment at all times with minimum 4" sleeves. (When performing hot work, no non-flame-retardant vests shall be worn.) All personnel shall wear appropriate clothing including safety shoes and gloves when needed. No loose clothing, dangling jewelry, or shorts are permitted.
6. All personnel shall wear suitable work boots. Tennis shoes or athletic shoes are not permitted.

7. Respirators of the approved type shall be worn when dust or toxic fumes are present.
8. Appropriate hearing protection shall be worn as required by the OSHA standard.
9. The use of radios, boom boxes, tape players, CD players, iPods, MP3 players or similar devices, whether employing speakers or headsets, is not permitted on CORE jobsites. (Radios for jobsite communication are acceptable.)
10. Cell phone usage is prohibited while working, except for foremen or supervisors.
11. All accidents, injuries, and near miss incidents, regardless of severity, shall be reported to the CORE superintendent immediately. An incident report must be completed and provided to the CORE superintendent within 24 hours following the incident, injury or near miss.
12. Contractors/employees shall report all unsafe site conditions to the CORE Project Superintendent regardless of whether the contractor has the responsibility or resources to implement an appropriate corrective action.
13. Possession or use of any substance (alcohol, non-prescribed drugs, illegal drugs, or prescription/non-prescription drugs which warn of user impairment) is strictly prohibited. Anyone reporting to the job-site under the influence will be dismissed from the site.
14. Requirements for scaffolding:
 - a. Work platform shall be fully planked
 - b. Guardrails at 42" and 21" required at 6' and greater heights
 - c. Base plates always required
 - d. Ladder access to working platform must be provided
 - e. Supported scaffolds with height to base ratio greater than 4:1 will be tied off
15. Excavation and trench requirements:
 - a. Excavated material shall be kept at least 2' from edge of excavation
 - b. Excavations 4' deep or greater must have ladder for every 25' of lateral travel
 - c. Excavations 5' deep or greater must be inspected by competent person
 - d. The competent person must determine soil type and precautions necessary to protect employees from trench collapse
16. Fall protection requirements:

- a. Body harness and lanyard must be used when working from an aerial lift. Proper training is required prior to using any Fall Arrest System
 - b. Mandatory fall protection when working at heights greater than 6'
17. Extension ladders must extend 3' past the landing area and be secured at top and bottom.
 18. Riding of equipment is prohibited. No person shall ride any hook, ball, hoist or other material handling equipment.
 19. Power tools – powder activated tools shall only be used by trained personnel. Guarding and ground plugs (if not double insulated) must be in place.
 20. All electrical devices must utilize a Ground Fault Circuit Interrupter (GFCI). All generators must utilize a GFCI, either built-in or a “pig-tail.”
 21. Proper certification is required to operate a forklift.
 22. Pressurized Gas cylinders shall be upright when in use. During storage and transport, they must be capped and secured in an upright position.
 23. Riggers and Signalers must be Qualified.
 24. Good “housekeeping” shall be practiced. Avoid excess debris. All material shall be stored such that it does not pose a potential safety hazard to others working on the project.
 25. No personnel shall bring dogs, cats or other animals to the project site.
 26. Gambling, horseplay, wrestling, or fighting is STRICTLY PROHIBITED.
 27. Damaging, mutilating, or willfully misusing equipment or tools is STRICTLY PROHIBITED.
 28. Graffiti on Company/Client property is STRICTLY PROHIBITED.
 29. Contractors shall promulgate and enforce all General and Site-Specific Safety Rules with all lower tier contractors and suppliers they employ.

30. CORE Construction utilizes drone technology to record video footage and aerial shots of projects. At any given point, you may be recorded, have photographs taken of you or have a drone flying over/near you while working on CORE's project site.

31. CORE **Strictly Prohibits** employees and contractors from possessing a prohibited weapon (as defined below) on jobsites, CORE's office(s), or other offices (e.g. Owner or Architect) when working on behalf of CORE; regardless of whether the person is licensed to carry the weapon or not. This policy does not restrict the rights of an employee or contractor who lawfully possesses a firearm or ammunition from transporting or storing the firearm or ammunition the employee is authorized by law to possess in a locked, privately owned motor vehicle in the parking lot, or other parking area provided for them. This policy also does not restrict the ability of police officers, security guards or other persons who have been given consent by CORE to lawfully carry a weapon on the premises.

In addition to firearms and ammunition as described above, other weapons prohibited by this policy include any form of weapon or explosive restricted under local, state or federal regulation; knives more than three inches in length; or other weapons covered by law. Legal, chemical dispensing devices, such as pepper spray, which are sold for personal protection, are excluded from this policy. CORE property covered by this policy includes, without limitation, all CORE owned or leased buildings and surrounding areas, such as sidewalks, walkways, driveways and parking lots under CORE's ownership or control. CORE jobsites covered by the policy include jobsites controlled by developers, owners, general contractors, or CORE itself.

CORE reserves the right to conduct searches of work areas and CORE owned property at its sole discretion. CORE further reserves the right to contact local authorities in the event CORE managerial or supervisory staff reasonably believe that an employee or a contractor's employee is in violation of this Policy or is a threat to the safety of him or herself or others. Searches of CORE owned property may be conducted by CORE management or local authorities.

Although Illinois state law allows an individual to keep a legally-owned and lawfully-possessed firearm locked inside their private vehicle, even when that vehicle is parked on CORE property or at a CORE jobsite, nothing else in this policy should be construed as permitting an employee or contractor employee to bring a firearm onto CORE premises or jobsite. Violations of this policy will result in disciplinary action. CORE enforces this policy consistent with applicable state law.

If an employee or contractor employee feels that their safety or the safety of others is threatened at any time, or if they witness or experience any prohibited behavior, they

have the responsibility to exercise good judgment and report such conduct immediately to CORE supervisory or management personnel.

32. CORE has a zero-tolerance policy for all behavior that is prohibited under CORE's EEO/AA, Sexual Harassment, and Workplace Violence policies. These policies apply to

CORE's employees as well as to contractors working at any of CORE's sites or properties. CORE will require the contractor to remove, from CORE's sites or properties, any of the contractor's employees found to have violated these policies. By issuing and enforcing these policies, it is the intent of CORE to ensure that, while working on CORE's sites or properties, employees, customers, vendors, and contractors never feel threatened, intimidated, or harassed by any individual's actions, presence, conduct or communication. The following are examples of behaviors and actions viewed by CORE as prohibited conduct. This list is not exhaustive, but instead should be used as general guidance. Other behaviors and actions not specifically set forth in this list may also be considered prohibited and will be dealt with accordingly.

Examples of prohibited conduct include:

- Physically assaulting another individual, including assaults of a sexual nature; • Threatening or intimidating another individual (both implied and explicit)
- Bringing unauthorized weapons onto CORE sites or properties.
- Tampering with supplies, tools, or equipment;
- Spitting on an individual;
- Urinating in an undesignated area;

Additionally, jokes, comments, references, or slurs of a sexual, racial, ethnic, religious or otherwise derogatory nature are prohibited. Furthermore, graffiti, specifically graffiti that is sexual, racial, or otherwise demeaning or derogatory to any group, and discriminatory or sexually inappropriate material or displays (e.g., stickers, clothing, or posters that depict offensive material; magazines, books, pictures or videos with sexual content) are also prohibited on CORE sites or property.

33. Progressive Discipline. Contractors/employees agree to comply with and to enforce disciplinary actions as a result of a violation of the rules contained in this section. The following is a general guideline of progressive discipline CORE /contractors shall utilize on jobsites. CORE reserves the right, in CORE's sole discretion, to determine the severity of safety violations and to accelerate discipline accordingly to maintain a safe project site.

General Violations:

First Offense: Employee receives verbal reprimand



Second Offense: Employee receives written warning. Contractor's home office is notified.
Employee must receive training before resuming work.

Third Offense: Employee will be suspended from the project site.

Fourth Offense: Employee will be permanently removed from the project site or terminated from their position with CORE Construction.

Violations Deemed Severe or Immediate Danger to Life and Health (IDLH):

First Offense: Employee receives warning. Contractor's home office is notified.
Employee must receive training before resuming work.

Second Offense: Employee may be temporarily or permanently removed from the project site.

Third Offense: Employee will be permanently removed from the project site or terminated from their position with CORE Construction.

I certify I have read the CORE General Safety Rules for Subcontractors, watched the CORE Safety Orientation video and will abide by these safety rules and regulations as well as all OSHA regulations as they pertain to my scope of work.

Printed Name: _____

Signature: _____

Company: _____

Date: _____

Hard Hat Sticker Number: _____

SECTION 00 73 19a – PROJECT SAFETY REQUIREMENTS

1.1 GENERAL

- A. Subcontractors shall comply with all requirements of the Construction Manager’s Safety Policy
- B. Subcontractors shall comply with all Owner safety requirements and campus rules.
- C. Available Project information includes the following:
- D. CORE CONSTRUCTION GENERAL SAFETY RULES FOR SUBCONTRACTORS (Site Safety Orientation)
- E. Owner’s safety requirements and campus rules.
- F. The full Construction Managers Safety Policy shall be made available upon request.

