

Request for Proposal UK-2375-24 Proposal Due Date – 09/15/2023

> Pence Hall Renovation Unit Substation Purchase Project #2590.3



REQUEST FOR PROPOSAL (RFP)

ATTENTION: This is not an order. Read all instructions, terms and conditions carefully.

PROPOSAL NO.: UK-2375-24 **RETURN ORIGINAL COPY OF PROPOSAL TO:** Issue Date: 08/16/2023 UNIVERSITY OF KENTUCKY

Pence Hall Renovation - Unit Substation Title: **Purchase**

Purchasing Officer: ROOM 322 PETERSON SERVICE BLDG. Ken Scott

Phone/Email: 859.257.9102/Kenneth.scott@uky.edu **LEXINGTON, KY 40506-0005**

PURCHASING DIVISION

411 S LIMESTONE

IMPORTANT: PROPOSALS MUST BE RECEIVED BY: 09/15/2023 3 P.M. LEXINGTON, KY TIME.

NOTICE OF REQUIREMENTS

- The University's General Terms and Conditions and Instructions to Bidders, viewable at https://purchasing.uky.edu/bid-and-proposal-opportunities, apply to this RFP. When the RFP includes construction services, the University's General Conditions and Special Conditions for Construction and Instructions to Bidders, viewable at https://purchasing.uky.edu/bid-and-proposal-opportunities, apply to the RFP. Contracts resulting from this RFP must be governed by and in accordance with the laws of the Commonwealth of Kentucky.
- Any agreement or collusion among offerors or prospective offerors, which restrains, tends to restrain, or is reasonably calculated to restrain competition by agreement to bid at a fixed price or to refrain from offering, or otherwise, is prohibited.
- Any person who violates any provisions of KRS 45A.325 shall be guilty of a felony and shall be punished by a fine of not less than five thousand dollars nor more than ten thousand dollars, or be imprisoned not less than one year nor more than five years, or both such fine and imprisonment. Any firm, corporation, or association who violates any of the provisions of KRS 45A.325 shall, upon conviction, be fined not less than ten thousand dollars or more than twenty thousand dollars.

AUTHENTICATION OF BID AND STATEMENT OF NON-COLLUSION AND NON-CONFLICT OF INTEREST

I hereby swear (or affirm) under the penalty for false swearing as provided by KRS 523.040:

- That I am the offeror (if the offeror is an individual), a partner, (if the offeror is a partnership), or an officer or employee of the bidding corporation having 1 authority to sign on its behalf (if the offeror is a corporation);
- That the attached proposal has been arrived at by the offeror independently and has been submitted without collusion with, and without any agreement, understanding or planned common course of action with, any other Contractor of materials, supplies, equipment or services described in the RFP, designed to limit independent bidding or competition;
- That the contents of the proposal have not been communicated by the offeror or its employees or agents to any person not an employee or agent of the 3. offeror or its surety on any bond furnished with the proposal and will not be communicated to any such person prior to the official closing of the RFP:
- 4. That the offeror is legally entitled to enter into contracts with the University of Kentucky and is not in violation of any prohibited conflict of interest, including, but not limited to, those prohibited by the provisions of KRS 45A.330 to .340, and164.390;
- That the offeror, and its affiliates, are duly registered with the Kentucky Department of Revenue to collect and remit the sale and use tax imposed by Chapter 5. 139 to the extent required by Kentucky law and will remain registered for the duration of any contract award;
- That I have fully informed myself regarding the accuracy of the statement made above.

SWORN STATEMENT OF COMPLIANCE WITH CAMPAIGN FINANCE LAWS

In accordance with KRS45A.110 (2), the undersigned hereby swears under penalty of perjury that he/she has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky and that the award of a contract to a bidder will not violate any provision of the campaign finance laws of the Commonwealth of Kentucky

CONTRACTOR REPORT OF PRIOR VIOLATIONS OF KRS CHAPTERS 136, 139, 141, 337, 338, 341 & 342

The contractor by signing and submitting a proposal agrees as required by 45A.485 to submit final determinations of any violations of the provisions of KRS Chapters 136, 139, 141, 337, 338, 341 and 342 that have occurred in the previous five (5) years prior to the award of a contract and agrees to remain in continuous compliance with the provisions of the statutes during the duration of any contract that may be established. Final determinations of violations of these statutes must be provided to the University by the successful contractor prior to the award of a contract.

CERTIFICATION OF NON-SEGREGATED FACILITIES

The contractor, by submitting a proposal, certifies that he/she is in compliance with the Code of Federal Regulations, No. 41 CFR 60-1.8(b) that prohibits the maintaining of segregated facilities.

SIGNATURE REQUIRED: This proposal cannot be considered valid unless signed and dated by an authorized agent of the offeror. Type or print the signatory's name, title, address, phone number and fax number in the spaces provided. Offers signed by an agent are to be accompanied by evidence of his/her authority unless such evidence has been previously furnished to the issuing office.

| DELIVERY TIME: | NAME OF COMPANY: | DUNS# |
|---|-------------------------|--------------|
| PROPOSAL FIRM THROUGH: | ADDRESS: | Phone/Fax: |
| PAYMENT TERMS: | CITY, STATE & ZIP CODE: | E-MAIL: |
| SHIPPING TERMS: F. O. B. DESTINATION PREPAID AND ALLOWED | TYPED OR PRINTED NAME: | WEB ADDRESS: |
| FEDERAL EMPLOYER ID NO.: | SIGNATURE: | DATE: |

Table of Contents

| 1.0 D | EFINITIONS | 6 |
|--------|---|------|
| | ENERAL OVERVIEW | |
| 2.1 | Intent and Scope | 7 |
| 2.2 | Background Information | |
| 2.3 | University Information | 7 |
| 2.4 | Supplier Diversity and Procurement | 9 |
| 3.0 PI | ROPOSAL REQUIREMENTS | . 10 |
| 3.1 | Key Event Dates | . 10 |
| 3.2 | Offeror Communication | . 10 |
| .3 | Pre-Proposal Conference | . 11 |
| 3.4 | Offeror Presentations | . 11 |
| 3.5 | Preparation of Offers | . 11 |
| 3.6 | Proposed Deviations from the RFP | . 12 |
| 3.7 | Proposal Submission and Deadline | . 12 |
| 3.8 | Modification or Withdrawal of Offer | . 13 |
| 3.9 | Acceptance or Rejection and Award of Proposal | . 13 |
| 3.10 | Rejection | . 13 |
| 3.11 | Addenda | . 13 |
| 3.12 | 2 Disclosure of Offeror's Response | . 14 |
| 3.13 | Restrictions on Communications with University Staff | . 14 |
| 3.14 | Cost of Preparing Proposal | . 14 |
| 3.15 | Disposition of Proposals | . 14 |
| 3.16 | S Alternate Proposals | . 14 |
| 3.17 | ' Questions | . 14 |
| 3.18 | Section Titles in the RFP | . 15 |
| 3.19 | No Contingent Fees | . 15 |
| 3.20 | Proposal Addenda and Rules for Withdrawal | . 15 |
| 3.21 | Requirement To Perform Vendor Onboarding and Registration | . 15 |
| 4.0 PI | ROPOSAL FORMAT AND CONTENT | . 16 |
| 4.1 | Proposal Information and Criteria | . 16 |

| | | Signed Authentication of Proposal and Statements of Non-Collusion and Non-Conflict of est Form | . 16 |
|----|-------------|--|------|
| | 4.3 | Transmittal Letter | . 17 |
| | 4.4 | Executive Summary and Proposal Overview | . 17 |
| | 4.5 | Criteria 1 - Offeror Qualifications | . 19 |
| | 4.6 | Criteria 2 – Services Defined | . 19 |
| | 4.7 | Criteria 3 – Financial Proposal | . 19 |
| | 4.8 | Criteria 4 – Evidence of Successful Performance and Implementation Schedule | . 19 |
| | 4.9 | Criteria 5 – Other Additional Information | . 19 |
| 5. | .0 E\ | /ALUATION CRITERIA PROCESS | . 20 |
| 6. | .0 SF | PECIAL CONDITIONS | . 21 |
| | 6.1 | Purchase Order | . 21 |
| | 6.2 | Effective Date | . 21 |
| | 6.3 | Competitive Negotiation | . 21 |
| | 6.4 | Appearance Before Committee | . 21 |
| | 6.5 | Additions, Deletions or Contract Changes | . 21 |
| | 6.6 | Contractor Cooperation in Related Efforts | . 22 |
| | 6.7 | Entire Agreement | . 22 |
| | 6.8 | Governing Law | . 22 |
| | 6.9 Prac | Kentucky's Personal Information Security and Breach Investigation Procedures and tices Act | . 22 |
| | 6.10 | Termination for Convenience | . 23 |
| | 6.11 | Termination for Non-Performance | . 23 |
| | 6.12 | Funding Out | . 24 |
| | 6.13 | Prime Contractor Responsibility | . 24 |
| | 6.14 | Assignment and Subcontracting | . 24 |
| | 6.15 | Permits, Licenses, Taxes | . 24 |
| | 6.16 | Attorneys' Fees | . 24 |
| | 6.17 | Royalties, Patents, Copyrights and Trademarks | . 25 |
| | 6.18 | Indemnification | . 25 |
| | 6.19 | Insurance | . 25 |
| | 6.20 | Method of Award | . 26 |
| | 6.21 | Reciprocal Preference | . 26 |
| | 6.22 | Reports and Auditing (NOT USED) | . 26 |

| 6.23 Confidentiality | 26 |
|---|-----------------------------|
| 6.24 Conflict of Interest | 27 |
| 6.25 Personal Service Contract Policies | 27 |
| 6.26 Copyright Ownership and Title to Designs and Copy | 27 |
| 6.27 University Brand Standards | 28 |
| 6.28 Printing Statutes | 28 |
| 6.29 Requirement for Contract Administration Fee (NOT USED) | 29 |
| 6.30 Payment Terms | 29 |
| 7.0 SCOPE OF SERVICES | 29 |
| 7.1 Detailed Services Defined | 29 |
| A. Perform the following field tests and inspections and prepare test not defined. | st reports: Error! Bookmark |
| 8.0 FINANCIAL OFFER SUMMARY | |

ATTACHMENTS:

- Attachment A Financial Offer
- Attachment B Drawings
- Attachment C Specifications
- Attachment D General Conditions
- Attachment E Special Conditions

1.0 DEFINITIONS

The term "addenda" means written or graphic instructions issued by the University of Kentucky prior to the receipt of proposals that modify or interpret the RFP documents by additions, deletions, clarifications and/or corrections.

The term "competitive negotiations" means the method authorized in the Kentucky Revised Statutes, Chapter 45A.085.

The terms "offer" or "proposal" mean the offeror's/offerors' response to this RFP.

The term "offeror" means the entity or contractor group submitting the proposal.

The term "contractor" means the entity receiving a contract award.

The term "purchasing agency" means the University of Kentucky, Purchasing Division, Room 322 Peterson Service Building, Lexington, KY 40506-0005.

The term "purchasing official" means the University of Kentucky's appointed contracting representative.

The term "responsible offeror" means a person, company or corporation that has the capability in all respects to perform fully the contract requirements and the integrity and reliability that will assure good faith performance. In determining whether an offeror is responsible, the University may evaluate various factors including (but not limited to): financial resources; experience; organization; technical qualifications; available resources; record of performance; integrity; judgment; ability to perform successfully under the terms and conditions of the contract; adversarial relationship between the offeror and the University that is so serious and compelling that it may negatively impact the work performed under this RFP; or any other cause determined to be so serious and compelling as to affect the responsibility of the offeror.

The term "solicitation" means RFP.

The term "University" means University of Kentucky.

2.0 GENERAL OVERVIEW

2.1 Intent and Scope

This Request for Proposal (RFP) is issued to solicit proposals from qualified, experienced, financially sound, and responsible firms to provide a Unit Substation for Pence Hall.

The Scope of Services includes the design of the unit substation to meet the performance listed in Section 7.0, Scope of Services and shall fit in the designated space. Potential Suppliers are responsible to utilize attached drawings and specifications to assure fit. All materials shall be made of material that will not decay or rust. Any material exposed to the sun shall be UV inhibited.

It is the intent of the University to award a contract to the qualified Offeror whose Offer, conforming to the conditions and requirements of the RFP, is determined to be the most advantageous to the University, cost and other factors considered.

The firm whose systems is selected would provide all design and installation assistance services necessary to construct the facilities in accordance with the guidelines, standards and limitations contained in the Request for Proposal and in the Offerors Proposal.

The University intends to issue a separate order to an installation contractor.

The Scope of Services is further defined in Section 7.0 of this Request for Proposal (RFP).

2.2 **Background Information**

Pence Hall is an existing building on the University of Kentucky campus that is being renovated to contain classrooms, offices, and public learning spaces for the College of Communication and Information.

2.3 University Information

Since his arrival, President Eli Capilouto has set forth an ambitious agenda to extend and enhance our role as Kentucky's land-grant and flagship research university. By focusing on infrastructure growth and improvement; creating opportunities for innovative teaching, learning, and academic excellence; fostering a robust research and creative scholarship enterprise; providing life-saving subspecialty care; empowering communities through service and outreach; and encouraging a transparent and shared dialogue about institutional priorities; the University of Kentucky will ensure a new century of promise for the people we impact.

Founded in 1865 as a land-grant institution adjacent to downtown Lexington, UK is nestled in the scenic heart of the beautiful Bluegrass Region of Kentucky. From its early beginnings, with only 190 students and 10 professors, UK's campus now covers more than 918 acres and is home to more than 30,000 students and approximately 14,500 employees, including more than 2,300 full-time faculty. UK is one of a small number of universities in the United States that has programs in agriculture, engineering, a full complement of health colleges including medicine and pharmacy, law and fine arts on a single campus, leading to groundbreaking discoveries and unique interdisciplinary collaboration. The state's flagship university consists of 17 academic and

professional colleges where students can choose from more than 200 majors and degree programs at the undergraduate and graduate levels. The colleges are Agriculture, Food and Environment; Arts and Sciences; Business and Economics; Communication and Information; Dentistry; Design; Education; Engineering; Fine Arts; Graduate School; Health Sciences; Law; Medicine; Nursing; Pharmacy; Public Health; and Social Work. These colleges are supported by a modern research library system.

Research at the University of Kentucky is a dynamic enterprise encompassing both traditional scholarship and emerging technologies, and UK's research faculty, staff and students are establishing UK as one of the nation's most prolific public research universities. UK's research enterprise attracted \$285 million in research grants and contracts from out-of-state sources, which generated a \$580 million impact on the Kentucky economy. Included in this portfolio is \$153 million in federal awards from the National Institutes of Health, non-NIH grants from the Department Health and Human Services, the National Science Foundation, Department of Energy, Department of Agriculture and NASA, among others. The National Science Foundation ranks UK's research enterprise 44th among public institutions.

With more than 50 research centers and institutes, UK researchers are discovering new knowledge, providing a rich training ground for current students and the next generation of researchers, and advancing the economic growth of the Commonwealth of Kentucky. Several centers excel in the services offered to the public. The Gluck Equine Research Center is one of only three facilities of its kind in the world, conducting research in equine diseases.

The Center for Applied Energy Research is pursuing groundbreaking discovery across the energy disciplines. CAER staff are pioneering new ways to sustainably utilize Kentucky natural resources through carbon-capture algae technology, biomass/coal to liquid products and the opening of UK's first LEED-certified research lab to support the development of Kentucky's growing alternative energy industry. Among the brightest examples of UK's investment in transformative research is the Markey Cancer Center. As a center of excellence and distinction at UK, Markey's robust research and clinical enterprise is the cornerstone of our commitment to Kentucky – fundamental to our success in uplifting lives through our endeavors and improving the general health and welfare of our state – burdened by the nation's highest rate of cancer deaths per 100,000 people. In 2013, Markey earned the prestigious National Cancer Institute-designation (NCI) – one of 68 nationally and the only one in Kentucky.

The University of Kentucky was awarded a \$20 million Clinical Translational Sciences Award (CTSA) from the National Institutes of Health (NIH). As one of only 60 institutions with this research distinction, UK was awarded the CTSA for its potential in moving research and discovery in the lab into practical field and community applications. The CTSA and NCI are part of a trifecta of federal research grants that includes an Alzheimer's Disease Center. UK is one of only 22 universities in the country to hold all three premier grants from NIH.

Established in 1957, the medical center at UK is one of the nation's finest academic medical centers and includes the University's clinical enterprise, UK HealthCare. The 569-bed UK Albert B. Chandler Hospital and Kentucky Children's Hospital, along with 256 beds at UK Good Samaritan Hospital, are supported by a growing faculty and staff providing the most advanced subspecialty care for the most critically injured and ill patients throughout the Commonwealth and beyond. Over the last several years, the number of patients served by the medical enterprise has increased from roughly 19,000 discharges to more than 36,000 discharges in 2014.

UK Chandler Hospital includes the only Level 1 Trauma Center for both adult and pediatric patients in Central and Eastern Kentucky. In addition, UK HealthCare recently opened one of the country's largest robotic hybrid operating rooms and the first of its kind in the region. While our new patient care pavilion is the leading healthcare facility for advanced medical procedures in the region, our talented physicians consult with and travel to our network of affiliate hospitals so Kentucky citizens can receive the best health care available close to their home and never need to leave the Bluegrass for complex subspecialty care.

King's Daughters Medical Center based in Ashland Kentucky officially became part of the University of Kentucky. King's Daughters Medical Center serves a 16-county region across Kentucky, Ohio, and West Virginia. Its health system is comprised of two acute-care hospitals totaling 465 licensed beds, more than 50 ambulatory centers and practice locations, a long-term care facility, medical transport company, and six urgent care centers.

UK's agenda remains committed to accelerating the University's movement toward academic excellence in all areas and gain worldwide recognition for its outstanding academic programs, its commitment to students, its investment in pioneering research and discovery, its success in building a diverse community and its engagement with the larger society. It is all part of the University's fulfillment of our promise to Kentucky to position our state as a leader in American prosperity.

SUSTAINABILITY

Sustainability is an institution-wide priority for the University of Kentucky. We strive to ensure that all activities are ecologically sound, socially just, and economically viable, and that they will continue to be so for future generations. This commitment also prioritizes the integration of these principles in curricula, research, athletics, health care, creative works, and outreach. This principled approach to operational practices and intellectual pursuits is intended to prepare students and empower the campus community to support sustainable development in the Commonwealth and beyond. The UK Sustainability Strategic Plan guides these efforts (https://www.uky.edu/sustainability/sustainability-strategic-plan).

2.4 Supplier Diversity and Procurement

The University of Kentucky is committed to serve as an advocate for diverse businesses in their efforts to conduct business. Diverse Business Enterprises (DBE) consist of minority, women, disabled, veteran and disabled veteran owned business firms that are at least fifty-one percent owned and operated by an individual(s) of the aforementioned categories. Also included in this category are disabled business enterprises and non-profit work centers for the blind and severely disabled.

The University is committed to increasing the amount of goods and services acquired from businesses owned and controlled by diverse persons to 10% of all procurement expenditures. The University expects its suppliers to support and assist in this effort.

Among the University's goals for DBE participation in procurement are:

- To ensure the absence of barriers that reduce the participation of diverse suppliers
- Educate vendors on "how to" do business with the University
- Support diverse vendors seeking to do business with the University in the areas of goods, services, construction, and other areas of procurement

- Encourage participation of qualified diverse vendors by directing them to agencies that can benefit from their product or service
- Provide resources for diverse vendors
- Sponsor events to assist diverse vendors in becoming active, responsible, and responsive participants in the University's purchasing opportunities

For additional information regarding how diverse suppliers may participate in this Request for Proposal, submit any questions to the Purchasing Officer as indicated in Section 3.2 by the Deadline for Written Questions date.

3.0 PROPOSAL REQUIREMENTS

3.1 Key Event Dates

| Release of RFP | 08/16/2023 |
|------------------------------------|--|
| Pre-Proposal Conference (Optional) | N/A |
| Deadline for Written Questions | 08/30/2023 by 1:00 P.M. Lexington, KY Time |
| RFP Proposals Due | 09/15/2023 by 3:00 P.M. Lexington, KY Time |

3.2 Offeror Communication

To ensure that RFP documentation and subsequent information (modifications, clarifications, addenda, Written Questions and Answers, etc.) are directed to the appropriate persons within the offeror's firm, each offeror who intends to participate in this RFP is to provide the following information to the purchasing officer. Prompt, thorough compliance is in the best interest of the offeror. Failure to comply may result in incomplete or delayed communication of addenda or other vital information. Contact information is the responsibility of the offeror. Without the prompt information, any communication shortfall shall reside with the offeror.

- Name of primary contact
- Mailing address of primary contact
- Telephone number of primary contact
- Fax number of primary contact
- E-mail address of primary contact
- Additional contact persons with same information provided as primary contact

This information shall be transmitted via fax or e-mail to:

Ken Scott
Purchasing Division
University of Kentucky
322 Peterson Service Building
Lexington, KY 40506-0005
Phone: (859) 257-9102

Fax: (859) 257-1951

E-mail: 000000@email.uky.edu

All communication with the University regarding this RFP shall only be directed to the purchasing officer listed above.

.3 Pre-Proposal Conference

A pre-proposal conference will not be held.

The University will prepare written responses to all questions submitted and make them available to all offerors. The questions and answers will be made part of the RFP and may become part of the contract with the successful contractor.

3.4 Offeror Presentations

All offerors whose proposals are judged acceptable for award may be required to make a presentation to the evaluation committee.

3.5 Preparation of Offers

The offeror is expected to follow all specifications, terms, conditions and instructions in this RFP.

The offeror will furnish all information required by this solicitation.

Proposals should be prepared simply and economically, providing a description of the offeror's capabilities to satisfy the requirements of the solicitation. Emphasis should be on completeness and clarity of content. All documentation submitted with the proposal should be bound in the single volume except as otherwise specified.

An electronic version of the RFP, in .PDF format only, is available through the University of Kentucky Purchasing Division website at: https://purchasing.uky.edu/bid-and-proposal-opportunities.

3.6 Proposed Deviations from the RFP

The stated requirements appearing elsewhere in this RFP shall become a part of the terms and conditions of any resulting contract. Any deviations therefrom must be specifically defined in accordance with the transmittal letter, Section 4.3 (d). If accepted by the University, the deviations shall become part of the contract, but such deviations must not be in conflict with the basic nature of this RFP.

Note: Offerors shall not submit their standard terms and conditions as exceptions to the University's General Terms and Conditions. Each exception to the University's General Terms and Conditions shall be individually addressed.

3.7 Proposal Submission and Deadline

Offeror must provide the following materials prior to 3:00 P.M. (Lexington, KY time) on the date specified in Section 3.1 and addressed to the purchasing officer listed in Section 3.2:

- **Technical Proposal:** One (1) copy on electronic storage devices (USB) <u>clearly marked</u> with the proposal number and name, firm name and what is included (Technical Proposal) and one (1) printed original copy.
- **Financial Proposal:** One (1) copy on electronic storage devices (USB) <u>clearly marked</u> with the proposal number and name, firm name and what is included (Financial Proposal) and one (1) printed original copy.

Note: Proposals received after the closing date and time will not be considered. In addition, proposals received via fax or e-mail are not acceptable.

The University of Kentucky accepts deliveries of RFPs Monday through Friday from 8 a.m. to 5 p.m. Lexington, KY time. However, RFPs must be received by 3 p.m. Lexington, KY time on the date specified on the RFP in order to be considered.

Proposals shall be enclosed in sealed envelopes to the above referenced address and shall show on the face of the envelope: the closing time and date specified, the solicitation number and the name and address of the offeror. The technical proposal shall be submitted in a sealed envelope and the financial proposal shall be submitted in a sealed envelope under separate cover. Both sealed envelopes shall have identical information on the cover, with the addition that one will state "Technical Information," and the other, "Financial Proposal."

Note: In accordance with the Kentucky Revised Statute 45A.085, there will be no public opening.

3.8 Modification or Withdrawal of Offer

An offer and/or modification of offer received at the office designated in the solicitation after the exact hour and date specified for receipt will not be considered.

An offer may be modified or withdrawn by written notice before the exact hour and date specified for receipt of offers. An offer also may be withdrawn in person by an offeror or an authorized representative, provided the identity of the person is made known and the person signs a receipt for the offer, but only if the withdrawal is made prior to the exact hour and date set for receipt of offers.

3.9 Acceptance or Rejection and Award of Proposal

The University reserves the right to accept or reject any or all proposals (or parts of proposals), to waive any informalities or technicalities, to clarify any ambiguities in proposals and (unless otherwise specified) to accept any item in the proposal. In case of error in extension or prices or other errors in calculation, the unit price shall govern. Further, the University reserves the right to make a single award, split awards, multiple awards or no award, whichever is in the best interest of the University.

3.10 Rejection

Grounds for the rejection of proposals include (but shall not be limited to):

- Failure of a proposal to conform to the essential requirements of the RFP.
- Imposition of conditions that would significantly modify the terms and conditions of the solicitation or limit the offeror's liability to the University on the contract awarded on the basis of such solicitation.
- Failure of the offeror to sign the University RFP. This includes the Authentication of Proposal and Statement of Non-Collusion and Non-Conflict of Interest statements.
- Receipt of proposal after the closing date and time specified in the RFP.

3.11 Addenda

Any addenda or instructions issued by the purchasing agency prior to the time for receiving proposals shall become a part of this RFP. Such addenda shall be acknowledged in the proposal. No instructions or changes shall be binding unless documented by a proper and duly issued addendum.

3.12 <u>Disclosure of Offeror's Response</u>

The RFP specifies the format, required information and general content of proposals submitted in response to this RFP. The purchasing agency will not disclose any portions of the proposals prior to contract award to anyone outside the Purchasing Division, the University's administrative staff, representatives of the state or federal government (if required) and the members of the committee evaluating the proposals. After a contract is awarded in whole or in part, the University shall have the right to duplicate, use or disclose all proposal data submitted by offerors in response to this RFP as a matter of public record.

Any submitted proposal shall remain valid six (6) months after the proposal due date.

The University shall have the right to use all system ideas, or adaptations of those ideas, contained in any proposal received in response to this RFP. Selection or rejection of the proposal will not affect this right.

3.13 Restrictions on Communications with University Staff

From the issue date of this RFP until a contractor is selected and a contract award is made, offerors are not allowed to communicate about the subject of the RFP with any University administrator, faculty, staff or members of the board of trustees except: the purchasing office representative, any University purchasing official representing the University administration, others authorized in writing by the purchasing office and University representatives during offeror presentations. If violation of this provision occurs, the University reserves the right to reject the offeror's proposal.

3.14 Cost of Preparing Proposal

Costs for developing the proposals and any subsequent activities prior to contract award are solely the responsibility of the offerors. The University will provide no reimbursement for such costs.

3.15 Disposition of Proposals

All proposals become the property of the University. The successful proposal will be incorporated into the resulting contract by reference.

3.16 Alternate Proposals

Offerors may submit alternate proposals. If more than one proposal is submitted, all must be complete (separate) and comply with the instructions set forth within this document. Each proposal will be evaluated on its own merits.

3.17 Questions

All questions should be submitted by either fax or e-mail to the purchasing officer listed in Section 3.2 no later than the date listed in Section 3.1.

3.18 Section Titles in the RFP

Section titles used herein are for the purpose of facilitating ease of reference only and shall not be construed to infer the construction of contractual language.

3.19 No Contingent Fees

No person or selling agency shall be employed or retained or given anything of monetary value to solicit or secure this contract, except bona fide employees of the offeror or bona fide established commercial or selling agencies maintained by the offeror for the purpose of securing business. For breach or violation of this provision, the University shall have the right to reject the proposal, annul the contract without liability, or, at its discretion, deduct from the contract price or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee or other benefit.

3.20 Proposal Addenda and Rules for Withdrawal

Prior to the date specified for receipt of offers, a submitted proposal may be withdrawn by submitting a written request for its withdrawal to the University purchasing office, signed by the offeror. Unless requested by the University, the University will not accept revisions or alterations to proposals after the proposal due date.

3.21 Requirement To Perform Vendor Onboarding and Registration

As a condition of award, and for any renewals performed during the life of the contract, successful Contractor agrees to register their company with PaymentWorks, Inc., the University's vendor onboarding application. Registration information will be provided by the Purchasing Division as part of the award process. During the vendor registration process, successful Contractor agrees to provide any applicable information pertaining to diversity demographics for their company. Further, should any company or diversity information change during the life of the contract, successful Contractor agrees to update this information in PaymentWorks as applicable.

4.0 PROPOSAL FORMAT AND CONTENT

4.1 **Proposal Information and Criteria**

The following list specifies the items to be addressed in the proposal. Offerors should read it carefully and address it completely and in the order listed to facilitate the University's review of the proposal.

Proposals shall be organized into the sections identified below. The content of each section is detailed in the following pages. It is strongly suggested that offerors use the same numbers for the following content that are used in the RFP.

- Signed Authentication of Proposal and Statement of Non-Collusion and Non-Conflict of Interest Form
- Transmittal Letter
- Executive Summary and Proposal Overview
- Criteria 1 Offeror Qualifications
- Criteria 2 Services Defined
- Criteria 3 Financial Proposal
- Criteria 4 Evidence of Successful Performance and Implementation Schedule
- Criteria 5 Other Additional Information

4.2 <u>Signed Authentication of Proposal and Statements of Non-Collusion and Non-Conflict of Interest Form</u>

The Offeror will sign and return the proposal cover sheet and print or type their name, firm, address, telephone number and date. The person signing the offer must initial erasures or other changes. An offer signed by an agent is to be accompanied by evidence of their authority unless such evidence has been previously furnished to the purchasing agency. The signer shall further certify that the proposal is made without collusion with any other person, persons, company or parties submitting a proposal; that it is in all respects fair and in good faith without collusion or fraud; and that the signer is authorized to bind the principal offeror.

4.3 <u>Transmittal Letter</u>

The Transmittal Letter accompanying the RFP shall be in the form of a standard business letter and shall be signed by an individual authorized to legally bind the offeror. It shall include:

- A statement referencing all addenda and written questions, the answers and any clarifications
 to this RFP issued by the University and received by the offeror (If no addenda have been
 received, a statement to that effect should be included.).
- A statement that the offeror's proposal shall remain valid for six (6) months after the closing date of the receipt of the proposals.
- A statement that the offeror will accept financial responsibility for all travel expenses incurred for oral presentations (if required) and candidate interviews.
- A statement that summarizes any deviations or exceptions to the RFP requirements and includes a detailed justification for the deviation or exception.
- A statement that identifies the confidential information as described in Section 6.23.

4.4 Executive Summary and Proposal Overview

The Executive Summary and Proposal Overview shall condense and highlight the contents of the technical proposal in such a way as to provide the evaluation committee with a broad understanding of the entire proposal.

As part of the Executive Summary and Proposal Overview, Offeror shall submit with their response a summarized profile describing the demographic nature of their company or organization:

- 1. When was your organization established and/or incorporated?
- 2. Indicate whether your organization is classified as local, regional, national, or international.
- 3. Describe the size of your company in terms of number of employees, gross sales, etc.
- 4. Is your company certified as small business, minority-owned, women-owned, veteran-owned, disabled-owned, or similar classification?
- 5. Include other demographic information that you feel may be applicable to the Request for Proposal submission.
- 6. Offeror shall describe in detail their company's commitment to diversity, equity, and inclusion. Information shall be provided as to the number of diverse individuals that the vendor employees as well as a description of vendors efforts to do business with Diverse Business Enterprises as they conduct their own business. In additional, please indicate the diversity nature of your company as well as ownership race/ethnicity.

| Diverse Business Description | Check All That Apply |
|---|-------------------------|
| Minority-Owned | |
| Woman-Owned | |
| Small Business | |
| Veteran-Owned | |
| LGBTQ-Owned | |
| Disability-Owned Business Entity (DOBE) | |
| Diversity not indicated | |

| Race/Ethnicity | Check One |
|----------------------------------|-----------|
| Asian | |
| Black/African American | |
| Hispanic or Latino | |
| Native American | |
| Native Hawaiian/Pacific Islander | |
| White | |
| Other | |
| Prefer not to say | |

4.5 <u>Criteria 1 - Offeror Qualifications</u>

The purpose of the Offeror Qualifications section is to determine the ability of the offeror to respond to this RFP. Offerors should describe and offer evidence of their ability to meet each of the qualifications listed below.

- a) Please provide the contact information and a brief narrative describing the history of your company. Identify the ownership of your company, the primary contact person for the University account, and provide a statement to indicate if your company has ever filed for bankruptcy, been in default on a loan, or if there are pending liens, claims, or lawsuits against the company. If so, please provide a complete description of the circumstances and status.
- b) Our supply chains and business partnerships are an important aspect of this work. In your proposal, please (A) provide your company's mission and vision relative to sustainability, and (B) how your company, through services, products, and partnerships, will help the University of Kentucky advance specific elements of the Sustainability Strategic Plan.

4.6 <u>Criteria 2 – Services Defined</u>

- a) Attached Specification and drawings.
- b) Manufacturers one year warranty from substantial completion.

4.7 Criteria 3 – Financial Proposal

The Financial Summary Form shall contain the complete financial offer made to the University using the format contained in Section 8.0. All financial information must be submitted in a sealed envelope under separate cover.

4.8 Criteria 4 – Evidence of Successful Performance and Implementation Schedule

- 1. Provide evidence of successful experience performing the services requested.
- 2. Provide production and delivery schedules.

4.9 Criteria 5 – Other Additional Information

The offeror may present any creative approaches that might be appropriate. The offeror may also provide supporting documentation that would be pertinent to this RFP.

Offeror shall describe in detail their company's commitment to diversity, equity and inclusion. Information shall be provided as to the number of diverse individuals that the vendor employees as well as a description of vendors efforts to do business with Diverse Business Enterprises as they conduct their own business.

5.0 EVALUATION CRITERIA PROCESS

A committee of University officials appointed by the Chief Procurement Officer will evaluate proposals and make a recommendation to the Chief Procurement Officer. The evaluation will be based upon the information provided in the proposal, additional information requested by the University for clarification, information obtained from references and independent sources and oral presentations (if requested).

The evaluation of responsive proposals shall then be completed by an evaluation team, which will determine the ranking of proposals. Proposals will be evaluated strictly in accordance with the requirements set forth in this solicitation, including any addenda that are issued. The University will award the contract to the responsible offeror whose proposal is determined to be the most advantageous to the University, taking into consideration the evaluation factors set forth in this RFP.

The evaluation of proposals will include consideration of responses to the list of criteria in Section 4.0. Offerors must specifically address all criteria in their response. Any deviations or exceptions to the specifications or requirements must be described and justified in a transmittal letter. Failure to list such exceptions or deviations in the transmittal letter may be considered sufficient reason to reject the proposal.

The relative importance of the criteria is defined below:

Primary Criteria

- Offeror Qualifications
- Services Defined
- Financial Proposal
- Evidence of Successful Performance and Implementation

Secondary Criteria

Other Additional Services

The University will evaluate proposals as submitted and may not notify offerors of deficiencies in their responses.

Proposals must contain responses to each of the criteria, listed in Section 4 even if the offeror's response cannot satisfy those criteria. A proposal may be rejected if it is conditional or incomplete in the judgment of the University.

6.0 SPECIAL CONDITIONS

6.1 Purchase Order

This Request for Proposals is to establish a Purchase Order(s) for the custom equipment that will serve new construction at the University.

6.2 Effective Date

The effective date of the contract shall be the date upon which the parties execute it and all appropriate approvals, including that of the Commonwealth of Kentucky Government Contracts Review Committee, have been received.

6.3 <u>Competitive Negotiation</u>

It is the intent of the RFP to enter into competitive negotiation as authorized by KRS 45A.085.

The University will review all proposals properly submitted. However, the University reserves the right to request necessary modifications, reject all proposals, reject any proposal that does not meet mandatory requirement(s) or cancel this RFP, according to the best interests of the University.

Offeror(s) selected to participate in negotiations may be given an opportunity to submit a Best and Final Offer to the purchasing agency. All information-received prior to the cut-off time will be considered part of the offeror's Best and Final Offer.

The University also reserves the right to waive minor technicalities or irregularities in proposals providing such action is in the best interest of the University. Such waiver shall in no way modify the RFP requirements or excuse the offeror from full compliance with the RFP specifications and other contract requirements if the offeror is awarded the contract.

6.4 **Appearance Before Committee**

Any, all or no offerors may be requested to appear before the evaluation committee to explain their proposal and/or to respond to questions from the committee concerning the proposal. Offerors are prohibited from electronically recording these meetings. The committee reserves the right to request additional information.

6.5 Additions, Deletions or Contract Changes

The University reserves the right to add, delete, or change related items or services to the contract established from this RFP. No modification or change of any provision in the resulting contract shall be made unless such modification is mutually agreed to in writing by the contractor and the Chief Procurement Officer and incorporated as a written modification to the contract. Memoranda of understanding and correspondence shall not be interpreted as a modification to the contract.

6.6 Contractor Cooperation in Related Efforts

The University reserves the right to undertake or award other contracts for additional or related work to other entities. The contractor shall fully cooperate with such other contractors and University employees and carefully fit its work to such additional work. The contractor shall not commit or permit any act which will interfere with the performance of work by any other contractor or by University employees. This clause shall be included in the contracts of all contractors with whom this contractor will be required to cooperate. The University shall equitably enforce this clause to all contractors to prevent the imposition of unreasonable burdens on any contractor.

6.7 Entire Agreement

The RFP shall be incorporated into any resulting contract. The resulting contract, including the RFP and those portions of the offeror's response accepted by the University, shall be the entire agreement between the parties.

6.8 Governing Law

The contractor shall conform to and observe all laws, ordinances, rules and regulations of the United States of America, Commonwealth of Kentucky and all other local governments, public authorities, boards or offices relating to the property or the improvements upon same (or the use thereof) and will not permit the same to be used for any illegal or immoral purposes, business or occupation. The resulting contract shall be governed by Kentucky law and any claim relating to this contract shall only be brought in the Franklin Circuit Court in accordance with KRS 45A.245.

6.9 <u>Kentucky's Personal Information Security and Breach Investigation Procedures and Practices Act</u>

To the extent Company receives Personal Information as defined by and in accordance with Kentucky's Personal Information Security and Breach Investigation Procedures and Practices Act. KRS 61.931, 61.932 and 61.933 (the "Act"), Company shall secure and protect the Personal Information by, without limitation: (i) complying with all requirements applicable to non-affiliated third parties set forth in the Act; (ii) utilizing security and breach investigation procedures that are appropriate to the nature of the Personal Information disclosed, at least as stringent as University's and reasonably designed to protect the Personal Information from unauthorized access, use, modification, disclosure, manipulation, or destruction; (iii) notifying University of a security breach relating to Personal Information in the possession of Company or its agents or subcontractors within seventy-two (72) hours of discovery of an actual or suspected breach unless the exception set forth in KRS 61.932(2)(b)2 applies and Company abides by the requirements set forth in that exception; (iv) cooperating with University in complying with the response, mitigation, correction, investigation, and notification requirements of the Act, (v) paying all costs of notification, investigation and mitigation in the event of a security breach of Personal Information suffered by Company; and (vi) at University's discretion and direction, handling all administrative functions associated with notification, investigation and mitigation.

6.10 Termination for Convenience

The University of Kentucky, Purchasing Division, reserves the right to terminate the resulting contract without cause with a thirty (30) day written notice. Upon receipt by the contractor of a "notice of termination," the contractor shall discontinue all services with respect to the applicable contract. The cost of any agreed upon services provided by the contractor will be calculated at the agreed upon rate prior to a "notice of termination" and a fixed fee contract will be pro-rated (as appropriate).

