## INVITATION TO BID - GENERAL CONTRACTOR

**Project Name:** Miscellaneous Interior Modifications, Existing Office Building

117 North Garth Avenue, Columbia Missouri 65203 Mid-Missouri Legal Services Corporation, Owner

Sealed bids are invited from General Contractors for Miscellaneous Interior Modifications to an existing two-story office building located at 117 North Garth Avenue, Columbia, Missouri 65203, as defined in the Contract Documents, including this Invitation to Bid, Instructions to Contractors, Architectural and Engineering Drawings, Specifications and Drawing Notes, and Proposal Form.

Sealed bids, in duplicate, will be received at the office of Mid-Missouri Legal Services, currently located at 1201 West Broadway, Columbia, Missouri, until 5:00 p.m. on March 10, 2020. Faxed or emailed Bid Proposals shall not be accepted.

Procedures for submitting bids, claiming an error, withdrawal of bids and other pertinent information are contained in the Instructions to Bidders. The owner reserves the right to reject any or all bids.

A mandatory Pre-Bid meeting will be held on Tuesday, February 25, 2020 at 2:00 p.m. Questions or requests for clarification will be answered during the Pre-Bid meeting or posted on the Owner's website at www.mmls.org/contractors/ on or before February 28, 2020.

If other questions or requests for clarification arise after the Pre-Bid Meeting, the Contractor must submit them to the Owner c/o Susan Lutton, by email, at <a href="https://lutton@mmls.org">https://lutton@mmls.org</a> on or before March 6, 2020 at 5:00 p.m. The questions/requests, and the Architect's responses, will be posted at <a href="https://www.mmls.org/contractors/">www.mmls.org/contractors/</a> on or before March 9, 2020.

Agency Representative:

Susan Lutton 1201 West Broadway Columbia MO 65201 (573) 442-0116 Ext. 210 lutton@mmls.org

<sup>\*</sup>All dates are subject to change at the discretion of Owner.

#### **INSTRUCTIONS TO BIDDERS**

## 1.01 GENERAL

- A. Bids must be prepared in accordance with these instructions and the contract documents in order to be considered.
- B. The contact person at Mid-Missouri Legal Services (Owner) for questions regarding this bid shall be directed to:

Susan Lutton, Executive Director 1201 West Broadway, Columbia MO 65203 (573) 442-0116 X210 lutton@mmls.org

## 1.02 PREPARATION

- A. Submit bids on the Proposal Form furnished.
- B. All blank spaces on the Proposal Form shall be filled in by computer, typewriter or ink by the Bidder. Where both written numbers (words) and numerical figures are given, the written numbers (words) will govern in the event of conflict. Any erasures or corrections in the Proposal Form must be initialed by the Bidder.
- C. Sign in longhand and type the name and position of the signer under each signature. If the bidder is a partnership or co-partnership, each partner must sign. If the bidder is a corporation, sign with the legal name of the corporation followed by the name of the state of incorporation, the corporation seal and the legal signature of an officer authorized to bind the corporation to a Contract.

## 1.03 EXAMINATION OF SITE AND DOCUMENTS

- A. Each Bidder by submitting his Bid represents that he has read and understand the proposed Contract Documents and reference materials and has compared them.
- B. Each Bidder, by submitting his Bid, represents that he has visited the site, familiarized himself with the local conditions, compared the Contract Documents with any work in place, and informed himself of all conditions, difficulties and

restrictions related to the execution of the work. All Bidders must attend the mandatory pre-bid meeting on February 25, 2020 at 2:00 p.m.

#### 1.04 BID BOND

Bidders must provide a certified check or cashier's check payable to the Owner in an amount equal to five percent of the bid amount, or a 5% bid bond payable without condition to the Owner, which shall be retained as liquidated damages for the delay and extra expense caused to the Owner if the Bidder fails to execute the contract and furnish the Performance/Payment bond required by the Contract Documents.

#### 1.05 SUBMISSION OF BIDS

- A. Original, fully completed Bids shall be submitted to Mid-Missouri Legal Services Corporation (Owner), currently located at 1201 West Broadway, Columbia MO 65203, to the attention of Susan Lutton, Executive Director. Bids must be submitted, in duplicate, to the Owner's office no later than 5:00 P.M. on March 10, 2020.
- B. Each contractor shall place his bid, in duplicate, in a sealed envelope addressed to Mid-Missouri Legal Services, to the attention of Susan Lutton, Executive Director. The Bidder's name and address must appear on the outside of the envelope. In the lower left-hand corner the following must appear: "Interior Modifications, 117 North Garth Avenue, Columbia, Missouri."

## 1.06 CONTRACT BOND

The successful Bidder, within ten (10) days of the notice of acceptance of his Bid by the Owner, shall provide the Owner a surety bond for 100% of the Contract amount. The form of bond shall be that furnished by the Owner and the surety shall be acceptable to the Owner.

## 1.07 RIGHTS RESERVED BY OWNER

A. The Owner reserves the right to reject any or all Bids, to waive any and all technicalities or irregularities in a bid, and to accept a bid which, in the judgment of the Owner, is in the best interest of the Owner. The Owner may accept a bid which is not the lowest bid and will consider the bidders' prior experience on similar projects.

Bidders shall include with their bids a list of similar projects completed by them to be considered by the Owner in selecting the successful Bidder.

B. The successful bidder must have a business license with the City of Columbia.

## 1.08 WITHDRAWAL OF BIDS

Withdrawal Prior to Bid Opening: A bidder may withdraw a Bid after submitting the Bid to the Owner, prior to the bid deadline.

Withdrawal After Bid Opening: The Bid shall remain valid and open for acceptance for a period of forty-five (45) days after the bid opening; provided, however, a Bidder may withdraw a Bid from consideration after the bid opening if the bid amount was substantially lower than the amounts of other Bids, providing the Bid was submitted in good faith and the reason for the Bid amount being substantially lower was a clerical mistake, as opposed to a judgment mistake, and was actually due to an unintentional and substantial arithmetic error or an unintentional omission of a substantial quantity of work, labor or material made directly in the compilation of the bid amount. Notice of a request to withdraw a Bid shall be made in writing to the Owner within two (2) business days after the Bid opening. The Owner reserves the right to request the Bidder to submit evidence substantiating the Bidder's request to withdraw the Bid. Any Bidder may withdraw its Bid any time after the 45-day period by giving written notice to the Owner.

Rights of Owner After Bid Withdrawal: If a Bidder withdraws his bid, the Owner may review the remaining bids and award the Contract to another Bidder or reject all Bids and advertise for other Bids.

#### 1.09 RETAIL SALES TAX EXEMPTION

- A. Retail sales taxes shall not be included in the bid amount. Purchases of building materials for use on this project are exempt from certain State sales taxes, and such taxes shall be omitted from the bids, unless otherwise directed by the Owner.
- B. The Contractor and Subcontractors shall be responsible for and pay any and all applicable taxes including sales and use taxes, on such leased tools, machinery, equipment, or other property.

## 1.10 WORK HOURS

The City of Columbia restricts demolition, construction, altering or repairing of buildings and structures to the hours of 7:00 A.M. to 7:00 P.M. weekdays, 9:00 A.M. to 5:00 P.M. Saturdays, and no work allowed on Sundays, unless a written waiver is obtained from the City.

#### 1.11 NON-DISCRIMINATION

The Contractor and Subcontractors shall not discriminate, because of race, creed, color, sex, or national origin, against any employees or applicants for employment in connection with the performance of the work, nor shall they discriminate against suppliers or vendors who provide materials for the Project.

## 1.12 AGREEMENT

A. The Contractor shall provide Certificates of Insurance evidencing coverage as stated below within twenty (20) days of the Owner's acceptance of the successful bid. The Owner and Contractor will enter into an Owner Contract Agreement using AIA Doc. A101 – Standard Form of Agreement, or a form that is agreeable to both parties, within twenty (20) days of Owner's acceptance of the successful bid. This Agreement will incorporate such modifications to which both parties shall reasonably agree.

## 1.13 COMPLETION DATE:

The Contractor shall complete the work prior to August 1, 2020. The contractor shall pay, or allow the Owner as liquidated damages, the sum of One Hundred Dollars (\$100.00) for each day thereafter, Sundays and holidays excepted, that the work remains incomplete.

## 1.14 INSURANCE REQUIREMENTS

A. During the course of performance of services under this Agreement and until Owner's final acceptance of the work, the Contractor shall maintain standard policies of liability insurance coverage and minimum limits of liability as indicated below and in the bid proposal, for any and all persons present and/or working on the project.

Coverage Minimum Limits of Liability

Workers' Compensation Per Statute

Contractor's Comprehensive 1,000,000 each occurrence

Commercial General Liability 2,000,000 each aggregate (incl. Contractual Liability, Owner's & Contractor's Protective Liability & Broad Form Property Damage endorsement)

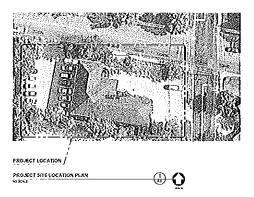
Completed Operations 2,000,000 aggregate

1,000,000 each occurrence

Umbrella 5,000,000

**Automotive Comprehensive Liability** 

(incl. hired automobiles and Non-Ownership Liability)



#### INTERIOR ALTERATIONS

MSCELLANEOUS INTERIOR MODIFICATIONS EXISTING OFFICE BULDING MD-MSSOURI LEGAL SERVICES



## CODE INFORMATION:

	Podd Sand Na		
	BECKHARWA	W ELENO BOOK PARES 2 STORY	****
±	0-77 1 C374 C TH	4(416)	

1 OWNER OF STAN

A COUNTY AND THE TOTAL THE COUNTY AND THE PROPERTY AND TH

proc & mak ;

AND CONTROL OF THE PROPERTY OF

CA MANAGE AND AND BLOOM BLOOM

## APPLICABLE CODES FOR THIS PROJECT:

ES ADMINIA, BLING EM ES ADMINIA, MENNOL QUE ES ADMINIA, MENOL QUE ES ADMINIA, MENOL QUE ES ADMINIA, MINIA, PERFORMANTA, CIE ES ADMINIA, MINIA, PERFORMANTA, CIE ESTA LONG. ESTA COMP

