NOTE: The following Form of Proposal shall be followed exactly in submitting a proposal for this work. If this copy is lost, an additional copy will be furnished upon written request to the authority issuing Contract Documents.

This Proposal is submitted by:

(NAME AND ADDRESS OF BIDDER)

Date: __________________________

Telephone: __________________________

TO: BID CLERK

INVITATION TO BID: CCK-2188-17

UNIVERSITY OF KENTUCKY
CAPITAL CONSTRUCTION
PROCUREMENT
RM. 322 SERVICE BUILDING
LEXINGTON, KY 40506-0005

BID OPENING DATES: February 1, 2017
TRADE CONTRACT DESCRIPTION: ________
TRADE CONTRACT NO.: 26C
TIME: 3:00 P.M. E.D.T.

The Bidder, in compliance with your Invitation for Bids for the above referenced Project, having carefully examined the site of the Work, the Drawings and complete Contract Documents as defined in Article I of the General Conditions, as well as the Specifications affecting the work as prepared by the Consultant, hereby proposes to furnish all labor, materials, supplies and services required to construct the Project in accordance with the Contract Documents, within the time set forth therein, and at the price stated below without qualification.

The Bidder hereby acknowledges receipt of the following Addenda:

ADDENDUM NO. ___________ DATED ________________
ADDENDUM NO. ___________ DATED ________________
ADDENDUM NO. ___________ DATED ________________

(Insert the number and date of any Addenda issued and received. If none has been issued and received, the word NONE should be inserted.)
FORM OF PROPOSAL

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

I hereby certify:

1. That I am the Bidder (if the Bidder is an individual), a partner in the Bidder (if the Bidder is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the Bidder is a corporation);

2. That the submitted Bid or Bids covering Capital Construction Procurement Section Invitation No. CCK-2188-17 have been arrived at by the Bidder independently and have been submitted without collusion with, and without any agreement, understanding or planned common course of action with, any other contractor, vendor of materials, supplies, equipment or services described in the Invitation to Bid, designed to limit independent bidding or competition; as prohibited by provision KRS 45A.325;

3. That the contents of the Bid or Bids have not been communicated by the Bidder or its employees or agents to any person not an employee or agent of the Bidder or its surety on any bond furnished with the Bid or Bids and will not be communicated to any such person prior to the official opening of the Bid or Bids;

4. That the Bidder is legally entitled to enter into the contracts with the University of Kentucky and is not in violation of any prohibited conflict of interest, including those prohibited by the provisions of KRS 164.390, and 45A.330 to 45A.340 and 45A.455;

5. This offer is good for 60 calendar days from the date this Bid is opened. In submitting the above, it is expressly agreed that upon proper acceptance by the Capital Construction Procurement Section of any or all items Bid above, a contract shall thereby be created with respect to the items accepted;

6. That I have fully informed myself regarding and affirm the accuracy of all statements made in this Form of Proposal including Bid Amount.

7. Unless otherwise exempted by KRS 45.590, the Bidder intends to comply in full with all requirements of the Kentucky Civil Rights Act and to submit data required by the Kentucky Equal Employment Act upon being designated the successful contractor.

8. That the bidding contractor and all subcontractors to be employed do not and will not maintain any facilities they provide for employees in a segregated manner and they are in full compliance with provisions of 41 CFR 60-1.8 that prohibits the maintaining of segregated facilities.

9. 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 the bidder will not violate any provision of the campaign finance laws of the Commonwealth of Kentucky.

READ CAREFULLY - SIGN IN SPACE BELOW – FAILURE TO SIGN INVALIDATES BID

SIGNED BY_____________________________     TITLE_____________________________

PRINT NAME_____________________________     FIRM_____________________________

ADDRESS_______________________________     PHONE (  )_______________________

PHONE (  )_______________________     FAX (  )_______________________

CITY_________________     STATE_________     ZIP CODE__________

DATE__________________________

Work Category – 26C     Page 2 of 15
Contractor Report of Prior Violations of
Chapters 136,139, 141, 337, 338, 341, and 342

Pursuant to KRS 45A.485, the Contractor shall, prior to the award of a Contract, reveal final determinations of any violations of the provisions of KRS Chapters 136, 139, 141, 337, 338, 341, and 342 by the Contractor that have occurred in the previous five (5) year period.

