

LCI Management Services Leopardo Construction

#### **ADDENDUM #1**

### Will County Health Department BID PACKAGE #3 – MEP/Finishes/Carpentry/Glazing November 30, 2018

This addendum will be included in all future sets of drawings distributed and on the Leopardo Building Connected website.

**Division 1 – General Instructions** 

#### 1.0 Bid Instructions

#### A. Bid Submission

1. There will be NO bid due date extension for this addendum. Final bids are due no later than noon on Wednesday, December 12, 2018.

#### 1.1 Bid Documents

#### A. Schedule of Bid Documents

The following documents are included as part of this bid addendum:

DATE	DESCRIPTION	By
11/30/18	Addendum Narrative (this document)	Leopardo
		Companies
11/30/18	Revised BP3 Invitation to Bid	Leopardo
		Companies
11/30/18	Bid RFI Log Dated	Leopardo
		Companies
11/30/18	Revised Work Scopes	Leopardo
		Companies
11/30/18	Revised Bid Proposal Forms	Leopardo
		Companies
11/30/18	Sealed Bid Attachments – (As Listed Below)	Leopardo
		Companies
11/14/18	Pre-Bid Conference Sign In Sheet Dated 2018.11.14	Leopardo
		Companies
11/14/18	Bid Package No. 3 Pre-Bid Conference slides	Leopardo
		Companies

#### 2.0 General Information

#### A. RFI Log

• See attached RFI log dated 11/30/2018

#### B. Revised Work Scopes (Revisions noted in Red)

- See attached Revised Work Scopes dated 11/30/2018
  - 0 3-06, 3-07, 3-08, 3-13, 3-14, 3-15, 2-16, 3-17, 3-20

#### C. Revised Bid Proposal Forms (Revisions noted in Red)

- See attached Revised Bid Forms dated 11/30/2018
  - 0 3-06, 3-07, 3-08, 3-13, 3-14, 3-16, 3-17, 3-21

#### D. Sealed Bid Attachments (Include With Bid Form)

- Include the following attachments with your sealed bid form. Bid Forms can be
  found in the Project Manual Vol.1 Section 00400. If you are submitting under
  multiple bid categories, submit a separate bid for each category with all
  attachments in each sealed envelope.
  - o Bid Label

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- o 10% Bid Bond
- o Prime Contractor Certification Form -SIGNED
- o Bid Form-SIGNED
- o Labor and Machine -Include on Your Own Form
- o Qualification Forms
  - Tier One Trades <\$700K (If Not Listed in Tier Two or Three)
  - Tier Two Trades > \$700K (If Not Listed in Tier Three)
  - Tier Three (Use Form Specifically for Your Bid Category)

#### E. Pre-Bid Conference

- Sign In Sheet Dated 11/14/18
- Bid Package No. 3 Pre-Bid Conference slides Dated 11/14/18

#### **END OF ADDENDUM #1**



## NOTICE OF PRE-BID WORKSHOP / CONFERENCE BID PACKAGE NO. 3 FOR THE NEW WILL COUNTY HEALTH DEPARTMENT BUILDING



YOU ARE INVITED TO ATTEND THE PRE-BID WORKSHOP / CONFERENCE FOR BID PACKAGE NO. 3 FOR THE NEW WILL COUNTY HEALTH DEPARTMENT BUILDING.

ATTENDANCE IS HIGHLY RECOMMENDED AT THE PRE-BID WORKSHOP / CONFERENCE TO BE HELD ON TUESDAY, NOVEMBER 20, 2018 AT 11:00 AM, IN THE COUNTY BOARD COMMITTEE ROOM AT 302 N. CHICAGO ST., 2ND FLR., JOLIET, IL, 60432.

PLANS, SPECIFICATIONS AND CONDITIONS OF THE BID ARE AVAILABLE AFTER 12:00 PM ON TUESDAY, NOVEMBER 20, 2018 AT:

WWW.BUILDINGWILLCOUNTY.COM
OR, BY CONTACTING THE CONSTRUCTION
MANAGER, LEOPARDO, INC. AT 847-783-3856.

SEALED BIDS WILL BE RECEIVED AT THE WILL COUNTY EXECUTIVE'S OFFICE, 302 N. CHICAGO ST., 2ND FLOOR, JOLIET, IL 60432 BY NO LATER THAN WEDNESDAY, 1:00 PM **DECEMBER 12, 2018** and PUBLICLY OPENED AT THIS TIME IN THE WILL COUNTY BOARDROOM, 302 N. CHICAGO STREET, JOLIET, IL 60432, 2ND FLR.

THE TENDERING OF A BID SHALL BE CONSTRUED AS ACCEPTANCE OF THE PLANS AND SPECIFICATIONS. THE COUNTY BOARD RETAINS THE RIGHT TO REJECT ANY AND ALL BIDS, AND TO WAIVE NON-MATERIAL INFORMALITY OR IRREGULARITY IN ANY BID RECEIVED IN WHOLE OR PART, AND TO

3-01	ckage #3 – MEP/Finishes/Carpentry/Glazing Hard Tile	
3-02	Ceilings (Acoustical)	
3-03	Resilient Base & Flooring/Carpeting	
3-04	<b>Epoxy Flooring</b>	
3-05	Fence & Gates	
3-06	Carpentry	
	Doors, Frames, & Hardware	
	Millwork and lockers	
	Toilet Accessories/Wall & Door	
	Protection/FE & FEC's	
3-07	Exterior & Interior Glazing	
3-08	Painting & Wall Coverings/Sealed	
	Concrete	
3-09	Operable Partitions	
<del>3-10</del>	Lockers-(in BP 3-06)	
3-11	Window Treatments	
3-12	Toilet Compartments	
3-13	HVAC/BAS/TAB	
3-14	Electrical/Fire Alarm	
3-15	Plumbing	
3-16	Fire Protection	
3-17	Security/Surveillance and Cabling	
3-18	AV Equipment and Cabling	
3-19	Structured Cabling	
3-20	Lab Equipment & Casework	
3-21	Interior and Exterior Signage	
3-22	Scissor Lift	

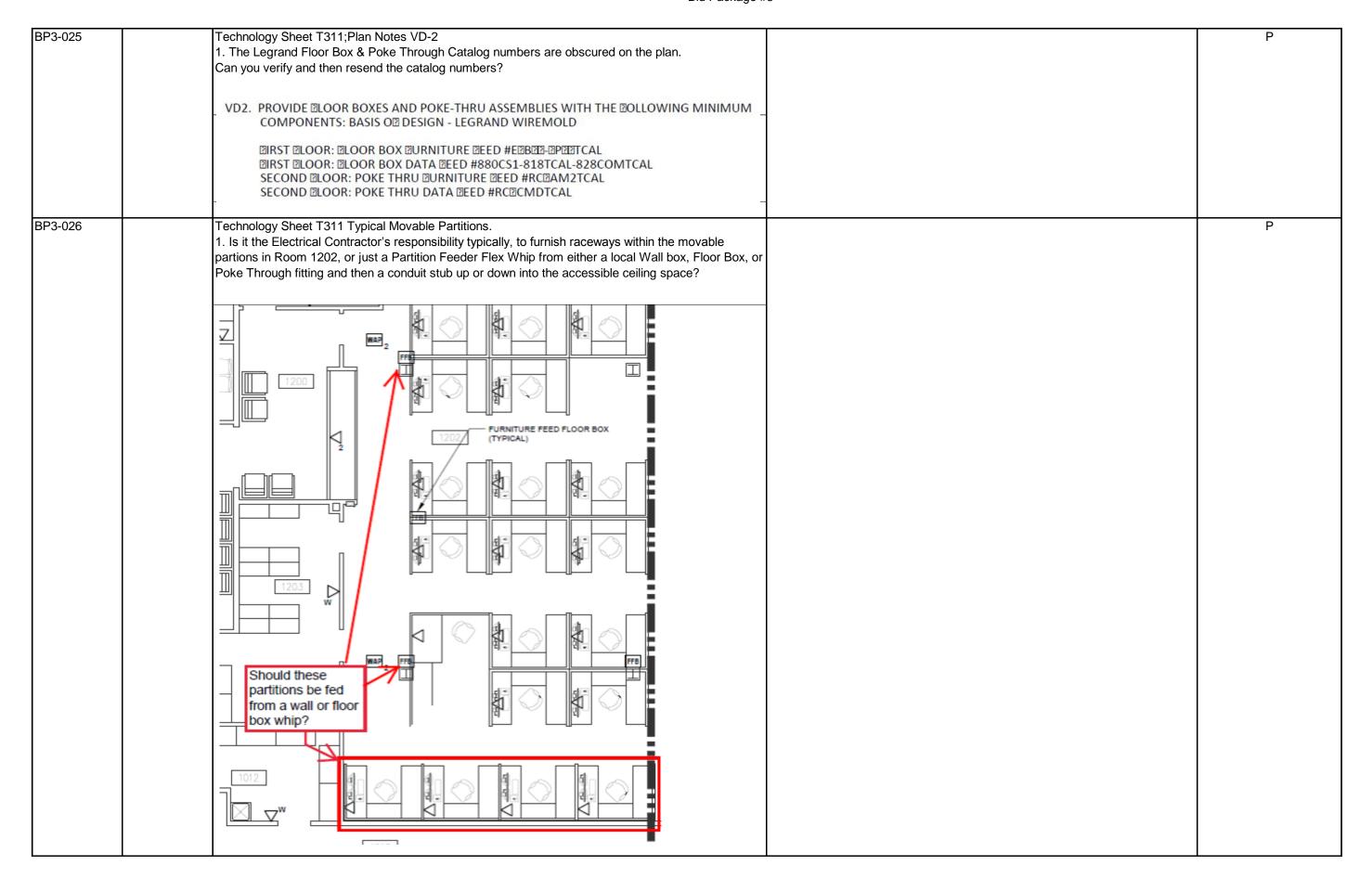
DETERMINE NOT TO PROCEED TO CONTRACT ON ANY PARTICULAR BID.

BY ORDER OF THE WILL COUNTY EXECUTIVE, LAWRENCE M. WALSH

				R =	Resolved
				P =	Pending
				l =	Response Incomplete
RFI#	Addenum #	Question	Response		Status
	, addition "	quosiisii	Кооролос		Otatuo
BP3-001		Are fire dampers required where duct passed through fire rated walls?			Р
BP3-002		What type of VFD is required for RAF-1?			Р
BP3-003		Will all the owner provided equipment be set in place for the specified contractor to then make final connections?			Р
BP3-004	Addenum #1	In the plumbing scope 7.e. states "e) Furnish and install all wiring for circulating pumps, and emergency eye wash station alarm. The electrical subcontractor will only be responsible to hook up line voltage power to each pump and the controller if required. Coordinate with electrical subcontractor prior to installation." This is electrician's scope of work. Is this to remain in the plumbing scope?	Yes		R
BP3-005		Are flooring systems to continue under millwork and laboratory casework?			Р
BP3-006		There is no information on the existing Generator in the bid documents  1. Who is the manufacturer, what is the model number and what is the serial number of this engine?  2. Do you have a submittal for it, so we can get quotes for the services required for generator in BP-3-14?  3. Which company is holding the current warranty and service contract?  4. Who is the Gen Distribution Panel manufacturer, so we can get the new circuit breakers? Also, is the Gen Panel mounted in the Genset or remotely.  5. What is the estimated distance from the Manhole by the Generator to the Gen Distribution panel and is this conduit in the BP-1 Site Electrical Contractors Package?  6. Should we assume that the 4 hour load test will consume existing fuel in the belly tank and that we just refill it at the end, and is there enough fuel for the test in the tank now?  7. What is the fuel capacity of the Belly Tank?	6. Assume empty		P
BP3-007	Addendum #1	<ol> <li>In the Carpentry Scope of Work, items 1a-e under Thermal and Moisture Protection indicate the carpentry contractor is to install the exterior air/vapor barrier. Item e under Exclusions states Fluid Applied Air Barrier is by others. Please clarify.</li> <li>If fluid applied barrier is included in the carpentry scope: Paragraph 3.04-B of spec Section 07 25 00.02 (Weather Barriers) is lined out. Please verify that we SHOULD NOT include the costs for ABAA testing. (Note: we agree that the ABAA testing requirement should be removed since it would add unnecessary costs to the project).</li> </ol>	See revised scope in addendum #2		R
BP3-008	Addendum #1	You have some prequalification forms that need to be submitted. I need some details. Do the forms need to be complete prior to submitting the bid or with our bid	The qualifications are included in volume 1. They are not pre qualifications.  Just qualifications they have to meet to be able to bid.		R
BP3-009	Addendum #1	Do the hard tile, resilient base, flooring, and carpeting jobs require union or prevailing wage bids?	Leopardo requires our subs to be union. The job falls under prevailing wages for Will County and that is to be sure they are paying the required minimum hourly rate for their trade.		R
BP3-010	Addendum #1	Plumbing VS Fire Sprinkler Scope	RPZ is for the domestic water side of the system IE POTABE WATER. This is a Furnish and Install item by the plumber.  The Double Detector Check Valve which is for the Fire suppression system should be furnished by the FP guy installed by the Plumber. Installation is Plumbing Union thing.		R

BP3-011	Addendum #1	The existing X-Ray unit for TB that is being relocated. Drawings show and specify lead lining of gypsum board for interior room, gypsum board walls, door frame and door. Please advise if this is correct and whose scope it is in	Lead is required. Its on the plans and a spec section is included in BP#3 for this. Carpentry to provide.	R
BP3-012		What Control cable & how many are to be installed in the 1" Conduit in the Gen Duct Bank, and where are the origination and destination points for the cable?		Р
BP3-013		Seismic requirements are all over the MEP drawings/specifications. See sheet: M322 for example. Please advise		Р
BP3-014	Addendum #1	We are looking for a list of Mechanical Contractors bidding the HVAC for Will County Health Department. We would appreciate any help you can give us.	See attached bidders at this time	R
BP3-015	Addendum #1	<ol> <li>What exactly was or is being completed in BP #1 on the site by the site and building electrician?</li> <li>Will there be any demolition in BP #3 by the building electrician?</li> <li>The notes on E100 in both bid packages are mostly the same. It is unclear where BP#1 left off and BP #3 picks up.</li> <li>The notes on E100 do not match with the information on the riser diagram. Specifically cabling sizes, etc.</li> <li>Is the new ComEd pad installed under BP #1 or BP #3?</li> <li>Is the Telecommunication conduit (E100 detail) installed in BP #1?</li> <li>Is the 4" ComEd PVC installed in BP #1?</li> </ol>	See revised scope. 2. no 3. see revised scope. 4. see revised scope 5.  BP#1 6. See revised scope. 7. See revised scope	R
BP3-016		RFI Regarding Lighting:  1. The Exterior Luminaire Schedule on sheet E411 has a Type OA3 Fixture and lists it as a Pole Mounted Fixture, but the plan clearly shown as Wall Mounted.  Please Clarify.  2. Also, this fixture is to match the Site Pole Light Fixtures OA3 purchased in BP-1 Site Electrical.  Do you have an approved submittal for this fixture, so we can match it as specified?  3. The Exterior Luminaire Schedule on sheet E411 has a Type OB1 Fixture on it but we could not find any of these. Has one been mis-labeled?  4. The Interior Luminaire Schedule on sheet E412 has Types EM & EM-C, but we could not find any of these.	Not at this time. Please assume higher cost fixture	P
BP3-017		RFI Regarding Lighting Controls  1. The Lighting Control Schedule on E411 indicates that the Exterior Pole Mounted fixtures are to be equipped with Load Shedding/Dimming functions.  Do you know if these fixtures were ordered, installed and wired with these functions up to the inground Junction Boxes by the Site Electrical Contractor, or is this an internal function of the Lutron Lighting Control Panels?  2. Did the Design Team engineer any Lighting Control Panel Schedules? I didn't see them on the plans		Р
BP3-018		The electrical specifications have two sections for "LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES, SECTION 26 05 19.01 and 26 05 19.03". They have some differences in cable requirements. Why 2 sections and which one is correct?      The electrical specifications have two sections for "CONDUIT FOR ELECTRICAL SYSTEMS, SECTION 26 05 33.01 and 26 05 33.03". These appear to be the same.		Р
BP3-019	Addendum #1	The Bid Form; Lightning Protection (Line Item 2.E on the Bid Form Schedule of Values)  1. Where would I find drawings & specifications for the Lightning Protection System? This requirement was not listed in the Electrical Scope of Work	See revised bid form	R
BP3-020	Addendum #1	The Bid Form; Alternate #3 LED Temp Jobsite Lighting  1. Where would I find a specific description of these requirements? Is this just for interior construction?	See revised bid form	R

BP3-021	Addendum #1	BP1 Trade Specific-Site Electrical, Section 8.b & c indicates that the Site Electrical Contractor is to: b.Provide portable, exterior rated site lighting on wood poles for parking lots designated to remain open during construction. Review schedule and site logistics/phasing plan. c.Coordinate installation of temporary flood lighting at offsite parking lot with ComEd. Utility consumption will be billed and paid by Will County. Install a temporary pole and flood lights to provide adequate lighting for temporary parking. Pull power overhead at one of the three existing ComEd poles. Include removal of temporary pole and power at the end of construction use. Reference Addendum #3 for further scope clarification. Job Site Lighting, or just Interior Building Construction Lighting?	Job site lighting. Temp power requirements are shown in building eletrical scope	R
BP3-022		The following are some issues regarding the Trade Specific BP3-14 Electrical Scope of Work  Section 2.y Re: Resistivity Monitor;  1. What is involved in the installation of this equipment?  It's not shown on the drawings or listed on any of the panelboard schedules  2. Can you furnish or identify the Lab Equipment/Casework drawings that show this work?  It wasn't listed in any of the detail page's equipment schedules.  3. What are the power requirements.?  Section 4.c, Existing Generator.  1. Since this is an existing generator, from where are the power for the unit heaters, battery warmers, cabinet unit heaters, battery charger, water heater, fuel pumps, lights and etc., supposed to come from? None of this is shown on the Electrical Panelboard schedules. What are the power requirements?  2. Did the Site Electrical Contractor include raceways for these power requirements or do we have to trench all the way back from the building?  4. Did the Site Electrical Contractor demo all of the existing conduits up to and under the Generator pad, or did he intercept them in the new Pull Box which would make more sense?  5. If not, and the existing conduits are still underground, how are we supposed to run new conduit under the existing generator diesel fuel belly tank? Can you furnish a detail of how we're supposed to run the conduits?	4.C see revised scope	P



BP3-027		Can we expect a Lutron lay-out drawing for this complicated lighting control system?  There's no way to decern what devices (ie. Wireless, Low Voltage or Line Voltage) that will be provided or how these will need to get wired. There's no device schedule that identifies the control panels or wall/ceiling devices you'll be providing by catalog number. Attached is sample of layout drawings received prior to the bid on another Lutron Quantum project did.  We need have something similar, so we'll know what devices you'll be using, where they will be placed and how we are to wire them	
BP3-028	Addendum #1	Re; Low Voltage System Raceways, General;  1. Structured V/D Cabling, AV, & Security Access Control, CCTV, Burglar Alarm, Emergency Notification devices, etc., ;  Unless you tell us otherwise, we will assume that the Electrical Contractor is to furnish % Conduit Stub-ups for each device to the closest accessible ceiling, and sleeves through walls and floors as shown on the plans, and that we are not responsible for individual drywall sleeves w/ firestopping, J-Hooks through the corridors, cable runways (Cable Tray) and conduit stubs out of the various Control Panels and racks inside the IDF/MDF rooms.  2. Unless you tell us otherwise, we will assume that we are to include the IDF/MDF Ground Bars and Grounding Back-Bone from the incoming service only, and that the Structured cabling Contractor will accomplish the IDF/MDF rooms grounding specified in Spec Section 27 05 26.03- Grounding and Bonding for Communications Systems  3. Unless you tell us otherwise, we will assume that all horizontal low voltage cabling within casework, desks and/or low knee walls will be allowed without conduit, and that we will furnish an appropriately sized conduit stub at the nearest wall with a grommeted wall box.  4. For break-out purposes, unless you tell us otherwise, we will include the outlets shown on T311-T322 (except as outlined below) as part of the Structured Cabling Rough-In.  **PARTABRORY NORARRES CABLE GTY*** On DATABRORY NORARRA LOCATION**  **DATABRORY NORARES CABLE GTY*** On DATABRORY NORARRA LOCATION**  **DATABRORY NORARES CABLE GTY*** On DATABRORY NORARRA LOCATION**  **DATABRORY NORARRA SCABLE GTY*** On DATABRORY CABREA LOCATION**  **DATABRORY NORARRA SCABLE GTY***  **DATABRORY NORARRA SCABLE	
		DATA DROP, WALL LOCATION	

BP3-029		Re: LED Alarm Lights; 6. I couldn't find a device that matched this description on the Systems parts lists. Can you tell us what rough-in is required for this device?	7. OK	P
		7. For break-out purposes, unless you tell us otherwise, we will include all of the outlets shown on T411-T422 (except as outlined below) as part of the Audio/Visual Rough-In.		
		CARD READER  (S) SOUND SPEAKER		
		DC DOOR CONTACT PB PANIC BUTTON  ES ELECTRIC STRIKE REQUEST TO EXIT		
		HDMI INPUT TV COAX OUTLET  KEY KEYPAD BURGLAR VC VOLUME CONTROL		
BP3-030	Addendum #1	Re: HDMI Devices; 8. Is there a special size conduit and back box requirement for each of these?	Assume 1 1/2"	R
BP3-031	Addendum #1	Re: Audio/Visual Speakers; 9. Unless you tell us otherwise, we will assume that no rough-in is required for the ceiling speakers and that they will be installed by the A/V contractor.	review drawings for clarifcation	R
BP3-032	Addendum #1	Re: TV Outlets;  10. The TV outlets on the Structured Cabling Drawings T311-T322 are duplicated on A/V Security Drawings T411-T422.  Are these the same devices and should we assume that only one conduit stub is required as shown on T311-T322 or are two stubs required?  11. Per the A/V Contractors Scope of work there may be special backboxes required  Can you specify a type to be furnished so we can labor them out properly?  Otherwise we will furnish 1G backboxes with ¾" conduit stubs only, one for Data, and a separate one for A/V.  (See the Attachment)  12. Should these Outlets be included as part of the A/V Breakout on the Bid Form?  TV COAX OUTLET  WIRELESS ACCESS POINT  DATA DROP, TV LOCATION	10. Assume 2 11. Provide only what is specified 12. OK	R

BP3-033		12. OK	Р
	Re: Camera/CCTV Outlets;		
	11. The Camera outlets on the Structured Cabling Drawings T311-T322 are duplicated on Security Drawings T411-T422.		
	Are these the same devices, and should we assume that only one conduit stub is required as shown		
	on T311-T322?		
	12. Should these stubs be included as part of the Security Breakout on the Bid Form?		
	© CCTV CAMERA		
	V DATA DROP, CAMERA LOCATION		

#### SECTION 00220.306 WORK SCOPE CARPENTRY

The Scope of Work includes all labor, material, tools, equipment, scaffolding, hoisting, supervision and engineering as required to complete the <u>Carpentry</u> Scope of Work in accordance with the Contract Documents and enumerated below:

Subcontractor understands the Contract Documents are scope documents that indicate the general scope of the project which may not indicate or describe all the work required for the full performance and completion of their work. Subcontractor includes all items reasonably inferable to complete their scope of work whether or not indicated on the Contract Documents.