NOEX OF SHEETS

A) TITLE SHEET AND CODE REVEW

A) FRST FLOOR FLAN

2 SECOND FLOOR FLAN

51 BLEVATOR SHAFF STRUCTURAL DRAWNO

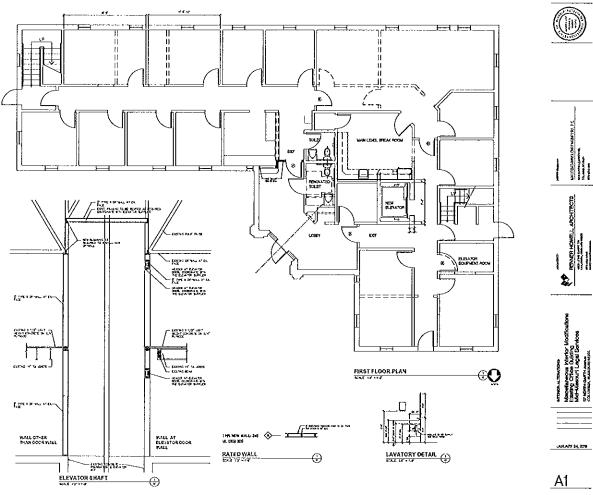




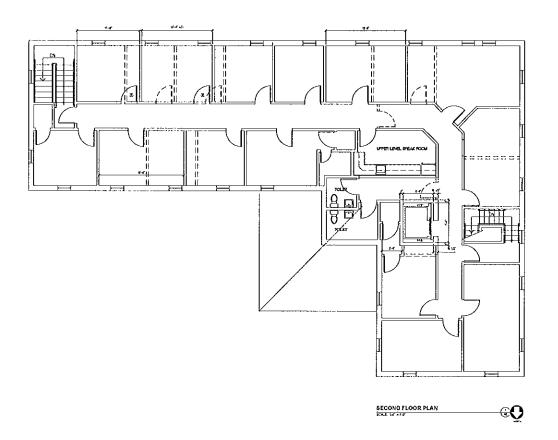


X44714.818

Α0













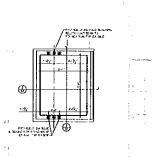
34437 H 278

A2

<u>Managaria</u> 1. Thursen 45-a, the die Tole Poleon, Ettelling Merchane 1. Thursen 60 and and angles V. B. Albah e Daniel and the Tole In the line of the Poleon 2-bit Thursen 6. Merchane (Thur & Managaria) and Aban Aban Aban and the state of the Managaria 2-bit Thursen 6. Merchane (Thur & Managaria) and Aban Aban Aban and the state of the Managaria

A THE STATE OF THE

rations in more prompted

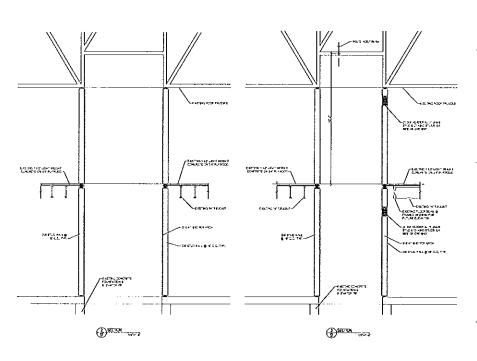


TATAL PLAN

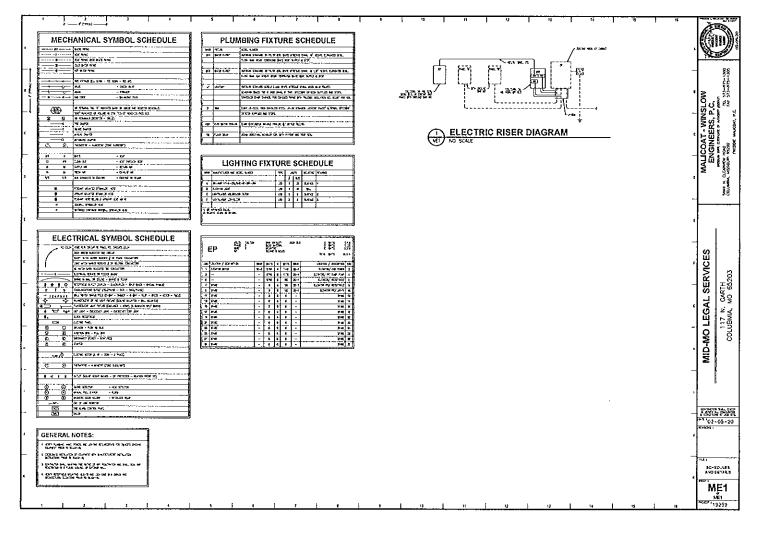
The state of the s



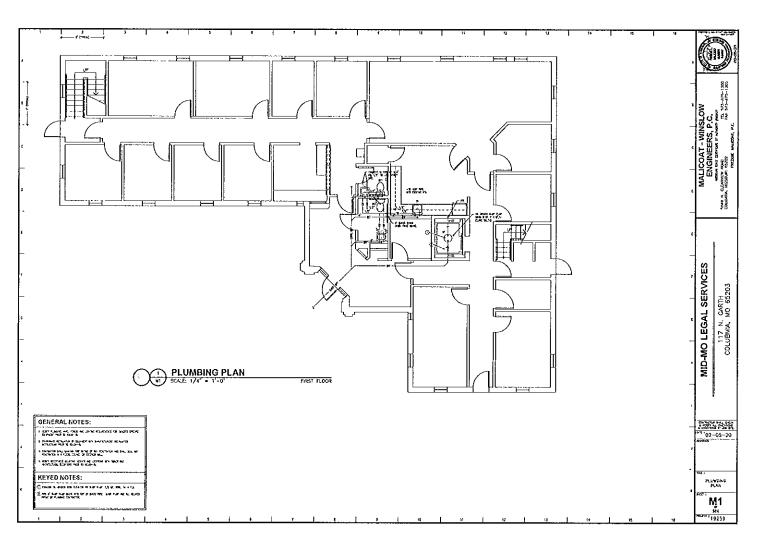
INNER ATRICE
JIPTON ATRICE
COLORNA VIOLEN



S1

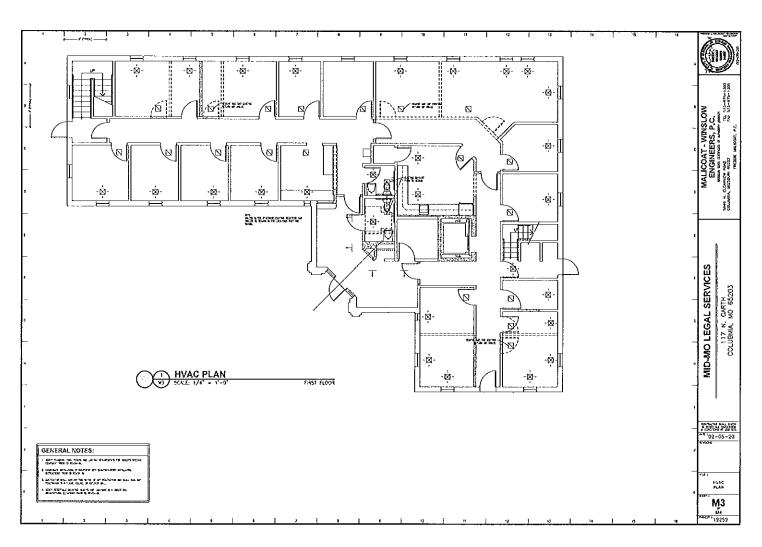


men of the trackly of the trackly see that

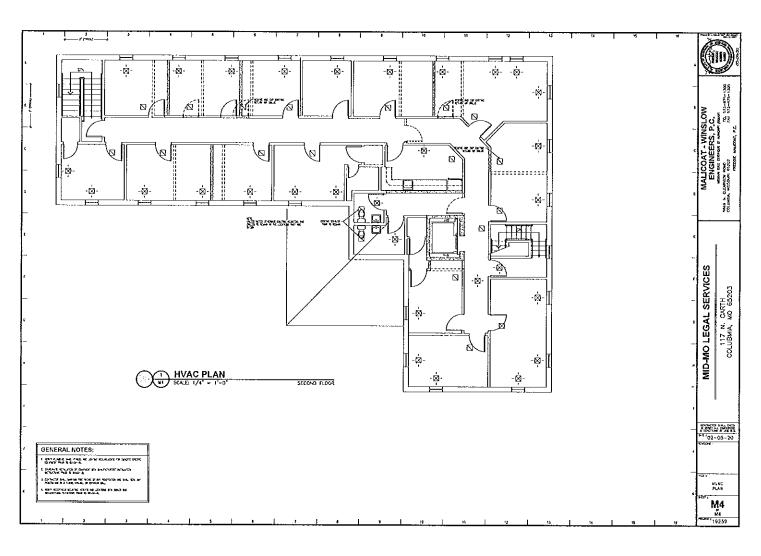


The second secon

Franchistrachesteracous physics tradscribes depart

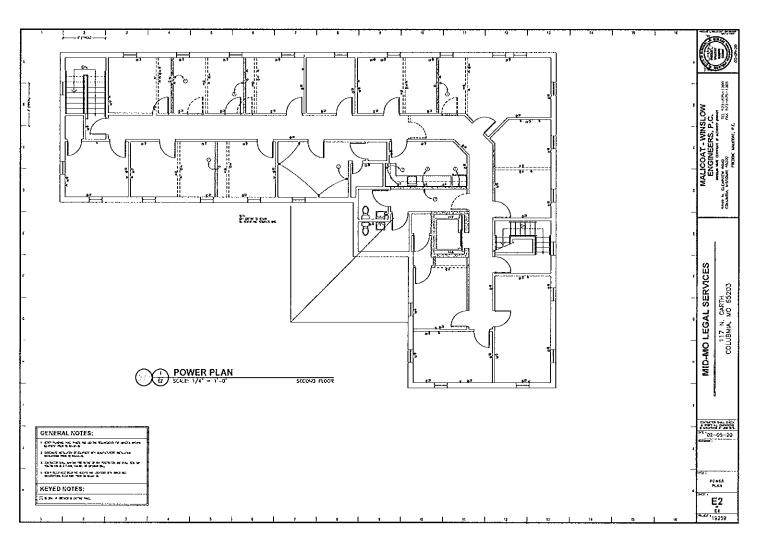


freshabitations physical states an experi



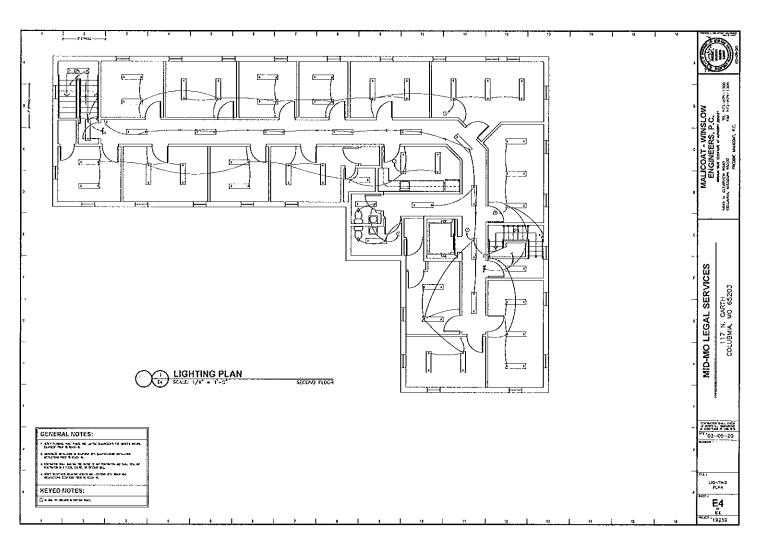
MILETERATED SMITH IN THE STATE OF SECURITY

minimagaking maky jingan stadal ali Appara



abstract the same about the same asset

Service of the Parket of the Parket of the Parket Service Serv



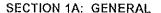
Constitution to Meaning, physiology to an all hear Assessed

# SPECIFICATIONS & DRAWING NOTES

MISCELLANEOUS INTERIOR MODIFICATIONS EXISTING OFFICE BUILDING MID-MISSOURI LEGAL SERVICES 117 NORTH GARTH AVENUE COLUMBIA, MISSOURI 65203

Renner Howell Architects 4603 John Garry Drive, Suite 10 Columbia, Missouri 65203 573-424-8743 Mobile Email: kerry@rennerhowell.com

January 24, 2020



Prior to submitting Bid Proposal, the General Contractor shall attend the mandatory Pre-Bid Meeting on February 25, 2020, and carefully evaluate the existing conditions at the job site, 117 North Garth Avenue, Columbia, Missouri 65203. Questions and requests for clarifications will be answered during the meeting or posted on the Owners website (www.mmls.org/contractors) by February 28, 2020, If other questions arise after the Pre-Bid Meeting, the Contractor must submit them to the Owner, by email, at <u>lutton@mmls.org</u> on or before March 6, 2020 at 5:00 PM. Those additional questions and clarification requests, and responses thereto, will be posted at www.mmls.org/contractors/ on or before March 9, 2020. Bid Proposals shall be delivered to Mid-Missouri Legal Services, 1201 West Broadway, Columbia, Missouri 65203, prior to March 10, 2020, 5:00 PM. (Note: Faxed or emailed Bid Proposals shall not be accepted.)