This statute also requires for the duration of the Contract established, the Contractor be in continuous compliance with the provisions of Chapters 136, 139, 141, 337, 338, 341, and 342 that apply to the Contractor’s operations. The Contractor’s failure to reveal a final determination of a violation of KRS Chapters 136, 139, 141, 337, 338, 341, and 342, or failure to comply with any of the above cited statutes for the duration of the Contract shall be grounds for the cancellation of the Contract, and the disqualification from eligibility for future contracts for a period of two (2) years.

The Contractor, by signing and submitting a Bid on this Invitation, agrees as required by KRS 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 these statutes during the duration of any contract that may be established. Final determinations of any violations of these statutes, must be provided to the University by the successful Contractor prior to the award of a Contract.
LUMP SUM PROPOSAL

The Bidder, in compliance with the Invitation to Bid CCK-2188-17 having examined the drawings, specifications, related documents and having visited the site of the proposed work, and being familiar with all the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby submits the following bid to furnish all labor, materials, and supplies and to construct the project in accordance with the Bid Documents within the time set forth therein and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this Bid is a part.

The Bidder agrees to furnish all labor, 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 Specifications and Contract Documents and shown on the Drawings enumerated below and as modified by the Addenda listed above.

Bidder hereby agrees that all escalation cost associated with materials and/or labor have been included in the stated unit cost, through the projected duration dates as stated in the preliminary project construction schedule.

FOR THE LUMP SUM OF ___________________________ DOLLARS AND ___________________ CENTS.

____________________ (USE WORDS) ___________________ (USE WORDS)

($____________________) (USE FIGURES)

BID ALTERNATES

Add Alternate A-1: Level 1 Area-C Bike Storage

FOR THE LUMP SUM OF ___________________________ DOLLARS AND ___________________ CENTS.

____________________ (USE WORDS) ___________________ (USE WORDS)

($____________________) (USE FIGURES)

Add Alternate A-2: Lower Level Vivarium

FOR THE LUMP SUM OF ___________________________ DOLLARS AND ___________________ CENTS.

____________________ (USE WORDS) ___________________ (USE WORDS)

($____________________) (USE FIGURES)
Alternate A-3: Combined Electrical and Telecommunications Bid (WC 26C and WC 27A)
*Optional
**Does Not Include Alternate A-1 or A-2

FOR THE LUMP SUM OF ____________________________ (USE WORDS)

________________________ DOLLARS AND _______________ CENTS.

________________________ (USE WORDS) ______________________ (USE WORDS)

($ ________________)

(USE FIGURES)

Add Alternate A-4: Combined Alternate A-1 Electrical and Telecommunications
*If Alternate A-3 is filled out, this is required

FOR THE LUMP SUM OF ____________________________ (USE WORDS)

________________________ DOLLARS AND _______________ CENTS.

________________________ (USE WORDS) ______________________ (USE WORDS)

($ ________________)

(USE FIGURES)

Add Alternate A-5: Combined Alternate A-2 Electrical and Telecommunications
*If Alternate A-3 is filled out, this is required

FOR THE LUMP SUM OF ____________________________ (USE WORDS)

________________________ DOLLARS AND _______________ CENTS.

________________________ (USE WORDS) ______________________ (USE WORDS)

($ ________________)

(USE FIGURES)
BUSINESS CLASSIFICATION

Please complete this form which is necessary for the University of Kentucky vendor database. Mark only one classification. Refer to "Definitions" for assistance in determining correct classification.

(01) ___ Small Business  (06) ___ Woman-Owned Large Business
(02) ___ Large Business    (07) ___ Disadvantaged Woman-Owned Small Business
(03) ___ Disadvantaged Small Business    (08) ___ Disadvantaged Woman-Owned Large Business
(04) ___ Disadvantaged Large Business  (09) ___ Other
(05) ___ Woman-Owned Small Business

DEFINITIONS

(01) SMALL BUSINESS: A business concern that is organized for profit, is independently owned and operated, is not dominant in the field of operations in which it is bidding, and meets the size standards as prescribed in the Code of Federal Regulations, Title 13, Part 121. Consult your local or district Small Business Administration (SBA) office if further clarification is needed.

(02) LARGE BUSINESS: A business concern that exceeds the small business size code standards established by SBA.