END OF SECTION 00 73 19a

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. Certain Bid Packages may contain allowances for work which may not be reasonably quantified at the time of the bid. Each Subcontractor shall include such allowances in their total bid for the associated Bid Package. Failure to include the required allowances will result in rejection of the bid and may result in forfeiture of the bid security.
 - 2. All work performed against an allowance shall be documented on a Time and Material Ticket available from the Construction Manager. Tickets for such Time and Material Work shall be completed daily and shall be turned in to the Construction Manager by 9:00 AM of the day following the day on which the work was performed. Failure to submit Tickets in a timely manner may result in rejection of any costs for work performed. Each Subcontractor shall notify the Construction Manager prior to starting any Allowance or Time and Material Work and shall subsequently notify the Construction Manager when such work has been completed
 - 3. Each Subcontractor shall submit wage rates to be used for allowances upon award of Contract. Wage rates shall only include straight time scale wages, benefits, FICA, State Unemployment, Federal Unemployment, and Workers Compensation. No other costs or mark-ups will be allowed in determining the wages used for determining allowances. Examples of costs that are not allowed include, but are not limited to, vehicles, phones, fuel, tools, vacation, overhead, bonuses, incentive pay, safety bonuses, etc.
 - 4. Mark-up (i.e. overhead & profit) for allowances should be included in the base bid price and will not be added to individual allowance uses or T&M tickets associated with the allowance.
 - 5. Allowances which remain unused at the conclusion of the project shall be credited back to the owner by deductive change order.

1.3 SELECTION AND PURCHASE

- A. At the earliest practical date after the award of the Subcontract, advise the Architect and the Construction Manager of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
- B. At the Construction Manager'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.

1.4 ACTION SUBMITTALS

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

1.5 INFORMATIONAL SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for the installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in the same manner as for other portions of the Work.

1.6 COORDINATION

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

1.7 ALLOWANCES

- A. Allowance shall include the cost to the Subcontractor of specific products and materials ordered by the Owner or selected by Architect under allowance and shall include freight and delivery to the project site.
- B. Unless otherwise indicated, Subcontractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials under allowance shall be included as part of the Subcontract Sum and not part of the allowance.
- C. Unused Materials: Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after the installation has been completed and accepted.
 - 1. If requested by Architect, retain and prepare unused material for storage by Owner. Deliver unused material to the Owner's storage space as directed.

1.8 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
 - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
 - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.
 - 3. Submit substantiation of a change in scope of work, if any, claimed in Change Orders related to unit-cost allowances.
 - 4. The Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.

- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.
1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.
 2. No change to Contractor's indirect expense is permitted for the selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.
 3. All work performed against an allowance shall be documented on a Time and Material Ticket available from the Construction Manager. Tickets for such Time and Material Work shall be completed daily and shall be turned in to the Construction Manager by 9:00 AM of the day following the day on which the work was performed. Failure to submit Tickets in a timely manner may result in rejection of any costs for work performed. Each Contractor shall notify the Construction Manager prior to starting any Allowance or Time and Material Work and shall subsequently notify the Construction Manager when such work has been completed.
 4. Each Contractor shall submit wage rates to be used for allowances upon award of Contract. Wage rates shall only include straight time scale wages, benefits, FICA, State Unemployment, Federal Unemployment, and Workers Compensation. No other costs or mark-ups will be allowed in determining the wages used for determining allowances. Examples of costs which are not allowed include, but are not limited to, vehicles, phones, fuel, tools, vacation, overhead, bonuses, incentive pay, safety bonuses, etc.
 5. Allowances which remain unused at the conclusion of the project shall be credited back to the owner by deductive change order.

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. Bid Package 01 – GENERAL TRADES
- 1) \$50,000 allowance for additional work as directed by Construction Manager
 - 2) \$50,000 allowance for temporary roads and laydown area as directed by Construction Manager

END OF SECTION 01 21 00



SECTION 01 22 00 - UNIT PRICES

- 1. NOT APPLICABLE.**

END OF SECTION 01 22 00

SECTION 01 23 00 - ALTERNATES

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 alternates.

1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: Specification Sections referenced in the alternate schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

- 1. Refer to bid form:

END OF SECTION 01 23 00

SECTION 01 25 00 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
 - 1. Division 01 Section "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.
 - 2. Divisions 02 through 33 Sections for specific requirements and limitations for substitutions.

1.2 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by Contract Documents and proposed by Contractor.
 - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
 - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.

1.3 SUBMITTALS

- A. Substitution Requests: Submit electronically each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Substitution Requests shall be submitted electronically through the Construction Manager then to the A/E Project Manager and Construction Administrator. A substitution request is not a standard project submittal until the substitution request is approved by the A/E.
 - 2. Substitution Request Form: Use facsimile of form provided in Project Manual.
 - 3. Documentation: Show compliance with requirements for substitutions and following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
 - b. Coordination information, including a list of changes or revisions needed to other parts of Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from Work specified.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
 - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES, if applicable.

- j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for Work, including effect on overall Contract Time. If specified product or method of construction cannot be provided within Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
 - k. Cost information, including a proposal of change, if any, in Contract Sum.
 - l. Contractor's certification that proposed substitution complies with requirements in Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
 - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
4. A/E's Action: If necessary, A/E will request additional information or documentation for evaluation within 10 days of receipt of a request for substitution. A/E will notify Contractor through Construction Manager of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order.
 - b. Use product specified if A/E does not issue a decision on use of a proposed substitution within time allocated.

1.4 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.
- B. Variation from Materials Specified: It is intended that materials or products specified by name of manufacturer, brand, and trade name or by catalog reference shall be the basis of the bid and furnished under the contract, unless changed by mutual agreement. Where two or more materials are named, the choice of these shall be optional with the contractor. Should the contractor wish to use any materials or products other than those specified, they shall so state, naming the proposed substitutions and stating what difference, if any, on the form herein. If accepted the product, including any possible cost modification shall be made part of the contract.

1.5 PROCEDURES

- A. Coordination: Revise or adjust affected work as necessary to integrate work of approved substitutions.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
 - 1. Conditions: A/E will consider Contractor's request for substitution when following conditions are satisfied. If following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
 - a. Requested substitution is consistent with Contract Documents and will produce indicated results.
 - b. Substitution request is fully documented and properly submitted.
 - c. Requested substitution will not adversely affect Contractor's construction schedule.
 - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - e. Requested substitution is compatible with other portions of Work.
 - f. Requested substitution has been coordinated with other portions of Work.

- g. Requested substitution provides specified warranty.
 - h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: A/E will consider requests for substitution if received within 60 days after Notice to Proceed. Requests received after that time may be considered or rejected at discretion of A/E.
- 1. Conditions: A/E will consider Contractor's request for substitution when following conditions are satisfied. If following conditions are not satisfied, A/E will return requests without action, except to record noncompliance with these requirements:
 - a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to A/E for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
 - b. Requested substitution does not require extensive revisions to Contract Documents.
 - c. Requested substitution is consistent with Contract Documents and will produce indicated results.
 - d. Substitution request is fully documented and properly submitted.
 - e. Requested substitution will not adversely affect Contractor's construction schedule.
 - f. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - g. Requested substitution is compatible with other portions of Work.
 - h. Requested substitution has been coordinated with or portions of Work.
 - i. Requested substitution provides specified warranty.
 - j. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 25 00

**SUBSTITUTION
REQUEST**
(After the Bidding Phase)



Project: _____

To: _____

Re: _____

From: _____

Date: _____

A/E Project Number: _____

Contract For: _____

Specification Title: _____ Description: _____
Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____

Manufacturer: _____ Address: _____ Phone: _____

Trade Name: _____ Model No.: _____

Installer: _____ Address: _____ Phone: _____

History: New product 2-5 years old 5-10 yrs old More than 10 years old

Differences between proposed substitution and specified product: _____

Point-by-point comparative data attached

Reason for not providing specified item: _____

Similar Installation:

Project: _____ Architect: _____

Address: _____ Owner: _____

_____ Date Installed: _____

Proposed substitution affects other parts of Work: No Yes; explain _____

Savings to Owner for accepting substitution: _____ (\$ _____).

Proposed substitution changes Contract Time: No Yes [Add] [Deduct] _____ days.

Supporting Data Attached: Drawings Product Data Samples Tests Reports _____

**SUBSTITUTION
REQUEST**
(Continued)



The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by: _____

Signed by: _____

Firm: _____

Address: _____

Telephone: _____

Attachments: _____

A/E's REVIEW AND ACTION

- Substitution approved - Make submittals in accordance with Specification Section 01 33 00.
- Substitution approved as noted - Make submittals in accordance with Specification Section 01 33 00.
- Substitution rejected - Use specified materials.
- Substitution Request received too late - Use specified materials.

Signed by: _____
(Project Manager)

Date: _____

Additional Comments: Contractor Subcontractor Supplier Manufacturer A/E _____

SECTION 01 26 00 - CONTRACT MODIFICATION 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. Section includes administrative and procedural requirements for handling and processing Contract modifications.

1.3 MINOR CHANGES IN THE WORK

- A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions."

1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within 24 hours after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - e. Quotation Form: Use forms acceptable to Architect.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect within 24 hours.
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.

2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
4. Include costs of labor and supervision directly attributable to the change.
5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
6. Comply with requirements in Section 00 43 25 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
7. Proposal Request Form: Use form acceptable to Architect.

1.5 ADMINISTRATIVE CHANGE ORDERS

- A. Allowance Adjustment: See Section 00 43 21 "Allowances" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect actual costs of allowances.

1.6 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Work Changes Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

1.7 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 26 00

SECTION 01 29 00 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Requirements:
 - 1. Section 01 21 00 "Allowances" for procedural requirements governing the handling and processing of allowances.
 - 2. Section 01 22 00 "Unit Prices" for administrative requirements governing the use of unit prices.
 - 3. Section 01 26 00 "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.

