

**INVITATION TO BID**

**NKCC-04-2020**



**Fine Arts Center – Floor Heaving Repair**

**February 21, 2020**

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

**Bids NO:** NKCC-04-2020  
**Issue Date:** 02/21/2020  
**Purchasing Officer:** Holly C. Vasquez  
**Phone:** 859.572.5171

**RETURN ORIGINAL COPY OF BID TO:**

**Northern Kentucky University  
Procurement Services  
1 Nunn Drive  
617 Lucas Administrative Center  
Highland Heights, KY 41099**

**IMPORTANT: BIDS MUST BE RECEIVED BY: 03/20/2020 BEFORE 2:00 P.M. HIGHLAND HEIGHTS, KY time.**

**NOTICE OF REQUIREMENTS**

1. The University's General Terms and Conditions and Instructions to Bidders, viewable at the [NKU Procurement Website](#), apply to this Request for Bid.
2. Contracts resulting from this ITB must be governed by and in accordance with the laws of the Commonwealth of Kentucky.
3. 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.
4. 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, may 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:

1. 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 authority to sign on its behalf (if the offeror is a corporation);
2. That the attached bids 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 Request for Bids, designed to limit independent bidding or competition;
3. That the contents of the bid have not been communicated by the offeror or its employees or agents to any person not an employee or agent of the offeror or its surety on any bond furnished with the bid and will not be communicated to any such person prior to the official closing of the ITB;
4. That the offeror is legally entitled to enter into contracts with the Northern Kentucky University and is not in violation of any prohibited conflict of interest, including those prohibited by the provisions of KRS 45A.330 to .340, 164.390, and
5. 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 139 to the extent required by Kentucky law and will remain registered for the duration of any contract award
6. That I have fully informed myself regarding the accuracy of the statement made above.

**SWORN STATEMENT OF COMPLIANCE WITH 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 bids 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 bids, 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.

**RECIPROCAL PREFERENCE**

- (1) Prior to a contract being awarded to the lowest responsible and responsive bidder on a contract by a public agency, a resident bidder of the Commonwealth shall be given a preference against a nonresident bidder registered in any state that gives or requires a preference to bidders from that state. The preference shall be equal to the preference given or required by the state of the nonresident bidder.
- (2) A resident bidder is an individual, partnership, association, corporation, or other business entity that, on the date the contract is first advertised or announced as available for bidding:
  - (a) Is authorized to transact business in the Commonwealth; and
  - (b) Has for one (1) year prior to and through the date of the advertisement, filed Kentucky corporate income taxes, made payments to the Kentucky unemployment insurance fund established in KRS 341.490, and maintained a Kentucky workers' compensation policy in effect.
- (3) A nonresident bidder is an individual, partnership, association, corporation, or other business entity that does not meet the requirements of subsection (2) of this section.
- (4) If a procurement determination results in a tie between a resident bidder and a nonresident bidder, preference shall be given to the resident bidder.
- (5) This section shall apply to all contracts funded or controlled in whole or in part by a public agency.
- (6) The Finance and Administration Cabinet shall maintain a list of states that give to or require a preference for their own resident bidders, including details of the preference given to such bidders, to be used by public agencies in determining resident bidder preferences. The cabinet shall also promulgate administrative regulations in accordance with KRS Chapter 13A establishing the procedure by which the preferences required by this section shall be given.

- (7) The preference for resident bidders shall not be given if the preference conflicts with federal law.  
 (8) Any public agency soliciting or advertising for bids for contracts shall make KRS 45A.490 to 45A.494 part of the solicitation or advertisement for bids

DEFINITIONS

As used in KRS 45A.490 to 45A.494: (1) "Contract" means any agreement of a public agency, including grants and orders, for the purchase or disposal of supplies, services, construction, or any other item; and

(2) "Public agency" has the same meaning as in KRS 61.805.

**SIGNATURE REQUIRED:** This bid 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. Your signature is acceptance to the Terms and conditions above.

|   |                                    |                     |
|---|------------------------------------|---------------------|
| <b>DELIVERY TIME:</b>   | <b>NAME OF COMPANY:</b>            | <b>DUNS #</b>       |
| <b>BID FIRM THROUGH:</b>  | <b>ADDRESS:</b>                    | <b>Phone/Fax:</b>   |
| <b>PAYMENT TERMS:</b>   | <b>CITY, STATE &amp; ZIP CODE:</b> | <b>E-MAIL:</b>      |
| <b>SHIPPING TERMS: F.O.B. DESTINATION - PREPAID AND ALLOWED</b> | <b>FEDERAL EMPLOYER ID NO.:</b>    | <b>WEB ADDRESS:</b> |

**READ CAREFULLY - SIGN IN SPACE BELOW - FAILURE TO SIGN INVALIDATES BID or OFFER**

AUTHORIZED SIGNATURE: \_\_\_\_\_

NAME (Please Print Legibly): \_\_\_\_\_

TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

\*\*\*\*\*

State of \_\_\_\_\_)

County of \_\_\_\_\_)

The foregoing statement was sworn to me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by  
 \_\_\_\_\_.

(Notary Public)

My Commission expires: \_\_\_\_\_

***THIS DOCUMENT MUST BE NOTORIZED***

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## **1.0 DEFINITIONS**

The term "ITB" means Invitation to Bid or this document

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

The terms "offer" or "bid" mean the offeror's/offers' response to this ITB.

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

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

The term "purchasing agent" means Northern Kentucky University 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 ITB; or any other cause determined to be so serious and compelling as to affect the responsibility of the offeror.

The term "solicitation" means ITB.

The term "University" means Northern Kentucky University.

### **General Terms & Conditions Available to view / download at:**

[https://inside.nku.edu/content/dam/Procurement/docs/forms/General%20Terms%20%20Conditions\\_RS\\_jg11-1-18.pdf](https://inside.nku.edu/content/dam/Procurement/docs/forms/General%20Terms%20%20Conditions_RS_jg11-1-18.pdf)

An electronic version of the ITB, in .PDF format only, is available through Northern Kentucky University's Plan Room at <https://www.nkuplanroom.com/purchasing/View/Login>.

## **2.0 GENERAL OVERVIEW**

### **2.1 Intent and Scope**

Northern Kentucky University is seeking a Contractor to provide all materials, labor, tools, supervision, and equipment required to: Provide services for structural repairs due to floor heaving. Repairs include but not limited to partial removal of concrete slab/walls, concrete slab repairs, epoxy injection repairs, metal reinforcing at noted repairs. Work to begin on May 11, 2020 and must achieve Final Completion by July 17, 2020.

### **2.2 University Information**

Information regarding Northern Kentucky University can be found at <https://inside.nku.edu/>

### **3.0 Special Conditions to Bidder**

All work and cleaning to be completed by date outlined in 3.1 as Final Completion in order to allow adequate timing for replacement of owner furnishings before start of school year.

#### **Temporary Construction**

Bidders to include temporary barricade, door, and draping as part of bid number in order to maintain construction area as a dust free zone for duration of Work. Refer to specifications and drawings for additional information for signage and safety throughout duration of Work.

#### **Application made for Payment**

Application for Payment shall be submitted with a schedule of values for the Work covered by the applications and certificate of payment that has been completed in accordance with the contract documents. Schedule of Values must be presented and reviewed by Owner's Project Manager and Owner representative before start of Work.

#### **Change Orders**

All change orders must be approved by the Owner's Project Manager and the Owner's Representative for revised/additional scope to the contract documents before requested Work may be completed. Description must be submitted with contractor pricing of proposed change.

### **3.1 Key Project Dates**

|                                       |                                    |
|---------------------------------------|------------------------------------|
| Release of ITB                        | 02/21/2020                         |
| Pre-Bid Conference                    | 02/28/2020                         |
| Deadline for Written Questions        | Noon Eastern Time on 03/06/2020    |
| Deadline for Written Response/Addenda | Noon Eastern Time on 03/12/2020    |
| BIDS DUE                              | 2:00 pm Eastern Time on 03/20/2020 |
| Contract Award*                       | 03/27/2020                         |

#### **\*Project Dates:**

**Work Start Date shall be May 11, 2020**

**Substantial Completion no later than July 6, 2020**

**Final Completion no later than July 17, 2020**

### **3.2 Offeror Communication**

Information relative to this project obtained from other sources, including other university administration, faculty or staff may not be accurate, will not be considered binding and could adversely affect the potential for selection of your bid. All requests for information, questions or comments relative to this project should be directed, in writing to:

**Ryan Straus**  
**Coordinator, Contracts & Bidding**  
**Procurement Services**  
**Lucas Administrative Center, Suite 617**  
**Northern Kentucky University**  
**Highland Heights, KY 41099**  
[Strausr2@nku.edu](mailto:Strausr2@nku.edu)

### **3.3 Pre-bid Conference**

Pre-Bid conference will be held at Friday February 28<sup>th</sup> at 12.30 pm at Northern Kentucky University Fine Arts Center, 4th Floor Room 416. Please email Ryan Straus, Coordinator, Procurement Services [strausr2@nku.edu](mailto:strausr2@nku.edu) with any questions.