6.11 Termination for Non-Performance

Default

The University may terminate the resulting contract for non-performance, as determined by the University, for such causes as:

- Failing to provide satisfactory quality of service, including, failure to maintain adequate
 personnel, whether arising from labor disputes, or otherwise any substantial change in
 ownership or proprietorship of the Contractor, which in the opinion of the University is not in its
 best interest, or failure to comply with the terms of this contract;
- Failing to keep or perform, within the time period set forth herein, or violation of, any of the covenants, conditions, provisions or agreements herein contained;
- Adjudicating as a voluntarily bankrupt, making a transfer in fraud of its creditors, filing a petition under any section from time to time, or under any similar law or statute of the United States or any state thereof, or if an order for relief shall be entered against the Contractor in any proceeding filed by or against contractor thereunder. In the event of any such involuntary bankruptcy proceeding being instituted against the Contractor, the fact of such an involuntary petition being filed shall not be considered an event of default until sixty (60) days after filing of said petition in order that Contractor might during that sixty (60) day period have the opportunity to seek dismissal of the involuntary petition or otherwise cure said potential default; or
- Making a general assignment for the benefit of its creditors, or taking the benefit of any
 insolvency act, or if a permanent receiver or trustee in bankruptcy shall be appointed for the
 Contractor.

Demand for Assurances

In the event the University has reason to believe Contractor will be unable to perform under the Contract, it may make a demand for reasonable assurances that Contractor will be able to timely perform all obligations under the Contract. If Contractor is unable to provide such adequate assurances, then such failure shall be an event of default and grounds for termination of the Contract.

Notification

The University will provide ten (10) calendar days written notice of default. Unless arrangements are made to correct the non-performance issues to the University's satisfaction within ten (10)

calendar days, the University may terminate the contract by giving forty-five (45) days notice, by registered or certified mail, of its intent to cancel this contract.

6.12 **Funding Out**

The University may terminate this contract if funds are not appropriated or are not otherwise available for the purpose of making payments without incurring any obligation for payment after the date of termination, regardless of the terms of the contract. The University shall provide the contractor thirty (30) calendar days' written notice of termination under this provision.

6.13 Prime Contractor Responsibility

Any contracts that may result from the RFP shall specify that the contractor(s) is/are solely responsible for fulfillment of the contract with the University.

6.14 Assignment and Subcontracting

The Contractor(s) may not assign or delegate its rights and obligations under any contract in whole or in part without the prior written consent of the University. Any attempted assignment or subcontracting shall be void.

6.15 Permits, Licenses, Taxes

The contractor shall procure all necessary permits and licenses and abide by all applicable laws, regulations and ordinances of all federal, state and local governments in which work under this contract is performed.

The contractor must furnish certification of authority to conduct business in the Commonwealth of Kentucky as a condition of contract award. Such registration is obtained from the Secretary of State, who will also provide the certification thereof. However, the contractor need not be registered as a prerequisite for responding to the RFP.

The contractor shall pay any sales, use, personal property and other tax arising out of this contract and the transaction contemplated hereby. Any other taxes levied upon this contract, the transaction or the equipment or services delivered pursuant hereto shall be the responsibility of the contractor.

The contractor will be required to accept liability for payment of all payroll taxes or deductions required by local and federal law including (but not limited to) old age pension, social security or annuities.

6.16 Attorneys' Fees

In the event that either party deems it necessary to take legal action to enforce any provision of the contract and in the event that the University prevails, the contractor agrees to pay all expenses of such action including attorneys' fees and costs at all stages of litigation.

6.17 Royalties, Patents, Copyrights and Trademarks

The Contractor shall pay all applicable royalties and license fees. If a particular process, products or device is specified in the contract documents and it is known to be subject to patent rights or copyrights, the existence of such rights shall be disclosed in the contract documents and the Contractor is responsible for payment of all associated royalties. To the fullest extent permitted by law the Contractor shall indemnify, hold the University harmless, and defend all suits, claims, losses, damages or liability resulting from any infringement of patent, copyright, and trademark rights resulting from the incorporation in the Work or device specified in the Contract Documents.

Unless provided otherwise in the contract, the Contractor shall not use the University's name nor any of its trademarks or copyrights, although it may state that it has a Contract with the University.

6.18 Indemnification

The contractor shall indemnify, hold and save harmless the University, its affiliates and subsidiaries and their officers, agents and employees from losses, claims, suits, actions, expenses, damages, costs (including court costs and attorneys' fees of the University's attorneys), all liability of any nature or kind arising out of or relating to the Contractor's response to this RFP or its performance or failure to perform under the contract awarded from this RFP. This clause shall survive termination for as long as necessary to protect the University.

6.19 Insurance

The successful Contractor shall procure and maintain, at its expense, the following minimum insurance coverages insuring all services, work activities and contractual obligations undertaken in this contract. These insurance policies must be with insurers acceptable to the University.

COVERAGES

Workers' Compensation
Employer's Liability
Commercial General Liability including
operations/completed operations, products
and contractual liability (including defense
and investigation costs), and this contract
Business Automobile Liability covering
owned, leased, or non-owned autos

LIMITS

Statutory Requirements (Kentucky) \$500,000/\$500,000/\$500,000 \$3,000,000 each occurrence (BI & PD combined) \$2,000,000 Products and Completed Operations Aggregate

\$2,000,000 each occurrence (BI & PD combined)

The successful contractor agrees to furnish Certificates of Insurance for the above described coverages and limits to the University of Kentucky, Purchasing Division. The University, its trustees and employees must be added as additional insured on the Commercial General Liability policy with regard to the scope of this solicitation. Any deductibles or self-insured retention in the above-described policies must be paid and are the sole responsibility of the contractor. Coverage is to be primary and non-contributory with other coverage (if any) purchased by the University. All of these required policies must include a Waiver of Subrogation (except Workers' Compensation) in favor of the University, its trustees and employees.

6.20 Method of Award

It is the intent of the University to award a contract to the qualified offeror whose offer, conforming to the conditions and requirements of the RFP, is determined to be the most advantageous to the University, cost and other factors considered.

Notwithstanding the above, this RFP does not commit the University to award a contract from this solicitation. The University reserves the right to reject any or all offers and to waive formalities and minor irregularities in the proposal received.

6.21 Reciprocal Preference

In accordance with KRS 45A.494, a resident offeror of the Commonwealth of Kentucky shall be given a preference against a nonresident offeror. In evaluating proposals, the University will apply a reciprocal preference against an offeror submitting a proposal from a state that grants residency preference equal to the preference given by the state of the nonresident offeror. Residency and non-residency shall be defined in accordance with KRS 45A.494(2) and 45A.494(3), respectively. Any offeror claiming Kentucky residency status shall submit with its proposal a notarized affidavit affirming that it meets the criteria as set forth in the above reference statute.

6.22 Reports and Auditing (NOT USED)

6.23 Confidentiality

The University recognizes an offeror's possible interest in preserving selected information and data included in the proposal; however, the University must treat such information and data as required by the Kentucky Open Records Act, KRS 61.870, et seq.

Information areas which normally might be considered proprietary, and therefore confidential, shall be limited to individual personnel data, customer references, formulae and company financial audits which, if disclosed, would permit an unfair advantage to competitors. If a proposal contains information in these areas and the offeror declares them to be proprietary in nature and not available for public disclosure, the offeror shall declare in the Transmittal Letter the inclusion of proprietary information and shall noticeably label as confidential or proprietary each sheet containing such information. Proposals containing information declared by the offeror to be proprietary or confidential, either wholly or in part, outside the areas listed above may be deemed non-responsive and may be rejected.

The University's General Counsel shall review each offeror's information claimed to be confidential and, in consultation with the offeror (if needed), make a final determination as to whether or not the confidential or proprietary nature of the information or data complies with the Kentucky Open Records Act.

6.24 Conflict of Interest

This Request for Proposal and resulting Contract are subject to provisions of the Kentucky Revised Statutes regarding conflict of interest and the University of Kentucky's Ethical Principles and Code of Conduct (www.uky.edu/Legal/ethicscode.htm). When submitting and signing a proposal, an offeror is certifying that no actual, apparent or potential conflict of interest exists between the interests of the University and the interests of the offeror. A conflict of interest (whether contractual, financial, organizational or otherwise) exists when any individual, contractor or subcontractor has a direct or indirect interest because of a financial or pecuniary interest, gift or other activities or relationships with other persons (including business, familial or household relationships) and is thus unable to render or is impeded from rendering impartial assistance or advice, has impaired objectivity in performing the proposed work or has an unfair competitive advantage.

Questions concerning this section or interpretation of this section should be directed to the University purchasing officer identified in this RFP.

6.25 <u>Personal Service Contract Policies</u>

Pursuant to the Kentucky Model Procurement Code (Code), the Government Contract Review Committee (GCRC) of the Kentucky General Assembly may establish policies that govern personal service contracts. Under the Code, a personal service contract is an agreement whereby an individual, firm, partnership or corporation is to perform certain services requiring professional skill or professional judgment for a specified period of time at an agreed upon price.

A. Professional Service Rate Schedules:

The GCRC has established rate schedules for certain professional services and may impact any contract established under the Code. These rate schedules are located on the GCRC website at the following link: https://apps.legislature.ky.gov/moreinfo/contracts/homepage.html. Access/click the dropdown menu within the web page for the rates information.

B. Invoicing of Personal Service Contracts:

The Kentucky Model Procurement Code was recently amended to establish conditions for invoicing for fees for personal service contracts. It states, "No payment shall be made on any personal service contract unless the individual, firm, partnership, or corporation awarded the personal service contract submits its invoice on a form established by the committee." The Government Contract Review Committee has adopted a personal service contract invoice form that must be submitted as a condition of payment. A copy of the form is located on the GCRC website at: https://apps.legislature.ky.gov/moreinfo/contracts/PSC%20INVOICE%20FORM.pdf.

6.26 Copyright Ownership and Title to Designs and Copy

The contractor and University intend this RFP to result in a contract for services, and both consider the products and results of the services to be rendered by the contractor hereunder to be a work made for hire. The contractor acknowledges and agrees that the work and all rights therein, including (without limitation) copyright, belongs to and shall be the sole and exclusive property of the University. For any work that is not considered a work made for hire under applicable law, title and copyright ownership shall be assigned to the University.

Title to all dies, type, cuts, artwork, negatives, positives, color separations, progressive proofs, plates, copy and any other requirement not stated herein required for completion of the finished product for use in connection with any University job shall be the property of and owned by the University. Such items shall be returned to the appropriate department upon completion and/or delivery of work unless otherwise authorized by the University. In the event that time of return is not specified, the contractor shall return all such items to the appropriate University department within one week of delivery.

6.27 <u>University Brand Standards</u>

The contractor must adhere to all University of Kentucky Brand Standards. University Brand Standards are maintained by the University Public Relations Office (UKPR) and can be viewed at http://www.uky.edu/prmarketing/brand-standards. Non-adherence to the standards can have a penalty up to and including contract cancellation. Only the UKPR Director or designee can approve exceptions to the University standards.

Graphics standards for the UK HealthCare areas are governed by UK HealthCare Clinical Enterprise Graphic Standards, found at: https://ukhealthcare.uky.edu/staff/brand-strategy.

Contractor warrants that its products or services provided hereunder will be in compliance with all applicable Federal disabilities laws and regulations, including without limitation the accessibility requirements of Section 255 of the Federal Telecommunications Act of 1996 (47 U.S.C. § 255) and Section 508 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794d), and its implementing regulations set forth at Title 36, Code of Federal Regulations, Part 1194. For purposes of clarity, updated regulations under Section 508 standards now incorporate WCAG 2.0, and for purposes of this agreement WCAG 2.0 Level AA compliance is expressly included. Contractor agrees to promptly respond to, resolve and remediate any complaint regarding accessibility of products or services in a timely manner and provide an updated version to University at no cost. If deficiencies are identified, University reserves the right to request from Contractor, a timeline by which accessibility standards will be incorporated into the products or services provided by Contractor and shall provide such a timeline within a commercially reasonable duration of time. Failure to comply with these requirements shall constitute a material breach of this Agreement and shall be grounds for termination of this Agreement.

Where any customized web services are provided, Contractor represents that it has reviewed the University's Web Policy and all products or services will comply with its published standards.

Contractor will provide University with a current Voluntary Product Accessibility Template (VPAT) for any deliverable(s). If none is available, Vendor will provide sufficient information to reasonably assure the University that the products or services are fully compliant with current requirements.

6.28 Printing Statutes

The purchase of printing services for all state agencies is governed by Chapter 57 of the Kentucky Revised Statutes. Specifically, all printing must be awarded to the lowest responsive bidder and approved by the Governor of Kentucky. In compliance with these statutes, all printing must be provided by a contract established by the Purchasing Division.

6.29 Requirement for Contract Administration Fee (NOT USED)

6.30 Payment Terms

The University adheres to a strategic approach regarding payables management based on risk minimization, processing costs, and industry best practices. As such, suppliers and individuals doing business with the University will be paid based on the following protocol:

- 1. The University utilizes Payment Plus (e-payables) as its primary default form of payment. By enrolling in Payment Plus, suppliers can receive payments immediately (all invoices will be paid immediately upon confirmation of goods receipt and invoice). The process is electronic and the supplier receives real-time payment notices. Additional information regarding Payment Plus (and enrollment form) can be found at: https://www.uky.edu/ufs/payment-plus-supplier-enrollment-form.
- 2. Payments by check. Payment terms for check payments are Net-30.
- 3. Individuals receiving payments from the University that require ACH direct payments will only be processed under special circumstances as approved by the Controller's office. Payment terms for ACH are Net-40.

7.0 SCOPE OF SERVICES

7.1 Detailed Services Defined

Provide the Unit Substation and deliver to the site. Provide testing and startup including setting the trips on the breakers.

Provide a factory-authorized representative to perform the following startup services:

- A. Perform the following field tests and inspections and prepare test reports:
 - 1. Operational Test: After electrical circuitry has been energized, start units to confirm proper unit operation. Remove and replace malfunctioning units and retest.
 - 2. Test and adjust controls and safeties.
 - 3. Test each system for compliance with sequence of operation.

Provide one year warranty from substantial completion.

See the following drawings and specifications for scope of work.

- 1. Drawing:
 - a. E001 Partial Electrical Plan Switchgear and Generator.
- Specification:
 - a. 261116 Secondary Unit Substations.
 - b. 262413 Switchboards.

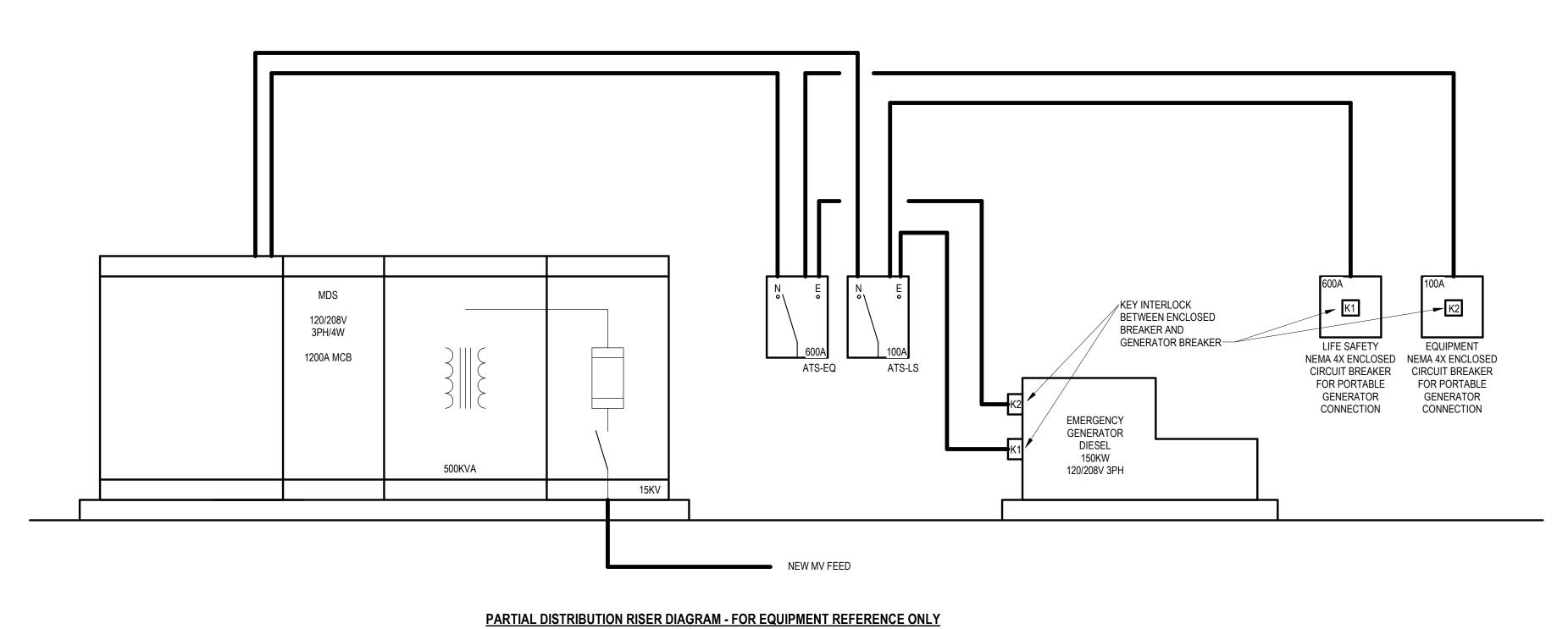
8.0 FINANCIAL OFFER SUMMARY

Please complete and submit "Attachment A – Financial Offer for UK-2375-24".

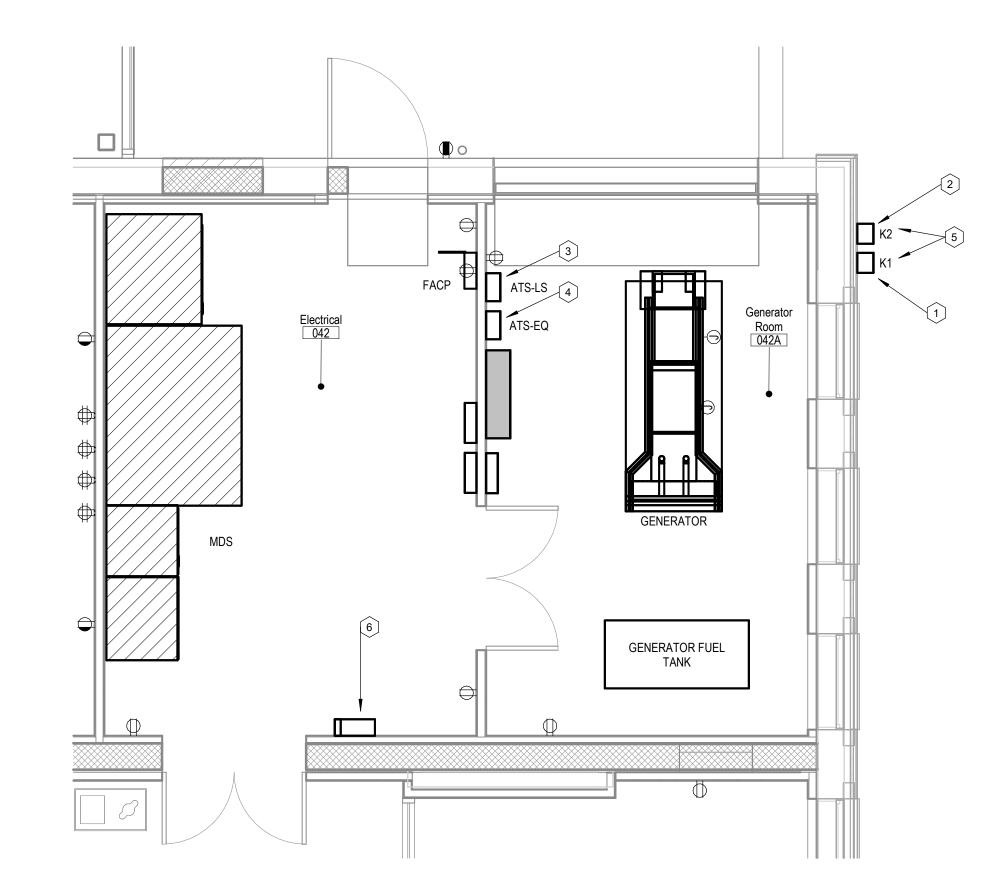
Financial Offer for UK-2375-24

The Bidder agrees to furnish all materials, supplies and services required to complete the Work, for the above referenced Project, for the Capital Construction Procurement Section, University of Kentucky, as described in the RFP including Attachments and as modified by the Addenda listed above.

| FOR THE LUMP SUM OF_ | | | | |
|------------------------------|------------------|---------------|--------------------|-------------|
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| (USE WORDS) | _DOLLARS AND | J | (USE WORDS) | OENTS. |
| (\$(USE FIGURES) | _) | | | |
| Equipment Delivery | | | | |
| Freight included in Price | | | YES | NO |
| Freight estimate | | | \$ | |
| Method of Shipment | | | | |
| Transportation will take app | roximately | | _ Days | |
| Shipment date after receipt | of order | | | |
| Shipment date after receipt | of approval draw | ings | | - |
| <u>Drawings/Manuals</u> | | | | |
| Approval Drawings to be su | bmitted | _# of weeks a | ifter order. | |
| "AS Built" Drawings to be su | bmitted | # of weeks | after construction | completion. |
| Help wth Assembly | | | | |
| Provide contactor help with | assemble? | | YES | NO |
| Start-up, Training, Spare F | Parts & Addition | al Services | | |
| No. of Start-up days include | | | | |
| No. of Training days include | | | | |



| | LOCATION: Elect SUPPLY FROM: MOUNTING: ENCLOSURE TYPE: | rical 042 | VOLTAGE: 208Y/ ² PHASE: 3 WIRES: 4 | 120 | SCCR. RATING: MAIN TYPE: MCB BUS RATING: 1200 MCB RATING: 1200 A | |
|----------|--|--------------------|---|----------------|--|-------|
| CKT# | CIRCUIT | DESCRIPTION | POLES | TRIP RATING | LOAD REMA | RKS |
| 1 | EQ-L-G-1 | | 3 | 600 A | 117544 VA | |
| 2 | ELS-L-G-1 | | 3 | 100 A | 5067 VA | |
| 3 | L-G-1A | | 3 | 200 A | 28884 VA | |
| 4 | L-G-1B | | 3 | 200 A | 7294 VA | |
| 5 | L-G-M | | 3 | 400 A | 31342 VA | |
| 6 | L-1-1A | | 3 | 200 A | 45900 VA | |
| 7 | L-1-1B | | 3 | 200 A | 8937 VA | |
| 8 9 | L-2-1A L-2-1B | | 3 | 200 A 200 A | 16200 VA 14211 VA | |
| 10 | L-2-1B L-3-1A | | 3 | 200 A 200 A | 46800 VA | |
| 11 | L-3-1A L-3-1B | | 3 | 200 A 200 A | 20759 VA | |
| 12 | SPARE | | 3 | 800 A | 0 VA | |
| 13 | SPARE | | 3 | 200 A | 0 VA | |
| 14 | SPARE | | 3 | 100 A | 0 VA | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| | | | | TOTAL LOAD: | 342938 VA | |
| | | | | TOTAL AMPS: | 952 A | |
| LOAD CL | ASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED | PANEL 1 | OTALS |
| Spare | | 342938 VA | 100.00% | 342938 VA | | |
| | | | | | TOTAL CONN. LOAD: | |
| | | | | | TOTAL EST. DEMAND: | |
| | | | | | TOTAL CONN. CURRENT: | |
| | | | | | TOTAL EST. DEMAND | 952 A |
| | | | | | | |
| CIRCUIT | BREAKER NOTES: | | | | | 1 |
| SH = SHI | JNT TRIP | | | | | |
| | CI CIRCUIT BREAKER (PERSO | | | | | |
| | FI CIRCUIT BREAKER (EQUIPI CK ON DEVICE | VILINI FRUIEUIIUN) | | | | |
| | CK OUT DEVICE | | | | | |
| | | | | | | |
| SWITCH | BOARD NOTES: | | | | | |
| | | | | | | |
| | | | | | | |



PARTIAL GROUND FLOOR POWER PLAN - ELECTRICAL ROOMS
1/4" = 1'-0"

KEY NOTES:

- 100 AMP NEMA 4X ENCLOSED CIRCUIT BREAKER FOR PORTABLE GENERATOR LIFE SAFETY CONNECTION.
- 600A NEMA 4X ENCLOSED CIRCUIT BREAKER FOR PORTABLE GENERATOR EQUIPMENT POWER CONNECTION.
- 3 100A 120/208V LIFE SAFETY TRANSFER SWITCH.
- 600A 120/208V EQUIPMENT POWER TRANSFER SWITCH.
- ENCLOSED CIRCUIT BREAKERS ARE TO BE KEY INTERLOCKED WITH CORRESPONDING GENERATOR BREAKERS. REMOTE OPERATOR FOR MDS MAIN BREAKER.

UK Pence Hall Renovation

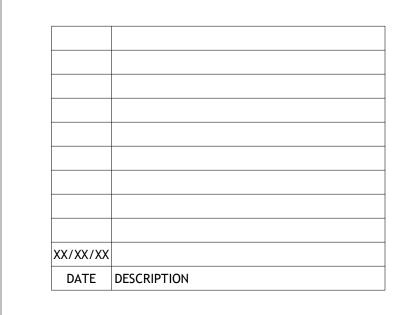
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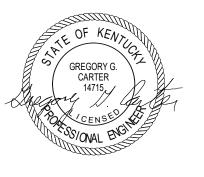
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PARTIAL ELECTRICAL PLAN - SWITCHGEAR AND GENERATOR 654321

08/02/2023

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UNIVERSITY OF KENTUCKY – PENCE HALL RENOVATION 100% CONSTRUCTION DOCUMENTS

UK PROJECT #2590.3 KNBA PROJECT # 22-0460

SPECIFICATION INDEX

| <u>DIVISION 26 – ELECTRICAL</u> | | | | PAG | |
|---------------------------------|---------|---|----------------------------|-----|---|
| Section | 26 1116 | _ | Secondary Unit Substations | 1 - | 6 |
| Section | 26 2413 | _ | Switchboards | 1 - | 9 |

UNIVERSITY OF KENTUCKY — PENCE HALL UK PROJECT #2590.3 100% CONSTRUCTION DOCUMENTS

KNBA PROJECT # 22-0460

SECTION 26 1116 - SECONDARY UNIT SUBSTATIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes indoor secondary unit substations, each consisting of the following:
 - 1. Primary incoming section.
 - 2. Transformer.
 - 3. Secondary distribution section.

1.3 DEFINITIONS

A. NETA ATS: Acceptance Testing Specification.

1.4 SUBMITTALS

- A. Product Data: Include rated capacities, furnished specialties, and accessories.
- B. Shop Drawings: Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 - 1. Wiring Diagrams: Power, signal, and control wiring.
 - 2. Dimensioned plans and elevations showing major components and features.
 - 3. One-line diagram.
 - 4. List of materials.
 - 5. Nameplate legends.
 - 6. Size and number of bus bars and current rating for each bus, including mains and branches of phase, neutral, and ground buses.
 - 7. Short-time and short-circuit current ratings of secondary unit substations and components.
 - 8. Ratings of individual protective devices.
- C. Time-Current Characteristic Curves: For overcurrent protective devices.
- D. Primary Fuses: Submit recommendations and size calculations.
- E. Product Certificates: For secondary unit substations, signed by product manufacturer.
- F. Qualification Data: For testing agency.
- G. Material Test Reports: For secondary unit substations.
- H. Factory test reports.

I. Operation and Maintenance Data: For secondary unit substations and accessories to include in emergency, operation, and maintenance manuals.

1.5 QUALITY ASSURANCE

- A. Product Options: Drawings indicate size, profiles, and dimensional requirements of secondary unit substations and are based on the specific system indicated. Refer to Division 01 Section "Product Requirements."
- B. Electrical Components, Devices and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- C. Comply with IEEE C2.
- D. Comply with IEEE C37.121.
- E. Comply with NFPA 70.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver in shipping splits in sizes that can be moved past obstructions in delivery path.
- B. Handle secondary unit substation components according to manufacturer's written instructions. Use factory-installed lifting provisions.

1.7 PROJECT CONDITIONS

A. Space Limitations: Equipment must fit within the space limits as indicated on the drawings.

1.8 COORDINATION

1.9 EXTRA MATERIALS

- A. Furnish extra materials described below, before installation begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Spare fuses: Six of each type and rating of fuse and fusible device used, except for medium-voltage fuses. Include spares for the following:
 - a. Primary disconnect fuses.
 - b. Potential transformer fuses.
 - c. Control power fuses.
 - 2. Touchup Paint: Three half-pint containers of paint matching enclosure's exterior finish.
 - 3. Primary Switch Contact Lubricant: One container(s).
 - 4. Two spare sets of key interlock key sets complete.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

- 1. ABB Global, Inc.
- 2. Cooper Industries, Inc.; Cooper Power Systems Division.
- 3. Siemens Energy & Automation, Inc.
- 4. Square D; Schneider Electric.

2.2 MANUFACTURED UNITS

- A. Indoor Unit Arrangement: Single assembly. Complete, assembled unit including the air switch, transformer, and distribution must fit into space as indicated on the contract documents.
- B. Enclosure Finish: Factory-applied finish in manufacturer's standard color, including under surfaces treated with corrosion-resistant undercoating.
- C. Access: Front access only.

2.3 INCOMING SECTION

- A. Primary Incoming Section: Enclosed, air-interrupter, primary switch.
 - 1. Three pole, single throw, dead front, copper, bottom feed, metal enclosed, with manual stored energy operator, with fuses mounted on a single frame, complying with IEEE C37.20.3.
 - 2. Key interlocking system to prevent fuse access door from being opened unless switch is open. Additionally, interlock air-interrupter switch with transformer secondary main circuit breaker, preventing switch from being opened or closed unless secondary main circuit breaker is open.
 - 3. Phase Barriers: Located between blades and fuses of each phase, designed for easy removal, allows visual inspection of switch components when barrier is in place.
 - 4. Window: Permits viewing switch-blade positions when door is closed.
 - 5. Accessory Set: Tools and miscellaneous items required for interrupter switchgear test, inspection, maintenance, and operation. Include fuse-handling tool as recommended by switchgear manufacturer.
 - 6. Continuous-Current Rating: 600 A.
 - 7. Short-Circuit Rating:
 - a. Short-time momentary asymmetrical fault rating of 40 kA.
 - b. 3-second symmetrical rating of 25-kA RMS.
 - c. Fault close asymmetrical rating of 40 kA.
 - 8. Fuses: Sizes recommended by secondary unit substation manufacturer, considering fan cooling, temperature-rise specification, and cycle loading. Comply with the following:
 - a. Current-limiting type, rated for not less than 50-kA RMS symmetrical current-interrupting capacity.
 - b. Indicator integral with each fuse to show when it has blown.
 - c. Spares: Include three fuses in use and three spare fuses in storage clips in each switch.
 - 9. Cable Entry: Include a cabling entry terminal space on side of switch to facilitate entry of primary conductors.

Surge Arresters: Comply with IEEE C62.11, Distribution class; metal-oxide-varistor type, with ratings as indicated, connected in each phase of incoming circuit and ahead of any disconnecting device.

2.4 DRY-TYPE TRANSFORMER SECTION

- A. Description: IEEE C57.12.01, IEEE C57.12.51, NEMA ST 20, and dry-type, 2-winding, secondary unit substation transformer.
- B. Enclosure: Indoor, ventilated, VPI coil type and with insulation system rated at 220 deg C with an 80 deg C average winding temperature rise above a maximum ambient temperature of 40 deg C.
- C. Cooling System: Provide provisions for Class AA/FA, air cooled with fans and controls included for forced-air cooling. Comply with IEEE C57.12.01.
 - 1. Automatic forced-air cooling system controls, including thermal sensors, fans, control wiring, temperature controller with test switch, power panel with current-limiting fuses, indicating lights, alarm, and alarm silencing relay.
- D. Winding Material: Copper
- E. Insulation Materials: IEEE C57.12.01, rated 220 deg C.
- F. Insulation Temperature Rise: 65 deg C, maximum rise above ambient.
- G. Basic Impulse Level: 95 kV for the primary and 30 kV for the secondary.
- H. Full-Capacity Voltage Taps: 4 nominal 2.5 percent taps, 2 above and 2 below rated primary voltage.
- I. Sound level may not exceed 65 dBA, without fans operating.
- J. Impedance: 5% percent.
- K. Provide with lightning arrestors on high voltage side.
- L. Provide with vibration isolation for reduced sound transmission through structure. At a minimum, vibration isolators shall be neoprene mount with washers and grommets with minimum static deflection of 0.15".
- M. Accessories:
 - 1. Dial type temperature gauge
 - 2. Threaded grounding lug

2.5 SECONDARY DISTRIBUTION SECTION

- A. Secondary Terminal Compartment: Bus bars mounted on standoff insulators.
- B. Secondary Distribution: Low-voltage switchboard as specified in Division 26 Section "Switchboards."

2.6 IDENTIFICATION DEVICES

A. Compartment Nameplates: Engraved, laminated-plastic or metal nameplate for each compartment, mounted with corrosion-resistant screws. Nameplates and label products are specified in Division 26 Section "Identification for Electrical Systems."

2.7 SOURCE QUALITY CONTROL

- A. Factory Tests: Perform design and routine tests according to standards specified for components. Conduct transformer tests according to IEEE C57.12.90. Conduct switchgear and switchboard tests according to ANSI C37.51.
- B. Factory Tests: Perform the following factory-certified tests on each secondary unit substation:
 - 1. Resistance measurements of all windings on the rated voltage connection and on tap extreme connections.
 - 2. Ratios on the rated voltage connection and on tap extreme connections.
 - 3. Polarity and phase relation on the rated voltage connection.
 - 4. No-load loss at rated voltage on the rated voltage connection.
 - 5. Exciting current at rated voltage on the rated voltage connection.
 - 6. Impedance and load loss at rated current on the rated voltage connection and on tap extreme connections.
 - 7. Applied potential.
 - 8. Induced potential.
 - 9. Temperature Test: If a transformer is supplied with auxiliary cooling equipment to provide more than one rating, test at lowest kilovolt-ampere Class OA or Class AA rating and highest kilovolt-ampere Class FA rating.
 - a. Temperature test is not required if a record of a temperature test on an essentially duplicate unit is available.

PART 3 - EXECUTION

3.1 FIELD QUALITY CONTROL

- A. Testing: Factory service group is to perform the following field tests and inspections and prepare test reports:
- B. Perform the following field tests and inspections and prepare test reports:
 - 1. Perform each visual and mechanical inspection and electrical test according to NETA ATS. Certify compliance with test parameters.
 - 2. After installing secondary unit substation but before primary is energized, verify that grounding system at the substation tested at the specified value or less.
 - 3. After installing secondary unit substation and after electrical circuitry has been energized, test for compliance with requirements.
 - 4. Set field-adjustable switches and circuit-breaker trip ranges as indicated.
 - a. Remove and replace malfunctioning units and retest as specified above.

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KNBA PROJECT # 22-0460

3.2 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain systems. Refer to Division 01 Section "Demonstration and Training."

END OF SECTION 26 1116

SECTION 26 2413 - SWITCHBOARDS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract apply to this Section.

1.2 SUMMARY

A. Section Includes:

- 1. Service and distribution switchboards rated 600 V and less.
- 2. Transient voltage suppression devices.
- 3. Disconnecting and overcurrent protective devices.
- 4. Instrumentation.
- 5. Control power.
- 6. Accessory components and features.
- 7. Identification.
- 8. Mimic bus.

1.3 SUBMITTALS

- A. Product Data: For each type of switchboard, overcurrent protective device, transient voltage suppression device, ground-fault protector, accessory, and component indicated. Include dimensions and manufacturers' technical data on features, performance, electrical characteristics, ratings, accessories, and finishes.
- B. Shop Drawings: For each switchboard and related equipment.
 - 1. Include dimensioned plans, elevations, sections, and details, including required clearances and service space around equipment. Show tabulations of installed devices, equipment features, and ratings.
 - 2. Detail enclosure types for types other than NEMA 250, Type 1.
 - 3. Detail bus configuration, current, and voltage ratings.
 - 4. Detail short-circuit current rating of switchboards and overcurrent protective devices.
 - 5. Include descriptive documentation of optional barriers specified for electrical insulation and isolation.
 - 6. Detail utility company's metering provisions with indication of approval by utility company.
 - 7. Detail features, characteristics, ratings, and factory settings of individual overcurrent protective devices and auxiliary components.
 - 8. Include time-current coordination curves for each type and rating of overcurrent protective device included in switchboards. Submit on translucent log-log graft paper; include selectable ranges for each type of overcurrent protective device.
 - 9. Include diagram and details of proposed mimic bus.

SWITCHBOARDS PAGE 1 of 9

- 10. Include schematic and wiring diagrams for power, signal, and control wiring.
- C. Operation and Maintenance Data: For switchboards and components to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01 Section "Operation and Maintenance Data," include the following:
 - 1. Routine maintenance requirements for switchboards and all installed components.
 - 2. Manufacturer's written instructions for testing and adjusting overcurrent protective devices.
 - 3. Time-current coordination curves for each type and rating of overcurrent protective device included in switchboards. Submit on translucent log-log graft paper; include selectable ranges for each type of overcurrent protective device.

1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain switchboards, overcurrent protective devices, components, and accessories from single source from single manufacturer.
- B. Product Selection for Restricted Space: Drawings indicate maximum dimensions for switchboards including clearances between switchboards and adjacent surfaces and other items. Comply with indicated maximum dimensions.
- C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- D. Comply with NEMA PB 2.
- E. Comply with NFPA 70.
- F. Comply with UL 891.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver switchboards in sections or lengths that can be moved past obstructions in delivery path.

1.6 PROJECT CONDITIONS

A. Environmental Limitations:

- 1. Do not deliver switchboards until spaces are enclosed and weathertight, wet work in spaces is complete and dry, work above switchboards is complete, and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.
- 2. Rate equipment for continuous operation under the following conditions unless otherwise indicated:
 - a. Ambient Temperature: Not exceeding 104 deg F (40 deg C).
 - b. Altitude: Not exceeding 6600 feet (2000 m).

SWITCHBOARDS PAGE 2 of 9

1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace transient voltage suppression devices that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period: One year from date of Substantial Completion.

1.8 EXTRA MATERIALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Potential Transformer Fuses: Equal to 10 percent of quantity installed for each size and type, but no fewer than two of each size and type.
 - 2. Control-Power Fuses: Equal to 10 percent of quantity installed for each size and type, but no fewer than two of each size and type.
 - 3. Fuses for Fused Power-Circuit Devices: Equal to 10 percent of quantity installed for each size and type, but no fewer than three of each size and type.
 - 4. Indicating Lights: Equal to 10 percent of quantity installed for each size and type, but no fewer than one of each size and type.

PART 2 - PRODUCTS

2.1 MANUFACTURED UNITS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. ABB Global, Inc.
 - 2. Cooper Industries, Inc.; Cooper Power Systems Division.
 - 3. Siemens Energy & Automation, Inc.
 - 4. Square D; a brand of Schneider Electric.
- B. Front-Connected, Front-Accessible Switchboards:
 - 1. Main Devices: Fixed, individually mounted, drawout.
 - 2. Branch Devices: Panel mounted.
 - 3. Sections front and rear aligned.
- C. Nominal System Voltage: 480Y/277 V and 208Y/120 V.
- D. Main-Bus Continuous: See drawings.
- E. Indoor Enclosures: Steel, NEMA 250, Type 1.