AIA General Conditions of the Contract for Construction, 2017 Edition, shall be made a requirement of this Contract unless amended or contradictory to the signed Contract between Mid-Missouri Legal Services (Owner) and Contractor.

Coordinate all scheduling of construction work and construction phasing with the Owner's designated representative.

All construction shall meet or exceed requirements of applicable Federal, State and City codes and regulations. Minimum standards shall be 2018 IBC and associated codes.

Construction for the new facility shall be according to the Drawings and as specified herein unless amended by Contract. Without limiting the scope of work, generally remove and replace existing interior walls, doors and frames, ceilings and floor finishes, miscellaneous cabinets, shelving and countertops, modify existing H.V.A.C. systems including duct work, supply air and return air grilles, plumbing,



24-2020

lighting and electrical. Install new ADA 2100 pound capacity hydraulic elevator in existing pit, including all new shaft walls and equipment room. Work shall be as described, noted and shown on the Drawings and in these Specifications.

Contractor shall submit a signed bid on Section 00200 PROPOSAL FORM to MID-MISSOURI LEGAL SERVICES. Bids shall be submitted on the PROPOSAL FORM and signed by an authorized representative of the firm. Bids shall not be withdrawn for a minimum of forty-five (45) days. MID-MISSOURI LEGAL SERVICES reserves the right to reject any and all bids and to waive all informalities. All materials and systems shall be installed according to the manufacturer's written recommendations, submittals and / or shop drawings.

Prior to submitting a bid proposal, Contractor shall visit the job site to carefully evaluate the existing conditions. Clarifications and questions must be submitted to the Owner in writing or by email, minimum three (3) days prior to Bid date.

## SECTION 1B: SPECIAL CONDITIONS

Contractor shall guarantee all new materials, equipment and work for a period of one (1) year from the date of Owner's final acceptance.

Contractor shall keep the areas of the Work areas clean and orderly at all times during the performance of the Contract. Contractor shall provide and maintain at his expense the Insurance as outlined in Section 01000 SPECIAL CONDITIONS. All changes in the Work shall be approved in writing by the Architect and / or Owner's Representative prior to performance of the work.

Contractor shall be liable for and protect, defend, indemnify and save the Owner, its officers, directors, employees and consultants harmless against any and all claims, losses, demands, causes of action, and any and all costs and expenses of every kind and character suffered by the parties. Contractor shall not be held liable for damages or costs caused by the sole negligence of the Owner.

Mid-Missouri Legal Services is exempt from paying sales tax. In order for them to take advantage of their sales tax exemption status, the Contractor shall be furnished an exemption certificate authorizing the purchase of construction materials.

Contractor shall coordinate the Work with the Owner's Representative, their schedule, and storage on site. The Owner, Architect and Engineers shall have reasonable access to the project at all times during the construction phase. The Project work shall be substantially complete by the date set in the Contract.

#### **SECTION 2A: SELECTIVE DEMOLITION**

Furnish all labor, materials, tools and equipment necessary to salvage and remove designated and necessary items such as walls, ceilings, soffits, flooring, doors, frames, hardware, carpet, flooring, trim, wall base, cabinets and shelving, duct work, grilles, wiremold, electrical, and lighting. Remove all materials not to be reinstalled form the site unless directed otherwise. All construction debris shall be cleaned up and removed Owner's property and properly and legally disposed.

#### **SECTION 3A: CONCRETE**

Furnish all labor, material, tools and equipment necessary to complete the work, including by not limited to interior slab-on-grade floor modifications and elevator pit floor and wall modifications (if required), and other related concrete work. All concrete (unless noted otherwise) shall be approved 4000 psi concrete mix.

#### **SECTION 6A: CARPENTRY**

Wood carpentry shall generally include all new wood products as necessary to provide a complete project. All framing lumber shall be minimum No. 2 grade fir, pine, or other Architect approved equal. Do not splice structural members between supports.

New stud walls shall be minimum 2 x 4 studs @ 16-inches on center. Elevator shaft shall generally be 2 x 6 studs @ 16-inches on center for wall construction for the side shaft walls and front shaft wall. Rear shaft wall may be 2 x 4 or 2 x 6 studs @ 16-inches on center. Provide and install additional 3 - 2 x 6 stud full height columns, 6 total, to attach the elevator rails, locations as necessary to comply with approved Elevator Shop Drawings. Elevator clear shaft shall be approximately 5'-9" deep (front to back) by 7'-4" wide (side to side). Coordinate construction of elevator shaft cap with existing roof trusses and overhead height requirements for hoist beam from approved Elevator Shop Drawings. If new shaft cap construction required, joists shall be 2 x 8 joists @ 16-inches on center. Refer to Drawings for elevator door header requirements. Note that clear shaft dimensions include 5/8" thick type-X drywall each side of walls and ceilings.

Provide and install continuos 2 x 6 blocking for items such as wall and base cabinets, grab bar railings, doors, etc.

Provide and install miscellaneous 2 x blocking and framing for lowered drywall ceilings hung from ceiling joists, roof trusses, acoustical tile ceilings and other work required to complete the project. Spacing shall be 16-inches on center unless noted otherwise. Note that approved steel stud and hat track members may be substituted for wood framing.

Provide and install solid 2 x 4 full thick solid vertical blocking / studs in designated "secure" area in new wall between the Reception and Lobby area around the "secure" reception window, from floor to approximately 7'-0" high by 10'-0" wide, the wall supporting new Door A and the "secure" reception window.

Generally provide framing, members of sizes and on spacings noted and / or shown, or if not shown, comply with recommendations of "Manual for Housing Framing" of National Forest Products Association. Do not splice structural members between supports. Screw anchor with hot-dipped galvanized units as noted and to comply with product literature, and other recommendations of N.F.P.A. Generally attach members with screws or bolts, not nails. Construct stud framing corners, window header framing using energy saving technics similar to "Advanced Wall Framing" in order to allow for installation of wall insulation in all areas as much as practical.

## SECTION 6C: INTERIOR ARCHITECTURAL WOODWORK / CABINETS / TOPS

Provide all labor and materials for the architectural woodwork, custom cabinets and lockers, custom locked cabinets, miscellaneous trim, custom kitchen cabinets, solid surface counter tops, and solid window stools. Cabinet maker shall be a qualified firm with a past track record of quality work similar to the scope of this project.

Without limiting the scope of work, new casework shall include new standard and / or custom plastic laminate cabinets and solid surface top with under-mount stainless steel sinks. Casework hinges shall be heavy-duty fully adjustable concealed units equal to Blum 170 degree self-closing hinges, drawer sides shall be rated minimum 75-pounds and shall be soft-close type, and pulls shall be heavy satin nickel units for drawers and doors, equal to Unilocks L5004-160SN or approved equal.

Typical base cabinets shall be nominal 24" deep with finished custom tops at various heights as shown and noted. Wall cabinets shall be typically 12" deep x 30" high unless noted or shown otherwise. Base and wall cabinets shall have minimum two adjustable plastic laminate shelf per cabinet. All new counter tops shall be solid surface in selected color, pattern, round radius 1.5" edges. Color of solid surface tops and plastic laminate cabinets shall be selected by Owner from standard colors by Corian or other approved selections. Tops with overhangs shall be full thick structural backing.

Note: Plastic laminate for exposed surfaces on cabinets shall be selected from available Formica, Wilson Art Premium Laminate or Owner / Architect approved full selection. Solid surface for open shelving, counter tops shall be Dupont Corian, MAUI or Architect / Owner approved equal.

Plastic laminate casework shall comply with the AWI Quality Standards (latest edition) Custom Grade. Provide Shop Drawings for Owner's / Architect's review.

#### **SECTION 7A: SOUND BATT INSULATION**

Furnish all labor and material for installation of sound batt insulation. All interior stud walls shall be insulated with batt insulation for sound. Stud walls shall receive full thick batts. New insulation shall completely fill in any voids. Coordinate work with work of other trades to provide access for such work as the Owner's security and computer wiring, sub-contractor's electrical, plumbing and H.V.A.C. systems.

#### SECTION 7B: SEALANTS

Sealants and fire caulking shall be best grade of GE, Tremco or Dow Corning. Sealants shall be installed for purpose as recommended by manufacturer. Without limiting the scope of work, generally seal joints between dissimilar materials and open joints to produce a tight, weather-resistant joint. Install sealant around doors, windows, masonry, trim, around plumbing fixtures, electrical outlets, boxes and conduits, between walls, floors, ceilings, and slabs, perimeter of all exterior openings, isolation joints, and expansion / control joints. Provide and install foam backer rope of proper size prior to installation of sealant. Color of sealant shall generally match adjacent finish surfaces. Coordinate sealant work with masonry

control joints, framed openings and other penetrations. Prime materials as recommended. Install sealants according to recommendations of sealant manufacturer.

#### SECTION 8A: WOOD DOORS, FRAMES & HARDWARE

Interior doors, frames, trim, hardware, finishes and keying shall generally match existing, adjacent units. New doors and frames in Main Level Lobby area shall be 1.75" thick solid core doors in minimum 16-gauge hollow metal frames. Unless notes otherwise, doors shall be 36" wide by 6'-8" high. New door for Elevator Equipment Room shall be 3'-6" wide by 6'-8" high by 1.75" thick solid core wood in new hollow metal frame with B-Label fire rating and locking hardware. New exit Doors A and B in the Lobby area shall be standard matching solid core wood in hollow metal frames with heavy-duty commercial exit devices with electric strikes to allow doors to be pulled open from the Lobby side for security reasons. Doors to have pull handles only on Lobby side.

Note: Contractor may reinstall matching finish salvaged doors if swings and hardware are corresponding to the new installation.

## SECTION 8B: RECEPTION WINDOW, SECURITY GLASS & CURRENCY TRAY

Provide all labor, materials, accessories and trim required for the new heavy-duty metal framed bullet resistant glazed vision panel with pass thru tray, 16" x 8" x 2". Frame size shall be approximately 36" wide by 36" high with Level 1 bullet resistant glazing. Total system shall be designed and furnished by Total Security Solutions or approved equal. Install according to manufacturer's written recommendations.