#### TRADE SPECIFIC - CARPENTRY

- 1. See "General Work Scope" for General Requirement, applicable to all bid packages.
- 2. Trade Specific General Items:
  - a) Provide sufficient crew size and sufficient quantity of equipment, tools, and materials to conform to Leopardo project schedule. A full-time manager/supervisor and full-time competent safety supervisor shall be present during all work. Start date and sequence of the work to be at the direction of the Leopardo superintendent.
  - b) If requested by the CM, glazing subcontractor will be required to commence shop fabrication of window framing prior to completion of window openings in the field. Glazing subcontractor shall provide rough opening dimensions for all windows. This subcontractor will be required to provide guaranteed openings to within industry standard tolerances. Carpentry subcontractor, therefore, shall be prepared to provide guaranteed openings for exterior windows to specified tolerances.
  - c) Properly protect all materials stored on-site. CM will not be responsible for damage to stored materials.
  - d) All wall types indicating drywall and metal stud construction as indicated on contract drawings have been included.
  - e) Provide all layout required for your work from control lines provided by the CM. Subcontractor acknowledges that there are numerous locations where the floors will be exposed and no layout shall take place on these floors.
  - f) Coordinate with all in-wall accessories i.e. paper towel dispensers, electrical panels, fire extinguisher cabinets, recess TV's etc. Furr-out walls as necessary to achieve design intent.
  - g) Meet or exceed all UL, STC, Fire, and structural ratings for all assemblies provided under this contract. Ensure that all construction complies with specified fire ratings.
  - h) All details referenced in this contract are for reference only. Subcontractor shall be responsible to provide all necessary blocking, framing, sheeting, drywall, insulation, sealants and other accessories at similar conditions throughout the project. Stud splicing will not be permitted unless approved by the project architect or CM.

#### TRADE SPECIFIC - EXTERIOR COLD FORM METAL FRAMING, METAL STUDS AND DRYWALL

- 1. Provide delegated sign of the exterior Cold Form Metal Framing and Sheeting:
  - a. Include all framing, sheeting, and insulation at the following areas and elsewhere as shown:
    - i. All exterior walls
    - ii. All clerestory framing
    - iii. All soffits, overhangs, and exterior ceilings including exterior gypsum board.
    - iv. Include supplemental framing for metal soffits at wide eaves and overhangs wherever needed
    - v. Supplemental framing for all sloped roofs
    - vi. All sheeting and drywall related to the above including all interior drywall and finish taping.
    - vii. Furnish and install all fire and acoustical sealants.
    - viii. Carpentry contractor will work with masonry and metal panel contractors to provide guaranteed openings for the exterior glazing contractor based off approved glazing shop drawings.
    - ix. Provide all soffits with closure plates as shown.
    - x. Any other Cold Formed Metal exterior framing wherever shown.
    - i. Non-structural steel kickers (including cold formed framing)

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ii. Furnish and install fire stopping packing material per drawings.

#### 2. Metal Studs and Drywall:

- a) Include the following for all metal stud and drywall installations throughout:
  - i. All studs to be 20 ga. minimum.
  - ii. Soffit framing and drywall wherever shown
  - iii. Cement tile backer board at all tiled walls.
  - iv. Include all finish taping throughout.
  - v. Include "Tear-Away" bead or other approved method of providing a clean transition between drywall and exposed steel.
  - vi. Compressible fillers, neoprene gaskets, metal closure pieces, and other approved construction wherever interior partitions intersect exterior curtain wall and window construction.
  - vii. Furnish and install all slip joint details at wall-to-deck conditions as shown.
  - viii. Low height wall framing for all walls unless specifically noted otherwise.
  - In-wall steel supports wherever required to maintain wall position and to support loading of wallmounted items.
  - x. Fire and acoustical sealants at all head of walls, floor to wall locations. This subcontractor must provide a complete fire rated and sound sealant system through drywall partitions. If the wall is neither fire rated nor sound rated this subcontractor must at a minimum provide sound sealant at all the above mentioned items. MEP trades to provide firestopping at their penetrations through rated walls.
  - xi. This subcontractor to provide sound sealant around MEP penetrations when sound rated wall.
  - xii. Furnish and install putty pads at outlets in fire/sound-rated walls. Provide acoustically rated pads for all non-fire rated walls and fire rated putty pads for all fire rated walls. This is for every electrical box in all framed walls.
  - xiii. Provide fire rated wall labeling as specified for rated walls.
  - xiv. Stuff/fill deck flutes over rated walls. Include sheet metal closure piece where shown/needed
  - xv. Light cove framing and drywall.
  - xvi. Furnish and install all sound attenuation blankets
  - xvii. Provide all vapor barriers.
- xviii. Furnish and install framing members for sectional door openings.
- xix. Provide framing and taping of access panels furnished by others.
- xx. Furnish and install all drywall headers.
- xxi. Furnish and install all drywall under stairs as shown.
- xxii. Furnish and install all drywall reveals.
- xxiii. Any level 5 finishes
- xxiv. Extend all walls to deck unless otherwise noted.
- xxv. Provide and install paintable joint sealants at top of non-rated, exposed walls.
- xxvi. Furnish and install Plaster ceilings with associated accessories.
- b. Furnish and install X-Ray radiation protection as specified. Leaded Glass to be by the Glazing Subcontractor. Provide 20-gauge minimum studs or greater. Include caps for screws
- c. Furnish and install all metal lath and cement plaster as specified and shown.

#### **TRADE SPECIFIC - ROUGH CARPENTRY**

- 1. General Notes-Carpentry:
  - a) Provide blocking materials suitable for the environment and conditions requiring it. Provide pressure treated, flame retardant, fire proof, and other variations of materials as directed by the architect and CM.
  - b) Use sheet metal backing wherever allowed by the architect and CM
  - c) Review all drawings and bid documents (Including vendor drawings, equipment schedules, and documentation) indicating wall-mounted equipment and provide requiring backing as needed.
  - d) Include install of access panels furnished by MEP Contractors.
- 1. Provide Roof Blocking at:
  - a) Perimeter of building at top of framed walls in all locations with metal coping.

- b) Roof edge
- c) Mechanical roof curbs.
- d) Parapet blocking

#### 2. Plywood Sheeting:

a) Include plywood sheeting where shown including where indicated where shown at all soffits.

#### 3. Glazing Blocking:

- a) As a general rule, storefront framing requires perimeter wood bucks mounted to the wall opening, within Cold Form Metal framing, or within the insulated wall cavities adjacent to this framing.
- b) Coordinate any recessed frames with glazing subcontractor as depicted on the contract documents.
- c) As a general rule, curtainwall and louver framing requires perimeter wood bucks mounted to the wall opening, within Cold Form Metal framing, or within the insulated wall cavities adjacent to this framing.
- d) Subcontractor will be responsible to provide blocking at the perimeter of these openings in addition to details shown so that perimeters of all openings receive blocking.
- e) Subcontractor will be responsible to provide blocking at the perimeter of these openings in addition to details shown so that perimeters of all openings receive blocking.
- f) Wood wraps at all sides of all window and storefront openings (even where not shown). Wood shall be the thickness of the rigid insulation. Include wood blocking behind lintels over window openings.
- g) Window sill blocking throughout

#### 4. Misc. Exterior Blocking:

- a) Wood bucks for all exterior CMU block openings
- b) Blocking within door jambs
- c) Blocking as applicable for overhead/coiling doors.
- d) At support of metal panels as shown/needed.
- 5. Miscellaneous interior blocking. All interior blocking and backing will be included under carpentry work scope and will be included in this contract. Interior blocking includes:
  - a) Behind any wall or ceiling-mounted items as needed
  - b) Behind stair rail mounting brackets.
  - c) Behind lockers as needed
  - d) Perimeter of elevator hoistway door jambs
  - e) Blocking behind all wall mounted equipment including all toilet accessories
  - f) Behind casework wherever needed. (Note: Stud mounting or drywall attachments will not be allowed)
  - g) For mounting of window treatments
  - h) Plywood on walls in communications closets. Furnish and install fire rated plywood on IT rooms walls. Final locations to be determined. Coordinate with LCI.
  - i) Provide all plywood sheathing as indicated in contract documents at all coiling and sectional doors.
  - j) All wood blocking for wall mounted TV's
  - k) Provide as necessary for operable partitions/folding partitions.
  - 1) Furnish and install fire rated wood material for toilet partitions and urinal screens.
  - m) Coordinate blocking installation for owner provided wall mounted resistivity monitor.
  - Coordinate all blocking installation with approved lab casework and millwork shop drawings.

#### TEMPORARY CONSTRUCTION

- 1. Furnish and install the following temporary construction:
  - a) Wall bracing
  - b) Temporary openings for stocking of construction materials and equipment access
  - a) Furnish and install plywood infills at all floor grille locations during construction until final grilles can be installed. Platforms shall be able to handle a scissors lift.
  - c) Provide two temporary set of plywood barn doors for stocking location
  - d) Subcontractor shall provide temporary wooden guard rails at areas at the perimeter when framing exterior walls that must meet OSHA requirements
  - e) Subcontractor shall provide temporary enclosures over all windows and other opening's framed in to

- the exterior stud framing. These enclosures shall be removed by this subcontractor prior to window installation. Coordinate with the CM Superintendent.
- f) Provide door jamb protection for all installed door frames.
- 2. Provide temporary measures necessary to maintain standards for indoor air quality including, but not limited to the following as required by the CM:
  - a) Exhaust "scrubbers" for all gas or diesel powered equipment used inside or near the building.
  - b) Dust control measures for cutting, handling, and installing materials
  - c) Adequate ventilation during all phases of construction.
  - d) Subcontractor shall wet sand all drywall and or with vacuums to limit dusty conditions. Provide enclosures to limit dust travel through the building and provide protection of any and all HVAC ducts for dust migration.

#### FIRE EXTINGUISHERS & FIRE EXTINGUISHER CABINETS

- 1. Furnish and install all FEs & FECs.
  - a) Provide all fire rated fire extinguisher cabinets as required. See drawings for locations for cabinets and fire rated wall
  - b) All extinguishers shall be tagged on site a maximum of one month prior to project completion. Coordinate with project superintendent.
  - c) Furnish and install (6) additional 10 lb. temporary fire extinguishers with proper tags for construction purposes. Hang from furnished hook as directed by LCI superintendent. Four extinguishers will be installed at the finish of steel erection and two extinguishers shall be extras and will be delivered to LCI's job-site trailer. Maintenance of these will be by others.
  - d) Provide wall mounted fire extinguisher tags above every fire extinguisher.

#### **TOILET & BATH ACCESSORIES**

- 1. Furnish & install toilet/bath accessories & toilet partitions:
  - a) Furnish all toilet accessories including but not limited to: standard stock mirror, baby changing stations, mop bracket, coat hooks, grab bars, robe hooks, rods, broom holders, paper towel dispensers, specimen pass through cabinets, utility hook strips, shower hooks, curtains, soap dishes, sanitary napkin disposals, grab bars, seats, fixed shower head, etc. as indicated on the drawings and specifications. Drain and valve guards to be furnished and installed by others.
  - b) Furnish all hardware necessary to install accessories as indicated in this section.
  - c) Coordinate recessed paper towel dispensers/trash receptacles with scheduled wall thickness.
  - d) All toilet accessories shown on A500 (except R and U)
  - e) Furnish hand dryers to building electrician for installation

### CORNERGUARDS WALL PROTECION

1. Furnish & install erash rail, corner guards and wall protection (WP-1, etc.) as scheduled.

#### VISUAL DISPLAY BOARDS

2. Furnish and install all visual display boards as specified with the contract documents.

#### **MISCELLANEOUS**

- 1. Furnish and install the following miscellaneous items:
  - a) Furnish and Install access panels shown and specified for MEP trades as directed by CM and furnished by all MEP Subcontractors Provide framing, taping and cut out for each panel.
  - b) Deliveries shall be staged as the job progresses. Make multiple deliveries as directed by the LCI superintendent.
  - c) Protect finished construction from damage due to dust and taping compound spatter. Scrape, wash, and

- thoroughly clean all remaining drywall taping compound from all finished surfaces upon completion of the work.
- d) All extruded aluminum reveals as shown.
- e) Furnish and install all exterior plaster as shown.
- f) Subcontractor shall provide 120 hours of carpenter time to be used at LCI discretion. All time shall be verified on a daily ticket basis.
- g) Subcontractor shall provide 270 hours of labor time to be used at LCI discretion. All time shall be verified on a daily ticket basis.

#### TRADE SPECIFIC - THERMAL and MOISTURE PROTECTION / SOUND ISOLATION/AIR BARRIERS

- 1. Furnish and install the following:
  - a) Furnish and install all vapor barrier at metal studs as shown.
  - b) Properly prepare all substrates and joints before installation.
  - c) Seal all penetrations within your construction at the time of installation.
  - d) Furnish and install all related membrane flashings.
  - e) Include proper air barrier assemblies at all penetrations.
  - f) Include all sealants required for a complete air barrier assembly.
  - g) Ensure a completely weather tight enclosure system
  - h) Furnish and install all mineral fiber insulation as indicated.
  - i) Masonry contractor will provide all rigid insulation between masonry veneers and exterior sheeting (or beams/columns at limited details).
  - j) Metal panel contractor will provide all rigid insulation between metal panels and exterior sheeting.
  - k) All other rigid insulation within or attached to wall construction will be provided under this contract.
  - Include all thermal batt and acoustical insulation wherever shown throughout the project including, but not limited to the following areas:
    - i. Within parapets, walls etc. as indicated.
    - ii. Surrounding structural steel
    - iii. Above drywall ceilings
    - iv. The above details and list are provided for convenience only. The intent is that ALL thermal batt insulation will be provided under this Carpentry contract.

#### TRADE SPECIFIC-DOORS, FRAMES, AND HARDWARE:

- 2. Furnish and install all metal grade doors, frames, and hardware.
  - a) All materials delivered to job site F.O.B.
  - b) Subcontractor shall provide a full-time person to oversee door hardware, frames and door installation. This person must remain on-site for the duration of the doors, frames and hardware installation.
  - c) All hardware shall be packaged as per door or per opening package. All opening/doors shall be individually packaged and boxed. This includes all weather stripping etc. General boxes such as hinges will not be accepted. (Door hardware can be rejected on-site if not shipped as indicated above)
  - d) All doors, frames and hardware are to be individually marked for each door opening.
  - e) All hollow metal doors and frames to be properly prepared and reinforced to receive the specified hardware and grouting.
  - f) All hollow metal frames to have metal spreaders included for protection during shipping and handling. This subcontractor must provide additional spreaders and supports for a proper door installation. This subcontractor will be responsible for any door frames in drywall partitions that may be racked due to improper supporting of the frames.
  - g) Provide UL Labels for all doors/frames requiring same.
  - h) Provide all hardware being installed on rated doors for electrical rooms, equipment rooms, etc. with textured tactile warning per ADA and code requirements.
  - i) All doors and frames of every type are to be pre-machined to receive hardware and or/glazing as required.
  - j) Provide fire rated HM frames as shown.
  - k) Coordinate with specified glass thicknesses for glass stop requirements in doors and sidelights.
  - Provide all wood doors pre-finished, pre-machined, poly bagged, with widened top rails as required to receive hardware. Subcontractor is to provide touch up stain for doors.

- m) Provide louvers on doors as indicated.
- n) Provide all hollow metal door frames and borrow light frames with finishes as indicated.
- o) Provide and coordinate with mason all hollow metal frames to be installed in masonry walls.
- p) Provide all door lite trim kits.
- q) Provide mortar boxes for frames in masonry and drywall partitions.
- r) Provide reinforcing for doors and frames to receive hardware requiring same.
- s) All sidelight frames and rated borrowed lite frames including stops and gaskets.
- t) Install all electronic door hardware including any required internal wiring required for door hardware. This includes but not limited to running pre-terminated wiring through doors and frames and connecting to corresponding hardware components. Coordinate with electrical subcontractor.
- u) Coordinate all frames with partition schedule to insure correct throat size.
- v) All keying and key requirements per specifications.
- w) All hardware for aluminum glass and glazed doors in storefront systems shall be provided by the glazing subcontractor.
- x) Provide removable temporary core system for all doors with locks. Provide keys to G.C. All temporary cores shall be installed by this subcontractor. Subcontractor acknowledges that final core installation will be after ownership move and will provide an additional mobilization for this work.
- y) Provide all cores and keying for project. Installation of final cores shall be by this subcontractor.
- z) Coordinate with electrical and low voltage subs for security and life safety scope related hardware.
- aa) Furnish and install all STC rated doors
- bb) Coordinate door undercut sizes with scheduled flooring installations.
- cc) Furnish and install a new door at the existing Sunny Hill link.
- dd) Furnish and install X-Ray radiation protection as specified. This includes Lead-Lined Doors and Frames as shown. Leaded Glass to be by the Glazing Subcontractor.

#### TRADE SPECIFIC -LOCKERS:

- 1. Provide a complete locker assembly including bases as specified
  - a) Sloped tops
  - b) Provide complete locker assembly including bases and "Z" channel or similar base material as specified.
  - c) Include handicapped lockers
  - d) All filler pieces, finished end panels, drawers, and trim pieces as shown and as needed to maintain a finished appearance on all exposures.
  - e) All interior shelves and coat hooks
  - f) All required door hardware.
  - g) Include any exposed blocking, shims, and mounting devices as needed to mount lockers to walls and floors. Concealed blocking or metal strap backing will be provided by others.
  - h) Include mirror, document holder and lockable compartment per specs.

#### TRADE SPECIFIC - CASEWORK/MILLWORK:

- 2. Furnish and install all millwork, casework (except lab), wood trim, solid surfaces, metal countertops, laminates, melamine, and paneling etc. as indicated on drawings.
- Coordinate with all trades.
- 4. The following general notes apply to all millwork furnished under this contract:
  - a) All countertops and work surfaces shall have complete back and side splashes in the same material unless indicated otherwise.
  - b) Assume plastic laminate finishes for casework and countertops unless specifically indicated otherwise within the contract documents.
  - c) All steel supports shown on the drawings shall be furnished and installed by carpentry sub. by misc. steel subcontractor and installed by this subcontractor. This contractor will be responsible to design all supports where not indicated and needed for proper millwork installation. Coordinate with miscellaneous metals subcontractor for proper installations.