(03) DISADVANTAGED SMALL BUSINESS: A business concern (a) that is at least 51 percent owned by one or more socially and economically disadvantaged individuals (as defined below), or a publicly owned business, having at least 51 percent of its stock owned by one or more socially and economically disadvantaged individuals; and (b) has its management and daily business operations controlled by one or more such individuals. Socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans and other minorities or individuals found to be disadvantaged by the SBA.

(04) DISADVANTAGED LARGE BUSINESS: A concern that meets the definition of socially and economically disadvantaged individuals, but which is not a small business by the SBA's size standards.

(05) WOMAN-OWNED SMALL BUSINESS: A small business that is at least 51 percent owned by a woman or women who also control and operate it. "Control" in this context means exercising the power to make policy decisions. "Operate" means actively involved in the day to day management.

(06) WOMAN-OWNED LARGE BUSINESS: A concern that meets the definition of woman owned and operated, but which is not a small business by the SBA's standards.

(07) DISADVANTAGED, WOMAN-OWNED SMALL BUSINESS: A concern that meets the definition of both (03) and (05) above.

(08) DISADVANTAGED, WOMAN OWNED LARGE BUSINESS: A concern that meets the definition of both (04) and (06) above.

(09) OTHER: A concern that does not meet any of the above definitions.
THE FOLLOWING ITEMS ARE HEREBITH ENCLOSED AS REQUIRED BY KRS 45A.185

1. Bid Bond or Certified Check in an amount not less than five percent (5%) of total Bid.

2. List of Proposed Subcontractors and Unit Prices. (if required)

3. Authentication of Bid and Statement of Non-Collusion and Non-Conflict of Interest.

4. List of Materials and Equipment.

5. VENDOR NUMBER: It is imperative that you furnish your Federal Employer Identification Number in the space provided below. Failure to do so may delay the processing of purchase orders issued to your firm.

(Nine Digit Number)

BIDDER'S QUALIFICATIONS

The Commonwealth of Kentucky Model Procurement Code (KRS 45A.080) requires contracts to be awarded, "to the responsive and responsible bidder whose bid offers the best value" to the University of Kentucky. In order to determine if the Bidder has the experience, qualifications, resources and necessary attributes to provide the quality workmanship, materials and management required by the plans and specifications, the Bidder may be required to complete and submit the information requested on the University of Kentucky Contractor Bidder Determination of Responsibility questionnaire. Failure to provide the information requested on the questionnaire or failure to provide any additional submittals or information that may be requested to make this determination may be grounds for a declaration of non-responsibility with respect to the Bidder. A copy of the Contractor Determination of Responsibility questionnaire is available upon request to all Bidders.

TIME LIMIT FOR EXECUTION OF CONTRACT DOCUMENTS

It is further agreed, that in the event this Proposal is accepted by the Owner and the undersigned shall fail to execute the Contract and furnish satisfactory Payment and Performance Bond within ten (10) consecutive calendar days from the date of notification of the award of the Contract, the Owner may at his option, determine that the undersigned has abandoned the Contract and thereupon, the Proposal shall become null and void and the Bid guarantee, check or Bid bond which accompanied it shall be forfeited and become the property of the Owner as liquidated damages for each failure and no protest pursuant to such action will be made. If the Undersigned shall execute the Contract, and furnish satisfactory Payment Bond and Performance Bond, it is understood that the Bid Guarantee or Bid Bond will be returned to the undersigned by the Owner.
UNIT PRICES

NOTE: Unit Prices shall include the furnishing of all labor, materials, supplies and services and shall include all items of cost, overhead and profit for the Contractor and any subcontractor involved, and shall be used uniformly without modifications for either additions or deductions. The Unit Prices as established shall be used to determine the equitable adjustment of the Contract Price in connection with changes, deletions or extra work performed under the Contract and the "Rules of Measurement" set forth in the General Conditions shall govern.