### **3.4 Preparation of Offers**

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

The offeror will furnish all information required by this solicitation.

Bids 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 bids should be bound in the single volume except as otherwise specified.

### **3.5 Bid Submission and Deadline**

The bidder shall submit, by the time and date specified via US Postal Service, courier or other delivery service, its bid response in a **sealed package** addressed to:

**Holly C. Vasquez**  
**Manager, Procurement Services**  
**Lucas Administrative Center, Suite 617**  
**1 Nunn Drive**  
**Northern Kentucky University**  
**Highland Heights, KY 41099**

Both inner and outer envelopes/packages should bear respondent's name and address, and clearly marked on package(s) as follows:

**ITB NKCC-04-2020**  
**FINE ARTS CENTER – FLOOR HEAVING REPAIR**

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



**3.6 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.

**3.7 Acceptance or Rejection and Award of bid**

The University reserves the right to accept or reject any or all bids, to waive any informalities or technicalities, to clarify any ambiguities in bids in the bid. 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.

**3.8 Rejection**

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

- a) Failure of a bid to conform to the essential requirements of the ITB.
- b) 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.
- c) Failure of the offeror to sign the University ITB. This includes the Authentication of Bids and Statement of Non-Collusion and Non-Conflict of Interest statements. (pages 1 & 2)
- d) Failure to sign the Bid Form / Form of Bids
- e) Receipt of bid after the closing date and time specified in the ITB.

**3.9 Addenda**

Any addenda or instructions issued by the purchasing agent prior to the time for receiving bids shall become a part of this ITB. Such addenda shall be acknowledged on the bid form or form of bid. No instructions or changes shall be binding unless documented by a proper and duly issued addendum.

**3.10 Disclosure of Offeror's Response**

The ITB specifies the format, required information and general content of bids submitted in response to this ITB. The purchasing agent will not disclose any portions of the bids prior to contract award to anyone outside the Office of Procurement Services, the University's administrative staff, representatives of the state or federal government (if required) and the members of the committee evaluating the bids. After a contract

is awarded in whole or in part, the University shall have the right to duplicate, use or disclose all bid data submitted by offerors in response to this ITB as a matter of public record.

Any submitted bid shall remain valid for 90 days after the bid due date.

**3.11 Restrictions on Communications with University Staff**

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

**3.12 Cost of Preparing Bid or Bids**

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

**3.13 Questions**

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

**3.14 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 bids, 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.

**3.15 Bids Addenda and Rules for Withdrawal**

Prior to the date specified for receipt of offers, a submitted bids 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 bids after the bids due date.

**3.16 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 (if applicable) Commonwealth of Kentucky Legislative Contracts Review Committee, have been received.

**3.17 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.

**3.18 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.

**3.19 Kentucky's Personal Information Security and Breach Investigation Procedures and Practices Act**

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.

**3.20 Termination for Convenience**

Northern Kentucky University, Office of Procurement Services, 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).

### **3.21 Termination for Non-Performance**

#### **a) 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.

#### **b) 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.

#### **c) 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.

### **3.22 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.

**3.23 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.

**3.24 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 ITB.

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.

**3.25 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.

**3.26 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.

**3.27 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 ITB or its performance or failure to perform under the contract awarded from this ITB. This clause shall survive termination for as long as necessary to protect the University.

### **3.28 Insurance**

If awarded, bidder / proposer must provide NKU with an insurance certificate listing NKU as a certificate holder and additionally insured.

**Northern Kentucky University  
617 Lucas Administrative Center  
1 Nunn Drive  
Highland Heights, KY 41099**

The Contractor shall furnish the University the Certificates of Insurance and guarantee the maintenance of such coverage during the term of the contract. The Contractor shall provide an original policy endorsement of its CGL insurance naming Northern Kentucky University and the directors, officers, trustees, and employees of the University as additional insured on a primary and non-contributory basis as their interest appears. Additionally, the Contractor shall provide an original policy endorsement for Waiver of subrogation in favor of the Northern Kentucky University its directors, officers, trustees, and employees as additional insured.

#### **Our basic insurance requirements are:**

Workers' Compensation insurance with Kentucky's statutory limits and Employers' Liability insurance with at least \$100,000 limits of liability.

Comprehensive General Liability (CGL) Insurance the limits of liability shall not be less than \$500,000 each occurrence for bodily injury and \$250,000 property damage.

Comprehensive Automobile Liability 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 \$500,000 for bodily injury and \$100,000 for property damage.

Excess liability insurance in an umbrella form for excess coverages shall have a minimum of \$1,000,000 combined single limits for bodily injury and property damage for each.

***If accessing NKU Student, Employee, or other personal records, vendor needs Security and Privacy Liability Insurance with limits no less than \$1,000,000.***

***If accessing NKU Student, Employee, or other personal records, vendor needs Evidence Breach Response Services coverage with limits no less than \$5,000,000.***

**3.29 Method of Award**

It is the intent of the University to award a contract to the qualified offeror whose bid, conforming to the conditions and requirements of the ITB, is determined to be the lowest.

Notwithstanding the above, this ITB 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 bid received.

**3.30 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 bids, the University will apply a reciprocal preference against an offeror submitting a bids 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 bids a notarized affidavit affirming that it meets the criteria as set forth in the above reference statute.

An affidavit is provided and attached, for your convenience to this ITB.

**3.31 Reports and Auditing**

The University, or its duly authorized representatives, shall have access to any books, documents, papers, records or other evidence which are directly pertinent to this contract for the purpose of financial audit or program review.

**3.32 Confidentiality**

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

If the offeror declares information provided in their response to be proprietary in nature and not available for public disclosure, the offeror shall declare in their response the inclusion of proprietary information and shall noticeably label as confidential or proprietary each sheet containing such information. Bids containing information declared by the offeror to be proprietary or confidential, either wholly or in part, not excluded by the Kentucky Open Records Act, KRS 61.870 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.

**3.33 Conflict of Interest**

When submitting and signing a bids, 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 agent identified in this ITB.

**3.34 Parking Permits**

Contractor must obtain parking permits for all vehicles that will be parked on campus. Permits can be obtained at the Welcome Center for \$80/month per vehicle.

<http://parking.nku.edu/rules/guidelines.html>

**3.35 Tobacco Free Campus**

Effective January 1st, 2014, NKU will be a tobacco free campus. The use of all tobacco products shall be prohibited in all campus buildings and outside areas on campus.

**3.36 Statutory Authority**

Selection of firms to provide professional services to Northern Kentucky University are governed by the provisions of the Kentucky Revised Statutes, KRS 45A.085, <http://www.lrc.ky.gov/KRS/045A00/085.PDF>

**3.37 Foreign Corporations**

Foreign corporations are defined as corporations that are organized under laws other than the laws of the commonwealth of Kentucky. Foreign corporations doing business within the commonwealth of Kentucky are required to be registered with the Secretary of State, New Capitol Building, Frankfort, Kentucky and must be in good standing.

The Foreign Corporate Proposer, if not registered with the Secretary of State at the time of the bid submittal, shall be required to become registered and be declared in good standing prior to the issuance or receipt of a contract.

**3.38 Domestic Corporations**

Domestic corporations are required to be in good standing

**3.39 Occupational License**

Northern Kentucky University was annexed by the city of Highland Heights in 2008. All contractors performing work for NKU must possess a Campbell County Occupational License and a city of Highland Heights Occupational License (administered by Campbell County) and must also pay applicable payroll taxes. For further information, call 859-572-6605.

**3.40 Bid Bonds:**

A 5% bid bond is required with submission of this ITB.

**3.41 Payment and Performance Bonds**

100% Payment and Performance Bonds will be required for work arising from this ITB.



**3.42 Completion Dates or Liquidated Damages if applicable**

It is understood and agreed that time is of the essence. The Contractor will efficiently, diligently, and expeditiously conduct the work in a manner that will satisfy compliance with approved project schedules and completion by the completion date appearing in the body of this bid.

**Substantial Completion shall be July 6, 2020**

**Final Completion shall be July 17, 2020**

**All work and cleaning to be completed by July 17th in order to allow adequate timing for replacement of owner furnished flooring, furniture, and equipment prior to start of the school year. Allow for slab concrete work to be completed, cured, and tested in order for owner floor finish installation to begin on July 27, 2020.**

**3.43 Coordination of Work**

The Vendor shall be responsible for coordinating all work with the **NKU Project Manager**. The Contractor shall cooperate completely with the Owner's security forces and measures.

**3.44 Damage and Repairs**

The Contractor shall exercise particular care to avoid damage to his own work, the Owner's property, and adjacent property of every description. He shall make good any damage resulting from or caused by the work under this contract at his sole expense in a manner satisfactory and without extra cost to the Owner including, but not limited to, finishes, furnishings, and landscaping.

**3.45 Hazardous Materials**

No asbestos containing materials, lead based paints, or other hazardous materials shall be furnished or installed in this work.