#### **SECTION 9A: DRYWALL**

Generally provide all labor and materials related to drywall work required to complete the project as noted and indicated. Patch / fill areas as necessary, fill in where walls removed and added. All drywall for walls, soffits and ceilings shall be equal to National Gypsum Gold Bond XP 5/8" thick Type X mold and moisture resistant drywall. Drywall shall be screw attached to studs, joists, furring and blocking as recommended by the drywall manufacturer. Furnish all necessary accessories such as standard corner beads, quarter round corner beads, J-trim and control joint trim. Install vertical control joints, maximum 30' on center. Finish interior gypsum wallboard by applying joint compounds in 3 coats (not including prefill of openings in base), and sand between coats and after last coat. System shall be complete ready for finish painting. Install control joints not more than 30' on center each way. Comply with manufacturer's recommendations, ASTM C 840, GA-216 and other industry standards for the installation and finishing of drywall.

Note: Install quarter round corner beads on all vertical outside corners.

Note: Install drywall ceilings on office walls over RC-1 Metal Channels @ 16-inches on center for sound retardation similar to existing installation.

Generally match existing conditions.

#### SECTION 9B: ACOUSTICAL CEILING TILE SYSTEM

Suspended acoustical ceiling tile shall be equal to white Rockfon Arctic, SL 660, 2' x 2' x 5/8", white, NRC 0.75, 10-year limited warranty. Suspension grid shall be white, 1200 Series grid, 15/16" standard system, approved by tile manufacturer. System shall be installed by a qualified, skilled craftsman. Carefully layout grid and system to comply with the Mechanical and Electrical Lighting Plan layouts. Coordinate installation of system with drywall, painting, lay-in and can lighting and HVAC work. New suspended ceiling areas shall be as high as practical, approximately 8'-8" high. Generally layout the grid in each room with grid layour centered in the areas using minimum half tiles. Consult with Owner, Architect and engineer on final layout.

## SECTION 9C: CARPET, WOOD / LAMINATE FLOORING & WALL BASE

General Contractor shall work with the Owner in the installation of new floor finishes. The Owner shall generally install new flooring finishes throughout the building using their own sub-contractors. The General Contractor shall remove existing carpet and sheet flooring and clean the areas. Install new matching wood wall base in renovated areas unless directed otherwise by the Owner. Remove existing flooring, clean floors, patch and level substrate as necessary prior to prepare for flooring installation by others.

## SECTION 9D: UPPER LEVEL FLOOR, CONCRETE TOPPING AND PATCHING

Provide all materials and labor to fill in and patch existing floor topping on the Upper Level Floor, especially in areas where existing wall are removed. Remove existing 2 x wall plates and fill in voids. Grind and level sub-floor areas prior to installation of new flooring. General Contractor shall coordinate work with Flooring Sub-Contractor.

## **SECTION 9E: PAINTING**

Generally paint all new and existing paintable interior surfaces such as drywall, trim and frames. Existing and new wood doors shall be cleaned. New doors shall be stained to match existing. Coordinate stained wood finishes of trim, wall base, frames, doors, cabinets, casework, etc. Do not paint factory finished materials unless directed otherwise. Prime drywall and painted trim. Materials shall be primed with paint recommended by finish material manufacturer. Paint for drywall and interior shall be equal to Benjamin Moore SCUFF-X Single-Component Latex eggshell finish. Trim shall be similar SCUFF-X paint system in satin finish, minimum two finish coats. Paint and finish materials shall be best grade by approved manufacturer. Minimum two (2) interior colors shall be selected by Architect / Owner from manufacturer's full range. Apply paint colors as directed. Generally paint all areas / surfaces unless noted or directed otherwise. Paint selected shall be recommended by the manufacturer's color charts.

General Contractor shall coordinate surface preparation including removal of existing items such as wiremold, nails, and anchors.

#### **SECTION 10A: APPLIANCES**

General Contractor shall coordinate installation of Owner furnished kitchen appliances. Provide and install all necessary electrical and plumbing connections, accessories, etc.

#### **SECTION 11A: TOILET ACCESSORIES**

Provide and install all commercial duty toilet accessories as follows for the renovated Toilet Room on the Main Floor Level.

- 1. Mirror: Bobrick B-165-2436, 24" x 36" one piece bright polished channel frame ½" x ½" x ½". No. 1 quality 1/4" float/plate glass guaranteed against silver spoilage for 10 years.
- 2. Grab Bars: Bobrick B-6206 Series, 1½" round, satin finish, 1½" wall clearance, concealed mounting. One 42" long and one 36" long, and one vertical 18" long. 42" and 36" long to be mounted at 33" high above the floor. Bottom of 18" vertical bar to be mounted at 40" high and 40" from back wall.
- 4. Paper Towel Dispenser and Waste Receptacle: By Owner.
- 5. Toilet Paper Dispenser: By Owner.
- 5. Soap Dispenser: By Owner.

Note: Coordinate installation of blocking required in existing stud walls for mounting the grab bars.

#### SECTION 14A: HYDRAULIC PASSENGER ELEVATOR

Provide all materials and labor to install a complete ADA compliant 2100 pound capacity hydraulic elevator system in the existing area originally roughed-in including the existing elevator pit. Elevator shall be equal to AC Gearless Passenger Elevator by Thyssenkrupp. System shall be single speed, two stop, front opening, approximately 10'-6" floor to floor (field verify), 5'-9" deep by 7'-4" wide shaft as shown on the Drawings. Elevator system shall be complete with all standard finishes, accessories, equipment and systems to comply with Code and ADA requirements. Installation shall be within the designated areas with Equipment Room across the hall on the Main Floor Level. Cab shall have VCT flooring, plastic laminate walls, suspended ceiling with LED lighting, stainless steel door, aluminum sills, and stainless steel handrails. Finishes and colors shall be selected by Owner from manufacturer's available standard selections. Contractor shall coordinate and comply / modify existing conditions with approved Elevator Shop Drawings; comply with all applicable Code requirements.

Elevator Shaft Construction Note: General Contractor shall coordinate the elevator shaft construction with all necessary trades, especially wood framing and drywall. Shaft construction shall be minimum one-hour rated, with 1-layer 5/8" thick Type-X drywall each side of new and existing framing, all sides and shaft cap. Refer to Structural Engineering and Architectural details and notes. Fur out front wall of shaft as necessary to provide a flush wall, approximately 10.5" total thickness.

## SECTION 15 & 16: MECHANICAL / ELECTRICAL / PLUMBING

Refer to attached Construction Documents by Malicoat - Winslow Engineers P.C. for all mechanical, electrical and plumbing work. General Contractor shall closely coordinate the Work other trades. Notify Architect and / or Engineer of conflicts, if any. Comply with the latest Codes and City of Columbia requirements. Work shall be accomplished by qualified, skilled workers.

**END OF ARCHITECTURAL SPECIFICATIONS** 

## DIVISION 22 SECTION 220000 PLUMBING

## PART I - GENERAL

## 1.01 Related Documents

A. Provisions of the General Requirements, Division 1, are a part of this section.

## 1.02 Work Included

- A. Piping
  - 1. Sanitary waste and vent
  - 2. Hot and cold water
- B. Plumbing fixtures and trim.
- C. Drawings of Record.
- D. Prior to bidding, all <u>Contractors</u> shall visit the site and become familiar with all existing conditions, which will affect construction procedures and scope of work required as part of this Section.

## 1.03 Related Work

- A. Painting by Painting Contractor
- B. Cutting and patching
- C. Excavation and backfill

## 1.04 Codes and Standards

- A. International Plumbing Code.
- B. National Fire Protection Association.
- C. American Society of Mechanical Engineers.
- D. International Approval Service.
- E. American Society for Testing and Materials.
- F. American Society of Heating, Refrigerating, and Air Conditioning Engineers.

G. International Building Code

## 1.05 Shop Drawings

A. Shop drawings shall be submitted to the Architect for approval. The Contractor shall be responsible for quantities and dimensions. The Contractor shall check all shop drawings prior to submission to the Architect.

## PART II - PRODUCTS

## 2.01 Piping Materials

- A. All sanitary waste piping and vent piping shall be Schedule 40 PVC plastic pipe and fittings, except waste piping outside building shall be SDR-35.
- B. All hot and cold water piping shall be pex.

## 2.02 Hangers/Supports

A. All hangers 1/2" through 6", Elcen Figure 89 or 389, galvanized steel or copper plated steel, all thread rod with concrete insert, lag screw, or other approved anchorage means.

#### 2.03 Valves

- A. Ball valves (all valves unless noted on Drawings) shall be Watts 6000 Series ball valves, 2 piece bronze, or equal by Nibco or Crane.
- B. All bathroom groups shall have isolation valves on both the cold and hot water supplies. Locate valves as required. If valves are installed within a wall, provide an access door as required.

#### 2.04 Pipe Insulation

A. Shall be 3/8" thick Armaflex. Insulate all above grade hot water and cold water piping.

## 2.05 Plumbing Fixtures

- A. All fixtures shall be of one manufacturer unless specified. See drawings.
- B. Vitreous china fixtures shall be twice fired, all exposed surfaces covered with opaque glaze. Cast iron fixtures shall be finished inside with acid resisting porcelain enamel. All exposed trim shall be heavy polished chrome plated brass. Determine quantity of fixtures and equipment from drawings.

## 2.06 Cleanouts

A. Approved equal by Zurn or Wade. Install maximum of 50 feet on centers, at base of all stacks, and at all 90E bends in waste piping. Cover for cleanouts shall be coordinated with wall and floor finish.

## 2.07 ADA Compliant Lavatory Insulation

A. All exposed piping under handicap or wheelchair accessible lavatories shall be insulated/isolated with molded, recessed tamper proof security set screws, antimicrobial UV inhibited, universal fit, Handy-Shield Safety Covers Pro-2000 series brand by Plumberex Specialty Products, Inc. or other approved as equal.

#### 2.08 Substitutions

All substitutions must be pre-approved by the architect prior to bidding. See
 Division 1 for substitution process.

#### PART III - EXECUTION

#### 3.01 Installation Instructions.

- A. All material and equipment shall be installed as recommended by manufacturer. These specifications shall not be construed to vary from manufacturer's written installation instructions without written approval from manufacturer.
- B. It shall be the responsibility of this Contractor to visit the site & coordinate with the other trades for clearance, elevations, etc., before installation of any material. Where conflicts exist the Architect shall be notified before installing material. Changes required in work specified in this Section caused by neglect to do so shall be made at no cost to the Owner.
- C. Arrange with Contractors of other trades for installation of built-in items, blocking, and additional necessary supports.

## 3.02 Pipe Routing

- A. All piping shall be concealed except where approved by Architect.
- B. All piping shall be run parallel and/or perpendicular to building lines and shall be neatly grouped. Piping shall be on warm side of insulation.
- C. See Drawings for general routing of pipes and see details of drawings for specific pipe routing.