*All Bidders are required to complete and submit the following information with their bid.*

*The apparent low bidder is requested to attend a post bid meeting which will be scheduled at a later date.*

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>COST PER UNIT</th>
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<tbody>
<tr>
<td>BIM COORDINATION</td>
<td>HR</td>
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<tr>
<td>CORE THROUGH SLAB – 2&quot;WITH FIRESEAL</td>
<td>EA</td>
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<tr>
<td>CORE THROUGH SLAB – 4&quot; WITH FIRESEAL</td>
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<tr>
<td>EXIT SIGN – FURNISHED AND INSTALLED</td>
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<tr>
<td>BBSRB FIRE ALARM DEVICE</td>
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PRIMARY LIST OF PROPOSED SUBCONTRACTORS

All subcontractors are subject to the approval of the Capital Construction Procurement Section and Capital Project Management Division, University of Kentucky, Lexington, KY.

If certain branches of the Work are to be done by the Prime Contractor, so state.

*The apparent low bidder will be required to complete and submit to the University the following information by twelve (12) noon of the first working day following the bid opening. The information requested in this submittal is required to assist the University in determining contractor responsibility to complete the project being bid.*

*The apparent low bidder is requested to attend a post bid meeting which will be scheduled at a later date.*

Provide the address, phone number and contact information for the following subcontractor/suppliers:

<table>
<thead>
<tr>
<th>DIVISION OF WORK</th>
<th>NAME AND ADDRESS OF SUBCONTRACTOR</th>
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LIST OF MATERIALS AND EQUIPMENT

Each item listed under the different phases of construction must be clearly identified so that the Owner will definitely know what the Bidder proposes to furnish.

The use of a manufacturer's or 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.

*The apparent low bidder will be required to complete and submit to the University the following information by twelve (12) noon of the first working day following the bid opening. The information requested in this submittal is required to assist the University in determining contractor responsibility to complete the project being bid.*

*The apparent low bidder is requested to attend a post bid meeting which will be scheduled at a later date.*

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<tr>
<th>ITEM DESCRIPTION</th>
<th>MANUFACTURER/SUPPLIER</th>
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IDENTIFICATION OF MINORITY SUBCONTRACTORS AND MATERIAL SUPPLIERS

Participation of Minority and Women owned Contractors and businesses.

The University of Kentucky encourages and supports the participation of minority and women owned businesses.

1. Minority and Women Subcontractors

2. Minority and Women Material Suppliers

SUPERINTENDENT

In accordance with Article 17 of the General Conditions a full-time superintendent will be required on this project. Below, please list the superintendent your firm will employ on this project. The successful Bidder will be required to furnish a resume of the superintendents’ qualifications and or past projects.

List the Superintendent’s Name

Revised 3/22/06
TRADE CONTRACT – 26C - Electrical

This section defines in summary, without limitations by the descriptions, significant items of the scope of work to be performed by the Subcontractor and any special provision related to the Subcontractor’s execution of the Work and the Project. The details of the scope of work are further defined in Drawings, Specifications, and other provisions contained in the Project Documents.

Unit 26C – Electrical

This work shall include all items indicated in Section A: General Scope of Work, as such items apply to this work unless specifically noted otherwise herein.

This work primarily includes, but is not limited to the following specification sections as well as related work specified or shown elsewhere in the Contract Documents:

- Electrical Fit Out as specified in contract documents

***Note: This Subcontractor is responsible for the requirements of the complete Contract Documents as they pertain to this Unit of Work.

1. Scope of Work – It is the intent for this project that this Subcontractor performs all work scoped herein and as specified in the Project Manual and Contract Drawings. This subcontract includes Electrical for the Fit Out portion of the RB2 project, including modifications required to the Core and Shell Electrical system bought previously. Coordinate Fit Out with Core and Shell drawings and installation for limits of electrical work installed under Core and Shell.

2. Full-time Project Manager - Subcontractor shall provide full time project manager or competent person onsite at all time work is being performed.

3. Building Information Modeling (BIM) – Coordination shall be 3-D VDC, based on the Whiting-Turner BIM Implementation Plan. Lay out work using 3-D surveying technology (Trimble or other). All groups of conduits regardless of size, single conduits over 1 ¼” and junction boxes are to be modeled accurately, along with equipment and panel clearances. This subcontractor shall provide floor and wall penetration layout drawings for approval based on coordination drawings.

4. PlanGrid License – This Subcontractor has included the necessary license(s) to PlanGrid for their office and field staff for field reference and notifications. Please note that drawings posted on PlanGrid do not supersede the Contract Documents and should only be used for reference and notifications. All submittals, RFIs, and installation work should conform to the Contract Documents.