**3.46 Examination of Site**

Each vendor shall fully acquaint and familiarize themselves with the conditions as they exist and the character of the operation to be carried on under the proposed contract and has made such investigation as may be reasonably necessary so that the vendor shall fully understand the facilities, physical conditions and restrictions attending to the work under the contract. The specifications furnished represent a fair approximation of the material needed but all quotations submitted should take into account knowledge gained as a result of the above referenced visual inspection.

**3.47 Examination of Contract**

Each vendor shall also thoroughly examine and become familiar with the specifications and associated contract documents. By submitting a bid, the vendor agrees that they have carefully examined the specifications and have thereupon decided that from their own investigation Contractor has satisfied themselves as to the nature and location of work, the general and local conditions and all matters which may in any way affect the work or its performance and that as a result of such examination and investigation, vendor fully understands the intent and purpose of the documents and conditions of the bidding. Claims for additional compensation and/or extension of time because of the vendor's failure to follow the foregoing procedure and to familiarize themselves with the Contract Documents and all conditions which might affect work will not be allowed.

**3.48 Field Verification**

It is the Vendor's responsibility to verify all measurements.

### **3.49 Hours of Work**

Working days at Northern Kentucky University are generally Monday through Friday, 7:00am to 4:30pm but can be adjusted. Deviation from these working hours must be approved by said project manager.

### **3.50 Warranty**

Offeror shall stand behind installed system for period of 1 year along with any above and beyond conditions stated in the contract documents from Date of Substantial Completion against all the conditions indicated below as part of but not limited to Description of Work outlined in 4.0. Offeror is not responsible for warranty of OFCI equipment or signage. When notified in writing from Owner, Offeror shall, promptly and without inconvenience and cost to Owner correct said deficiencies.

## **4.0 DESCRIPTION OF WORK**

- A. The Work of the Project is defined by the Contract Documents and consists of the following:
  - 1. The Work for Northern Kentucky University– 2<sup>nd</sup> Floor Fine Arts Center cmu wall and concrete floor repairs consists of correcting strains that have been placed on the building due to an area of expansive shale below the foundation.
  - 2. Specific tasks for this renovation include but are not limited to the following:
    - a. Selective demolition of cracked and deteriorated slab above existing cmu walls as outlined herein.
    - b. Partial removal of cmu wall coursing block
    - c. Correction of diagonal shear crack via epoxy injection as outlined in the work documents.
    - d. New concrete patch/repair material.
  - 3. **Allow for slab concrete work to be completed, cured, and tested in order for owner floor finish installation to begin on July 27, 2020.**

**5.0 BID DOCUMENTS**

**5.1 References**

**5.2 Subcontractors (If Applicable)**

**5.3 List of Materials and Equipment**

**5.4 List of Unit Prices**

**5.5 Bid Bond**

**5.6 EEO Paperwork/Reporting Requirements (If Applicable)**

**5.7 Form of Bid**

**Appendix 1 Drawings and Specifications**

**5.1 REFERENCES**

**Bidder Qualifications:** The bidder is required to submit a list of completed projects where he has performed similar work to that specified herein as well as adhere to qualifications as listed in the contract documents.

**Organization:** \_\_\_\_\_

**Contact Name:** \_\_\_\_\_

**Phone Number:** \_\_\_\_\_

**Date Work Completed:** \_\_\_\_\_ **Value of Contract:** \_\_\_\_\_

**Project Manager assigned to this project:** \_\_\_\_\_

**Brief Project Description:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Organization:** \_\_\_\_\_

**Contact Name:** \_\_\_\_\_

**Phone Number:** \_\_\_\_\_

**Date Work Completed:** \_\_\_\_\_ **Value of Contract:** \_\_\_\_\_

**Project Manager assigned to this project:** \_\_\_\_\_

**Brief Project Description:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Organization:** \_\_\_\_\_

**Contact Name:** \_\_\_\_\_

**Phone Number:** \_\_\_\_\_

**Date Work Completed:** \_\_\_\_\_ **Value of Contract:** \_\_\_\_\_

**Project Manager assigned to this project:** \_\_\_\_\_

**Brief Project Description:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**5.2 SUBCONTRACTORS (IF APPLICABLE)**

**SUBCONTRACTORS:** The following is a list of subcontractors proposed by the bidder to be used to complete the project. All subcontractors are subject to approval by Northern Kentucky University. Failure to submit this list completely filled out may invalidate bid. **SUBCONTRACTORS MAY NOT BE CHANGED AFTER CONTRACT AWARD WITHOUT APPROVAL BY NKU.**

**BRANCH OF WORK**

**NAME, ADDRESS AND TELEPHONE OF SUBCONTRACTORS**

|  |  |
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**5.3 List of Materials and Equipment  
(Must be submitted within 24 hours after bid opening)**

Every item listed under the different phases of this project must be clearly identified so that Northern Kentucky University will definitely know what the bidder proposes to furnish. Bidders be hereby advised that this list shall be required to be filled out completely by the apparent low bidder within twenty-four (24) hours from the close of the official reading of the bids.

The above requirement does not preclude any bidder from submitting this list, fully executed, at the time the bids are submitted.

The use of the manufacturers' dealer's name only, or stating "as per plans and specifications", will not be considered as sufficient identification. Where more than one "Make or Brand" is listed for any one item, the Owner has the right to select the one to be used.

Failure to submit a proper list may result in rejection of the Bidder's Bids.

|                      |  |
|----------------------|--|
| Concrete Repairs     |  |
| Epoxy Injection      |  |
| Miscellaneous Metals |  |
|                      |  |
|                      |  |
|                      |  |
|                      |  |
|                      |  |

#### 5.4 List of Unit Prices

**List of Unit Prices.** Unit prices shall include the furnishing of all labor, materials, suppliers, services, and shall include all items of cost, overhead and profit for the Trade Contractor and any Subcontractor involved, and shall be used uniformly without modification for either additions or deductions. The Unit Price as established shall be used to determine the equitable adjustment of the Contract Price in connection with changes or extra work performed under the Contract. Failure to completely fill out the unit prices requested will result in Bid rejection.

| ITEM DESCRIPTION                                 | UNIT | UNIT PRICE |
|--|------|------------|
| 1. Full Depth Floor Repair in Offices 230 & 231  | S.F. | \$_____    |
| 2. Epoxy Injection Repair                        | L.F. | \$_____    |
| 3. Replacement Price for new studio dance mirror | E.A. | \$_____    |

5.5

**Bid Bond**  
5% of Contract Price

**KNOW ALL MEN BY THESE PRESENTS,** that we (here insert full name and address or legal title of Contractor)

as Principal, hereinafter called the Principal, and (here insert full name and address or legal title of Surety)

a corporation duly organized under the laws of the State of Kentucky as Surety, hereinafter called Surety, are held and firmly bound unto **Northern Kentucky University** as Obligee, hereinafter called Obligee, in the sum of :

\_\_\_\_\_ Dollars (\$\_\_\_\_\_),

representing 5% of the Principal's total bid price and for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

**WHEREAS,** the Principal has submitted a bid for \_\_\_\_\_ (Here insert full name, address and description of project)

NOW THEREFORE, if the Obligee shall accept the bid of the Principal within the period specified, or if no period is specified, within 45 days after its opening, and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bid or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bonds or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this day of \_\_\_\_\_ 2020

|             |        |
|-------------|--------|
| (Principal) | (Seal) |
|-------------|--------|

\_\_\_\_\_  
(Witness)

\_\_\_\_\_  
(Title)

|          |        |
|----------|--------|
| (Surety) | (Seal) |
|----------|--------|

\_\_\_\_\_  
(Witness)

\_\_\_\_\_  
(Title)

***THIS DOCUMENT MUST BE NOTORIZED***  
**This is only an example. Other forms may be used.**



## 5.7 FORM OF BID

### LUMP SUM BASE BID

The Bidder agrees to furnish all labor, materials, supplies, supervision and services required to perform this contract in a workmanlike manner. These services to be provided in accordance with Specifications and Contract Documents, and any duly issued Addenda for the **LUMP SUM BASE BID** set forth below:

\_\_\_\_\_ Dollar \_\_\_\_\_ Cents  
(USE WORDS) (USE WORDS)

\$ \_\_\_\_\_  
(USE NUMBERS)

This offer is for, at minimum, \_\_\_\_\_ calendar days from the date this offer is opened. In submitting the above it is expressly agreed that upon proper acceptance by Northern Kentucky University of any or all items offered, a contract shall thereby be created with respect to the items accepted.