- D. Join all copper piping with Bridgit Lead-Free solder and non-corrosive flux Nodorode, or equal clean surfaces to be solder bright.
- E. Provide a union or flange connection at each piece of equipment such as water heaters, accessible fixtures etc. so the equipment can be removed or serviced without disturbing remainder of system, draining system or cutting piping.
- F. Make all connections between copper and ferrous pipe in domestic water and other open type systems with dielectric unions.

## 3.03 Plumbing Fixture Installation

- A. Provide all fixtures and equipment with compression stops in addition to the faucets.
- B. Provide all grounds and supports for the fixtures and other equipment. Arrange with contractors of other trades for installation of built-in items, blocking, and additional necessary supports.
- C. Grout behind all wall hung plumbing fixtures with hard white durable plaster materials to eliminate all voids and cracks and provide sufficient plane bearing surface for mounting.
- D. Caulk behind all standard wall hung fixtures with G.E. "Silicone Sanitary Sealant" or other approved mildew resistant, paintable, non-hardening sealant.

#### 3.04 Pipe Support Installation

A. Vertical pipe of the following materials shall be supported at intervals not more than the distance prescribed in the following:

1. Copper Tube: At each story, but not more than ten (10) foot intervals.

2. Plastic Pipe: At each story, and at midpoint between floors.

3. Threaded Pipe: At each story, but not more than (10) foot intervals.

B. Horizontal pipe of the following materials shall be supported at intervals not more than the distances prescribed in the following:

Copper Tube (1½ inch or less): At six (6) foot intervals.
 Copper Tube (1½ inch and over): At ten (10) foot intervals.
 Plastic Pipe (3 inch or less): At four (4) foot intervals.
 Plastic Pipe (4 inches and over): At five (5) foot intervals.
 Threaded Pipe: At twelve (12) foot intervals.

C. Piping shall be so anchored as to take the load off the stack at the base.

- D. Hangers and strapping material shall be of similar materials as the piping to avoid galvanic action.
- E. Provide additional hangers at each turn and where concentrated loads such as valves, risers, etc. occur.
- F. Trapeze Hangers shall not be permitted.
- G. Provide pipe covering protection saddles.
- H. Construct rigid structural steel anchors to secure piping to building construction where required to stabilize piping.
- Furnish and install all supplementary steel angles, channels, beams, etc.; where hanger location falls between joists, purlins or beams; for hanging loads exceeding capacity of a single joist, etc. Safety factor of all such assemblies shall be 5 to 1 minimum.
- J. Support all piping and equipment from building construction with adequate hangers, claps, rods inserts.
- K. All supporting methods and devices must be approved by the Architect prior to installation. No overloading of any beam, joist, slab, device, etc. will be allowed. Welding to and drilling of structural members must be approved by the Architect. Coordinate support locations with other Contractors.

## 3.05 Floor Drain Installation

A. This contractor shall be responsible for proper setting and elevation of all floor drains to provide proper slopes and avoid water puddling on floors.

#### 3.06 Access Doors

A. Furnish and install access doors over all concealed valves, and other concealed components requiring service and not accessible from utility spaces. All access doors shall be as manufactured by Inland Steel Products Co. "Milcor" styles as required to match construction and as approved by Architect.

## 3.07 Excavation and Backfill

A. Contractor shall perform all excavation and backfill required for all plumbing work. Cutting of any concrete required by the excavation shall be done by the General Contractor. Any rock shall be excavated 3" below the laying depth, and the trench shall be filled in 6" layers and mechanically compacted. Flooding or

puddling not permitted. All piping which will be under concrete or roads, shall be backfilled in accordance with Architects specifications.

## 3.08 Waterproofing

A. Plumbing work piercing weatherproof construction shall be made weatherproof by use of Architect approved materials and methods.

## 3.09 Tests and Adjustments

- A. Fixtures and equipment shall not be concealed or covered until they have been inspected and approved by the Architect, who shall be notified when the work is ready for inspection. All work shall be completed installed, tested as required by this Section, and leak-tight before inspection if requested. All tests shall be repeated to the satisfaction of those making the inspection.
  - All waste and vent piping shall be filled with water to the highest point in each system with all air removed. The lines shall be flushed by removing the test plug. Piping concealed shall be subjected to not less than 10' head. Stand piping installed for head test shall be min. 2" diameter.
  - 2. Sewer piping shall be filled with water to its highest point.
  - Water piping shall be flushed out, tested at 100# PSI for 24 hours, then left under pressure of supply main for the balance of construction period.
  - Plumbing fixtures shall be filled with water and checked for leaks or retarded flow.
  - All flush valves, key stops, valves and similar equipment shall be adjusted and balanced to provide for the proper operation of the various systems.
  - Each piece of plumbing equipment and the entire plumbing system shall be adjusted and readjusted as required to insure proper functioning and shall be left in 1st-class operating condition.

## 3.10 Expansion

A. Contractor shall provide for min. 1-1/2" expansion per 100 linear ft. of piping by installing swing joints and/or expansion compensators.

## 3.11 Sterilization of Water Distribution System

- A. When the new water distribution system has been flushed thoroughly, it shall be sterilized in accordance with the requirements of the Health Department having jurisdiction or, in the absence of such, by the following:
  - Introduce chlorine or a solution of calcium or sodium hypochlorite, filling
    the lines slowly and applying the sterilizing agent at a rate of 50 parts per
    million of chlorine as determined by residual chlorine tests at the ends of
    the lines. Open and close all valves and hydrants while the system is
    being chlorinated.

2. After the sterilizing agent has been applied for 24 hours, test for residual chlorine that is indicated, repeat the sterilization process.

## 3.12 Cutting, Patching and Piercing

A. Obtain written permission of the Architect before cutting or piercing structural members. If, in the process of the mechanical work, ducts, piping or equipment need to be installed in an area after it has been completed, the area shall be left in the same condition it was originally. Patching and/or refinishing will be determined by the Architect.

#### 3.13 Access

A. Equipment, valves and devices shall be mounted in a manner which provides adequate maintenance, inspection access and work space. Where access is required for adjustment, cleanout, inspection of maintenance and such access is not otherwise available, access panels shall be furnished and installed. Panels shall be selected by the Architect.

## 3.14 Building Openings for Admission or Installation of Equipment

A. The Contractor shall ascertain from his examination of the Architectural and Structural Drawings whether any special temporary or permanent openings in the building for the admission or installation of apparatus furnished under this Contract will be necessary and he shall notify the General Contractor accordingly. He shall pay all cost of making such openings in case of failure to give this notification in time for the General Contractor to arrange for same during construction.

## 3.15 Cutting, Sleeves, Inserts, Anchor Bolts and Escutcheons

- A. In placing sleeves, inserts, anchor bolts and any other material to be embedded in masonry and concrete or built into the structure, the Contractor shall cooperate with all other trades and shall consult with the Architect in regard to their exact location whenever there is any interference with structural members.
- B. The Contractor will be held responsible for locating and maintaining in proper position, sleeves, inserts and anchor bolts supplied and/or set in place by him. In the event that failure to do so requires cutting and patching of finished work, it shall be done at the Contractor's expense.
- C. All pipe passing through floors, walls or partitions shall be provided with sleeves having an internal diameter 1" larger (unless specifically indicated otherwise) than the outside diameter of the pipe.

- D. Sleeves through outside walls shall be Schedule 40 black steel pipe. Sleeves shall extend 1/2" beyond each side of the wall. The space between the sleeve and the pipe shall be packed and made watertight with a waterproof compound.
- E. Sleeves through interior partitions shall be 22 gauge galvanized sheet steel set flush with finished surface of partitions.
- F. Inserts shall be individual or strip type of pressed steel construction with accommodation for removable nuts and threaded rods up to 3/4" in diameter, permitting lateral adjustment. Individual inserts shall have an opening at the top to allow reinforcing rods to be passed through the insert body and shall be similar to Fee and Mason Fig. 188 or equal for equipment suspension and Fig. 9000 or equal for pipe suspension.
- G. Where sleeves or inserts are placed in interior walls or partitions, the openings shall be completely sealed with Fiberglass to prevent sound transmission.
   Where sleeves are placed in fire rated walls and floors, they shall be packed with high temperature mineral wool and non-flammable sealant.
- H. Furnish and install escutcheons where uninsulated pipes pass through finished walls, floors or ceilings. Escutcheons shall be chrome plated brass, firmly secured to the pipes and of sufficient outside diameter to amply cover the sleeved openings for the pipes. Escutcheon plates shall be as manufactured by Crane Company or equal.

#### 3.16 Sound and Vibration

A. All pumps, motors etc. shall be mounted so as to be isolated from the building by approved sound insulation means. All noises and hums of motors, fan etc. shall be so absorbed that the operation will not be heard except in the immediate vicinity of the equipment.

#### 3.17 Cleaning of Equipment and Removal of Rubbish

- A. All equipment furnished or installed by this Division shall be thoroughly cleaned. At the completion of the work, the Contractor shall remove from the buildings and the premises all rubbish and debris resulting from his operations and shall leave all material and equipment furnished by him and the space occupied by them absolutely ready for use.
- B. Under no circumstances shall rubbish be allowed to accumulate in the building or on the premises. All dirt and rubbish resulting from this Division's work shall be removed by this Division from time to time and as often as directed by the Architect and Owner's representative.

## 3.18 Record Documents

A. Blueline or blackline copy of Drawings shall be kept by this Contractor at the job site at all times for the sole purpose of recording horizontal and vertical location of all concealed and underground plumbing, referenced to permanent visible structures. At completion of job, neatly record all dimensions on a reproducible drawing and submit for approval of Architect.

**END OF SECTION** 

# DIVISION 23 SECTION 230000 HEATING, VENTILATING, AND AIR CONDITIONING

#### PART I - GENERAL

- 1.01 Related Documents
  - A. Provision of General Requirements, Division 1, are a part of this section.
- 1.02 Description of Work
  - A. The extent of work is shown on drawings, and includes but is not necessarily limited to the following:
    - 1. Ductwork
  - B. Prior to bidding, all <u>Contractors</u> shall visit the site and become familiar with all existing conditions, which will affect construction procedures and scope of work required as part of this Section.
- 1.03 Related Work
  - A. Power and control wiring
  - B. Painting
  - C. Cutting and patching
- 1.04 CODES AND STANDARDS
  - A. American Society of Mechanical Engineers
  - B. American Society for Testing and Materials
  - C. American Society of Heating, Refrigerating and Air Conditioning Engineers.
  - D. International Building Code
  - E. Sheet Metal and Air Conditioning Contractors National Association.
  - F. Underwriter's Laboratories
  - G. NFPA

## H. International Approval Service

#### 1.05 Design Conditions

- A. HVAC system design assumes the following:
  - 1. Winter outdoor temperature -10° F.
  - 2. Winter indoor temperature 72° F
  - Summer outdoor temperature 95° F. D.B. 78° F W.B.
  - 4. Summer indoor temperature 72° F. D.B.