SWITCHBOARDS PAGE 3 of 9

- F. Enclosure Finish for Indoor Units: Factory-applied finish in manufacturer's standard gray finish over a rust-inhibiting primer on treated metal surface.
- G. Barriers: Between adjacent switchboard sections.
- H. Insulation and isolation for main bus of main section and main and vertical buses of feeder sections.
- I. Bus Transition and Incoming Pull Sections: Matched and aligned with basic switchboard.
- J. Removable, Hinged Rear Doors and Compartment Covers: Secured by standard bolts, for access to rear interior of switchboard.
- K. Hinged Front Panels: Allow access to circuit breaker, metering, accessory, and blank compartments.
- L. Pull Box on Top of Switchboard (if required):
 - 1. Adequate ventilation to maintain temperature in pull box within same limits as switchboard.
 - 2. Set back from front to clear circuit-breaker removal mechanism.
 - 3. Removable covers shall form top, front, and sides. Top covers at rear shall be easily removable for drilling and cutting.
 - 4. Bottom shall be insulating, fire-resistive material with separate holes for cable drops into switchboard.
 - 5. Cable supports shall be arranged to facilitate cabling and adequate to support cables indicated, including those for future installation.
- M. Buses and Connections: Three phase, four wire unless otherwise indicated.
 - 1. Phase- and Neutral-Bus Material: Hard-drawn copper of 98 percent conductivity, silver-plated, with tin-plated aluminum or copper feeder circuit-breaker line connections.
 - 2. Load Terminals: Insulated, rigidly braced, runback bus extensions, of same material as through buses, equipped with compression connectors for outgoing circuit conductors. Provide load terminals for future circuit-breaker positions at full-ampere rating of circuit-breaker position.
 - 3. Ground Bus: 1/4-by-2-inch- (6-by-50-mm-) Minimum-size required by UL 891 unless otherwise noted, hard-drawn copper of 98 percent conductivity, equipped with compression connectors for feeder and branch-circuit ground conductors. For busway feeders, extend insulated equipment grounding cable to busway ground connection and support cable at intervals in vertical run.
 - 4. Main Phase Buses and Equipment Ground Buses: Uniform capacity for entire length of switchboard's main and distribution sections. Provide for future extensions from both ends.
 - 5. Neutral Buses: 100 percent of the ampacity of phase buses unless otherwise indicated, equipped with compression connectors for outgoing circuit neutral cables. Brace bus extensions for busway feeder neutral bus.
 - 6. Isolation Barrier Access Provisions: Permit checking of bus-bolt tightness.
- N. Future Devices: Equip compartments with mounting brackets, supports, bus connections, and appurtenances at full rating of circuit-breaker compartment.

SWITCHBOARDS PAGE 4 of 9

O. Fungus Proofing: Permanent fungicidal treatment for overcurrent protective devices and other components including instruments and instrument transformers.

2.2 TRANSIENT VOLTAGE SUPPRESSION DEVICES

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. General Electric Company; GE Consumer & Industrial Electrical Distribution.
 - 2. Siemens Energy & Automation, Inc.
 - 3. Square D; a brand of Schneider Electric.
- B. Surge Protection Device Description: IEEE C62.41-compliant, integrally mounted, bolt-on, solid-state, parallel-connected, modular (with field-replaceable modules) type, with sine-wave tracking suppression and filtering modules, UL 1449, second edition, short-circuit current rating matching or exceeding the switchboard short-circuit rating, and with the following features and accessories:
 - 1. Fuses, rated at 200-kA interrupting capacity.
 - 2. Fabrication using bolted compression lugs for internal wiring.
 - 3. Integral disconnect switch.
 - 4. Redundant suppression circuits.
 - 5. Redundant replaceable modules.
 - 6. Arrangement with wire connections to phase buses, neutral bus, and ground bus.
 - 7. LED indicator lights for power and protection status.
 - 8. Audible alarm, with silencing switch, to indicate when protection has failed.
 - 9. Form-C contacts rated at 5 A and 250-V ac, one normally open and one normally closed, for remote monitoring of system operation. Contacts shall reverse position on failure of any surge diversion module or on opening of any current-limiting device. Coordinate with building power monitoring and control system.
 - 10. Six-digit, transient-event counter set to totalize transient surges.
- C. Peak Single-Impulse Surge Current Rating: 160 kA per mode/320 kA per phase.
- D. Withstand Capabilities: 12,000 IEEE C62.41, Category C3 (10 kA), 8-by-20-mic.sec. surges with less than 5 percent change in clamping voltage.
- E. Protection modes and UL 1449 SVR for grounded wye circuits with 480Y/277V and 208Y/120V, three-phase, four-wire circuits shall be as follows:
 - 1. Line to Neutral: 800 V for 480Y/277 and 400 V for 208Y/120.
 - 2. Line to Ground: 800 V for 480Y/277 and 400 V for 208Y/120.
 - 3. Neutral to Ground: 800 V for 480Y/277 and 400 V for 208Y/120.

2.3 DISCONNECTING AND OVERCURRENT PROTECTIVE DEVICES

A. Molded-Case Circuit Breaker (MCCB): Comply with UL 489, with interrupting capacity to meet available fault currents.

SWITCHBOARDS PAGE 5 of 9

- 1. Electronic trip circuit breakers with RMS sensing; field-replaceable rating plug or field-replicable electronic trip; and the following field-adjustable settings:
 - a. Instantaneous trip.
 - b. Long- and short-time pickup levels.
 - c. Long- and short-time time adjustments.
 - d. Ground-fault pickup level, time delay, and I²t response.
- 2. Current-Limiting Circuit Breakers: Frame sizes 400 A and smaller; let-through ratings less than NEMA FU 1, RK-5.
- 3. Molded-Case Circuit-Breaker (MCCB) Features and Accessories:
 - a. Standard frame sizes, trip ratings, and number of poles.
 - b. Lugs: Compression style, suitable for number, size, trip ratings, and conductor material.
 - c. Application Listing: Appropriate for application; Type SWD for switching fluorescent lighting loads; Type HID for feeding fluorescent and high-intensity discharge (HID) lighting circuits.
 - d. Ground-Fault Protection: Integrally mounted relay and trip unit with adjustable pickup and time-delay settings, push-to-test feature, and ground-fault indicator.
 - e. Undervoltage Trip: Set to operate at 35 to 75 percent of rated voltage without intentional time delay.
 - f. Auxiliary Contacts: Two SPDT switches with "a" and "b" contacts; "a" contacts mimic circuit-breaker contacts, "b" contacts operate in reverse of circuit-breaker contacts.
 - g. Key Interlock Kit: Externally mounted to prohibit circuit-breaker operation; key shall be removable only when circuit breaker is in off position.
 - h. Remote operator: Provide remote operator for main breaker.
- B. Insulated-Case Circuit Breaker (ICCB) for Main Breaker: 100 percent rated, sealed, insulated-case power circuit breaker with interrupting capacity rating to meet available fault current.
 - 1. Drawout circuit-breaker mounting.
 - 2. Two-step, stored-energy closing.
 - 3. Standard-function, microprocessor-based trip units with interchangeable rating plug, trip indicators, and the following field-adjustable settings:
 - a. Instantaneous trip.
 - b. Long- and short-time time adjustments.
 - c. Ground-fault pickup level, time delay, and I²t response.
 - 4. Key Interlock Kit: Externally mounted to prohibit circuit-breaker operation; key shall be removable only when circuit breaker is in off position.

2.4 INSTRUMENTATION

- A. Instrument Transformers: IEEE C57.13, NEMA EI 21.1, and the following:
 - 1. Potential Transformers: IEEE C57.13; 120 V, 60 Hz, single secondary; disconnecting type with integral fuse mountings. Burden and accuracy shall be consistent with connected metering and relay devices.

SWITCHBOARDS PAGE 6 of 9

- 2. Current Transformers: IEEE C57.13; 5 A, 60 Hz, secondary; wound type; single secondary winding and secondary shorting device. Burden and accuracy shall be consistent with connected metering and relay devices.
- 3. Control-Power Transformers: Dry type, mounted in separate compartments for units larger than 3 kVA.
- 4. Current Transformers for Neutral and Ground-Fault Current Sensing: Connect secondary wiring to ground overcurrent relays, via shorting terminals, to provide selective tripping of main and tie circuit breaker. Coordinate with feeder circuit-breaker, ground-fault protection.
- B. Multifunction Digital-Metering Monitor: Schneider Electric PM5500 series.
 - 1. The meter shall have a BACnet interface.
 - 2. Communications interface to the existing Johnson Controls (JCI) system (Metasys) for providing output of all monitored and stored information to the owner's facility management system. Coordinate with JCI to provide the required hardware and accessories.
 - 3. Mounting: Display and control unit flush or semi-flush mounted in instrument compartment door. Mounting height for the meter shall be no higher than 5 feet above finished floor.
 - 4. Separately mounted molded case circuit breaker for meter protection and isolation.

2.5 CONTROL POWER

- A. Control Circuits: 120-V ac, supplied through secondary disconnecting devices from control-power transformer.
- B. Control-Power Fuses: Primary and secondary fuses for current-limiting and overload protection of transformer and fuses for protection of control circuits.
- C. Control Wiring: Factory installed, with bundling, lacing, and protection included. Provide flexible conductors for No. 8 AWG and smaller, for conductors across hinges, and for conductors for interconnections between shipping units.

2.6 ACCESSORY COMPONENTS AND FEATURES

- A. Accessory Set: Include tools and miscellaneous items required for overcurrent protective device test, inspection, maintenance, and operation.
- B. Portable Test Set: For testing functions of solid-state trip devices without removing from switchboard. Include relay and meter test plugs suitable for testing switchboard meters and switchboard class relays.
- C. Portable Circuit-Breaker Lifting Device: Floor-supported, roller-based, elevating carriage arranged for movement of circuit breakers in and out of compartments for present and future circuit breakers.
- D. Spare-Fuse Cabinet: Suitably identified, wall-mounted, lockable, compartmented steel box or cabinet. Arrange for wall mounting.

SWITCHBOARDS PAGE 7 of 9

2.7 IDENTIFICATION

- A. Mimic Bus: Continuously integrated mimic bus factory applied to front of switchboard. Arrange in single-line diagram format, using symbols and letter designations consistent with final mimic-bus diagram.
- B. Coordinate mimic-bus segments with devices in switchboard sections to which they are applied. Produce a concise visual presentation of principal switchboard components and connections.
- C. Presentation Media: Painted graphics in color contrasting with background color to represent bus and components, complete with lettered designations.
- D. Service Equipment Label: NRTL labeled for use as service equipment for switchboards with one or more service disconnecting and overcurrent protective devices.

PART 3 - EXECUTION

3.1 FIELD QUALITY CONTROL

- A. Testing Agency: Factory service group to perform tests and inspections.
- B. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections.
- C. Perform tests and inspections.
 - 1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.

D. Acceptance Testing Preparation:

- 1. Test insulation resistance for each switchboard bus, component, connecting supply, feeder, and control circuit.
- 2. Test continuity of each circuit.

E. Tests and Inspections:

- 1. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
- 2. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.
- 3. Perform the following infrared scan tests and inspections and prepare reports:
 - a. Initial Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each switchboard. Remove front panels so joints and connections are accessible to portable scanner.
 - b. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each switchboard 11 months after date of Substantial Completion.

SWITCHBOARDS PAGE 8 of 9

- c. Instruments and Equipment:
 - 1) Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
- 4. Test and adjust controls, remote monitoring, and safeties. Replace damaged and malfunctioning controls and equipment.
- F. Switchboard will be considered defective if it does not pass tests and inspections.
- G. Prepare test and inspection reports, including a certified report that identifies switchboards included and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

3.2 ADJUSTING

- A. Adjust moving parts and operable components to function smoothly, and lubricate as recommended by manufacturer.
- B. Set field-adjustable circuit-breaker trip ranges as indicated.

3.3 PROTECTION

A. Temporary Heating: Apply temporary heat, to maintain temperature according to manufacturer's written instructions, until switchboard is ready to be energized and placed into service.

3.4 DEMONSTRATION

A. Train Owner's maintenance personnel to adjust, operate, and maintain switchboards, overcurrent protective devices, instrumentation, and accessories, and to use and reprogram microprocessor-based trip, monitoring, and communication units.

END OF SECTION 26 2413

SWITCHBOARDS PAGE 9 of 9

TABLE OF CONTENTS GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION BY A CONSTRUCTION MANAGER AT RISK

University of Kentucky Capital Construction Division

| Co | 4 | | - 4 | |
|--------------|----|-------|-----|---|
| | nт | e_1 | ٦Τ | c |
| \mathbf{C} | ш | C) | ıι | o |

| ARTICLE 1 - DEFINITIONS | 3 |
|--|----|
| ARTICLE 2 - CONSULTANT | 5 |
| ARTICLE 3 - CORRELATION AND INTENT OF CONTRACT DOCUMENTS | 7 |
| ARTICLE 4 - PRE-CONSTRUCTION CONFERENCE | 8 |
| ARTICLE 5 - SHOP DRAWINGS | |
| ARTICLE 6 - LAYING OUT WORK | 9 |
| ARTICLE 7 - PLANS, DRAWINGS, SPECIFICATIONS AND RECORD DRAWINGS | 10 |
| ARTICLE 8 - TEMPORARY UTILITIES | 10 |
| ARTICLE 9 - MATERIALS, EQUIPMENT, APPLIANCES, AND EMPLOYEES | 11 |
| ARTICLE 10 - ROYALTIES AND PATENTS | 12 |
| ARTICLE 11 - SURVEYS, PERMITS, REGULATIONS, AND STANDARD CODES | 12 |
| ARTICLE 12 - PROTECTION OF WORK, PROPERTY, AND PUBLIC | 14 |
| ARTICLE 13 - BLASTING | |
| ARTICLE 14 - CONSTRUCTION AND SAFETY DEVICES | 15 |
| ARTICLE 15 - HAZARDOUS MATERIALS | |
| ARTICLE 16 - INSPECTION OF WORK | |
| ARTICLE 17 - SUPERINTENDENT - SUPERVISION | 18 |
| ARTICLE 18 - CHANGES IN THE WORK | |
| ARTICLE 19 - RULES AND MEASUREMENTS FOR EXCAVATION | 21 |
| ARTICLE 20 - CONCEALED CONDITIONS | 22 |
| ARTICLE 21 - DELAYS AND EXTENSION OF TIME | 23 |
| ARTICLE 22 - CORRECTION OF WORK BEFORE FINAL PAYMENT | 26 |
| ARTICLE 23 - CORRECTION OF WORK AFTER FINAL PAYMENT | 27 |
| ARTICLE 24 - TERMINATION OF CONTRACT FOR CONVENIENCE OF OWNER | 27 |
| ARTICLE 25- OWNER'S RIGHT TO STOP WORK | 27 |
| ARTICLE 26 -TERMINATION OF CONTRACT FOR DEFAULT ACTION OF CONSTRUCTION MANAGER | |
| ARTICLE 27 - SUSPENSION OF WORK | |
| ARTICLE 28 - TIME OF COMPLETION | |
| ARTICLE 29 - LIQUIDATED DAMAGES | |
| ARTICLE 30 - PAYMENT TO THE CONSTRUCTION MANAGER | |
| | |

| ARTICLE 31 - AUDITS | 35 |
|--|-------|
| ARTICLE 32 - PROGRESS & SCHEDULING | 36 |
| ARTICLE 33 - USE OF COMPLETED PORTIONS | 37 |
| ARTICLE 34 - INDEMNIFICATION | 37 |
| ARTICLE 35 - INSURANCE | 38 |
| ARTICLE 36 - PERFORMANCE AND PAYMENT BONDS | 39 |
| ARTICLE 37 - DAMAGED FACILITIES | 39 |
| ARTICLE 38 - CLAIMS & DISPUTE RESOLUTION | 40 |
| ARTICLE 39 - CLAIMS FOR DAMAGE | 41 |
| ARTICLE 40 - LIENS | 41 |
| ARTICLE 41 - ASSIGNMENT | |
| ARTICLE 42 - SEPARATE CONTRACTS | 42 |
| ARTICLE 43 - CONSTRUCTION MANAGER/SUB-CONTRACTOR RELATIONS | HIP42 |
| ARTICLE 44 - CASH ALLOWANCE | 43 |
| ARTICLE 45 - PROJECT SITE LIMITS | 43 |
| ARTICLE 46 - CLEAN UP | 43 |
| ARTICLE 47 - POINTS OF REFERENCE. | 44 |
| ARTICLE 48 - SUBSTITUTION - MATERIALS AND EQUIPMENT | 44 |
| ARTICLE 49 - TEST AND INSPECTION | |
| ARTICLE 50 - WARRANTY | 45 |
| ARTICLE 51 - PREVAILING WAGE LAW REQUIREMENTS (NO LONGER USE | |
| 1/9/17) | |
| ARTICLE 52 - APPRENTICES | |
| ARTICLE 53 - GOVERNING LAW | |
| ARTICLE 54 - NONDISCRIMINATION IN EMPLOYMENT | |
| ARTICLE 55 - AFFIRMATIVE ACTION; REPORTING REQUIREMENTS | 47 |

GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION BY A CONSTRUCTION MANAGER AT RISK

University of Kentucky Capital Construction Division

These General Conditions are binding upon the Construction Manager and all Sub-contractors as each are subject to the provisions contained herein.

ARTICLE 1 - DEFINITIONS

- 1.1 Wherever used in these General Conditions or in other Contract Documents, the following terms have the meaning indicated which are applicable to both the singular and plural thereof:
- 1.1.1 ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS (ASI) The term "ASI" means a written order issued by the Consultant that clarifies or interprets the Contract Documents, that orders minor changes in the Work, that does not require an adjustment in either cost or time, and that does not require a Change Order.
- 1.1.2 BUSINESS DAY The term "Business Day" means a Calendar Day that is not a Saturday, Sunday or legal holiday in Fayette County, Kentucky.
- 1.1.3 CALENDAR DAY The term "Calendar Day" means a day of twenty-four hours measured from midnight to the next midnight
- 1.1.4 CHANGE ORDER The term "Change Order" means a written order to the Construction Manager, signed by the Owner and issued after the execution of the Contract, directing a change in the Work or an adjustment in the Contract Amount or the Contract Time. A Change Order may be an agreed change by the Construction Manager and the Owner or it may be a unilateral change by the Owner.
- 1.1.5 CONSULTANT The term "Consultant" means the person and/or entity, whether singular or plural, either Architect, Engineer or other Consultant, who is or are identified as such in the Contract Documents.
- 1.1.6 CONSTRUCTION MANAGER or CONSTRUCTION MANAGER AT RISK (CM) The term "Construction Manager" or "Construction Manager at Risk" (CM) means the person or entity who will or has entered into a contract with the Owner that assumes the risk for construction of the Project as the construction manager, and who will provide consultation and collaboration regarding the construction during and after design of the Project. The CM shall execute and hold all construction Trade Contracts and Purchase Orders for the Project.
- 1.1.7 CONTRACT The term "Contract" means the Contract between Owner and Construction Manager and consists of all Contract Documents as defined in Article 1.1.10 of these General Conditions.
- 1.1.8 CONTRACT AMOUNT The term "Contract Amount" means the sum stated in the Agreement which represents the total amount payable by the Owner to the Construction Manager for the performance of the Work under the Contract Documents, plus or minus adjustments as provided for in the Contract Documents or by approved Change Orders.
- 1.1.9 CONTRACT DOCUMENTS The "Contract Documents" include the Agreement of Contract between the Owner and the Construction Manager (the "Agreement"); the Request for Proposal; the General Conditions; the Special Conditions; the Construction Manager's Form of

Proposal; the Construction Manager's Bonds; the Specifications, Drawings and Addenda for the construction of the Project which are to be used for bidding of the bid pack/Trade Contracts; and any Change Orders issued after execution of this Contract. The Contract Documents shall not be construed to create a contractual relationship of any kind between the Owner and any Sub-contractor, or any person or entity other than the Construction Manager. Documents not included or expressly contemplated in this Article do not, and shall not, form any part of the Contract for Construction. Without limiting the generality of the foregoing, shop drawings and other submittals from the Construction Manager or its Sub-contractors and suppliers do not constitute a part of the Contract Documents. Except as otherwise provided, where these Contract Documents obligate the Construction Manager to certain responsibilities or require the Construction Manager to perform certain actions, the Construction Manager may require these same responsibilities and/or actions of one or more Sub-contractors. However, assignment of such responsibilities or actions to one or more Sub-contractors shall not be construed to relieve the Construction Manager of its obligation to the University under this contract.—

- 1.1.10 CONTRACT TIME The term "Contract Time", unless otherwise provided, means the specified number of consecutive Calendar Days following the stipulated commencement of the Work as stated in the Work Order, plus or minus adjustments as provided for by approved Change Orders, within which the Construction Manager shall complete the Work required by the Contract and shall achieve certification of substantial and final completion.
- 1.1.11 KRS REFERENCES Reference to "KRS" means the "Kentucky Revised Statutes" adopted by the Commonwealth of Kentucky, including all laws that may have been revised, amended, supplemented or new laws enacted.
- 1.1.12 OWNER The term "Owner" means the University of Kentucky, a statutory body corporate existing pursuant to Sections 164.100 et seq. of the Kentucky Revised Statutes.
- 1.1.13 PROJECT The term "Project" means the total construction of the Work performed under the Contract Documents, which may be the whole or a part, and which may include construction by the Owner or by separate contracts.
- 1.1.14 PROJECT MANAGER The term "Project Manager", when used alone, means the Owner's representative responsible for administration and management of the Project. The Owner's Project Manager during construction shall be the designated University of Kentucky Capital Projects Management Project Manager that is in charge of the Project. The term "CM Project Manager" means the individual employed by the Construction Manager who is assigned to the Project to provide overall management during both the design and construction phases of the Project, and who has total responsibility for the successful completion of the Project
- 1.1.15 PROVIDE The term "Provide," as used throughout the specifications, shall mean furnish, install and pay for.
- 1.1.16 SHOP DRAWINGS The term "Shop Drawings" means drawings, diagrams, schedules, and other data specially prepared for the Work by the Construction Manager or any Sub-contractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.
- 1.1.17 SUBSTANTIAL COMPLETION The term "Substantial Completion" is the point at which, as certified in writing by the Owner, a project is at the level of completion, in strict compliance with the contract, where (a) necessary approval by public regulatory authorities (and by other authorities having jurisdiction or as identified in Article 11.2, as necessary) has been given; (b) the Owner has received all required warranties and documentation, and (c) the Owner may enjoy beneficial use or

occupancy and may use, operate, and maintain the project in all respects, for its intended purpose. Partial use or occupancy shall not necessarily result in the project being deemed substantially complete and shall not be evidence of Substantial Completion. In order for the Owner to enjoy beneficial use or occupancy and use, operate, and maintain the project in all respects, for its intended purpose, the stage or progress of the Work or a designated portion thereof shall be sufficiently complete, accessible, operable and usable, and all parts, systems and site Work shall be 100% complete, cleaned and available for the Owner's full use without interruption in accordance with the Contract Documents, including but not limited to the provisions of Article 28 of these General Conditions. The Work will not be considered acceptable for Substantial Completion review until all Project systems included in the Work are operational as designed and scheduled, all designated or required governmental inspections and certifications have been made and approvals provided to the Owner, designated instruction of the Owner's personnel in the operation of systems has been completed, and all final finishes within the Contract Documents are in place. In general, the only remaining Work shall be minor in nature so that the Owner and/or the Owner's tenants could occupy the Project on that date and the completion of the Work by the Construction Manager would not materially interfere or hamper the Owner's or the Owner's tenants' normal business operations. As a further condition of Substantial Completion acceptance, the Construction Manager shall certify in writing that all remaining Work, the same being solely of a "punch list" nature, will be completed within thirty (30) consecutive Calendar Days following the date of Substantial Completion.

- 1.1.17.1The parties agree that "substantial completion" as defined in Article No. 2 of the Agreement and Article 1 of the General Conditions, as extended by approved Change Order(s) pursuant to Article 18.1 of the General Conditions, shall be the "date of completion specified in the contract" for purposes of KRS. 45A.250(2).
- 1.1.18 SUB-CONTRACTOR The term "Sub-contractor" means the person, company, corporation, joint venture or other legal entity with whom the Construction Manager has executed a Contract for a portion of the Work.
- 1.1.19 WORK The term "Work" means the scope of construction and services required by the Contract Documents and all approved Change Orders, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Construction Manager to perform and complete the Construction Manager's obligations under the Contract in an expeditious, orderly and workmanlike manner. The Work may constitute the whole or a part of the Project.
- 1.1.20 WORK ORDER The term "Work Order" means a written notice by the Owner to the Construction Manager authorizing the Construction Manager to commence Work under the Contract and establishing the beginning date from which the time for Substantial and Final Completion shall be established.
- 1.1.21 UNIT PRICE The term "Unit Price" means the amount per unit of measurement for materials or services as described in the bid documents.

ARTICLE 2 - CONSULTANT

- 2.1 The Consultant will be the Owner's representative during construction and until the Work is complete. The Consultant will advise and consult with the Owner. The Owner's instructions to the Construction Manager may be forwarded through the Consultant.
- 2.2 The Consultant will regularly, but no less frequently that monthly, visit the site to become familiar with the progress of the Work, the quality of the Work being provided and to determine if the Rev 11/2020

 5 General Conditions

Work is proceeding in accordance with the Contract Documents. On the basis of these on-site inspections, the Consultant will inform the Owner of the progress of the Work, will advise the Owner of any defects and deficiencies observed in the Work and, when appropriate, will certify to the Owner that the Work in place equals or exceeds the amount requested by the Construction Manager on all applications for progress payments.

- 2.2.1 If applicable for the Work, the Consultant will verify to the Owner that the Construction Manager is performing erosion prevention and sediment control inspections as required by the Kentucky Division of Water Construction General Permit (KYR10) at least once every 7 days and shall include the findings in the site visit reports.
- 2.3 The Consultant will be the interpreter of the requirements of the drawings and specifications and any changes made to the drawings and specifications.
- 2.4 Claims, disputes, and other matters in question that arise relating to the execution or the progress of the Work shall be referred in writing to the Consultant by the Construction Manager. The Consultant will provide a response in accordance with and subject to the provisions of Article 38 of these General Conditions.
- 2.5 The Consultant will have the authority to reject Work which does not conform to the Contract Documents or to the required level of quality and performance.
- 2.6 The Consultant will review and approve, or take other appropriate action upon receipt of the Construction Manager's submittals such as Shop Drawings, product data, and samples. The review of submittals will be for general conformance with the design concept of the work, and for compliance with the information provided by the Contract Documents. Such review will not relieve the Construction Manager of any responsibility for errors or omissions in submittals, and will in no way constitute a waiver of or change to the requirements of the Contract Documents.
- 2.6.1 The Consultant's review and response will be completed with reasonable promptness with a goal of ten (10) business days or less. The Consultant's review of a specific item shall not indicate approval of an assembly of which the item is a component.
- 2.7 The Consultant will prepare Change Orders for the Owner to direct changes in the Work. Minor changes in the Work, not involving modifications to the contract cost or completion times and that are consistent with the purpose of Work, may be directed by the Consultant through Architect's Supplemental Instructions (ASI).
- 2.8 When requested by the Construction Manager, the Consultant will conduct inspections to determine if the Project is at the level of completion required by and is in strict compliance with the Contract such that the Owner may enjoy beneficial use or occupancy and may use, operate, and maintain the project in all respects for its intended purpose, as further defined in the Contract. If the level of completion warrants, the Consultant will confirm that all necessary approvals by public regulatory authorities or other authorities having jurisdiction-have been given, will confirm that the Owner has received all required warranties and documentation, will recommend dates for certification of Substantial Completion and Final Completion by the Owner, and will complete and submit the Notice of Termination of coverage under the KPDES General Permit for Storm Water Discharges Associated with Construction Activity.
- 2.9 The Construction Manager will accept direction for the Work on the Project only from the Owner's Project Manager or from the Consultant. Requests for information from the Construction Manager shall be directed to the Consultant.

ARTICLE 3 - CORRELATION AND INTENT OF CONTRACT DOCUMENTS

- 3.1 Execution of the Contract by the Construction Manager is a representation that the Construction Manager has or shall thoroughly and carefully examine the site of the of Work; shall timely investigate all conditions which can affect the Work or its cost, including but not limited to availability of labor, materials, supplies, water, electrical power, roads, access to the site, uncertainties of weather, water tables, the character of equipment and facilities needed to perform the Work, and local conditions under which the Work is to be performed; and further, that the Construction Manager shall insure that the documents issued for bidding by Sub-contractors reflect the results of this investigation and are adequate to complete the Work. It is the responsibility of the Construction Manager to be familiar with and comply with all Federal, State, and local laws, ordinances, and regulations which might affect those engaged in the Work, and to be familiar with the materials, equipment, or procedures to be used in the Work, or which in any other way could affect the completion of the Work. The Construction Manager shall carefully study and compare the Contract Documents with each other and with other information provided to the Construction Manager by the Consultant or the Owner pursuant to the Contract Documents and shall notify the Owner and the Consultant in writing of any errors, inconsistencies or omissions in the Contract Documents recognized by the Construction Manager. Any failure to properly familiarize itself with the proposed Work shall not relieve the Construction Manager from the responsibility for completing the Work in accordance with the Contract Documents.
- 3.2 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Construction Manager. All labor or materials which are reasonably inferable from the Contract Documents and which are necessary to produce the desired result, even though not specifically mentioned in the Contract Documents, shall be included in the Work at no additional cost to the Owner.
- 3.3 In the event a question arises regarding the meaning or intent of the Contract Documents, the Construction Manager shall report it by preparing an RFI in eCommunication® to the Consultant. The Consultant shall furnish, with reasonable promptness and with a goal of three (3) business days and by whatever means as may be appropriate, additional instructions necessary for the proper execution of the Work. All such drawings and instructions shall be consistent with the Contract Documents, true developments thereof, and reasonably inferable therefrom. The Work shall be executed in conformity therewith and the Construction Manager shall do no Work without proper drawings and instructions. Items indicated on drawings as "N.I.C." or "Not In Contract" are shown for explanation purposes only and are not to be included in this Contract.
- 3.4 The Contract Documents are complementary, and what is required by one shall be binding as if required by all. In case of conflicts between the various documents, the order of precedence will be as follows: (1) Addenda, (2) Special Conditions, (3) General Conditions, (4) Technical provisions of the Specifications and (5) Drawings.
- 3.5 Any notice to the Construction Manager from the Owner regarding this Contract shall be in writing and delivery and service of such notice shall be considered complete when sent by certified mail to the Construction Manager at Construction Manager's last known address. Such notice may also, at the Owner's election, be hand-delivered to the Construction Manager or the Construction Manager's authorized representative.

ARTICLE 4 - PRE-CONSTRUCTION CONFERENCE

- 4.1 Following the execution of the Contract, a pre-construction conference will be held. Representatives of the Capital Project Management Division, Consultant, Construction Manager, and all major Sub-contractors shall be present to discuss the time for construction, methods and plan of operation, authority of the Consultant, procedures for handling shop drawings, progress estimates and requests for payments, and other relevant issues. The time and location of this meeting will be the responsibility of the Construction Manager in consultation with the Consultant, Owner and other interested parties.
- 4.2 Environmental aspects of the project, including erosion prevention and sediment control (EPSC) and storm water management shall be discussed during this conference. The Group shall discuss the Storm Water Pollution Prevention Plan (SWPPP) to ensure that all parties understand the requirements. During this meeting the responsibility for reading the rain gage on a daily basis will be established. The Construction Manager will identify the initial measures to be installed prior to land disturbing activities beginning. Any modifications to the SWPPP due to constructability issues should be discussed at this conference.

ARTICLE 5 - SHOP DRAWINGS

- 5.1 The Construction Manager shall submit a shop drawing and product sample submittal schedule to the Consultant establishing dates for the submission of Shop Drawings and product samples prior to the submittal of the Construction Manager's first application for payment for construction phase services. The schedule shall have been coordinated with all Sub-contractors and material suppliers as well as the Construction Manager's construction schedule and shall allow for adequate and reasonable time for review of the samples and submittals by the Consultant. The Construction Manager shall be responsible for compliance with the submittal schedule and shall insure that the submittal schedule is maintained in order to accurately reflect the status of processing all required submittals.
- 5.2 The Construction Manager shall review product samples and Shop Drawings for compliance with the requirements of the Contract Documents, and shall submit them to the Consultant in accordance with submittal procedure and schedule established. The Construction Manager's review and submittal to the Consultant of any Shop Drawing or sample shall constitute a representation to the Owner and Consultant that a) the Construction Manager has determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data, or assumes full responsibility for doing so, and that b) each Shop Drawing or sample has been reviewed or coordinated with the requirements of the Work and the Contract Documents. Shop Drawings and submittal requirements shall not be deemed satisfied until approvable documents are received by the Consultant. Incorrect or incomplete submittals will be returned to the Construction Manager without action. No claim for additional time or extension of the contract will be considered if such claim is the result of failure by the Construction Manager to provide correct, accurate, complete and approvable submittals.
- 5.3 The Consultant will review submittals with reasonable promptness, and take appropriate action or return submittals to the Construction Manager for corrections as may be required. The Construction Manager shall make any corrections required by the Consultant for compliance with the Contract and shall return the required number of corrected copies of Shop Drawings and resubmit new samples until approved. The Construction Manager shall direct specific attention, in writing, or on resubmitted Shop Drawings, to revisions other than the corrections called for by the Consultant on previous submissions.

- Work shall be commenced until the submission has been accepted in writing by the Consultant. The review and acceptance shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The acceptance of a separate item will not indicate acceptance of the assembly in which the item functions. A copy of each accepted Shop Drawing and product sample shall be kept in good order by the Construction Manager at the site and shall be made available to the Consultant on request.
- 5.5 The Consultant's acceptance of Shop Drawings or samples shall not relieve the Construction Manager from the responsibility for any deviations from the requirements of the Contract Documents unless the Construction Manager has in writing called the Consultant's attention to such deviation at the time of submission and the Consultant has given written approval to the specific deviation. Any acceptance by the Consultant does not relieve the Construction Manager from responsibility for errors or omissions in the Shop Drawings.

ARTICLE 6 - LAYING OUT WORK

- 6.1 The Construction Manager will secure all data at the site of the building such as grades of lot, convenience of receiving and sorting material, location of public services, and other information which will have a bearing proposals or on the execution of the Work and shall address these issues in the preparation of scopes of work for the Subcontract bid packages. No allowance shall be made for failure of the Construction Manager to obtain such site information prior to submitting their proposal or to include such information in the Subcontract bid packages, and no adjustment to the Construction Manager's Contract amount or stipulated time for completion shall be allowed when due to failure by the Construction Manager to do so.
- Work executed under the Contract. The Construction Manager shall verify all dimensions before laying out the Work and will be held responsible for any error resulting from failure to do so. Working from lines and levels established by the property survey or by other Contract Documents, and as shown in relation to the Work, the Construction Manager will establish and maintain bench marks and other dependable markers to set lines and levels for Work at each area of construction and elsewhere on the site as needed to properly locate each element of the entire Project. The Construction Manager shall calculate and measure from the bench marks and dependable markers required dimensions as shown (within recognized tolerances if not otherwise indicated), and shall not scale drawings to determine dimensions. The Construction Manager shall advise Sub-contractors and trades persons performing Work of marked lines and levels provided for their use in layout work. The Construction Manager shall verify layout information shown on drawings as required for the Work.
- 6.3 The Construction Manager shall be responsible for coordination of the installation of all elements of the Work, including preparation of coordination drawings if required by the Contract Documents or deemed necessary by the Construction Manager for performance of the Work.
- 6.4 If any encroachments are made by the Construction Manager or any Sub-contractor on any adjacent property, the Construction Manager shall, at the Construction Manager's expense, and within thirty (30) Calendar Days after written notice from the Owner or the Consultant, correct any encroachments and obtain approval from the owner of such adjacent property for any encroachments that cannot be feasibly corrected. The Construction Manager shall not be entitled to any adjustment to the Contract Amount or the Contract Time as a result of any such encroachment or the correction thereof.

ARTICLE 7 - PLANS, DRAWINGS, SPECIFICATIONS AND RECORD DRAWINGS

- 7.1 Unless otherwise provided in the Contract Documents, the Owner will furnish the Construction Manager free of charge one electronic or reproducible copy of the Drawings and Specifications for execution of the Work. The Construction Manager shall pay for the cost of duplication of all sets required over and above this amount.
- 7.2 The cost of additional plans, specifications and official contract documents for use by Subcontractors for bidding and for construction shall be borne by the Construction Manager or by the Sub-contractors. Arrangements for orders and payment for plans, specifications and other contract documents must be made with Lynn Imaging, Lexington, Kentucky (http://www.ukplanroom.com) or by phone at 1.800.888.0693 or 859.255.1021) before a set of documents will be issued.
- 7.3 The Construction Manager shall keep one copy of all Contract Documents, including Drawings, Specifications and Shop Drawings on the site and in good order. A qualified representative of the Construction Manager shall record on these documents, from day to day as Work progresses, all changes and deviations from the Contract Documents. Prior to Substantial Completion, the Construction Manager shall complete and turn over to the Consultant the As-Built drawings, with a digital copy (in PDF format) submitted to the Owner simultaneously. The As-Built drawings shall consist of a set of drawings which indicate all field changes that were made to adapt to field conditions, changes resulting from Change Orders and all concealed and buried installations of piping, conduit and utility services. All buried and concealed items, both inside and outside the facility, shall be accurately located on the As-Built drawings as to depth and in relationship to not less than two permanent features such as interior or exterior wall faces. The As-Built drawings shall be clean and all changes, corrections and dimensions shall be given in a neat and legible manner in a contrasting color. For any changes or corrections in the Work which are made subsequent to the Substantial Completion Inspection, revisions shall be made to the As-Built drawings and submitted to the Consultant prior to final payment. Approval of the final payment request shall be contingent upon compliance with these provisions.
- 7.4 All drawings, specifications and copies thereof, furnished by the Consultant to the Owner, are the property of the University of Kentucky. They shall not be used by the Consultant, Construction Manager, or any Sub-contractor or Supplier on any other Project.

ARTICLE 8 - TEMPORARY UTILITIES

- 8.1 The Construction Manager shall provide and pay for, unless modified in the Special Conditions, all temporary conveniences including, but not limited to, wiring, lighting, power and electrical outlets, heat, water, and sanitary facilities required for construction. In the event the Owner elects to make available, at no cost to the Construction Manager, the electric power required for construction activities, the electric power supplied shall not be utilized as a means to provide temporary heat or for welding.
- 8.2 The Construction Manager is responsible for paying all utility costs, whether the costs are from an outside utility company or from the University, for utility services used in the course of completing the Work. The Construction Manager shall provide temporary heating, ventilation, telephones, water, electricity, portable gas, lighting for the Work, safety lighting, security lighting, and trash removal/dumpster service for both Construction Manager and Sub-contractor use during the Project. Work and safety lighting shall be provided continuously during working hours. Security lighting shall be provided at all hours of darkness.