- d) Assist electrical contractor with installation of conduit and wiring within all millwork. Provide access panels, cut-outs, and assistance during fabrication as needed to install all necessary electrical components. Provide raceways as required. Coordinate all lighting mounted under casework or integrated in casework with the electrical subcontractor.
- e) Assist plumbing contractor with installation of fixtures within all millwork. Provide access panels, cutouts, and assistance during fabrication as needed to install all necessary components.
- f) Install specified products as recommended by the manufacturer/architect. This includes, but is not limited to natural wood deviation patterns, fastening recommendations, etc.
- g) Furnish and install integral sinks as indicated on the drawings
- h) Provide all recessed and/or continuous painted metal panels and metal surround at all locations noted.
- i) Provide plastic laminated wall panels and all covering shown,
- 5. Include all modular and custom casework as follows:
  - a) All base and wall cabinets throughout including glass, plastics, or films included within millwork.
  - b) All glass/resin within casework and millwork
  - c) All countertops including solid surfaces.
  - d) All work surfaces with related supports and end panels
  - e) All shelving units
  - f) Closet hanging rods (wood or stainless steel as noted) and adjustable shelving
  - g) All hardware
  - h) All transaction tops
  - i) All open shelving units and tall cabinets
  - j) Grommets drilled in field. Include grommet finishes as applicable.
- Include all custom architectural millwork and casework including wood and plastic veneer where indicated in the contract drawings including work surface supports
- 7. Include all:
  - a) Mail slots as required.
  - b) PLAM panels under sinks
  - c) Lavatory counters including counter brackets & backsplash
  - d) Include epoxy resin tops as indicated for millwork scope. Epoxy tops for laboratory casework by the lab casework supplier.
  - e) Fire lock box shown in specification 083100
  - f) Glass divider walls including but not limited to rooms 1100, 1104, 2250, 1151, 1103, 2200, 2253, first and second intake areas and reception desk
  - a) Provide Display Cases/Cabinets as follows:
    - 1) Recessed wood case with glass front
    - 2) Complete display case cabinet
    - 3) Include glass doors/Front with related hardware and accessories.
    - 4) Interior shelves
    - 5) Coordination with Lighting provided by electrician (if shown/required)
- 8. Installation:
  - a) Millwork shall be shop fabricated and assembled to the fullest extent possible. Provide all joining devices, anchors, mounting brackets, primed/exposed blocking, and other accessories as needed to make a complete installed assembly.
  - b) Subcontractor has included to furnish and install all caulking from any item installed by this subcontractor to any adjacent surface.
  - c) All blocking with carpentry subcontractor.

#### **EXCLUSIONS**

The following work is specifically excluded:

a) Electrical work

- b) High Density shelving
- c) Exterior Louvers (by glazer)
- d) Caulking at exterior door frames (by others)
- e) Fluid Applied Air Barrier (by others)
- f) Spray Insulation (by others)
- g) Rigid insulation at roof, metal panels and CMU outboard of sheathing.
- h) Glazing (less display case glazing and divider walls stated above)
- i) Frameless Mirrors (by glazer)
- j) Acoustical ceilings
- k) Sectional doors
- 1) Window shades
- m) Aluminum doors and frames by glazer.
- n) Any casework denoted for lab casework provider
- o) Laboratory Casework

**END OF SECTION 00220.306** 

#### SECTION 00220.307 WORK SCOPE GLAZING

The Scope of Work includes all labor, material, tools, equipment, scaffolding, hoisting, supervision and engineering as required to complete the **Glazing** Scope of Work in accordance with the Contract Documents and enumerated below:

Subcontractor understands the Contract Documents are scope documents that indicate the general scope of the project which may not indicate or describe all the work required for the full performance and completion of their work. Subcontractor includes all items reasonably inferable to complete their scope of work whether or not indicated on the Contract Documents.

#### TRADE SPECIFIC - EXTERIOR AND INTERIOR GLAZING

- 1. See "General Work Scope" for General Requirement, applicable to all bid packages.
- Provide complete design and engineering of all systems to meet or exceed requirements of the performance criteria listed in the specifications. Include Illinois registered, licensed structural engineers review and stamp.
- 3. Provide sufficient crew size and sufficient quantity of equipment, tools, and materials to conform to Leopardo project schedule. Subcontractor to complete this scope of work in the number of working days specified in this schedule. A full-time manager/supervisor and full-time competent safety supervisor shall be present during all work. Start date and sequence to be at the direction of Leopardo superintendent.
- 4. Subcontractor shall submit for approval his proposed scheme for the hoisting of all equipment, including any required shop drawings, sketches and/or load distribution diagrams and calculations verifying adequacy of supporting systems to allow erection activities to be coordinated and approved with other Subcontractor's field operations and structural engineer.
- 5. If requested by the CM, glazing subcontractor will be required to commence shop fabrication of window framing prior to completion of window openings in the field. Glazing subcontractor shall provide rough opening dimensions for all windows. Mason and carpentry subcontractors will be required to provide guaranteed openings to within industry standard tolerances. Glazing subcontractor shall fabricate all framing to accommodate these industry standard tolerances and make final adjustments in the field as necessary.
- 6. Properly protect all materials stored on-site. CM will not be responsible for damage to stored materials
- 7. LCI has engaged a qualified testing agency to perform tests and inspections to conduct air and water infiltration testing as specified.
- 8. Subcontractor shall repair system failures and prepare for retesting in the same manner for as many times necessary to comply with all requirements and pass the test.
- 9. All other testing with required documentation per the specifications.

10.

#### SEISMIC REQUIREMENTS

1. Meet or exceed all requirements necessary to comply with seismic codes for work as specified see sheet S010 for seismic criteria and include all engineering and code verification required.

#### EXTERIOR CURTAINWALL, STOREFRONT, GLAZING, AND ALUMINUM ENTRANCES

- 1. Provide complete curtainwall system as shown including
  - a) Systems shall meet or exceed all specifications, profiles, finishes, manufacturers and other features provided by the basis of design for storefront framing listed in the specifications.
  - b) Structurally reinforce all framing as needed
  - c) Storefront and curtain wall shall be fabricated by the same manufacturer.
  - d) Include custom fabricated break metal or composite metal closures as needed within your systems and between your systems (storefront, curtainwall, punched opening framing) and surrounding finishes (including all metal closures/infill between your systems framing and masonry and/or metal panels.
  - e) Provide custom extrusions and Head Receivers wherever required to match proposed systems.

- f) Include extruded sills at interior side of all windows as shown.
- g) Include all decorative elements integral with the storefront and curtainwall system. These elements shall be designed to withstand the same weather conditions and natural forces as the base storefront and curtainwall systems.
- 2. Provide complete storefront system.
- 3. Coated aluminum per specs
- 4. Provide complete aluminum entrances.
- 5. Provide all forms of structural attachment including:
  - a) Provide all required attachment devices between glazing and structure supporting it (such as clip angles, anchor bolts, weld plates, etc.).
  - b) Include all miscellaneous metal supporting your systems even if it is not specifically shown on the structural drawings.
  - c) Include connection steel between framing and structure at all sill conditions.
  - d) Clip angles between glazing and structural framing shown as applicable and elsewhere as shown.
  - e) Include special anchoring systems, if required to attach to cold formed metal framing systems. Coordinate with the cold formed framing system engineer as necessary to ensure the necessary framing and support is provided at all cold formed metal-framed openings.
- 6. Provide all glazing as follows:
  - a) Glass tint, frit, and coloring shall be as specified.
  - b) Include all fire-rated glass and assemblies where shown
- 7. All aluminum and glass doors shall be furnished and installed per the door and hardware schedules as part of this contract. Doors shall have insulating glazing and door frames shall be thermally broken. Provide all hardware for these hardware doors.
- 8. Provide any integral glazing/glass with monumental staircases or railings as depicted in drawings.
- 9. Include the following for automatically operated aluminum doors:
  - a) Automatic door operators
  - b) Include all necessary framing and preparation
  - c) Coordinate with electrical and security contractors. Provide necessary controls and other features to ensure proper function of door operators with security system.
  - d) Furnish and install all automatically operated swing door leafs complete with glass & glazing
  - e) Exterior glazing subcontractor to provide all required hardware for exterior aluminum doors.
- 10. To the greatest extent possible utilizing standard farming methods, glazing contractor will make provisions for removal and reinstallation of selected windows to allow temporary access to the building during the course of construction.
- 11. Coordinate with installations of other trades to ensure that building exterior remains weather tight. Provide compatible flashings, receiver pieces, caulking, etc. as needed in conjunction with adjacent systems.

#### THERMAL AND MOISTURE PROTECTION

- 1. Provide the following thermal and moisture protection:
  - a) Flashings behind all installations as needed (with exception to foundation waterproofing systems)
  - b) Complete weep system as required
  - c) All framing and other assemblies to be thermally broken
  - d) Furnish and install all caulking within and surrounding glazing systems.
  - e) All exterior caulk joints shall be filled with (2) lines of sealant and backer rods.
  - f) Install a single line of sealant at interior side of all storefront framing.

#### **ACCESSORIES**

- 1. Furnish and install all exterior louvers as follows:
  - a) Include framing around all louvers as applicable, and elsewhere as needed.
  - b) Include insect screens behind all louvers (including areas that have blank-offs)
  - c) Include break metals as needed between louver frames and surrounding openings to maintain a
  - d) consistent appearance and fill entire louver opening.
  - e) All louvers to have drainable blades and meet or exceed wind-driven rain resistance requirements.

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- f) All louvers shall be finished to match glass framing. Maintain the same level of quality and warrantee requirements as the glass.
- g) Include all head and sill flashings.
- h) Include all perimeter caulking and caulking between louvers. Caulk shall be double-line application.
- i) Include all connection steel required between louvers and supporting structures.
- j) Include necessary reinforcing for attachment of dampers and other equipment.

#### INTERIOR GLASS

- 1. Furnish and install the following miscellaneous interior glass:
  - a) Provide complete glazing for all interior door lites, borrowed lites, and sidelites.
  - b) All frameless mirrors as show
  - c) All interior aluminum doors and frames with complete hardware
  - d) Glass shall be fire rated to match wall construction in which it is installed. Include fire/smoke-rated gaskets and seals as required.
- 2. Provide all Decorative Glasswork, glazed partitions, door lights & sidelights, glass wall panels including:
  - a) Chanel set Mirrors
  - b) All fasteners and supports needed for a complete system.
  - a) Work with Millworker as necessary.
  - b) Furnish and install all: graphics, frosted, etched, interior glass panels where they occur.
  - c) All fasteners and supports needed for a complete system.
  - d) Caulk to dissimilar surfaces. Silicone caulk at butt joints.
  - e) Furnish and install film/s as noted
- 3. Furnish and installed leaded glass for X-Ray Radiation Protection as shown in keynote 13.490 and specification section 134913.03.

#### **MISCELLANEUOUS**

- 1. Provide the following miscellaneous items:
  - a) Glazing subcontractor has included additional trip(s) to return (weather permitting) for caulking and installation of doors and glazing left out at from initial installation
  - b) All miscellaneous blocks, shims, and gaskets.
  - c) Warning markers to avoid injury of workmen or damage to newly installed glass
  - d) Caulking where required and in conjunction with adjacent systems
- 2. Provide ornamental railings and aluminum railings to match at the following locations:
  - a) Stair Railing at lobby with related components
  - b) Specified Finishes and hardware required for entire railing except stairs and tile flooring. All other materials and finishes by this subcontractor.
  - c) Coordinate with all trades your work interfaces with.
  - d) All fasteners and supports needed for a complete system.
  - e) Caulk to dissimilar surfaces.
  - f) Required engineering.
  - g) Provide glazing as specified.
  - h) All supports, and anchors related to the handrail system
  - i) Include finished channels and trim as needed where your system adjoins other finishes.
  - j) Coordinate all work with Structural and miscellaneous Steel Contractor to insure proper reinforcing, dimensioning, fitting, and accessories necessary for a complete installation. This contractor will be responsible to provide any construction not indicated on the Structural Steel and Misc. Metals Contractor scope as needed to complete the Work.
  - k) Work with Millworker as necessary.

#### **EXCLUSIONS**

- 1. The following work is specifically excluded:
  - a) Fire containment systems and fire safing behind spandrels and curtain wall framing
  - b) Low voltage wiring between security equipment and operators for all automatic doors including all access control devices and systems.
  - c) Display case glazing and glass Divider walls (by carpentry sub)
  - d) Lab casework glass (By lab casework sub)
  - e) Third party testing agency.

**END OF SECTION 00220.307** 

### SECTION 00220.308 WORK SCOPE PAINTING, WALL COVERING, & SEALED CONCRETE

The Scope of Work includes all labor, material, tools, equipment, scaffolding, hoisting, supervision and engineering as required to complete the **Painting, Wall Covering, & Sealed Concrete** Scope of Work in accordance with the Contract Documents and enumerated below:

Subcontractor understands the Contract Documents are scope documents that indicate the general scope of the project which may not indicate or describe all the work required for the full performance and completion of their work. Subcontractor includes all items reasonably inferable to complete their scope of work whether or not indicated on the Contract Documents.

#### PAINTING AND WALL COVERING

- 1. See "General Work Scope" for General Requirement, applicable to all bid packages.
- 2. Trade Specific General Items
  - a) Provide sufficient crew size and sufficient quantity of equipment, tools, and materials to conform to Leopardo project schedule. Subcontractor to complete this scope of work in the number of working days specified in this schedule. A full-time manager/supervisor and full-time competent safety supervisor shall be present during all work. Start date and sequence to be at the direction of Leopardo superintendent.
  - b) Thoroughly inspect all substrates to which your finishes are applied. Commencement of work will be construed as acceptance of all substrates.
- 3. Provide surface preparation and protection including:
  - a) Wiping down/dusting/sanding/cleaning dirt & residues/debris from surfaces to be painted.
  - b) Prepare and clean ductwork and other metal surfaces as needed.
  - c) Compatible prime coats for all surfaces.
  - d) Mask and protect completed installations which will remain unpainted.
  - e) Provide drop cloths and protection of completed installations.
  - f) Spot patch new and completed walls as needed
  - g) Prep rusty steel scheduled to be painted. Work shall include any grinding, sanding, spot priming and etc. for a complete smooth finished product specifically at stairs and railings.
  - h) Remove all labels on ducts, piping and etc.
- 4. Provide all exterior painting at the following areas:
  - a) Any exposed steel lintels throughout
  - b) Roof hatches and ladders
  - c) Hollow metal doors and frames
  - d) Include special primers and treatments necessary to paint over galvanized steel.
  - e) Any other exposed exterior steel
  - f) All MEP piping exposed to the elements shall be finish painted by the-painting contractor upon completion of installations.
- 5. Provide all interior painting as follows:
  - a) All exposed masonry block walls throughout. Include approved block filler and other treatments as required.
  - b) Sealed concrete. Provide mockup for architect's approval.
  - c) Stairs, railings, and ladders.
  - d) Paint area around and behind showers/eyewash stations as applicable
  - e) Metal surrounds/panels.
  - f) Elevator pit ladder
  - g) All walls in laboratory spaces to be painted with epoxy paint unless noted otherwise.
  - h) All exposed to view duct, mechanical piping, electrical conduit, plumbing piping and etc as noted.

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- i) Exposed steel framing and cross bracing as required.
- i) Any other exposed steel or ferrous metal throughout the project.
- k) Provide intumescent paint as depicted on the contract documents.
- 1) Exposed plywood at equipment and electrical rooms.
- m) All HM/steel doors, frames and borrowed lite frames
- n) Elevator door frames if shown or required.
- o) Ceiling and wall access hatches
- p) Paint all exposed surfaces unless otherwise noted including door frames, borrowed lite frames, access panels, grilles, fire house or extinguishers cabinets, etc.
- q) Inside of all light coves to match walls (unless another color is specifically indicated)
- r) Interior of ductwork where exposed to view in finished spaces
- s) Paint all reveals between millwork panels, drywall panels, wood composite panels and elsewhere a different color than surrounding walls as directed by the architect.
- t) Painting will be applied as follows: prime and first coat of paint will be applied before ceiling grid and final coat of paint will be applied after ceilings, millwork and flooring are installed.
- u) Subcontractor must take extra precautions to protect wiring that is exposed so that it is not painted. Any wiring painted shall be cleaned by this subcontractor or if replacement is necessary subcontractor shall be responsible for the cost of the replacement of wire. (This shall include all wall J-boxes with wiring)
- v) Exposed steel which is not prefinished
- w) Painting at gaps and cut edges of acoustical ceilings
- 6. Provide all caulking as follows:
  - a) At perimeter of all door frames and borrowed lite frames
  - b) Provide caulking of joints between head and jamb in hollow metal frames and from frame to floor.
  - c) At transitions between paint and adjacent finishes where shown
  - d) Furnish and install all caulking from drywall or drywall accessory to any other finish material. This shall include window frames, CMU walls, structural, misc steel and etc for a complete seamless look.
- 7. Attic Stock minimum 5% (or more if specified by the architect), but no less than (1) full can of paint per color. Minimum 5% of each fabric wall covering color provided.
- 8. Paint all 6 sides of all doors and frames scheduled to receive paint or which are exposed to the project area regardless of location.

#### **MISCELLANEOUS**

- 1. Provide the following miscellaneous items:
  - a) All scaffolds and man lifts required to perform your work
  - b) Clean up all debris to LCI dumpsters.
  - c) Furnish and install all elastomeric coatings as specified
  - d) All wood stains and varnishes as specified
  - e) Level 5 finishes as shown

#### **EXCLUSIONS**

- 1. The below work is specifically excluded:
  - a) Epoxy floors

END OF SECTION 00220.308

#### SECTION 00220.313 WORK SCOPE HVAC/BAS/TAB

The Scope of Work includes all labor, material, tools, equipment, scaffolding, hoisting, supervision and engineering as required to complete the <a href="https://example.com/HVAC/BAS/TAB">HVAC/BAS/TAB</a> Scope of Work in accordance with the Contract Documents and enumerated below:

Subcontractor understands the Contract Documents are scope documents that indicate the general scope of the project which may not indicate or describe all the work required for the full performance and completion of their work. Subcontractor includes all items reasonably inferable to complete their scope of work whether or not indicated on the Contract Documents.

#### TRADE SPECIFIC-H.V.A.C

- 1. See "General Work Scope" for General Requirement, applicable to all bid packages
- 2. Trade Specific General Items
  - a) Design, engineer and provide a complete and proper functioning H.V.A.C/BAS system as outlined in the contract documents. This "Definition of Work" list is for clarification only and does not relieve the trade contractor from accomplishing all the H.V.A.C/BAS work complete for the project which is the intent of this contract, unless items of work are specifically and expressly excluded in the additional provisions of this contract. The trade contractor's scope of work relates exclusively to the complete system that meets applicable codes.
  - b) Subcontractor has included all work as it relates to the "M" series drawings and all other drawings without exception.
  - c) Layout for this trade contractor's work. Provide all engineering and layout as required for the competition of your work.
  - d) Minor items and accessories or devices reasonably inferable or necessary to the complete and proper operation of any system shall be provided for such systems, whether or not they are specifically called for by the specifications or the drawings.
  - e) When requirements cited in the specifications conflict with each other or with other contract documents, the most stringent shall govern work.
  - f) Trade contractor has reviewed the contract documents and provides for a complete scope of work as required or inferred from the scope defined in the contract documents and requirements of all governing authorities.
  - g) Premium time, if required for any final connection/tie-ins, and testing shall be completed by trade contractor at no additional cost.
  - h) Within two (2) weeks of acceptance of a given system, provide all required identification, as outlined in the contract documents. At minimum, identification is required inside mechanical rooms.
  - i) Provide any required deck openings related to trade contract's work. Should trade contractor require deck openings it will be its responsibility to layout and mechanically coordinate this work, to detail openings and provide any additional information required so that they may be reviewed and approved by the Architect/Engineer prior to incorporation into the Work.
  - j) Provide all sleeves and/or coring, or reinforcing required for penetrations that are necessary for the completion of trade contractor's work. It is intended that trade contractor shall set sleeves or conduit before a deck is poured. Where sleeves are not set in a timely manner, trade contractor shall core all required holes in the deck, provide reinforcements as required and set sleeves at no increase to the contract amount. Prior to any coring, however, submit for Architect approval a sketch indicating the exact location of the proposed core or sleeve. All field coring locations must be reviewed and approved by the Architect/Engineer prior to the work proceeding.
  - k) Provide escutcheon plates at all exposed pipe penetrations through finish walls or ceilings in public or basement mechanical area and provide sleeves at masonry walls as necessary.
  - l) Properly seal all the sleeves and box-outs after installation of the work with code approved water resistant fire safing and packing and sealant.