#### PART II - PRODUCTS

#### 2.01 Ductwork

- A. Rectangular shall be galvanized iron fabricated and installed to SMACNA standards. Provide turning vanes in all 90 degrees elbows. Provide all necessary manual volume dampers, turning vanes, volume extractors, etc. as required to properly balance system. Fresh air duct shall be insulated with 2" rigid, insulation, with "K" value of .24. Ductwork shall have duct liner insulation. Ductwork in conditioned areas shall have 1/2" duct liner and duct work in unconditioned areas shall have 1" duct liner. Number after hyphen in duct size indicates thickness of insulation. Duct sizes have been increased to allow for thickness of insulation. (Alternate method) Ductwork shall have 1-1/2" .24K factor duct wrap insulation in conditioned areas and 2" .24" K factor in unconditioned areas.
- B. Round Shall be galvanized iron fabricated and installed to SMACNA standards.
- C. Flexible Duct Flexmaster #6M Insulated flexible duct. Mylar inner liner, 1" thick fiberglass insulation with seamless aluminized vapor barrier. Maximum length unless otherwise noted shall not exceed 10 feet, and supported maximum 3' o.c.

#### 2.02 Duct Liner

- A. Insulate all supply ducts, return ducts, and related fittings with duct liner meeting the requirements of ASTM C1071 as follows:
  - Type I Flat, in roll form, in thickness of ½" to 2" (13mm to 51mm) in ½" (13mm) increments. R-value at ½" = 2.2, R-value at 1" = 4.2, R-value at 1.5" = 6.3, and R-value at 2" = 8.0. The duct liner shall have an airstream surface treatment.
  - Type II Flat, in sheet form, in thicknesses of 1", 1 ½", and 2" (25mm, 38mm, and 51mm). R-value at 1" = 4.3, R-value at 1.5" = 6.3, and R-value at 2" = 8.7. The duct liner shall have an airstream surface treatment.

- B. Acoustical Performance at ½" NRC = 0.85, at 2.0" NRC = 0.95.
- C. Air stream surface of duct liners should have a protective coating applied to a flexible glass mat that includes an EPA-registered anti-microbial agent.

## 2.03 Grilles and Louvers (Relocated)

#### 2.04 Substitutions

A. All substitutions must be pre-approved by the architect prior to bidding. See Division 1 for substitution process.

#### PART III - EXECUTION

#### 3.01 Manufacturer's Written Installation Instructions

- A. All materials shall be installed as recommended by manufacturer. Nothing in these specifications shall be construed to vary from manufacturer's written installed instructions without written approval from manufacturer.
- B. It shall be the responsibility of this Contractor to coordinate with the other trades for clearance, elevations, etc., before the installation of any material. Where conflicts exist the Architect shall be notified before installing material. Changes required in work specified in this Section caused by neglect to do so shall be made at no cost to the Owner.
- C. Arrange with Contractors of other trades for installation of built-in items, blocking, and additional necessary supports.

### 3.02 Heating/Air Conditioning

- A. Furnish and install complete and operable heating/air conditioning system, consisting of relocated air distribution, etc.
- B. Air balance shall be performed by a qualified air balancer.

#### 3.03 Noise and Vibration

A. It is the specific intent of these specifications and design conditions that the system including equipment, piping and other parts, shall be noiseless and free of vibration as a result of the new installation in the building. It shall be the responsibility of this Contractor to correct these conditions at no cost to the Owner.

## 3.04 Wiring Diagrams

A. Furnish complete wiring diagrams for all equipment furnished by this Contractor. Submit wiring diagrams to Architect with equipment submittals for approval.

# 3.05 Electrical Equipment

A. Starters and thermal protective devices not a factory mounted integral part of equipment specified in this Section shall be furnished by this Contractor for installation by the Electrical Contractor.

#### 3.06 Testing, Adjusting and Air Balancing

A. All systems and equipment shall be put into operation and shall continue to operate for at least three, eight-hour periods until all adjusting, balancing, testing, demonstrations, instruction and cleaning of system have been completed. Testing and balancing to be done by a qualified balancer. Submit SMACNA air balance report for approval by Architect.

## 3.07 Operating Instructions and Maintenance Data.

A. Upon completion and acceptance of the work by the Owner, the Contractor shall provide an experienced Engineer to instruct the Owner's operators in operation of entire installation. Instruction period shall be for a period of one (1) eight-hour working day. Contractor shall provide four (4) sets of 8 1/2" x 11" typed operating and maintenance instructions. Sample maintenance instructions will be provided by Engineer upon request. Contractor shall also include wiring diagrams of all controls in each set of maintenance instructions.

## 3.08 Clean-up

A. Upon completion of work under this Section, all unnecessary equipment, materials, rubbish, etc., shall be removed from project site and surrounding area leaving site in a safe and cleared condition.

## 3.09 Piping Installation

- A. All piping shall be run parallel and/or perpendicular to building lines and shall be neatly grouped.
- B. See drawings for general routing of pipes and see details of drawings for specific pipe routing.

- C. All piping shall be supported in a manner to prevent the weight of any piping, valves, fittings, etc. from being born be equipment connections.
- D. Insulate A/C condensate line (inside building), with 3/8" Armaflex.

## 3.10 Hanger Installation

A. Install hangers on maximum 8 ft centers for 1/2" thru 2" steel pipe and maximum 10 ft centers for 2 1/2" steel pipe and larger, Install hangers at maximum 4'-0"
 O.C. for plastic pipe. Provide rigid insulation of wood blocks and size hangers for O.D. of insulation. Sheet metal saddles on all insulated piping.

## 3.11 Cutting, Patching and Piercing

A. Obtain written permission of the Architect before cutting or piercing structural members. If, in the process of the mechanical work, ducts, piping or equipment need to be installed in an area after it has been completed, the area shall be left in the same condition it was originally. Patching and/or refinishing will be determined by the Architect.

#### 3.12 Access

A. Equipment, valves and devices shall be mounted in a manner which provides adequate maintenance, inspection access and work space. Where access is required for adjustment, cleanout, inspection of maintenance and such access is not otherwise available, access panels shall be furnished and installed. Panels shall be selected by the Architect.

# 3.13 Building Openings for Admission or Installation of Equipment

A. The Contractor shall ascertain from his examination of the Architectural and Structural Drawing whether any special temporary or permanent openings in the building for the admission or installation of apparatus furnished under this Contract will be necessary and he shall notify the General Contractor accordingly. He shall pay all cost of making such openings in case of failure to give this notification in time for the General Contractor to arrange for same during construction.

#### 3.14 Cutting, Sleeves, Inserts, Anchor Bolts and Escutcheons

A. In placing sleeves, inserts, anchor bolts and any other material, the Contractor shall cooperate with all other trades and shall consult with the Architect in regard to their exact location whenever there is any interference with structural members.

- B. The Contractor will be held responsible for locating and maintaining in proper position, sleeves, inserts and anchor bolts supplied and/or set in place by him. In the event that failure to do so requires cutting and patching of finished work, it shall be done at the Contractor's expense.
- C. All pipe passing through floors, walls or partitions shall be provided with sleeves having an internal diameter 1" larger (unless specifically indicated otherwise) than the outside diameter of the pipe. All holes cut in floor panels shall be core drilled.
- D. Sleeves through outside walls shall be Schedule 40 black steel pipe. Sleeves shall extend 1/2' beyond each side of the wall. The space between the sleeve and the pipe shall be packed and made water tight with a waterproof compound.
- E. Sleeves through masonry floors, interior masonry walls, or fire walls shall be Schedule 40 steel pipe set flush with finished wall or ceiling surfaces, but extending 2" above finished floors.
- F. Sleeves through interior partitions shall be 22 gauge galvanized sheet steel set flush with finished surface of partitions.
- G. Inserts shall be individual or strip type of pressed steel construction with accommodation for removable nuts and threaded rods up to 3/4" in diameter, permitting lateral adjustment. Individual inserts shall have an opening at the top to allow reinforcing rods to be passed through the insert body and shall be similar to Fee and Mason Fig 188 or equal for equipment suspension and Fig. 9000 or equal for pipe suspension.
- Where sleeves or inserts are placed in interior walls or partitions, the openings shall be completely sealed with Fiberglass to prevent sound transmission.
   Where sleeves are placed in fire rated walls, they shall be packed with high temperature mineral wool and non-flammable sealant.
- Furnish and install escutcheons where uninsulated pipes pass through finished walls, floors or ceilings. Escutcheons shall be chrome plated brass, firmly secured to the pipes and of sufficient out side diameter to amply cover the sleeved openings for the pipes. Escutcheon plates shall be as manufactured by Crane Company or equal.

## **END OF SECTION**

# DIVISION 26 SECTION 260000 ELECTRICAL

#### PART I - GENERAL

1	.01	Related	Document	c
		L/CIGICO		

- A. Provisions of General Requirements, Division 1, are a part of this section.
- 1.02 This work shall include, but not necessarily be limited to furnishing and installing:
  - A. Wiring
  - B. Conductors and Conduit
  - C. Panels and Fused Disconnects.
  - D. Wiring Devices, Light Fixtures, Lamps, Ballasts, Fuses.
  - E. Wiring for Equipment Furnish by Others.
  - F. Grounding
  - G. Telephone and Computer Conduit, CATV, J-Boxes, Cover Plates, Pull Wire
  - H. Drawings of Record
  - Prior to bidding, all <u>Contractors</u> shall visit the site and become familiar with all existing conditions, which will affect construction procedures and scope of work required as part of this Section.

## 1.03 Codes and Standards

- A. National Fire Protection Association National Fire Code.
- B. National Electrical Code
- C. Building Officials and Code Administrators International, Inc.
- D. Underwriter's Laboratories
- E. National Electric Safety Code

- 1.04 Shop Drawings shall be submitted to the Architect for approval. The Contractor shall be responsible for quantities and dimensions. The Contractor shall check all shop drawings prior to submission to the Architect.
- 1.05 The Contractor shall follow the drawings in the layout of his work and shall consult general construction drawings, mechanical drawings and all other drawings for this project to determine all conditions affecting the electrical work. The drawings are not to be scaled and the Contractor shall verify spaces in which the electrical work is to be installed.
- 1.06 The Contractor shall take measurements and make layouts as required for the proper installation of the work and coordination with all other work on the project.
- 1.07 Related Work
  - A. Mechanical Equipment
  - B. Painting by Painting Contractor

PART II - PRODUCTS

# 2.01 Wire and Cable

- A. Low voltage wire and cable
  - All wire and cable installed under this contract shall be Southwire, Anaconda, Triangle or approved equal, complete with non-fading type color coding system as set forth by National Electric Code. General interior wiring shall have 600 volt insulation, THHN. Wiring in wet and damp locations shall be THWN.
  - Wire shall be soft annealed copper conforming to current requirements of National Electrical Code, and shall be Brown & Sharp (B&S), or American Wire Gauge (AWG) gauges unless specifically indicated on the Drawings. NO ALUMINUM WIRE SHALL BE USED. Wire smaller than #12 gauge shall not be used.
- B. Wiring in wood frame construction may be non-metallic sheathed cable (ROMEX).

#### 2.02 Connectors

A. Shall be "Scotch Lok" for up to #8 wire and Weaver, or approved equal, split bolt or set screw type connectors for #6 wire and larger.