1.3 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
 - 1. Coordinate line items in the schedule of values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with continuation sheets.
 - b. Submittal schedule.
 - c. Items required to be indicated as separate activities in Contractor's construction schedule.
 - 2. Submit the schedule of values to Architect at earliest possible date, but no later than thirty days before the date scheduled for submittal of initial Applications for Payment.
- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
 - 1. Identification: Include the following Project identification on the schedule of values:
 - a. Project name and location.
 - b. Name of Architect.
 - c. Architect's project number.
 - d. Contractor's name and address.
 - e. Date of submittal.

2. Arrange schedule of values consistent with format of AIA Document G703.
3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.
 - a. Include separate line items under Contractor and principal subcontracts for Project closeout requirements in an amount totaling five percent of the Contract Sum and subcontract amount.
4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
5. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site. If required, include evidence of insurance.
6. Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
7. Allowances: Provide a separate line item in the schedule of values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
8. Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.

1.4 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.
 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.
- C. Application for Payment Forms: Use AIA Document G702/CMA and AIA Document G703 as form for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.

1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
 4. Indicate separate amounts for work being carried out under Owner-requested project acceleration.
- E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment, for stored materials.
 2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
 3. Provide summary documentation for stored materials indicating the following:
 - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
 - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
 - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- F. Transmittal: Submit four signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's liens from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.
1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 2. When an application shows completion of an item, submit conditional final or full waivers.
 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 4. Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
 2. Schedule of values.
 3. Contractor's construction schedule (preliminary if not final).

- I. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
 - 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 - 2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

- J. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
 - 1. Evidence of completion of Project closeout requirements.
 - 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 - 3. Updated final statement, accounting for final changes to the Contract Sum.
 - 4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
 - 5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
 - 6. AIA Document G707, "Consent of Surety to Final Payment."
 - 7. Evidence that claims have been settled.

1.5 SUPPLIER PAYMENT

- A. Refer to section 00 22 00a Sample Purchase Agreement with Attachments

1.6 SUBCONTRACTOR PAYMENT

- A. Refer to section 00 22 00b Sample Subcontract with Attachments

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 29 00

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. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General coordination procedures.
 - 2. Coordination drawings.
 - 3. Requests for Information (RFIs).
 - 4. Project meetings.
- B. Related Requirements:
 - 1. Section 01 77 00 "Closeout Procedures" for coordinating closeout of the Contract.

1.3 DEFINITIONS

- A. RFI: Request from Owner, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

1.4 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 - 1. Name, address, and telephone number of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.
- B. Key Personnel Names: Within 3 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home, office, and cellular telephone numbers and e-mail addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.
 - 1. Post copies of list in project meeting room in temporary field office. Keep list current at all times.

1.5 GENERAL COORDINATION PROCEDURES

- A. Coordination: Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Each contractor shall coordinate its operations with operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
1. Schedule construction operations in 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 with other contractors to ensure maximum performance and accessibility for required maintenance, service, and repair.
 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
1. Prepare similar memoranda for Owner and separate contractors if 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 to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. Preparation of Contractor's construction schedule.
 2. Preparation of the schedule of values.
 3. Installation and removal of temporary facilities and controls.
 4. Delivery and processing of submittals.
 5. Progress meetings.
 6. Preinstallation conferences.
 7. Project closeout activities.
 8. Startup and adjustment of systems.

1.6 COORDINATION DRAWINGS

- A. Coordination Drawings, General: Prepare, within 7 days of contract award, coordination drawings according to requirements in individual Sections, and additionally where installation is not completely shown on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.
1. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:
 - a. Use applicable Drawings as a basis for preparation of coordination drawings. Prepare sections, elevations, and details as needed to describe relationship of various systems and components.
 - b. Coordinate the addition of trade-specific information to the coordination drawings by multiple contractors in a sequence that best provides for coordination of the information and resolution of conflicts between installed components before submitting for review.
 - c. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.

- d. Indicate space requirements for routine maintenance and for anticipated replacement of components during the life of the installation.
 - e. Show location and size of access doors required for access to concealed dampers, valves, and other controls.
 - f. Indicate required installation sequences.
 - g. Indicate dimensions shown on the Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
- B. Coordination Digital Data Files: Prepare coordination digital data files according to the following requirements:
1. File Preparation Format: Same digital data software program, version, and operating system as original Drawings.
 2. File Preparation Format: DWG, Version, operating in Microsoft Windows operating system.
 3. File Submittal Format: Submit or post coordination drawing files using Portable Data File (PDF) format.
 4. Architect will furnish Contractor one set of digital data files of Drawings for use in preparing coordination digital data files.
 - a. Architect makes no representations as to the accuracy or completeness of digital data files as they relate to Drawings.
- C. 2-D Coordination Drawing & Meeting Process
1. From Notice of Award, the Coordinating Contractor (Mechanical Subcontractor) shall immediately begin Work and prepare 1/4" scale layout drawings of their own work in AutoCAD format. The Coordinating Contractor shall overlay their layout with the architectural and structural backgrounds for each floor of the building and indicate bottom of structure elevations. Within seven (7) working days from date of Notice of Award, the mechanical layout is to be complete in AutoCAD format for distribution to General, Plumbing, Fire Protection and Electrical/Technology Subcontractors.
 2. Each Subcontractor is responsible for the layout of their own Work in AutoCAD format. Within five (5) working days of receiving the mechanical layout, the General, Plumbing, Fire Protection and Electrical/Technology Subcontractors shall have completed their layout drawings and shall forward the AutoCAD file of their layout to the Coordinating Contractor.
 3. Within five (5) working days, the Coordinating Contractor shall composite all other General and MEP/FP related trade's drawing files as collected and review all trades for conflicts. The Coordinating Contractor shall identify all conflicts on the coordination drawings.
 4. Twenty (20) days from date of Notice of Award, all Subcontractors (General, Mechanical, Electrical, Technology, Plumbing and Fire Protection) will attend the first coordination meeting.
 - a. Three (3) days prior to ALL coordination meetings, the Coordinating Contractor shall forward the complete coordinating drawings (pdf format and AutoCAD format) with conflicts identified to the Construction Manager.
 - b. The General, Mechanical, Plumbing, Fire Protection and Electrical/Technology Subcontractors are required to attend ALL coordination meetings. The representative(s) from each subcontractor is required to be familiar with the Work and have the expertise and authority to answer questions and make decisions and changes to its systems at these meetings.

- c. Subcontractors, at the meeting, will work to review and overlay the different trades to identify and resolve interferences and coordination problems.
 - d. Following the meeting, Subcontractors shall revise their AutoCAD layout drawings, if necessary, based upon the agreed changes and be prepared to forward revised layout drawing to the Coordinating Contractor for review within five (5) working days.
 - e. All Subcontractors will meet again within ten (10) working days of the first coordination meeting as scheduled by the Construction Manager.
5. When the 2-D coordination drawings have been fully revised with no exceptions taken by respective Subcontractors, including the Construction Manager, the Subcontractors shall sign them, indicating their awareness of, and agreement with the indicated routings, elevations, layouts, and their inter-relationship with the adjoining or continuous Work of all Project contracts. Thereafter, no unauthorized deviations from the information provided will be permitted, and if made without the knowledge or agreement of the Architect and the Construction Manager, this unauthorized Work will be subject to removal and correction at no additional cost to the Owner, Architect, Engineer, or Construction Manager.
 - a. Within three (3) Days of the signing of the 2-D coordination drawings, each Subcontractor shall provide the Construction Manager with a digital copy and three (3) hard copy prints of their portion of the coordinated shop drawings for the submittal to the Architect/Engineer/Owner.
6. Information for specific trades is required but not limited to the following:
 - a. Mechanical – Size, layout and routing of all metal and flex ductwork, re-heat coils, terminal units, filters, and major hangers and supports; location and sizes of all registers, grilles, diffusers, and similar features; locations of all valves, dampers, and note any items requiring access for service and maintenance as well as access doors in inaccessible ceilings. Subcontractor shall provide notation for diffuser boot sizes and heights and any other special features. Subcontractor shall provide cross sections and additional details through areas where clearances are tight and further detail as appropriate and/or required. Where piping or ductwork has external insulation, Subcontractor shall note or show locations and thickness. Subcontractor shall indicate bottom elevation of duct, pipes and equipment and elevation changes, to be measured to the lowest point including insulation and hangers where applicable. In areas or rooms where no HVAC work occurs, but where other mechanical and electrical installations are installed the HVAC Subcontractor will issue or note on AutoCAD background indicating “No HVAC Work Required.”
 - b. General – Size, location and bottom of structure elevations of all new steel and exposed existing steel in all areas with HVAC work.
 - c. Plumbing – Size, layout and routing of piping, valves, boxes, sleeve locations, supports, etc., for all utilities regardless of material size. Show or note all pipe sizes and working clearances around valves, etc. For pitched piping, identify bottom elevations at key points and at least every column line. Note thickness and location of all external insulation. Bottom elevations shall be measured to the lowest point including hangers and insulation where applicable.
 - d. Sprinkler Piping – Size, layout, and routing of mains and branch piping, sleeve locations, hanger and supports, valves, working clearances, and bottom of pipe and bottom of hanger support elevations. Sprinkler head locations shall be shown on ceiling plans. For pitched piping, identify bottom elevation at key points and at least every column line.
 - e. Electrical – Size, sleeve locations, layout and routing and size of conduit and wire 1-1/2” or larger for normal power distribution systems, 1-1/2” or larger for communication systems telephone, security, etc., boxes larger than 4”x4”x4”, hangers,

supports, and electrical fixtures including lights, speakers, detectors, sensors, cable trays, raceways, etc. Size and clearance of ceiling and above ceiling mounted items shall be noted as a depth from finished ceiling to top of fixture or top of clear area required. Provide bottom elevations of conduits and equipment. Bottom elevation shall be measure from the lowest point, including hangers.