- m) Provide any field coring as required to properly complete the work. Prior to any coring, trade contractor shall submit for approval to the Architect/Engineer a sketch indicating the exact location of the proposed core and sleeve. Coring of reinforced concrete slab, if required, due to missing mechanical coordination or due to trade contractor's preference shall be at no additional cost.
- n) Trade contractor shall include all caulk including fire and sound caulking of rated walls and floors as required to meet all codes and designated with STC ratings. Trade contractor shall be responsible for any firestopping/patching required around their piping. Provide silicone based waterproof fire stopping at all floor penetrations.
- Trade contractor may be required to commence work prior to installation of floor slab(s). Trade
  contractor shall provide all-terrain lifts and other equipment as needed to continue work as directed
  by the CM.
- p) Contractor shall provide all scaffolding required for the performance of contract work.
- q) Provide all required flashing and sealing at those areas where fire protection piping pass through roofed, waterproofed, and/or damp proofed walls and floors. Seal all piping penetrations through perimeter foundation walls as required to ensure a waterproofed installation. Trade Contractor shall coordinate all arrangements for sealing and waterproofing of such areas with the Roofing and Waterproofing Trade
- Contractor to ensure a watertight installation and maintain all roofing and /or waterproofing warranties.
- s) Finish painting of trade contractor's work shall be the responsibility of the Painting contractor. However, all items furnished by this trade contractor, which are scheduled to be finish painted by others, shall be furnished with a prime coat in accordance with the applicable sections of the technical specifications.
- t) All equipment furnished by trade contractor is to be provided factory finish painted, if not scheduled to be painted.
- u) Provide extended warranties on all pieces of HVAC equipment used temporarily during construction, so that all warranties for equipment supplied by this trade contractor begin on the date of the Owner's final acceptance of the HVAC equipment/systems. Trade contractor shall clean and/or refurbish as required to maintain the manufacturer's warranties on all equipment / systems which have been used temporarily during construction.
- v) Provide all required flashing and sealing at those areas where HVAC piping pass through roofed, waterproofed, and/or damp proofed walls and floors. Seal all piping penetrations through perimeter foundation walls as required to ensure a waterproofed installation. Contractor shall coordinate all arrangements for sealing and waterproofing of such areas with the Roofing and Waterproofing Trade Contractor to ensure a watertight installation and maintain all roofing and / or waterproofing warranties.
- w) All mechanical services shall be coordinated with the concrete construction. All risers shall allow for the tolerances of construction as detailed in the structural drawings and provide proper annular space for firestopping details.

#### SEISMIC REQUIREMENTS

3. Meet or exceed all requirements necessary to comply with seismic codes for work as specified see sheet S010 for seismic criteria and include all engineering and code verification required.

#### **Trenching & Excavation**

- 4. Provide the following for trenching and excavation to complete your work.
  - a) Provide hand excavation/compaction wherever machine excavation/compaction is not possible.
  - b) Provide hand excavation when working in close proximity to existing site utilities.
  - c) Provide compacted granular backfill under all improved, paved areas
  - d) Contact JULIE or other site utility location company prior to commencing work.
  - e) Temporarily support embankments and provide trench boxes as required.
  - f) All excess spoils to remain onsite and placed at location per direction of LCI superintendent. Final placement by Earthwork subcontractor

#### **HVAC Equipment**

- 5. Furnish and install factory fabricated RTUs and AHUs including:
  - a) Unit make shall be as specified
  - b) Meet or exceed all performance criteria in the specifications
  - c) Pressure seal all assemblies. Provide field leakage testing per the specifications.
  - d) Include all final cleaning upon completion of construction.
  - e) Complete field and factory testing
  - f) All internal wiring for lights, internal equipment, etc. shall be furnished as part of the factory fabricated unit with wiring brought to a single point of connection for the Electrical subcontractor. All internal and external wiring shall be in conduit as required.
  - g) Refer to interior air quality program for shipping and storage of units.
  - h) Provide Factory Start-up for all units as specified.
  - Furnish and factory install VFD's for all units. If VFD's are not factory installed provide field installation of VFD's. Building electrical subcontractor will wire from VFD to electrical service required.
  - j) Provide extended warranties for all equipment used during construction at no additional cost to Leopardo or the owner.
- 6. Furnish and install all ventilation equipment including:
  - a) All equipment as specified and as listed on equipment schedules
  - b) Furnish and install all Split System Units as indicated in the contract documents.
  - Furnish and install Exhaust Fans as indicated in the contract documents. Furnish and Install properly sized roof curbs for roofing installation. Coordinate with Roofing Subcontractor.
  - d) Furnish and install all in duct Humidifiers as indicated in the contract documents.
  - e) Furnish all Grilles and diffusers for the project. Provide plaster frames for all drywalled ceilings.
  - f) Furnish and Install all Gas Fired Unit Heaters (electric and water)
  - g) Furnish and install all fan powered and terminal units as specified.
  - h) Provide HEPA filter rack per sheet M312 note 23.229
- 7. Furnish and install all hydronic equipment including but not limited to:
  - a. All equipment as specified and as listed on equipment schedules.
  - b. Final connection of all make-up water systems
  - c. Furnish Hot Water Modular Boilers as indicated in the contract Documents.
  - d. Chemical treatment systems
  - e. Furnish and Install all Heat Exchangers as indicated in contract documents
  - f. Furnish and install all pumps as indicated in contract documents.
  - g. Furnish and install all Hydronic accessories as indicated in contract documents.
  - h. Furnish and Install heat recovery boxes as specified.
  - i. Provide neutralizing basins, piping, etc. as indicated.
- 8. Furnish and install the following electrical equipment:
  - a) Electric unit heaters and cabinet heaters.
  - b) All variable frequency drives (VFD'd) as required for a complete system and connection to the BAS system / specifications. Drives shall be factory installed at all locations. If factory installation is not possible provide field installation.
  - c) Motor starters for all equipment furnished under this contract. Starters shall be factory installed whenever possible. Loose starters shall be furnished to the electrician for mounting and wiring.
  - d) Starters and disconnects for all equipment supplied by this subcontractor as required.
  - e) All Duct Mounted Heating Coils
- 9. Provide the following accessories for all equipment:
  - a) Pre-filter pads and secondary filters for air handling equipment. Refer to indoor air quality program for required filters.
  - b) Vibration isolators as shown/specified

- c) Inertia pads (concrete fill by others)
- d) All structural mounting hardware, supports, curbs, unistrut, rails, etc. as needed for a complete installation. No structural supports will be provided by other trades.
- e) Access doors, access panels, hand holes, etc. as needed to service equipment and devices.
- f) Provide (2) additional rails 6' long for future equipment.
- 10. All equipment shall be completely warranted for a minimum of (1) year past the date of substantial completion (or greater if indicated in the project documents). Refer to project manual for temporary use and indoor air quality program.
- 11. All baseboard radiators and other exposed heating elements shall have all necessary finished covers, blankoffs, and other accessories as needed to create a continuous enclosure of all heaters and related piping.
- 12. Provide a complete installation of owner provided D-I Water Tanks. This includes unloading, manufacturer startup, required flushing/cleaning procedures, and placement.

#### **Supplemental Cooling Systems**

- 13. Furnish and install complete supplemental cooling systems as shown throughout the project. Systems shall include:
  - a) Split System units and condensers as scheduled.
  - b) Premanufactured stands to permanently support units prior to installation of raised floors.
  - c) All related ductwork, finished grilles, etc.
  - d) Control interlock with owner-furnished equipment if required.
  - e) Control interlock with fire suppression systems as required.
  - f) Furnish, Install and Wire Power Ventilation Kits, Controllers, Controls, Interlock wiring, Low Ambient controllers, Crank Case Heaters, Condensate Pumps etc. for a complete system. The building electrical subcontractor will only provide single point power wiring connection for these units
  - g) Low Ambient Kits Crank Case Heater and Wind Baffle as specified.

#### **Ductwork and Air Distribution Systems**

- 14. Furnish and install all ductwork as follows:
  - a) Meet or exceed all design criteria outlined in the specifications.
  - b) All specialty ductwork including but not limited to welded, stainless, PVC and aluminum as shown.
  - c) Ductwork which is too heavy to be suspended shall be supported from the floor. Provide steel legs and miscellaneous steel supports as needed.
  - d) All ductwork shall be sealed as specified / shown.
  - e) All ductwork shall be field tested
  - f) Seal all ductwork passing through full-height partitions
  - g) All duct connections shall be of the type and kind specified. Provide TDC connections where no other type of connection is shown / specified.
  - h) Ductwork shall be externally braced where required to meet code, industry standards or other conditions
  - i) Provide (1) thorough duct cleaning prior to project turn-over to the owner.
  - Mechanical subcontractor shall keep duct clean throughout construction by covering and protecting openings.
  - k) Provide Stainless steel ducts at and downstream of in-duct humidifiers if nothing specified in specifications.
  - 1) Provide all paint grip material where duct is exposed.
  - m) Breaches and flues for all gas fired equipment including hot water heaters including roof penetrations, flashings and rain hoods. Includes Plumbers hot water heaters.
  - n) Provide all fresh air intakes as required for all gas fired equipment.
- 15. Furnish and install all duct insulation including:

- a) All duct insulation to be installed per the plans, specifications, SMACNA, industry standards, and local codes, requirements (whichever is more stringent).
- b) Pre-formed fitting insulation wherever possible.
- c) In-duct sound attenuators.
- d) All exterior ductwork shall be wrapped with waterproof protective materials. Material color shall be selected by the architect.
- e) All coatings and membranes as specified
- 16. Furnish and install all duct accessories including
  - a) Provide Category IV approved stainless steel sealed vent material for boilers.
  - Provide roof curbs and caps for boiler fresh air intake and exhaust piping. Coordinate with Roofing Subcontractor.
  - c) Furnish and install all smoke dampers and fire/smoke dampers.
  - d) Furnish and install all fire dampers
  - e) Fire dampers and smoke dampers shall be provided as shown and anywhere they are required by code.
  - f) All miscellaneous balancing and manual dampers
  - g) Furnish and install all duct smoke / fire detectors. Include installation of duct detectors. Wiring shall be by Electrical Subcontractor.
  - h) Grilles, registers and diffusers finished as specified, including detention grilles.
  - i) Furnish and install all continuous slot diffusers. Include both active and inactive plenum and all necessary mounting accessories for a consistent finished appearance.
  - j) Include paint, anodized or other finish on all diffusers, grilles and other exposed accessories as scheduled & specified.
  - k) Wire mesh on all open-ended ductwork.
  - 1) Subcontractor shall provide any additional hanger wires or supports and the metal trim adapters required for grilles and diffusers. See structural drawings for MEP items on support specifications.
  - m) Any other accessories as specified.
  - n) Remote cable operated balancing dampers as indicated in contract drawing.

#### **HVAC Piping and Systems**

- 17. Furnish and install all HVAC piping systems including:
  - a) Copper condensate drain piping as shown / required from equipment to hub drain.
  - b) Hot water supply and return piping
  - c) Any other piping indicated on the drawings.
  - d) Provide all piping for split systems as indicated on the contract documents.
  - e) Provide all DI water pipe as shown on P sheets and any other drawings.
  - f) Provide condensate drain for condensate hood in lab space.
- 18. Furnish and install the following related work and accessories for HVAC piping:
  - a) All required insulation per the specifications. Insulation shall have preformed fittings wherever possible.
  - b) Chemical treatment systems with all related controls and control wiring for a complete and operable installation. Provide all power and control wiring for chemical treatment system as required.
  - c) All heat tracing furnished and installed including control panel as specified. Final connection shall be by the electrical contractor. Include BAS system monitoring. Subcontractor shall furnish and install all heat tracing, controllers, thermostats, alarm contacts and etc. for a complete heat tracing system on all plumbing and HVAC piping. Single point power connection shall be provided by this subcontractor for all heat tracing. The electrical subcontractor will provide power to the heat tracing control panel.
  - d) All piping supports and mounting accessories.
  - e) Drip pans and supplemental drip pans with drains wherever required.
  - f) Subcontractor shall furnish all electric and hot water plenum unit heaters as indicated on the contract documents. The Electrical subcontractor will receive and install the electric unit heaters furnished by

- Subcontractor. All hot water heaters and baseboard heaters shall be furnished and installed by the HVAC Subcontractor. This subcontractor has included to furnish and install all blocking required for heaters as required for a complete installation.
- g) Furnish and install pumps as indicated in the contract documents. Provide VFD's for all pumps requiring VFD's.
- h) Furnish and install all mechanical piping and connections if required to fume hood fixtures as coordinated with the approved fume hood shop drawings. Reference lab casework/equipment drawings and specifications for bidding purposes. Any discrepancies between architectural details and mechanical details will default to the more stringent design.
- i) Furnish and install all mechanical piping to ceiling service panel connections as coordinated with the approved shop drawings. Reference lab casework/equipment drawings and specifications for bidding purposes. Any discrepancies between architectural details and mechanical details will default to the more stringent design.
- No added cost will be approved for additional piping to coordinate around windows or other architectural elements.
- k) Install owner provided lab equipment shown on lab equipment schedule. Installation includes unloading, placement, and power connection to device.
- 19. Furnish and install all Natural Gas piping throughout the project including
  - a) Subcontractor has included all work as it related to gas as shown on the drawings.
  - b) All roof rails, mounting blocks, curbs and any other support devices shown Meter fittings, brackets, and accessories as required by the Natural Gas Company.
  - c) All gas piping exposed to the elements shall be finish painted by the piping painting contractor upon completion of installations.
  - d) All pressure reducing valves, regulators, and related vents for all equipment. Subcontractor shall be responsible to provide additional regulators beyond what is shown as required for proper operation of all equipment.
  - e) Final connections to all gas-fired equipment.
  - f) All gas piping tests per requirements of the local utility provider.
  - g) Provide rails as needed for all natural gas pipe exposed to the elements. No piping may sit on insulation.

#### **BAS/Temperature Control Systems**

- 20. Temperature controls and BAS system shall be furnished and installed under this contract. Subcontractor acknowledges that they will be responsible to provide all temperature control / BAS equipment, devices, conduit and wiring, piping, and any other accessories as needed to make all systems provided under this contract operational. This subcontractor acknowledges that the building electrical subcontractor will only provide control wiring, power wiring and hook-up as indicated on the contract documents. It is this subcontractor's responsibility to review the electrical drawings and provide all power and control wiring and conduit not indicted on the electrical drawings.
- 21. Temperature Control and BAS systems shall include the following:
  - a) Furnish and install all low voltage wiring and conduit. All BAS wiring shall be in conduit.
  - b) Provide line voltage wiring as needed to power transformers used for temperature controls throughout the project.
  - c) All line voltage wiring for circuits controlled by Temperature Control/BAS systems devices.
  - d) Line voltage connections to motor operated dampers.
  - e) Engineer/Design and control all fire smoke dampers in the project. Provide all required relay interfacing into FA system etc. for a complete smoke control system. Furnish and install all conduit wire etc. for fire and fire/smoke dampers.
  - f) Provide and install all control devices mounted to ductwork, piping, or equipment.
  - g) Furnish and install temperature control bridge devices and controls.
  - h) Furnish and install (at the factory) all AHU sensors, controls, and dampers
  - i) Interface controls with all equipment provided on the project by other trades including all low

voltage wiring, conduit, and devices. Include interlocks with building lighting systems, generators, hot water heaters, etc. as indicated in the contract documents shown.

- 22. Include all interlocks and contact points required for interface with life-safety systems.
- 23. Include all communications wiring and conduit as needed for PC internet connection. This subcontractor shall not plan on using the house LAN system for interconnection from the BAS to the BAS Head end unit.
- 24. Electrical Subcontractor shall provide only that control wiring specifically outlined in the <u>electrical drawings</u>. All other control wiring shall be the responsibility of HVAC Subcontractor. HVAC Subcontractor has included all Tele/data wiring and conduit from the main telephone room to each head end unit and equipment as required for a complete BAS system.
- 25. Subcontractor shall provide the State of Illinois requirements for controls of the boiler system. Provide all EM stop switches etc. for a complete code compliant system for boiler and domestic hot water system.
- 26. Subcontractor shall provide power monitoring through the BAS system as required. Coordinate with local utility companies.
- 27. Provide and install complete system integrations with lab equipment and lab casework to the BAS. Reference specification sections for a complete scope. Integration between fume hoods, equipment, and fixtures to the BAS will be by this subcontractor. This includes, but is not limited to furnishing and installing VAV control devices, alarms, etc.
- 28. Subcontractor has included furnishing and installing all monitoring devices for utilities as required this shall include all meters and devices for power, gas, and water. This subcontractor shall not assume that the utility company will supply these items.
- 29. Subcontractor shall furnish and install all monitoring of electrical usage for all electrical panels, as required/shown.
- 30. Subcontractor to furnish and install all interlocking controls from the F/A system to the fire smoke dampers for operation during a fire. Coordinate with the electrical and F/A subcontractor.
- 31. Subcontractor shall provide LCI MEP Coordinator with password and computer software to for the BAS system. Coordinate with LCI.
- 32. All wiring elements must comply with electrical classifications reference electrical specifications and drawings.

#### **Test and Balance**

- 33. Test and Balance shall be provided under this contract.
- 34. Include temporary enclosures as required to complete T & B systems.
- 35. Subcontractor shall provide all volume damper extensions and remote volume damper access as required for a complete maintainable HVAC and Test & Balance. Provide additional balancing valves where needed as determined by the TAB contractor.
- 36. Provide pressure testing of all water piping on a half per floor basis or as required to meet project schedule.
- 37. Under floor piping shall be filled and under 20 LBS of pressure during and 48 hours after concrete pour.
- 38. All tests shall have a properly scaled gage and witnessed by the CM. All tests shall be documented and submitted after each test.
- 39. Subcontractor has included the re-protecting all protection of in place mechanical items including but not limited to piping, duct, equipment, pumps, etc. All ends of the related items shall be kept free from debris and duct during construction. Subcontractor has included to furnish, install and follow SMACNA's Duct cleanliness "Advanced Level".
- 40. Provide all testing and balancing work of all H.V.A.C. systems installed under this Subcontract as outlined in the Contract Documents. Testing and balancing work shall be performed by an approved certified Testing and Balancing Subcontractor, employed by Subcontractor. Include all balancing dampers and other related accessories and all re-testing and/or balancing as required to satisfy the overseeing Mechanical Engineer of record that all installations are in accordance with the Contract Documents.
- 41. Subcontractor has included to provide all duct pressure testing as specified and indicated in the contract documents.
- 42. Subcontractor has included but not limited to all manpower, documentation, retesting etc. for commissioning of the HVAC systems.

- a. Meet all requirements as indicated in the Project Manual Vol.1 Mechanical Project Delivery Plan and as indicated in Project Manual Vol.2.3 specifications
- 43. Subcontractor shall provide 1 week of a (1) man crew for manpower to visit the job-site (6) weeks prior to start of T&B and provide a written report to the CM of noncompliance work, outstanding work etc.
- 44. This report shall be typed and given to LCI after the 1-week review.
- 45. Subcontractor shall provide a T&B plan within 2 months after contract award.
- 46. Subcontractor will provide all coordination with all subcontractors to provide a complete Test and Balance HVAC system.
- 47. Subcontractor has included to attend weekly coordination meetings or as required for the duration of the project.
- 48. Subcontractor has included removing all temporary protection installed by the HVAC contractor. This includes but not limited to temporary plastic cover, duct tape, flags at HVAC accessories etc.
- 49. Subcontractor shall provide final reports of test and balancing no more than 2 weeks after work is completed.
- 50. Subcontractor shall provide the CM with hand written reports after each system has been balanced and prior to final report.
- 51. A TAB report must be completed prior to final fume hood testing, provide applicable mobilizations to accomplish this scope.

#### **Temporary Work**

52. See Volume 1 section 05120 of Project Manual including, but not limited to, temporary heating and cooling requirements including in this contract. If temporary heating and cooling is required then it shall be provided by this Subcontractor at no additional cost. This includes but is not limited to any associated fuel costs consumption with temporary heat or cooling.