5. BBSRB Interface - This project includes connection to the existing BBSRB building at four levels. This subcontractor shall carry an allowance of 500 hours of labor and $10,000 in material for Electrical work associated with these tie-ins, including but not limited to research to determine impact of tie-ins, demolition and relocation of conduits, wire and devices, programming, conduit, wiring, new devices and any other work associated with interface between existing BBSRB Electrical system and RB2. This allowance includes all fire alarm, lighting, tele/data conduit, tray, boxes and rough-in and power that will be affected by the tie-in. Any unused funds of the allowance will be returned to UK via deductive change order.

6. Traffic Control System – This subcontractor shall carry an allowance of $75,000 for a complete traffic control system in the Loading Dock drive, including lights, controls, user interface, conduit, wiring, installation and testing.
7. **Engineering** – This Subcontractor shall be responsible for complete engineering and design of the electrical system to the extent needed for permitting. Furnish and install all seismic bracing required by local code for this scope of work. Provide complete engineering for seismic systems. Furnish and install vibration isolation for electrical equipment and piping per contract documents for this scope of work. Provide complete engineering for isolation systems.

8. **Sleeves** – Furnish and set electrical sleeves in concrete, masonry and drywall walls. Furnish wall sleeves for installation into walls by masonry contractor or drywall contractor. Provide shop drawings to installing contractor identifying height and locations of wall sleeves.

9. Provide cutting and patching, sawcutting and core drilling for any penetrations required for this scope of work. No core drilling will take place without the Structural Engineer's written approval. This subcontractor shall lay out and core all floor boxes and pokethroughs on Level 1-4.

10. Provide drawings showing all required in-wall blocking. Blocking to be provided by others.

11. **Access Doors** - Furnish all access doors required for access to electrical system. Access doors to be installed by others.

12. **Fire Stopping** - Provide fire stopping at all electrical penetrations in floors, ceilings, and walls.

13. Provide patching of spray fireproofing damaged by this Subcontractor.

14. **Protection** - This subcontractor shall be responsible for identification and protection of all work that will remain exposed after installation. Costs to repair or replace inadequately protected work that becomes damaged shall be borne by this subcontractor.

15. **Caulking and Sealing** - Provide caulking for all piping installed in this subcontract. Subcontractor shall seal all penetrations where electrical wire or conduit penetrates interior or exterior partitions. Caulking within the vivarium shall be by this subcontractor and shall follow all details shown on Electrical drawings for conduit and wiring, including caulking inside conduits. Ensure that all penetrations through exterior walls to receive waterproofing have been properly sealed according to the requirements of the Contract Documents and manufacturer’s recommendations before waterproofing is installed.

16. Provide flashing, counterflashing and sealants required for penetrations through roof related to this scope of work. Include all supports, curbs, angles, clips, all thread, bolts and connections to support and mount new work.

17. Furnish and install labels and signage which meet contract documents along with the governing code for electrical systems.

18. Furnish and install supplemental steel for electrical equipment per contract documents for this scope of work. Prime paint all steel supports installed for this scope of work. This subcontractor shall be responsible for all steel supports in walls required for electrical scope of work.

19. Furnish and install labels and signage which meet contract documents along with the governing code for electrical systems. Identification (labels, tags, schedules, engravings, etc.) for all items including conduits and raceways provided by this unit of work. Temporary labels and schedules are required for any panels and switchgear that are activated. Update labels as work is installed.

20. **Building Temporary Power** – This subcontractor shall replace temporary power system installed by Core and Shell electrician as areas of the building transfer to fit out phase. Coordinate with Core and Shell electrician to ensure that power remains available through transfer. Maintain temporary power at North and South electrical closets, and Install specialty breakers and wire pigtails for subcontractors requiring specialty power. Furnish, install and wire multiple power stands at each floor fed from the temporary closet services for temporary use.
during construction. This subcontractor shall maintain temporary power for entire building, including fit out and core and shell spaces, from January 1, 2017 until substantial completion or until permanent power is available throughout the building. This subcontractor shall be responsible for removal of power, including wiring and disconnects, from material hoist and tower crane upon removal of this equipment by others.