ARTICLE 9 - MATERIALS, EQUIPMENT, APPLIANCES, AND EMPLOYEES

- 9.1 Unless otherwise provided in the Contract Documents, the Construction Manager shall provide and pay for all materials, labor and personnel, tools, equipment, construction equipment and machinery, utilities, supplies, appliances, transportation, taxes, temporary facilities, licenses, permits and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and the proper execution and completion of the Work safely, without damage to persons and property, and in compliance with all applicable law. The Construction Manager shall furnish, erect, maintain, and remove at the completion of the Contract, all temporary installations as may be required during the construction period.
- 9.2 Immediately following the execution of each of the Trade Contracts, the Construction Manager shall determine the source of supply for all materials required under that Trade Contract and the length of time required for their delivery, and shall assure that orders are placed for such materials in sufficient time to assure delivery to the site so that such materials are available to be incorporated into the Work when needed to comply with the schedule of Work.
- 9.3 The Construction Manager shall immediately notify the Consultant in writing of any known problems with the procurement, fabrication or ordering of any materials. Unless changes are approved in writing by the Consultant, the Construction Manager will not be excused for delays in securing materials specified.
- The Construction Manager or Sub-contractors shall not place purchase orders or issue contracts for materials, supplies, equipment and services necessary to complete this Project using the name of the University of Kentucky. All orders placed by the Construction Manager that are related to this Project must use the name of the Construction Manager or Sub-contractor placing the order. The use of the University of Kentucky's name for ordering purposes is strictly prohibited. Payment for all goods and services required for the completion of the Work is the sole responsibility of the Construction Manager. Any invoices received at the University that are related to this Project will be immediately forwarded to the Construction Manager. Copies of these invoices will be made and placed in the Construction Manager's file and proof must be provided that these invoices have been paid in full prior to the processing of the next scheduled application for progress payment.
- 9.5 The route for delivery of all materials to the Project shall be coordinated with the Owner's Project Manager.
- 9.6 The Construction Manager shall be responsible for the proper and adequate storage of materials and equipment. Unless otherwise provided in the Contract Documents, all materials shall be of good quality and new. Workmanship and materials supplied and incorporated into this Work shall be of first quality. The Construction Manager, if required, shall furnish satisfactory evidence as to the kind and quality of materials.
- 9.7 The Construction Manager shall at all times enforce strict discipline and good order among all employees and Sub-contractors. The conduct of all individuals performing Work or operations related to the Work is the responsibility of the Construction Manager. The consumption of alcohol or drugs on the job by any workers is strictly prohibited. Any individual apprehended under the influence of alcohol or drugs on the premises at any time shall be subject to automatic removal from the Project by the Construction Manager, the Consultant or the Owner. Improper conduct of any kind will not be permitted and may result in the offending individual, Sub-contractor or Construction Manager being barred from the Owner's premises. The Construction Manager shall not permit the employment on the Project of any person unfit or not skilled in the Work assigned.

ARTICLE 10 - ROYALTIES AND PATENTS

10.1 The Construction Manager shall pay all royalties and license fees. If a particular process, product or device is specified in the Contract Documents and it is known to be subject to patent rights or copyrights, the existence of such rights shall be disclosed in the Contract Documents and the Construction Manager is responsible for payment of all associated royalties. The Construction Manager hereby agrees to indemnify, defend and hold the Owner, and any subsidiary, parent, or affiliates of the Owner, or other persons or entities designated by the Owner, and their respective directors, officers, agents, employees and designees (collectively, the "Indemnities") harmless from all losses, claims, liabilities, injuries, damages and expenses, including attorneys' fees and legal expenses, that the Indemnities may incur as a result of the Construction Manager's failure to strictly comply with its obligations under this Paragraph 10.1.

ARTICLE 11 - SURVEYS, PERMITS, REGULATIONS, AND STANDARD CODES

- 11.1 The Owner will furnish only such surveys that are specifically required by the Contract Documents. Approvals, assessments, and easements for permanent structures or permanent changes in existing structures shall be secured and paid for by the Owner, unless otherwise specified. All required utility tap-on fees shall be secured and paid for by the Construction Manager, or included in a Trade Contract, including the Lexington-Fayette Urban County Government (LFUCG) sewer tap-on fee. All construction permits, where required by local ordinances, except excavation permit, shall be obtained by the Construction Manager, but no fee shall be charged to or paid by the Construction Manager as the Owner is exempt from such charges. A Contractor's license fee for doing business in the locale, if applicable, shall be paid for by the Construction Manager.
- 11.2 All branches of Work shown on the plans and specifications shall be executed in strict compliance with all state and federal regulations and codes, with all national codes, and with the requirements of both ADA and JCAHO when applicable.
- 11.3 The Contractor, on projects disturbing 1 acre or more, or projects less than 1 acre that are part of a large common development plan, including grading, clearing, excavation, material laydown or other earth moving activities, shall assure full compliance with the requirements of the KYR10 and shall:
- 11.3.1 File a Notice of Intent (KPDES FORM eNOI-SWCA) with the Kentucky Division of Water and copy the UKCPM Project Manager and Water Quality Manager prior to the start of any excavation, grading or site development work.
- 11.3.2 The permittee (contractor) shall develop a Stormwater Pollution Prevention Plan (SWPPP) based on the Erosion Prevention and Sediment Control Plan (EPSC) as a minimum design standard. Ensure all requirements of KYR10 are fully addressed in the SWPPP. Once the SWPPP is written, forward a copy to the Capital Projects Project Manager and to the Water Quality Manager for approval. Work cannot begin until SWPPP is approved and permit coverage obtained.
- 11.3.3 Install BMP's such as, basins, traps, drainage, and sediment barriers before beginning land disturbing activities, including the construction entrance/exit. Once prevention measures have been installed, grading can commence. In the event a new construction entrance is added to the site, this new entrance must be built according to the EPSC design details with a wheel wash, a water supply and a sediment catch basin for washed wheel sediment.

- 11.3.4 Maintain all measures in working condition. Perform maintenance activities identified during inspections prior to the next rain event. Remove sediment from BMPs when 1/3 the storage volume has been filled.
- 11.3.5 Stabilize disturbed areas within 14 days of inactivity or reaching final grade on any portion of the site according to permit requirements.
- 11.3.6 Inspect the site every 7 calendar days and after each rainfall of ½"or more. Document site conditions, rainfall, maintenance activities needed and performed, stabilization needed and performed, and where new measures are needed. Discuss deficiencies with UK Project Manager and Water Quality Manager and note on the SWPPP Inspection Sheets.

Per the KPDES Permit, Section 2.1.7. "Inspections – Permittee Conducted". "Inspections shall be performed by personnel knowledgeable and skilled in assessing conditions at the construction site that could impact storm water quality and assessing the effectiveness of erosion prevention measures, sediment control measures, and other site management practices chosen to control the quality of the storm water discharges. Inspectors shall have training in storm water construction management such as Kentucky Erosion Prevention & Sediment Control (KEPSC), Certified Professional in Stormwater Quality (CPSWQ), Certified Erosion, Sediment and Stormwater Inspector (CESSWI), or other similar training."

Inspections shall include a tour of the total site and verification that all BMPs are performing as constructed. Inspector shall certify that all observations are correct as stated and sign and date the inspection form.

- 11.3.7 Keep Permit, SWPPP, weekly/rain event inspections sheets in binder in construction trailer. Any BMP change/alteration from SWPPP and EPSC plan must be noted on the EPSC and SWPPP.
- 11.3.8 No soil and sediment shall leave the construction site. BMPs shall be repaired immediately if failure has occurred. No Mud shall be permitted on any street. All entrances/exits shall have a means by which to wash wheels. If an entrance/exit does not have a wheel wash, that exit shall not be used in muddy conditions. If for any reason mud is tracked offsite, the area must be cleaned in such a way as to prevent sediment from entering the storm sewer system. The use of tractor brooms solely will not be permitted.
- 11.3.9 When it is necessary to dewater an excavation, proper BMPs must be implemented. Dewatering filter bags must be sized and used according to manufacturer's requirements and Standard Operating Procedures for Dewatering Bags.
- 11.3.10 UK (the MS4) routinely inspects sites for compliance with the EPSC/SWPPP. Any deficiencies noted become record for the Kentucky Division of Water and shall be remedied/installed as soon as site conditions are favorable but no more than 7 days from the inspection date.
- 11.3.11 At the conclusion of the project and all bare areas, slopes and ditches are 70% vegetated with the permanent ground cover, the contactor shall notify the UK Project Manager and Water Quality Manager and request a final site inspection prior to filing a "Notice of Termination (NOT) with the state. This inspection verifies that Construction BMPs can be removed, and Post-Construction BMPs are in place and functioning.
- 11.3.12 Failure of the site contractor (permitee of the KPDES Permit) to timely comply with requirements of KPDES, the Construction Manager shall inform the site contractor that a third party contractor shall be retained to remediate all BMP deficiencies immediately, and all third party costs shall be passed to the permitee of the KPDES Permit. Any fines or other costs

resulting from failure to comply, levied against the Owner will be assessed against the Construction Manager's or General Constructor's funds.

- 11.3.13 Refer to 334000S01 STORM DRAINAGE UTILITIES Information for Consultants & Contractors.
- 11.3.14 Reference to standards, codes, specifications, and regulations refer to the latest edition of printing in effect at the date of issue shown in the Contract Documents unless another date is implied by the suffix number of the standard.
- 11.4 Reference to standards, codes, specifications, and regulations refer to the latest edition of printing in effect at the date of issue shown in the Contract Documents unless another date is implied by the suffix number of the standard
- 11.5 The Construction Manager shall furnish a final occupancy permit from the proper agency or agencies as required.
- 11.6 The Construction Manager shall, by provision within each applicable subcontract or by inclusion in the lump sum fee proposed to the Owner, insure the payment of all sales, consumer, use and similar taxes for materials, equipment and supplies incorporated into the Work, by unless otherwise specified in the bid documents.

ARTICLE 12 - PROTECTION OF WORK, PROPERTY, AND PUBLIC

- 12.1 The Construction Manager shall continuously maintain adequate protection of all Work from damage and shall protect the Owner's property from injury or loss arising in connection with this Contract. Except as otherwise covered by Builder's Risk insurance, the Construction Manager shall pay for any damage, injury, or loss, except such as may be directly due to errors in the Contract Documents or caused by agents or employees of the Owner. The Construction Manager shall adequately protect adjacent property as provided by law and the Contract Documents.
- 12.2 In an emergency affecting the safety of life, or of the Work, or of adjoining property, the Construction Manager, without special instruction or authorization from the Consultant or the Owner, is obligated to act to prevent such threatened damage, loss or injury.
- 12.3 The Construction Manager shall maintain fire protection as required by the Kentucky Building Code. Access to the Project site and surrounding buildings for local fire truck access during construction must be maintained. The Construction Manager shall maintain construction to allow access to new, existing or temporarily relocated standpipes, fire hydrant connections and fire alarm communication panels pursuant to Section 3018.8 of the Kentucky Building Code. If the Construction Manager utilizes the Owner's fire protection equipment, the Construction Manager shall replace any such materials lost, consumed or misplaced during the Contract period. The Construction Manager is responsible for any false alarms caused by dust created in the Work area or dust traveling to areas beyond the Work area due to inadequate dust protection barriers. Should there be a need for any existing or newly installed fire alarm system, or parts of a system that requires service, to be removed from service or disconnected, prior approval must be obtained from the Owner and the Construction Manager shall immediately provide alternate protection such as a fire watch until such systems are returned to full normal operations. When work or service is completed on a disabled fire alarm system, the Owner shall be immediately notified so the system can be placed in service.

- 12.4 The Construction Manager and Sub-contractors are responsible for the security of their own materials, tools and equipment at the Project site.
- 12.5 The Construction Manager shall provide to the Owner's Project Manager a key to Construction Manager's field office or job trailer.

ARTICLE 13 - BLASTING

13.1 Blasting is not allowed unless permission is granted in the Special Conditions. Should blasting be allowed by the Special Conditions, it shall be completed in accordance with all laws, regulations, ordinances and instructions contained in the Special Conditions.

ARTICLE 14 - CONSTRUCTION AND SAFETY DEVICES

- 14.1 The Construction Manager shall provide safety controls for protection of the life and health of employees and visitors. The Construction Manager will utilize precautionary methods for the prevention of damage to property, materials, supplies, and equipment, and for avoidance of work interruptions in the performance of this Contract. In order to provide such safety control, the Construction Manager shall comply with all pertinent provisions of the Kentucky Fire Prevention Code, Kentucky Building Code, Kentucky Labor Cabinet's Division of Occupational Safety and Health Program Construction Standards and Federal Occupational Safety and Health (Construction) Standards that are in effect at the time the Contract is entered into and during the period in which the Contract is to be performed.
- 14.2 The Construction Manager shall provide a written safety program which includes all pertinent written specialty standards such as, but not limited to, Control of Hazardous Energy Sources (Lockout/Tagout), Hazard Communications Program, First Aid, Blood Borne Pathogen Program, Respirator Use Program and Hearing Conservation Program. The Construction Manager shall require all Sub-contractors to have an effective written safety program or be required to follow the Construction Manager's written safety program.
- 14.3 The Construction Manager shall maintain an accurate record of and shall report to Kentucky Labor Cabinet's Division of Occupational Safety and Health in the manner and on the forms prescribed by that Division, exposure data and all accidents resulting in death, traumatic injury, or occupational disease. The Construction Manager shall maintain an accurate record of and shall report to the Owner's Project Manager, any damage to property, materials, supplies, or equipment incident to Work under this Contract.
- 14.4 The Kentucky Labor Cabinet's Division of Occupational Safety and Health may notify the Construction Manager of any noncompliance with the foregoing provisions. The Construction Manager shall, upon receipt of such notice, immediately correct the cited conditions. Notice delivered to the Construction Manager or the Construction Manager's representative at the site of the Work shall be deemed sufficient for this purpose. If the Construction Manager fails or refuses to comply promptly, the Owner may issue an order stopping all or part of the Work until satisfactory corrective action has been taken. Failure or refusal to comply with the order will be grounds for reducing or stopping all payments due under the Contract to the Construction Manager. No part of the construction time lost due to any such stop order shall be cause for, or the subject of a claim for, extension of time or for additional costs or damages by the Construction Manager.
- 14.5 The Construction Manager or any Sub-contractor shall immediately contact the University of Kentucky's Department of Occupational Health and Safety through the Owner's Project Manager

should they be selected for an inspection by the Kentucky Occupational Safety and Health Compliance Division.

- Compliance with the provisions of the foregoing sections by Sub-contractors shall be the responsibility of the Construction Manager.
- 14.7 Nothing in the provisions of this Article 14 shall prohibit the U.S. Department of Labor or the Kentucky Department of Labor Division of Occupational Safety and Health from enforcing pertinent occupational safety and health standards as authorized under Federal or State Occupational Safety and Health Standards.
- 14.8 The Construction Manager shall take all necessary precautions for the safety of employees on the Work, and shall comply with all applicable provisions of federal, state, and municipal safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the premises where the Work is being performed. If the Construction Manager or any Sub-contractor has questions related to the health or safety required by their written safety program, they should contact the Kentucky Labor Cabinet Occupational Safety and Health Program Division of Education and Training. The Construction Manager shall designate a responsible member of the on-site work force as the safety officer and shall report to the Consultant and to the Owner the name of the person selected. The duties of the safety officer include the enforcement of safety regulations.

ARTICLE 15 - HAZARDOUS MATERIALS

- 15.1 If the Construction Manager encounters material reasonably believed to be or suspected to be asbestos containing material, lead, polychlorinated biphenyls (PCBs), fluorescent light bulbs and ballasts, mercury or other hazardous material, the following procedures must be followed:
- 15.1.1 The Construction Manager shall immediately stop work in the affected area and notify the Owner's Project Manager. The Owner's Project Manager will contact the Owner's Environmental Health and Safety unit to arrange for collection of samples, review of existing data, or other testing necessary to confirm the presence of hazardous materials. The Owner's Project Manager will notify the Construction Manager in writing of the results. Until that notification is received, the Work must not continue in the affected area.
- 15.1.2 If the material is confirmed to be asbestos, lead, polychlorinated biphenyls (PCBs), fluorescent light bulbs and ballasts, mercury or other hazardous material, the Owner will take appropriate action to remove the material before the Construction Manager can continue Work in the affected area.
- 15.1.3 The Construction Manager shall not be required to perform any Work related to asbestos, lead, polychlorinated biphenyls, or other hazardous material. The Construction Manager is advised that certain classes of building materials (thermal system insulation, sprayed or troweled surfacing materials, and resilient flooring) installed before 1981 are required by law to be treated as asbestos containing until proven otherwise. These presumed asbestos containing materials must not be disturbed without confirmation from the Owner that asbestos is not present.
- 15.2 The Owner, the Construction Manager, and Sub-contractors will be under the requirements of the OSHA Hazard Communication Standard (29) CFR 1910.1200. The Construction Manager and Sub-contractors must provide their own written Hazard Communication Program. The Hazard Communication Standard must include: (1) A list of the hazardous chemicals to which the Construction Manager's employees may be exposed; (2) Statement of the measures that Construction Manager's employees and Sub-contractors may take to lessen the possibility of exposure to the

hazardous materials; (3) The location of and access to the Material Safety Data Sheets (MSDS's) related to the hazardous chemicals located in the Work area; (4) Procedures that the Construction Manager's employees and Sub-contractors are to follow if they are exposed to hazardous chemicals above the Permissible Exposure Limit (PEL). Material Safety Data Sheets may be reviewed upon request by the Construction Manager or any Sub-contractor as they pertain to the Work areas of the Project. Photocopies of the MSDS's may be made by Construction Manager at its expense.

- 15.3 The Construction Manager and Sub-contractors shall provide the Owner with a list of any hazardous materials that will be used on the job site. The Construction Manager and Sub-contractors shall provide the Owner with copies of Material Data Sheets for all such materials to be used.
- 15.4 It is the policy of the Owner that PCB containing equipment will be treated by the Construction Manager and the Owner in a manner that conforms to the intent of all applicable laws and regulations (primarily 40 CFR Part 761). The following procedures shall be followed by the Construction Manager and Sub-contractors while present on the Owner's Project or other property: (1) Only authorized, trained personnel may inspect, repair, or maintain PCB transformers; and (2) No combustible materials may be stored within a PCB transformer room or within five meters of a PCB transformer. Such materials include, but are not limited to, paints, solvents, plastic, paper, and wood. The Construction Manager shall not use rooms containing PCB transformers for storage rooms, staging areas, job site offices or break rooms. Violation of this policy may be grounds for dismissal of the offending Construction Manager and/or Sub-contractor from the Project. All PCB transformers at the University of Kentucky are identified by a PCB label as defined in federal regulations. If the Construction Manager should have a question as to the location of a PCB transformer, it should contact the Owner's Project Manager.
- 15.5 The Construction Manager shall ensure that NO asbestos-containing materials (including but not limited to: drywall, joint compound, roof mastic or floor tile adhesive) will be install on any University project without prior written approval of the University's Environmental Health and Safety Division. Additionally, the Construction Manager shall submit MSDS sheets and have prior approval before installing any materials that contains hazardous substances or could pose an environmental hazard. If any environmental hazardous materials are installed without written approval of the University, the Construction Manager will be responsible for all material replacement cost, all removal and all other associated damages. Any materials removed shall be taken out in accordance with all applicable federal, state and local regulations.

ARTICLE 16 - INSPECTION OF WORK

- 16.1 Inspections, tests, measurements or other acts of the Consultant are for the sole purpose of assisting the Consultant in determining if the Work, materials, rate of progress, and quantities comply with the Contract Documents. These acts or functions shall not relieve the Construction Manager from performing the Work in full compliance with the Contract Documents, nor relieve the Construction Manager from any of the responsibility for the Work assigned to it by the Contract Documents. No inspection by the Consultant shall constitute or imply acceptance. Approval of material is general and shall not constitute waiver of the Owner's right to demand full compliance with Contract Documents.
- 16.2 All Work completed and all materials incorporated for the Project are subject to inspection by the Owner, the Consultant or their representatives to determine conformance with the Contract Documents. The Owner, Consultant and their representatives shall at all times have access to the Work whenever it is in preparation or progress. The Construction Manager shall provide, at no additional cost to the Owner, any facilities necessary for sufficient and safe access to the Work to complete any inspections required. The Consultant shall be given timely notification in order to

arrange for the proper inspections to be performed on any Work outside of the normal working day or week. If the Consultant provides the Construction Manager with a list of construction milestones that require inspection, the Construction Manager shall provide the Consultant with at least five (5) Business Days written notice prior to the commencement of Work with respect to such milestone in order to permit the Consultant time to coordinate an inspection of the commencement of the applicable Work.

- 16.2.1 Normal Work hours are defined as a period between 7:00 a.m. and 5:00 p.m. Monday through Friday. The Construction Manager shall notify the Owner's Project Manager at least one working day prior to performance of any Work for permission to do any Work during non-normal Work hours.
- 16.3 If the Specifications, the Consultant's instructions, laws, ordinances, or any public authority require any Work to be specially inspected, tested or approved, the Construction Manager shall give the Consultant timely notice of the readiness of the Work for inspection. The Consultant shall promptly make all required inspections. If any portion of the Work should be covered contrary to the request of the Consultant, or to the requirements specifically expressed in the Contract Documents, the Work must be uncovered for inspection and observation and shall be uncovered and replaced at the Construction Manager's expense.
- 16.4 If any other portion of the Work has been covered, which the Consultant has not specifically requested to observe prior to being covered, the Consultant, with the Owner's approval, may request to see such Work and it shall be uncovered by the Construction Manager. If such Work is found to be in accordance with the Contract Documents, the cost of uncovering and replacement shall be charged to the Owner by appropriate Change Order. If such uncovered Work is not in accordance with the Contract Documents, the Construction Manager shall pay all costs for uncovering and replacement of such Work.

ARTICLE 17 - SUPERINTENDENT - SUPERVISION

- 17.1 The Construction Manager shall completely and thoroughly direct and superintend the Work in accordance with the highest standard of care for the Construction Manager's profession so as to ensure expeditious, workmanlike performance in accordance with requirements of the Contract Documents. Except as otherwise dictated by specific requirements of the Contract Documents, the Construction Manager shall be solely responsible for and have control over all construction means, methods, techniques, sequences and procedures. The Construction Manager shall be responsible for the acts and omissions of all Sub-contractors and persons directly or indirectly employed by the Construction Manager in the completion of the Work. The Construction Manager shall be responsible for coordinating and scheduling all portions of the Work unless the Contract Documents give other specific instructions. The Construction Manager shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by the activities of the Consultant in the administration of the Contract, or by tests, inspections or approvals required or performed by persons other than the Construction Manager.
- 17.2 The Construction Manager shall have a competent superintendent on the Project site at all times during the process of the Work. The superintendent shall have authority to act on the Construction Manager's behalf with regard to all aspects of performance of this Contract. The superintendent shall have such assistants with individual specialized competencies as may be necessary to fully understand and oversee all aspects of the Work. The Construction Manager shall also provide administrative, supervisory and coordinating personnel required to fully perform the Work and for interfacing the Work with other work of the Project. The superintendent and all assistants shall be physically fit for their work and capable of going to all locations where Work is being performed. A communication given to the superintendent shall be binding on the Construction

Manager. Immediately after the award of Contract, the Construction Manager shall submit to the Consultant a list of Construction Manager's employees and consultants, including names, positions held, addresses, telephone numbers and emergency contact numbers.

- 17.3 The superintendent assigned shall not be changed except under the following circumstances: (1) Where the superintendent ceases to be employed by the Construction Manager, in which case the Construction Manager shall give timely written notice to the Owner of the impending change of the superintendent and a reasonable explanation for the change; or (2) Where the Owner or the Consultant have reasonable grounds for dissatisfaction with the performance of the superintendent and give written notice to the Construction Manager of the grounds. In either case, the Construction Manager shall obtain prior written approval from the Owner of the qualifications of the proposed replacement superintendent. Such prior approval will not be unreasonably withheld.
- 17.4 If the Owner or Consultant determines that the superintendent is not performing, or is incompetent to perform the required Work, the Owner may direct the Construction Manager to remove the superintendent from the Project and replace the superintendent with an employee who has the necessary expertise and skills to satisfactorily perform the Work.

ARTICLE 18 - CHANGES IN THE WORK

- 18.1 The Owner, at any time after execution of the Contract, may make changes within the general scope of the Contract or issue additional instructions, require additional Work, or direct the deletion of Work. The Owner's right to make changes shall not invalidate the Contract or relieve the Construction Manager of any obligations under the Contract Documents. All such changes to the Work shall be authorized in writing by Change Order and shall be executed under the conditions of the Contract Document. Any adjustment of the Contract Amount or Time of Completion, as may be appropriate, shall be made only at the time of ordering such change. Change order proposals based on a reservation of rights, whether for additional compensation to be determined at a later date or for an extension of time to be determined at a later date, will not be considered for approval and shall be returned to the Construction Manager without action.
- 18.2 The cost or credit resulting from a change in Work shall be determined in one or more of the following ways:
- 18.2.1 By unit prices named in the Contract or additional unit prices subsequently agreed upon;
- 18.2.2 By agreement on a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- 18.2.3 By an amount agreed upon by the Construction Manager and the Owner as a mutually acceptable fixed or percentage fee.
- 18.3 All lump sum proposals shall include a detailed cost breakdown satisfactory to the Consultant and to the Owner for each component of Work indicating both labor and material costs. This cost breakdown shall be submitted to the Consultant promptly and with a goal of seven (7) Calendar Days or less after receipt of the proposal request.
- 18.3.1 In computing labor costs, the hourly labor rates shall not exceed a mutually agreeable combined hourly labor rate plus fringe benefits negotiated with the Owner based on a presentation of acceptable documentation by the CM. For the purposes of this Article, the term "fringe benefits" shall mean those funds transferred irrevocably to a third party for payment/distribution. In addition,

there may be added by the Sub-contractor an amount agreed upon, but not to exceed ten percent (10%) of the actual cost, for overhead and profit.

- 18.3.2 The CM is entitled to a mark-up for bonds and insurance on all change orders. For change orders coded "End User Requested Changes" or "Other Owner Requested Changes" the CM may add overhead & profit in addition to the bonds and insurance referenced above. The mark-ups shall not exceed the combined percentage for overhead and profit, bonds, and insurance stated in the CM's "Financial Proposal Summary". These mark-ups will not be added to the individual change orders but will be reconciled by amendment at the completion of the project and/or on an annual basis for those projects exceeding 12 months in duration.
- 18.4 If none of the above methods are mutually agreed upon or if the Construction Manager does not respond promptly, a change may be made by unilateral determination by the Owner and/or the Consultant of reasonable costs or savings attributable to the change, including a reasonable allowance for overhead and profit. If this method is utilized, the Construction Manager shall promptly proceed with the Work involved in the change upon receipt of a written order signed by the Owner. In such case, the Construction Manager shall keep and present an itemized accounting of labor, equipment, material and other costs, in such form as may be prescribed by the Consultant.
- 18.5 In all cases where Change Orders are determined by unit prices set forth in the Contract Documents, no amount is to be added for additional overhead and profit.
- 18.6 The Construction Manager shall keep and present in such form as the Consultant may direct, a correct account of all items comprising the net cost of such Work, together with vouchers. The determination of the Consultant and/or the Owner shall be final upon all questions of the amount and cost of extra Work and changes in the Work, and it shall include in such cost, the cost to the Construction Manager of all materials used, the cost of all labor (including social security, old age and unemployment insurance, fringe benefits to which the employee is entitled, and Workers Compensation insurance), and the fair rental of all machinery used upon the extra Work, for the period of such use, which was upon the Work before or which shall be otherwise required by or used upon the Work before or after the extra Work is done. If the extra Work requires the use of machinery not already on the Project site, or to be otherwise used upon the Work, then the cost of transportation of such machinery to and from the Project site shall be added to the fair rental value. Transportation costs shall not be allowable for distances exceeding one hundred (100) miles.
- 18.7 The Construction Manager shall not include or allow to be included in the cost of change in the Work any cost or rental of small tools, or any portion of the time of the Construction Manager or the superintendent, or any allowance for the use of capital, or for the cost of insurance or bond premium or any actual or anticipated profit, or job or office overhead. These items are considered as being covered under the added amount for general overhead addressed in Article 18.3
- 18.8 The Owner will not pay claims made for lost opportunities, claims made for lost production or production inefficiencies or claims made that are formula based.
- 18.9 Pending final determination of value, partial payments on account of changes in the Work may be made on recommendation of the Consultant. All Change Orders shall be in full payment and final settlement of all claims for direct, indirect and consequential costs, including all items covered and affected. Any such claim not presented by the Construction Manager for inclusion in the Change Order shall be waived.
- 18.10 The Consultant may authorize minor changes in the Work which do not involve additional cost or extension of the Contract Time, and which are not inconsistent with the intent of the Contract

Documents. Such changes shall be made by an ASI issued by the Consultant, and shall be binding on the Owner and the Construction Manager. The Construction Manager shall carry out such orders promptly. If the Construction Manager should claim that an ASI involves additional cost or delay to the completion of the Work, the Construction Manager shall give the Consultant written notice thereof within ten (10) Calendar Days after receipt of the written ASI. If this notification does not occur, the Construction Manager shall be deemed to have waived any right to claim or adjustment to the contract sum or to the contract completion time.

- 18.10.1 If the Construction Manager claims that any instructions by the Consultant involve additional cost or time extension, the Construction Manager shall give the Consultant written notice thereof within ten (10) Calendar Days after the receipt of such instructions and before proceeding to execute the change in Work. The written notice shall state the date, circumstances, whether a time extension will be requested, and the source of the order that the Construction Manager regards as a Change Order. Unless the Construction Manager acts in accordance with this procedure, any oral order shall not be treated as a change and the Construction Manager hereby waives any claim for an increase of the Contract amount or extension of the contract time.
- 18.11 Requests for extension of time related to changes in the Work shall be submitted in accordance with the requirements of Article 21 of these General Conditions.
- 18.12 Prior to final payment, the Construction Manager shall provide to the Owner a full accounting of executed change orders by and between the Construction Manager and the Trade Contracts. The Construction Manager shall also provide a reconciliation of that accounting against the executed change orders by and between the Owner and the Construction Manager.

ARTICLE 19 - RULES AND MEASUREMENTS FOR EXCAVATION

- 19.1 If applicable, the following Rules and Measurements shall apply to the use of Unit Prices for the excavation portion of the Work:
- 19.1.1 Except as provided in this Article 19 for arbitrary measurements, the quantity of excavation shall be its in-place volume before removal.
- 19.1.2 No allowance will be made for excavating additional material of any nature taken out for the convenience of the Construction Manager beyond the quantity computed under these "Rules and Measurements."
- 19.1.3 The quantities of excavation shall be computed from instrument readings taken by the Consultant's representative in vertical cross sections located at such intervals that will assure accuracy.
- 19.1.4 "Trench Excavation" for pipes shall arbitrarily be assumed to be two feet (2') wider than the outside diameter of the pipe barrel and with sides vertical.
- 19.1.5 The quantities shall be computed from plan size, or if there are no drawings, from actual measurements of the Work in place.
- 19.1.6 Each unit price shall cover, among other things, engineering (surveying) costs and keeping excavating dry.

- 19.1.7 Earth excavation for structures will be measured between the vertical planes passing 18 inches beyond the outside of the footings and from the surface of the ground to the neat lines of the bottom of the structure.
- 19.1.8 Rock excavation for structures will be measured between the vertical planes passing 18 inches beyond the outside of the footings and from the surfaces of the rock to the neat lines of the bottoms of the structures or the actual elevation of the rock ledge.
- 19.1.9 Rock excavation for pipelines trenches, unless otherwise provided for in the Specifications, shall be measured as follows: An arbitrary width of 18 inches plus the nominal diameter of the pipe multiplied by the depth from the surface the rock to six (6) inches below the invert for pipe 24 inches in diameter or less and eight (8) inches below the invert for all pipe greater than 24 inches in diameter. No additional compensation will be allowed for excavation for bell holes, gates or other purposes. The measurement of rock excavation for manholes shall be in accordance with Section 19.1.8 above.
- 19.1.10 Unclassified excavation shall be measured in the same manner as earth excavation.

ARTICLE 20 - CONCEALED CONDITIONS

- 20.1 The Contract Drawings show the approximate location of the existing and new utility lines. These lines have been identified and located as accurately as possible using available information. The Construction Manager is responsible for verifying all actual locations. If utilities require relocation or rerouting that is not shown or indicated to be relocated or rerouted, the Construction Manager shall contact and cooperate with the Consultant to make the required adjustments. Any request for change in the Contract Amount by the Construction Manager shall be made pursuant to Article 18 of the General Conditions.
- 20.2 If any charted or uncharted utility service is interrupted by activities of the Construction Manager or the Construction Manager's Sub-contractor(s) for any reason, the Construction Manager shall work continuously to restore service to the satisfaction of the Owner.
- 20.2.1 If any charted utility service, or any uncharted utility service the existence of which could have been discovered by careful examination and investigation of the site of the Work by the Construction Manager, is interrupted by activities of the Construction Manager or the Construction Manager's Sub-contractor(s) for any reason, the entire cost to restore service to the satisfaction of the Owner shall be paid by the Construction Manager. Should the Construction Manager fail to proceed with appropriate repairs in an expedient manner, the Owner reserves the right to have the work/repairs completed and the cost of such work/repairs deducted from the monies due or to become due to the Construction Manager pursuant to Article 22 of the General Conditions.
- 20.3 The Construction Manager shall promptly, but in no case more than ten (10) Calendar Days from the time of discovery, and before the conditions are disturbed, notify Consultant in writing of:
- 20.3.1 Subsurface or latent physical conditions or any condition encountered at the site which differ materially from those indicated in the Contract Documents and which were not known by Construction Manager or could not have been discovered by careful examination and investigation of the site of the proposed Work;
- 20.3.2 Unknown and unexpected physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered in the locale or generally recognized as inherent in the Work provided for in this Contract or,

- 20.3.3 Concealed or unknown conditions in an existing structure which are at variance with the conditions indicated by the Contract Documents, which are of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the Work provided for in this Contract, and which were not known by the Construction Manager and could not have been discovered by careful examination and investigation of the site of the Work.
- 20.4 The Consultant shall promptly investigate the conditions discovered. If the Consultant finds that conditions, which are materially different from those ordinarily encountered and generally recognized as inherent in the Work provided for in this Contract, were not known by the Construction Manager, and could not have been discovered by careful examination and investigation of the site of the Work, have caused or would cause a material increase or decrease in the Construction Manager's cost of construction or the time required for performance of any part of the Work under this contract, the Consultant will recommend and the Owner will make an equitable adjustment in the Contract Amount and/or the time allotted for performance in the Contract Documents. Failure by the Construction Manager to provide written notice to the Owner of such claims for additional compensation or time for performance within ten (10) Calendar Days of discovery of such conditions shall constitute a waiver by the Construction Manager of the right to make such claims. The Owner will not pay claims made for lost opportunities, claims made for lost production or production inefficiencies or claims made that are formula based.
- 20.5 If the Consultant determines that changed conditions do not exist or are not materially different and no adjustment in the Contract Amount or time is warranted, the Construction Manager shall continue performance of the Contract as directed by the Consultant. No claim by the Construction Manager under this clause shall be allowed unless the required written notice is given and the Consultant is given adequate opportunity to investigate the conditions encountered prior to disturbance. The failure of the Construction Manager to give the Consultant proper notice of a differing site condition shall not affect the Owner's right to an equitable adjustment of the contract price or time if there is a decrease in the Contract Amount or time required to perform the Work.

ARTICLE 21 - DELAYS AND EXTENSION OF TIME

- 21.1 It is agreed that time is of essence for each and every portion of this Contract and where additional time is allowed for the completion of the Work or any part of the Work under this Contract, the new time limit fixed by such time extension shall be of the essence of this Contract. An extension of time shall not be cause for extra compensation under this Contract, except as set forth in Article 21.10 below.
- 21.2 The Construction Manager will, subject to the provisions of Articles 21.7, 21.8 and 21.9 below, be granted an extension of time and/or relief from liquidated damages when the delay in completion of the Work is due to:
- 21.2.1 Any preference, priority, or allocation order duly issued by the government;
- 21.2.2 Unforeseeable causes beyond the control and without the fault or negligence of the Construction Manager including, but not limited to, acts of God, or of the public enemy, acts of the Owner, acts of another contractor in the performance of a contract with the Owner, floods, epidemics, quarantine restrictions, strikes, and freight embargoes.
- 21.2.2.1For such delays which stop all work on the Project for thirty (30) Calendar Days or more, the Construction Manager shall be authorized at its discretion to remove its people from the site and return when the normal progress of the work may continue.

- 21.2.3 Regardless of the cause of a delay, the Construction Manager shall expend all reasonable effort to mitigate the impact of any delay.
- 21.2.4 Requests for additional time due to delays in transportation or due to failures of suppliers shall not be considered for approval.
- 21.3 Requests for extensions of time and/or relief from liquidated damages, except for weather related claims, shall be made in writing not later than ten (10) Calendar Days after the beginning of the delay. Requests for extension of time or relief from liquidated damages shall be stated in numbers of whole Calendar Days.
- 21.4 Except as otherwise provided in the Contract Documents, extensions of the contractually required completion dates may be granted for unusually bad weather on the Project. Unusually bad weather as used herein means daily temperature or precipitation that exceeds the normal weather recorded and expected for the locality and/or the season or seasons of the year. For the purposes of this contract, it is mutually agreed that the following chart accurately defines the number of days in each month on which bad weather can reasonably be anticipated to impact weather dependent construction operations, and the Construction Manager shall anticipate this normal seasonal weather in the development of the Project baseline schedule.

| Mean | Jan. | Feb | Mar | Ap | May | Jun | Jul. | Aug | Se | Oct | Nov. | Dec. |
|---------------------------------------|------|-----|-----|----|-----|-----|------|-----|----|-----|------|------|
| Number of | | | | r. | | | | | p. | | | |
| Days When | | | | | | | | | | | | |
| Max Temp | | | | | | | | | | | | |
| 32° or | 9 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 |
| Below | | | | | | | | | | | | |
| Precip. Is 0.10 Inch or Greater | 7 | 6 | 9 | 7 | 8 | 8 | 8 | 6 | 5 | 5 | 7 | 7 |

For the purpose of this Contract, "unusually bad weather" shall be interpreted as either 1) those days in a given month on which rainfall was 0.10 inch or more that exceed the number of days shown in the row for "Precip" or 2) those days in a given month on which maximum temperature was 32 degrees F or below that exceed the number of days shown in the row for "Max Temp", whichever is greater.

- 21.4.1 Requests for extension of time due to unusually bad weather that could not reasonably have been anticipated at the time of execution of the Contract shall be made in writing not later than the tenth calendar day of the month following the month in which the delay occurred.
- 21.4.2 Requests for an extension of time due to unusually bad weather shall be considered for approval only if it is shown that a) the unusual weather event delayed work on a specific weather dependent activity or activities that had been planned to be underway on the date(s) on which the weather event occurred, as shown in the most recent update to the Project schedule that had been submitted to the Owner prior to the date of the event, and b) only if the delay to that activity or activities is shown to be the proximate cause of a corresponding delay to the contractually required completion dates for the Project shown in the most recent update to the Project schedule. The actual dates on which the delay(s) occurred must be stated and the specific activities that were directly impacted must be identified. In the event of concurrent delays, only those activities actually Rev 11/2020

 24

 General Conditions

impacting contractually required completion dates will be considered in evaluating the merit of a delay request. Time extensions will not be considered if such adjustments do not exceed the total or remaining "float" associated with the impacted activities at the time of delay as shown in the most recent update to the Project schedule, nor for concurrent delays not caused by the Owner.