#### **MISCELLANEOUS**

- 53. Furnish and install the following miscellaneous items:
  - a) All required hoisting (material hoists, elevators, and cranes will not be made available for your use).
  - b) Scaffolds, ladders and other equipment necessary to access the work.
  - c) Traffic control and barricades as required for your work.
  - d) Piping identification and valve tagging as required by the CM and as detailed in the contract documents
  - e) Include receiving of owner/owner vender's equipment/parts (sign off), coordination, installation (as applicable) testing and providing complete working system.
  - f) Subcontractor shall furnish and install a yellow and black flag from all HVAC MOD's balancing Dampers, VAV boxes, hot water piping valves & balancing valves, and all other HVAC items requiring balancing. Removal of flags will be by the Balancer. Subcontractor shall provide red and black flags at Fire dampers, and Fire smoke dampers.
  - g) This subcontractor has included furnishing and installing labels on ceiling grid with a P-touch label maker at the locations of all VAV boxes. Coordinate color of back ground with CM and Architect.
  - h) Roof curbs, isolation rails, treated wood blocks,
  - i) All hangers and supports for any installation in this contract.
  - j) Supplemental steel beyond what is shown on the structural and architectural drawings as needed to support HVAC installations.
  - k) Clean-up all debris to LCI dumpsters
  - ) Plaster frames for all diffusers, registers and grilles that are installed in plaster, drywall, or suspended ceilings, and walls.
  - m) Compliance with LCI's Mechanical Project Delivery Plan.
- 54. Commissioning Requirements as noted in the specifications and per the Commissioning Agent's (Farnsworth Group) Professional Building Commissioning Services Agreement included in the bidding documents
- 55. Maintenance on all exterior mechanical equipment required from startup to substantial completion. In addition include weekly filter changes and weekly coil cleaning for 6 weeks after building substantial completion during existing building demolition.

- 56. Provide openings within building structure and finishes as required to complete the work including:
  - a) Cut openings in metal and concrete decks.
  - b) Furnish and install pipe and ductwork sleeves at concrete decks and walls as needed.
  - c) Include pipe portals for HVAC and electrical piping penetrating roofing.
  - d) Provide any field coring as required to properly complete the work. Prior to any such coring,
  - e) Subcontractor shall submit for approval to the Architect/Engineer a sketch indicating the exact location of the proposed cores and sleeves. Coring of reinforced concrete slab, if required, due to missing mechanical coordination or due to Subcontractor's preference shall be without additional cost to the Subcontract amount. All cored holes in the concrete slab shall have a schedule 40 sleeve.
  - f) Properly seal all joints between sheet metal, sheet metal casings, filter frames and all other locations where required to eliminate air leakage and/or noise and as required for fire safing.

    Subcontractor shall provide schedule 40 extended pipe sleeves for all pipes that penetrate floors. The pipe sleeves shall be cast in and extend 2" above the concrete floor. This subcontractor shall provide concrete curbs around all ducts that penetrate the mechanical room floors. Curbs shall
  - g) Include costs for cutting and patching of completed installations and reframing of roof openings due to subcontractor's failure to properly coordinate the work complete installations per the project schedule.
- 57. Provide all of the Indoor Air Quality Plan required photographs per the Leopardo Indoor Air Quality Plan.
- 58. Provide VFD specified for fume hood shall have integral disconnect switch.
- 59. Provide VFD for RAF-1. The VFD shall have an integral disconnect switch.
- 60. Provide all lead sheathing around all junction box, wire trough and all other MEP's where lead sheathing is shown

#### **EXCLUSIONS**

- 1. Full Continuous flush out (listed as add alternate in bid form)
- 2. Satisfactory air containment testing prior to occupancy (listed as add alternate in bid form)

**END OF SECTION 00220.313** 

### SECTION 00220.314 WORK SCOPE BUILDING ELECTRIC/FIRE ALARM

The Scope of Work includes all labor, material, tools, equipment, scaffolding, hoisting, supervision and engineering as required to complete the **Building Electric/Fire Alarm** Scope of Work in accordance with the Contract Documents and enumerated below:

Subcontractor understands the Contract Documents are scope documents that indicate the general scope of the project which may not indicate or describe all the work required for the full performance and completion of their work. Subcontractor includes all items reasonably inferable to complete their scope of work whether or not indicated on the Contract Documents.

#### TRADE SPECIFIC-ELECTRICAL

- 1. See "General Work Scope" for General Requirement, applicable to all bid packages
- 2. Trade Specific General Items
  - a) All work shall be performed in conformance with the above listed specifications and the following (Wherever discrepancies occur, provide the greater quantity or quality of work as directed by the engineer of record).
    - i. NECA
    - ii. NEMA
    - iii. Local City Codes of Authorities Having Jurisdiction.
  - b) Subcontractor has included all protection of in-place electrical items including, but not limited to conduit, wire, electrical panels, disconnect switches, owners supplied equipment, GC supplied equipment, furniture, and etc.
  - c) Subcontractor shall include all firestopping of rated walls and floors as required to meet all codes and fire rated partitions ratings and as specified in the contract documents.
  - d) Subcontractor has included furnishing and installing all water tight firestopping of slab penetrations at all floors.
  - e) Subcontractor may be required to commence work prior to installation of slab-on-grade. Subcontractor shall provide all-terrain lifts and other equipment as needed to continue work as directed by the CM.
  - f) Subcontractor has included all extended warranties and maintenance for all electrical equipment supplied, installed and used by this subcontractor, CM or owner during construction. The warranty shall begin on the date of the Owner's final acceptance of the system. The warranty shall extend through the full term of the warranty period as required in the Contract Documents. Prior to turnover, permanent systems which have been utilized, must be refurbished to a "like new" state as required to maintain the manufacturer's warranties.
  - g) Finish painting of subcontractor's work shall be the responsibility of the Painting subcontractor. However, all items furnished by subcontractor, which are scheduled to be finished painted by others, shall be furnished with a prime coat in accordance with applicable sections of the technical specifications. All electrical equipment furnished by subcontractor is to be provided factory finish painted unless scheduled to receive field finish. Subcontractor shall be responsible to degrease and remove labels from all electrical work.
  - h) Coordinate all permit inspections. Provide reports and other required paperwork as needed to assist CM in obtaining permits.
  - All electrical services shall be coordinated with the concrete construction as follows: All risers shall allow for the tolerances of construction as detailed in the structural drawings and provide proper annular space for firestopping details.
  - Include all rigging and hoisting required for the work. Provide additional measures and equipment as needed where access is limited.
  - k) Final connections to heat tracing for mechanical and plumbing piping as required.
  - Subcontractor shall submit for approval his proposed scheme for the hoisting of all equipment, including any required shop drawings, sketches and/or load distribution diagrams and calculations verifying adequacy of supporting systems so as to allow erection activities to be coordinated and

- approved with other subcontractor's field operations and structural engineer as required.
- Ml work shall conform to recognized and accepted engineering practices and all methods and procedures shall be approved by the Architect/Engineer prior to commencement of each element of work.
- n) Subcontractor shall promptly provide all updated Architectural, Structural, and MEP drawings to all of their field staff. The field staff shall also maintain a copy of their contract, approved submittals, and a set of coordinated (signed) drawings on-site.
- o) Subcontractor has included to have all personal protective equipment as it pertains to NFPA 70E. All protective equipment must be kept in a separate gang box labeled as "Personal Protective Equipment" and shall remain on-site whenever subcontractor's employees are on-site This gang box will be inspected periodically for compliance by CM.
- p) Supplemental steel beyond what is shown on the structural and architectural drawings as needed to support electrical installations.
- q) Minor items and accessories or devices reasonably inferable or necessary to the complete and proper operation of any system shall be provided for such systems, whether or not they are specifically called for by the specifications or the drawings.
- r) Provide any required deck openings related to trade contractor's work. Should trade contractor require deck openings it will be its responsibility to layout and coordinate this work, to detail openings and provide any additional information required so that they may be reviewed and approved by the Architect/Engineer prior to incorporation into the work.
- s) Provide any field coring as required to properly complete the work. Prior to any coring, trade contractor shall submit for approval to the Architect/Engineer a sketch indicating the exact location of the proposed core and sleeve. Coring of reinforced concrete slab, if required, due to missing coordination or due to trade contractor's preference shall be at no additional cost.
- t) Provide all sleeves and/or coring, or reinforcing required for penetrations that are necessary for the completion of trade contractor's work. It is intended that trade contractor shall set sleeves or conduit before a deck is poured. Where sleeves are not set in a timely manner, trade contractor shall core all required holes in the deck, provide reinforcements as required and set sleeves at no increase to the contract amount. Prior to any coring, however, submit for Architect approval a sketch indicating the exact location of the proposed core or sleeve. All field coring locations must be reviewed and approved by the Architect/Engineer prior to the work proceeding. Provide escutcheon plates at all exposed pipe penetrations through finish walls or ceilings in public or basement mechanical area and provide sleeves at masonry walls as necessary. Properly seal all the sleeves and box-outs after installation of the work with code approved water resistant fire safing and packing and sealant.
- Furnish and install all required power to fume hood receptacles as coordinated with the approved fume hood shop drawings. Reference lab casework/equipment drawings and specifications for bidding purposes. Any discrepancies between architectural details and mechanical details will default to the more stringent design.
- v) Furnish and install all required power to ceiling service panel receptacles as coordinated with the approved shop drawings. Reference lab casework/equipment drawings and specifications for bidding purposes. Any discrepancies between architectural details and mechanical details will default to the more stringent design.
- w) Furnish and install all required power to lab casework receptacles as coordinated with the approved shop drawings. Reference lab casework/equipment drawings and specifications for bidding purposes.
   Any discrepancies between architectural details and mechanical details will default to the more stringent design.
- x) Provide sectional overhead door power as specified in electrical drawings and sectional overhead doors specification
- y) Install owner provided Resistivity Monitor. Refer to lab equipment/casework drawings for installation coordination. Installation includes unloading, placement, and power connection to device.
- z) Install owner provided lab equipment shown on lab equipment schedule. Installation includes unloading, placement, and power connection to device.

#### SEISMIC REQUIREMENTS

 Meet or exceed all requirements necessary to comply with seismic codes for work as specified see sheet S010 for seismic criteria and include all engineering and code verification required.

#### **Trenching and Excavation**

- 3. Provide the following for all trenching and excavation required to complete your work
  - a) Provide hand excavation/compaction wherever machine excavation/compaction is not possible.
  - b) Provide hand excavation when working in close proximity to existing site utilities.
  - c) Provide compacted granular backfill under all improved, paved areas
  - d) Contact JULIE or other site utility location company prior to commencing work.
  - e) Temporarily support embankments and provide trench boxes as required.
  - f) All excess spoils to remain onsite and placed at location per direction of LCI superintendent. Final placement by Earthwork subcontractor
  - g) Subcontractor has included restoration of all roads and erosion control to its original condition. Site evaluation will be conducted with the subcontractor and CM Superintendent prior to start of work. A site walk thru will also be conducted after work is completed. All deficient items shall be corrected within 48 hours of final walk thru.
  - Subcontractor includes dust control associated with their work including but not limited to providing water trucks if necessary.
  - i) Subcontractor includes the cleaning of public roadways including but not limited to street sweeping for their work as required.

#### **Existing Generator**

- 4. Trade Specific Existing Generator:
  - a) Subcontractor shall provide all layout work for their trade.
  - b) Provide ALL ATS switches as indicated and specified in the contract documents.
  - c) Include furnishing and installing all required power and control wiring from the building to the generator as required for a complete powered system. These items include but are not limited to unit heaters, battery warmers, cabinet unit heaters, battery charger, water heater, fuel pumps, lights etc.
  - d) Subcontractor is responsible to provide and install conduit from site pull box as provided under bid package 1 to the existing generator distribution switchboard. See sheet E600 and E100 for further detail
  - Subcontractor will be responsible to provide any wiring and accessories as shown in the contract documents.
  - f) Subcontractor shall be responsible to include any electrical work necessary to make systems complete and operational.
  - g) Include furnishing and installing all low voltage wiring from the generator to the building as required for a complete low voltage system as shown. These items include but not limited to ATS switching, F/A ties, BAS ties etc.
  - h) Furnish and install a complete emergency power system as indicated and shown on the contract documents.
- 4. Engine Generators Services: Subcontractor has included the following services for the completion of each engine generator:
  - a) Provide all start up required for the generator.
  - b) Include fuel for the load bank test. Once load bank test is completed provide a full tank of fuel for owner turnover.
  - a. Pre-start up inspection. The subcontractor shall provide a complete inspection of the generators 5 days prior to scheduled start-up. This subcontractor shall provide a complete list of inspection notes and advise LCI in writing of deficient items for a complete start-up. This inspection shall also include pre-startup inspection of subcontractor's engine generators for any missing items for a complete start up.
  - b. Provide a complete startup of the engine generators as specified and in accordance with the bid documents. Provide all start up functions in accordance to the manufacturer's requirements and

- specifications. The subcontractor shall provide all written documentation of startup and any discrepancies.
- c. Subcontractor to provide a load bank test at 100% full load of the engine generators a 4-hour duration each. Provide all required written documentation for this test per all codes and industry standards.
- d. Subcontractor has included the testing of all building ATS's with the electrician and authorities having jurisdiction. The subcontractor shall provide an 8-hour period for testing.
- e. Subcontractor has included training and demonstration of the engine generators with the owner.
- 5. Engine Generators Miscellaneous specific items
  - a. Subcontractor has included a one-year labor warranty for the generator. The warranty shall start after substantial completion. Subcontractor has included an extended warranty for the time between start-up and substantial completion.
  - b. Include one year maintenance.
  - c. Include data link for BAS System.
  - d. Include emergency switches as required.
  - e. Subcontractor has included all NO and NC contacts for proper ATS conductivity and function. Subcontractor will have multiple and both types of contacts available and ready to use.
  - f. Subcontractor has included furnishing the generator's new breakers at generator distribution switchgear.
  - g. Include all transfer switches including all conduit and wire for a complete working system.
  - Include emergency stop button including all associated conduit and wire for a complete working system.
  - i. Subcontractor has included furnishing all circuit breakers, shunt trips, bus taps etc. for a complete system connection.
  - j. Include EPO switch and annunciator panel and shown

#### **Temporary Electric**

- 5. Subcontractor shall provide the following temporary electrical work:
  - a) Please refer to Volume #1 Division #1 General Requirements for temporary power and lighting
  - b) Subcontractor has included furnishing and installing all equipment and materials required to make connections to the local utility company and provide temporary electrical power and light distribution. The electrical subcontractor shall coordinate the location of the electrical power and lighting as directed by LCI. Subcontractor shall provide all temporary water tight facilities for all electrical gear. Coordinate temporary electrical with CM.
  - c) Subcontractor shall furnish and install power at the first floor outside each elevator shaft for the elevator installation. (2) 20 amp circuits must be dedicated for the elevator installers at each location.
  - d) Subcontractor acknowledges that the exterior windows will be covered with sheet rock and exterior building wrap until final windows are ready for installation. This will prevent natural lighting from entering the building. This subcontractor has included all lighting necessary for all locations inside the building.
  - e) Subcontractor shall provide a written description of the temporary electric plan for the building along with an  $8 \frac{1}{2} \times 11$  sketch of the temporary electrical systems at the post bid review.
  - f) Building temporary electric will be provided from the permanent ComEd Transformer or existing overhead poles for the building.
  - g) If through permanent ComEd Transformer this subcontractor shall provide connection to the transformer and provide a temporary electrical enclosure that is water tight to house the temporary electrical service equipment outside the building next to the ComEd transformer. Power to be distributed from this location into building for use by other trades. Once switchgear room is installed and water tight it is this subcontractor's responsibility to furnish, hook-up and run a generator with fuel and for the duration for power transfer to permanent power from temporary. Schedule power transfer with job-site Superintendent. Provide minimum 480V 3 phase 400A temporary power.

#### FA/Systems

6. Subcontractor shall provide the following work for all fire alarm systems:

- a) Include furnishing and installing a complete F /A system as indicated in the contract documents for the building.
- b) Include all automatic dialers etc. for a complete system.
- c) Provide the fan status panel including:
  - i. All conduit, wiring,
  - ii. Contacts and switches
  - iii. All connections required to activate the fresh air intake and exhaust louvers as required. (Coordinate voltages of dampers with the HVAC and BAS subcontractors.)
- d) Fire door hold-open/alarm system including relays, all wiring and accessories.
- e) Include furnishing and installing all low voltage and power wiring for the fire doors as required for a complete fire door installation. Hanging of control panels, power, and F/A ties have also been included.
- f) Include all fire alarm connections to all other electrical systems as required for a complete F/A system.
- g) Include furnishing and installing all duct detectors as required for a complete F/A system. Installation to be by HVAC sub.
- h) Include furnishing and installing all fan shut downs/relays as required for a complete
- i) F/A and fan shut down system to within five feet of all HVAC mechanical equipment requiring F/A shut downs. Coordinate with HVAC & BAS installer.
- j) Include providing multiple times of programming as required for a complete F/A system per the contract schedule.
- k) Complete all pre-testing, testing with authorities having jurisdiction, and etc as required for a complete F/A system.
- 1) Include furnishing a complete panel readout schedule for programmed points prior to programming of the F/A system. This shall be submitted and approved prior to installation of the F/A system.
- Subcontractor acknowledges that the design drawings are schematic at best and has included all code required devices, wiring, engineering, testing, permit fees and etc for a complete code compliant system.
- n) Furnish and install all telephone ties to the fire alarm system as required.
- o) Coordinate with LCI and the authority having jurisdiction for ties to system.
- p) Furnish, install and program relays at every door that has security to disengage the security system in the event of a fire. Provide final hook up to security control board at each door. See Security drawings and hardware schedules for quantities.
- q) Furnish, install and program relays at every Smoke damper in duct as shown on mechanical drawings. Provide final hook up to smoke damper.

#### **Low Voltage Systems**

- 7. Subcontractor acknowledges that the audio visual, structured cabling, and security & paging raceways shall be provided as shown on the design drawings and has included all supports, raceways, floor boxes, and etc as required for a complete code compliant installation by those subs.
- 8. If electrical subcontractor needs additional sleeves/raceways beyond what is shown on the drawings the electrical subcontractor shall provide at no additional cost.
- 9. Continue AT&T and Comcast services conduit stubs from the 5' building line into the building in coordination with the Site Electric subcontractor.
- 10. Trade Specific Structured Cabling (Telephone/Data) Systems:
  - a) Subcontractor has included conduit and raceways (including all floor boxes shown on T series) to all locations for TEL/Data. Coordinate exact requirements with subcontractors. Refer to drawings and specifications for conduit requirements.
- 11. Trade Specific Audio Visual Systems:
  - a) Subcontractor has included conduit and raceways (including floor boxes floor boxes shown on T series) to all locations for AV. Coordinate exact requirements with subcontractors. Refer to drawings and specifications for requirements.
- 12. Trade Specific Security and Paging Systems:
  - a) Subcontractor has included conduit and raceways (including floor boxes shown on T series) to all

locations CATV Security, access control, burglar system, paging etc. Coordinate exact requirements with subcontractors. Refer to drawings and specifications for requirements.

#### 13. Trade Specific Overhead Door Systems:

 a) Include all low voltage conduit and wire for overhead doors. Coiling/Sectional Door Subcontractor will provide key switches, electric eyes, safety bottoms, power and etc. to this Subcontractor for installation.

#### 14. Trade Specific Generator System

a) Include furnishing and installing all low voltage wiring from the generator to the building as required for a complete low voltage system. These items include but not limited to generator status panels, ATS switching, F/A ties, BAS ties etc.

#### 15. Trade Specific Elevator System

- a) Furnish and install (2) sets of control wiring from each ATS switch to each elevator controller to identify normal power and emergency power pre-transfer. Coordinate with elevator subcontractor.
- b) Provide step down transformer, if required, at the elevator panel.
- c) The elevator electrical subcontractor shall include the shunt trip and disconnect. Conduit and wiring from disconnect to elevator machine will be provide by the electrical contractor.
- d) Elevator Subcontractor shall interface with Electrical/F.A. Subcontractors with Fire Alarm System. Electrical Subcontractor will bring wires and land them in the controller.
- The electrical contractor will provide power to a disconnect box located just inside the elevator machine room. The <u>elevator</u> electrical subcontractor is to provide all other electrical wiring, control wiring, making the terminations, etc. as required for a fully functional elevator system.

#### **Power Systems**

#### 16. Trade Specific Power Systems:

- a) Provide All Wiring for ADA Operators. Furnish and install all power conduit, wiring, j-boxes, hangers, etc. for a complete power system. See structural drawings for MEP items on support specifications.
- b) Furnish and install all power devices as specified and indicated in the contract documents to include but limited to poke through's, electrical outlets, switches, lighting, equipment power, and etc for a complete powered system.
- c) Furnish and install p-touch labels on all outlets and switch cover plates.
- d) Label all disconnect switches and j-boxes with p-touch labels.
- e) Install a complete emergency power system as indicated and shown on the contract documents.
- f) Provide power to all detention/security equipment systems as specified and shown on the bid documents.
- g) Provide power to all mechanical/plumbing equipment as specified and shown on the bid documents.
- h) Install all loose VFD's for all mechanical equipment. The VFD's will be shipped loose and will be supplied by the HVAC subcontractor.
- i) Furnish and install all starters and disconnects as shown for all MEP equipment.
- j) Furnish and install all whips from raceway to furniture as required.
- k) Provide power, conduit, and wire for all exhaust fan motor operated dampers.
- 1) Provide power, conduit, and wire for scissor lift.