21. **Temporary Lighting** – Provide temporary lighting for entire building during fit out. This includes replacing core and shell temporary fixtures in any areas where permanent lighting is not available on January 1, 2017. Coordinate with Core and Shell electrician to ensure that temporary lighting is available throughout transfer from 26B to 26C. Install lighting as needed to maintain OSHA required light levels, and relocate and/or add lighting as walls are added. This subcontractor shall maintain temporary lighting for entire building, including fit out and core and shell spaces, from January 1, 2017 until substantial completion or until permanent lighting is available throughout the building.

22. **Material Hoist and Tower Cranes** – Remove power for material hoist upon removal of hoist.

23. **Protection** - This subcontractor shall be responsible for identification and protection of all work that will remain exposed after installation. Costs to repair or replace inadequately protected work that becomes damaged shall be borne by this subcontractor.

24. Furnish and Install all electrical equipment, including but not limited to:
   - Switchboards
   - Meters
   - Panels
   - Transformers
   - Bus plugs
   - Wiremold
   - Rack Mounted UPS

25. Provide coordination study, arc flash study and provide labels for all equipment included in this bid package.

26. Coordinate all power requirements with Mechanical and Plumbing drawings and submittals. Identify all discrepancies at submittal time.

27. Coordinate with Controls Contractor for interface between electrical equipment and Building Automation System. Coordinate Fire Alarm & Security System interface with Building Automation System. Provide breakers for Building Automation System. Provide power and wiring to all motorized dampers, including fire, smoke and fire/smoke dampers.

28. Install VFD’s and starters furnished by others for equipment provided under fit out package. Provide disconnects shown on contract documents, disconnects not shown on documents will be furnished by others and installed by this subcontractor. Provide all fuses for disconnects provided by others for fit out equipment.

29. Wire all equipment provided by others. This includes wiring between components packaged separately (e.g. gas pressure alarms, skid mounted equipment split for shipment, etc.). Subcontractor shall connect AHU and EAHU internal power and lighting wiring after units have been assembled.

30. Review casework drawings and compare to outlet locations shown on electrical, tele/data and audio/visual drawings. Notify Whiting-Turner in writing of any conflicts prior to the start of rough-in

31. Provide electrical connections to kitchen and residential equipment.

32. Provide electrical connections to all laboratory equipment and owner-furnished equipment.

33. Provide power and wiring to operable shades furnished and installed by others.
34. Provide floor boxes. Submit drawing showing locations for approval and lay out boxes. Provide core drilling for conduit to floorboxes. Provide protection for floorboxes and stub-ups from damage by other trades during construction.

35. Provide grounding system related to fit out including ground bars and connection to building reinforcement. Connect to grounding conductors placed by division 26B. Provide lightning protection system for rooftop equipment added in Fit Out package.

36. Notify ALL construction personnel on site of any electrical energizing, de-energizing and tie-in work. Notify Whiting-Turner and the Owner's Representative 48 hours prior to performing this work.

37. Provide permanent lighting for fit out and shell areas as part of this bid package. Use of permanent light fixtures for temporary lighting shall not affect lamp and/or ballast warranties. Include light fixtures shown on all drawings, not just electrical. Include an allowance to provide fifty (50) additional exit signs above those shown on the documents.

38. Provide lighting control system, including all conduit, wiring, and devices, and coordinate tie-ins to other building systems. Provide all programming, testing, training and commissioning.

39. Provide site lighting. Trenching, backfill and site pole bases are by this subcontractor. Include grounding. Coordinate site lighting conduit, pullboxes and fixtures with Division 32.

40. Provide a complete Security system, including but not limited to panels, controllers, backboards, conduit, security head end equipment, workstation, cameras, camera mounts and poles, blue phones, access control rough-in, cabling, access control devices, intrusion alarms, door monitoring, programming, etc. Provide all cable testing. Provide all functional testing of security system as part of commissioning. All wiring for door access control is to be included in this package, including wiring from power supplies and card readers to doors. All conduit for access control is by this subcontractor. Provide power and wiring to automatic doors, including wiring between door operators and devices. Note that some devices in the Loading Dock report to BBSRB security system, this subcontractor shall be responsible for all tie ins, testing and coordination with existing security system. **Provide card readers shown in walls and mullions, Division 8 only furnishes door-mounted card readers.**