THIS BID SUBMITTED BY:

\_\_\_\_\_  
(Name and Address of Bidder)

DATE: \_\_\_\_\_ AUTHORIZED SIGNATURE: \_\_\_\_\_

**NOTE:** *The Authentication of Bid and Statement of Non-Collusion and Non-Conflict of Interest must be properly executed for this Bid to be valid.*

*This Bidder, in compliance with this Request for Bid, and having carefully examined the complete contract documents, as well as the specifications for the work as prepared by Northern Kentucky University, hereby proposes to furnish all labor, supervision, materials, supplies and services required to perform the specifics of the Contract Documents, within the time set forth herein and for the final negotiated price.*

The Bidder, hereby acknowledges receipt of the following Addenda:

ADDENDUM NO. \_\_\_\_\_ DATED \_\_\_\_\_ ADDENDUM NO. \_\_\_\_\_ DATE \_\_\_\_\_

Appendix 1 Drawings and Specifications



# NK UNIVERSITY

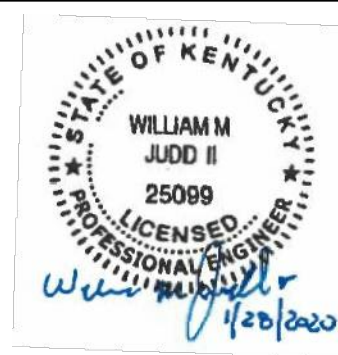
## FINE ARTS CENTER FLOOR HEAVING REPAIR



THP Limited, Inc.  
Cincinnati • Cleveland

100 East Eighth Street  
Cincinnati, Ohio 45202  
Phone: 513.241.3222  
www.thpltd.com

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### GENERAL STRUCTURAL NOTES:

#### A. CODES AND SPECIFICATIONS

- 2018 KENTUCKY BUILDING CODE.
- ASCE/SEI 7-10, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
- ACI 301-16, SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS AS MODIFIED BY THE CONSTRUCTION DOCUMENTS.
- ANSI/AISC 303-16, CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES AS MODIFIED BY THE CONSTRUCTION DOCUMENTS.
- ADDITIONAL TECHNICAL SPECIFICATIONS IN THE PROJECT MANUAL.

#### B. DESIGN LOADS

- FLOOR LOADS PER ORIGINAL DRAWINGS DATED 1977:  
TYPICAL CLASSROOM LIVE LOAD: 40 PSF  
CORRIDOR AND STAIR LIVE LOAD: 100 PSF  
CEILING AND MECHANICAL ALLOWANCE: 10 PSF

#### C. CONCRETE

- CONCRETE STRENGTH: 4000 PSI
- ALL REINFORCING BARS: 60 KSI YIELD.
- JOINTS NOT INDICATED ON STRUCTURAL DRAWINGS ARE NOT PERMITTED UNLESS APPROVED BY THE STRUCTURAL ENGINEER.
- CONCRETE CONSTRUCTION TOLERANCES ARE AS SHOWN IN THE PROJECT SPECIFICATIONS.

#### D. POST-INSTALLED ANCHORS AND ADHESIVE ANCHORING TO CONCRETE

- POST-INSTALLED ANCHORS AND ADHESIVE ANCHORING SYSTEMS MUST BE TESTED AND APPROVED USING ICC EVALUATION SERVICE ACCEPTANCE CRITERIA, INCLUDING ICC-ES AC109: "MECHANICAL ANCHORS IN CONCRETE ELEMENTS" OR ICC-ES AC308: "POST-INSTALLED ADHESIVE ANCHORS IN CONCRETE ELEMENTS". CONCRETE SHALL BE CONSIDERED CRACKED. SUBMIT MANUFACTURER'S DATA AND EVALUATION REPORT (ESR) FOR PROPOSED ANCHORS, ADHESIVES, AND ANCHORING SYSTEMS. INDICATE SPECIFIC PROJECT LOCATIONS AND CONDITIONS WHERE PROPOSED FOR USE.
- MECHANICAL ANCHORS TO CONCRETE SHALL BE AS SHOWN IN THE STRUCTURAL DETAILS. UNLESS NOTED OTHERWISE, USE ONE OF THE FOLLOWING:
  - HILTI KWIK BOLT T2 EXPANSION ANCHORS.
  - POWERS POWER-STUD® SD2 WEDGE EXPANSION ANCHORS.
  - SIMPSON STRONG-BOLT 2 WEDGE ANCHORS.
- POST-INSTALLED ANCHORS SHALL ONLY BE USED AS SHOWN AND APPROVED; THEY SHALL NOT BE USED WHERE CAST-IN-PLACE ANCHORS ARE REQUIRED.

#### E. QUALITY CONTROL AND ASSURANCE

- ZINC COAT ANCHORS, RODS AND HARDWARE TYPICALLY.
- EMBEDMENT DEPTH, EDGE DISTANCES, AND SPACING ARE CRUCIAL. LOCATE AS SHOWN ON THE DRAWINGS. WHERE NOT SHOWN, EMBED REBAR 24 DIAMETERS AND EMBED ANCHORS AT LEAST 8 DIAMETERS, WITH EDGE DISTANCES AT LEAST 8 DIAMETERS, AND SPACING AT LEAST 12 DIAMETERS. USE MANUFACTURER'S DATA TO CALCULATE REDUCED CAPACITY FOR ACTUAL CONDITIONS AND CONFIRM AN ULTIMATE SAFETY FACTOR OF AT LEAST 4.0.
- HOLES INTO CONCRETE MUST NOT INTERFERE WITH REINFORCING BARS. THE CONTRACTOR SHALL REVIEW THE STRUCTURAL DRAWINGS AND USE FERRO-SCAN, CHIPPING OR OTHER MEANS TO LOCATE REINFORCING BARS IN THE AREA. SPACE HOLES TO FIT AROUND REBAR AND FABRICATE FIXTURE TO MATCH.
- HOLES IN CONCRETE SHALL BE THE PROPER SIZE AND THOROUGHLY CLEANED WITH ALL DUST REMOVED. DRILL HOLES USING A HOLLOW BIT AND FUNCTIONING VACUUM SYSTEM, THEN BRUSH AND BLOW OUT WITH COMPRESSED AIR.
- INSTALL INTO DRY CONCRETE IN CLEAN, DUST FREE HOLES USING METHOD AND PROCEDURE THAT MEETS MANUFACTURER'S RECOMMENDATIONS INCLUDING TEMPERATURE RANGE, HUMIDITY, INSTALLATION TIME AND CURE TIME. FOLLOW THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS. INSTRUCTIONS MUST BE INCLUDED IN THE ANCHOR PACKAGING.
- PROVIDE STANDARD SIZE HOLES IN THE FASTENED STEEL ELEMENT (1/16" LARGER THAN THE BOLT DIAMETER). MARK AND DRILL ALL HOLES IN THE CONCRETE BEFORE SETTING

STEEL. SOME ANCHORS MAY BE SET AFTER STEEL IS IN PLACE TO ALLOW SOME ALIGNMENT. DO NOT OVERSIZE HOLES.

- THE CONTRACTOR SHALL ARRANGE FOR A REPRESENTATIVE OF THE MANUFACTURER TO PROVIDE ONSITE INSTALLATION TRAINING FOR THEIR PRODUCTS. ADHESIVE ANCHOR INSTALLERS SHALL ALSO BE CERTIFIED BY A RECOGNIZED PROGRAM, SUCH AS BY ACI AND CRSI. SUBMIT DOCUMENTATION OF TRAINING AND CERTIFICATION OF PERSONNEL PRIOR TO PERFORMING SUCH WORK. PROVIDE COPY TO THE OWNER'S INSPECTION AGENCY.

#### F. COORDINATION AND CONSTRUCTION

- THE SPECIFICATIONS AND DRAWINGS COMPLEMENT EACH OTHER. BOTH SHALL BE THOROUGHLY REVIEWED BEFORE PROCEEDING WITH ANY WORK. THE CONTRACTOR SHALL COMPLETE ALL WORK REQUIRED AND NECESSARY FOR THE PROJECT IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, DRAWINGS, AND REFERENCED STANDARDS.
- UNLESS OTHERWISE NOTED, DETAILS, SECTIONS AND NOTES ON THE STRUCTURAL DRAWINGS ARE INTENDED TO APPLY TO SIMILAR SITUATIONS ELSEWHERE.
- SHOP DRAWINGS PREPARED BY SUPPLIERS AND SUB CONTRACTORS SHALL BE REVIEWED BY THE TRADE CONTRACTOR AND GENERAL CONTRACTOR PRIOR TO SUBMITTING TO ENGINEER.
  - FIELD VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND CONDITIONS WHICH AFFECT FABRICATION AND SHOW ON SHOP DRAWINGS.
  - VERIFY AND SHOW EXACT SIZE AND LOCATION OF ALL FLOOR, WALL AND ROOF OPENINGS, SLAB EDGES, EMBEDDED ANCHORS AND OTHER ITEMS.
  - SHOW AND LOCATE ALL MECHANICAL SLEEVES, EMBEDS, DRAINS, ETC. ON COORDINATION DRAWINGS. ITEMS NOT SUBMITTED FOR REVIEW TO THE STRUCTURAL ENGINEER ARE NOT PERMITTED IN OR THROUGH THE STRUCTURE.
  - SUBMIT COMPLETE SHOP DRAWINGS WITH MANUFACTURERS' DATA, ETC. SHOW ALL CONNECTIONS AND DETAILS NECESSARY TO FULLY DESCRIBE AND PROPERLY INSTALL THE WORK.
  - STRUCTURAL ENGINEER'S REVIEW SHALL BE FOR GENERAL ARRANGEMENT AND CONFORMANCE WITH THE STRUCTURAL INTENT ONLY.
- THE SPECIFICATIONS AND STRUCTURAL DRAWINGS TYPICALLY REFER TO THE FINISHED STRUCTURE. UNLESS NOTED OTHERWISE, THEY DO NOT PRESCRIBE THE METHOD OF CONSTRUCTION.
- BRACE ENTIRE STRUCTURE AS REQUIRED TO MAINTAIN STABILITY UNTIL COMPLETE AND FUNCTIONING AS THE DESIGNED UNIT.
- IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO WORKING HOURS.
- THE ENGINEER'S OBSERVATION AND REVIEW OF CONTRACTORS' PERFORMANCE DOES NOT INCLUDE REVIEW OF ADEQUACY OF CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