#### **Lighting and Lighting Systems**

- 17. Provide the following for a complete lighting system:
  - a) Provide all lighting fixtures as shown and specified in the contract documents.
  - b) Provide all lighting control systems and all controls, switches, relays, sensors, cabinet transformers, touch screen controllers etc. for a complete lighting control system.
  - c) Subcontractor to furnish and install all occupancy sensors, wall box timers, pilot light switches as shown and required.
  - d) Furnish and Install a complete emergency lighting system including but not limited to; wire, conduit, signage etc. for a complete emergency lighting system.

#### Grounding

#### 18. Trade Specific Grounding:

a) Furnish and install a complete electrical grounding as indicated in the contract documents.

#### **Site Electric**

- 19. Trade Specific Site Electrical:
  - a) Site Electrical subcontractor to pull site lighting wire to pull box as noted on the contract documents. The Building Electrical Subcontractor will complete the installation of conduit and wire from the pull box into the electrical panels for an operational system.
  - a. Site Electrical subcontractor will furnish and install conduits form ComEd transformer and stub up through the foundation of the pad.
  - b) The ComEd feeders shown will be installed up to the transformer pad by the site electrical subcontractor. Building Electrical Subcontractor shall include furnishing and installing all low voltage wiring from the transformer to the building as required for a complete low voltage system.
  - c) Site Electrical subcontractor to stub conduit from ComEd Transformer to 5' of the building line. Building Electrical subcontractor to provide all wiring from ComEd Transformer and terminate within building as depicted on the contract documents. Building Electrical subcontractor to furnish and install conduit from the 5' feet building line into the building as coordinated with the Site Electrical subcontractor.
  - d) Site Electrical Subcontractor will provide fixtures, conduit and power for the flagpoles lights and flood lights. The Building Subcontractor will complete the installation into the electrical panels.
  - e) All lights shown on E100 labeled 26.107 to be furnished and installed by building electrician.
  - f) All work shown on T001 will be completed by the Site Electrical subcontractor with the exception of the fiber. Temporary Fiber shown on T001 from the existing health department running east west shall be furnish and installed by the site electrical subcontractor and removed by the structured cabling subcontractor
  - g) All work shown on T002 will be completed by the Site Electrical subcontractor with the exception of the fiber. Fiber shown on T002 shall be furnish and installed by the Structured Cabling
  - h) Site Electrical subcontractor to provide conduit to pull box per sheet E600 for electrical ductbank. Building Electrical subcontractor to furnish and install remaining conduit into the building as coordinated with the Site Electrical subcontractor. Building Electrical subcontractor to provide all wiring associated with the generator as shown on E100
  - i) This subcontractor acknowledges that some site lighting and power has been included by the site electrician as shown and the building electrician shall include, but not limited, concrete, rebar, excavation, lights, hand holes, power connections and etc not included by site electrician for a complete operational system. Building Electrical Subcontractor shall review site electrical scope of extent of work.

#### MISCELLANEOUS

- 20. Provide the following miscellaneous items:
  - a) Keep the subcontractors field staff to date with the most current Architectural, Structural, and MEP design drawings and specifications. The field staff shall also have on-site, a copy of their contract, approved submittals, and a set of coordinated (signed off drawings).
  - b) Furnish and install any hand dryers as required by the contract documents.
  - c) Provide all power and lighting requirements for per elevator work scope and elevator submittals.
  - d) Compliance with LCI's Mechanical project delivery plan.
  - e) Commissioning Requirements as noted in the specifications and per the Commissioning Agent's (Farnsworth Group) Professional Building Commissioning Services Agreement included in the bidding documents
  - f) Complete installation of owner provided X-Ray equipment.
  - g) Complete installation of owner provided "Smart White Board"
  - h) Furnish and install all electric hand dryers furnished by carpenter.
  - i) Provide all lead sheathing around all junction box, wire trough and all other MEP's where lead sheathing is shown
  - j) Provide and install complete Emergency Notification System.
  - k) Subcontractor shall provide all caulk including fire and sound designated with STC ratings END OF SECTION 00220.314

#### SECTION 00220.315 WORK SCOPE PLUMBING

The Scope of Work includes all labor, material, tools, equipment, scaffolding, hoisting, supervision and engineering as required to complete the **Plumbing** Scope of Work in accordance with the Contract Documents and enumerated below:

Subcontractor understands the Contract Documents are scope documents that indicate the general scope of the project which may not indicate or describe all the work required for the full performance and completion of their work. Subcontractor includes all items reasonably inferable to complete their scope of work whether or not indicated on the Contract Documents.

#### TRADE SPECIFIC-PLUMBING

- 1. See "General Work Scope" for General Requirement, applicable to all bid packages
- 2. General Trade Specific:
  - a) Layout for this Subcontractor's work. Provide all engineering and layout as required for the completion of your work. Initial bench marks and property corners will be provided by LCI. All other layout for building corners, pads and site improvements are included herein under this scope of work.
  - b) All work under this scope shall comply with proper trade jurisdictions, even if it is necessary to assemble composite crews or subcontract to appropriate trades.
  - c) Coring of reinforced concrete slab or concrete fill on metal deck floors, if required due to missing mechanical coordination or due to Subcontractor's preference, shall be at no additional cost to the Subcontract amount. Coordinate all fields coring with the Construction Manager and Concrete Subcontractor. Cover and protect all openings left in the floor for passage of this Subcontract's work. Provide scanning as needed if coring through reinforced concrete slab and metal deck.
  - d) Provide all required flashing and sealing at those areas where the plumbing piping passes through roofed, waterproofed, and/or damp proofed walls, floors and roofs.
  - e) Seal all piping penetrations through perimeter foundation walls as required to ensure a waterproofed installation. Include lead/metal flashing required at all roof drains. Subcontractor shall coordinate all arrangements for sealing and waterproofing of such areas with the Roofing and Waterproofing Subcontractors to ensure a watertight installation and maintain all roofing and / or waterproofing warranties. Subcontractor has included all silicone based waterproof fire stopping at all through floor penetrations.
  - Subcontractor has included furnishing and supplying all lifts, cranes, excavation, scaffolding, Dunnage, etc. for setting of subcontractor's equipment and installing materials and equipment as required for a complete plumbing system.
  - g) Furnish and install all Plumbing work as outlined in the Contract Documents. This "Definition of Work" list is for clarification only and does not relieve the Subcontractor from accomplishing all the Plumbing work complete for the Project which is the intent of this Contract, unless items of work are specifically and expressly excluded below. Provide all labor, materials and equipment necessary to provide a complete, operable plumbing system for the building interior and site with completed connections to the City sewer and water mains, per the Contract Documents and as indicated in this subcontract. Plumbing Work shall include domestic water systems, waste/vent systems, storm/roof drainage systems; all equipment, structures and accessories for domestic water systems, waste/vent systems, storm/roof systems; and site sewer and water work.
  - h) Minor items and accessories or devices reasonably inferrable or necessary to the complete and proper operation of any system shall be provided for such systems, whether or not they are specifically called for by the Contract Documents.
  - i) When requirements cited in the Specifications conflict with each other or with other Contract Documents, the most stringent shall govern work.
  - j) Subcontractor has reviewed the Contract Documents and provides for a complete scope of work as required or inferred from the scope defined in the Contract Documents and requirements of all governing authorities.
  - k) Include receiving of owner/owner venders' equipment / parts (sign off), coordination, installation

- (as applicable) testing and providing complete working system.
- 1) All work indicated on all drawings indicating plumbing shall be included in this contract without exception.
- m) Furnish and install all plumbing fixture schedules as indicated with the exception of integral fixtures to the laboratory casework.
- Furnish and install all safety showers and eye wash stations as depicted on drawings. Refer to the lab casework/equipment drawings for coordination of locations and quantities with the plumbing drawings.
- o) Provide all plumbing connections to lab equipment/casework as depicted on the approved lab casework shop drawings. All lab casework integrated plumbing fixtures will be by the lab casework supplier and installed by the plumbing subcontractor.
- p) Provide a complete installation to owner provided autoclave and dishwashers. Refer to owner provided cutsheets for complete coordination.
- q) Furnish and install water softeners
- r) Furnish and install electric water coolers.
- s) Install owner provided lab equipment shown on lab equipment schedule. Installation includes unloading, placement, and power connection to device.

#### SEISMIC REQUIREMENTS

1. Meet or exceed all requirements necessary to comply with seismic codes for work as specified see sheet S010 for seismic criteria and include all engineering and code verification required.

#### **Trenching & Excavation**

- 3. Provide the following for trenching and excavation to complete your work.
  - a) Provide hand excavation/compaction wherever machine excavation/compaction is not possible.
  - b) Provide hand excavation when working in close proximity to existing site utilities.
  - c) Provide compacted granular backfill under all improved, paved areas
  - d) Contact JULIE or other site utility location company prior to commencing work.
  - e) Temporarily support embankments and provide trench boxes as required.
  - f) All excess spoils to remain onsite and placed at location per direction of LCI superintendent. Final placement by Earthwork subcontractor.
  - g) Include stoning of curbs for ramps to prevent cracking from moving equipment around associated with their work. Subcontractor includes plating over site utility trenches to provide protection for crane/truck traffic as required. Any damage done to curbs/roads/site utilities as a result of this subcontractors work will be repaired at this subcontractor's expense.
  - Provide as-built drawings of underground, in-wall and overhead piping installed by this subcontractor.
  - i) Include all clean backfill as required per the contract documents, and Authorities having jurisdiction.
  - Include all OSHA required excavation safety items as required to complete specified work per the terms and conditions of the contract documents.
  - k) Restore all roads and erosion control as-is condition. Site evaluation will be conducted with the subcontractor and CM Superintendent prior to start of work. A site walk thru will also be conducted after work is completed. All deficient items shall be corrected within 48 hours of final walk thru.
  - Include dust control associated with their work including but not limited to providing water trucks if necessary.
  - m) Include the cleaning of public roadways including but not limited to street sweeping for their work as required.
  - n) Provide all minor pumping / dewatering of all rain and/or ground water seepage as required for the timely progress and completion of the Work. Minor pumping is defined as using pumping equipment, which does not require a standby operating engineer. Pumps provided at 2" or smaller.
  - o) Upon completion of all underground building plumbing work, bring all subgrades of excavated areas to the elevation as required on the drawings to plus or minus 1", averaging zero.

#### Site Utilities Storm, Sewer and Water

- 4. Site Utilities Storm, Sewer and Water Plumbing work includes, but is not limited to the following:
  - a) Site utility subcontractor to provide domestic water and fire protection mains to the sprinkler and water meter rooms as shown. Plumbing Subcontractor is responsible to field verify depth and location of existing water main stubs and provide any additional piping or accessories necessary to complete the system.
  - b) Provide domestic water and sprinkler protection connection to mains as located in the contract documents
  - c) Site Utilities Subcontractor will bring chlorinated water to a blind flange into sprinkler room including pressure testing, cleaning, and flushing of underground main.
  - d) Site Utilities Subcontractor includes bringing the storm and sanitary lines to within 5' of the building foundation walls with cleanout. Plumbing subcontractor shall pick up and bring into the building.
  - e) Plumbing Subcontractor has included furnishing and installing water piping from water main to the building fire riser room and furnishing and installing backflow preventer with water meter. The Fire Protection Subcontractor will be required to pipe from backflow preventer to fire protection system as required. Coordinate flange and piping requirements with sprinkler subcontractor.
  - Fire Protection Subcontractor shall furnish the RPZ for fire protection system and Plumbing Subcontractor shall install.

#### **Building Storm, Sewer, and Water**

- 5. Building Storm, Sewer, and Water Plumbing work includes, but is not limited to the following:
  - a) Provide complete sanitary drainage, storm drainage, and domestic hot and cold water distribution and insulation systems. Provide all building storm, sanitary and kitchen system piping. Provide taps / tie-ins to the site storm, sanitary and water systems. Water system piping from house side of meter shall be by Plumbing Subcontractor.
  - b) Provide piping material as specified in the design specifications.
  - c) Provide all roof, floor, and open hub drains as shown in the contract documents. Expedite the final connection to all roof drains so that they may be utilized to control rainwater during construction, or provide temporary rain water conductor system if permanent system is not available.
  - d) Provide all building waste, vent, water and storm piping systems, including all valves, clean-outs, and other accessories as required for a complete installation. Floor clean-out access boxes, frames and covers are included.
  - e) Furnish and install all downspout connectors.
  - f) Provide all make-up water supplies and other piping, including all valves, floor drains, trap primers open hub drains, condensate drains, etc., as required for the cooling tower, chillers, mechanical system boilers and any other mechanical equipment as shown on the Contract Documents. Subcontractor shall provide make-up water piping to with-in five feet of all HVAC equipment as indicated or required.
  - g) Provide floor drain in room 1219 for DI water skid
  - h) Provide (2) floor drains in server room
  - i) Provide all sewer and storm system items as indicated in the contract documents (i.e. grease separators, separator structures oil basins, ejector pits, sump pits and as indicated or required, shall be provided by this subcontractor including the manhole frames, covers, and clean-outs for these structures. Piping and connection to the building and site plumbing systems is included. Provide the miscellaneous iron support for the referenced elements including all necessary design work.
  - j) Provide and install acid waste pipe as indicated in the contract documents. Polypropylene piping is to be utilized for acid waste piping to meet code.
  - k) Provide all trench drains as required. Include all piping, frames, covers / grates, plugs, trench drain outlets, etc. as indicated or required and final connections to the site utilities as required for a complete installation. All concrete work shall be by the Concrete Subcontractor. Subcontractor includes coordination for a proper installation.
  - l) Provide a complete insulation system for all plumbing piping work as required in the Contract

- Documents, including all protectors, insulation for all fittings, roof heads, horizontals, valves, flanges and all other related items as required.
- m) Furnish and install all service sinks, water closets, water heaters, lavatories, bathtubs, showers, basins, faucets, penal fixtures, eye wash stations and all other plumbing fixtures as specified or shown. Fixtures are to be furnished in the finish specified by the Architect/Engineer.
- Subcontractor shall provide all caulk including fire and sound designated with STC ratings
   detention grade caulk and penal rated fixtures. Seal at faucet fixtures, toilets and the shower bases
   etc. for a complete system.
- o) Provide all water distribution including all frost-proof hose bibs, sill cocks, hose stations, ice-maker valve boxes, laundry gray boxes, with approved backflow preventer, including all required piping, valves, vacuum breakers, insulation, etc. as required to provide a complete water distribution system. Hose bibs shall be drainable where required.
- p) Provide sump pumps, ejector pits, recirculation pumps, and water booster pumps, sump pits, including any necessary basins, storage and expansion tanks as indicated or required in the Contract Documents. Provide raceway per sheet P410 detail 5 and extend cabling if required
- q) Provide a complete system for elevator pit drainage per the Contract Document or as required per governing authorities. Subcontractor includes a submersible sump pump for elevator pit.
- r) Provide wet stacks, including waste lines, vent lines and valved cold water supply as indicated or required in the Contract Documents.
- s) Furnish and install keyed stops for all water stops.
- t) Provide pipe insulation on all exposed piping under sink as required by code and as specified in the contract documents.
- u) Provide all miscellaneous iron supports that shall be required for the proper support and installation of plumbing piping systems.
- Provide a complete piping and valve identification system, including valve tags, charts and markers.
- w) Furnish and install all building water meters
- x) Provide testing of water system piping on every floor at half floor increments and as coordinated with the Construction Manager.
- y) Provide all mop basins as required by code and as specified in the contract documents.
- z) Subcontractor shall provide water feeds and connection to all AHU's, split system units and all other mechanical units requiring water for humidification.
- aa) Subcontractor shall furnish and install all pipe insulation as specified. This includes horizontal and vertical downspout piping
- bb) Provide all sleeves and reinforcing required for penetrations that are necessary for the completion of Subcontractor's work. It is intended that Subcontractor shall set sleeves before a deck is poured. Where sleeves are not set in a timely manner, Subcontractor shall core all required holes in the deck, provide reinforcements as required and set sleeves at no increase to the Contract amount. Prior to any coring, however, submit for Architect approval a sketch indicating the exact location of the proposed cores or sleeves. All field coring locations must be reviewed and approved by the Architect / Engineer prior to the work proceeding. Provide any mountings or supports necessary for Subcontractor's work.
- cc) Furnish and install schedule 40 pipe, Hilti firestop/water-stop or equal, sleeves if nothing is specified for all through slab penetrations. Each sleeve shall extend past the slab by 2".
- dd) Provide Lead-Flashing of all roof drains and vent piping. Coordinate with roofer.

#### **Temporary Work**

- 6. Provide, maintain and remove the following Temporary Construction
  - a) Include all temporary requirements as specified in the project manual and throughout the bid documents. These items below specifically add, delete or clarify temporary requirements for plumbing during the duration of the project.
  - b) Furnish and install temporary construction water supply system with multiple valved outlets on all of the floors. The temporary water supply system shall be sized to meet the water requirements of the, Masonry, Drywall, and Painting Subcontractors and all other "wet" trades. Provide for a

- temporary water pump suitable for the above purposes if it is required.
- c) Please see project manual Volume 1 for temporary water required.
- d) Provide 1-1/2" minimum, valved water supply at the ground floor and second floor with governing authorities' pressure. for use by the Masonry Subcontractor.
- e) Maintain the temporary water/pumping system throughout the course of the project and provide all standby labor to ensure the availability of all temporary systems during normal working hours, including start-up and shutdown premium time (maximum one hour for each occurrence). Insulate the temporary systems needed for winter construction; heat tracing and etc. Provide valves and drain downs on all temporary systems during the winter months as required to prevent freeze-ups. When weather permits the temporary water system will again be made available, if required by other trades, to properly complete the work.
- f) All temporary work will be installed in such a manner so as not to interfere with the permanent construction. If interference does occur, Subcontractor will make all modifications required to overcome this interference at no additional cost to the Construction Manager.
- g) Include the removal of all temporary work at the end of the project and refurbishment of permanent systems, as directed by the Construction Manager.
- h) Temporary connection of down spouts if required (spill into drain inside or outside of building capable of handling normal storm volume).

#### **MISCELLANEOUS**

- 7. Furnish and install the following miscellaneous items:
  - a) Extended warranties on all pieces of plumbing equipment, including those used temporarily during construction, so that all warranties for equipment supplied by Subcontractor begin on the date of first final acceptance by the Owner and extend through the full term of the warranty. Prior to turnover, permanent systems, which have been utilized, must be cleaned and/or refurbished to a "like new" state as required to maintain the manufacturer's warranties.
  - b) Furnish all required access panels. This Subcontractor shall locate/layout on coordinated drawings.
  - c) Provide metal troughs and drip pans for plumbing piping, complete with all accessories, in mechanical spaces including elevator machine and electrical rooms, to avoid potential water contact with electrical equipment, motors, motor control centers, electrical switchgear, elevator equipment, etc., in accordance with applicable governing codes.
  - d) Provide metal trough above ceiling in elevator machine room
  - e) Provide drain down and filling of systems for all tie-ins as required for the completion of Subcontractor's work.
  - f) Furnish and install all wiring for circulating pumps, and emergency eye wash station alarm. The electrical subcontractor will only be responsible to hook up line voltage power to each pump and the controller if required. Coordinate with electrical subcontractor prior to installation.
  - g) Furnish and install all gas fired domestic water heater flues and fresh air intake piping as required for a complete operational system. Provide roof curbs for all vent and fresh intake piping through roof. Coordinate size and location with roofing subcontractor.
  - h) Include supplemental steel beyond what is shown on the structural and architectural drawings as needed to support plumbing installations. Provide all sump pans for roof drain as required.
  - i) Compliance with LCI's Mechanical Project Delivery Plan.
  - j) Commissioning Requirements as noted in the specifications and per the Commissioning Agent's (Farnsworth Group) Professional Building Commissioning Services Agreement included in the bidding documents.
  - k) Provide all lead sheathing around all junction box, wire trough and all other MEP's where lead sheathing is shown

#### **EXCLUSIONS**

- a) All Natural Gas and DI water piping. This will be provided by the HVAC subcontractor.
- b) Sinks, faucets, and fixtures denoted as the laboratory casework.