- 1) Within four (4) feet of all panels, or areas where more than 4 conduits, regardless of size, are routed or grouped together, identify an easement or right-of-way for the groups of conduit.
- 2) Also show all wall mounted items located within 12" of the ceiling plane, and show all access panels required.

1.7 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
1. Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
 3. Combine RFI and its attachments into a single electronic file
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
1. Project name.
 2. Project number.
 3. Date.
 4. Name of Contractor.
 5. Name of Architect.
 6. RFI number, numbered sequentially.
 7. RFI subject.
 8. Specification Section number and title and related paragraphs, as appropriate.
 9. Drawing number and detail references, as appropriate.
 10. Field dimensions and conditions, as appropriate.
 11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 12. Contractor's signature.
 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
 - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.
- C. RFI Forms: AIA Document G716.
1. Attachments shall be electronic files in Adobe Acrobat PDF format.
 2. RFI's shall be submitted via PROCORE

- D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow seven working days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
1. The following Contractor-generated RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for approval of Contractor's means and methods.
 - d. Requests for coordination information already indicated in the Contract Documents.
 - e. Requests for adjustments in the Contract Time or the Contract Sum.
 - f. Requests for interpretation of Architect's actions on submittals.
 - g. Incomplete RFIs or inaccurately prepared RFIs.
 2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt of additional information.
 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 01 26 00 "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 2 days of receipt of the RFI response.
- E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.
1. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.

1.8 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site unless otherwise indicated.
1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 3. Minutes: Contractor is responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three days of the meeting.
- B. Preconstruction Conference: Preconstruction conference shall be scheduled prior to work commencing
1. Conduct the conference to review responsibilities and personnel assignments.
 2. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 3. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Execution of Owner-Contractor Agreement (if applicable).

- b. Submission of executed bonds and insurance certificates. (if applicable)
 - c. Construction schedule.
 - d. Critical work sequencing and long-lead items.
 - e. Designation of key personnel and their duties.
 - f. Lines of communications.
 - g. Procedures for processing field decisions and Change Orders.
 - h. Procedures for RFIs.
 - i. Procedures for testing and inspecting.
 - j. Procedures for processing Applications for Payment.
 - k. Distribution of the Contract Documents.
 - l. Submittal procedures.
 - m. Background checks and badging (if applicable)
 - n. Preparation of record documents.
 - o. Use of the premises and existing building.
 - p. Work restrictions.
 - q. Working hours.
 - r. Owner's occupancy requirements.
 - s. Responsibility for temporary facilities and controls.
 - t. Procedures for disruptions and shutdowns.
 - u. Construction waste management and recycling.
 - v. Parking availability.
 - w. Office, work, and storage areas.
 - x. Equipment deliveries and priorities.
 - y. First aid.
 - z. Security.
 - aa. Progress cleaning.
4. Minutes: Contractor is responsible for conducting meeting will record and distribute meeting minutes.
- C. Progress Meetings: Conduct progress meetings at weekly intervals.
- 1. Coordinate dates of meetings with preparation of payment requests.
 - 2. Attendees: In addition to representatives of Owner, Owner's Commissioning Authority and Architect, each contractor, subcontractor, supplier, and 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 meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction 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.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:

- 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Access.
 - 5) Site utilization.
 - 6) Temporary facilities and controls.
 - 7) Progress cleaning.
 - 8) Quality and work standards.
 - 9) Status of correction of deficient items.
 - 10) Field observations.
 - 11) Status of RFIs.
 - 12) Status of proposal requests.
 - 13) Pending changes.
 - 14) Status of Change Orders.
 - 15) Pending claims and disputes.
 - 16) Documentation of information for payment requests.
4. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
- a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.
- D. Coordination Meetings: Conduct Project coordination meetings at weekly intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.
1. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and 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 meetings shall be familiar with Project and authorized to conclude matters relating to the Work.
 2. Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to combined Contractor's construction 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.
 - b. Schedule Updating: Revise combined Contractor's construction schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.
 - c. Review present and future needs of each contractor present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Site utilization.

- 6) Temporary facilities and controls.
 - 7) Work hours.
 - 8) Hazards and risks.
 - 9) Progress cleaning.
 - 10) Quality and work standards.
 - 11) Change Orders.
3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 31 00

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. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Related Requirements:
 - 1. Section 01 29 00 "Payment Procedures" for submitting Applications for Payment and the schedule of values.
 - 2. Section 01 78 23 "Operation and Maintenance Data" for submitting operation and maintenance manuals.
 - 3. Section 01 79 00 "Demonstration and Training" for submitting video recordings of demonstration of equipment and training of Owner's personnel.

1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's and Construction Manager's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's and Construction Manager's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."
- C. File Transfer Protocol (FTP): Communications protocol that enables transfer of files to and from another computer over a network and that serves as the basis for standard Internet protocols. An FTP site is a portion of a network located outside of network firewalls within which internal and external users are able to access files.
- D. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.

1.4 ACTION SUBMITTALS

- A. Submittal Schedule: See submittal section of project schedule in 01 33 00 for submittal requirements. Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and Construction Manager and additional time for handling and reviewing submittals required by those corrections. Contractor to provide timeframes within 3 days of contract award.
1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
 2. Final Submittal: Submit concurrently with the first complete submittal of Contractor's construction schedule.
 - a. Submit revised submittal schedule to reflect changes in current status and timing for submittals.
 3. Format: Arrange the following information in a tabular format:
 - a. Scheduled date for first submittal.
 - b. Specification Section number and title.
 - c. Submittal category: Action; informational.
 - d. Name of subcontractor.
 - e. Description of the Work covered.
 - f. Scheduled date for Architect's and Construction Manager's final release or approval.
 - g. Scheduled date of fabrication.

1.5 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
 4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Architect and Construction Manager reserve the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- B. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

1. Initial Review: Allow 14 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Construction Manager will advise Contractor when a submittal being processed must be delayed for coordination.
 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 3. Resubmittal Review: Allow 14 days for review of each resubmittal.
 4. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Architect and to Architect's consultants, allow 14 days for review of each submittal. Submittal will be returned to Construction Manager, through Architect, before being returned to Contractor.
- C. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
 2. Name file with submittal number or other unique identifier, including revision identifier.
 - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
 3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect and Construction Manager.
 4. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Owner, containing the following information:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name of Construction Manager.
 - e. Name of Contractor.
 - f. Name of firm or entity that prepared submittal.
 - g. Names of subcontractor, manufacturer, and supplier.
 - h. Category and type of submittal.
 - i. Submittal purpose and description.
 - j. Specification Section number and title.
 - k. Specification paragraph number or drawing designation and generic name for each of multiple items.
 - l. Drawing number and detail references, as appropriate.
 - m. Location(s) where product is to be installed, as appropriate.
 - n. Related physical samples submitted directly.
 - o. Indication of full or partial submittal.
 - p. Transmittal number, numbered consecutively.
 - q. Submittal and transmittal distribution record.
 - r. Other necessary identification.
 - s. Remarks.
- D. Options: Identify options requiring selection by Architect.
- E. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect and Construction Manager on previous submittals, and deviations from requirements in the

Contract Documents, including minor variations and limitations. Include same identification information as related submittal.

- F. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked with approval notation from Architect's and Construction Manager's action stamp.
- G. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- H. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's and Construction Manager's action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
 - 1. Post electronic submittals as PDF electronic files to the Construction Manager's site as specified in the contract documents.
 - a. Architect, through Construction Manager, will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
 - 2. Action Submittals: Submit three paper copies of each submittal unless otherwise indicated. Architect, through Construction Manager, will return two copies.
 - 3. Informational Submittals: Submit two paper copies of each submittal unless otherwise indicated. Architect and Construction Manager will not return copies.
 - 4. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - a. Provide a digital signature with digital certificate on electronically submitted certificates and certifications where indicated.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.

- b. Standard color charts.
 - c. Statement of compliance with specified referenced standards.
 - d. Notation of coordination requirements.
 - e. Availability and delivery time information.
 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams showing factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 5. Submit Product Data before or concurrent with Samples.
 6. Submit Product Data in the following format:
 - a. PDF electronic file.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
 2. Submit Shop Drawings in the following format:
 - a. PDF electronic file.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of applicable Specification Section.
 - e. Specification paragraph number and generic name of each item.
 3. Provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.

4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit two full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect, through Construction Manager, will return submittal with options selected.
6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit two sets of Samples. Architect and Construction Manager will retain two Sample sets.
 - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
 - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
 1. Type of product. Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
 2. Manufacturer and product name, and model number if applicable.
 3. Number and name of room or space.
 4. Location within room or space.
 5. Submit product schedule in the following format:
 - a. PDF electronic file.
- F. Coordination Drawing Submittals: Comply with requirements specified in Section 01 31 00 "Project Management and Coordination."
- G. Application for Payment and Schedule of Values: Comply with requirements specified in Section 01 29 00 "Payment Procedures."
- H. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Section 01 40 00 "Quality Requirements."
- I. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 01 77 00 "Closeout Procedures."

- J. Maintenance Data: Comply with requirements specified in Section 01 78 23 "Operation and Maintenance Data."
- K. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- L. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
- M. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- N. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- O. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- P. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- Q. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- R. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

2.2 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF electronic file and three paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 - EXECUTION**3.1 CONTRACTOR'S REVIEW**

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect and Construction Manager.
- B. Project Closeout and Maintenance Material Submittals: See requirements in Section 01 77 00 "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S AND CONSTRUCTION MANAGER'S ACTION

- A. Action Submittals: Architect and Construction Manager will review each submittal, make marks to indicate corrections or revisions required, and return it. Architect and Construction Manager will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:

1. Approval does not authorize changes in the contractor sum or contract time unless stated by change order or construction change directive.