- 21.4.3 In anticipation of the possibility of delay due to unusually bad weather, the Construction Manager shall identify those activities in the baseline schedules, and those activities subsequently added to updated schedules, that might reasonably be expected to be delayed by such weather.
- 21.4.4 Delays caused by unusually bad weather shall be incorporated in the Project schedule when the schedule is next updated by showing actual dates and/or percent complete for those activities that were impacted by the unusually bad weather as well as the effects of any effort to mitigate such delays. When claims are submitted for time extensions resulting from more than one occurrence of unusually bad weather during a month, the Project schedule shall be updated to reflect such separate events sequentially so that the impact of each subsequent occurrence is shown on an adjusted Project schedule that includes all prior claims for additional time.
- 21.5 In addition to the requirements of Article 21.7 and Article 21.8 below, any request for an extension of time for strikes or lockouts shall be supported by a written statement of facts concerning the strike including, but not limited to, the dates, the craft(s) affected, the reason for the strike, efforts to resolve the dispute, and efforts to minimize the impact of the strike on the Project.
- Approval of time extensions for changes in the Work will depend upon the extent, if any, to which the changes cause delay in the completion of the various elements of construction. The Change Order granting the time extension may provide that the Contract Time will be extended only for those specific elements so delayed and that other Work will not be altered.
- 21.7 The Contract Time will only be adjusted for causes specified above. Extensions of time will only be approved if the Construction Manager provides justification supported by the Project schedule or other acceptable data that 1) such changes are, in fact, on the critical path and extend the contractually required completion dates, and 2) the Construction Manager has expended all reasonable effort to minimize the impact of such changes on the construction schedule. No additional extension of time will be granted subsequently for claims having the basis in previously approved extensions of time.
- In support of requests for an extension of time not caused by unusual inclement weather, and concurrently with the submittal of any such request, the Construction Manager shall submit to the Consultant and the Owner a written impact analysis showing the influence of each such event on contractually required completion dates as shown in the updated Project schedule most recently submitted to the Owner prior to the event. The analysis shall include a partial network diagram showing a sequence of new or revised activities and/or durations that are proposed to be added to the existing schedule including related logic (a "fragnet"). This impact analysis and the fragnet shall include the new activities and/or activity revisions proposed to be added to the existing schedule and shall demonstrate the claimed impact on the critical path and the contractually required completion dates. The Construction Manager will not be granted an extension of time and/or relief from liquidated damages when the delay to completion of the work is attributable to, within the control of, or due to the fault, negligence, acts, or omissions of the Construction Manager and/or the Construction Manager's contractors, subcontractors, suppliers, or their respective employees and agents. Time extensions will not be considered in the event such adjustments do not exceed the total or remaining "float" associated with the impacted activities at the time of delay, nor for concurrent delays not caused by the Owner. In the event of concurrent delays, only that event actually impacting contractually required completion dates will be considered in adjusting the schedule and evaluating the merit of a

delay claim. Requests for an extension of time which are not supported by this information shall not be considered for approval.

- 21.9 Approved extensions of time not caused by unusual inclement weather shall be incorporated in a revised schedule at the time of approval. No subsequent requests for time extension will be considered unless all previous approved time extensions have been incorporated in the Project schedule on which the requests are based.
- 21.10 Except as provided for in Article 21.10.1 through 21.10.3 below, no payment or compensation shall be made to the Construction Manager and extensions of the time fixed for completion of the Contract shall be the Construction Manager's sole remedy for any and all delays, hindrances, obstructions or impacts in the orderly progress of the Work.
- 21.10.1 In addition to the provisions of Articles 18.3 and 18.3.1 above, and subject to the requirements of Article 21.8 and 21.8.1 above, if the Owner orders changes to the scope of Work for the Project that extend the then current contractually required completion dates of the Project, the Construction Manager shall be entitled to reimbursement for job site, general conditions and staffing costs associated with such delay.
- 21.10.2 If delays, hindrances, impacts or obstructions of the Construction Manager's performance of the Contract are in whole or in part within the control of the Owner and, subject to the requirements of Article 21.8 and 21.8.1, extend contractually required completion dates of the Project, the Construction Manager shall be entitled to reimbursement for job site, general conditions and staffing costs for that portion of the costs caused by acts or omissions of the Owner.
- 21.10.3 Such reimbursements shall not include consequential or similar damages, exemplary damages, damages based on unjust enrichment theory, formula based delay claims, or any element of home office overhead.

ARTICLE 22 - CORRECTION OF WORK BEFORE FINAL PAYMENT

- 22.1 The Construction Manager shall promptly remove from the site and replace any material and/or correct any Work found by the Consultant to be defective or that fails to conform to the requirements of the Contract, whether incorporated in the Work or not, and whether observed before or after Substantial or Final Completion. The Construction Manager shall bear all costs of removing, replacing or correcting such Work or material including the cost of additional professional services necessary, and the cost of repairing or replacing all Work of separate contractors damaged by such removal or replacement.
- 22.2 The Consultant will notify the Construction Manager and the Owner immediately upon its knowledge that additional services will be necessary. The Owner may consent to accept such nonconforming Work and materials with an appropriate adjustment in the Contract Amount. Otherwise, the Construction Manager shall promptly replace and re-execute the Work in accordance with the Contract Documents and without expense to the Owner and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement. If the Construction Manager fails to commence and continue to correct non-conforming Work within a reasonable time as determined by the Consultant, the Owner may without limitation of other rights available to the Owner and without prejudice to other remedies, take any necessary action to make the necessary corrections. If the Owner makes required corrections for non conforming Work or materials, a Change Order will be issued reflecting an equitable deduction from the Contract Amount. This amount will be deducted from payments due to the Construction Manager or, if no additional

payments are due, Construction Manager or the Construction Manager's surety shall be responsible for payment of this amount.

ARTICLE 23 - CORRECTION OF WORK AFTER FINAL PAYMENT

- 23.1 Neither the final certificate of payment nor any provisions in the Contract Documents shall relieve the Construction Manager of responsibility for materials and equipment incorporated into the Work that fails to meet specification requirements, or for the use of faulty materials or poor quality workmanship. If within one year after the date of Substantial Completion of the Work or designated portion thereof, any of the Work is found to be defective or not in accordance with the requirements of the Contract Documents, the Construction Manager shall correct it promptly after receipt of written notice from the Owner to do so. The Construction Manager shall correct any defects due to these conditions and pay for any damage to other Work resulting from their use. Nothing contained in this clause shall be construed to establish a period of limitation with respect to any obligation of the Construction Manager under the Contract including, but not limited to, warranties. The obligation of the Construction Manager under this section shall be in addition to and not in limitation of any obligations imposed by special guarantees or warranties required by the Contract, given by the Construction Manager, or otherwise recognized or prescribed by law.
- 23.2 In addition to being responsible for correcting the Work and removing any non-conforming Work or materials from the job site, the Construction Manager shall bear all other costs of bringing the affected Work into compliance with the Contract requirements. This includes costs of any required additional testing and inspection services, Consultant's services, and any resulting damages to other property or to work of other contractors or of the Owner.
- 23.3 If the Construction Manager fails to correct nonconforming Work within a reasonable time as determined by the Consultant, the Owner may take necessary actions to make the necessary corrections. If the Owner makes required corrections for nonconforming Work or materials after Final Payment to the Construction Manager, the Owner shall be entitled to recover all amounts for such corrections, including costs and attorney's fees, from Construction Manager or surety.

ARTICLE 24 - TERMINATION OF CONTRACT FOR CONVENIENCE OF OWNER

24.1 The Owner, by written notice to the Construction Manager, may terminate this Contract in whole or in part when it is in the interest of the Owner, at the sole discretion of the Owner. In such case, the Construction Manager shall be paid for all Work in place and a reasonable allowance for profit and overhead on Work done, provided that such payments shall not exceed the total Contract price as reduced by the value of the Work as yet not completed. The Construction Manager shall not be entitled to profit and overhead on Work not performed.

ARTICLE 25- OWNER'S RIGHT TO STOP WORK

25.1 If the Construction Manager fails to correct defective Work as required, or persistently fails to carry out the Work in accordance with the Contract Documents, the Owner by written notice may order the Construction Manager to stop the Work or any portion of the Work until the cause for the order has been eliminated to the satisfaction of the Owner. The Consultant may stop Work without written notice for 24 hours whenever in its professional opinion such action is necessary or advisable to insure conformity with the Contract Documents. The Construction Manager shall not be entitled to an adjustment in the Contract Time or Amount under this clause in the event such stoppages are determined to be the fault of the Construction Manager or its Sub-contractor(s). The right of the Owner or Consultant to stop Work shall not give rise to a duty on the part of the Owner or Consultant to exercise this right for the benefit of the Construction Manager or others.

ARTICLE 26 -TERMINATION OF CONTRACT FOR DEFAULT ACTION OF CONSTRUCTION MANAGER

- 26.1 In addition to its rights under Articles 24 and 25, the Owner may terminate the contract upon the occurrence of any one or more of the following events:
- 26.1.1 If the Construction Manager refuses or fails to prosecute the Work (or any separable part thereof) with such diligence as will insure its completion within the agreed upon time; or if the Construction Manager fails to complete the Work within such time;
- 26.1.2 If the Construction Manager is adjudged a bankrupt or insolvent, or makes a general assignment for the benefit of creditors, or if the Construction Manager or a third party files a petition to take advantage of any debtor's act or to reorganize under the bankruptcy or similar laws concerning the Construction Manager, or if a trustee or receiver is appointed for the Construction Manager or for any of the Construction Manager's property on account of the Construction Manager's insolvency, and the Construction Manager or its successor in interest does not provide adequate assurance of future performance in accordance with the Contract within ten (10) days of receipt of a request for assurance from the Owner;
- 26.1.3 If the Construction Manager repeatedly fails to supply sufficient qualified supervision of the work, or repeatedly fails to ensure that Sub-contractors supply adequate supervision, suitable materials or equipment, or adequate numbers of skilled workmen and supervision to the Work;
- 26.1.4 If the Construction Manager repeatedly fails to make prompt payments to Sub-contractors or suppliers at any tier, or for labor, materials or equipment;
- 26.1.5 If the Construction Manager disregards laws, ordinances, rules, codes, regulations, orders or similar requirements of any public entity having jurisdiction;
- 26.1.6 If the Construction Manager disregards the authority of the Consultant or the Owner;
- 26.1.7 If the Construction Manager performs Work which deviates from the Contract Documents, and neglects or refuses to correct rejected Work; or
- 26.1.8 If the Construction Manager otherwise violates in any material way any provisions or requirements of the Contract Documents.
- 26.2 Once the Owner determines that sufficient cause exists to justify the action, the Owner may terminate the Contract without prejudice to any other right or remedy the Owner may have, after giving the Construction Manager and its Surety three (3) Calendar Days notice by issuing a written Declaration of Default. The Owner shall have the sole discretion to permit the Construction Manager to remedy the cause for the contemplated termination without waiving the Owner's right to terminate the Contract.
- 26.3 In the event that the Contract is terminated, the Owner may demand that the Construction Manager's Surety take over and complete the Work on the Contract. The Owner may require that in so doing, the Construction Manager's Surety not utilize the Construction Manager in performing the Work. Upon the failure or refusal of the Construction Manager's Surety to take over and begin completion of the Work within twenty (20) Calendar Days after the demand, the Owner may take over the Work and prosecute it to completion as provided below.

- 26.3.1 In the event that the Contract is terminated and the Construction Manager's Surety fails or refuses to complete the Work, the Owner may take over the Work and prosecute it to completion in accordance with the laws of the Commonwealth, by contract or otherwise, and may exclude the Construction Manager from the site. The Owner may take possession of the Work and of all of the Construction Manager's tools, appliances, construction equipment, machinery, materials, and plant which may be on the site of the Work, and use the same to the full extent they could be used by the Construction Manager, without liability to the Construction Manager. At the Owner's sole discretion, the Owner has the right to take assignment of any or all portions of the contract work in order to prosecute the completion of the Work. In exercising the Owner's right to prosecute the completion of the Work, the Owner may also take possession of all materials and equipment stored at the site or for which the Owner has paid the Construction Manager but which are stored elsewhere, and finish the Work as the Owner deems expedient. In such case, the Construction Manager shall not be entitled to receive any further payment until the Work is finished.
- 26.3.2 If the unpaid balance of the Contract Price exceeds the direct and indirect costs and expenses of completing the Work including compensation for additional professional and Consultant services, such excess shall be used to pay the Construction Manager for the cost of the Work it performed and a reasonable allowance for overhead and profit. If such costs exceed the unpaid balance, the Construction Manager or the Construction Manager's Surety shall pay the difference to the Owner. In exercising the Owner's right to prosecute the completion of the Work, the Owner shall have the right to exercise its sole discretion as to the manner, methods, and reasonableness of the costs of completing the Work and the Owner shall not be required to obtain the lowest figure for Work performed in completing the Contract. In the event that the Owner takes bids for remedial Work or completion of the Project, the Construction Manager shall not be eligible for the award of such Contract.
- 26.3.3 The Construction Manager shall be liable for any damage to the Owner resulting from the termination or the Construction Manager's refusal or failure to complete the Work, and for all costs necessary for repair and completion of the Project above the amount of the Contract. The Construction Manager shall be liable for all attorney's fees, costs and expenses incurred by the Owner to enforce the provisions of the Contract.
- 26.3.4 If liquidated damages are provided in the Contract and the Owner terminates the Contract, the Construction Manager shall be liable for such liquidated damages, as provided for in Article 29.2 and 29.3 below, until Substantial Completion and Final Completion of the Work are achieved.
- 26.3.5 In the event the Contract is terminated, the termination shall not affect any rights of the Owner against the Construction Manager. The rights and remedies of the Owner under this Article are in addition to any other rights and remedies provided by law or under this Contract. Any retention or payment of monies to the Construction Manager by the Owner will not release the Construction Manager from liability.
- 26.3.6 In the event the Contract is terminated under this Article, and it is determined for any reason that the Construction Manager was not in default under the provisions of this Article, the termination shall be deemed a Termination for Convenience of the Owner pursuant to Article 24 and the rights and obligations of the parties shall be determined in accordance with Article 24.

ARTICLE 27 - SUSPENSION OF WORK

27.1 The Owner or the Consultant may, at any time and without cause, order the Construction Manager in writing or cause the Construction Manager to suspend, delay or interrupt all or any part of the Work for such period of time as the Owner may determine to be appropriate for its convenience.

Adjustment may be made for any increase in the Contract time necessarily caused by such suspension or delay, in accordance with Article 21.

ARTICLE 28 - TIME OF COMPLETION

- 28.1 The Construction Manager shall begin the Work on the date of commencement as specified in the Work Order. All time limits stated in the Contract Documents are of the essence of the Contract. The actual end of the Contract Time shall be the date specified on the approved certificate of Substantial Completion. The time for completion set forth in the Contract is a binding part of the Contract upon which the Owner may rely in planning the use of the facilities to be constructed and for all other purposes.
- 28.2 Substantial Completion is defined in Article 1.1.17 of these General Conditions. Only incidental corrective Work under punch lists and final cleaning (if required) for Owner's full use shall remain for Final Completion. The ability to occupy or utilize shall include regulatory authority approval unless regulatory approval is delayed due to actions of the Owner or the Consultant. When the Owner accepts and occupies a portion of the Project, the operation, maintenance, utilities, and insurance of that portion of the Project becomes the responsibility of the Owner.
- 28.3 The date of Substantial Completion shall be that date certified by the Owner, in accordance with the following procedures, that the Work is sufficiently complete to occupy or utilize as defined above.
- 28.3.1 When the Construction Manager considers the entire Work is substantially complete as defined in Article 1.1.17 of these General Conditions, and is ready for its intended use, the Construction Manager shall notify the Consultant in writing and request an inspection. The declaration and request shall be accompanied by a list prepared by the Construction Manager of those items of Work still to be completed or corrected. The failure of the Construction Manager or Consultant to include any item or items which are not completed or which need correction on such list shall not alter the responsibility of the Construction Manager to complete all Work in accordance with the Contract Documents.
- 28.3.2 The Consultant shall, within a reasonable time after receipt of notification from the Construction Manager of a declaration of Substantial Completion and request for inspection, make such inspection. Prior to the Substantial Completion Inspection and within sufficient time to allow the Consultant's review, the Construction Manager shall submit all As-Built drawings, Notice of Termination, catalog data, complete operating and maintenance instructions, manufacturer specifications, certificates, warranties, written guarantees and related documents required by the contract. The Consultant shall review said documents for accuracy and compliance with the Contract Documents and incorporate them into complete operating instructions and deliver them to the Owner.
- 28.3.3 If the Consultant considers the Work substantially complete, the Consultant shall recommend that the Owner prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion and the responsibilities between the Owner and Construction Manager for security, maintenance, heat, utilities and insurance, if not otherwise provided for in the Contract Documents, and a tentative list of items to be completed or corrected, and shall fix the time within which the Construction Manager shall complete the items listed therein. This time shall not exceed thirty (30) Calendar Days unless otherwise provided for in the Work Order. The Certificate of Substantial Completion shall be submitted to the Consultant and Construction Manager for their written acceptance of the responsibilities assigned to them in the certificate. The Project shall not be deemed substantially complete until the certificate is issued. If, after making the inspection, the

Consultant does not consider the Work substantially complete, the Consultant will notify the Owner and the Construction Manager in writing

- 28.4 Operation and Maintenance Manual Deliverables. In anticipation and preparation of completion of the Work and the closing out of the Project, and to facilitate training of the Owner's personnel in the maintenance and operation of the new installations, the Construction Manager shall comply with the requirements of Article 8.7 of the Special Conditions. (For the purposes of this article, air test and balance reports may be submitted at a later date with the request for certification of substantial completion.) These manuals shall be submitted to the Consultant for approval, and subsequently forwarded to the Owner's Project Manager by or before the time construction is 75% complete, as reflected by the Contractor's most recently submitted Application for Payment.
- 28.4.1 The provisions of Article 30.11 notwithstanding, if the Construction Manager meets the requirements of Article 28.4 above with respect to timely submittal of approvable Operation and Maintenance manuals and provided the project construction is 1) at least 75% complete and 2) is equal to or ahead of the approved progress schedule and 3) the Work completed is in compliance with the requirements of the contract documents, the Owner, at the sole discretion of the Director, Capital Projects Management Division may reduce the retainage to not less than three percent (5%) of the current Contract Amount. In the event the Construction Manager fails to submit acceptable O&M manuals prior to reaching 75% completion, it is agreed that the Owner at its sole discretion may deduct from the current and subsequent Applications for Payment an amount deemed by the Owner to be sufficient to encourage prompt compliance with this contractual requirement, until such time as acceptable O&M manuals are received.
- 28.5 Project Close Out. When the Construction Manager considers that all Work required by the Contract is 100% complete, including correction of any remaining punch list work or deficiencies, the Construction Manager shall notify the Consultant in writing and request a final inspection. The Consultant, upon receipt of written notice from the Construction Manager that the Work is complete and is ready for final inspection and acceptance, will promptly make such inspection and if the Consultant finds the Work completed and acceptable under the Contract Documents and the Contract fully performed, the Consultant will notify the Construction Manager in writing to submit, and will certify to the Owner a final Certificate for Payment in accordance with Articles 30.9 and 30.9.1 of these General Conditions. If the Construction Manager does not complete the punch items within the time designated, the Owner retains the right to have these items corrected at the expense of the Construction Manager including all architectural, engineering and inspection costs and expenses incurred by the Consultant and the Owner, and to deduct such costs and expenses from the funds being held in retainage. The Owner shall not be required to release the retainage until such items have been completed.

ARTICLE 29 - LIQUIDATED DAMAGES

- 29.1 The Owner and the Construction Manager recognize and agree that time is of the essence of this Contract and that the Owner will suffer financial loss if the Work is not completed within the time specified in the Contract plus any extensions that may be allowed. The parties further recognize the delays, expense and difficulties involved in proving the actual loss suffered by the Owner should the Work not be completed on time. The Owner and the Construction Manager agree on the amounts stated as liquidated damages in the Agreement. The Owner and Construction Manager agree that the amount stated as liquidated damages are not intended to be penalties.
- 29.2 Should the Construction Manager fail to satisfactorily complete the Work under Contract on or before the date stipulated for Substantial Completion, as adjusted by approved Change Orders, if any, the Construction Manager will be required to pay liquidated damages to the Owner for each

consecutive Calendar Day that the Owner is deprived of full use of the area beyond the date specified unless otherwise stipulated elsewhere by Owner. After the date for Substantial Completion has been certified by the Owner, the Construction Manager shall cease to owe liquidated damages until the date established for Final Completion.

29.3 If Final Completion is not achieved by the date established for Final Completion, as adjusted by approved Change Orders, if any, liquidated damages in the amount stipulated in the Agreement will become due and collectable. The Contract will be considered complete and Final Completion shall be deemed to have occurred when all Work has been completed in compliance with the Contract Documents and the Certificate of Final Completion has been issued by the Owner. No deduction or payment of liquidated damages will, in any degree, release the Construction Manager from further obligations and liabilities to complete the entire Contract. Permitting the Construction Manager to continue and finish the Work, or any part of it, after expiration of the Contract Time, shall in no way constitute a waiver on the part of the Owner of any liquidated damages due under the Contract.

ARTICLE 30 - PAYMENT TO THE CONSTRUCTION MANAGER

- 30.1 Payments on account of this Contract shall be made monthly as Work progresses. The Construction Manager shall submit to the Consultant, in the manner and form prescribed, an application for each payment, and, if required, receipts or other vouchers showing payments made for materials and labor, including payments to Sub-contractors. All payments shall be subject to any withholding or retainage provisions of this contract. All pay request documents, except the final payment, shall be submitted in whole dollar amounts. All payment applications from the Construction Manager shall include line items for overhead, profit and general condition costs.
- 30.2 The Consultant shall, within ten (10) Business Days after receipt of each application for payment, certify approval of payment in writing to the Owner and present the application to the Owner, or return the application to the Construction Manager indicating in writing its reasons for refusing to approve payment. The Owner, provided no exception is taken to the application for payment submitted by the Consultant, will issue payment on or within thirty (30) Business Days from the date received from the Consultant. A reasonable delay on the part of the Owner in making payment to the Construction Manager for any given payment shall not be grounds for breach of Contract. The Consultant may refuse to approve the whole or any part of any payment if it would be incorrect to make such presentation to the Owner.
- 30.3 If payment is requested on the basis of materials and equipment not incorporated in the Work, but delivered and suitably stored at an off jobsite location agreed to in writing by the Owner that meets the manufacturer's requirements for the stored material and not-comingled with other material, the Construction Manager must furnish the following:
- 30.3.1 A list of the materials consigned to the Project (which shall be clearly identified), giving the place of storage, together with copies of invoices.
- 30.3.2 Certification that all items have been tagged for delivery to the Project and that they will not be used for any other purpose.
- 30.3.3 A letter from the Surety indicating that the Surety agrees to the arrangements and that payment to the Construction Manager shall not relieve either the Construction Manager or its Surety of their responsibility to complete the Work.
- 30.3.4 Evidence of adequate insurance listing the Owner as an additional insured covering the material in storage.

- 30.3.5 Evidence that representatives of the Consultant have visited the Construction Manager's place of storage and checked all items listed on the Construction Manager's certificate. They shall certify, insofar as possible, that the items are in agreement with the Specifications and approve their incorporation into the Project.
- 30.4 The Owner will pay 80% of the invoiced value less retainage for materials stored off site providing the above conditions are met.
- 30.5 The Construction Manager's signature on each subsequent application for payment shall certify that all previous progress payments received on account of the Work have been applied to discharge in full all of the Construction Manager's obligations reflected in prior applications for payment.
- 30.6 Each payment made to the Construction Manager shall be on account of the total amount payable to the Construction Manager and the Construction Manager warrants and guarantees that the title to all materials, equipment and Work covered by the paid partial payment shall become the sole property of Owner free and clear of all encumbrances. Nothing in this Article shall be construed as relieving Construction Manager from the sole responsibility for care and protection of materials, equipment and Work upon which payments have been made or restoration of any damaged Work or as a waiver of the right of Owner to require fulfillment of all terms of the Contract Documents.
- 30.7 Within thirty (30) Calendar Days of the award of any Trade Contracts, and prior to submitting the next application for payment, the Construction Manager shall submit to the Consultant and the Owner for approval a detailed breakdown of the Contract Amount including all trade contracts that have been awarded as of the date of that application for payment pursuant to CSI specification divisions, divided so as to facilitate payment and correlated to the schedule required by General Conditions Article 32 of the Contract Documents. The total value of all activities shall add up to the Contract Amount. When approved by the Consultant and the Owner, this schedule shall be used as a basis for Construction Manager's applications for payment and may be used by the Owner to determine costs or credits resulting from changes in the Work. Failure to obtain the approval of the Schedules of Values shall be a basis for withholding payment to the Construction Manager.
- 30.8 Retainage – The Owner will retain ten percent (10%) of the Construction Manager's progress payments, including amounts claimed for construction management fee until fifty one percent (51%) of the construction project has been completed. Thereafter, if the Work is fully in compliance with the requirements of the Contract and except as provided for in Article 28.4.1 above, the Owner shall retain five percent (5%) of the total contract amount until Substantial Completion and acceptance of all Work covered by this Contract, as collateral security to insure successful completion of the Work. For the purposes of this Article, the term "in full compliance" shall mean 1) that the progress of the Work is equal to or ahead of that predicted by the Project Baseline schedule and 2) the Work completed is in compliance with the requirements of the contract documents. Subsequent to the issuance of the Substantial Completion Certificate and depending upon the cost involved for the completion and/or correction of punch list items, the Consultant may recommend to the Owner an adjustment to the amount being held as retainage and, if approved by Owner, the amount of retainage may then be reduced and a sufficient sum retained by Owner to assure completion of the remaining unfinished Work. Retainage reduction as provided for in this Article 30.8 is contingent upon the Construction Manager and/or Sub-contractors being on or ahead of the approved progress schedule and on verification by the Consultant that the Work completed is in compliance with the requirements of the contract documents.

- 30.8.1 In addition to the retainage set forth above, the Owner may withhold from any monthly progress payments or nullify any progress payments in whole or in part as necessary to protect the Owner from loss on account of:
- 30.8.1.1Defective Work which has not been remedied or completed Work which has been damaged requiring correction or replacement, or
- 30.8.1.2Action required by the Owner to correct Defective Work or complete Work which the Construction Manager has failed or refused to correct or complete, or
- 30.8.1.3 Failure of the Construction Manager to perform any of its obligations under the Contract, or
- 30.8.1.4Failure of the Construction Manager to make payment properly to Sub-contractors; suppliers of material, services or labor; or to reimburse the University for utilities or other services as provided for in the Contract;
- 30.8.1.5 Amounts to be withheld as liquidated damages for failure to complete the Project in the allotted Contract time.
- 30.8.2 When the Owner is satisfied that the Construction Manager has remedied any such deficiency, payments shall be made of the amount being withheld on the next scheduled application for payment.
- 30.9 Final Payment When all Work is completed and acceptable and the Contract is fully performed, the Construction Manager will be directed to submit a final payment application for certification and the entire balance shall be due and payable upon a certification of completion by the Consultant that the Work is in accordance with the Contract Documents. Final change order reconciliation as per Article 18.12 must be provided prior to final payment.
- 30.9.1 Upon issuance of the Certificate of Final Completion by the Owner and submittal by the Construction Manager of all required documents and releases, all retained amounts shall be paid to the Construction Manager as part of the Final Payment. By accepting such payment, the Construction Manager certifies that all amounts due or that may become due to any Sub-contractor, any Consultant of the Construction Manager, or any vendors or material suppliers, have been paid or will be paid from the proceeds of the final payment; and that, further, there are not liens, claims or disputes involving the Owner or the Consultant that are outstanding or unresolved.
- 30.10 The Construction Manager shall promptly pay each Sub-contractor and material supplier upon receipt of payment from the Owner the amount to which said Sub-contractor and supplier is entitled, reflecting the percentage actually retained from payments to the Construction Manager on account of such Sub-contractor's work. The Construction Manager shall, by an appropriate Agreement with each Sub-contractor and material supplier, require each Sub-contractor and supplier to make payments to their sub-contractors, vendors and suppliers in similar manner.

The Consultant may, on request, furnish to any Sub-contractor or material supplier information regarding the percentages of completion applied for by the Construction Manager and the action thereon by the Consultant.

30.10.2 Neither the Owner nor the Consultant shall have any obligation to make payment to any Sub-contractor or material supplier except as may otherwise be required by law.

ARTICLE 31 - AUDITS

- 31.1 The Construction Manager's Trade Contractors', sub-contractors' and/or vendor's "records" shall upon reasonable notice be open to inspection and subject to audit and/or reproduction during normal business working hours as may be deemed necessary by the Owner at its sole discretion. Such audits may be performed by an Owner's representative or an outside representative engaged by the Owner. The Owner or its designee may conduct such audits or inspections throughout the term of this contract and for a period of three years after final payment, or longer if required by law. Owner's representative may (without limitation) conduct verifications such as counting employees at the Construction Site, witnessing the distribution of payroll, verifying information and amounts through interviews and written confirmations with Construction Manager's employees, field and agency labor, Trade Contractors and vendors.
- 31.2 "Records" as referred to in this Contract shall include any and all information, materials and data of every kind and character, including without limitation, records, books, papers, documents, subscriptions, superintendents' reports, drawings, receipts, vouchers and memoranda, and any and all other agreements, sources of information and matters that may in the Owner's judgment have any bearing on or pertain to any matters, rights, duties or obligations under or covered by any Contract Document. Such records shall include hard copy, as well as computer readable data if it can be made available, written policies and procedures; time sheets; payroll registers; cancelled payroll checks; subcontract files (including proposals of successful and unsuccessful bidders, bid recaps, etc.); original estimates; estimating work sheets; correspondence; change order files (including documentation covering negotiated settlements); back charge logs and supporting documentation; invoices and related payment documentation; general ledger; records detailing cash and trade discounts earned; insurance rebates and dividends; and any other Construction Manager or contractor records which may have a bearing on matters of interest to the Owner in connection with the Construction Manager's dealings with the Owner (all foregoing hereinafter referred to as the "records") to the extent necessary to adequately permit evaluation and verification of any or all of the following:

Compliance with Contract requirements for deliverables;

Compliance with approved plans and specifications;

Compliance with Owner's business ethics expectations;

Compliance with Contract provisions regarding the pricing of change orders;

Accuracy of Construction Manager representations regarding pricing of invoices; and

Accuracy of Construction Manager representations related to claims submitted by the

Construction Manager or its payees.

- 31.3 The Construction Manager shall require all payees (examples of payees include Trade Contractors, Sub-contractors, vendors, and/or material suppliers) to comply with the provisions of this Article by including the requirements hereof in a written contract agreement between the Construction Manager and payees. Such requirements to include flow-down right of audit provisions in contracts with payees will also apply to Subcontractors and Sub-subcontractors, material suppliers, etc. The Construction Manager will cooperate fully and will cause all related parties and all of the Construction Manager's Trade Contractors and/or subcontractors (including those entering into lump sum subcontracts) to cooperate fully in furnishing or in making available to Owner from time to time whenever requested, in an expeditious manner, any and all such information, materials and data.
- Owner's authorized representative or designee shall have reasonable access to the Construction Manager's facilities, shall be allowed to interview all current or former employees to discuss matters pertinent to the performance of this contract and shall provide adequate and appropriate work space in order to conduct audits in compliance with this Article. The Construction Manager and its payees agree bear their costs and expenses relating to any inspections and audits.

- 31.5 If an audit inspection or examination in accordance with this Article discovers any fraud or misrepresentation, or discloses overpricing or overcharges (of any nature) by the Construction Manager to the Owner, in addition to making adjustments for the overcharges, the reasonable actual cost of the Owner's audit shall be reimbursed to the Owner by the Construction Manager. Any adjustments and/or payments that must be made as a result of any such audit or inspection of the Construction Manager's invoices and/or records shall be made within Ninety (90) Calendar Days from presentation of the Owner's findings to the Construction Manager.
- 31.6 The provisions of Articles 31.1, 31.2 and 31.5 notwithstanding, the Owner shall have the right to conduct inspections and audits of any matter relating to the Contract Documents or the Work, which shall be for the Owner's sole benefit and shall not relieve the Construction manager, its sureties, contractors, subcontractors suppliers and their respective employees and agents of any obligations under the Contract Documents.
- 31.7 Any audits or inspections under Article 31 shall not constitute a waiver of any right the Owner has to accounting or discovery of records in the possession, custody or control of the Construction Manager, its sureties, contractors, subcontractors, vendors and their respective employees and agents

ARTICLE 32 - PROGRESS & SCHEDULING

- 32.1 If requested by the Owner during the Design Phase of the Project, and working in cooperation with the Owner and the Consultant(s), the Construction Manager shall prepare a Critical Path Method (CPM) type Design Phase schedule incorporating design phase and review activities through completion of the design and bidding of the Trade Contracts, shall include in this Design Phase schedule the broad categories of Work to be accomplished in the subsequent implementation of the design and construction of the Project, and shall modify and update this Design Phase schedule as necessary to reflect the actual status and then current plan for the Project.
- 32.2 The schedules submitted for this Project shall be prepared using Primavera P6 scheduling software. If approved by the University, and at the sole discretion of the University, schedules submitted using earlier versions of Primavera scheduling software (Primavera SureTrak or Primavera P3) may be converted to Primavera P6 format by the University for review purposes. However, the University will not be responsible for any inaccuracies that may result from such conversions.
- 32.2.1 Prior to bidding Trade Contracts, the Construction Manager shall prepare and submit to the Owner and the Consultant a preliminary CPM construction schedule for the Work that will be included in the Project bidding documents.
- 3.2.2.2 The schedules submitted for this Project shall coordinate Work in accordance with all schedules included in the Owner's approved Program. Construction work shall be scheduled and executed such that operations of the University are given first priority. This applies particularly to outages and restriction of access.
- 32.2.3 The schedules submitted for this Project shall not exceed time limits established for the Project. Schedules which reflect a duration less than the Contract Time are for the convenience of the Construction Manager and shall not be the basis of any claim for delay or extension of time.
- 32.2.4 Schedules shall be revised at appropriate intervals as required by the condition of the Work and the Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.

- 32.2.5 The Construction Manager shall also submit a payment schedule indicating the percentage of the Contract Amount and the amount of the anticipated monthly payments that will be requested as the Project proceeds.
- 32.2.6 The Owner may withhold approval of all or a portion of progress payments until the progress payment schedule and construction schedule have been submitted by the Construction Manager.
- 32.3 The Construction Manager shall prepare and keep current, for the Consultant's approval, a separate schedule of submittals coordinated with the Construction Manager's CPM construction schedule that provides reasonable time for the Consultant to review the submittals.
- 32.4 The Construction Manager shall cause the work to be performed pursuant to the most recent schedules.

ARTICLE 33 - USE OF COMPLETED PORTIONS

33.1 Upon mutual Agreement between the Owner, Construction Manager, and Consultant, the Owner may use a completed portion of the Project after an inspection is made. Such possession and use shall not be deemed as acceptance of any Work not completed in accordance with the Contract Documents, nor shall such possession and use be considered to alter warranty obligations or cause any warranty period to commence prior to Substantial Completion.

ARTICLE 34 - INDEMNIFICATION

- 34.1 To the fullest extent permitted by law, the Construction Manager shall indemnify and hold harmless the Owner, its consultants, and their respective employees and agents from and against all claims, damages, losses and expenses, including attorney's fees, provided that any such claim, loss, damage or expense: (a) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom, and (b) is caused in whole or in part by any negligent act or omission of the Construction Manager, any Sub-contractor or material supplier, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. This basic obligation to indemnify shall not be construed to nullify or reduce other indemnification rights which the Owner, its consultants, and their respective employees and agents would otherwise have.
- 34.2 The Construction Manager shall also indemnify and hold harmless the Owner, its consultants, and their respective employees and agents from any claims relating to the Project brought against the Owner, its consultants, and their respective employees and agents by any Sub-contractor unless such claims are due to the gross negligence or misconduct of the Owner or Consultant.
- 34.3 In any and all claims against the Owner its consultants, and their respective employees and agents, by any employee of the Construction Manager, any Sub-contractor, any one directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Article shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Construction Manager or any Sub-contractor under Worker's Compensation acts, disability benefit acts or other employee benefit acts.
- 34.4 The obligations of the Construction Manager under this Article shall not extend to the liability of the Consultant, his agents or employees, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, Change Orders, designs or specifications, or (2) the

giving of or the failure to give directions or instructions by the Consultant, his agents or employees, provided such giving or failure to give is the primary cause of injury or damage.

ARTICLE 35 - INSURANCE

- 35.1 The Construction Manager shall furnish the Owner the Certificates of Insurance or other acceptable evidence that insurance is effective, and guarantee the maintenance of such coverage during the term of the Contract. Each policy of insurance, except Workers Compensation, shall name the University of Kentucky and the directors, officers, trustees and employees of the University as additional insured on a primary and non-contributory basis as their interest appears. Waiver of subrogation in favor of the University of Kentucky shall apply to all policies. Any endorsements required to validate such waiver of subrogation shall be obtained by the Construction Manager at the Construction Manager's expense.
- 35.2 The Construction Manager shall not commence, nor allow any Sub-contractor to commence Work under this Contract, until the Owner has reviewed the certificates and approved coverages and limits as satisfying the requirements of the bidding process.
- 35.3 Workers' Compensation and Employers' Liability Insurance. The Construction Manager shall acquire and maintain Workers' Compensation insurance with Kentucky's statutory limits and Employers' Liability insurance as defined in the Special Conditions for all employees who will be working at the Project site. In the event any Work is sublet, the Construction Manager shall require any Sub-contractor to provide proof of this insurance for the Sub-contractors' employees, unless such employees are covered by insurance provided by the Construction Manager.
- 35.4. The Construction Manager shall either require each Sub-contractor to procure and maintain insurance of the type and limits stated during the terms of the Contract, or insure the activities of such Sub-contractors under a blanket form as described below:
- 35.4.1 Commercial General Liability Insurance. The Construction Manager shall acquire and maintain a Broad Form Comprehensive General Liability (CGL) Insurance Policy including premises operations, products/completed operations, blanket contractual, broad form property damage, real property fire legal liability and personal injury liability coverage. The Insurance Policy must be on an "occurrence" form only, unless approved by the Owner. Contractual liability must be endorsed to include defense costs. Products and completed operations insurance must be carried for two years following completion of the Work. Policies which contain Absolute Pollution Exclusion endorsements are not acceptable. Coverage must include pollution from "hostile fires". Where required by the risks involved, Explosion, Collapse and Underground (XCU) coverages shall be added by endorsement. If the work involved requires the use of helicopters, a separate aviation liability policy as defined in the Special Conditions will be required. If cranes and rigging are involved, a separate inland marine policy with liability limits as defined in the Special Conditions will be required.
- 35.4.1.1 The limits of liability shall not be less than defined in the Special Conditions.
- 35.4.2 Comprehensive Automobile Liability Insurance. The Construction Manager shall show proof and guarantee the maintenance of insurance to cover all owned, hired, leased or non-owned vehicles used on the Project. Coverage shall be for all vehicles including off the road tractors, cranes and rigging equipment and include pollution liability from vehicle upset or overturn. Policy limits shall not be less than defined in the Special Conditions.