41. Provide a complete Tele/Data system, including but not limited to conduit, backboxes, cable tray, cabling, devices, etc. Provide all cable testing. Furnish and install tele/data devices in furniture. Furnish and Install cable tray as shown on Fit Out documents. Furnish and install all cable shown on TC-501, which was not purchased in Core and Shell. **Cable, testing and devices are included in Bid Package 27A.**

42. Provide a Audio/Visual system as indicated on Fit Out documents, including but not limited to conduit, cable tray, cabling, backboxes, devices, etc. Provide all cable testing. **Cable, testing and devices are included in Bid Package 27A.**

43. This subcontractor shall be responsible for the complete Fire Alarm System. A future addendum will include an scope and allowance from the UK Fire Alarm supplier to be carried as part of this bid. Coordinate with previously installed sleeves. Include all conduit, wiring, panels, devices, programming, addressable interfaces, interconnection with door hardware, BAS and mechanical systems, and testing. Furnish all duct detectors for installation by the HVAC Contractor, and connect to Fire Alarm system. Provide connection to flow and tamper switches, coordinate location and quantity with Fire Protection Contractor. Provide Fire Alarm interconnect wiring between duct smoke detector and damper. Coordinate with Controls Contractor for damper status and interlock wiring.

44. Subcontractor shall be responsible for cleaning and certification of the electrical system as required by contract documents and codes. Provide cleaning of inside of panels and gear before turnover.
45. Testing – This subcontractor shall be responsible for all testing of systems installed under this scope of work. Provide factory testing and third party testing as required. Coordinate all testing and inspections with Authority Having Jurisdiction and Whiting-Turner. Provide multiple testing of installations as required to meet the project schedule.

46. Training: Subcontractor shall provide training and demonstrations per contract documents. Include videotaped records of training sessions. Coordinate training with W-T and owner. This subcontractor understands and agrees that some testing may take place off hours and has included costs for this.

47. Commissioning: Provide commissioning support including but not limited to the following:
   - Completion of commissioning documentation
   - Attendance in commissioning meetings when directed by Whiting-Turner
   - Onsite support during functional testing
   - Onsite support to resolve any commissioning issues with installed work

48. Site Conditions – All existing site conditions are to be verified prior to start of construction. Any variances in conditions must be documented prior to construction. If Whiting-Turner is not notified in writing, it shall be the responsibility of this Subcontractor to make any corrections or remediation necessary at no additional cost. In addition, this Subcontractor shall protect all existing conditions and surroundings as so not to damage during construction. This includes any damage that could result from surface water. If any existing items, which are to be left undisturbed, are damaged by this Subcontractor it shall be its responsibility to repair.

49. Traffic Control – This Subcontractor will provide a flagmen with stop signs and appropriate training to assist and manage traffic flow, for haul trucks to make a safe and secure exit out of the Construction site. This Subcontractor is fully aware that the construction site is within a high traffic campus corridor with continuing operations throughout the construction process. To that end, this Subcontractor will work hand in hand with the Construction Manager to ensure deliveries, manpower, and general construction traffic are conducted in such a manner as to provide a safe and undisturbed environment for the pedestrian and vehicular traffic, which includes but is not limited to: cleanup of all vehicle debris, mud, materials, adjusting haul routes and hours, adjusting exit routes, parking in designated areas, deferring to campus traffic, posting flagmen, etc.

50. Schedule / Weather – This Subcontractor shall make all provisions for an accelerated construction schedule. Contract extensions will not be considered for abnormal weather conditions. As a Team we must anticipate and do everything reasonable and prudent to get over, through and/or around the obstacles that beset every construction project.

1. **ADD ALTERNATE 1**

   1. Vivarium Electrical – This Subcontractor has included an add alternate to furnish and install Electrical system for the initial vivarium build out as shown in the Contract Documents, including sealing all Electrical penetrations in Vivarium area per 20 0000 3.3V. This includes, but is not limited to, all coordination, layout, sleeves, penetrations, hangers, conduit, wiring and cable, lighting, devices, programming, testing and commissioning **except Division 27 cable and testing**. Provide a complete Vivarium monitoring system including but not limited to panels, wiring, installation, startup, testing, commissioning and training. Coordinate with Division 22C for water piping and Division 26C for power. Include a minimum of eight hours of vivarium monitoring system training. All scope items noted above will apply to this pricing.

END OF SPECIFIC SCOPE