- | | |
|--|--|
| <input type="checkbox"/> Approved | <input type="checkbox"/> Rejected |
| <input type="checkbox"/> Approved as noted | <input type="checkbox"/> Revise and Resubmit |

Review and approval are only for conformance with the information given and the design concept of the project as expressed in the contract documents. Review of submittals are not conducted for the purpose of determining the accuracy and completeness of other details, such as dimensions and quantities, for substantiating instructions for the installation or performance of equipment or systems, all of which remain the responsibility of the contractor as required by the contract documents. Review of the contractor's submittals shall not relieve the contractor from any obligation contained in the contract documents and shall not constitute approval of any construction means, methods, techniques, sequences, or any safety precautions or procedures and shall not indicate approval of any assembly of which the item is a component.

By _____ Date _____

- B. Informational Submittals: Architect and Construction Manager will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect and Construction Manager will forward each submittal to appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect and Construction Manager.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Submittals not required by the Contract Documents may be returned by the Architect without action.

END OF SECTION 01 33 00

SECTION 01 40 00 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-assurance and -control services required by A/E, Owner, Construction Manager, or authorities having jurisdiction are not limited by provisions of this Section.
- C. Related Sections:
 - 1. Divisions 02 through 33 Sections for specific test and inspection requirements.

1.2 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by A/E or Construction Manager.
- C. Mockups: Full size physical assemblies that are constructed on-site. Mockups are constructed to verify selections made under sample submittals; to demonstrate aesthetic effects and, where indicated, qualities of materials and execution; to review coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not Samples. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.
 - 1. Integrated Exterior Mockups: Mockups of the exterior envelope erected separately from the building but on the project site, consisting of multiple products, assemblies and subassemblies.
 - 2. Room Mockups: Mockups of typical interior spaces complete with wall, floor, and ceiling finishes, doors, windows, millwork, casework, specialties, furnishings and equipment, and lighting.
- D. Preconstruction Testing: Tests and inspections performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.
- E. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
- F. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.

- G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- I. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade or trades.

1.3 CONFLICTING REQUIREMENTS

- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to A/E for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to A/E for a decision before proceeding.

1.4 INFORMATIONAL SUBMITTALS

- A. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
 - 1. Specification Section number and title.
 - 2. Entity responsible for performing tests and inspections.
 - 3. Description of test and inspection.
 - 4. Identification of applicable standards.
 - 5. Identification of test and inspection methods.
 - 6. Number of tests and inspections required.
 - 7. Time schedule or time span for tests and inspections.
 - 8. Requirements for obtaining samples.
 - 9. Unique characteristics of each quality-control service.

1.5 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, and telephone number of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the Work and test and inspection method.
 - 7. Identification of product and Specification Section.
 - 8. Complete test or inspection data.
 - 9. Test and inspection results and an interpretation of test results.
 - 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.

11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 12. Name and signature of laboratory inspector.
 13. Recommendations on retesting and reinspecting.
- B. **Manufacturer's Technical Representative's Field Reports:** Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
1. Name, address, and telephone number of technical representative making report.
 2. Statement on condition of substrates and their acceptability for installation of product.
 3. Statement that products at Project site comply with requirements.
 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 6. Statement whether conditions, products, and installation will affect warranty.
 7. Other required items indicated in individual Specification Sections.
- C. **Factory-Authorized Service Representative's Reports:** Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:
1. Name, address, and telephone number of factory-authorized service representative making report.
 2. Statement that equipment complies with requirements.
 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 4. Statement whether conditions, products, and installation will affect warranty.
 5. Other required items indicated in individual Specification Sections.
- D. **Permits, Licenses, and Certificates:** For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.6 QUALITY ASSURANCE

- A. **General:** Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. **Manufacturer Qualifications:** A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- C. **Fabricator Qualifications:** A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. **Installer Qualifications:** A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. **Professional Engineer Qualifications:** A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.

- F. Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirements of authorities having jurisdiction shall supersede requirements for specialists.
- G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- H. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- I. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- J. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
 - 1. Build mockups in location and of size indicated or, if not indicated, as directed by A/E.
 - 2. Notify A/E and Construction Manager seven days in advance of dates and times when mockups will be constructed.
 - 3. Employ supervisory personnel who will oversee mockup construction. Employ workers that will be employed during the construction at the Project.
 - 4. Demonstrate the proposed range of aesthetic effects and workmanship.
 - 5. Obtain A/E's approval of mockups before starting work, fabrication, or construction.
 - a. Allow seven days for initial review and each re-review of each mockup.
 - 6. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
 - 7. Demolish and remove mockups when directed, unless otherwise indicated.

1.7 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
 - 1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
 - 2. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.
- B. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.
 - 1. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
 - 2. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.

3. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
 4. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 5. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 6. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. **Manufacturer's Field Services:** Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 01 Section "Submittal Procedures."
- D. **Manufacturer's Technical Services:** Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in preinstallation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.
- E. **Retesting/Reinspecting:** Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- F. **Testing Agency Responsibilities:** Cooperate with A/E, Construction Manager, and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
1. Notify A/E, Construction Manager, and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 6. Do not perform any duties of Contractor.
- G. **Associated Services:** Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
1. Access to the Work.
 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 4. Facilities for storage and field curing of test samples.
 5. Delivery of samples to testing agencies.
 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- H. **Coordination:** Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
1. Schedule times for tests, inspections, obtaining samples, and similar activities.

- I. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents. Coordinate and submit concurrently with Contractor's construction schedule. Update as the Work progresses. .
 1. Distribution: Distribute schedule to Owner, A/E, Construction Manager, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

1.8 SPECIAL TESTS AND INSPECTIONS

- A. Special Tests and Inspections: Owner will engage a qualified testing agency or special inspector to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, and as follows:
 1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.
 2. Notifying A/E, Construction Manager, and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
 3. Submitting a certified written report of each test, inspection, and similar quality-control service to A/E, through Construction Manager, with copy to Contractor and to authorities having jurisdiction.
 4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 6. Retesting and reinspecting corrected work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEST AND INSPECTION LOG

- A. Prepare a record of tests and inspections. Include the following:
 1. Date test or inspection was conducted.
 2. Description of the Work tested or inspected.
 3. Date test or inspection results were transmitted to A/E.
 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and modifications as they occur. Provide access to test and inspection log for A/E's and Construction Manager's reference during normal working hours.

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Division 01 Section "Execution."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01 40 00

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. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "approved," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.2 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless 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 standards in effect as of date of the Contract Documents, unless otherwise indicated.
- C. Copies of Standards: Each entity engaged in construction on Project should 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, obtain copies directly from publication source.

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.
- B. Related Requirements:
 - 1. Section 00 24 13 "SCOPES OF WORK" for use charge responsibility
 - 2. Section 00 31 13.26 - CORE Site Logistics Plan

1.3 USE CHARGES

- A. General: Installation and removal of 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, occupants of Project, testing agencies, and authorities having jurisdiction. Use Charges by owner.

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. Dust- and HVAC-Control Plan: Submit coordination drawing and narrative that indicates the dust- and HVAC-control measures proposed for use, proposed locations, and proposed time frame for their operation. Identify further options if proposed measures are later determined to be inadequate. Include the following:
 - 1. Locations of dust-control partitions at each phase of work.
 - 2. HVAC system isolation schematic drawing.
 - 3. Location of proposed air-filtration system discharge.
 - 4. Waste handling procedures.
 - 5. Other dust-control measures.

1.5 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
- A. Regulations: Comply with industry standards and applicable laws and regulations, including, but not limited to:
 - 1. Erosion Control Plan included in these specifications.
 - 2. NPDES Permit and developed SWPPP

1.6 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Dust-Control Adhesive-Surface Walk-off Mats: Provide mats minimum 36 by 60 inches (914 by 1624 mm).
- B. Insulation: Unfaced mineral-fiber blanket, manufactured from glass, slag wool, or rock wool; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.

2.2 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
 - 1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
 - 2. Heating Units: Listed and labeled for type of fuel being consumed, by a qualified testing agency acceptable to authorities having jurisdiction, and marked for intended location and application.
- C. Air-Filtration Units: Primary and secondary HEPA-filter-equipped portable units with four-stage filtration. Provide single switch for emergency shutoff. Configure to run continuously.

PART 3 - EXECUTION**3.1 INSTALLATION, GENERAL**

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

3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas.
 - 1. Prior to commencing work, isolate the HVAC system in area where work is to be performed according to coordination drawings.
 - a. Disconnect supply and return ductwork in work area from HVAC systems servicing occupied areas.
 - b. Maintain negative air pressure within work area using HEPA-equipped air-filtration units, starting with commencement of temporary partition construction, and continuing until removal of temporary partitions is complete.
 - 2. Maintain dust partitions during the Work. Use vacuum collection attachments on dust-producing equipment. Isolate limited work within occupied areas using portable dust-containment devices.
 - 3. Perform daily construction cleanup and final cleanup using approved, HEPA-filter-equipped vacuum equipment.
- C. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
 - 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
 - 2. Install lighting for Project identification sign.

3.3 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. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.