- 35.4.3 Excess or Umbrella Liability Insurance. The Construction Manager shall acquire and maintain a policy of excess liability insurance in an umbrella form for excess coverages over the required primary policies of broad form commercial general liability insurance, business automobile liability insurance and employers' liability insurance. This policy shall have a minimum as defined in the Special Conditions for each occurrence in excess of the applicable limits in the primary policies. The excess liability policy shall not contain an absolute pollution exclusion and shall include coverages for pollution that may occur due to hostile fires and vehicle upset and overturn. The limits shall be increased as appropriate to cover any anticipated special exposures.
- 35.5 <u>Builder's Risk Insurance</u>. The Construction Manager shall purchase and maintain an "all risk" Builder's Risk Insurance policy upon the Work at the site to the full insurable value thereof. Such insurance shall include interests of the Owner, Construction Manager, and all Sub-contractors and of their subcontractors. It shall insure against perils of fire, extended coverage, vandalism and malicious mischief. Construction Manager's work performed, and materials to be incorporated into the project and stored on the jobsite, will be covered. Builder's Risk does not include temporary buildings, or Construction Manager or Construction Manager's tools, equipment, or trailers and contents.
- 35.6 Insurance Agent and Company Insurance as required in the bidding process of the Project shall be written according to applicable state law in Kentucky. The policies shall be written by an insurer duly authorized to do business in Kentucky in compliance with KRS: 304.1-.100 and -110.

ARTICLE 36 - PERFORMANCE AND PAYMENT BONDS

- 36.1 The Construction Manager shall furnish a Performance Bond in the form provided in the Contract Documents in the full amount of the Contract Amount as security for the faithful performance of the Contract. The Construction Manager shall also furnish a Payment Bond in the form provided in the Contract Documents in the full amount of the Contract Amount for the protection of all persons performing labor or furnishing materials, equipment or supplies for the Construction Manager or its Sub-contractors for the performance of the Work provided for in the Contract, including security for payment of all unemployment contributions which become due and payable under Kentucky Unemployment Insurance Law.
- 36.2 Each bond furnished by the Construction manager shall incorporate by reference the terms of the Contract as fully as though they were set forth verbatim in such bonds. In the event the Contract Amount is adjusted by Change Order, the penal sum of both the performance bond and the payment bond shall be deemed increased by like amounts.
- The performance and payment bonds shall be executed by a surety company authorized to do business in the Commonwealth of Kentucky, and the contract instrument of bonds must be countersigned by a duly appointed and licensed resident agent.

ARTICLE 37 - DAMAGED FACILITIES

- 37.1 The Construction Manager shall repair or replace, at no expense to the Owner, any damaged section of existing buildings, paving, landscaping, streets, drives, utilities, watersheds, etc. caused by Work performed under the Contract or incidental thereto, whether by the Construction Manager's own forces, Sub-contractors or by material suppliers. Such repair or replacement shall be performed by craftsmen skilled and experienced in the trade or craft for the original Work.
- 37.2 Water damage to the interior of any building caused by Work performed under the Contract or incidental thereto, whether by the Construction Manager's own forces, Sub-contractors, or by material suppliers, and whether occurring in a new or existing building, shall be repaired by the

Construction Manager at the Construction Manager's expense, and any materials damaged inside the building, including personal property, shall be repaired or replaced at the full replacement cost by the Construction Manager at the Construction Manager's expense.

- 37.3 For existing buildings, the Construction Manager, along with the Owner's Representative and Consultant, will tour the Project site to evaluate existing conditions and determine any existing damage before any Work on this Contract is done.
- 37.4 Should the Construction Manager fail to proceed with appropriate repairs in an expedient manner, the Owner reserves the right to have the Work/repairs completed and deduct the cost of such Work/repairs from amounts due or to become due to the Construction Manager. If the Owner deems it not expedient to repair the damaged Work, or if repairs are not done in accordance with the Contract, an equitable deduction from the Contract price shall be made.

ARTICLE 38 - CLAIMS & DISPUTE RESOLUTION

- 38.1 All Construction Manager's claims and disputes shall be referred to the Consultant for review and recommendation. All claims shall be made in writing to the Consultant and to the Owner's Project Manager not more than ten (10) days from the occurrence of the event which gives rise to the claim or dispute, or not more than ten (10) days from the date that the Construction Manager knew or should have known of the claim or dispute. Unless the claim is made in accordance with these requirements, it shall be waived. Any claim not submitted before Final Payment shall be waived. The Consultant shall render a written decision within fifteen (15) days following receipt of a written demand for the resolution of a claim or dispute.
- 38.1.1 The provisions of Article 43.2 notwithstanding, claims and disputes between the Construction Manager and any Sub-contractor or supplier shall not be referred to the Consultant except to request interpretation and/or clarification of the intent of the plans or specifications. Such claims and disputes between the Construction Manager and any Sub-contractor shall be resolved between those parties as required by Article 43.4 of these General Conditions.
- 38.2 The Consultant's decision shall be final and binding on the Construction Manager unless the Construction Manager submits to the Consultant and the Owner's Project Manager a written notice of appeal within fifteen (15) Calendar Days of the Consultant's decision. The Construction Manager must present within fifteen (15) Calendar Days of such notice to appeal a narrative claim in writing with complete supporting documentation. After receiving the written claim, the Project Manager will review the materials relating to the claim and may meet with the Consultant and/or the Construction Manager to discuss the merits of the claim. The Project Manager will render a decision within thirty (30) Calendar Days after receiving the written claim and supporting documentation. The decision of the Project Manager shall be final and binding pending further appeal as provided for in Article 39. If the Consultant or the Project Manager do not issue a written decision within thirty (30) calendar days after receiving the claim and supporting documentation, or within a longer period as may be established by the parties to the Contract in writing, then the Construction Manager may proceed as if an adverse decision had been received.
- 38.3 If the Project Manager does not agree with the Consultant's decision on a claim by the Construction Manager, the Project Manager shall notify the Construction Manager and the Consultant and direct the Construction Manager to perform the Work about which the claim was made and the Construction Manager shall proceed with such Work in accordance with the Project Manager's instruction. If the Construction Manager disagrees with a decision of the Project Manager concerning a Construction Manager's claim, the Construction Manager shall proceed with the Work as indicated by the Project Manager's decision.

38.4 The Construction Manager shall continue to diligently pursue Work under the Contract pending resolution of any dispute, and the Owner shall continue to pay for undisputed work in place.

ARTICLE 39 - CLAIMS FOR DAMAGE

- 39.1 Should either party to the Contract suffer damage because of wrongful act or neglect of the other party, or of anyone employed by them, or others for whose act they are legally liable, or if other controversy should arise under the Contract, such claim or controversy shall be made in writing to the other party within thirty (30) days after the first occurrence of the event. Prior to the institution of any action in court, the claim or controversy (together with supporting data) shall be presented in writing to the Director of the Capital Project Management Division at the University of Kentucky ("Director") or his designee. The Director, or designee, is authorized, subject to any limitations or conditions imposed by regulations, to settle, comprise, pay, or otherwise adjust the claim or controversy with the Construction Manager. The Director, or designee, shall promptly issue a decision in writing. A copy of the decision shall be mailed or otherwise furnished to the Construction Manager. The decision rendered shall be final and conclusive unless the Construction Manager files suit pursuant to KRS 45A.245. If the Director, or designee, does not issue a written decision within one hundred and twenty (120) days after written request for a final decision, or within a longer period as may be established by the parties to the Contract in writing, then the Construction Manager may proceed as if an adverse decision had been received.
- Any legal action on the Contract shall be brought in the Franklin Circuit Court and shall be tried by the Court sitting without a jury. All defenses in law or equity, except the defense of government immunity, shall be preserved to the Owner. The Owner shall recover from the Construction Manager all attorney's fees, costs and expenses incurred to the extent the Owner prevails in defending or prosecuting each claim in litigation of disputes under the Contract. The Owner is the prevailing party under this provision and is entitled to recover attorneys' fees, costs and expenses on a claim-by-claim basis to the extent the Owner successfully defeats or prosecutes each claim. A recovery of a net judgment by the Construction Manager shall not be determinative of the Owner's right to recover attorneys' fees, expenses and costs. Rather, such a determination shall be made based on the extent that the Owner successfully defends or prosecutes each distinct claim in litigation under the Contract, even if the Owner does not prevail on every claim. The Construction Manager shall be liable to the Owner for all attorney's fees, costs and expenses incurred by the Owner to enforce the provisions of the Contract.

ARTICLE 40 - LIENS

- The filing and perfection of liens for labor, materials, supplies, and rental equipment supplied on the Work are governed by KRS 376.195 et seq.
- 40.2 Statements of lien shall be filed with the Fayette County Clerk and any action to enforce the same must be instituted in the Fayette Circuit Court, pursuant to KRS 376.250 (5).
- 40.3 The lien shall attach only to any unpaid balance due the Construction Manager for the improvement from the time a copy of statement of lien, attested by the Fayette County Clerk, is delivered to the Owner, pursuant to the provisions of KRS 376.240.

ARTICLE 41 - ASSIGNMENT

Neither party to the Contract shall assign the Contract, or any portion thereof without the prior written consent of the other, which consent may be granted or withheld in the granting party's 41

sole and absolute discretion. The Construction Manager shall not assign any amount or part of the Contract or any of the funds to be received under the Contract unless the Construction Manager has the prior written approval of the Owner (which approval may be granted or withheld in the Owner's sole and absolute discretion) and the Surety on the Construction Manager's bond has given written consent to any such assignment.

ARTICLE 42 - SEPARATE CONTRACTS

- 42.1 The Owner reserves the right to enter into other Contracts in connection with the Project or to perform any work with the Owner's forces in the normal sequence of the work as depicted in the then current construction schedule. Except for work performed by University personnel, such contracts shall be assignable to the Construction Manager and shall contain the same terms and conditions as the contracts between the Construction Manager and the Sub-contractors. The Construction Manager will be entitled to a maximum of three percent (3%) overhead and profit on the value of such assigned contracts. The Construction Manager shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work and shall properly connect and coordinate its Work with theirs in such manner as the Consultant may direct.
- 42.2 Should the Construction Manager cause damage to any separate contractor on the Work, and the separate contractor sues the Owner on account of any damage alleged to have been so sustained, the Construction Manager shall be responsible for all costs, attorney's fees and expenses incurred by the Owner for defending such proceedings unless the Owner prevails on behalf of the Construction Manager in which case fees and expenses will be the responsibility of the separate contractor and if any judgment against the Owner arises therefrom, the Construction Manager shall pay or satisfy it and shall pay all costs, attorney's fees and expenses incurred by the Owner.
- 42.3 If any part of the Construction Manager's Work depends upon the work of any other separate contractor, the Construction Manager shall promptly report to the Consultant any observed defects in such work that render it unsuitable for proper execution connection. The failure to inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of the work, except as to defects which may develop in the other contractor's work after the execution of the work.
- 42.4 Whenever work being done by the Owner's forces or by other contractors is contiguous to work covered by this Contract, the respective rights of the various parties involved shall be established by the Owner to secure the completion of the various portions of the Work in general harmony.

ARTICLE 43 - CONSTRUCTION MANAGER/SUB-CONTRACTOR RELATIONSHIP

- 43.1 The Construction Manager is fully responsible to the Owner for the acts and omissions of the Sub-contractors and of persons either directly or indirectly employed by them. The Construction Manager is responsible for the acts and omissions of persons employed directly by the Construction Manager and for the coordination of the Work, including placement and fittings of the various component parts. No claims for extra costs as a result of the failure to coordinate the Work, or by acts or omissions of the various Sub-contractors, will be paid by the Owner.
- 43.2 Except as otherwise provided in these Contract Documents, the Construction Manager agrees to bind every Sub-contractor by the terms and conditions of the Contract Documents as far as applicable to their portion of the Work. Upon request, the Construction Manager shall provide copies of any subcontracts and purchase orders to the Owner or Consultant.

- 43.3 The Construction Manager shall make no substitution or change in any Sub-contractor listed and accepted by the Consultant or Owner except as approved in writing by the Owner. The Construction Manager shall not employ any Sub-contractor or supplier against whom the Owner or the Consultant has made reasonable and timely objection. The Construction Manager (CM) will not be allowed to self-perform work or bid on any of the proposed work categories unless a subcontractor fails to perform and upon prior approval by the Universities authorized representatives."
- 43.4 Nothing contained in the Contract Documents shall create any contractual relationship between the Owner and any Sub-contractor, Trade Contractor or Supplier, nor shall the Construction Manager include any language in their contracts with any Sub-contractor, Trade Contractor and/or Supplier that might Imply such a relationship. The Construction Manager is hereby notified that it is the Construction Manager's contractual obligation to settle disputes between Sub-contractors, Trade Contractors, and/or Suppliers. Neither the Owner nor the Consultant will settle disputes between the Construction Manager and any Sub-contractor, Trade Contractor, and/or Supplier or between Sub-contractors, Trade Contractors, and/or Suppliers.
- 43.4.1 The Owner does not waive sovereign immunity under KRS 45A.245(1) for any claim or claims made by parties not having a written contract with the University of Kentucky.
- 43.4.2 Third party and/or flow-through type claims, from Sub-contractors and/or suppliers or any other entity not having a written contract directly with the University, are specifically prohibited by this Contract and no provision of the Construction Manager's contracts with such entities shall indicate otherwise.
- 43.4.3 The Construction Manager shall indemnify and hold harmless the Owner and its agents and employees from any claims relating to the Project brought against the Owner by any of the Construction Manager's Sub-contractors or suppliers, or between their sub-contractors or suppliers.

ARTICLE 44 - CASH ALLOWANCE

44.1 The Construction Manager is to provide or require the Sub-contractor(s) to include in the Contract Amount all costs necessary to complete the Work. Costs based on "allowances" shall be permitted only for objectively quantifiable material items and only with the prior written approval of the Owner.

ARTICLE 45 - PROJECT SITE LIMITS

45.1 The Construction Manager shall confine the apparatus, the storage of materials, and the operations of Workmen to Project site limits indicated in the Contract Documents and as permitted by law, ordinances, and permits, and shall not unreasonably encumber the site with materials and equipment.

ARTICLE 46 - CLEAN UP

- 46.1 The Construction Manager shall at all times keep the premises free from accumulation of waste material or rubbish caused by the operations in connection with the Work. All corridors and exit doors must be kept clear at all times. All exit ways, walks, and drives must be kept free of debris, materials, tools and vehicles.
- 46.2 At the completion of the Work, and prior to final inspection and acceptance, the Construction Manager shall remove all remaining waste materials, rubbish, Construction Manager's construction equipment, tools, machinery, and surplus materials and shall leave the Work in a clean and usable

condition, satisfactory to the Consultant and the Owner. If the Construction Manager fails to clean up as provided in the Contract Documents, the Owner may perform the cleaning tasks and charge the cost to the Construction Manager.

ARTICLE 47 - POINTS OF REFERENCE

47.1 The Construction Manager shall carefully preserve bench marks, reference points and stakes, and in case of willful or careless destruction, the Construction Manager shall be charged with the resulting expense of replacement and shall be responsible for any mistake that may be caused by their loss or disturbance.

ARTICLE 48 - SUBSTITUTION - MATERIALS AND EQUIPMENT

- 48.1 Reference to or the listing of items to be incorporated in the construction without referring to any specific article, device, equipment, product, material, fixture, patented process, form, method or type of construction, or by name, make, trade name, or catalog number shall be interpreted as establishing the general intent of the Contract and the general standard of quality for that item.
- 48.2 Specific references in the Contract Documents to any article, device, equipment, product, material, fixture, patented process, form, method or type of construction, or by name, make, trade name, or catalog number, with the words "or equal", shall be interpreted as establishing a minimum standard of quality, and shall not be construed as limiting competition.
- 48.2.1 Substitution of other equipment and materials as "or equal" to items named in the specifications will be allowed provided the proposed substitution is approved by the Consultant and will perform the functions called for by the general design, be similar and of equal quality to that specified and be suited to the same use and capable of performing the same function of that specified. The Construction Manager has the burden to prove equality of any substitution requested.
- 48.3 Specific references in the Contract Documents to any article, device, equipment, product, material, fixture, patented process, form, method or type of construction, or by name, make, trade name, or catalog number, without the words "or equal", shall be interpreted as defining an item or source that has after careful consideration been determined by the University as necessary to be compliant with, and/or to function properly within, the University operational system. No substitutions will be allowed.
- 48.3.1 In the event the Contract Documents contain specific reference to two or more items as described in Article 48.3, any of those listed will be acceptable.
- 48.4 Substitution of equipment and materials previously submitted by the Construction Manager and approved by the Consultant will be considered only for the following reasons:
- 48.4.1 Unavailability of the materials or equipment due to conditions beyond the control of the supplier.
- 48.4.2 Inability of the supplier to meet Contract Schedule.
- 48.4.3 Technical noncompliance to specifications.
- 48.5 In substituting materials or equipment, the Construction Manager assumes responsibility for any changes in systems or modifications required in adjacent or related work to accommodate such substitutions, despite consultant approval, and all costs associated with the substitution shall be the

responsibility of the Construction Manager. The Consultant shall be reimbursed by the Construction Manager for any architectural or engineering revisions required as the result of such substitutions.

48.6 Inclusion of a certain make or type of materials or equipment in the Construction Manager's bid proposal shall not obligate the Owner to accept such materials or equipment if they do not meet the requirements of the Contract Documents and any such substitutions in the preparation of the bid without written approval shall be at the sole risk of the Construction Manager.

ARTICLE 49 - TEST AND INSPECTION

- 49.1 Regulatory agencies of the government having jurisdiction may require any Work to be inspected, tested or approved. The Construction Manager shall assume full responsibility therefore, pay all costs in connection therewith, unless otherwise noted, and furnish the Consultant the required certificates of inspection, testing or approval.
- 49.2 The Construction Manager shall give the Consultant timely notice of readiness of the Work for all inspections, tests or approvals.
- 49.3 The technical specifications may indicate specific testing requirements to be performed by the Construction Manager. Unless otherwise provided in the Contract Documents, the cost of all such testing shall be the responsibility of the Construction Manager. Testing shall be completed using a testing facility or laboratory approved by the Owner.
- 49.4 The costs of all inspection fees as may be required to construct and occupy the Work shall be the responsibility of the Construction Manager.

ARTICLE 50 - WARRANTY

50.1 The Construction Manager warrants to the Owner and the Consultant that all materials and equipment furnished under this Contract shall be new and in accordance with the requirements of the Contract Documents, and that all Work shall be of good quality, free from faults and defects and in conformance with the Contract Documents. If required by the Consultant or the Owner, the Construction Manager shall furnish satisfactory evidence as to the kind and quality of materials and equipment. If the Construction Manager requests approval of a substitution of material or equipment, the Construction Manager warrants that such installation, construction, material, or equipment will equally perform the function for which the original material or equipment was specified. The Construction Manager explicitly warrants the merchantability, the fitness for a particular purpose, and quality of all substituted items in addition to any warranty given by the manufacturer and/or supplier. Approval of any such substitution is understood to rely on such warrant of performance. Prior to the Substantial Completion inspection, the Construction Manager shall deliver to the Consultant all warranties and operating instructions required under the Contract or to which the Construction Manager is entitled from manufacturers, suppliers, and Sub-contractors. All warranties for products and materials incorporated into the Work shall begin on the date of Substantial Completion. The warranty provided in this Article 50 shall be in addition to and not a limitation of any other warranty or remedy required by law or by the Contract Documents, and such warranty shall be interpreted to require the Construction Manager to replace defective material and equipment and re-execute defective Work which is disclosed to the Construction Manager by or on behalf of the Owner within a period of one (1) year after Substantial Completion of the entire Work in addition to other warranty obligations beyond one year from Substantial Completion as provided for by law or by the Contract Documents.

- Neither the final payment, any provision in the Contract Documents nor partial or entire use or occupancy of the premises by the Owner shall constitute an acceptance of Work not done in accordance with Contract Documents or relieve the Construction Manager or its Sureties of liability with respect to any warranties or responsibilities for faulty materials and workmanship. The Construction Manager or its sureties shall remedy any defects in Work and any resulting damage to Work at the Construction Manager's own expense. The Construction Manager shall be liable for correction of all damage resulting from defective Work. If the Construction Manager fails to remedy any defects or damage, the Owner may correct Work or repair damages and the cost and expense incurred in such event shall be paid by or be recoverable from the Construction Manager or the surety. The Owner will give notice of observed defects with reasonable promptness.
- 50.3 The Construction Manager shall guarantee that labor, material, and equipment will be free of defects for a period of one (1) year from the date shown on the Certificate of Substantial Completion unless special conditions or additional warranty periods are required by the contract pursuant to Article 23 in addition to warranty obligations which extend beyond one year from Substantial Completion. The Owner will give notice of observed defects with reasonable promptness. Expendable items and wear from ordinary use are excluded from this warranty.
- Should the Construction Manager be required to perform tests that must be delayed due to climate conditions, it is understood that such tests will be accomplished by the Construction Manager at the earliest possible date with provisions of the general warranty beginning upon satisfactory completion of said test. The responsibility of the Construction Manager under this Article will not be abrogated if the Owner should elect to initiate final payment. If the Owner initiates final payment, consent of Construction Manager's surety acknowledging that Work not yet tested is required. The Construction Manager shall warrant that the entire Project will conform to the Contract Documents.
- In addition to the foregoing, the Construction Manager shall warrant for a period of one (1) year that all buildings and other improvements constructed as a part of the Work shall be watertight and leak proof at every point and in every area. The Construction Manager shall, immediately upon notification by or on behalf of the Owner of water penetration, determine the source of water penetration and, at the Construction Manager's expense, (a) do any work necessary to make such buildings or improvements watertight and (b) repair and replace any other damaged material, finishes and furnishings damaged as a result of such water penetration and return the buildings or other improvements to their original condition.
- The Construction Manager shall address and resolve to the Owner's satisfaction any warranty claims made by or on behalf of the Owner during the above described warranty period and all repairs and replacements made by the Construction Manager pursuant to this Article 50 shall be warranted by the Construction Manager, on the terms set forth in this Article 50, for a period of time commencing upon the completion of such repairs and replacements and ending on the later of (a) the expiration of the one (1) year warranty period provided for above or (b) six (6) months after the date such repair or replacement is completed.
- 50.7 All costs, attorney's fees and expenses incurred by the Owner as a result of the Construction Manager's failure to honor any warranty for the Work shall be paid by or recoverable from the Construction Manager.

ARTICLE 51 - PREVAILING WAGE LAW REQUIREMENTS (NO LONGER USED AS OF 1/9/17)

ARTICLE 52 - APPRENTICES

52.1 Apprentices (for all classifications of work) shall be permitted to work only under an apprenticeship agreement approved by the Kentucky Supervisor of Apprenticeship and by the Kentucky Apprenticeship and Training, United States Department of Labor.

ARTICLE 53 - GOVERNING LAW

53.1 This Contract and all issues and disputes arising out of this Contract shall be governed by, construed and enforced in accordance with the laws of the Commonwealth of Kentucky without consideration of its conflicts of laws principles.

ARTICLE 54 - NONDISCRIMINATION IN EMPLOYMENT

- 54.1 During the performance of the Contract, the Construction Manager agrees as follows:
- 54.1.1 The Construction Manager will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin, or disability in employment. The Construction Manager will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, age, national origin, or disability in employment. Such action shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Construction Manager agrees to post in conspicuous places available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 54.1.2 The Construction Manager will, in all solicitations or advertisements for employees placed by or on behalf of the Construction Manager; state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, national origin or disability in employment.
- 54.1.3 The Construction Manager will send to each labor union or representatives of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the said labor union or workers' representatives of the Construction Manager's commitments under this Article, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- Failure to comply with the above nondiscrimination clause constitutes a material breach of Contract.

ARTICLE 55 - AFFIRMATIVE ACTION; REPORTING REQUIREMENTS

55.1 The Construction Manager and any Sub-contractor is exempt from any affirmative action or reporting requirements, under the Kentucky Equal Employment Opportunity Act of 1978, KRS 45.550 to KRS 45.640 "The Act", if any of the following conditions are applicable:

- 55.1.1 The Trade Contract awarded is in the amount of two hundred and fifty thousand dollars (\$250,000.00) or less, and the amount of the Trade Contract is not a subterfuge to avoid compliance with the provisions of the Act;
- 55.1.2 The Construction Manager or Sub-contractor utilizes the services of fewer than eight (8) employees during the course of the Contract;
- 55.1.3 The Construction Manager or Sub-contractor employs only family members or relatives;
- 55.1.4 The Construction Manager or Sub-contractor employs only persons having a direct ownership interest in the business and such interest is not a subterfuge to avoid compliance with the provisions of The Act.
- 55.2 The Construction Manager and any Sub-contractor, not otherwise exempted, shall:
- 55.2.1 For the length of the Contract, hire DBE's from within the drawing area to satisfy the agreed upon goals and timetables. Should the union with which the General Contractor or Sub-contractor have collective bargaining agreements be unwilling to provide sufficient DBE's to satisfy the agreed upon goals and timetables, the General Contractor and Sub-contractors shall hire DBE's from other sources within the drawing area.

Diverse Business Enterprises (DBE) consist of minority, women, disabled, veteran and disabled veteran owned business firms that are at least fifty-one percent owned and operated by an individual(s) of the aforementioned categories. Also included in this category are disabled business enterprises and non-profit work centers for the blind and severely disabled. MBE, WBE, Veterans, Disabled Veterans and Disabled make up Diverse Business Enterprises (DBE)

- 55.2.2 The equal employment provisions of The Act may be met in part by the Construction Manager contracting to a DBE contractor or Sub-contractor. A DBE contractor, or Sub-contractor shall mean a business established under the definition of a DBE in Article 55.2.1
- 55.2.3 The Construction Manager shall, for the length of the Contract, furnish such information as required by The Act and by such rules, regulations and orders issued pursuant thereto and will permit access by the contracting agency and the department to all books and records pertaining to its employment practices and Work sites for purposes of investigation to ascertain compliance with The Act and such rules, regulations and orders issued pursuant thereto.
- 55.3 If the Construction Manager is found to have committed an unlawful practice against a provision of The Act during the course of performing under this Contract, a Trade Contract or a subcontract covered under The Act, the Owner may cancel or terminate the Contract, conditioned upon a program for future compliance approved by the Owner. The Owner may also declare such Construction Manager ineligible to submit proposals on further contracts until such time as the Construction Manager complies in full with the requirements of The Act.
- Any provisions of The Act notwithstanding, the Construction Manager shall not be required to terminate an existing employee, upon proof that employee was employed prior to the date of the Contract, nor to hire anyone who fails to demonstrate the minimum skills required to perform a particular job.

UNIVERSITY OF KENTUCKY SPECIAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION BY A CONSTRUCTION MANAGER AT RISK

TABLE OF CONTENTS

Contents

| ARTICLE 01 GENERAL INFORMATION | 3 |
|---|------|
| ARTICLE 02 PERMITS AND FEES | 3 |
| ARTICLE 03 (NOT USED) | 3 |
| ARTICLE 04 CONSULTANT | |
| ARTICLE 05 GEOTECHNICAL REPORT NOTE: CONSULTANT TO USE | |
| ONLY ONE OF THE PARAGRAPHS BELOW AND DELETE THE OTHER | 3 |
| ARTICLE 06 TIME FOR COMPLETION | 3 |
| ARTICLE 07 LIQUIDATED DAMAGES | |
| ARTICLE 08 SUBMITTALS AND SHOP DRAWINGS | |
| ARTICLE 09 PLANS, DRAWINGS, AND SPECIFICATIONS | |
| ARTICLE 10 PROGRESS MEETINGS | |
| ARTICLE 11 CRITICAL PATH METHOD (CPM) SCHEDULE | |
| ARTICLE 12 WALK-THROUGH | |
| ARTICLE 13 OWNER'S CONSTRUCTION REPRESENTATIVE | |
| ARTICLE 14 FIELD OFFICE | |
| ARTICLE 15 TELEPHONE SERVICE | |
| ARTICLE 16 CONSTRUCTION FENCE | |
| ARTICLE 17 PROJECT SIGN | |
| ARTICLE 18 PARKING | |
| ARTICLE 19 SANITARY FACILITIES | |
| ARTICLE 20 RULES OF MEASUREMENT | |
| ARTICLE 21 ALLOWANCES | |
| ARTICLE 22 CONSTRUCTION CONTINGENCY FUNDS | |
| ARTICLE 23 SEQUENCE OF CONSTRUCTION | |
| ARTICLE 24 CRANE & MATERIAL HOIST OPERATIONS | |
| ARTICLE 25 UTILITIES | |
| ARTICLE 26 CLEANING AND TRASH REMOVAL | |
| ARTICLE 27 BLASTING | |
| ARTICLE 28 CUTTING AND PATCHING - NEW AND EXISTING WORK | |
| ARTICLE 29 UNRELATED PROJECTS | |
| ARTICLE 30 OWNER SUPPLIED MATERIALS | |
| ARTICLE 31 REMOVED ITEMS | |
| ARTICLE 32 INTERIOR ENCLOSURE AND DUST ENCAPSULATION | |
| ARTICLE 33 UKIT COMMUNICATIONS AND NETWORK SYSTEMS | . 33 |
| ARTICLE 34 EMERGENCY VEHICLE ACCESS | . 33 |
| ARTICLE 35 SMOKE DETECTORS / FIRE ALARM SYSTEMS- EXISTING | |
| AND/OR NEW FACILITIES | . 33 |
| ARTICLE 36 SURVEYS, RECORDS, and REPORTS | |
| ARTICLE 37 SMOKING IS PROHIBITED | |
| | |

| ARTICLE 38 ALTERNATES | 35 |
|---|----|
| ARTICLE 39 FIELD CONSTRUCTED MOCK UPS | 35 |
| ARTICLE 40 PROJECT COORDINATION VIA COMPUTER | 36 |
| ARTICLE 41 HOT WORK PERMITS | |
| ARTICLE 42 INSURANCE | 37 |
| ARTICLE 43 KEY ACCESS | 38 |
| ARTICLE 44 CEILING CLEARANCE | 38 |
| ARTICLE 45 METAL ANCHORS | 39 |
| ARTICLE 46 LOADING DOCK | 39 |
| ARTICLE 47 CONSTRUCTION PATH | 39 |
| ARTICLE 48 HOSPITAL PROJECT PROCEDURE | 39 |
| ARTICLE 49 WORKING HOURS/ACCESS: FOR MEDICAL | |
| CENTER/HOSPITAL | 39 |
| ARTICLE 50 SECURITY BADGES AND MEDICAL CENTER SECURITY | 39 |
| ARTICLE 51 HOSPITAL CONSTRUCTION CERTIFICATION | 39 |
| ARTICLE 52 APPEARANCE | 39 |
| ARTICLE 53 HIPAA (The Health Insurance Portability and Accountably Act) | 39 |
| ARTICLE 54 SAFETY & FIRE PROCEDURES | 39 |
| ARTICLE 55 INTERIM LIFE SAFETY MEASURES (ILSM) | 39 |
| ARTICLE 56 TREE PROTECTION STANDARDS | 40 |
| ARTICLE 57 CONTRACTOR/SUPERINTENDENT EXPERIENCE | 40 |
| ARTICLE 58 COVID-19 POLICY | 46 |

ARTICLE 01 GENERAL INFORMATION

- 1.1 These Special Conditions are intended to modify, supplement, or delete from, applicable Articles of the General Conditions.
- 1.2 Where any Article of the General Conditions is supplemented by these Special Conditions, the Article shall remain in effect and the supplement shall be added thereto.
- 1.3 Where Special Conditions conflict with General Conditions, provisions of the Special Conditions take precedence.

ARTICLE 02 PERMITS AND FEES (NOT USED)

ARTICLE 03 (NOT USED)

ARTICLE 04 CONSULTANT

4.1 Wherever in these Contract Documents reference is made to the Consultant, it shall be understood to mean To Be Determined or their duly authorized representatives. (See Article 2 of the General Conditions.)

ARTICLE 05 GEOTECHNICAL REPORT

5.1 No subsurface or geotechnical survey information is available at this time.

ARTICLE 06 TIME FOR COMPLETION

6.1 The time for Substantial Completion as further defined in Article 1 of the General Conditions shall be 457 consecutive calendar days from the date of commencement as specified in the Work Order letter, and Final Completion shall be 30 days thereafter.

ARTICLE 07 LIQUIDATED DAMAGES

- 7.1 Should the Construction Manager fail to achieve Substantial Completion of the Work under this Contract on or before the date stipulated for Substantial Completion (or such later date as may result from extensions in the Contract Time granted by the Owner), he agrees that the Owner is entitled to, and shall pay the Owner as liquidated damages the sum of \$Seven hundred ninety one Dollars (\$791.00) for each consecutive calendar day that Substantial Completion has not been met. See Article 3 of the Agreement.
- 7.2 Should the Construction Manager fail to achieve Final Completion of the Work under this Contract on or before the date stipulated for Final Completion (or such later date as may result from extensions in the Contract Time granted by the Owner), he agrees that the Owner is entitled to, and shall pay the Owner as liquidated damages the sum of

\$One hundred and six Dollars (\$106.00) for each consecutive calendar day until Final Completion is reached. See Article 3 of the Agreement.

ARTICLE 08 SUBMITTALS AND SHOP DRAWINGS

8.1 SUBMITTALS - GENERAL

- 8.1.1 The Construction Manager shall submit each set of Shop Drawings, product data, samples, and test and/or certification reports and samples as a separate item in <u>UK E-Communication®</u>. <u>Projects not utilizing UK E-Communication® must submit all items electronically to the Consultant and the UK Project Manager and Administrative Coordinator.</u>
- 8.1.2 All sample selections for color shall be submitted for approval at the same time. Color selections shall not be submitted individually.
- 8.1.3 Any deviation from the Contract Documents shall be noted on the transmittal form comment section.
- 8.1.4 All submittals are to be reviewed by the Construction Manager for compliance with the Contract Documents before submission for approval. All submittals are to be initiated by the Construction Manager. Submittals made directly to the Consultant by sub-contractors, manufacturers or suppliers will not be accepted or reviewed.
- 8.1.5 Re-submittals shall conspicuously note all changes from earlier submissions. Special notation by the Construction Manager shall be made to any changes other than those made in response to the Consultant's review.
- 8.1.6 Manufacturers shall, when requested by the Consultant, submit test reports prepared by reputable firms or laboratories certifying as to performance, operation, construction, wearability, etc., to support claims made by the manufacturer of the equipment or materials proposed for inclusion in the Work. Construction Manager shall also submit a list of three (3) installations where said equipment or materials have been in service for a minimum of five (5) years.

8.2 SUBMISSIONS - REVIEW

- 8.2.1 Review of submittals is only for compliance with the design concept and the contract documents. THE CONSULTANT SHALL NOT BE RESPONSIBLE FOR CHECKING DEVIATIONS FROM CONTRACT DOCUMENT REQUIREMENTS OR CHANGES FROM EARLIER SUBMISSIONS NOT SPECIFICALLY NOTED.
- 8.2.2 The following shall be verified prior to making submittals:

Field Measurements, Field Construction Criteria, Catalog numbers and similar data, Quantities and Capacities, and Compliance with requirements, including verification of all dimensions,

- 8.2.3 Review Stamp designations shall be as follows:
- 8.2.3.1 "NET = No Exceptions Taken": Proceed with the Work, no corrections needed.

8.2.3.2

"FC= Furnish as Corrected": Proceed with the Work, noting the corrections/conditions of the approval.

- 8.2.3.3 "RR = Revise and Resubmit": Do not proceed with the Work, as the submittal does not comply with the Contract Documents. Revisions to the submittal are required for approval. On projects utilizing UK E-Communication, "Send Back a Step" is used in lieu of "Revise and Resubmit"
- 8.2.3.4 "R = rejected": Do not proceed with the Work, the submittal is rejected.
- 8.3 SUBMISSIONS SPECIAL PROVISIONS
- 8.3.1 In making a submittal, the Construction Manager shall be deemed to be making the following representations:
- 8.3.1.1 The Construction Manager understands and agrees that he shall bear full responsibility for the products furnished. The Construction Manager expressly warrants that products described in the attached submittal will be usable and that they conform to the Contract requirements unless specifically noted otherwise.
- 8.3.1.2 The Construction Manager understands and agrees that, without assuming design responsibility, he expressly warrants that products described in the attached submittal are capable of being used in accordance with the intent of the design documents and that they conform to the Contract requirements unless specifically noted otherwise.
- 8.3.1.3 The Construction Manager acknowledges that the Owner will rely on the skill, judgment, and integrity of the Construction Manager as to conformance requirements and subsequent usability.

8.4 SHOP DRAWING AND PROCUREMENT SUBMITTAL LOG

8.4.1 The Construction Manager, within ten (10) days after the Pre-Construction meeting, shall begin uploading submittals using UK E-Communication[®], to generate a log fixing the dates for submission of Shop Drawings, special order material items, certifications, guarantees, and any other items required to be submitted to the Consultant for review, approval or acceptance. Projects not utilizing UK E-Communication[®] will submit a Shop Drawing Log provided by the Owner during the Pre-Construction

5

Meeting.

8.4.2 The log shall track all submittals to date. The updated log shall then be reviewed and discussed at each progress meeting to determine items that may impact the construction schedule.

8.5 Shop Drawings

- 8.5.1 The Construction Manager shall review, approve, and submit Shop Drawings to the Consultant, in accordance with the Consultant's Shop Drawing & Procurement Submittal Log or UK E-Communication[®], as herein detailed. By approving and submitting Shop Drawings, the Construction Manager represents that he has determined and verified all materials, field measurements, and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.
- 8.5.2 The Construction Manager shall submit Shop Drawings required for the Work and the Consultant will review and take appropriate action. The review and approval shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The approval of a separate item will not indicate approval of the assembly in which the item functions.
- 8.5.3 The Construction Manager shall make any corrections required by the Consultant for compliance to the Contract and shall return the required number of corrected copies of Shop Drawings and resubmit new samples until approved. The Construction Manager shall direct specific attention, in writing, or on resubmitted Shop Drawings, to revisions other than the corrections called for by the Consultant on previous submissions. The Construction Manager's stamp of approval on any shop drawing or sample shall constitute a representation to Owner and Design Consultant that the Construction Manager has either determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar date, or he assumes full responsibility for doing so, and that he has reviewed or coordinated each shop drawing or sample with the requirements of the Work and the Contract Documents.
- 8.5.4 Where a shop drawing or sample submission is required by the specifications, no related Work shall be commenced until the submission has been approved by the Design Consultant. A copy of each approved shop drawing and each approved sample shall be kept in good order by the Construction Manager at the site and shall be available to the Consultant.
- 8.5.5 The Consultant's approval of Shop Drawings or samples shall not relieve the Construction Manager from his responsibility for any deviations from the requirements of the Contract Documents unless the Construction Manager has in writing called the Consultant's attention to such deviation at the time of submission and the Consultant has given written approval to the specific deviation. Any approval by the Consultant shall

not relieve the Construction Manager from responsibility for errors or omissions in the Shop Drawings.

- 8.5.6 All submittals are to be submitted electronically by the contractor. Shop Drawings submitted through UK E-Communication® shall be scanned and submitted in color. Mark-ups must be made using visible color when printed. Workflow in UK E-Communication® will be established during the workflow meeting. Each individual Shop Drawing shall have its respective specification number and description highlighted.
- 8.5.7 Where Shop Drawings include fire alarm, communication systems schematics, sprinkler systems, etc., a sepia of each drawing shall be submitted to the Consultant as part of the "Record" set of drawings.

8.6 SUBMISSIONS - SAMPLES

- 8.6.1 Office samples shall be of sufficient size and quantity to clearly illustrate functional characteristics of the product with integrally related parts and attachment devices, and full range of color, texture, and pattern.
- 8.6.2 Products shall not be used until the sample has been submitted to and approved by the Consultant.
- 8.6.3 A minimum of two (2) samples are required to be submitted to the Consultant for review and approval and will be distributed as follows:
 - a) One to be retained by the University;
 - b) One to be returned to the Design Consultant;
 - c) An additional sample or samples may be submitted, at the Construction Manager's option, for distribution to a third party.
- 8.6.4 Field samples (block, brick, etc.) of materials to be constructed at the site shall be submitted for review as required by the individual section of the Contract Documents.