**END OF SECTION 00220.315** 

#### SECTION 00220.316 WORK SCOPE FIRE PROTECTION

The Scope of Work includes all labor, material, tools, equipment, scaffolding, hoisting, supervision and engineering as required to complete the <u>Fire Protection</u> Scope of Work in accordance with the Contract Documents and enumerated below:

Subcontractor understands the Contract Documents are scope documents that indicate the general scope of the project which may not indicate or describe all the work required for the full performance and completion of their work. Subcontractor includes all items reasonably inferable to complete their scope of work whether or not indicated on the Contract Documents.

#### TRADE SPECIFIC-FIRE PROTECTION

- 1. See "General Work Scope" for General Requirement, applicable to all bid packages
- 2. Trade Specific General Items
  - a) Design, engineer and provide a complete and proper functioning Fire Protection system as outlined in the Contract Documents. This "Definition of Work" list is for clarification only and does not relieve the Trade Contractor from accomplishing all the Fire Protection work complete for the Project which is the intent of this Contract, unless items of work are specifically and expressly excluded in the additional provisions of this Contract. Plans and specifications are for reference; the fire sprinkler system will be design-build. The Trade Contractor's scope of work relates exclusively to the complete fire protection sprinkler system that meets applicable codes. Subcontractor acknowledges that the drawings are diagrammatical and this subcontractor is responsible to design, engineer, and install a fully functional system to meet the design intent of the contract documents along with meeting all NFPA, and Local codes.
  - b) Subcontractor has included all permit review fees in there scope of work.
  - c) Layout for this Trade Contractor's work. Provide all engineering and layout as required for the completion of your work.
  - d) Subcontractor understands the complete design intent and wall assemblies on the project for a fully compliant sprinkler system design. This includes, but is not limited to wall heights, wall materials, millwork materials,
  - e) Minor items and accessories or devices reasonably inferable or necessary to the complete and proper operation of any system shall be provided for such systems, whether or not they are specifically called for by the specifications or the drawings.
  - f) When requirements cited in the Specifications conflict with each other or with other Contract Documents, the most stringent shall govern work.
  - g) Trade Contractor has reviewed the Contract Documents and provides for a complete scope of work as required or inferred from the scope defined in the Contract Documents and requirements of all governing authorities.
  - h) Premium time, if required for any final connection/tie-ins, and testing shall be completed by trade contractor at no additional cost. Subcontractor has included to tie-in the water connection outside of building line as required for a complete system. Subcontractor has included furnishing and installing the double detector valve and meter for this valve. Double check shall also have tamper switches provisions and tamper switches installed on the double check valve.
  - i) Provide all required flashing and sealing at those areas where fire protection piping pass through roofed, waterproofed, and/or damp proofed walls and floors. Seal all piping penetrations through perimeter foundation walls as required to ensure a waterproofed installation. Trade Contractor shall coordinate all arrangements for sealing and waterproofing of such areas with the Roofing and Waterproofing Trade Contractor to ensure a watertight installation and maintain all roofing and / or waterproofing warranties.
  - j) Within two (2) weeks of acceptance of a given system, provide all required piping identification, valve tagging charts, etc., as outlined in the contract documents. At minimum, pipe identification

- is required inside pump rooms.
- k) Provide extended warranties on all pieces of fire protection equipment used temporarily during construction, so that all warranties for equipment supplied by this trade contractor begin on the date of the Owner's final acceptance of the fire protection equipment/systems. Trade contractor shall clean and/or refurbish as required to maintain the manufacturer's warranties on all equipment systems which have been used temporarily during construction
- Provide any required deck openings related to trade contractor require deck openings it will be its responsibility to layout and mechanically coordinate this work, to detail openings and provide any additional information required so that they may be reviewed and approved by the Architect/Engineer prior to incorporation into the Work.
- m) Provide all sleeves and/or coring, or reinforcing required for penetrations that are necessary for the completion of trade contractor's work. It is intended that trade contractor shall set sleeves or conduit before a deck is poured. Where sleeves are not set in a timely manner, trade contractor shall core all required holes in the deck, provide reinforcements as required and set sleeves at no increase to the contract amount. Prior to any coring, however, submit for Architect approval a sketch indicating the location of the proposed core or sleeve. All field coring locations must be reviewed and approved by the Architect/Engineer prior to the work proceeding. Provide escutcheon plates at all pipe penetrations through finish walls or ceilings in public or basement mechanical area and provide sleeves at masonry walls as necessary. Properly seal all the sleeves and box-outs after installation of the work with code approved water resistant fire-safing and packing and sealant.
- n) Provide any field coring as required to properly complete the work. Prior to any coring, trade contractor shall submit for approval to the Architect/Engineer a sketch indicating the exact location of the proposed core and sleeve. Coring of reinforced concrete slab, if required, due to missing mechanical coordination or due to trade contractor's preference shall be at no additional cost.
- O) Trade Contractor shall include all fire caulking of rated walls and floors as required to meet all codes and fire rated partitions ratings and as specified in the contract documents. Trade contractor shall be responsible for any firestopping/patching required around his piping. Provide silicone based waterproof fire stopping at all floor penetrations. Use security rated caulk/sealant in all detention areas.
- p) Trade contractor may be required to commence work prior to installation of floor slab(s). Trade contractor shall provide all-terrain lifts and other equipment as needed to continue work as directed by the CM.
- q) Finish painting of trade contactor's work shall be the responsibility of the Painting contractor. However, all items furnished by this trade contractor, which are scheduled to be finish painted by others, shall be furnished with a prime coat in accordance with the applicable sections of the technical specifications. All equipment furnished by trade contractor is to be provided factory finish painted, if not scheduled to be painted.
- r) Subcontractor shall provide schedule 40 pipe sleeves at all floor penetrations and Trade contractor shall be available for any required meeting between authorities having jurisdiction.
- s) Fire Prevention Bureau and/or the Owner's insurance underwriter, where related to obtaining the necessary approvals required for a complete and proper functioning sprinkler/fire protection system.
- t) Any utility shut-off that may be required to complete the work must be scheduled through the construction manager at least 48 hours prior to shut-off.
- Provide all necessary mountings and supports for fire protection work including all Isolation devices, curb support devices/metal frame components (pipe stands, anchors, bolts and plates, hangers and supports, threaded rod/unistruts). See structural drawings for MEP items on support specifications.
- v) Contractor shall provide all scaffolding required for the performance of contract work.
- w) Trade contractor will include any upgrade to pump(s) if hydraulics do not meet code with current pump selection criteria at no increase to the trade contract price. Design based on flow test accepted authorities having jurisdiction.

- x) Subcontractor shall provide all work indicating Fire Protection on all drawings without exception.
- y) All mechanical services shall be coordinated with the concrete construction as follows: All risers shall allow for the tolerances of construction as detailed in the structural drawings and provide proper annular space for firestopping details.
- z) Provide hydrant flow tests, permit fees, etc. as applicable for new fire loop.

#### SEISMIC REQUIREMENTS

1. Meet or exceed all requirements necessary to comply with seismic codes for work as specified see sheet S010 for seismic criteria and include all engineering and code verification required.

#### **Fire Protection Specific Items**

- 3. Furnish and Install the following items:
  - a) Provide all service equipment relative to the fire sprinkler system including double-detector checks, backflow preventers, and related accessories.
  - b) Furnish RPZ for Fire Protection System and provide to Plumbing Subcontractor for installation.
  - c) Provide all upright sprinkler heads and related piping as indicated or required at all areas throughout the building without finished ceilings.
  - d) Provide penal rated heads and related piping as indicated or required at all detention areas throughout the building.
  - e) Provide hangers on every sprinkler pipe within 12" of the drops regardless whether it is not required by code or NFPA.
  - f) Provide electrically operated alarm bell as specified. Wiring of these will be by the building electrical subcontractor.
  - g) Provide dry, pre-action and wet pipe type sprinkler systems as specified or required including all air compressors, accelerators, valve assemblies, control wiring and other accessories required for a complete installation including associated testing. Trade contractor includes interconnecting and control wiring.
    - a. Provide pre-action system in rooms as indicated.
  - h) Provide flow and tamper switches, including all related accessories as required throughout the building. Adjustment of the flow and tamper switches and all other control wiring required for a complete installation shall be provided by trade contractor. Provide tamper switches and valve stem notching as required on incoming fire protection water detector.
  - Provide all required drain risers, piping and related valves as specified in the contract documents or as required. Drain all risers to a floor drain located in a mechanical room or janitor closet as required.
  - j) Sprinkle above and below all floating ceilings as indicated.
  - k) Provide all caulking of work including fire and sound designated with STC ratings
  - Provide all code required fire hose valves, cabinets and connections, including caps and chains, fire department valve and all related accessories including specified finishes. Provide an add alternate for (1) fire hose cabinet.
  - m) Provide sprinkler system in all ducts, flues, at raised computer floors, and elevator shafts elevator rooms, above open ceiling grid locations and as required.
  - n) Provide control valve with tamper switch or elevator shaft and elevator equipment room.
  - o) Provide all risers, loops, mains, branch piping and sprinkler heads as required.
  - p) Provide all devices, materials, supplies, labor and power as required to properly test and flush all systems provided by trade contractor in accordance with the contract documents and to obtain approval of all governing authorities. All tests must be conducted in the presence of the architect/engineer, city inspectors, and the construction manager. Coordination for witnessing of all tests is included at no increase to the trade contractor price. Testing will be conducted on a half a floor basis.
  - q) Subcontractor shall provide permanent labeling/ tagging of all sprinkler piping this includes above all ceilings and all exposed piping, risers, etc. Labels shall be submitted and approved prior to installation. All labels shall be placed in 30 foot increments before and after every wall and shall be labeled "sprinkler system" at a minimum, if technical specifications do not have stricter

- r) Subcontractor has included all required electronics for tie into the F/A system. All contacts panels etc. have been included by this subcontractor.
- s) Subcontract is based on providing the number of sprinkler heads, amount of branch piping, etc., as required to meet the by governing authority's requirements or on the quantity of the sprinkler heads shown on the contract documents whichever is a more stringent requirement. Trade contractor shall only be entitled to additional costs if there is a revision to the contract documents, such that room dimensions and wall/ceiling layouts change thereby requiring additional sprinkler heads. Provide all detention, upright, recessed etc. heads as detailed and required by code.
- t) All sprinkler heads must be installed so that they align with each other as the drawings indicate.
- Provide owner with two (2) sprinkler wrenches for each type of sprinkler head provided by trade contractor.
- v) Provide owner with spare sprinklers per NFPA and cabinets and appropriate sprinkler wrenches for each type of sprinkler.
- w) Provide a complete sprinkler/fire protection system in each stairway and canopies, as required to provide proper coverage and as required by governing authorities.
- x) Provide all drain downs and pressure tests as required during construction to meet the Construction Manager's schedule. Trade contractor shall fill and test. Provide for all required testing when the building is not fully heated, during the winter to allow drywall work to proceed. All drain down costs are included in the subcontract amount. Heat and water for testing provided by this Subcontractor.
- y) Provide an adequate means of permanent access to all equipment in coordination process.
- z) Provide sprinkler heads with head guards in locations where sprinklers are subject to abuse or as specified including areas where installed below 7' 0".
- aa) Trade contractor includes all comeback required for the proper completion of any of his work left incomplete. Leave out locations (i.e. stocking area)
- bb) Provide coordination and supervision for all authority having jurisdiction testing at no increase to the trade contract price.
- cc) Protect adjacent work from damage or contamination caused by trade contractor's operation.
- dd) Subcontractor shall design, engineer, furnish, and install a complete smoke detector system and activation system for each double interlock pre-action system. This includes but not limited to conduit, wire, control panels, control wiring, smoke detectors, manual control/Pull stations with labels, controls, etc. for a complete system. The building electrical subcontractor will only provide connection at each dry valve location/dry valve alarm panel a trouble, supervisory, and alarm monitoring. Provide power wiring for each dry valve fire alarm to the nearest available panel for connection for power. Subcontractor shall coordinate with building electrical subcontractor for a complete operational system. Provide all permit drawings, permit fees etc. for these systems.
- ee) Provide all fire protection to lab equipment/casework as depicted on the lab casework drawings if required by code.

#### **Temporary Fire Protection**

- 4. Provide, maintain and remove (if required) a temporary construction fire protection system, including, but not limited to, the following clarifying items:
  - a) Two (2) permanent standpipes shall be utilized for the temporary fire protection system. Standpipes shall be at least one floor ahead of construction and not less than 42" above the floor being framed. Standpipes shall be dry during construction, with temporary Siamese connections to allow the fire department pumpers to supply water into the standpipe as required by the code. Provide all temporary piping required to install the Siamese connection at the location required by the City of Joliet.
  - b) Include the maintenance of all temporary fire protection systems including, equipment and valves.
  - c) Temporary Fire Protection System provided should be dry type not requiring any freeze protection
  - d) The temporary fire protection system shall be installed so as not to interfere with the permanent construction. This trade contractor includes all labor and materials required for removal of this system at the end of the project.
  - e) Maintain a temporary standpipe for construction coverage per the City of Joliet fire code.

f) See also Volume 1 of Project Manual

#### **Trenching & Excavation**

- 5. Provide the following for trenching and excavation to complete your work.
  - a) Provide hand excavation/compaction wherever machine excavation/compaction is not possible.
  - b) Provide hand excavation when working in close proximity to existing site utilities.
  - c) Provide compacted granular backfill under all improved, paved areas
  - d) Contact JULIE or other site utility location company prior to commencing work.
  - e) Temporarily support embankments and provide trench boxes as required.
  - f) All excess spoils to remain onsite and placed at location per direction of LCI superintendent. Final placement by Earthwork subcontractor

#### **MISCELLANEOUS**

- 6. Provide the following miscellaneous fire protection items:
  - a) Furnish access panels as specified for installation by others.
  - b) Provide all interconnecting control wiring required for a complete system. The building electrician will only provide single point wiring and the F/A contractor will only monitor such fire protection systems.
  - c) Provide all grouting of all equipment bases furnished and installed under this subcontract
  - d) Trade contractor will apply for and pay for all required sprinkler permits.
  - e) Compliance with LCI's Mechanical Project Delivery Plan
  - f) Commissioning Requirements as noted in the specifications and per the Commissioning Agent's (Farnsworth Group) Professional Building Commissioning Services Agreement included in the bidding documents
  - g) Provide all lead sheathing around all junction box, wire trough and all other MEP's where lead sheathing is shown

**END OF SECTION 00220.316** 

#### SECTION 00220.317 WORK SCOPE SECURITY

The Scope of Work includes all labor, material, tools, equipment, scaffolding, hoisting, supervision and engineering as required to complete the **Security** Scope of Work in accordance with the Contract Documents and enumerated below:

Subcontractor understands the Contract Documents are scope documents that indicate the general scope of the project which may not indicate or describe all the work required for the full performance and completion of their work. Subcontractor includes all items reasonably inferable to complete their scope of work whether or not indicated on the Contract Documents.

#### TRADE SPECIFIC - SECURITY

- 1. See "General Work Scope" for General Requirement, applicable to all bid packages
- 2. Trade Specific General Items
  - a) All work shall be performed in conformance with the above listed specifications and the following (wherever discrepancies occur, provide the greater quantity or quality of work as directed by the engineer of record):
    - i. NEMA
    - ii. NECA
    - iii. Local Building Codes for governing authority.
  - b) Comply with all Commissioning requirements (including completion of commissioning tables)
  - Subcontractor agrees to provide the manpower and coordination services necessary to accommodate the demands of all projects being performed on-site.
  - d) Subcontractor shall include all fire caulking of rated walls and floors as required to meet all codes and fire rated partitions ratings and as specified in the contract documents.
  - e) Subcontractor has included furnishing and installing all water tight fire caulking of slab penetrations at all floors.
  - f) Subcontractor may be required to commence work prior to installation of slab-on-grade.
  - g) Subcontractor shall provide all-terrain lifts and other equipment as needed to continue work as directed by the CM.
  - h) Subcontractor shall coordinate final placement of all roof penetrations with the roofing subcontractors to ensure a watertight installation and maintain all roofing and / or waterproofing warranties.
  - Subcontractor has included all extended warranties and maintenance for all security equipment supplied, installed and used by this Subcontractor or the CM during construction. The warranty shall begin on the date of the Owner's final acceptance of the system. The warranty shall extend through the full term of the warranty period as required in the contract documents.
  - j) Subcontractor shall be responsible to degrease and remove labels from all material scheduled to receive a paint finish.
  - k) Coordinate all permit inspections. Provide reports and other required paperwork as needed to assist CM in obtaining permits.
  - l) Include all rigging and hoisting required for the work. Provide additional measures and equipment as needed where access is limited.
  - m) Subcontractor shall submit for approval his proposed scheme for the hoisting of all equipment, including any required shop drawings, sketches and/or load distribution diagrams and calculations verifying adequacy of supporting systems so as to allow erection activities to be coordinated and approved with the other subcontractor's field operations and structural engineer as required.
  - All work shall conform to recognized and accepted engineering practices and all methods and procedures shall be approved by the Architect/Engineer prior to commencement of each element of work.
  - o) Provide all sleeves and/or coring, or reinforcing required for penetrations that are necessary for the

completion of trade contractor's work. It is intended that trade contractor shall set sleeves or conduit before a deck is poured. Where sleeves are not set in a timely manner, trade contractor shall core all required holes in the deck, provide reinforcements as required and set sleeves at no increase to the contract amount. Prior to any coring, however, submit for Architect approval a sketch indicating the exact location of the proposed core or sleeve. All field coring locations must be reviewed and approved by the Architect/Engineer prior to the work proceeding. Provide escutcheon plates at all exposed pipe penetrations through finish walls or ceilings in public or basement mechanical area and provide sleeves at masonry walls as necessary. Properly seal all the sleeves and box-outs after installation of the work with code approved water resistant fire safing and packing and sealant.

- p) Provide any field coring as required to properly complete the work. Prior to any coring, trade contractor shall submit for approval to the Architect/Engineer a sketch indicating the exact location of the proposed core and sleeve. Coring of reinforced concrete slab, if required, due to missing mechanical coordination or due to trade contractor's preference shall be at no additional cost.
- q) Minor items and accessories or devices reasonably inferable or necessary to the complete and proper operation of any system shall be provided for such systems, whether or not they are specifically called for by the specifications or the drawings.
- r) Receive and install all electrical door security devices that are furnished by others. Hardware to be installed by others and security contractor to terminate.

s)

#### SEISMIC REQUIREMENTS

3. Meet or exceed all requirements necessary to comply with seismic codes for work as specified see sheet S010 for seismic criteria and include all engineering and code verification required.

#### **Trenching & Excavation**

- 4. Provide the following for trenching and excavation to complete your work.
  - a) Provide hand excavation/compaction wherever machine excavation/compaction is not possible.
  - b) Provide hand excavation when working in close proximity to existing site utilities.
  - c) Provide compacted granular backfill under all improved, paved areas
  - d) Contact JULIE or other site utility location company prior to commencing work.
  - e) Temporarily support embankments and provide trench boxes as required.
  - f) All excess spoils to remain offsite and placed at location per direction of LCI superintendent. Final placement by Earthwork subcontractor
  - g) Subcontractor has included restoration of all roads and erosion control to its original condition. Site evaluation will be conducted with the subcontractor and CM Superintendent prior to start of work. A site walk thru will also be conducted after work is completed. All deficient items shall be corrected within 48 hours of final walk thru.
  - h) Subcontractor includes dust control associated with their work including but not limited to providing water trucks if necessary.
  - i) Subcontractor includes the cleaning of public roadways including but not limited to street sweeping for their work as required

#### **Trade Specific-Security:**

- 5. Trade Specific-Security
  - a) All video monitors including consoles, counters, brackets/ shelves/supports, etc.
  - b) Workstations for the CCTV headend equipment in the MDF to be provided as specified on the drawings.
  - c) All other CCTV VMS designated locations shall receive and be configured with the web client version of the VMS software.
  - d) All cameras with related structural support, mounting brackets
  - e) All cameras and other devices exposed to weather shall be sealed tight and installed in heated enclosures (if necessary) to insure protection against the elements.
  - f) All card swipes and proximity detectors
  - g) See DOORS AND HARDWARE specification/drawing section for related requirements

- h) Subcontractor shall coordinate with electrical/structured cabling subcontractor.
- i) Provide all wire, hangers, and etc for a complete operational system. Building Electrical Subcontractor shall provide all conduit shown on all drawings showing security; any other conduit not shown but required for a complete scope will be by Security Subcontractor.
- Security shall be installed as shown on the design drawings. This subcontractor has included all supports, etc as required for a complete code compliant installation.
- k) If security subcontractor needs additional sleeves/raceways beyond what is shown on the drawings the security subcontractor shall provide at no additional cost.
- This subcontractor acknowledges that the building electrical subcontractor will only provide the
  quantity and power as indicated on the contract drawings. Any power wiring above what is shown
  is the responsibility of Security Subcontractor to run all conduit wire etc. to the nearest available
  panel for power.
- m) Provide all bases and poles as required for site card readers.
- n) All site conduit and hand holes as shown will be provided by the Site Electrical Subcontractor.
- o) Provide full time site supervision for all aspects of security installations. This includes from the start of conduit installation to turn-over of the security systems to the owner. This supervision may not be a site foreman.
- P) Subcontractor acknowledges that some site work for Low voltage conduit has been previously included in the site electrical scope of work. Please see this scope of work for what the site electrical contractor is providing. Provide remaining conduit to final location.
- q) Provide and install complete Emergency Notification Systems not provided by electrician.
- r) Furnish and install LED alarm lights as indicated.
- s) Furnish and install panic alarm system
- t) Provide all lead sheathing around all junction box, wire trough and all other MEP's where lead sheathing is shown
- u) Subcontractor shall provide all caulk including fire and sound designated with STC ratings

#### **EXCLUSIONS**

**END OF SECTION 00220.317** 

#### SECTION 00220.320 WORK SCOPE LAB EQUIPMENT & CASEWORK

The Scope of Work includes all labor, material, tools, equipment, scaffolding, hoisting, supervision and engineering as required to complete the **Lab Equipment & Casework** Scope of Work in accordance with the Contract Documents and enumerated below:

Subcontractor understands the Contract Documents are scope documents that indicate the general scope of the project which may not indicate or describe all the work required for the full performance and completion of their work. Subcontractor includes all items reasonably inferable to complete their scope of work whether or not indicated on the Contract Documents.