- D. 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. Owner reserves right to take possession of Project identification signs.
 - 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 SUMMARY

- A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.
 - 1. It is the intent of the Specifications and Drawings to accomplish a complete and first-rate installation executed by competent and experienced workers.
 - 2. Equipment, specialties, and similar items shall be checked for compliance and approved prior to installation. Contractors are cautioned that work or equipment installed without approval is subject to condemnation, removal, and subsequent replacement with an approved item without extra remuneration.

- B. Related Sections include the following:
 - 1. Division 01 Section "Allowances" for products selected under an allowance.
 - 2. Division 01 Section "References" for applicable industry standards for products specified.
 - 3. Division 01 Section "Closeout Procedures" for submitting warranties for Contract closeout.
 - 4. Divisions 02 through 49 Sections for specific requirements for warranties on products and installations specified to be warranted.

1.2 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.

- B. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.

1.3 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.
 - 1. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
 - 2. If a dispute arises between contractors over concurrently selectable but incompatible products, A/E will determine which products shall be used.

1.4 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
- C. Storage:
 - 1. Store products to allow for inspection and measurement of quantity or counting of units.
 - 2. Store materials in a manner that will not endanger Project structure.
 - 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
 - 4. Store cementitious products and materials on elevated platforms.
 - 5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
 - 6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
 - 7. Protect stored products from damage and liquids from freezing.
 - 8. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.
- D. Each Contractor shall be responsible for materials he orders for delivery to the jobsite. Responsibility includes, but is not limited to, receiving, unloading, storing, protecting, and setting in place; ready for final connections.
 - 1. The Owner will not be responsible for deliveries related to the construction or operation of the Contractor. The Owner cannot sign delivery forms for the Contractor.
- E. Contractors shall insure that products are delivered to the Project in accordance with the Construction Schedule of the Project. In determining date of delivery, sufficient time shall be allowed for shop drawings and sample approvals, including the possibility of having to resubmit improperly prepared submittals or products other than those specified and the necessary fabrication or procurement time along with the delivery method and distance involved.

1.5 WARRANTIES

- A. Specific warranties or bonds called for in the Contract Documents, in addition to that falling under the general warranty as set forth in General Conditions, shall be furnished in accordance with the requirements of the Specifications.
 - 1. 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 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.
 - a. 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.

- B. Each Contractor shall and does hereby agree to warrant for a period of one year, or for longer periods, where so provided in the Specifications, as evidenced by the date of Substantial Completion issued by the A/E, products installed under the Contract to be of good quality in every respect and to remain so for periods described herein.
- C. Should defects develop in the previously mentioned Work within the specified periods, due to faults in products or their workmanship, the Contractor hereby agrees to make repairs and do necessary Work to correct defective Work to the A/E's satisfaction, in accordance with the General and Supplementary Conditions. Such repairs and corrective Work, including costs of making good other Work damaged by or otherwise affected by making repairs or corrective Work, shall be done without cost to the Owner and at the entire cost and expense of the Contractor within 30 days after written notice to the Contractor by the Owner.
 - 1. 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.
 - 2. 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.
- D. Nothing herein intends or implies that the warranty shall apply to Work that has been abused, neglected, or improperly maintained by the Owner or his successor in interest.
- E. Where service on products is required under this Article, it shall be promptly provided when notified by the Owner and no additional charge shall be made, unless it can be established that the defect or malfunctioning was caused by abuse or accidental damage not to be expected under conditions of ordinary wear and tear.
- F. In the event movement in the adjoining structure or components causes malfunctioning, the Contractor responsible for the original installation of the adjoining structure or components shall provide such repair, replacement, or correction necessary to provide for proper functioning to bring the equipment back into the same operating condition as approved at the completion of the building.
- G. The manufacturer and supplier expressly warrants that each item of equipment furnished by him and installed in this Project is suitable for the application shown and specified in the Contract Documents and includes features, accessories, and performing characteristics listed in the manufacturer's catalog in force on the date bids are requested for the Work. This warranty is intended as an assurance by the manufacturer that his equipment is not being misapplied and is fit and sufficient for the service intended. This warranty is in addition to and not in limitation of other warranties or remedies required by law or by the Contract Documents. It shall be the responsibility of the Contractor for the particular equipment to obtain this warranty in writing.
- H. In case the Contractor fails to do Work so ordered, the Owner may have Work done and charge the cost thereof against monies retained as provided for in the Agreement and, if said retained monies shall be insufficient to pay such cost or if no money is available, the Contractor and his Sureties shall agree to pay to the Owner the cost of such Work.
- I. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 - 2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.

- J. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.
 3. Refer to Divisions 02 through 49 Sections for specific content requirements and particular requirements for submitting special warranties.
- K. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.
1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 4. Where products are accompanied by the term "as selected," A/E will make selection.
 5. Where products are accompanied by the term "match sample," sample to be matched is A/E's.
 6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
- B. Product Selection Procedures:
1. Product: Where Specifications name a single product and manufacturer, provide the named product that complies with requirements.
 2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements.
 3. Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
 - a. Restricted List: Where specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Substitutions for Contractor's convenience will not be considered after award, unless otherwise noted.
 4. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
 - a. Restricted List: Where specifications include a list of manufacturer's names, provide a product by one of the manufacturers listed that complies with requirements. Substitutions for Contractor's convenience will not be considered, unless otherwise indicated.
 5. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named.
 6. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches A/E's sample. A/E's decision will be final on whether a proposed product matches.
 - a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 Article "Product Substitutions" for proposal of product.
 7. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, and textures" or a similar phrase, select a product that complies with other specified requirements.

- a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, A/E will select color, pattern, density, or texture from manufacturer's product line that does not include premium items.
- b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, A/E will select color, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 PROTECTION

- A. Contractor shall protect building elements and products subject to damage. Should workers or other persons employed or commissioned by a Contractor be responsible for damage, the entire cost of repairing said damage shall be assumed by that individual Contractor. Should damage be done by a person or persons not employed or commissioned by a Contractor, the respective Contractors shall make repairs and charge the cost to the guilty person or persons. The affected Contractors shall be responsible for collecting such charges. If the person or persons responsible for damage cannot be discovered, the respective Contractor shall make full and satisfactory repairs, and the cost of Work shall be prorated against each Contractor.
- B. The respective Contractors shall protect their products prior to installation and final acceptance. Storage shall be dry, clean, and safe. Materials or equipment damaged, deteriorated, rusted, or defaced due to improper storage shall be repaired, refinished, or replaced, as required by the A/E. Products lost through theft or mishandling shall be replaced by the Contractor without cost to the Owner.

2.3 ACCEPTANCE OF EQUIPMENT OR SYSTEMS

- A. The Owner will not accept the start of the warranty period on systems or equipment until Substantial Completion is issued to the respective Contractor(s) for Owner's occupancy of the building, in part or whole. Each Contractor shall make such provisions as required to extend the manufacturer's warranty from time of initial operation of systems or equipment until Substantial Completion is given in writing.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 60 00

SECTION 01 73 29 - CUTTING AND PATCHING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes procedural requirements for cutting and patching.
- B. Related Sections include the following:
 - 1. Division 02 Section "Selective Structure Demolition" for demolition of selected portions of the building.
 - 2. Divisions 2 through 33 Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work.
 - 3. Division 07 Section "Penetration Firestopping" for patching fire-rated construction.

1.2 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other Work.
- B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.
- C. Cutting and patching performed during the manufacture of products or during the initial fabrication, erection, or installation processes is not considered to be "cutting and patching" under this definition. Drilling of holes to install fasteners and similar operations are also not considered to be "cutting and patching".

1.3 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
 - 1. Structural Elements: When cutting and patching structural elements, notify A/E of locations and details of cutting and await directions from the A/E before proceeding. Shore, brace, and support structural element during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection.
 - a. Foundation construction.
 - b. Bearing and retaining walls.
 - c. Structural concrete.
 - d. Structural steel.
 - e. Lintels.
 - f. Structural decking.
 - g. Miscellaneous structural metals.
 - h. Exterior curtainwall construction.
 - i. Equipment supports.
 - j. Piping, ductwork, vessels, and equipment.
 - k. Structural systems of special construction in Division 13 Sections.
- B. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety. Operating elements include the following:
 - 1. Primary operational systems and equipment.
 - 2. Air or smoke barriers.
 - 3. Fire-suppression systems.
 - 4. Mechanical systems piping and ducts.
 - 5. Control systems.
 - 6. Communication systems.
 - 7. Conveying systems.

8. Electrical wiring systems.
 9. Operating systems of special construction in Division 13 Sections.
 10. Fire detection and alarm systems.
 11. Fire separation assemblies.
- C. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety. Miscellaneous elements include the following:
1. Water, moisture, or vapor barriers.
 2. Membranes and flashings.
 3. Exterior curtain-wall construction.
 4. Equipment supports.
 5. Piping, ductwork, vessels, and equipment.
 6. Noise- and vibration-control elements and systems.
 7. Sprayed fire-resistive material.
- D. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in A/E's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- E. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.
- F. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in-place materials.
- C. Cast-In-Place Concrete
1. Cementitious Materials
 - a. Portland Cement: ASTM C150, Type I or III, grey.
 - b. Normal-Weight Aggregate: ASTM C33, Class 3S.
 2. Mix
 - a. Minimum Compressive Strength: 3500 psi at 28 days.
 - b. Maximum Water-Cementitious Materials Ratio: 0.45.
 - c. Slump Limit: 4 inches, plus or minus 1 inch, before adding water-reducing or plasticizing admixtures, with maximum slump less than 6 inches.
 - 1) High range water reducers are not allowed.
 - d. Air Content: Do not allow air content of troweled finish floors to exceed 3 percent.
- D. Hydraulic Cement Repair Underlayment: Cement-based, polymer-modified self-leveling product that can be applied in thicknesses required to patch and that can be feathered at edges to match adjacent floor elevations.
1. Cement Binder: ASTM C150, Portland cement or hydraulic or blended hydraulic cement as defined in ASTM C219.