## 2.03 Conduit

- A. EMT electrical metallic tubing, Republic "Electriunite", National, Triangle.
- B. Rigid galvanized conduit, Republic "Galvanite", National, Triangle, with threaded fittings.
- C. Flexible metal conduit, "Greenfield".
- D. Carlon, or approved equal, Schedule 40 non-metallic conduit and fittings.
- E. Metal Clad (Type MC) cable and fittings manufactured by AFC, or approved equal.

## 2.04 Outlet, Junction and Pull Boxes

A. Outlet boxes shall be galvanized or sherardized, one-piece pressed steel of sectional type or non metallic (Carlon), of size most suitable for the outlet used. Boxes shall be equipped with plaster rings, extension rings, bar hangers and fixture studs as may be required. Junction or pull boxes, either flush or surface mounted, as indicated or required, shall be of adequate sizes to accommodate the conductors installed therein. Junction and pull boxes shall comply with the National Electrical Code as to construction.

## 2.05 Lighting and Power Panelboards and Fuses

- A. Power panels and lighting panels shall be circuit breaker type, Cutler-Hammer, Siemens, Square D, GE, or equal. See Drawings.
- B. Fuses shall be Bussmann as follows or as noted on Drawings. Fuses 60 amps and above shall be NEMA class L Hi-cap "KRP-C" fuses with time delay. Fuses feeding circuit breaker panels shall be Limitron fuses, "KTN" for 250 volts. Fuses on power feeders shall be Fusetron Dual-Element fuses in the 0-60 amp sizes, "FRN" for 250 volts, and Low-Peak Dual Element fuses in the 70 to 600 amp sizes, "LPN" for 250 volts.
- C. Panels shall be for connection to 4-wire, 120/208 volt, grounded neutral, 3 phase power.
- Cabinets shall conform to NEMA standards, and be constructed of code gauge galvanized sheet steel with single door flush or surface trim as indicated on the Drawings.
- E. Cabinet trim shall have gray lacquer finish.

F. Panels shall have aluminum bus bars, ground bars, and neutrals.

#### 2.06 Wall Switches

A. Shall be Leviton #1120 series, or approved equal, 20 amp, 120/277 volt, grounding clip. Single pole or 3-way as indicated in the drawings. Color as selected by Architect.

# 2.07 Duplex Convenience Outlets

A. Shall be Leviton #5362, or approved equal, 20 amp grounding type. Ground fault receptacles shall be Leviton #7899-LW Series. Side wire only. Color as selected by Architect.

## 2.08 Special Outlets

A. Shall be by Leviton as required and as shown on drawings, complete with wall plates, same color as duplex receptacles.

## 2.09 Switch and Receptacle Plates

A. Shall be Leviton #80700 series to match switch, receptacle, or special outlet as required or approved equal

## 2.10 Fused Disconnects

A. Shall be Square D, general duty, single throw, externally operated safety switches, fuses and of poles, volts and ampere ratings for the load shown in NEMA-1 or NEMA-3R enclosures, as required.

## 2.11 Light Fixtures

A. All light fixtures shall be as scheduled on drawings or approved equal. To be considered as equal, fixtures must have equal features, components, quality of construction, and photometrics.

## 2.12 Substitutions

A. All substitutions must be pre-approved by the architect prior to bidding. See Division 1 for substitution process.

#### PART III - EXECUTION

## 3.01 Manufacturer's Written Installation Instructions

- A. All materials shall be installed as recommended by manufacturer. Nothing in these specifications shall be construed to vary from manufacturer's written installed instructions without written approval from manufacturer.
- B. It shall be the responsibility of this Contractor to coordinate with the other trades for clearance, elevations, etc., before installation of any material. Where conflicts exist the Architect shall be notified before installing material. Changes required in work specified in this section caused by neglect to do so shall be made at no cost to the Owner or Architect.
- C. The Contractor shall verify the voltage phase full-load current and exact location of all electrical equipment before rough-in.
- Arrange with Contractors of other trades for installation of built-in items, blocking, and additional necessary supports.

#### 3.02 Wire and Cable Installation

- A. Unless specifically indicated on Drawings, all wire and cable installed in ordinarily dry locations above base slab shall be Type THHN. Unless specifically indicated on Drawings, all wire installed below grade in slab or grade or in areas subjected to possible condensation, moisture, or weather shall be Type THWN.
- B. All wiring shall be in conduit, or shall be type MC cable. See "Conduit" below.
- C. All wiring shall be continuous between boxes with out any splices in conduit or frame spaces.
- D. All 120 volt 20 amp lighting and receptacle circuits requiring more than 100' of conductor (one way) shall be #10 conductors.

#### 3.03 Conduit Installation

- A. Conduit for general use concealed inside building as shown on Drawings shall be EMT or type MC cable.
- B. All conduit for installation exposed or exterior to structure, or within concrete construction or as shown on Drawings, shall be rigid galvanized or Schedule 40 PVC as approved by Architect.

- C. Conduit smaller than 1/2" shall not be used. Flexible conduit (Greenfield) may be used in short lengths (maximum 6') for fixture connections, motor connections and other special connections as approved by Architect.
- D. Conduit shall be concealed in finished spaces, except where noted otherwise on Drawings. All exposed conduit shall be as approved by Architect and shall be installed in a neat and workmanlike manner with conduit runs parallel to building lines.
- E. Conduit shall run continuous between outlets, boxes and cabinet, and each conduit run shall have not more than three 90 degree bends between termination points. Conduit shall bend without crimping or flattening to provide a smooth and even turn with bend radius as great as possible, never shorter than that used in corresponding trade elbow. Conduit bends in which interior enamel has flaked will not be permitted.
- F. Conduit shall be supported individually by use of bolted metal clamp type hangers at intervals not exceeding 8'-0' with each hanger rigidly attached to building construction. Vertical conduit supports, where required, shall be clamps attached to structure in an approved manner.
- G. Conduit ends shall be reamed and all burrs removed prior to installation, and all conduit shall be kept clean and dry during construction by use of caps and plug. Junction or pull boxes shall be installed as required to facilitate ease of wire pulling. Insulating bushings shall be provided on all conduits at points where entering metal enclosures to prevent abrasion and damage to insulation of wire and cable.
- H. Type MC cable installed in ceiling plenums shall be supported to prevent contact with T-bar ceilings.
- All wiring in wood frame areas may be ROMEX or conduit.
- 3.04 Outlet, Junction and Pull Box Installation
  - A. The size of each box shall be determined by the number of wires and conduits, or size of conduit entering the box, but shall be not less than 3 1/4" octagon or 4" square with ring.
  - B. All single to four-gang outlet boxes required in unplastered masonry walls shall be 3½" deep solid type with square corners. All plaster and masonry rings or boxes shall be flush or not more than ½" behind the finished surfaces.
  - C. All boxes shall be securely anchored to masonry or frame construction.

## 3.05 Locations of Outlets and Equipment

A. The Contractor shall coordinate his work with that of other trades in order to provide a proper installation of electrical equipment in keeping with the intent of the Drawings and Specifications. Minor changes relative to the location of electrical equipment may be made by Owner's Representative to comply with structural and building requirements as determined in the course of construction.

# 3.06 Height of Outlets

- A. All heights measured from finished floor line to centerline of device.
  - 1. Receptacle (general) 18"
  - Receptacle (special) as noted on Drawings. See architect's interior elevations for accessible locations.
  - Thermostats 4'-0"
  - 4. Wall Switches 4'-0"
  - 5. Telephone (Wall) 18" or 4'-0".

#### 3.07 Panel Circuit Directory

A. Provide a typewritten and laminated directory on inside of cabinet door on all panels designating rooms, outlets and equipment served by each branch circuit of the panel. Panelboards shall be securely anchored to wall by Electrical Contractor.

## 3.08 Grounding

- A. The complete new electrical installation, including metallic boxes and equipment shall be permanently and effectually grounded in accordance with all code requirements, whether or not such connections are specifically shown and/or specified.
- B. Every branch and feeder conduit shall contain a green insulated code sized grounding conductor. Care shall be taken to keep the system neutral conductor separate from the equipment ground except at the point of system derivation.

#### 3.09 Cutting and Patching

- A. Contractor shall perform all cutting and patching as required for all electrical work inside and outside of building.
- B. All conduit penetrations of rated walls will be sealed.

# 3.10 Wiring of Equipment Furnished by Others

- A. Electrical Contractor shall do all power wiring except factory prewired equipment.
- B. Furnish and install disconnects at all equipment not furnished with disconnect. Coordinate with HVAC Contractor to ensure all equipment has a properly sized electrical disconnect at the unit.
- Starters and thermal protective devices not a factory mounted integral part of equipment furnished by Section 230000, shall be furnished by the HVAC Contractor but installed and wired by the Electrical Contractor.
- D. Coordinate with technology, computer, and security contractors for electrical requirements. See plans.

## 3.11 Lighting Fixture Installation

A. This Contractor shall furnish and install all lighting fixtures and lamps as required. Material, equipment or services necessary to complete the installation of these fixtures, but not specifically mentioned, shall be furnished as though specified. All fixtures and lamps shall be properly cleaned and adjusted after installation. All adjustable lighting fixtures shall be carefully positioned by this Contractor in the presence of the Architect or his representative.

## 3.12 Telephone, CATV, and Computer Wiring

A. At each telephone, CATV, and computer outlet furnish and install 4" x 4" box, adapter, single cover, 3/4" conduit, and pull wire to above accessible ceiling or nearest accessible location. Verify exact location with Owner prior to installation.

## 3.13 Drawings of Record

A. A blueline or blackline copy of Drawing shall be kept at the job site at all times for the sole purpose of recording horizontal and vertical location of all below grade electrical wiring, referenced to permanent visible structures. At completion of job, neatly record all dimensions and submit for approval by Architect.

#### 3.14 Clean Up

A. Upon completion of work under this Section, all unnecessary equipment, materials, rubbish, etc., shall be removed from project site and surrounding area leaving site in a safe and cleared condition.

#### 3.15 Equipment Label Installation

A. Front cover of each panel, fused disconnect, and other electrical equipment shall have a mechanically attached name plate indicating name/number of panel and second nameplate on subpanels indicating "Fed from (panel #)". Panel nameplates shall have 3/4" letters and secondary nameplates shall have 1/2" letters. Seton #818-2, or approved equal, 1/2" x 4".

## 3.16 Materials and Workmanship

- A. Only new, clean and perfect equipment, apparatus, materials and supplies of latest design and manufacture shall be incorporated in the work in order to assure an electrical system of high quality.
- B. All materials shall be new, shall bear the Underwriters Label of Approval and shall be installed according to manufacturer's specifications or as directed by the Architect. The Contractor shall assume responsibility for proper installation of materials in the space available.

## 3.17 Erection of Apparatus

- A. All work shall be done under the supervision of the Contractor who shall provide foremen to lay out all work. All work shall be laid out with due regard for proper working clearances about electrical equipment and the space requirements of the other Contractors. The Contractor shall immediately report to the Architect any conflict or difficulties in regard to the installation.
- B. Lighting fixtures, motor switches or controllers, switches, boxes panels, and other electrical apparatus shall be set, mounted, positioned, coupled, connected, assembled or otherwise erected or constructed as recommended by the manufacture or designer thereof, unless approved by the Architect for erection in some other manner.
- C. Where crowded locations exist and where there is a possibility of conflict between the trades, the Contractor shall coordinate the exact locations of electrical work with the other trades. After consultation and agreement between the trades, the location shall be approved by the Architect before installation of the work.
- D. Equipment of a type that requires replacement, servicing, adjusting, or maintenance shall be located to allow easy access and space for removal of internal assemblies if required.