8.7 SUBMISSIONS - OPERATION AND MAINTENANCE MANUALS

8.7.1 The University requires a minimum of one (1) bound copies and one (1) digital copy of the final installation, training, operation, maintenance, and repair manuals to be turned over to the Owner's Project Manager and approved for content by the Consultant by or before the time construction is 75% complete. Projects utilizing e-Communication will create digital copy from the Document Library (Closeouts) in e-Communication. The Closeout Log must contain individual line items for each physical copy submitted with corresponding PDF attachments. Operation and maintenance manuals and materials, where specified, for mechanical and electrical equipment and for operating items other than mechanical and electrical equipment must be submitted in PDF format with a separate PDF file for each item. In the event the Construction Manager fails to

Rev. March 2022 010000S01 - Special Conditions - Construction Manager at Risk

provide these required electronic submittals prior to reaching seventy-five (75%) completion, it is agreed that the Owner at its sole discretion may deduct from the current and subsequent Applications for Payment an amount deemed by the Owner to be sufficient to encourage prompt compliance with this contractual requirement, until such time as acceptable O&M manuals are received.

- 8.7.2 Manuals provided must be of sufficient detail to enable the Owner or others to install, calibrate, train, operate, maintain, service and repair every system, subsystem, and/or piece of equipment installed on or as part of this Contract. Manuals submitted through UK E-Communication® shall be scanned and submitted in color. Mark-ups must be made using visible color when printed. Each manual must contain:
- 8.7.2.1 Project Title, Project number, Location, dates of submittals, names, addresses and phone number for the Consultant, Construction Manager, and Construction Manager's Sub-contractors;
- 8.7.2.2 An Equipment Index that includes vendors' names, addresses, and telephone numbers for all equipment purchased on the Project;
- 8.7.2.3 Emergency instructions with phone numbers and names of contact persons on warranty items shall be uploaded to UK E-Communication®;
- 8.7.2.4 Copies of each system's air balancing record and each system's hydronic balancing record (1) physical copy and (1) digital copy in eCommunication;
- 8.7.2.5 Copy of valve tag list;
- 8.7.2.6 Copy of As-Built temperature control system drawings and components and sequence of operation;
- 8.7.2.7 Original copies of the following provided by the manufacturer:

Installation manuals

Training manuals

Service Manual

Parts list

Instruction Manuals

Calibration manuals

Operation manuals

Repair manuals

Reviewed Shop Wire list

Drawings Keying Bit List

8.7.2.8 Any Computer, Micro controller, and/or Microprocessor equipped equipment installed shall be provided with source code copies of all software and firmware (prom, eprom, rom, other) supplied on this Contract; and

Rev. March 2022 010000S01 - Special Conditions - Construction Manager at Risk

- 8.7.2.9 Copies of all inspection and guarantee certificates, manufacturers' warranties with the University of Kentucky listed as the Owner for all equipment provided and/or installed.
- 8.7.2.10 All manuals shall be as follows: Bound in hard cover three(3) ring (D-type) binder, 1", 1.5" or 2" maximum, indexed and in CSI format, tabbed (4,5,8 or 16th cut), no more than 80% binder fill, white vinyl, presentation type with clear vinyl view cover on front, back and spine and with pockets on front and back. Maximum drawing size in binder shall be folded 11"x17" and shall be hole punched and reinforcements added. Do not put drawings in pockets. Top of all drawings shall be at top or spine side of the manual. Complete drawings must be viewed without opening rings. Provide binders as manufactured by Universal Office Products, Des Plaines, IL. 1"(S# B2-20742), 1.5"(B2-20744), or 2"(B2-20746) or equal.
- 8.7.2.11 If the binder includes manuals from any one vendor covering several different model numbers, the model used on the Project must be highlighted.
- 8.7.2.12 Included in the front of the "Operation and Maintenance Manual" shall be a copy of the Interior and Exterior Finish plan and Schedule listing all finish materials, the manufacturer, the finish color, and the manufacturer's paint number.
- 8.7.2.13 Photograph album containing photos and negatives or digital images (.pdf format) showing buried utilities and concealed items shall be included.
- 8.8 SUBMISSIONS AS BUILT SET OF DRAWINGS
- 8.8.1 The Construction Manager shall submit one (1) electronic copy of As Built set of drawings in PDF format indicating all deviations of construction as originally specified in the Contract Documents. These As-Built Drawings will compile information from the Construction Manager as well as all Sub-contractors. The Construction Manager shall provide a qualified representative to update the As Built set of drawings as construction progresses. As-Builts submitted through UK E-Communication® shall be scanned and submitted in color. Mark-ups must be made using visible color when printed.
- 8.8.2 The Construction Manager shall provide and utilize a camera to photograph the installation of buried utilities and concealed items. The Construction Manager shall provide standard 3 1/2" x 5" photographs with negatives, or digital images (.jpeg format), which shall be submitted as part of the Operation and Maintenance Manuals submission. These photos should be mounted in a bound album with labeling as to subject of photo, date, and Project. Such album is to be kept at job site with the As Built Set of Drawings until submittal of same.
- 8.8.3 Approval of the Final Payment request will be contingent upon compliance with these provisions. The Construction Manager's As Built set of drawings shall be

9

delivered to the Consultant at their completion so that the Consultant may make any changes on the original contract drawings.

8.9 SUBMISSIONS - SAP EQUIPMENT LIST

- 8.9.1 Complete equipment list for use with SAP software in electronic spreadsheet format. Data is to be provided in Uniformat format with the information being provided for individual locations as noted in Attachment A Uniformat Component List. Information is to be provided as follows (MCPPD or CPPD will provide blank Excel spreadsheets in electronic form for use in compiling the information, if desired)
- 8.9.2 All materials that require preventative maintenance (PM) are listed as in Attachment A. The equipment list is to be provided in Excel spreadsheet format and is to include the information listed in Attachment B
- 8.9.3 Required maintenance procedure listing each work task in Excel spreadsheet format as shown in Attachment C.
- 8.9.4 Required frequency of maintenance for the work tasks outlined in 8.9.3 above and included in the Attachment C spreadsheet
- 8.9.5 Listing of maintenance parts and items: i.e. filters, lubricants, etc. for each work task listed in 8.9.3 above.

8.10 SUBMISSIONS – MAINTENANCE MATERIALS

8.10.1 If specified, Maintenance/Replacement Materials, Spare Parts, and special maintenance tools for proper maintenance shall be provided by the CM At Risk.

ARTICLE 8.9 Attachment A – Uniformat Component List

| SAP Object Type No. | Component Name |
|---------------------|-----------------------------------|
| | |
| D5030.0232 | Access Control Panel |
| D3050.0110 | Air Conditioning Comp Rm Unit |
| D3030.0610 | Air Conditioning Compressor |
| D3030.0620 | Air Conditioning Condensing Unit |
| D3050.0120 | Air Conditioning Pkg Rooftop Unit |
| D3050.0130 | Air Conditioning Pkg Terminal Unt |
| D3030.0630 | Air Conditioning Split System |
| D3050.0140 | Air Conditioning Unit Package |
| D3050.0150 | Air Conditioning Unit Window |
| D3050.0710 | Air Curtain / Heater |
| D2090.0120 | Air Dryer |
| D3010.0443 | Air Eliminator |
| D3040.0110 | Air Handling Unit |
| D5090.0220 | Auto Transfer Switch - Electrical |
| | Automatic Door Operator |
| D2020.0330 | Backflow Preventers |
| D3020.0110 | Boiler, Steam System |
| D5030.0241 | Camera |
| D5030.0231 | Card Access System |
| D3030.0300 | Chiller, Reciprocate |
| E1090.0250 | Chutes & Collectors |
| D5010.0510 | Circuit Breaker Panel |
| F1020.0230 | Clean Rooms |
| F1020.0240 | Cold Storage Rooms |
| D2090.0110 | Compressor, Air |
| D3060.0250 | Controls, Building System |
| E1090.0317 | Cooler, Commercial |
| D3030.0510 | Cooling Tower, Packaged |
| D2010.1300 | Copper Silver Ion Equipment |
| D4090.0510 | Dampers Fire |
| D4090.0500 | Dampers Fire/Smoke |
| D4090.0520 | Dampers Smoke |
| D3050.0400 | Dehumidifiers |
| D2090.0200 | Deionized Water System |
| E1090.0391 | Dishwasher, Commercial |
| B2030.0160 | Door, Auto Entrance |
| B2030.0100 | Door, Exterior Entrance |

| C1020.0330 Door, Fire Separate | | |
|--|------------|----------------------------------|
| D2010.0800 Drinking Fountain D5010.0350 Electric Switchboard E1030.0310 Elevator, Dock Leveler D1090.0120 Elevator, Dumbwait Electric D1090.0130 Elevator, Dumbwait Hydraulic D1010.0140 Elevator, Hydraulic Passenger D1010.0230 Elevator, Hydraulic Passenger D1010.0240 Elevator, Platform Lift D1010.0130 Elevator, Sidewalk Lift D1010.0110 Elevator, Traction Freight D1010.0220 Elevator, Wheelchair Lift D2010.100 Emergency Eyewash D2010.100 Emergency Eyewash/Shower D5090.0810 Emergency Eyewash/Shower D5090.0810 Emergency Eyewash/Shower D3050.0600 Emergency Eyewash/Shower D3050.0600 Emergency Eyewash/Shower D3050.0600 Energency Eyewash/Shower D3050.0500 Energency Eyewash/Shower D3050.0500 Energency Eyewash/Shower D3050.0500 Energency Eyewash/Shower D3050.0500 Energency Eyewash/Shower D3050.0600 Energency Eyewash/Shower | C1020.0330 | Door, Fire Separate |
| DS010.0350 Electric Switchboard | C1020.0320 | Door, Smoke Partition |
| Elevator, Dock Leveler | D2010.0800 | Drinking Fountain |
| D1090.0120 Elevator, Dumbwait Electric | D5010.0350 | Electric Switchboard |
| D1090.0130 Elevator, Dumbwait Hydraulic D1010.0140 Elevator, Hydraulic Freight D1010.0120 Elevator, Hydraulic Passenger D1010.0230 Elevator, Platform Lift D1010.0240 Elevator, Sidewalk Lift D1010.0130 Elevator, Sidewalk Lift D1010.0110 Elevator, Traction Freight D1010.0110 Elevator, Traction Passenger D1010.0220 Elevator, Wheelchair Lift D2010.1100 Emergency Eyewash D2010.1100 Emergency Eyewash D2010.1200 Emergency Eyewash/Shower D5090.0810 Emergency Generator D2010.1200 Emergency Shower D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0121 Fan, Centrifugal D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0134 Fire Alarm AV Devices D5030.0134 Fire Alarm Door Holder D5030.0133 Fire Alarm Door Holder D5030.0133 Fire Alarm Door Holder D5030.0135 Fire Alarm Pull Station D5030.0136 Fire Alarm Pune D5030.0137 Fire Alarm Pune D5030.0137 Fire Alarm Pune D5030.0138 Fire Alarm Pune D5030.0139 Fire Alarm Pune D5030.0131 Fire Alarm Pune D5030.0135 Fire Alarm Pune D5030.0136 Fire Alarm Pune D5030.0137 Fire Alarm Signal Speaker D5030.0138 Fire Alarm Signal Speaker D5030.0139 Fire Alarm Soke Detectors D5030.0130 Fire Alarm Soke Detectors D5030.0131 Fire Alarm Soke Detectors D5030.0132 Fire Alarm Soke Detectors D5030.0133 Fire Alarm Soke Detectors D5030.0134 Fire Extinguisher Cabinet D4030.0100 Fire Extinguisher Cabinet D4030.0100 Fire Extinguisher Cabinet | E1030.0310 | Elevator, Dock Leveler |
| D1010.0140 Elevator, Hydraulic Freight | D1090.0120 | Elevator, Dumbwait Electric |
| D1010.0120 Elevator, Hydraulic Passenger | D1090.0130 | Elevator, Dumbwait Hydraulic |
| D1010.0230 Elevator, Platform Lift | D1010.0140 | Elevator, Hydraulic Freight |
| D1010.0240 Elevator, Sidewalk Lift | D1010.0120 | Elevator, Hydraulic Passenger |
| D1010.0130 Elevator, Traction Freight | D1010.0230 | Elevator, Platform Lift |
| D1010.0110 Elevator, Traction Passenger | D1010.0240 | Elevator, Sidewalk Lift |
| D1010.0220 Elevator, Wheelchair Lift D2010.1100 Emergency Eyewash D2010.1000 Emergency Eyewash/Shower D5090.0810 Emergency Generator D2010.1200 Emergency Shower D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3040.0120 Fan Coil Unit D3040.0121 Fan, Axial D3040.0122 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0139 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Heat Detectors D5030.0137 Fire Alarm Panel D5030.0138 Fire Alarm Signal Speaker D5030.0130 Fire Alarm Smoke Detectors D5030.0138 Fire Alarm System D5030.0138 Fire Alarm System D5030.0130 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D1010.0130 | Elevator, Traction Freight |
| D2010.1100 Emergency Eyewash D2010.1000 Emergency Eyewash/Shower D5090.0810 Emergency Generator D2010.1200 Emergency Shower D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0121 Fan, Axial D3040.0122 Fan, Axial D3040.011 Fan, Centrifugal D3040.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0139 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Pull Station D5030.0135 Fire Alarm Pull Station D5030.0130 Fire Alarm Signal Speaker D5030.0131 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0300 Fire Extinguisher Cabinet | D1010.0110 | Elevator, Traction Passenger |
| D2010.1000 Emergency Eyewash/Shower D5090.0810 Emergency Generator D2010.1200 Emergency Shower D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0122 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0121 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0131 Fire Alarm Heat Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Punel D5030.0137 Fire Alarm Punel D5030.0137 Fire Alarm Signal Speaker D5030.0130 Fire Alarm Signal Speaker D5030.0130 Fire Alarm Smoke Detectors D5030.0131 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0133 Fire Alarm Signal Speaker D5030.0130 Fire Alarm Signal Dev D4030.0100 Fire Extinguisher Cabinet D4030.0100 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D1010.0220 | Elevator, Wheelchair Lift |
| D5090.0810 Emergency Generator D2010.1200 Emergency Shower D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0121 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0139 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Heat Detectors D5030.0137 Fire Alarm Panel D5030.0137 Fire Alarm Signal Speaker D5030.0130 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0300 Fire Extinguisher Cabinet | D2010.1100 | Emergency Eyewash |
| D2010.1200 Emergency Shower D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0122 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Heat Detectors D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0132 Fire Alarm Signal Speaker D5030.0130 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0300 Fire Extinguisher Cabinet | D2010.1000 | Emergency Eyewash/Shower |
| D3050.0600 Energy Recovery Unit F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0121 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Panel D5030.0137 Fire Alarm Signal Speaker D5030.0130 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0300 Fire Extinguisher Cabinet | D5090.0810 | Emergency Generator |
| F1020.0260 Environmental Unit D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0122 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0137 Fire Alarm Panel D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0300 Fire Extinguisher Cabinet | D2010.1200 | Emergency Shower |
| D3040.0120 Fan D3050.0520 Fan Coil Unit D3040.0122 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Door Holder D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0138 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0300 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D3050.0600 | Energy Recovery Unit |
| D3050.0520 Fan Coil Unit D3040.0122 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Signal Speaker D5030.0137 Fire Alarm Signal Speaker D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0300 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | F1020.0260 | Environmental Unit |
| D3040.0122 Fan, Axial D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0130 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Balnket & Cabinet D4030.0300 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D3040.0120 | Fan |
| D3040.0121 Fan, Centrifugal D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0300 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D3050.0520 | Fan Coil Unit |
| D3040.0410 Fan, Exhaust D5030.0141 Fire Alarm Annunciator D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0136 Fire Alarm Panel D5030.0137 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0300 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D3040.0122 | Fan, Axial |
| D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0138 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0300 Fire Extinguisher Cabinet | D3040.0121 | Fan, Centrifugal |
| D5030.0134 Fire Alarm AV Devices D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0300 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D3040.0410 | Fan, Exhaust |
| D5030.0139 Fire Alarm Door Holder D5030.0144 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0300 Fire Extinguisher Cabinet | D5030.0141 | Fire Alarm Annunciator |
| D5030.0134 Fire Alarm Duct Detector D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0300 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D5030.0134 | Fire Alarm AV Devices |
| D5030.0133 Fire Alarm Heat Detectors D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0300 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D5030.0139 | Fire Alarm Door Holder |
| D5030.0136 Fire Alarm Horns D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D5030.0144 | Fire Alarm Duct Detector |
| D5030.0131 Fire Alarm Panel D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D5030.0133 | Fire Alarm Heat Detectors |
| D5030.0135 Fire Alarm Pull Station D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D5030.0136 | Fire Alarm Horns |
| D5030.0137 Fire Alarm Signal Speaker D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D5030.0131 | Fire Alarm Panel |
| D5030.0132 Fire Alarm Smoke Detectors D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D5030.0135 | Fire Alarm Pull Station |
| D5030.0130 Fire Alarm System D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D5030.0137 | Fire Alarm Signal Speaker |
| D5030.0138 Fire Alarm Visual Signal Dev D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D5030.0132 | Fire Alarm Smoke Detectors |
| D4030.0200 Fire Blanket & Cabinet D4030.0100 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D5030.0130 | Fire Alarm System |
| D4030.0100 Fire Extinguisher Cabinet D4030.0300 Fire Extinguisher Wheeled | D5030.0138 | Fire Alarm Visual Signal Dev |
| D4030.0300 Fire Extinguisher Wheeled | D4030.0200 | Fire Blanket & Cabinet |
| | D4030.0100 | Fire Extinguisher Cabinet |
| D4090.0300 Fire Extinguishing System, Clean | D4030.0300 | Fire Extinguisher Wheeled |
| | D4090.0300 | Fire Extinguishing System, Clean |

| D4090.0200 | Fire Extinguishing System, CO2 | | | |
|------------|---|--|--|--|
| D4090.0400 | Fire Extinguishing System, Dry Chemical | | | |
| D4090.0100 | Fire Extinguishing System, Foam | | | |
| D4090.0000 | Fire Extinguishing System, Other | | | |
| G3010.0310 | Fire Hydrant | | | |
| E1090.0330 | Food Cooking Equipment | | | |
| E1090.0310 | Food Stor/Prep Equipment | | | |
| D2090.0400 | Fuel Oil System | | | |
| D3040.0460 | Fume Hood System | | | |
| D3020.0310 | Furnaces | | | |
| D2030.0260 | Grease Trap | | | |
| D3050.0580 | Heat Exchanger | | | |
| D2020.0260 | Heater Domestic Water | | | |
| D3050.0521 | Heater, Cabinet Unit | | | |
| D3050.0581 | Heater, Cast Iron Radiator | | | |
| D3050.0530 | Heater, Fin Tube Radation | | | |
| D3050.0540 | Heater, Induction Unit | | | |
| D3050.0560 | Heater, Unit | | | |
| D3050.0570 | Heater, Unit Vent | | | |
| F1040.0700 | Heliport System | | | |
| E1090.0340 | Hood/Vent Equip | | | |
| D3050.0300 | Humidifier | | | |
| E1090.0380 | Ice Machines | | | |
| D5020.0330 | Light, Emergency Exterior | | | |
| D5020.0230 | Light, Emergency Interior | | | |
| D5020.0231 | Light, Exit | | | |
| E1020.0831 | Medical Air Compressor | | | |
| E1020.0900 | Medical Gas Alarm | | | |
| E1020.1000 | Medical Gas Area Alarm | | | |
| E1020.0840 | Medical Gas Auto Pressure Switch | | | |
| E1020.0834 | Medical Gas Manifold | | | |
| E1020.0835 | Medical Gas N2O | | | |
| E1020.0839 | Medical Gas Outlet | | | |
| E1020.0837 | Medical Gas Shut-off Valve | | | |
| E1020.0830 | Medical Gas System | | | |
| E1020.0838 | Medical Nitrogen | | | |
| E1020.0810 | Medical Sterilizer Equipment | | | |
| E1020.0832 | Medical Vacuum Pump | | | |
| D5010.0711 | Motor Control Center | | | |
| D5010.0720 | Motor, Electric | | | |
| D5030.0431 | Nurse Call System | | | |
| | | | | |

| E1090.0210 | _ | | | |
|---|------------|--|--|--|
| D5030.0420 | E1090.0210 | Packaged Incinerator | | |
| C1010.0180 Partition Fire Rated C1010.0190 Partition, Smoke D1090.0141 Pneumatic Tube Blower D1090.0142 Pneumatic Tube System D1090.0143 Pneumatic Tube Transfer Unit D3010.0430 Pump D3010.0432 Pump, Demestic Hot Water D2020.0222 Pump, Domestic Hot Water Recirculation D2020.0221 Pump, Domestic Water Booster D4010.0111 Pump, Fire D3010.0431 Pump, Hostey Fire D3030.0720 Pump, Rooftop Heat D3030.0720 Pump, Steam D2040.0270 Pump, Sump D2030.0330 Pump, Water Booster D3030.0330 Pump, Water Heat E1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Deluge System D4010.0400 Sprinkler, Standpipe D4010.0401 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5 | D3010.0550 | Packaged Solar Equipment | | |
| C1010.0190 Partition, Smoke D1090.0141 Pneumatic Tube Blower D1090.0142 Pneumatic Tube Station D1090.0143 Pneumatic Tube Transfer Unit D3010.0430 Pump D3030.0710 Pump, Air Source Heat D3010.0432 Pump, Dimestic Hot Water D2020.0222 Pump, Domestic Hot Water Recirculation D2020.0221 Pump, Domestic Water Booster D4010.0111 Pump, Fire D3010.0431 Pump, Heating Water D4010.0112 Pump, Jockey Fire D3030.0720 Pump, Rooftop Heat D3010.0433 Pump, Steam D2040.0270 Pump, Sump D2030.0330 Pump, Waste D2030.0330 Pump, Water Booster D3030.0730 Pump, Water Heat E1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0200 Sprinkler, Combo System D4010.0200 Sprinkler, Standpipe D4020 | D5030.0420 | Paging Systems | | |
| D1090.0141 Pneumatic Tube Station D1090.0142 Pneumatic Tube System D1090.0143 Pneumatic Tube System D1090.0143 Pneumatic Tube Transfer Unit D3010.0430 Pump D3010.0432 Pump, Air Source Heat D3010.0432 Pump, Chilled Water D2020.0222 Pump, Domestic Hot Water Recirculation D2020.0221 Pump, Domestic Water Booster D4010.0111 Pump, Fire D3010.0431 Pump, Heating Water D4010.0112 Pump, Rooftop Heat D3010.0433 Pump, Rooftop Heat D3010.0433 Pump, Sump D2040.0270 Pump, Sump D2030.0330 Pump, Water Booster D3030.0730 Pump, Water Booster D3030.0730 Pump, Water Heat E1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0400 Sprinkler, Combo System D4010.0200 Sprinkler, Deluge System | C1010.0180 | Partition Fire Rated | | |
| D1090.0142 | C1010.0190 | Partition, Smoke | | |
| D1090.0140 | D1090.0141 | Pneumatic Tube Blower | | |
| D1090.0143 | D1090.0142 | Pneumatic Tube Station | | |
| D3010.0430 | D1090.0140 | Pneumatic Tube System | | |
| D3030.0710 Pump, Air Source Heat D3010.0432 Pump, Chilled Water D2020.0221 Pump, Domestic Hot Water Recirculation D4010.0111 Pump, Fire D4010.0112 Pump, Heating Water D4010.0112 Pump, Heating Water D4010.0132 Pump, Rooftop Heat D3030.0720 Pump, Rooftop Heat D3010.0433 Pump, Steam D2040.0270 Pump, Sump D2030.0330 Pump, Water D3030.0730 Pump, Water Booster D3030.0730 Pump, Water Heat E1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0200 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D4020.0100 Sprinkler, Standpipe D4010.0240 Sprinkler, Standpipe D4010.0301 Steam Generator D5010.0840< | D1090.0143 | Pneumatic Tube Transfer Unit | | |
| D3010.0432 Pump, Chilled Water | D3010.0430 | Pump | | |
| D2020.0222 Pump, Domestic Hot Water Recirculation D2020.0221 Pump, Domestic Water Booster D4010.0111 Pump, Fire D3010.0431 Pump, Heating Water D4010.0112 Pump, Jockey Fire D3030.0720 Pump, Rooftop Heat D3010.0433 Pump, Steam D2040.0270 Pump, Sump D2030.0330 Pump, Waste D2020.0220 Pump, Water Booster D3030.0730 Pump, Water Heat £1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0400 Sprinkler, Deluge System D4010.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic | D3030.0710 | Pump, Air Source Heat | | |
| D2020.0221 Pump, Domestic Water Booster D4010.0111 Pump, Fire D3010.0431 Pump, Heating Water D4010.0112 Pump, Jockey Fire D3030.0720 Pump, Rooftop Heat D3010.0433 Pump, Steam D2040.0270 Pump, Sump D2030.0330 Pump, Waste D2020.0220 Pump, Water Booster D3030.0730 Pump, Water Heat E1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0200 Sprinkler, Dry-Pipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Steam Flash D5010.0210< | D3010.0432 | Pump, Chilled Water | | |
| D4010.0111 Pump, Fire D3010.0431 Pump, Heating Water D4010.0112 Pump, Jockey Fire D3030.0720 Pump, Rooftop Heat D3010.0433 Pump, Steam D2040.0270 Pump, Sump D2030.0330 Pump, Waste D2020.0220 Pump, Water Booster D3030.0730 Pump, Water Heat E1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0400 Sprinkler, Dry-Pipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Expansion Reheat D2090.0410 Tank, Steam Flash D5010.0210 | D2020.0222 | Pump, Domestic Hot Water Recirculation | | |
| D3010.0431 Pump, Heating Water D4010.0112 Pump, Jockey Fire D3030.0720 Pump, Rooftop Heat D3010.0433 Pump, Steam D2040.0270 Pump, Sump D2030.0330 Pump, Waste D2020.0220 Pump, Water Booster D3030.0730 Pump, Water Heat E1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0200 Sprinkler, Beluge System D4020.0100 Sprinkler, Standpipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D2020.0221 | Pump, Domestic Water Booster | | |
| D4010.0112 Pump, Jockey Fire D3030.0720 Pump, Rooftop Heat D3010.0433 Pump, Steam D2040.0270 Pump, Sump D2030.0330 Pump, Waste D2020.0220 Pump, Water Booster D3030.0730 Pump, Water Heat £1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Combo System D4010.0200 Sprinkler, Dry-Pipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0320 Tank, Expansion Peheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D4010.0111 | Pump, Fire | | |
| D3030.0720 Pump, Rooftop Heat D3010.0433 Pump, Steam D2040.0270 Pump, Sump D2030.0330 Pump, Waste D2020.0220 Pump, Water Booster D3030.0730 Pump, Water Heat E1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0200 Sprinkler, Dry-Pipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0320 Tank, Expansion Domestic D2090.0410 Tank, Expansion Reheat D2090.0410 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D3010.0431 | Pump, Heating Water | | |
| D3010.0433 Pump, Steam D2040.0270 Pump, Sump D2030.0330 Pump, Waste D2020.0220 Pump, Water Booster D3030.0730 Pump, Water Heat E1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0200 Sprinkler, Dry-Pipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D4010.0112 | Pump, Jockey Fire | | |
| D2040.0270 Pump, Sump D2030.0330 Pump, Waste D2020.0220 Pump, Water Booster D3030.0730 Pump, Water Heat E1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0200 Sprinkler, Dry-Pipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D3030.0720 | Pump, Rooftop Heat | | |
| D2030.0330 Pump, Waste D2020.0220 Pump, Water Booster D3030.0730 Pump, Water Heat E1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0200 Sprinkler, Deluge System D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D3010.0433 | Pump, Steam | | |
| D2020.0220 Pump, Water Booster D3030.0730 Pump, Water Heat E1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0200 Sprinkler, Dry-Pipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D2040.0270 | Pump, Sump | | |
| D3030.0730 Pump, Water Heat E1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0200 Sprinkler, Dry-Pipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D2030.0330 | Pump, Waste | | |
| E1090.0315 Refrigerator/Freezer, Commercial D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0200 Sprinkler, Dry-Pipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D2020.0220 | Pump, Water Booster | | |
| D3040.0123 Return Air Fan D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0200 Sprinkler, Dry-Pipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D3030.0730 | Pump, Water Heat | | |
| D2090.1200 Reverse Osmosis System D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0200 Sprinkler, Dry-Pipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | E1090.0315 | Refrigerator/Freezer, Commercial | | |
| D3030.0420 Scroll Chiller D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0200 Sprinkler, Dry-Pipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D3040.0123 | Return Air Fan | | |
| D4010.0300 Sprinkler, Combo System D4010.0400 Sprinkler, Deluge System D4010.0200 Sprinkler, Dry-Pipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D2090.1200 | Reverse Osmosis System | | |
| D4010.0400 Sprinkler, Deluge System D4010.0200 Sprinkler, Dry-Pipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D3030.0420 | Scroll Chiller | | |
| D4010.0200 Sprinkler, Dry-Pipe D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D4010.0300 | Sprinkler, Combo System | | |
| D4020.0100 Sprinkler, Standpipe D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D4010.0400 | Sprinkler, Deluge System | | |
| D4010.0100 Sprinkler, Wet-Pipe D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D4010.0200 | Sprinkler, Dry-Pipe | | |
| D3050.0310 Steam Generator D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D4020.0100 | Sprinkler, Standpipe | | |
| D5010.0840 Switchgear, Medium Voltage D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D4010.0100 | Sprinkler, Wet-Pipe | | |
| D3010.0441 Tank, Expansion Compressor D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D3050.0310 | Steam Generator | | |
| D2020.0310 Tank, Expansion Domestic D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D5010.0840 | Switchgear, Medium Voltage | | |
| D2020.0320 Tank, Expansion Reheat D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D3010.0441 | Tank, Expansion Compressor | | |
| D2090.0410 Tank, Fuel Oil D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D2020.0310 | Tank, Expansion Domestic | | |
| D3010.0444 Tank, Steam Flash D5010.0210 Transformer, Low-Volt 2nd | D2020.0320 | Tank, Expansion Reheat | | |
| D5010.0210 Transformer, Low-Volt 2nd | D2090.0410 | Tank, Fuel Oil | | |
| | D3010.0444 | Tank, Steam Flash | | |
| D5010.0410 Transformer, Low-Volt Inter | D5010.0210 | | | |
| | D5010.0410 | Transformer, Low-Volt Inter | | |

| D5010.0110 | Transformer, Main |
|------------|---------------------------|
| D3020.0150 | Trap, Steam |
| D5090.0110 | UPS - Computer |
| D5090.0120 | UPS - Other |
| D2090.1310 | Vacuum Pump |
| D3010.0435 | VFD - Pump |
| D3040.0190 | VFD HVAC |
| D5010.0850 | VFD/VSD |
| E1090.0316 | Walk-in-Refrigerator |
| D2090.0210 | Water Softener Equipment |
| D3010.0490 | Water Treatment Equipment |
| | |

ARTICLE 8.7.3 Attachment B – Equipment List Spreadsheet Data Categories

| Uniformat | |
|-----------------------|--|
| Component ID | |
| Component Name | |
| Description | |
| Name | |
| Tunic | MCPPD or CPPD will enter this |
| Equipment No. | data |
| Model No. | |
| Room Location | |
| | MCPPD or CPPD will enter this |
| Functional Location | data |
| Manufacturer | |
| Supplier | |
| Installing Contractor | |
| Serial No. | Month on the state of the state |
| Main Work Center | MCPPD or CPPD will enter this data |
| Wall Work Center | MCPPD or CPPD will enter this |
| Comments(30 char's) | data |
| ~ | MCPPD or CPPD will enter this |
| Critical | data MCPPD or CPPD will enter this |
| JCAH Code | data |
| | MCPPD or CPPD will enter this |
| Patient Room? | data |
| Vendor ID | MCPPD or CPPD will enter this data |
| v chuor ib | MCPPD or CPPD will enter this |
| Vendor Type | data |
| W 1 Od I C | MCPPD or CPPD will enter this |
| Vendor - Other Info | data MCPPD or CPPD will enter this |
| Equipment Life | data |
| Area Serviced | |
| Contains Lead? | |
| Contains Asbestos? | |
| Contains PCBs? | |
| Motor Frame | |
| Motor Style | |
| Motor HP | |
| Motor Phase | |
| | |
| Motor Volts | |
| Motor RPM | |
| Fan CFM | |

| Fan RPM | |
|---------------------|-------------------------------|
| Fan Static | |
| Fan Type | |
| Fan RPM 2 | |
| Pump Head | |
| Pump Inlet | |
| Pump GPM | |
| Pump Outlet | |
| Motor Oper Amps | |
| | MCPPD or CPPD will enter this |
| Condition | data |
| Disconnect Location | |
| Motor FLA | |
| Belts | |
| Filters | |

ARTICLE 8.7.3 Attachment C - Example Preventative Maintenance Procedures

| Description | Name | Equipment No. | Frequency | Maintenance Procedure | Maintenance Parts & Items |
|-------------------|-------|---------------|-----------|--------------------------|------------------------------|
| | | | | | |
| Air Handling Unit | AHU-1 | M-12345 | Monthly | Check Belts | |
| Air Handling Unit | AHU-1 | M-12345 | Quarterly | Grease bearings | Grease type xyz |
| Air Handling Unit | AHU-1 | M-12345 | Annually | Replace Belts | Belt model abc-123 |
| Air Handling Unit | AHU-2 | M-98765 | Monthly | Check Belts | |

The blue highlighted column will be filled in by MCPPD or CPPD.

ARTICLE 09 PLANS, DRAWINGS, AND SPECIFICATIONS

NOTE: CONSULTANT TO USE ONLY ONE VERSION OF PARAGRAPH 9.1 BELOW AND DELETE THE OTHER AFTER DISCUSSIONS WITH THE OWNER'S PROJECT MANAGER.

- 9.1 The successful Construction Manager can purchase any number of sets of plans and specifications from Lynn Imaging, Lexington, Kentucky (http://www.ukplanroom.com/ or Phone Lynn Imaging @1.800.888.0693 or 859.255.1021). The Construction Manager will be required to pay Lynn Imaging for the cost of duplication for all sets required.
- 9.2 The University will provide _two (2)_ sets of the 'Official Contract Documents' book to the successful Construction Manager. One set is to be for his office and the other set is for the jobsite.
- 9.3 All drawings, specifications and copies, thereof, prepared by the Consultant, are the property of the University of Kentucky. They are not to be used on other Work.

ARTICLE 10 PROGRESS MEETINGS

10.1 In addition to specific coordination and pre-installation meetings for each element of Work, and other regular Project meetings held for other purposes, progress meetings will be held as outlined at the Preconstruction Meeting. Each entity then involved in planning, coordination or performance of Work shall be properly represented at each progress meeting. The following areas will be covered at each progress meeting: current status of work in place, CM's review of upcoming work (1 month look ahead), schedule status, upcoming outages, new outage requests, shop drawings due from contractors, shop drawings being reviewed, outstanding RFI's, outstanding proposed change orders, change orders, new business, As-Built updated, close-out documents status, defective work in place issues, review "pencil copy" of payment application, safety issues and new business or other issues not covered above. With regard to schedule status, discuss whether each

element of current work is ahead of schedule, on time, or behind schedule in relation with updated progress schedule; determine how behind-schedule Work will be expedited, and secure commitments from entities involved in doing so; discuss whether schedule revisions are required to ensure that current Work and subsequent Work will be completed within Contract Time; and review everything of significance which could affect the progress of the Work.

- 10.2 Construction Manager shall prepare and submit at each progress meeting an updated schedule indicating Work completed to date and any needed revisions.
- 10.3 With the express purpose of expediting construction and providing the opportunity for cooperation of affected parties, progress meetings will be held and attended by representatives of:
 - (1) The Owner's Project Manager
 - (2) The Consultant.
 - (3) Construction Manager.
 - (4) Subcontractors.
 - (5) Others requested to attend (as deemed necessary by CPMD).
 - (6) Physical Plant Division Representative
- 10.4 A location near the site will be designated where such progress meetings will be held. Participants will be notified of the dates and times of the meetings by the Consultant.

ARTICLE 11 CRITICAL PATH METHOD (CPM) SCHEDULE

- 11.1 Construction Manager shall prepare Critical Path Method (CPM) type schedules in accordance with General Conditions Article 32 with separate divisions for each major portion of the Work or operation. The schedules submitted for this Project shall be prepared using Primavera P6 scheduling software. If approved by the University, and at the sole discretion of the University, schedules submitted using earlier versions of Primavera scheduling software (Primavera SureTrak or Primavera P3) may be converted to Primavera P6 format by the University for review purposes. However, the University will not be responsible for any inaccuracies that may result from such conversions. All schedule submittals shall include a copy in portable document (.pdf) format as well as a complete copy of the schedule in Primavera P6 electronic file (.xer) format.
- 11.1.1 CPM schedules shall be based on generally accepted good practices for the development of construction schedules including limited use of long activity durations, long total float values or relationships based on leads or lags. Schedules shall include all activities necessary for performance of the work showing logic (sequences, dependencies, etc.) and duration of each activity. The schedules shall provide information for all elements of the Work in sufficient detail to accurately demonstrate the relative importance of each activity to the successful completion of the Project including but not necessarily limited to the following.

- a) Activities to be performed by the University or the Design Team.
- b) Activities describing time sensitive submittals and submittal processing.
- c) Activities describing fabrication and delivery of key materials or equipment.
- d) Activities to identify equipment start-up and testing, system commissioning, and Owner training.
- e) Activities to identify Owner Furnished /Contractor Installed and Owner Furnished / Owner Installed material or equipment.
- f) Activities to denote all required inspections by the Owner or Design Team, and inspections by state or local agencies including receipt of necessary Certificate(s) of Occupancy.
- g) Activities to identify all dates and durations for major utility outages requiring coordination with the Owner and the Owner's operations.
- h) Activities to identify all contractually mandated constraints. Non-contractual constraints shall not be included in the Initial or Final Baseline schedules without explanation. Non-contractual constraints are for the convenience of the Construction Manager, shall not be a basis for delay claims, and may be temporarily removed by the University when schedules and updates are reviewed.
- i) Software coding of each activity to identify the applicable Phase; area and/or sub area where the work occurs; the trade subcontractor or party responsible for completion of the activity; whether the activity is a design activity, a bidding or procurement activity, a submittal activity, or a construction activity; and whether the activity is potentially weather dependent.
- j) The University may, at its sole discretion, also require that each activity be coded to indicate the section of the Technical Specifications that applies to the work.
- 11.1.2 Schedules shall include divisions for Work to be accomplished remote from the central construction site, (for example, modular or prefabricated units to be constructed off-site, or utilities to the site from outside the construction site such as chilled water, steam, electrical, communications, and fire service). Such Work shall be scheduled so that disruption resulting from construction will be minimized. Start dates and completion dates for utility construction must be maintained and completed in the shortest reasonable time.
- 11.2 An Initial Baseline Schedules shall be submitted to the Consultant and to the Owner within thirty (30) calendar days after award of the first bid Package or trade contract, and shall include detailed information regarding Work to be performed during the first ninety (90) days of the Project as well as milestone dates based on hammock or Level of Effort type activities that identify all major elements of the remainder of the Work. Any necessary revisions to the Initial Baseline Schedule shall be completed prior to submittal of the Final Baseline Schedule.
- 11.3 The Final Critical Path Baseline Schedule shall be submitted to the Consultant and to the Owner within seventy five (75) calendar days after award of the first bid Package or trade contract, shall be consistent with the information contained in the Initial Baseline Schedule prepared in accordance with Article 11.2 above, shall be a complete

and comprehensive description of the Construction Manager's plan to complete the Work in accordance with the Contract, shall include all activities necessary to complete the Work, and shall show the complete sequence of construction by activity, with dates for beginning and completion of each element of construction as well as an indication of whether the activity might reasonably be delayed or impacted by bad weather. Subschedules shall be provided as may be necessary to define critical portions of the entire schedule.