2. Primer: Product of underlayment manufacturer recommended for substrate, conditions, and application.
 3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch or coarse sand as recommended by underlayment manufacturer.
 - a. Provide aggregate when recommended in writing by underlayment manufacturer for underlayment thickness required.
 4. Compressive Strength: Not less than 4,000 psi at 28 days when tested according to ASTM C 109.
 5. Products: Subject to compliance with requirements, provide one of the following:
 - a. Ardex, Inc.; Ardex k-15
 - b. BASF; Enemrex Self-Leveling Underlayment of MBT Mastertop 110 Plus Underlayments.
 - c. Dayton Superior Corp.; Levelayer
 - d. Dependable Chemical Co.; Skimflow ES
 - e. Euclid Chemical Company; Super Flo-Top
 - f. MAPEI Corp.; Ultrapan 1 Plus
 - g. Maxxon Corp.; Level-Right
 - h. TEC Specialty Products; EZ Level
- E. Masonry Materials
1. Concrete Masonry Units: ASTM C90, normal weight, unless otherwise noted.
 2. Mortar Material: Comply with ASTM C270, property specification.
 - a. Portland Cement: ASTM C150, Type I or Type II.
 - b. Hydrated Lime: ASTM C207, Type S.
 - c. Aggregate for Mortar: ASTM C144.
 - d. Use Type N mortar, unless otherwise noted.
- F. Plaster Material
1. Metal Lath
 - a. Expanded-Metal Lath: ASTM C 847 with ASTM A 653, G60, hot-dip galvanized zinc coating.
 - 1) Flat rib lath; weight: 3/4 lb/sq.yd.
 - b. Wire-Fabric Lath
 - 1) Welded-wire lath; ASTM C923; self furring; weight: 1.4 lb/sq.yd.
 - 2) Woven-wire lath; ASTM C1032; self-furring, with stiffener wire backing; weight: 1.4 lb/sq.yd.
 2. Accessories: Comply with ASTM C1063 and coordinate depth of trim and accessories with thicknesses to match existing.
 3. Plaster Materials
 - a. Portland Cement: ASTM C150, Type I.
 - b. Lime: ASTM C206, Type S; or ASTM C207, Type S.
 4. Plaster Mix: Comply with ASTM C926 and as required to match existing.
- G. Gypsum Board General Requirements: Comply with ASTM C 1396. Provide in maximum lengths and widths available that will minimize joints in each area, that will minimize joints in each area, and that correspond with support system indicated.
1. Unless otherwise noted all gypsum board shall be fire-resistance-rated. Refer to Code Plan in Construction Drawings for specific locations and requirements of fire-resistance-rated assemblies indicated.
 2. Long Edges: Tapered and featured (rounded or beveled) for prefilling.
 3. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.
 4. Moisture-and Mold-Resistant Gypsum Panels: ASTM C 1396 with moisture and mold resistant core and surfaces.
 - a. Core: 5/8 inch, Type X.
 - b. Long Edges: Tapered.
 5. Finishing Materials: Comply with ASTM C475 and C1396. Provide auxiliary materials that comply with referenced installation standards.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
 - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Existing Warranties: Remove, replace, patch and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- B. Temporary Support: Provide temporary support of Work to be cut.
- C. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- D. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching according to requirements in Division 01 Section "Summary."
- E. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.

3.3 CUTTING AND PATCHING

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
 - 2. Do not use cutting torches.
 - 3. Contractor shall make arrangements with the other trades for fitting his Work into the construction. Where the Contractor was given sufficient information as to required openings prior to construction and then the cost for cutting and restoring shall be paid for by the Contractor failing to provide the required openings.
 - 4. Contractor shall be responsible for cutting, fitting, and patching that may be required to complete his Work. Contractors shall not endanger Work of other Contractors by cutting, excavating, or otherwise altering Work; and shall not cut or alter the Work of other Contractors except with written consent of the A/E. Costs caused by defective or ill-timed Work shall be borne by the party responsible.
 - 5. Cutting or restoring performed by Contractors which is condemned by the A/E shall have such correction or restoration work performed through the General Contractor when so instructed by the A/E. The cost of such Work shall be borne by the Contractor responsible for the originally defective Work.
 - 6. No Contractor shall not do cutting that may impair the strength of the building or its components. No holes except for small screws or bolts may be drilled in the beams or other structural members for the purpose of supporting, routing, or attaching Work without obtaining prior approval from the A/E.
 - a. Provide temporary support of work to be cut.
 - 7. Contractor shall do his own cutting and patching work in the existing building. This shall include cutting and patching required installing new utilities on the Project site.

8. Refer to other Sections of these Specifications for specific cutting and patching requirements and limitations applicable to individual units of Work.
 9. Unless otherwise specified, requirements of this Section apply to Mechanical and Electrical Work.
 - a. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.
- B. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 3. Concrete or Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 - a. After coring, Contractor shall pack and grout openings around sleeves or work penetrating the floor or deck.
 - b. CMU Removal: Remove units that are damaged or require removal to accommodate new work. Carefully remove entire units joint to joint, without damaging surrounding masonry in a manner that permits replacement with full size units.
 - 1) Support and protect remaining masonry that surrounds removal area. Maintain reinforcement and adjoining construction in an undamaged condition.
 - 2) Clean surrounding removal areas by removing mortar, dust, and loose particles in preparation for replacement.
 4. Excavating and Backfilling: Comply with requirements in applicable Division 31 Sections where required by cutting and patching operations.
 5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
 6. Do not proceed with patching until after construction operations requiring cutting in immediate area are complete.
- C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.
1. Patching should occur with materials and finishes to match the existing surrounding construction.
 2. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 3. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 - a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
 - b. Restore damaged pipe covering to its original condition.
 4. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.

- a. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
 - b. Patch Floor: Mix and apply underlayment components according to manufacturer's written instructions.
 - 1) Close areas to traffic during underlayment and for time period after application recommended in writing by manufacturer.
 - 2) Coordinate application of components to provide optimum underlayment-to-substrate and intercoat adhesion.
 - 3) At substrate expansion, isolation, and other moving joints, allow joint of same width to continue underlayment.
 - 4) Apply primer over prepared substrate at manufacturer's recommended spreading rate.
 - 5) Apply underlayment to a uniform, level surface.
 - a) Apply a final layer without aggregate to produce surface.
 - b) Feather edges to match adjacent floor elevations.
 - 6) Cure underlayment according to manufacturer's written instructions. Prevent contamination during application and curing processes.
 - 7) Do not install floor coverings over underlayment until after time period recommended in writing by underlayment manufacturer.
 - 8) Remove and replace underlayment areas that evidence lack of bond with substrate, including areas that emit a "hollow" sound when tapped.
 - c. Patch CMU: Replace damaged or removed units into bonding and coursing pattern of existing. Lay replacement units with completely filled bed, head, and collar joints. Butter ends with sufficient mortar to fill head joints and shove into place.
- 5. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
 - a. Cut, patch, and repair plaster as necessary to accommodate new work and to restore to match adjacent undisturbed surfaces. Repair or replace work to eliminate evidence of new work.
 - b. Refer to Division 09 Section "Acoustical Panel Ceilings" for replacement of acoustical ceilings.
 - 6. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.
- D. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

END OF SECTION 01 73 29

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.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Repair of the Work.
- B. Related Requirements:
 - 1. Section 01 78 23 "Operation and Maintenance Data" for operation and maintenance manual requirements.
 - 2. Section 01 79 00 "Demonstration and Training" for requirements for instructing Owner's personnel.

1.3 ACTION SUBMITTALS

- A. Product Data: For cleaning agents.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.4 CLOSEOUT SUBMITTALS

- A. Certificate of Insurance: For continuing coverage.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

1.6 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect and Construction Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
 - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for final completion.

1.7 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:
 - 1. Submit a final Application for Payment according to Section 01 29 00 "Payment Procedures Textura."
 - 2. Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect and Construction Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.8 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
 - 1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
 - 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
 - 3. Include the following information at the top of each page:

- a. Project name.
- b. Date.
- c. Name of Architect and Construction Manager.
- d. Name of Contractor.
- e. Page number.

1.9 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (215-by-280-mm) paper.
 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:

- a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
- b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
- c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
- d. Remove tools, construction equipment, machinery, and surplus material from Project site.
- e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
- f. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
- g. Sweep concrete floors broom clean in unoccupied spaces.
- h. Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to manufacturer's recommendations if visible soil or stains remain.
- i. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.
- j. Remove labels that are not permanent.
- k. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
- l. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
- m. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
 - 1) Clean HVAC system in compliance with NADCA Standard 1992-01. Provide written report on completion of cleaning.
- n. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency.
- o. Leave Project clean and ready for occupancy.

3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
- B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.
 1. Remove and replace chipped, scratched, and broken glass, reflective surfaces, and other damaged transparent materials.
 2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.
 - a. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.

3. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
4. Replace burned-out bulbs, bulbs noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.

END OF SECTION 01 77 00

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 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation and maintenance documentation directory.
 - 2. Operation manuals for systems, subsystems, and equipment.
 - 3. Product maintenance manuals.
 - 4. Systems and equipment maintenance manuals.
- B. Related Requirements:
 - 1. Section 01 33 00 "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.