## 3.18 Cutting, Patching and Piercing

- A. Obtain written permission of the Architect before cutting or piercing structural members. If, in the process of the electrical work, circuits or equipment need to be installed in an area after it has been completed, the area shall be left in the same condition it was originally. Patching and/or refinishing will be determined by the Owners Representative. Sleeves through floors and walls to be black iron pipe flush with walls, ceilings or finished floors, sized to accommodate the raceway.
- B. Use care in piercing waterproofing. After the part piercing the waterproofing has been set in place, seal opening and make completely watertight.
- C. Provide chrome-plated spring-clipped escutcheon plates where exposed pipe passes through finished walls, floors or ceilings. Cover sleeves and entire opening made for the pipe with escutcheon plates. Provide air and watertight conduit openings through floor slabs, masonry walls and continuous partitions. Tightly caulk space between conduit and building materials with non flammable sealant.

#### 3.19 Access

A. Equipment, valves and devices shall be mounted in a manner which provides adequate maintenance, inspection access and work space. Where access is required for adjustment, cleanout, inspection of maintenance and such access is not otherwise available, access panels shall be furnished by Division 26 for installation by the Division 5. Panels shall be selected by the Architect.

# 3.20 Cleaning of Equipment and Removal of Rubbish

- A. All fixtures, panelboards, motors and all other electrical equipment furnished or installed by the Contractor shall be thoroughly cleaned. At the completion of his work, the Contractor shall remove from the buildings and the premises all rubbish and debris resulting from his operations and shall leave all material and equipment furnished by him and the space occupied by them absolutely ready for use.
- B. Under no circumstances shall rubbish be allowed to accumulate in the building or on the premises. All dirt and rubbish resulting from the Contractor's work shall be removed by this Division from time to time and as often as directed by the Architect and Owner's representative.

#### 3.21 Painting

- A. All items not provided with a corrosion-resistant finish shall be painted. All electrical control equipment, panels and supporting framework shall have a light gray enamel finish which may be the manufacturer's standard gray, if acceptable to the Architect. Where the finish becomes scratched or marred, it shall be touched up or repainted to match the original finish as directed by the Architect. Particular caution shall be exercised so as not to obscure the nameplate data.
- B. All painting other than touch-up of factory finishes shall be by Division 9.

#### 3.22 Tests

- A. The entire system shall be tested, demonstrated and explained to such personnel as the Architect shall designate. The Contractor will be required to make the following checks and tests with his instruments as required:
  - 1. The correctness of lighting circuits to be in conformance with branch circuiting shown on the panel covers after construction.
  - Motors shall be checked for proper direction of rotation and corrected if necessary.
  - Grounds shall be checked and the resistance to ground shall not be more than 10 Ohms.
  - This Contractor shall balance phase currents of all distribution panelboards within +/-10 percent variation between average phase currents and measured individual phase currents.

#### 3.23 Guarantee

A. The Contractor shall guarantee by his acceptance of this Contract that all work installed will be free from any and all defects in workmanship and/or materials and that all apparatus will develop capacities and characteristics specified. If, during a period of one year, or as otherwise specified, from date of Certificate of Completion and acceptance of work, any such defect in workmanship, material or performance appears, the Contractor will without cost to the Owner, remedy such defects within a reasonable time as specified in notice from the Architect. In default thereof, the Owner may have work performed and charge the total cost to the Contractor.

#### 3.24 Maintenance Schedule and Operating Instructions

A. After the project is completed, Contractor shall be required to furnish four (4) copies of instruction sheets to the Owner for the proper maintenance of electrical equipment and systems furnished and installed by him.

- B. The Contractor shall be required to instruct Owner's operating personnel in the proper operation of electrical systems.
- C. Contractor shall turn over to the Owner all spare parts furnished by manufacturer and those specifically called for in the Specifications. All spare parts shall by properly identified as to the catalog number, manufacturer and the equipment for which they are used.

## 3.25 Manufacturer's Guarantee and Warranty

- A. Manufacturer's equipment guarantee shall be obtained for at least one year. When manufacturer's standard guarantee is for a longer period, or if longer period is called for in the Specifications, this period shall apply and such items, if defective, shall be replaced in accordance with the terms written in the manufacturer's specifications.
- B. Manufacturer's certificates of warranty shall be provided for all major pieces of equipment and such written certificates shall be turned over to the Owner prior to the final acceptance of the Project.

## 3.26 Electrical Circuitry for Equipment

- A. The electrical circuits, components, and controls for all equipment are selected and sized, based on the equipment specified. If substitutions and/or equivalent equipment are furnished, it shall be the responsibility of all parties concerned, involved in, and furnishing the substitute and/or equivalent equipment to verify and compare the electrical characteristics and requirements of that furnished to that specified and/or shown. If greater capacity or more materials or labor is required for the rough-in, circuitry or connections than for the item specified and provided for, then it shall be the responsibility of the parties involved in providing the substitute and/or equivalent items of equipment to provide all compensation for additional charges made for the proper rough-in, circuitry and connections for the equipment furnished. No additional charges shall be made to the Base Bid price or to the Owner.
- B. Before rough-in of circuitry or connecting to equipment, the Contractor shall verify the electrical characteristics and requirements of the equipment being furnished, and for that specified and shown on drawings.

## 3.27 Operating Instructions and Maintenance Data

A. Upon completion and acceptance of the work by the Owner, the Contractor shall provide four (4) sets of 8 1/2" x 11" typed operating and maintenance instructions. Sample maintenance instructions will be provided by Engineer upon

request. Contractor shall also include wiring diagrams of all controls in each set of maintenance instructions.

**END OF SECTION** 

Miscellaneous Interior Modifications Existing Office Building Mld-Missouri Legal Services 117 North Garth Avenue Columbia, Missouri 65203

PROP	OSAL FORM	
	Bid Time:	
	Bid Date:	
FROM herein	: after called the Bidder.	
TO:	MID-MISSOURI LEGAL SERVICES 1201 WEST BROADWAY COLUMBIA, MISSOURI 65203	
herein	after called the Owner.	
FOR:	MISCELLANEOUS INTERIOR MODIFICATIONS EXISTING OFFICE BUILDING MID-MISSOURI LEGAL SERVICES 117 NORTH GARTH AVENUE COLUMBIA, MISSOURI 65203	
herein	ifter called "the work".	
1.01	The undersigned, having examined and being familiar with the local conditions affecting the work an with the contract documents including the Drawings, the Advertisement to Bid, Instructions to Bidders Bidder's Statement of Qualifications, General Conditions, Supplementary Conditions, Special Conditions and the body of technical Specifications, including addenda numberthroughinclusive, prepared by Renner Howell Architects, hereby propose to furnish all labor, materials equipment, services, etc, required for the performance and completion of the aforementioned work as follows:	
	BID PRICING	
	Base Bld	
	The Bidder agrees to furnish all labor, materials, tools, and equipment required to renovate the existing office building located at 117 North Garth Avenue, Columbia, Missouri 65203. Without limiting the scope of work, it shall include all work required to complete the designed renovations of the two-story building. The Work generally includes selective demolition, changes to several offices conference rooms, the lobby / entry, reception, tollet rooms, break rooms, corridors, the installation of a new 2100-pound capacity ADA hydraulic elevator in an existing roughed-in pit / shaft area, new casework, new cellings and soffits, new stud walls, door, frame and hardware modifications, including interior painting, plumbing modifications, electrical modifications, now lighting and H.V.A.C modifications, all as detailed on the Drawings and described in the Specifications for the sum of:	
	Dollare (\$	

1.02	In submitting this bid, it is understood that the right is reserve reject any and all bids and it is agreed that the bids may not be a days from the specified time for receiving bids.	ed by Mid-Missouri Legal Services to withdrawn for a period of forty-five (45)			
1.03	Accompanying this bid is a certified check or cas  Dollars (\$ without condition to Mid-Missouri Legal Services, which it is a damages for the delay and extra expense caused the Owner is contract and furnish the Performance / Payment bond require	) or a 5% bid bond payable greed shall be retained as liquidated the undersigned falls to execute the			
1.04	The Contractor agrees to complete the work prior to agrees to pay to, or allow the Owner as liquidated damages (\$100.00) for each day thereafter, Sundays and holidays except	the sum of One Hundred Dollars			
1.05	The Bidder hereby certifies that the following subcontractors work:	rill be used in the performance of the			
	Note: Failure to list either the bidder's firm or subcontractors for each category of work identified on the Proposal Form, or the listing of more than one firm for any category without designating the portion of work to be performed by each, shall result in rejection of the bid proposal. After bid opening, substitutes of listed firms will not be permitted except as indicated in the General Conditions.				
	Name and Address of Firm	Work to be Performed			
		Carpentry			
		, ,			
		Drywall			
		Painting			
		Casework			
		Elevator Manufacturer			
		Elevator Installation			
		Plumbing			
		H.V,A.C,			
		Electrical			
	(Please attach additional sheets if necessary to extend subcontractor list).				

The Bidder agrees to pay not less than the current hourly rate of wages as determined by the Department of Labor and Industrial Relations, State of Missouri.

1.06

# 1.07 The Bidder hereby certifies:

That this proposal is genuine and is not made in the interest of or on behalf of any undisclosed person, firm, or corporation, and is not submitted in conformity with any agreement or rules or any group, association or corporation.

That he has not directly or indirectly induced or solicited any other bidder to put in a false or sham proposal;

That he has not solicited or inducted any person, firm or corporation to refrain from bidding;

That he has not sought by collusion or otherwise to obtain for himself any advantage over any other bidder or over the Owner; and

That he will not discriminate against any employees or applicant for employment because of race, creed, color or national origin in connection with the performance of the work.

Dated this day of	, 2020
F AN INDIVIDUAL:	
Name of Individual	Residence Address
Signature of Individual	Social Security Number
Address for Communications	Telephone Number
firm Name, If Any	
Primary Email Address for Communications	
F A PARTNERSHIP: (State Names and Residen	
F A PARTNERSHIP: (State Names and Resident lame of Partnership	ce Address of All Partners.)
F A PARTNERSHIP: (State Names and Resident Fame of Partnership	ce Address of All Partners.)
F A PARTNERSHIP: (State Names and Resident lame of Partnership lartner	ce Address of All Partners.)  Federal Tax I.D. Number
F A PARTNERSHIP: (State Names and Resident lame of Partnership	ce Address of All Partners.)

	Name and Title of Officer
laws of the State of	Signature of Officer
ri, attach Certificate of Authority	Federal Tax I.D. Number
	Address for Communications
for Communications	
Secretary	Telephone Number
	laws of the State of  (If a corporation organized in a ri, attach Certificate of Authority)  for Communications  Secretary

(Each Bidder must complete the Proposal Form by signing in the proper signature line above and by supplying the required information called for in connection with the signature. The information called for is necessary in the proper preparation of the contract and performance bond.)

END OF SECTION 00200