- 11.3.1 If the Project is to be constructed in multiple phases or using multiple Bid Packages, the date for the start of work on each phase of the Project shall be the date on which the University approves the award of the first Trade Contract for work in that phase or Bid Package.
- 11.3.2 A separate schedule including decision dates for selection of finishes and delivery dates for Owner furnished items, if any, shall be provided showing submittal dates for Shop Drawings, product data, and material samples, as appropriate.
- 11.3.3 A separate schedule shall be provided identifying dates and durations for major utility outages requiring coordination with the Owner and the Owner's operations.
- 11.3.4 Activities, including Outages, which require action by or which are the responsibility of, the Owner or the Consultant under the terms of the Contract shall be properly indicated, and the responsible party shall be identified in the CPM schedule.
- 11.4 The Consultant will review schedules only for compliance with the intent of the Contract Documents. Such review shall not relieve the Construction Manager of any responsibility for compliance with the provisions of the Contract nor shall such review or any review comments constitute an amendment or modification of the Contract requirements. The Construction Manager shall be solely responsible for the means and methods to be employed to assure constructions proceeds in accordance with the submitted schedule and for identifying all necessary activities, establishing activity sequencing and assigning activity durations and relationships to assure that the CPM schedule is an accurate and comprehensive description of the plan for the Work.
- 11.5 Up-dated progress schedules shall be submitted to the Consultant and to the Owner concurrently with each Application for Payment to indicate progress on each remaining activity as of the last working day prior to the date of the submittal and the projected completion date of each activity. Updated CPM schedules shall show the accumulated percentage of completion of each activity, and total percentage of Work completed, as of the data date of the update. Each submittal of an update to the schedule shall include a narrative report that identifies and explains activities modified since the previous submittal, major changes in scope and other identifiable changes, problem areas, anticipated delays and impact on the schedule, and shall describe corrective action taken or proposed, and its effect. Schedules will be uploaded in UK E-Communication®'s Schedules Item Log.

- 11.6. Submittals shall include a copy in portable document (.pdf) format as well as a complete copy of the schedule in Primavera P6 electronic file (.xer) format along with a transmittal letter and related narrative report.
- 11.7 Copies of updated CPM schedules are to be provided to the job site file and, as appropriate, to subcontractors, suppliers, and other concerned entities, including separate contractors. Recipients are to be instructed to promptly report, in writing, any problems anticipated in meeting the projected dates shown in the schedules.
- 11.8 The processing of all progress payments is contingent upon the submission of an updated CPM schedule. Only payment for bonds and limited Construction Manager mobilization costs will be approved for processing prior to receipt of the Initial and Final Baseline schedules
- 11.9 The processing of all change orders requesting a time extension to the contract is subject to the terms of Article 21 of the General Conditions to this Contract and is contingent upon the submission of a CPM schedule showing that the change order does indeed impact the contractually required completion dates for the Work. Time extensions for Change Orders that do not impact the contractually required completion dates for the Work will not be considered.
- 11.10 All time extensions shall be negotiated and made full, equitable and final, and incorporated in a revised CPM schedule at the time of Change Order issuance. No reservation of rights shall be allowed.
- 11.11 Float available in the schedule at any time shall not be considered for the exclusive use of either party to the contract, but will be a resource available to both the Owner and the Construction Manager. No time extensions will be granted for a delay unless the delay impacts the Project critical path as shown in the updated Project schedule most recently submitted to the Owner prior to the event, consumes all available float or contingency time, and extends the Work beyond the then current Contract completion date(s).

ARTICLE 12 WALK-THROUGH

- 12.1 After the "Work Order" is issued but before Work by the Construction Manager is started, a walk-through of the area is required to document the condition of the space, surfaces, or equipment. It is the responsibility of the Construction Manager to schedule the walk-through with the Owner's Project Manager, the Consultant, and other interested parties.
- 12.2 During the walk-through, Construction Manager shall identify all damaged surfaces or other defective items that exist prior to construction.
- 12.3 The walk-through shall be attended by Owner's Project Manager, a Representative of the user of the facility, the Construction Manager and the Consultant

12.4 Written documentation of the walk-through is to be provided by the Consultant with copies distributed to all parties. Polaroid type color photographs are to be provided and labeled by Construction Manager and one (1) copy of such photographs are to be given to Consultant. (Digital photos in a .jpg format are acceptable if submitted on digital media storage) All parties attending the walk-through agree on the list of damages.

ARTICLE 13 OWNER'S CONSTRUCTION REPRESENTATIVE (NOT USED)

ARTICLE 14 FIELD OFFICE

- 14.1 Construction Manager shall make his own provision for field office for his own personnel and for incidental use by their Subcontractors. Quantity and location are subject to approval of the Consultant and the Owner's Project Manager.
- 14.2 Construction Manager is not required to provide a field office for use by the Owner or Consultant.

ARTICLE 15 TELEPHONE SERVICE (NOT USED)

ARTICLE 16 CONSTRUCTION FENCE

- 16.1 Construction fencing will be designed and erected around job sites where there is a possibility of injury to employees, students or the public. Special precautions must be taken to protect the visually impaired, disabled, children and others using the University facilities. During active excavation/trenching operations, fencing shall be erected to prevent unauthorized entry into the site. All fencing shall comply with the current requirements of the International Building Code except where the following requirements are more stringent.
- 16.1.1 All job site perimeter fencing within 5 feet of a walkway, street, plot line, or public right-of-way shall be 8 feet in height. Perimeter fencing that blocks sidewalks must include signs directing pedestrians to a safe walkway or crosswalk. Signage may be attached to the fence, but may also be required to inform pedestrians of sidewalk closures and detours prior to arriving at the closed area. Construction Manager shall provide electrical pedestrian and general lighting along the top rail of the perimeter of the construction site fence to provide a minimum illumination level of 1.5 foot candles. Pedestrian and perimeter fence lighting shall be installed in conduit, raceway, and/or pathway system properly supported to the perimeter fence. Open or flexible cabling will not be acceptable.

Rev. March 2022 23

- 16.1.2 All job site perimeter fencing more than 5 feet from a walkway, street, plot line, or public right-of-way shall be a minimum of 6 feet in height unless International Building Code requirements are more restrictive due to the height of the structure and setback.
- 16.1.3 All fencing shall be of a woven material such as chain link or a solid type fence. Fencing shall include gates required for construction operations. Gates shall be lockable with both the Construction Manager's lock, and a lock provided by the Owner. Lock by Owner shall be keyed for the University Best GA key core. All locks to be "daisy-chained" to provide access to the Owner.
- 16.1.4 It shall be the Construction Manager's responsibility to determine the proper quality of materials and methods of installation of the fencing, with the understanding that it must be maintained in good condition, good appearance, rigid, plumb, and safe throughout the construction period. The fence does not have to be new material. The fence is to be erected on fence posts securely anchored in the ground. Provide a top bar or, with prior approval of the Owner, a wire shall be run through the top of the fence and attached to the end posts. A tension control device shall be installed as necessary. Use of sandbags, concrete weights, stakes, etc. to hold fence posts in place are not allowed. Penetrations in pavement or landscape walking surfaces may not be made without the approval of the Owner. Any damage caused by the fence installation shall be repaired in a manner satisfactory to the Owner. When fencing is to remain in place for 6 months or more a green fabric mesh must be provided for the full height and length of the fence. Fabric should be omitted for one section of fencing where blind corners occur or at pedestrian/vehicle intersections.
- 16.1.5 The Construction Manager shall be responsible for removing and replacing any fence sections and/or posts necessary for access to the site on a daily basis. The Construction Manager shall police such conditions to assure the fence and posts are reset in a timely manner and are specifically in place at the close of the working day.
- 16.1.6 If the Construction Manager fails to comply with the requirements of this Article 16, the Owner may proceed to have the work done and the Construction Manager shall be charged for the cost of the Work done by unilateral deductive change order.
- 16.1.7 Plastic construction fencing is not acceptable as a perimeter protection fence.

ARTICLE 17 PROJECT SIGN

17.1 The Construction Manager shall furnish, install and maintain a Project sign during this Project. This sign shall be 4' x 8' x 3/4" exterior grade plywood mounted on 4" x 4" posts. Design shall be as provided by the Owner at a later date and shall include the name of the Owner, Project, Consultant, and Construction Manager. (Note: No Project Sign will be allowed on renovation jobs where all of the renovation is taking place on the interior of the building and storage has not been allowed on the grounds surrounding the site.)

17.2 No signs, except those attached to vehicles or equipment, may be displayed without permission from the Consultant and the Owner's Project Manager. No political signs will be permitted.

ARTICLE 18 PARKING

NOTE: CONSULTANT TO USE ONLY ONE OF THE PARAGRAPHS BELOW AND DELETE THE OTHER

- 18.1 The University of Kentucky will make available for purchase by the Construction Manager of up to four (4) parking permits. The category of parking permit and location of parking is determined by the Director, Parking and Transportation Services, or a designee. Parking permits may be purchased by the Construction Manager to be used by the Construction Manager and/or the Construction Manager's subcontractors and employees during the construction period. The cost of each permit is based on the prorata annual cost and may be purchased from Parking Services, 721 Press Avenue, after the Contract is executed. Necessary documents required to purchase the passes will be available at the Pre-Construction Conference.
- 18.2 The Director, Parking and Transportation Services, or a designee will determine if parking is available for employees of the Construction Manager and subcontractors in the K lots at Commonwealth Stadium or elsewhere on Campus. The Construction Manager will be given thirty (30) days notice should conditions change that will affect parking at the designated parking area and it is necessary to relocate parking or terminate parking privileges. If parking is available, permits may be purchased from Parking Services, 721 Press Avenue at the appropriate monthly cost.

ARTICLE 19 SANITARY FACILITIES

NOTE: CONSULTANT TO USE ONLY ONE OF THE PARAGRAPHS BELOW AND DELETE THE OTHER.

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19.1 At the beginning of the Project, before any Work is started, the Construction Manager shall furnish, install and maintain ample sanitary facilities for the workforce. Permanent toilets in the existing building shall not be used during construction of the Project. Drinking water shall be provided from an approved safe source, piped or transported as to be kept clean and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing governing health regulations.

ARTICLE 20 RULES OF MEASUREMENT

- 20.1 Rules of Measurement shall be established by the Consultant in the field. Actual measurement shall be taken in the field. These amounts shall become binding upon the Construction Manager and be adjusted as before mentioned.
- 20.2 The Construction Manager shall pay for and coordinate through the Consultant and/or the Owner's Project Manager all associated Work by utility companies including relocation of utility poles, installation of new street lights, relocation of overhead or underground lines, and any other Work called for on the Plans and in the Specifications.

ARTICLE 21 ALLOWANCES

- 21.1 As stated in the General Conditions to the Contract, the Construction Manager shall have included in the Contract Amount all costs necessary to complete the Work. Costs based on "allowances" shall be permitted only for objectively quantifiable items and only with the prior written approval of the Owner. No allowances shall have been included in the calculation of the Construction Manager's fixed fee quotation in par. 8.0 of the RFP.
- 21.2 Costs based on allowances may be included in Subcontract bid packages only with the prior written approval of the Owner, and only for objectively quantifiable material items.
- 21.3 Any allowance amounts included in a Subcontract bid package, but not expended for the approved task during the course of the work of that Subcontract, shall be deducted from the Construction Manager's contract by Change Order. Any additional amounts necessary to pay for additional cost of an allowance in a Subcontract bid package shall be funded from the Construction Contingency Fund.

ARTICLE 22 CONSTRUCTION CONTINGENCY FUNDS

- 22.1 The Owner shall include an amount in the Project construction budget not to exceed one percent (1%) of the total cost of the construction, including the Construction Manager's fixed fee, as a Construction Contingency Fund. The following are general / typical categories of changes to the Work that may, with the Owner's prior written specific approval, be funded from this source:
- 22.1.1 Reasonable errors & omissions in the Construction Manager's bidding and scoping processes;
- 22.1.2 Reasonable costs associated with schedule recovery that is not a direct result of the construction managers or a trade contractor's failure to perform;
- 22.1.3. Any costs or expenses incurred by the Construction Manager, for provision of

management services necessary to complete the Project in an expeditious and economical manner consistent with the Contract for Construction and the best interests of Owner, that were not included in the Construction Manager's General Conditions Cost as submitted in the original fee proposal

22.1.4 Amounts necessary to fund cost overruns in approved allowance items within Subcontract bid packages, as described in Article 21.3, above.

ARTICLE 23 SEQUENCE OF CONSTRUCTION

23.1 **(NOT USED)**

- 23.2 All materials and equipment are to be brought into the project site from the approved staging location and are not to be brought through the existing buildings or loading docks. Any and all exceptions shall be approved by, and closely coordinated with, the Owner's Project Manager in advance of scheduling or performing the work.
- 23.2.1 The Construction Manager shall coordinate any road and sidewalk closings, utility disruptions, etc. which will affect the use of the existing building(s) with the Owner's Project Manager prior to commencing that Work.
- 23.3 The adjacent buildings and public areas will remain in use and the Owner shall have access to the existing building(s) throughout the duration of the Project. The Construction Manager shall coordinate construction activity to assure the safety of those who must cross the Project site and shall provide and maintain the necessary barriers and accommodations for a completely safe route of accessibility. The Construction Manager is to insure that all exits provide for free and unobstructed egress. If exits must be blocked, then prior arrangements must be made with the Owner's Project Manager.
- 23.4 The Construction Manager shall cooperate with the Owner in minimizing inconvenience to, or interference with normal use of existing buildings and grounds by staff, students, other Contractors, or the public. Construction Manager shall conduct operations to prevent damage to adjacent building structures and other facilities and in such a manner to protect the safety of building's occupants.
- 23.5 Special effort shall be made by the Construction Manager to prevent any employee from entering existing buildings for reasons except construction business. In particular, use of toilets, drinking fountains, vending machines, etc. is strictly prohibited.

ARTICLE 24 CRANE & MATERIAL HOIST OPERATIONS

24.1 Construction Manager shall provide appropriate barriers around crane and material hoist to protect pedestrian and vehicular traffic around operating area. When crane is operating or moving, flag men provided by Construction Manager shall be utilized to prevent pedestrian and vehicular traffic from crossing pathway of crane lift.

Construction Manager's flag men shall coordinate these activities with the appropriate security personnel.

- 24.2 Crane and material hoist shall be safely secured and inaccessible during non-operating hours. Construction Manager shall coordinate operation or erection of a crane or material hoist in the vicinity of the Medical Center with Medical Center Aeromedical Operations (Med-evac helicopter).
- 24.3 Any damage to trees, shrubs or plant material at the placement of crane or material hoist shall be repaired by tree surgery or replaced as directed by Consultant.

ARTICLE 25 UTILITIES

ON LARGE PROJECTS THE FOLLOWING NEEDS TO BE USED IN LIEU OF THE ABOVE. VERIFY CURRENT RATE FOR EACH UTILITY WITH PPD MANAGER OF UTILITIES.

- 25.1 When the various building systems are energized and connected to Owner's utility systems, but prior to turnover to and occupancy by the Owner, the Construction Manager is responsible to reimburse the Owner for Owner furnished utilities. These utilities include but not limited to steam, chilled water, domestic water, and electricity, provided by the Owner up to the date of Substantial Completion. Reimbursement will be payable monthly via a deductive change order to the contract. Unit costs for campus are as follows:
- 25.1.1 Steam is \$17.00/million BTU (1000 lb.) condensate measured through the building condensate meter (all condensate is to be returned).
- 25.1.2 Chilled Water is \$16.25/million BTU (1000 lb.) measured through the building BTU meter.
- 25.1.3 Electricity is \$0.095/KWH measured through the building electric meter.
- 25.1.4 Water is supplied by Kentucky American Water Company (KAWC). Construction Manager shall pay KAWC directly until the Owner's beneficial occupancy date. The Construction Manager shall pay KAWC directly for fire service.
- 25.1.5 Construction Manager shall furnish gas meter and Columbia Gas Company directly for service until the until the Owner's beneficial occupancy date.
- 25.1.6 Construction Manager shall obtain from and pay UKIT Communications and Network Systems for the use of telephone services.
- 25.2 UTILITY OUTAGES

- 25.2.1 Interruption of Utilities and Services: No utilities or services may be interrupted without full consent and prior scheduling of the Owner. Owner approval is required in writing for each disruption.
- 25.2.1.1 ENTIRE BUILDING OUTAGE. The Owner's Project Manager is the Construction Manager's contact with the University for requesting Utility Outages. The Owner's Project Manager will contact the proper departments and divisions within the University and receive approval from those units prior to allowing a planned outage to occur. The established standard within the University Departments and Divisions of an entire building or group of buildings shall be three weeks written notice. The written notice shall include the type of utility to be interrupted, reason for outage, length of outage, what will be affected by the outage, and a statement of whether or not the materials are on hand to complete the Work. If a specific time is desired for the outage it should be included. The Owner's Project Manager will insure that all parties affected are contacted and that a time which is least disruptive to all parties is selected. At the appointed outage time, Work shall begin and proceed continuously with all required manpower until Work is complete at no added cost to the University. The Owner's Project Manager will then notify all affected departments or divisions.
- 25.2.1.2 SECTION OF A BUILDING OUTAGE. The Owner's Project Manager is the Construction Manager's contact with the University for requesting Utility Outages. The Owner's Project Manager will contact the proper departments and divisions within the University and receive approval from those units prior to allowing a planned outage to occur. The established standard within the University Departments and Divisions of a section of a building shall be a written request one week prior to outage. The written request shall include the type of utility to be interrupted, when the outage is desired, reason for outage, length of outage, and what will be affected by the outage. The Owner's Project Manager will insure that all parties affected are contacted and that a time which is least disruptive to all parties is selected. At the appointed outage time Work shall begin and proceed continuously with all required manpower until Work is complete at no added cost to the University. The Owner's Project Manager will then notify all affected departments or divisions.

ARTICLE 26 CLEANING AND TRASH REMOVAL

- 26.1 The Construction Manager shall keep clean the entire area of new construction and shall keep streets used as access to and from the site free of mud and debris.
- All exit ways, walks, drives, grass areas, and landscaping must be kept free from debris, materials, tools and vehicles at all times. Trim weeds and grass within the site area.
- 26.3 Upon completion of the Work, Construction Manager shall thoroughly clean and re-sod grass areas damaged to match existing areas.

Rev. March 2022 29

- 26.4 All utility markings are to be made with water based marking paint with low Volatile Organic Compounds (VOC's) and high solids.
- 26.5 Upon Completion of the project, buried utility paint markings sprayed on walks and hardscapes are to be removed by non-destructive means such as pressure washing. Do not use chemicals. If a washed area is noticeable, the entire surface must be washed and or blended to match surrounding areas.
- 26.6 The Construction Manager shall be responsible for removal from the site of all liquid waste or other waste (i.e., hazardous, toxic, etc.) that requires special handling on a daily basis.
- 26.7 Dumpsters will be provided and maintained by the Construction Manager.
- 26.8 During Work at the Project site, the Construction Manager shall clean and protect Work in progress and adjoining Work on a continuing basis. Construction Manager shall apply suitable protective covering on newly installed Work where needed to prevent damage or deterioration until the time of Substantial Completion. Construction Manager shall clean and perform maintenance on newly installed Work as frequently as necessary through remainder of construction period.
- 26.9 The Construction Manager shall be responsible for daily cleaning of spillage's and debris resulting from his and his Subcontractor's operations, (includes removal of dust and debris from wall cavities), and for providing closed, tight fitting (dustproof if required), waste receptacles to transport construction debris from the work area to the dumpster. Broom clean all floors no less than once a week. The Construction Manager shall empty such receptacles into the trash container when full or when directed to be emptied by the Consultant and/or Owner's Project Manager, but not less than weekly. The use of the Owner's waste and trash receptacles is strictly prohibited, except as otherwise provided by the Project specifications.
- 26.10 Failure to comply with the above requirements shall be cause for stopping work until the condition is corrected.

ARTICLE 27 BLASTING

27.1 There shall be no blasting under any conditions on University of Kentucky property unless specified in these Special Conditions.

ARTICLE 28 CUTTING AND PATCHING - NEW AND EXISTING WORK

28.1 New Work - Cutting and patching shall be done by craftsmen skilled and experienced in the trade or craft that installed or furnished the original Work. Repairs shall be equal in quality and appearance to similar adjacent Work and shall not be

obviously apparent as a patch or repair. Work that cannot be satisfactorily repaired shall be removed and replaced.

28.2 Existing Construction - Refer to Architectural, Mechanical, and Electrical drawings for cutting and patching. All new Work shall be connected to the existing construction in a neat and workmanlike manner, presenting a minimum of contrast between old and new Work. Do all patching of the existing construction as may be required for the new construction to be completed. Necessary patching, closing of existing openings, repairing and touching up shall be included as required for a proper, neat and workmanlike finished appearance. Any existing item that is to remain and is damaged during construction shall be replaced at the Construction Manager's expense.

ARTICLE 29 UNRELATED PROJECTS

29.1 Unrelated construction projects may be under way in the vicinity of this Project or the site utility work during the course of the Work related to this Project. The Construction Manager for this Project must coordinate with any other contractors regarding overlapping areas. See Article 42 - Separate Contracts of the General Conditions.

ARTICLE 30 OWNER SUPPLIED MATERIALS

- 30.1 Owner, in an effort to expedite this Project, has pre-ordered certain long lead time items. The following is the list of material that has been pre-ordered:
 - 1. To Be Determined
 - 2. To Be Determined
- 30.2 All Pre-Ordered Material was specified to be shipped to the **Pence Hall**. It will be the Construction Manager's responsibility to receive and off load the Pre-Ordered Material. If there is damage to the Pre-Ordered Material, then the Construction Manager is to notify the Owner's Project Manager immediately so that the Owner can seek replacement material.

ARTICLE 31 REMOVED ITEMS

- 31.1 The following is a list of items to be turned over to the Owner by the Construction Manager after removal by the Construction Manager. If there are additional items listed in the drawings to be turned over to the Owner, but not listed here, it shall be construed as being listed here.
 - 1. To Be Determined
 - 2. To Be Determined
- 31.2 All items which are identified to be turned over to the Owner must be treated with the utmost of care and protected from damage during removal and transport.

31.3 Materials to be turned over to the Owner by the Construction Manager shall be delivered to a warehouse within a five (5) mile radius of the Project site. Location to be determined.

ARTICLE 32 INTERIOR ENCLOSURE AND DUST ENCAPSULATION

- 32.1 Areas under construction or renovation shall be separated from occupied areas by suitable temporary enclosures furnished, erected and maintained by the Construction Manager. Temporary enclosures shall be dust and smoke tight and constructed of noncombustible materials to prohibit dirt and air borne dust from entering occupied spaces. Construction Manager to review with Consultant ways to provide ventilation for dust generated by demolition and fumes/vapors produced during installation of new materials.
- 32.2 Construction Manager is responsible for coordinating with the Owner's Project Manager any equipment to be turned off prior to erecting temporary enclosures.
- 32.3 Construction Manager shall protect all exhaust diffusers, equipment and electrical devices from the collection of dust. All areas shall be checked and cleaned prior to final acceptance of Work.
- 32.4 Dust and debris from Work operations shall be held to a minimum.
- 32.5 Construction Manager shall construct temporary dust partitions at locations and as detailed on drawings. Closures used for dust barricades shall be constructed of <u>non-combustible materials</u>, (metal studs and gypsum board or fire retardant plywood).
- 32.6 Construction Manager shall provide additional devices and materials as required to contain dust within Work area and protect personnel during course of Work.
- 32.7 Areas of minor renovation, consisting of the removal of doors and frames, blocking of openings, and other limited Work shall be separated by a dust partition of fire retarded polyethylene on studs.
- 32.8 Existing corridor doors may serve as dust barriers, except if removed for refinishing. In such cases, temporary wood doors must be substituted until original doors are replaced.
- 32.9 The Construction Manager may assume existing walls which extend full height of floor shall be deemed appropriate to contain air borne dust. Cover any voids or penetrations.
- 32.10 Doors or windows in the perimeter walls surrounding the project work area shall be sealed off with protective materials in a manner to prohibit dust from escaping the work area. These shall be left in place until all work creating dust is completed. Protective

materials shall consist of fire retardant wood, metal studs, gypsum board or flame resistant plastic.

- 32.11 Entry passage to Work area shall be sealed off with zippered plastic opening, or other acceptable means which allows periodic entry and closure of barricade closure.
- 32.12 Install and maintain a "sticky mat" on the floor in locations where construction crews leave the construction area and prior to entering ANY existing space in the building.
- 32.13 Install and maintain a temporary floor covering in any and all elevators being utilized for this project.

ARTICLE 33 UKIT COMMUNICATIONS AND NETWORK SYSTEMS EDIT BELOW IF PRE-WIRING DONE BY CONTRACTOR AND TERMINATIONS BY UK AFTER DISCUSSIONS WITH THE OWNER'S PROJECT MANAGER.

33.1 The communications wiring is to be provided, installed and terminated by the Construction Manager using a certified and approved communications contractor. All work shall be done in compliance with the latest UKIT-Communications and Network Systems' Standards, and closely coordinated with UKIT-Communications and Network Systems.

ARTICLE 34 EMERGENCY VEHICLE ACCESS

34.1 Emergency Vehicle Access must be maintained during construction. The Construction Manager shall coordinate with the local Fire and Emergency Medical Services department(s) that would respond to an emergency during the initial startup of construction to ensure a complete understanding of their requirements.

ARTICLE 35 SMOKE DETECTORS / FIRE ALARM SYSTEMS- EXISTING AND/OR NEW FACILITIES

35.1 Construction Manager shall protect all smoke detectors in Work areas to prevent false alarms. The Construction Manager will be responsible for any false alarm caused by dust created in their Work areas or dust traveling to areas beyond the Work, past inadequate protection barriers. If there is a need for an existing or newly installed fire alarm system or parts of that system to be serviced, turned off, or disconnected, prior approval must be obtained from the Owner's Project Manager and notification given to the Campus Dispatch Office. The Construction Manager must follow the procedure outlined for Utility Outages and any documented costs charged by the responding fire department due to a false alarm shall be paid by the Construction Manager. As soon as all Work is completed notification must be given to the Owner's Project Manager and to

Rev. March 2022

33

the Campus Dispatch Office prior to reactivation of the system. Prior to Final Payment to the Construction Manager, all protected smoke detectors will be uncovered and tested.

35.2.1 When any fire alarm, detection or suppression system is impaired, a temporary system shall be provided. Construction Manager shall provide daily reports indicating the Superintendent has walked through the project at the end of each work period, to satisfy himself there are no present conditions that may result in an accidental fire. Portable fire extinguishers shall be on site during this time. The Construction Manager is responsible for inspecting and testing any temporary systems on a monthly basis.

ARTICLE 36 SURVEYS, RECORDS, and REPORTS

- 36.1 General: Working from lines and levels established by property survey, and as shown in relation to the Work, the Construction Manager will establish and maintain bench marks and other dependable markers to set lines and levels for Work at each area of construction and elsewhere on site as needed to properly locate each element of the entire Project. The Construction Manager shall calculate and measure from the bench marks and dependable markers required dimensions as shown (within recognized tolerances if not otherwise indicated), and shall not scale drawings to determine dimensions. Construction Manager shall advise Sub-contractors performing Work of marked lines and levels provided for their use in layout of Work.
- 36.2 Survey Procedures: The Construction Manager shall verify layout information shown on drawings, as required for his own Work. As Work proceeds, surveyor shall check every major element for line, level, and plumb (as applicable), and maintain an accurate Surveyor's log or Record Book of such checks available for Construction Manager or Design Consultant's reference at reasonable times. Surveyor shall record deviations from required lines and levels, and advise Design Consultant or Construction Manager promptly upon detection of deviations exceeding indicated or recognized tolerances. The Construction Manager shall record deviations which are accepted (not corrected) on Record Drawings.

ARTICLE 37 SMOKING IS PROHIBITED

- 37.1 For areas located within Fayette County, Kentucky, the use of <u>all</u> tobacco products is prohibited on all property that is owned, operated, leased, occupied, or controlled by the University. "Property" for purposes of this paragraph includes buildings and structures, grounds, parking structures, enclosed bridges and walkways, sidewalks, parking lots, and vehicles, as well as personal vehicles in these areas. To view the Lexington campus boundaries: http://www.uky.edu/TobaccoFree/files/map.pdf.
- 37.2 For areas not located within Fayette County, Kentucky, smoking is prohibited in all owned, operated, leased, or controlled University buildings and structures, parking structures, enclosed bridges and walkways, and vehicles. Smoking is also prohibited outside buildings and structures within 20 feet of entrances, exits, air intakes, and windows, unless further restricted by division policy.

Rev. March 2022 34

- 37.3 Construction Manager's employees violating this prohibition will be subject to dismissal from the Project.
- 37.4 For the full Administrative Regulation see University AR 6:5. http://www.uky.edu/Regs/files/ar/ar6-5.pdf

ARTICLE 38 ALTERNATES

- 38.1 Alternate(s) will be accepted in the sequence of the Alternates listed on the Bid Form, and the lowest Bid Sum will be computed on the basis of the sum of the base Bid and any alternates accepted, within the budgeted amount.
- 38.2 Schedule of Alternates: To Be Determined

ARTICLE 39 FIELD CONSTRUCTED MOCK UPS

- 39.1 Exterior Finishes
- 39.1.1 After sample selection but prior to ordering exterior finish materials, Construction Manager shall accumulate enough material samples to erect sample wall panels to further verify selection made for color and textural characteristics, and to represent completed Work for qualities of appearance, materials and construction including sample masonry units (face and back-up wythes, plus accessories), window units, roofing finish, etc. to provide a complete representation of the exterior facade for approval by the Consultant; build mock-ups to comply with the following requirements:
- 39.1.2 Build mock-ups well in advance of the time the finish materials will be needed for inclusion in the Work.
- 39.1.3 Locate mock-ups at location as reviewed and approved by the Architect and University's Project Manager, generally within 10 feet of existing building, parallel to existing face of building, and exposed to sunlight during daylight hours. Mock-Up to be reviewed twice, one in direct sunlight and one in shade to confirm color characteristics of samples.
- 39.1.4 Mock-ups Size(s) for the following types shall be approximately 6' long by 4' high by full thickness.

Each type of exposed Work.

39.1.5 Protect mock-ups from the elements with weather resistant membrane.

39.1.6 Retain mock-ups during construction as a standard for judging completed Work. When directed by the University's Project Manager or by the Consultant, demolish mock-ups and remove from the site.

39.2 Interior Finishes

- 39.2.1 After sample selection but prior to ordering interior finish materials, Construction Manager shall accumulate enough material samples to erect sample to further verify selection made for color and textural characteristics, and to represent completed Work for qualities of appearance, materials and construction; include samples of <u>interior finishes</u>, including paint, wood stain, vinyl wallcovering, flooring and ceiling materials to provide a complete representation for approval by the Consultant; build mock-ups to comply with the following requirements:
- 39.2.2 Build mock-ups well in advance of the time the finish materials will be needed for inclusion in the Work. Mock-ups may be on newly installed wall surfaces.
- 39.2.3 Locate mock-ups with adequate illumination for observation under intended light levels.
- 39.2.4 Retain mock-ups during construction as a standard for judging completed Work. When directed by the University's Project Manager or by the Consultant, remove mock-ups from site or incorporate into the completed work.

ARTICLE 40 PROJECT COORDINATION VIA COMPUTER

- 40.1 The Construction Manager and Subcontractors are required to have an active email account to facilitate coordination of the project during construction and warranty.
- 40.2 To facilitate project construction coordination between the Consultant, the Construction Manager, Subcontractors, and the University of Kentucky as the Owner, UK Capital Project Management Division (CPMD) is hosting an Internet/ Web-based Project Management System (WPMS) to help improve project communication and collaboration. The Consultant shall participate in the use of the WPMS (UK E-Communication® or other system at the Owner's discretion) providing collaboration between Owner, the Consultant and selected contractors.
- 40.2.1 Owner shall provide the Construction Manager and Subcontractors with user accounts and appropriate training for the web-based project management tool.
- 40.2.2 Utilization of, and training in the use of, the WPMS will be arranged for and supervised by Owner.
- 40.2.3 Participation of Construction Manager is mandatory; others as determined by Owner. Participation of Subcontractors and/or Trade Contractors is not mandatory but will be offered at their discretion.

Rev. March 2022 36

- 40.2.4 All participants are required to have access to the internet and the Microsoft Internet Explorer browser (version 5.0 or higher). A broadband connection to the internet (e.g. Cable modem, ISDN, DSL) is recommended, but not required.
- 40.2.5 The WPMS shall be utilized for the following functions, as a minimum: Posting Project Files, AE Amendments, Architect's Supplemental Information (ASI's), Closeouts, Consultant Invoices, Contracts, Defective Work in Place, Meeting Minutes, Payment Applications, Proposed Change Orders Change Orders (PCO to CO's), Punch Lists, Reports (Contractor Daily Reports, Field Reports, Commissioning Reports), RFIs, SAP Equipment List, Schedules, and Submittals. The Document Library (Bid set Plans, Specifications and Addenda will be uploaded by Lynn Imaging.
- 40.2.6 Site camera monitors may be included at Owner's discretion.
- 40.2.7 Utilization of the WPMS shall be implemented by the Owner's representative.
- 40.2.8 Use of the system will provide consistent, real-time information for decision making. Additionally, all project data entered into the system will be archived to facilitate project record keeping. It is anticipated that proper use of the WPMS will improve efficiency of communications and reduce project related paperwork and clerical workload.
- 40.2.9 The Construction Manager and Consultant shall submit complete close-out and submittal logs in E-Communication, or WPMS, including description of all deliverables to be submitted by the construction manager or trade contractors during Phase 3, Construction Documents Phase.

ARTICLE 41 HOT WORK PERMITS

41.1 All work involving open flames or producing heat and or sparks in occupied buildings on the University of Kentucky campus will require the Construction Manager to obtain approval to perform "Hot Work" on site. This includes, but is not limited to: Brazing, Cutting, Grinding, Soldering, Thawing Pipe, Torch Applied Roofing, and Cad welding. A copy of the Hot Work Permit and the Hot Work Permit Procedure will be passed out at the Preconstruction Conference for the Construction Manager's use.

ARTICLE 42 INSURANCE

- 42.1 Employers' Liability Insurance. The Construction Manager shall acquire and maintain Employers' Liability insurance with at least \$500,000/\$500,000/\$500,000 limits of liability for all employees who will be working at the Project site.
- 42.2.1 Commercial General Liability Insurance. If the work involved requires the use of helicopters, a separate aviation liability policy with limits of liability of

\$100,000,000 will be required. If cranes and rigging are involved, a separate inland marine policy with liability limits of \$20,000,000 will be required.

- 42.2.1.1 The limits of liability shall not be less than \$1,000,000 each occurrence combined single limits for bodily injury and property damage.
- 42.2.2 Comprehensive Automobile Liability Insurance. Policy limits shall not be less than \$1,000,000 for combined single limits for bodily injury and property damage for each occurrence.
- 42.2.3 Excess or Umbrella Liability Insurance. This policy shall have a minimum of \$1,000,000 combined single limits for bodily injury and property damage for each occurrence in excess of the applicable limits in the primary policies.
- 42.2.4 Workers' Compensation Statutory Requirements (Kentucky)

ARTICLE 43 KEY ACCESS

- 43.1 If Construction Cores are NOT utilized, then one set of keys for access to the renovation project area will be provided to the Construction Manager/Vendor's Project Manager/Superintendent by the University's Project Manager. The Construction Manager/Vendor's holder of the key(s) assumes responsibility for the safekeeping of the key(s) and its use. When leaving the renovation area all doors must be secured.
- 43.2 All keys must be returned to the University's Project Manager upon completion of project work as one of the requirements for Final Payment. Failure to return the keys may require re-keying of all doors in the work area up to and including the entire building if master keys are issued. The cost of re-keying of the door(s) accessed by the key(s) will be subtracted from the remaining contract dollars including contract retainage.
- 43.3 All lost or stolen keys must be reported immediately to the University's Project Manager.

ARTICLE 44 CEILING CLEARANCE

- 44.1 Work above ceiling: All work above an area with lay-in ceiling must be coordinated and installed so there is a minimum of 4" between the top of the ceiling grid runners and bottom of the installation. Installation shall not obstruct equipment access space or equipment removal space. Also, conduit and pipe attached to the wall must be above the 4" minimum level.
- 44.2 Coordination Between Trades: Request and examine all drawings and specifications pertaining to the construction before installing above ceiling work. Cooperate with all other contractors in locating piping, ductwork, conduit, openings, chases, and equipment in order to avoid conflict with any other contractor's work. Give special attention to points where ducts or piping must cross other ducts and piping, and Rev. March 2022

where ducts, piping and conduit must fur into the walls and columns. Make known to other trades intended positioning of materials and intended order of work. Determine intended position of work of other trades and intended order of installation.

ARTICLE 45 METAL ANCHORS

45.1 All anchoring devices utilized to secure materials to the building shall be metal. Plastic or plastic expansion components shall not be used. This shall include all fasteners for mechanical/electrical hangers.

ARTICLE 46 LOADING DOCK (NOT USED)

ARTICLE 47 CONSTRUCTION PATH (NOT USED)

ARTICLE 48 HOSPITAL PROJECT PROCEDURE (NOT USED)

ARTICLE 49 WORKING HOURS/ACCESS: FOR MEDICAL CENTER/HOSPITAL (NOT USED)

ARTICLE 50 SECURITY BADGES AND MEDICAL CENTER SECURITY (NOT USED)

ARTICLE 51 HOSPITAL CONSTRUCTION CERTIFICATION

Contractor will adhere to all provisions outlined in 010000S04 Article 51 of the Medical Center Project Manual for CM At Risk.

ARTICLE 52 APPEARANCE (NOT USED)

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ARTICLE 53 HIPAA (The Health Insurance Portability and Accountably Act) (NOT USED)

ARTICLE 54 SAFETY & FIRE PROCEDURES (NOT USED)

ARTICLE 55 INTERIM LIFE SAFETY MEASURES (ILSM) (NOT USED)

ARTICLE 56 TREE PROTECTION STANDARDS

Contractor will adhere to all provisions outlined in 010000S02 Tree Protection Standards.

ARTICLE 57 CONTRACTOR/SUPERINTENDENT EXPERIENCE

57.1 The Construction Manager, Project Manager and Superintendent are required to have a minimum of three (3) years of construction experience in the past 10 years with projects involving higher education campuses. The Project Manager and Superintendent shall have at least three (3) years experience in the same role in the past 5 years. Owner may waive this requirement if sufficient information is provided to confirm competency.

ARTICLE 58 COVID-19 POLICY

Any and all companies/organizations working on the University of Kentucky's campus shall have in place for the period of the contract a COVID-19 policy that is consistent with the University of Kentucky's current COVID-19 policy.

Rev. March 2022 40