#### G. QUALITY CONTROL AND ASSURANCE

- THE CONTRACTOR SHALL PERFORM QUALITY CONTROL, TESTING AND INSPECTION OF ALL WORK AS REQUIRED BY THE CONTRACT DOCUMENTS, INCLUDING REFERENCED CODES, SPECIFICATIONS AND STANDARDS.

- THE OWNER WILL EMPLOY A TESTING AND INSPECTION AGENCY TO PERFORM SERVICES INDICATED TO BE BY OWNER IN THE PROJECT SPECIFICATIONS.

- THE OWNER WILL ALSO EMPLOY QUALIFIED SPECIAL INSPECTORS TO PERFORM INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE BUILDING CODE. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING ALL INSPECTIONS AND TESTS. ITEMS REQUIRING SPECIAL INSPECTION ON THIS PROJECT INCLUDE:
  - CONCRETE: ALL CONCRETE WORK.

- THE STRUCTURAL ENGINEER MAY GENERALLY OBSERVE THE PROGRESS OF THE WORK, BUT HIS OBSERVATION SHALL NOT BE CONSTRUED AS INSPECTION.

### DRAWING INDEX:

- |     |                                 |
|-----|---------------------------------|
| 001 | TITLE SHEET                     |
| 101 | LEVEL 2 PLAN AND REPAIR DETAILS |



**ACADEMIC, ADMINISTRATIVE & MULTIPURPOSE BUILDINGS**  
1 Albright Health Center (HC)  
2 The Bank of Kentucky Center (BK)  
3 Baptist Student Union (BSU)  
4 Business Academic Center (BC)  
5 Holly/US Bank College of Business  
6 Campbell Hall (CA)  
7 Central Receiving  
8 Ceramics & Sculpture (CS)  
9 Fine Arts Center (FA)  
10 Griffin Hall (College of Informatics)  
11 Herrmann Natural Science Center (SC)  
12 Landium Academic Center (LA)  
13 Lucas Administrative Center (AC)  
14 Mathematics Education-Psychology Center (MP)  
15 Nunn Hall (NH)  
16 Power Plant  
17 Regents Hall (RH)  
18 Soccer Stadium  
19 Stealy Library (SL)  
20 University Center (UC)  
21 Otto M. Budig Theater  
22 Welcome Center (WC)  
23 Houses  
24 Alumni Programs (421 Johns Hill Rd.)  
25 Catholic Newman Center (19 Clearview Dr.)  
26 Center for Applied Ecology (15 Clearview Dr.)  
27 Economic Initiatives Center  
28 Honors House (HR)  
29 N. Ky. Training Program for Special Ed. (245 Johns Hill Rd.)  
30 Small Business Development Center (303 Johns Hill Rd.)  
31 Talent Search (10 Clearview Dr.)  
32 University Police (413 Johns Hill Rd.)  
33 Upward Bound (241 Johns Hill Rd.)

**BOOTH RESIDENTIAL VILLAGE**  
34 Callahan Hall (CH)  
35 Commonwealth Hall  
36 Kentucky Hall  
37 Norse Commons (NC)  
38 Norse Hall  
39 University Suites (US)  
40 Woodcrest Apartments  
**PARKING GARAGES**  
41 Kenton Drive Parking Garage  
42 University Drive Parking Garage  
43 Welcome Center Parking Garage  
**PARKING LOTS**  
A Open Parking  
C Faculty/Staff Parking  
D Faculty/Staff Parking  
E Faculty/Staff Parking  
F Student Parking  
G Open Parking  
H University Police Parking  
I Student Parking  
J Faculty/Staff Parking  
K Open Parking  
L Open Parking

**STUDENT PARKING**  
M Student Parking  
N Reserved Parking  
O Open/VIP Parking  
P Student Parking  
Q Student Parking  
R Student Parking  
S Open Parking  
T Open Parking  
U Student Parking  
V Faculty/Staff Parking  
W Student Parking  
X Open Parking  
Y Student Parking  
Z Open Parking  
VISITOR PAY-TO-PARK, NO PERMIT REQUIRED  
CERAMICS PERMIT REQUIRED  
EITHER CALLAHAN PERMIT OR REGULAR PERMIT WITH CALLAHAN ENDORSEMENT REQUIRED

**OTHER BUILDINGS**  
44 Maintenance Building  
45 Student Union  
46 Student Union  
47 Student Union  
48 Student Union  
49 Student Union  
50 Student Union  
51 Student Union  
52 Student Union  
53 Student Union  
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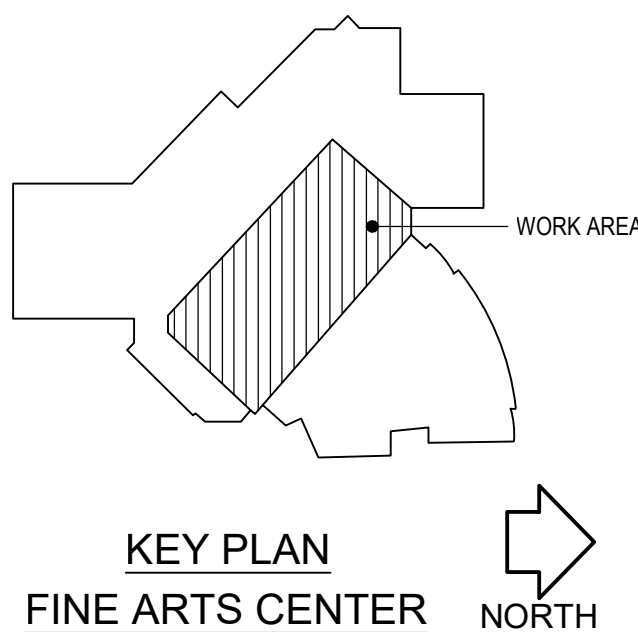
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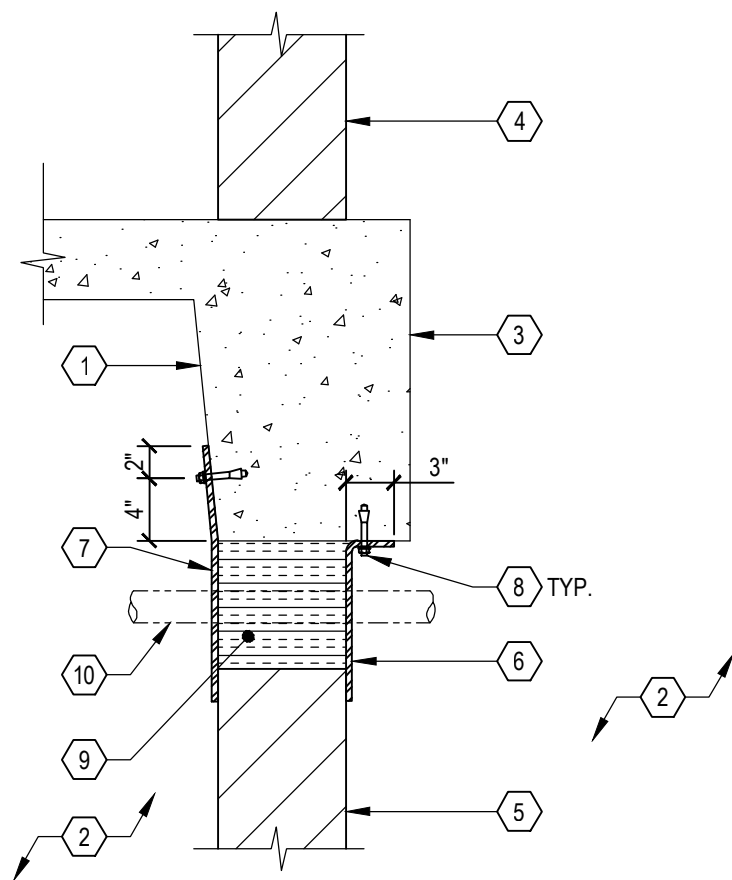
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- LEGEND**
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|---|------------------|
|  | SLAB REPAIR AREA |
|  | CMU WALL BELOW   |