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 CLOSEOUT SUBMITTALS

- A. Manual Content: Operations and maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
 - 1. Architect will comment on whether content of operations and maintenance submittals are acceptable.
 - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operations and maintenance manuals in the following format:
 - 1. PDF electronic file. Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Architect.
 - a. Name each indexed document file in composite electronic index with applicable item name. Include a complete electronically linked operation and maintenance directory.

- b. Enable inserted reviewer Comments on draft submittals.
- C. Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 15 days before commencing demonstration and training. Architect will return copy with comments.
 - 1. Correct or revise each manual to comply with Architect's comments. Submit copies of each corrected manual within 15 days of receipt of Architect's comments and prior to commencing demonstration and training.

PART 2 - PRODUCTS

2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

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

2.2 REQUIREMENTS FOR EMERGENCY, OPERATION, AND MAINTENANCE MANUALS

- 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: 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 and contact information for Contractor.
 6. Name and contact information for Construction Manager.
 7. Name and contact information for Architect.
 8. Name and contact information for Commissioning Authority.
 9. Names and contact information for major consultants to the Architect that designed the systems contained in the manuals.
 10. 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.
- E. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.
1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
 2. File Names and Bookmarks: Enable bookmarking of individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.
- F. Manuals, Paper Copy: Submit manuals in the form of hard copy, bound and labeled volumes.
1. Binders: Heavy-duty, three-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch (215-by-280-mm) 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, and indicate Specification Section number on bottom of spine. Indicate volume number for multiple-volume sets.
 2. 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.

2.3 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.
 2. Performance and design criteria if Contractor has delegated design responsibility.
 3. Operating standards.
 4. Operating procedures.
 5. Operating logs.
 6. Wiring diagrams.
 7. Control diagrams.
 8. Piped system diagrams.
 9. Precautions against improper use.
 10. License requirements including inspection and renewal dates.
- B. Descriptions: Include the following:
1. Product name and model number. Use designations for products indicated on Contract Documents.
 2. Manufacturer's name.
 3. Equipment identification with serial number of each component.
 4. Equipment function.
 5. Operating characteristics.
 6. Limiting conditions.
 7. Performance curves.
 8. Engineering data and tests.
 9. Complete nomenclature and number of replacement parts.
- C. Operating Procedures: Include the following, as applicable:
1. Startup procedures.
 2. Equipment or system break-in procedures.
 3. Routine and normal operating instructions.
 4. Regulation and control procedures.
 5. Instructions on stopping.
 6. Normal shutdown instructions.
 7. Seasonal and weekend operating instructions.
 8. Required sequences for electric or electronic systems.
 9. Special operating instructions and procedures.
- D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- E. Piped Systems: Diagram piping, as installed, and identify color-coding where required for identification.

2.4 PRODUCT MAINTENANCE MANUALS

- 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 and drawing or schedule designation or identifier where applicable.
- C. Product Information: Include the following, as applicable:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Color, pattern, and texture.
 - 4. Material and chemical composition.
 - 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
 - 1. Inspection procedures.
 - 2. Types of cleaning agents to be used and methods of cleaning.
 - 3. List of cleaning agents and methods of cleaning detrimental to product.
 - 4. Schedule for routine cleaning and maintenance.
 - 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

2.5 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS

- A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
 - 1. Standard maintenance instructions and bulletins.
 - 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
 - 3. Identification and nomenclature of parts and components.
 - 4. List of items recommended to be stocked as spare parts.
- C. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
 - 1. Test and inspection instructions.
 - 2. Troubleshooting guide.
 - 3. Precautions against improper maintenance.
 - 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - 5. Aligning, adjusting, and checking instructions.
 - 6. Demonstration and training video recording, if available.

- D. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
 - 1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
 - 2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
- E. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- A. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- B. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
 - 1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
 - 2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- 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 Section 01 78 39 "Project Record Documents."

END OF SECTION 01 78 23

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. Section includes administrative and procedural requirements for project record documents, including the following:
 - 1. Record Drawings.
 - 2. Miscellaneous record submittals.
- B. Related Requirements:
 - 1. Section 01 77 00 "Closeout Procedures" for general closeout procedures.
 - 2. Section 01 78 23 "Operation and Maintenance Data" for operation and maintenance manual requirements.

1.3 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit copies of record Drawings as follows:
 - a. Initial Submittal:
 - 1) Submit one paper-copy set(s) of marked-up record prints.
 - 2) Submit PDF electronic files of scanned record prints.
 - 3) Architect will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
 - b. Final Submittal:
 - 1) Submit PDF electronic files of scanned record prints and three set(s) of prints.
 - 2) Print each drawing, whether or not changes and additional information were recorded.
- B. Record Specifications: Submit one paper copy of Project's Specifications, including addenda and contract modifications.
- C. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities. Submit one paper copy of each submittal.

- D. Reports: Submit written report weekly indicating items incorporated into project record documents concurrent with progress of the Work, including revisions, concealed conditions, field changes, product selections, and other notations incorporated.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
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 provide information for preparation of corresponding 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 acceptable drawing technique.
 - c. Record data as soon as possible after obtaining it.
 - d. Record and check the markup before enclosing concealed installations.
 - e. Cross-reference record prints to corresponding archive photographic documentation.
 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Dimensional changes to Drawings.
 - b. Revisions to details shown on Drawings.
 - c. Depths of foundations below first floor.
 - d. Locations and depths of underground utilities.
 - e. Revisions to routing of piping and conduits.
 - f. Revisions to electrical circuitry.
 - g. Actual equipment locations.
 - h. Duct size and routing.
 - i. Locations of concealed internal utilities.
 - j. Changes made by Change Order or Construction Change Directive.
 - k. Details not on the original Contract Drawings.
 - l. Field records for variable and concealed conditions.
 - m. Record information on the Work that is shown only schematically.
 3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Record Digital Data Files: Immediately before inspection for Certificate of Substantial Completion, review marked-up record prints with Architect and Construction Manager. When authorized, prepare a full set of corrected digital data files of the Contract Drawings, as follows:
1. Format: Same digital data software program, version, and operating system as the original Contract Drawings.

2. Architect will furnish Contractor one set of digital data files of the Contract Drawings for use in recording information.
 - a. See Section 01 33 00 "Submittal Procedures" for requirements related to use of Architect's digital data files.
 - b. Architect will provide data file layer information. Record markups in separate layers.
- C. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
 1. Record Prints: Organize record prints and newly prepared record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
 2. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.
 3. Identification: As follows:
 - a. Project name.
 - b. Date.
 - c. Designation "PROJECT RECORD DRAWINGS."
 - d. Name of Architect and Construction Manager.
 - e. Name of Contractor.

2.2 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.
- B. Format: Submit miscellaneous record submittals as paper copy.
 1. Include miscellaneous record submittals directory organized by Specification Section number and title, electronically linked to each item of miscellaneous record submittals.

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 revisions to project record documents as they occur; do not wait until end of Project.
- B. Maintenance of Record Documents and Samples: Store record documents and Samples in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Architect's and Construction Manager's reference during normal working hours.

END OF SECTION 01 78 39

SECTION 01 79 00 - DEMONSTRATION AND TRAINING

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 instructing Owner's personnel, including the following:
 - 1. Demonstration of operation of systems, subsystems, and equipment.
 - 2. Training in operation and maintenance of systems, subsystems, and equipment.
 - 3. Demonstration and training video recordings.

1.3 INFORMATIONAL SUBMITTALS

- A. Instruction Program: Submit outline of instructional program for demonstration and training, including a list of training modules and a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.
 - 1. Indicate proposed training modules using manufacturer-produced demonstration and training video recordings for systems, equipment, and products in lieu of video recording of live instructional module.
- B. Attendance Record: For each training module, submit list of participants and length of instruction time.
- C. Evaluations: For each participant and for each training module, submit results and documentation of performance-based test.

1.4 CLOSEOUT SUBMITTALS

- A. Demonstration and Training Video Recordings: Submit two copies within seven days of end of each training module.
 - 1. Identification: On each copy, provide an applied label with the following information:
 - a. Name of Project.
 - b. Name and address of videographer.
 - c. Name of Architect.
 - d. Name of Construction Manager.
 - e. Name of Contractor.
 - f. Date of video recording.

2. Transcript: Prepared and bound in format matching operation and maintenance manuals. Mark appropriate identification on front and spine of each binder. Include a cover sheet with same label information as the corresponding video recording. Include name of Project and date of video recording on each page.
3. At completion of training, submit complete training manual(s) for Owner's use in PDF electronic file format on compact disc.

1.5 QUALITY ASSURANCE

- A. Facilitator Qualifications: A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.
- B. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Section 01 40 00 "Quality Requirements," experienced in operation and maintenance procedures and training.
- C. Videographer Qualifications: A professional videographer who is experienced photographing demonstration and training events similar to those required.

1.6 COORDINATION

- A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations and to ensure availability of Owner's personnel.
- B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.
- C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Architect.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 PREPARATION

- A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a training manual organized in coordination with requirements in Section 01 78 23 "Operation and Maintenance Data."
- B. Set up instructional equipment at instruction location.

3.2 INSTRUCTION

- A. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.
- B. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
 - 1. Owner will furnish Contractor with names and positions of participants.
- C. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
 - 1. Schedule training with Owner, through Construction Manager, with at least seven days' advance notice.
- D. Training Location and Reference Material: Conduct training on-site in the completed and fully operational facility using the actual equipment in-place. Conduct training using final operation and maintenance data submittals.

3.3 DEMONSTRATION AND TRAINING VIDEO RECORDINGS

- A. Video: Provide minimum 640 x 480 video resolution converted to format file type acceptable to Owner, on electronic media.

END OF SECTION 01 79 00