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|----|---|
| 1  | EXISTING CONCRETE EDGE JOIST AND SLAB SYSTEM.   |
| 2  | INKU SCENE SHOP AND STORAGE AREA. COORDINATE WORK AREA AND RELOCATION OF EXISTING UTILITIES WITH NKU.           |
| 3  | EXISTING SHEAR CRACK AT FACE OF JOIST, 3'-0"± IN LENGTH. PRIOR TO PARTIAL CMU REMOVAL, INJECT CRACK WITH EPOXY. |
| 4  | EXISTING CMU WALL ABOVE. NO WORK.   |
| 5  | EXISTING 8" CMU WALL. REMOVE TOP COURSE (8"±) OF WALL. COORDINATE RELOCATION OF DISTURBED UTILITIES WITH NKU.   |
| 6  | 3/8" x 10" WIDE x 10"± LONG BENT PLATE, SPACED 4'-0" OC ALONG LENGTH OF WALL.                                   |
| 7  | 3/8" x 10" WIDE x 1'-4"± LONG BENT PLATE SPACED AT 4'-0" OC ALONG LENGTH OF WALL.                               |
| 8  | (2) 3/8" DIA. EXPANSION ANCHORS EMBEDDED 2" INTO JOIST AND SPACED 8" OC.  |
| 9  | PROVIDE FIRE RESISTANT AND SOUND DEADENING INSULATION, CONTINUOUS TO FILL VOID.                                 |
| 10 | EXISTING MECHANICAL PIPING OR CONDUIT. DO NOT DAMAGE. COORDINATE WITH NKU IF RELOCATION IS REQUIRED.            |

- 1 EXISTING CONCRETE SLAB.
- 2 EXISTING CONCRETE JOIST.
- 3 EXISTING CMU WALL. LOCATION VARIES. REFER TO PLAN AND VERIFY IN FIELD. REFER TO DETAILS 2 AND 3 THIS DRAWING FOR TOP OF WALL RESURFUP.
- 4 EXISTING FULL DEPTH SLAB CRACK.
- 5 3/4" SAWCUT AROUND PERIMETER OF REPAIR AREA.
- 6 EDGE OF REMOVAL SHOULD BE AT 3:1 SLOPE AS SHOWN.
- 7 REMOVE ALL SOUND AND UNSOUND CONCRETE IN SHADED AREA. REFER TO SPECIFICATION SECTION 030100.
- 8 EXISTING SLAB REINFORCING. DO NOT DAMAGE DURING SLAB REMOVAL.
- 9 FORM UP PATCH. PREPARE CAVITY AND PROVIDE NEW CONCRETE PATCH MATERIAL. REFER TO SPECIFICATION SECTION 030100.
- 10 EXISTING BUILT UP PANCE FLOOR, CARPET TILE, OR LINOLEUM FINISH. REMOVE, PROTECT AND REPLACE PER PLAN NOTES.
- 11 BASE BID REPAIR TO BE LIMITED TO SLAB BETWEEN ADJACENT JOISTS AS SHOWN AND DIMENSIONS ON PLAN. THIS DRAWING CONTRACTOR IS TO SOUND SLAB TO DETERMINE IF DETERIORATION EXTENDS INTO ADJACENT SLAB. ADDITIONAL AREA IS TO BE REPAIRED ON A UNIT PRICE BASIS. REFER TO SPECIFICATION SECTION 030300.

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FULL DEPTH FLOOR REPAIR  
**DETAIL**

NO SCALE

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| 15205.00       | 01/2020 |
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DIVISION 03 – CONCRETE

SECTION 030100

CONCRETE REPAIRS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. All labor, material, tools, equipment and services to perform concrete repairs at areas indicated on the Drawings and in the Specifications, including but not limited to:
  - 1. Full depth floor repairs.

1.2 RELATED SECTIONS

- A. Epoxy Injection Repairs – Refer Section 036423.
- B. Miscellaneous Metals – Refer Section 055000.

1.3 REFERENCES

- A. American Concrete Institute (ACI):
  - 1. ACI 301 - Specification for Structural Concrete for Buildings.
  - 2. ACI 318 - Building Code Requirements for Reinforced Concrete.
- B. American Society for Testing and Materials (ASTM):
  - 1. ASTM A185 - Specification for Steel Welded Wire, Fabric, Plain, for Concrete Reinforcement.
  - 2. ASTM A615 - Specification for Deformed and Plain-Billet Steel Bars for Concrete Reinforcement.
  - 3. ASTM A775 – Standard Specification for Epoxy-Coated Reinforcing Steel Bars.
  - 4. ASTM C31 - Method of Making and Curing Concrete Specimens in the Fields.
  - 5. ASTM C33 - Concrete Aggregates.
  - 6. ASTM C39 - Test Method for Compressive Strength of Cylindrical Concrete Specimens.
  - 7. ASTM C94 - Specification for Ready-Mixed Concrete.
  - 8. ASTM C143 - Standard Test Method for Slump of Portland Cement Concrete.

9. ASTM C150 - Specification for Portland Cement Concrete.
  10. ASTM C260 - Specification for Air-entraining Admixtures for Concrete.
  11. ASTM C494 - Specification for Chemical Admixtures for Concrete.
  12. ASTM C881 – Specification for Epoxy-Resin-Base Bonding Systems for Concrete.
  13. ASTM C882 – Standard Test Method for Bond Strength of Epoxy-Resin Systems Used with Concrete.
- C. Structural Steel Painting Council (SSPC):
1. Surface Preparation Specification No. 3 (SP3) – Wire Wheel Cleaning.
- D. American Association of State Highway and Transportation Officials (AASHTO):  
AASHTO M182 - Specifications for Burlap Cloth Made from Jute or Kenaf.
- E. Keep a copy of the referenced specifications cited in this section in the on-site field office.

#### 1.4 SUBMITTALS

- A. Submit literature for manufactured products, including manufacturer's specifications, test data and installation instructions.
- B. Letter stating this Contractor and supplier are familiar with the referenced standards.
- C. The Owner's review of details and construction operations shall not relieve this Contractor of his responsibility for completing the work successfully in accordance with the Contract Documents.

#### 1.5 QUALITY ASSURANCE

- A. The Contractor shall comply with all Federal, State and Municipal laws, codes, ordinances and regulations applicable to the Work in this Contract and also with all requirements of the National Fire Protection Association, the National Electric Code, and the Occupational Safety and Health Administration (OSHA). If the above laws, codes or ordinances conflict with this Specification, then the laws, codes or ordinances shall govern, except in such cases where the Specification exceeds them in quality of materials or labor, then the Specifications shall be followed.
- B. Concrete that does not conform to the specified requirements, including bond to substrate, strength, finish and tolerances shall be subject to removal and replacement, including necessary preparatory work, at no additional cost to the Owner and without extension to the Contract Time.
- C. Contractor shall be responsible for restoration of other components of the Work damaged during placement of concrete or damaged during removal of

unsatisfactory concrete.

- D. ACI 301, ACI 305R and ACI 306R are a part of the Contract Documents, are incorporated herein as fully as if here set forth and are referred to as General Concreting Requirements.
- E. Concrete testing and certification shall be as described in ACI 301, Chapter 16.

## 1.6 JOB CONDITIONS – SHORING

- A. Typical Shore types are shown on the Drawings. Contractor shall provide the following number of shores to be used throughout the project in the different Work Areas.
  - 1. Typical Joist Shoring: Shoring system is to support at minimum 500 pounds per linear foot of unfactored load along bottom of joist.
- B. Contractor shall provide unit prices to install the different shore posts. Include in the unit price the cost of installation, miscellaneous hardware that cannot be re-used location to location, shore removal and miscellaneous patching required after removal.
- C. Install shores before removing concrete from the structural member that is designated to be shored.
- D. Shores must be on-site prior to beginning any concrete demolition work.

## 1.7 WARRANTY

- A. A warranty period of two (2) years shall be provided for concrete work performed under this Section against defects, as determined by the Owner, including but not limited to debonding, excessive cracking and surface scaling.

## PART 2 PRODUCTS

### 2.1 MATERIALS

- A. Fine and Coarse Aggregates:
  - 1. Meeting requirements of ASTM C-33.
- B. Water:
  - 1. Mixing water shall be potable meeting requirements of ASTM C-94.
- C. Pre-packed Concrete Materials:
  - 1. Horizontal Application – Typical Repair Areas (Patch Material Type A):
    - a. MasterEmaco T 310CI by BASF
    - b. SikaQuick 1000 by Sika Corp.

- c. MasterEmaco T 1060/1061 by BASF
  - d. Planitop 18 ES by Mapei.
- D. Welded Wire Reinforcement:
  - 1. Conforming to ASTM A185.
- E. Reinforcing Steel:
  - 1. All reinforcing steel shall have a minimum  $F_y$  of 60 ksi.
  - 2. Provide epoxy coated steel where shown on Drawings.
- F. Curing Materials:
  - 1. 10 oz. burlap meeting the requirements of AASHTO M-182.
  - 2. Visqueen: 6 mil polyethylene (white).
- G. Curing Compound:
  - 1. VOCOMP-25 by W.R. Meadows.
  - 2. MasterKure CC 1315WB by BASF
  - 3. Liquid membrane forming curing compound shall conform to the requirements of ASTM C1315, Type 1, Class A and have data from an independent laboratory indicating a maximum moisture loss of 0.40 grams per square cm. when applied at a coverage rate of 300 square feet per gallon.
- H. Form Lumber:
  - 1. New fire retardant material, grade and size to adequately form, support and brace concrete and to provide finishes that match adjacent surfaces.

### PART 3 EXECUTION

#### 3.1 GENERAL

- A. Prior to the start of work, the Contractor shall survey areas to receive repair concrete to determine locations and approximate quantity of material.
- B. Prior to start of excavations, perform an on-site review of the work areas with the Owner. Provide a minimum of 2 working days notice prior to the requested review day.
- C. Prior to performing operations such as jack hammer work, the Contractor shall make a careful and thorough survey of the underside of the level on which he intends to work and shall remove all loose soffit concrete which may fall as a result of those operations. The Contractor shall also be responsible for posting all signs and erecting all barricades as necessary to prevent pedestrians from entering the



area below hazardous work.

- D. During concrete removal work, Contractor shall not damage existing mild steel reinforcement. Mild steel reinforcement that is damaged by the Contractor, as determined by the Owner, shall have a new reinforcing bar the same size as the damaged bar lapped to each side of the damaged area. Lap lengths shall be determined by ACI 318. Cost of new reinforcing bar, concrete removal and patching for lap length shall be borne by the Contractor.
- E. It is intended that the existing reinforcement steel exposed during the work shall remain in place (unless noted on Drawing for removal) and undamaged during removal of the unsatisfactory concrete. Tie loose reinforcement bars in place in an approved manner prior to placing patch mix. If the reinforcement is deteriorated, as determined by the Owner, the Owner may direct that it be replaced and spliced in accordance with ACI splice and development requirements for reinforcement bars. Additional concrete removal may be required to expose undamaged reinforcing. If required, compensation will be made in accordance with the established Unit Prices.
- F. Concrete placement for patches or overlays on sloping surfaces shall begin on the low elevation end and proceed upwards to the high elevation end.

### 3.2 PROTECTION

- A. Contractor shall protect all open excavations, and reinforcing therein, from damage due to mechanical disturbance, weather conditions or other causes.
- B. Contractor shall protect occupied areas below the work area during all phases of the work including removal, preparation and placement of materials.
- C. Provide barricades to close areas immediately below the work area. Coordinate the time closing of required areas with the Owner.

### 3.3 FULL DEPTH FLOOR REPAIR PROCEDURE

- A. Refer to the Drawings for repair details and extents of work. Contractor shall sound the concrete slab using chain drag method and hammer survey to identify the limits of deteriorated concrete within the Work Area. Mark with paint each area to be repaired. Location of paint marks must be approved by the Owner's representative.
- B. Before removal of floor concrete within a Work Area, the Contractor and the Owner's representative will record the area bounded by the paint marks. Take measurements to the nearest inch in such a way that results in a total plan area at each location.
- C. Contractor and Owner's representative shall affix their signatures to each measurement sheet completed, attesting to the agreed-upon accuracy of the measurements. Furnish copies of measurement sheets to both parties for their records.

- D. Sum and calculate total repair area that exceeds contract documents to yield additional square feet. Measurements are the sole basis for calculation of final payment, based upon full depth repair unit price. Base unit price on the area of the repair and the depths indicated on the repair details.
- E. Remove floor concrete within the Work Area by conventional chipping methods.
- F. Conventional Chipping Method:
  - 1. Sawcut the concrete slab surface along the perimeter of the paint marks which define the removal area. Do not cut existing reinforcement. Depth of sawcuts shall be 3/4 inch. Cut perimeter of removal area before beginning chipping hammer work. Do not over cut corners of patch area.
  - 2. Perform concrete removal with no larger than 18 pound chipping hammers.
  - 3. Begin concrete removal at the center of the removal area and work towards the sawcut perimeter. Maintain vertical sawcut edge at perimeter. Re-saw if necessary to maintain required edge.
- G. The surface of the sound, exposed concrete shall be relatively flat with 1/4" amplitude over the repair area for new concrete patches and overlays. Contractor is responsible for insuring that the final concrete repair area is sound.
- H. Within 24 hours of concrete repair material placement, wire wheel clean the excavation and the immediately adjacent surface. Reinforcing steel shall be wire wheel prepared to an SSPC-SP3 condition.
- I. After completion of all cleaning operations, blow-out excavations with oil-free and water-free compressed air. Previously cleaned excavations that are subjected to contamination must be re-cleaned.
- J. Thoroughly saturate all concrete surfaces to be in contact with new concrete as necessary to provide a saturated surface dry condition.
- K. Place Patch Material Type A in the excavations. Vibrate new patch material to ensure consolidation in maximum-depth areas and at the excavations perimeter. Screed material flush with adjacent surfaces and finish with a float or light trowel.
- L. After finishing, fog concrete surfaces with water using approved fog spray device (hose not permitted) to prevent surface drying prior to start of curing.
- M. Cure Patch Material Type A in accordance with manufacturer's written instructions.

### 3.4 FIELD QUALITY CONTROL

- A. All excavations shall be inspected and approved prior to placing concrete. The Contractor shall notify the Owner 2 working days in advance of required inspection.
- B. Notify the Owner at least 2 working days prior to placing concrete.

C. Acceptance of Structure:

1. Acceptance of Structure shall be in accordance with ACI 301 Chapter 18.
2. Contractor shall bear all costs of correcting rejected work, including the cost of Owner's services thereby made necessary.

3.5 CLEANING

- A. Empty containers shall be removed from the Work Area at the end of each working day. Cloths soiled with adhesive materials that might constitute a fire hazard shall be placed in suitable metal safety containers or shall be removed from the building at the end of each working day. Special care shall be taken in storage of disposal of flammable materials. Comply with health, fire and environmental regulations.
- B. All spilled materials shall be completely removed from hardware, adjacent floor areas, metal work, etc. Remove spilled coating by approved methods.
- C. Repaint in matching color all slab soffits where existing paint was removed during preparation of adhesive materials installations.
- D. All hardware, adjacent floor areas, metal work, etc., and the general premises shall be left clean and free of all construction dust, dirt and debris.

END OF SECTION

DIVISION 03 – CONCRETE  
SECTION 036423  
EPOXY INJECTION REPAIRS

PART 1 GENERAL

1.1 SUMMARY

A. Section includes:

1. The labor, supervision, material, equipment, tools, and all other necessary services required to prepare and inject identified substrates. Work includes removal of ports and surface applied epoxy.

1.2 RELATED SECTIONS

- A. Epoxy Injection Repairs – Refer Section 036423.
- B. Miscellaneous Metals – Refer Section 055000.

1.3 SUBMITTALS

- A. Submit four (4) copies of literature for manufactured products, including manufacturer's specifications, test data and installation instructions.

1.4 QUALITY ASSURANCE

A. Qualifications:

1. The injection contractor shall be approved by the epoxy resin manufacturer.
2. The injection contractor shall certify that lead personnel (Field Superintendent and Foreman) in charge of the work have a minimum of three (3) years experience in supervising injection work. This experience shall include the supervision of at least three (3) injection projects of similar size and type as this project.
3. The Contractor shall furnish to the Engineer upon request, the names of reference projects for which lead personnel held supervisory positions.
4. The Owner reserves the right to request different lead personnel if, in the Owner's opinion, those assigned to the project are not qualified by way of experience or ability to perform the work. Contractor shall comply with Owner's request at no cost to the Owner.
5. Provide material samples taken from the mixing head to verify mixing ratio and resin cure time. Sample equipment daily and record time, date and location of repair where sample was taken on the sample container. Turn samples over to Engineer at regular intervals. Sample containers shall be clean, dry, and acceptable to the Engineer. Sample shall be no more than 1/8 inch thick in its least dimension.

- B. The Contractor shall comply with all Federal, State and Municipal laws, codes, ordinances and regulations applicable to the Work in this Contract and also with all requirements of the National Fire Protection Association, the National Electric Code, and the Occupational Safety and Health Administration (OSHA). If the above laws, codes or ordinances conflict with this Specification, then the laws, codes or ordinances shall govern, except in such cases where the Specification exceeds them in quality of materials or labor, then the Specifications shall be followed.

## PART 2 PRODUCTS

### 2.1 MATERIALS

- A. Epoxy Injection Resin, approved manufacturers:
  - 1. Prime Rez 1100 High Mod LV by Prime Resins.
  - 2. Sikadur 52 by Sika Corporation.
  - 3. Denepox I-300, by DeNeef Construction Chemical Inc.
  - 4. MasterInject 1500 by BASF.

### 2.2 EQUIPMENT

- A. The equipment used to inject the resin shall be capable of the following:
  - 1. Automatic proportioning of the materials within the maximum ratio tolerances set by the manufacturers of the resin.
  - 2. Delivery of components, resin and hardener, from separate reservoirs to a mixing discharge head.
  - 3. Complete and uniform mixing of components at the discharge head.
  - 4. Equipment shall be rated for injection of resin materials at constant pressures up to 200 psi.

## PART 3 EXECUTION

### 3.1 PREPARATION

- A. Before repair work begins, clean cracks free of loose matter, dirt, laitance, oil, grease, and other contaminants which would inhibit bond of the injection resin.
- B. Before injection of the crack, apply a surface seal material to the face of the crack. The surface seal material shall be a quick setting epoxy gel or a thermoplastic and must have adequate strength and adhesion to confine the injection resin until the resin is cured.
- C. Place entry ports in the surface seal along the crack. The distance between entry ports shall not be less than the thickness of the concrete member being repaired.

### 3.2 INSTALLATION

- A. Injection pressures shall not exceed 75 psi without the approval of the Engineer.
- B. Begin injection of the resin into each crack at the lowest entry port or at the extreme end of a horizontal crack. The appearance of resin at the next port will be considered evidence of adequate filling of the crack, at which the injection procedures shall be moved incrementally to the next port, capping the previous ports. Carefully monitor the injection pressure and resin flow to avoid damage to the delaminated concrete. Concrete damaged by the injection procedure shall be repaired or replaced as directed by the Engineer at no cost to the Owner.
- C. Remove the surface seal and finish the face of the crack flush with the adjacent concrete. Remove dust from surface seal removal operations.
- D. During the work, the contractor shall keep daily records. Record on a set of prints at each repair location: 1) the date of injection, 2) injection material type, 3) surface temperature when 45° F or lower. Turn records over to Engineer at completion of injection work.

END OF SECTION

DIVISION 05 – METALS  
SECTION 055000  
MISCELLANEOUS METALS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. All labor, material, equipment, tools and services to complete the miscellaneous metals work required for the project as indicated on the Drawings and in the Specifications, including but not limited to:
  - 1. Bent plates for CMU wall top support

1.2 RELATED SECTIONS

- A. Concrete Repairs - Refer Section 030100.
- B. Epoxy Injection Repairs – Refer Section 036423.

1.3 REFERENCES

- A. The following codes and standards are hereby incorporated as part of the Project Specifications. These codes and standards including all supplements, apply to all miscellaneous metal work as if fully reproduced herein. Modifications in this Specification when in conflict with the referenced codes and standards, shall take precedence over the referenced codes and standards.
  - 1. AISI Code of Standard Practice for Steel Buildings and Bridges, and including the Commentary on the Code of Standard Practice, 1986 Edition.
  - 2. AISC Code of Standard Practice for Steel Buildings and Bridges, 2000 Edition.
  - 3. American Welding Society (AWS) Structural Welding Code - Steel, 1990 Edition.
  - 4. ASTM A6 - General Requirements for Delivery of Rolled Steel Plates, Shapes, Sheet Piling and Bars for Structural Use.

1.4 SUBMITTALS

- A. Submit literature for manufactured products, including manufacturer's specifications, test data and installation instructions.
- B. Submit shop drawings for review of all fabricated items. Include complete details and schedules. Submit field measurements of existing conditions with shop drawings.

1.5 QUALITY ASSURANCE

- A. Steel Fabricator shall have not less than 5 years experience in the fabrication of

miscellaneous steel.

- B. All welders, welding operators, tackers and inspectors shall be fully qualified in accordance with the requirements of the American Welding Society for the type of work they are to perform. Copies of certification shall be submitted prior to performing that work.
- C. Modifications to the AISC Code of Standard Practice:
  - 1. Restoration drawings and details are to be used in place of more detailed structural steel plans. Requirements for structural steel work may be shown on restoration drawings and details.
  - 2. Contract drawings may be made to a scale less than 1/8-inch to the foot. With approval, shop drawings may also be made to a lesser scale.
  - 3. Section 4.2 is to be replaced with the following sections:
    - 4.2 Review of Shop Drawings - Shop drawings shall be made by the Contractor and submitted to the Owner for review. The Owner will endeavor to complete his review of a shop drawings submittal within 7 days of his receipt of a submittal. Shop drawings shall be returned noted: "No exceptions noted", or "Exceptions noted", or "Exceptions noted: revise and resubmit". Fabrication of material before the receipt of shop drawings for that material noted "No exceptions noted" shall be at the Contractor's risk.
      - 4.2.1 Review of shop drawings does not relieve the Contractor of the responsibility for: accuracy of detail dimensions; the general fit-up of parts to be assembled in the field; the ability to erect the material; the adequacy of any members or connections designed by the Contractor.
      - 4.2.2 Any notations by the Owner made on the shop drawings do not authorize additional compensation for the Contractor without the issuance of a formal change order.
- D. The Contractor shall comply with all Federal, State and Municipal laws, codes, ordinances and regulations applicable to the Work in this Contract and also with all requirements of the National Fire Protection Association, the National Electric Code, and the Occupational Safety and Health Administration (OSHA). If the above laws, codes or ordinances conflict with this Specification, then the laws, codes or ordinances shall govern, except in such cases where the Specification exceeds them in quality of materials or labor, then the Specifications shall be followed.

## 1.6 MATERIAL STORAGE AND HANDLING

- A. Protect metal from damage and deterioration.
- B. Support continuous lengths of material as necessary to keep from deflecting and bending.



- C. Store material off ground and keep covered and out of weather.

## 1.7 WARRANTY

- A. A warranty period of five (5) years shall be provided for all new steel fabrication and installation work performed under this Section, against defects, as determined by the Owner, including but not limited to weld failures, rust formation at painted surfaces, and embedment failures.

## PART 2 PRODUCTS

### 2.1 MATERIALS

- A. Rolled Steel Plates, Shapes and Bars: ASTM A36.
- B. Expansion Anchors – Stud Type:
  - 1. Stud type with wedge meeting requirements of Federal Specification A-A 1923A, Type 4. Zinc plated in accordance with ASTM B633.
  - 2. Basis of Design: Kwik Bolt TZ Expansion Anchor by Hilti.

### 2.2 FABRICATION

- A. General:
  - 1. Fabricate items in accordance with AISC Specifications and as indicated on the final shop drawings.
  - 2. Properly mark and match-mark materials for field assembly. Fabricate for delivery sequence which will expedite installation and minimize field handling of materials.
  - 3. Where finishing is required, complete the assembly, including connections and welding of units, before start of finishing operations.
  - 4. Mill all surfaces in contact bearing.
- B. Connections:
  - 1. Provide welded shop connections unless otherwise shown. Grind smooth and flush all welds to match curve of joints. Grind welded area to remove weld flux, slag and spatter.
  - 2. Provide field bolted or field welded connections as indicated.
  - 3. Comply with AWS Code for procedures, appearance and quality of welds, and methods used in correcting welding work. Assemble and weld sections by methods which will produce true alignment of axis without warp.
- C. Surface Preparation:

1. After inspection and before shipping, clean all metal fabrications to be painted. Remove loose rust, mill-scale and splatter. Clean metal fabrications in accordance with SSPC SP-6.
2. Immediately after surface preparation, apply to all painted metal fabrications primer paint in accordance with paint manufacturer's written instructions. Use painting methods which will result in full coverage of joints, corners, edges and all exposed surfaces. No sags or runs permitted on steel that will be exposed in the finish work.

## PART 3 EXECUTIONS

### 3.1 EXAMINATION AND PREPARATION

- A. Field measure all existing dimensions and be aware of all existing conditions which relate to the work prior to fabrication. Items fabricated without prior field verification shall not be the responsibility of the Owner and the Contractor shall fabricate new items at no additional cost to the Owner and no time extension shall be granted.
- B. Examine the areas and conditions under which the work is to be installed and notify the Owner in writing of conditions detrimental to the proper and timely completion of the work.
- C. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Engineer.

### 3.2 INSTALLATION

- A. Comply with AISC Specifications and Code of Standard Practice, and with specified requirements.
- B. Provide erection equipment, hoists, temporary shoring and bracing, and other equipment required for proper and safe erection of the work. Do not remove temporary members and connections until permanent construction required to make installation self-supporting is in place and final connections are made.
- C. Provide temporary planking and working platforms as required and as necessary to effectively and safely complete the work.
- D. Field Assembly:
  1. Set metal fabrications accurately to the lines and elevations indicated. Align and adjust the various members forming a part of a complete installation before permanently fastening. Perform necessary adjustment to compensate for discrepancies in elevations and alignment.
- E. Following installation of metal fabrications clean all mud, dirt and debris accumulated during installation. Inspect all items for abrasions and touch up with specified primer.

END OF SECTION