#### TRADE SPECIFIC-LAB EQUIPMENT & CASEWORK

- 1. See "General Work Scope" for General Requirement, applicable to all bid packages.
- 2. GENERAL
  - a. Reference all drawings, lab casework schedule, and lab equipment schedule for total count and location of equipment/casework.
  - b. All required scaffolds, ladders and other equipment necessary to access the work.
  - c. Traffic control and barricades as required for your work.
  - d. Union installation for all items furnished under this scope of work is also included.
  - e. Multiple deliveries to be coordinated with project schedule.
  - f. Receive, unload, set in place, level and scribe all new equipment and casework.
  - g. Field verify existing conditions prior to fabrication.
  - h. Caulking to adjacent surfaces.
  - i. Furnish trim fabricated to dimensions, profiles, and details indicated.
  - j. Clean-up all debris to LCI dumpsters
  - k. Onsite representative for startups, commissioning and owner training.
  - 1. Compliance with LCI's Mechanical Project Delivery Plan.
  - m. Include all supports for in wall and above ceiling.
  - n. Coordinate all new casework with owner provided equipment.

#### 3. LAB EQUIPMENT

- a. Mobile table with frame including steel shelves, rods, task lights, pre-wired electrical and cutouts.
- b. Painted steel fume hood assemblies to include extended depth fume hood superstructure, integral service fittings, pre-piping to top, ceiling enclosure, lighting fixtures, electrical receptacles, prewiring on top, fillers and scribes, etc.
- c. Field testing of fume hoods.
- Exhaust extraction arms including ceiling brackets, escutcheon plates and clear rectangular hood with connectors.
- e. Furnish and install ceiling service panels, including all outlets and quick connect fittings. Cutouts and junction boxes are provided for data outlets. Include furnishing and installing all connections from ceiling service panels to lab casework. Include all receptacles and data outlets integrated in lab casework and equipment.
- f. Furnish and install blank covers on for "future use" cutouts. Refer to mechanical, electrical, and plumbing plans for coordination of quantities.
- g. Complete integration of fume hoods with the BAS.
- h. Coordinate all ceiling service panels with architectural reflected ceiling plan, mechanical plans, electrical plans, plumbing plans, and telecommunication plans.
- i. Furnish all integral lab casework and equipment service fixtures.
- j. Wall mounted cylinder restraint brackets.
- k. Furnish and install the following:
  - i. Fume Hoods
  - ii. Balance Benches
  - iii. Exhaust Arms

#### 4. LAB CASEWORK

a. Laboratory Casework, including, but not limited to: base cabinets, sink cabinets, wall cases, tall cases, knee space assemblies, mobile cabinets, fillers, and scribes.

PROJECT MANUAL 00220.320-1 ISSUE DATE: 11/20/2023

- b. Modular bench systems, including upper shelving, service fixtures, pre-wired raceways with quick connect fittings.
- c. Free-standing adjustable height table frames with telescopic legs, non-marring leveling glides and vinyl shoes.
- d. Alpha system carts and worktops with adjustable heights.
- e. Epoxy worktops with factory CNC routed cutouts for undermount sides and service fixtures.
- f. Epoxy resin sinks with tailpiece strainer and overflow.
- g. Stainless scullery sinks including custom sinks.
- h. Acid, flammable and vacuum pump cabinets.
- i. Setting and installation of epoxy resin sinks and cup sinks is included.
- j. Stainless steel and phenolic resin countertops with integral splashes and sinks.
- k. Stainless steel shelving.
- 1. Powder coated steel service chases.
- m. Epoxy pegboard and drying racks.
- n. Gowning benches with booty holders.
- o. Must include all fixtures specified within the laboratory denotation. Including sinks, integral bowls, faucets, fixtures, etc.
- p. All steel supports shown on the drawings shall be furnished and installed by lab casework sub.
- q. Must include all glass shown within the lab casework

#### 5. MISCELLANEOUS

- a. Furnish and install the following miscellaneous items:
  - a. High-Density storage systems
  - b. Monitor Arms
  - c. Hose Reels
- b. All equipment in wall and above ceiling supports as required for proper installation of provided equipment/casework.
- c. Subcontractor to provide all protection at all counter tops, using suitable heavy-duty materials as approved by LCI, such as hardboard, heavy-duty cardboard, etc. Remove and dispose of all protection upon completion of work.
- d. Subcontractor to provide all sealant, filler, and neoprene work (both internal to Lab Casework and Equipment work and where abutting other trades) where indicated in the documents, and where required to achieve a joint/gap-free installation. Materials shall be acid-resistant where required. Include escutcheons, ceiling collars, and other closures at penetrations in Lab Casework and Equipment work, and where Lab Casework and Equipment work penetrates the work of other trades. All sealants shall be FDA approved and appropriate per the application, if required.
- e. Provide complete detailed shop drawings for each area of Lab Casework and Equipment work showing necessary blocking/backing.
- f. Subcontractor acknowledges that the potential exists for the work space to be adjacent to tenant occupied areas. Subcontractor will provide all means necessary to eliminate disruption to these operations.
- g. Subcontractor to be involved in weekly MEP coordination conference calls. Reference MEP coordination duration on project schedule.
- h. Subcontractor is responsible for field verification and confirmation that the conditions represented on the contract documents are representative of the actual field conditions for the work. This verification shall be conducted in a timely manner to prevent impediment of the work and to prevent fabrication errors. LCI shall be advised of changed conditions resultant from this field verification and any ramifications of from same shall be handled in accordance with the contact documents.

#### 6. EXCLUDES

- a. Relocated autoclave units.
- b. Casework not included on the Lab Casework schedule.
- c. Emergency eye wash stations and safety showers.

**END OF SECTION 00220.320** 

PROJECT MANUAL 00220.320-2 ISSUE DATE: 11/20/2023

#### SECTION 00400.306 BID PROPOSAL FORM – 3-06 – Carpentry

ISSUE DATE: 11/20/2018

BID DUE DATE: 12/12/2018 1:00 PM

PROJECT: Will County Health Department

501 Ella Avenue Joliet, Illinois

CONSTRUCTION

Attn: Leopardo Companies

Nicole McElroy

NMMcElroy@leopardo.com Senior Project Manager 5200 Prairie Stone Parkway Hoffman Estates, Illinois 60192 MANAGER: LEOPARDO COMPANIES, INC.

ARCHITECT: Kluber Architects + Engineers

FROM:			
Name of Bidder:	 		
Business Address:			
Phone Number:			

Bidder, in compliance with the Invitation to Bid for construction contemplated for Bid Package No. 3 MEP/Finishes/Carpentry/Glazing having carefully examined the Bidding Documents and the site of the proposed Project and the conditions affecting the proposed Work in the Bid Category(ies) including the condition of the Project site, any surface or subsurface obstruction, the actual levels, all excavating, filling in, removal and demolition, measurements and quantities involved in the Work, the availability of labor, materials and equipment, and the weather conditions that may possibly may be experienced in the Project vicinity, proposes to furnish all labor, materials, tools, equipment, machinery, equipment rental, transportation, superintendence, and services as are necessary to perform all Work in the Bid Category(ies) stated in accordance with the Contract Documents for the Base Bid and Alternate amounts stated below.

If identified as one of the apparent lowest bidder(s) for a Bid Category Bidder agrees to meet immediately with the Leopardo Companies Inc. and shall submit post bid information as described in Section 00200 Instructions to Bidders.

Bidder, if awarded a contract, agrees to: (1) execute the Agreement within fifteen (15) days of receiving notice of the award; (2) provide performance/payment bonds and insurance certificates in full compliance with the Contract Documents, (3) submit the Project Safety Program as described in Section 00200 Instructions to Bidders; (4) commence Work upon execution of the Agreement or at such other time as directed in the notice of award, and (5) to complete its Work in accordance with the Contract Documents and within the milestone activity dates and durations set forth in the Bidding Documents and subsequent construction project master schedule established by Leopardo Companies Inc.

<u>BASE BID</u>: Bidder agrees to perform all Work for Bid Category(ies) as described in the Contract Documents, for the Base Bid(s) stated below. The cost of performance and payment bonds shall be considered as an ADD Alternate. For each Bid Category to be bid, include the Base Bid, written and in figures, the cost of the payment & performance bond which is included in the base bid, written in figures, and the bid category and description.

(Show amounts in both words and figures. In case of discrepancy, amount shown in words will govern).

#### 1. TOTAL BASE BID

**Bid Category No 3-06 Carpentry** 

<b>BID CATEGORY</b>	WRITTEN DESCRIPTION/AMOUNT(S)	BID AMOUNT IN FIGURES
Combined Total Base Bid (i	ncluding allowances):	
A. Material		\$
	DOLLARS	
B. Labor	DOLLARG	\$
	DOLLARS	
TOTAL PROJECT COSTS	DOLLARG	\$
	DOLLARS	
SCHEDULE OF VALUES: Bid B	reakdown (Sum Must Match Above Total Including A	Allowances)
A. Shop Drawings/Submittals		\$
	DOLLARS	
B. Allowances (See Below for <u>Total</u>	Twenty Thousand DOLLARS	\$20,000
C. Cold Form Framing	2 022.11.0	¢
C. Cold Porm Praining	DOLLARS	Φ
D. Metal Studs		\$
	DOLLARS	
E. Rough Carpentry	DOLLARS	\$
F. Drywall	2 022.11.0	\$
1. Di y wan	DOLLARS	Ψ
G. Insulation		\$
	DOLLARS	
H. Sheathing	DOLLARS	\$
	DOLLARO	
I. Furnish Doors/Frames /Hardware		\$
	DOLLARS	

J. Installation Doors/Frames/Hardware		\$
	DOLLARS	
K. Millwork & lockers Furnish	DOLLARS	\$
L. Millwork & lockers Install	DOLLARS	\$
M. Specialty Item Installation (Visual display boards, wall protection, Toilet	DOLLARS	\$
Accessories, Fire Extinguishers/Cabinet/ Etc.)		
N. Specialty Item Furnish (Visual display boards, wall protection, Toilet Accessories, Fire Extinguishers/Cabinet/ Etc.)	DOLLARS	\$
O. Temporary Construction	DOLLARS	\$
P. PlanGrid/Pull Planning	DULLARS	\$
Q. 270 hours of labor time	DOLLARS	\$
R. 120 hours of carpenter time	DOLLARS	\$
S. Remainder of carpentry scope not mentioned above	DOLLARS	\$
ALI WANCES: The subcontractor e Cost and are to be used for th	DOLLARS  LOWANCES (INCLUDED IN BASE BID)  Expressly understands that the allowances listed below are include work to be performed over and above the Scope of Work wances will only be permitted with prior authorization from	and the Contrac

ALLOV Project ct Docum Manage

Allowance #1: Miscellaneous			
coordination between other trades	Ten Thousand	\$10,000	
	DOLLARS		
Allowance #2: X ray shielding			
Unistrut	Ten Thousand	\$10,000	
	DOLLARS		
TOTAL ALLOWANCES	Ten Thousand	\$20,000	
	DOLLARS		

#### **ALTERNATES**:

<u>ALTERNATES:</u> The following Alternate(s) are requested be offered by the respective Bidders. In the event the Alternate is accepted, Bidder agrees to perform all Work necessary to complete the Work as modified by the Alternate in full accordance with the Contract Documents, for the following add or deduct from the Base Bid as indicated: (Show amount(s) in both words and figures for Alternates. In case of discrepancy, amount shown in words will govern.)

ALTERNATE DESCRIPTION	WRITTEN DESCRIPTION/AMOUNT(S)	ALLOWANCE FIGURES
Alternate #1:		
Performance/Payment Bond		\$
ADD	DOLLARS	
Alternate #2:		\$
ADD/DEDUCT	DOLLARS	-
Alternate #3:		\$
ADD/DEDUCT	DOLLARS	

<u>VOLUNTARY ALTERNATES:</u> The following Alternate(s) to Base Bid(s) are voluntary to be offered by the respective Bidders. In the event the Voluntary Alternate is accepted, Bidder agrees to perform all Work necessary to complete the Work as modified by the Voluntary Alternate in full accordance with the Contract Documents, for the following add or deduct from the Base Bid as indicated: (show amounts in both written words and numeric figures for Alternates. In case of discrepancy, amount shown in written words shall govern). Bidder is required to submit sufficient detailed information to fully describe each voluntary Alternate(s) on a separate sheet(s) attached to this Bid Proposal form. Bidders are encouraged to provide voluntary alternates that provide additional value or savings to the Village.

<u>UNIT PRICES</u>: The following Unit Prices to Base Bid Categories are required to be offered by the respective Bidders. Bidder agrees that the following amounts will be used in determining contract changes from the Base Bid for authorized Changes in the Work. Bidder shall not include these unit costs in the Base Bid amount(s). All unit prices shall include Bidder's mark-up for overhead and profit.

1.	\$ /SF
2.	\$ /SF
3.	\$ /SF
4.	\$ /SF
5.	\$ /SF

<u>QUANTITIES</u>: Bidders are required to submit the following quantities. Quantities will be used for the purpose of evaluating bids. Subcontractors will be responsible to provide the appropriate amount of material(s) necessary to complete the work regardless of the quantities listed below.

1.	Exterior Framing	SF
2.	Interior Framing	SF

3.	Drywall	SF
4.	Sheathing	SF
5.	Labor Hours (not including additional 270 hours in scope)	HRS
6.	Carpentry Hours (not including additional 120 hours in scope)	HRS HRS
7.	Lockers	Total HRS
8.	Access Panels	THES
<u>PLI</u>	EASE NOTE: ALL BLANKS MUST BE F	FILLED IN OR YOU MAY BE
DEI	EMED NON-RESPONSIVE	
LAB(	OR & MACHINE RATES (Attach a Schedule of Equipment and	d Labor):
for all Categ and sh	r/Equipment Rates: The bidder shall provide as a part of his proportion of trades people and equipment involved with the party. Rates are to include all payroll taxes, insurance fringes, overhall remain valid for the term of the contract. Rates are to be components making up the hourly rate items	performance of the work required by this Bid nead, and profit etc. for a complete unit price
	the date of submission of the Bid Proposal, Bidder's worker's come state in which the Work is to be performed is	
	the date of submission of the Bid Proposal, Erector (if erector is to rience Modification Rate (EMR) for the state in which the Work is	
	er understands that the Owner /Leopardo Companies Inc. reserve the any informalities or irregularities therein.	he right to reject any or all Bid Proposals and to
Bido	der acknowledges receipt of the following Addenda (identify no	o. and date of each):
good requir requir	er accepts the provisions of the Bidding and Contract Documents at faith and without collusion with any other person or entity submit red to be licensed in the state where the work is performed acrements of the state in which work is to be performed, its curves:	ting a Bid Proposal for the Work. [If Bidder is Id "Bidder certifies that it meets all licensing rrent license number and classification are as
	An individual doing business as	
	A partnership	
	A limited liability company, organized in	
	A corporation, organized in  Joint venture formed between	(enter state)
	Joint venture formed between	and

Leopardo Companies Inc.	Will County Hea	lth Department
	(Signature from authorized representatives of each partner are required)	
Signature(s):		
Title:		
Name of firm:		
Business address:		
Telephone no.:	( )	
	QUIRED): ashier's Check (10% of Base Bid) ine Rate Sheet (use subcontractor's own form)	
Subcontractor Q	Qualification Form (Section 00440 in Project Manual Vol.1) rime Contractor Certification Form (Section 00430 in Project Manual Vol.1)	

END OF SECTION 00400.306

#### SECTION 00400.307 BID PROPOSAL FORM – 3-07 – Glazing

ISSUE DATE: 11/20/2018

BID DUE DATE: 12/12/2018 1:00 PM

PROJECT: Will County Health Department

501 Ella Avenue Joliet, Illinois

CONSTRUCTION

Attn: Leopardo Companies

Nicole McElroy

NMMcElroy@leopardo.com Senior Project Manager 5200 Prairie Stone Parkway Hoffman Estates, Illinois 60192 MANAGER: LEOPARDO COMPANIES, INC.

ARCHITECT: Kluber Architects + Engineers

FROM:			
Name of Bidder:	 		
Business Address:			
Phone Number:			

Bidder, in compliance with the Invitation to Bid for construction contemplated for Bid Package No. 3 MEP/Finishes/Carpentry/Glazing having carefully examined the Bidding Documents and the site of the proposed Project and the conditions affecting the proposed Work in the Bid Category(ies) including the condition of the Project site, any surface or subsurface obstruction, the actual levels, all excavating, filling in, removal and demolition, measurements and quantities involved in the Work, the availability of labor, materials and equipment, and the weather conditions that may possibly may be experienced in the Project vicinity, proposes to furnish all labor, materials, tools, equipment, machinery, equipment rental, transportation, superintendence, and services as are necessary to perform all Work in the Bid Category(ies) stated in accordance with the Contract Documents for the Base Bid and Alternate amounts stated below.

If identified as one of the apparent lowest bidder(s) for a Bid Category Bidder agrees to meet immediately with the Leopardo Companies Inc. and shall submit post bid information as described in Section 00200 Instructions to Bidders.

Bidder, if awarded a contract, agrees to: (1) execute the Agreement within fifteen (15) days of receiving notice of the award; (2) provide performance/payment bonds and insurance certificates in full compliance with the Contract Documents, (3) submit the Project Safety Program as described in Section 00200 Instructions to Bidders; (4) commence Work upon execution of the Agreement or at such other time as directed in the notice of award, and (5) to complete its Work in accordance with the Contract Documents and within the milestone activity dates and durations set forth in the Bidding Documents and subsequent construction project master schedule established by Leopardo Companies Inc.

BASE BID: Bidder agrees to perform all Work for Bid Category(ies) as described in the Contract Documents, for the Base Bid(s) stated below. The cost of performance and payment bonds shall be considered as an ADD Alternate. For each Bid Category to be bid, include the Base Bid, written and in figures, the cost of the payment & performance bond which is included in the base bid, written in figures, and the bid category and description.

(Show amounts in both words and figures. In case of discrepancy, amount shown in words will govern).

### 1. TOTAL BASE BID **Bid Category No 3-07 Glazing BID AMOUNT BID CATEGORY** WRITTEN DESCRIPTION/AMOUNT(S) IN FIGURES **Combined Total Base Bid (including allowances):** A. Material **DOLLARS** B. Labor **DOLLARS** TOTAL PROJECT COSTS **DOLLARS** 2. SCHEDULE OF VALUES: Bid Breakdown (Sum Must Match Above Total Including Allowances) A. Shop Drawings/Submittals \_\_\_\_\_ \$15,000 B. Allowances (See Below for Total) Fifteen Thousand DOLLARS C. Exterior Storefront w/ Doors & Hardware D. Exterior Punched Openings E. Interior Glazing DOLLARS F. Curtainwall w/ Doors & Hardware **DOLLARS** G. Fixed Louvers H. Ornamental railing DOLLARS

I. PlanGrid/Pull Planning		
	DOLLARS	
J. Remainder of Glazing Scope		\$
	DOLLARS	
K. Aluminum Glass Railings	\$	
_	DOLLARS	

#### **ALLOWANCES (INCLUDED IN BASE BID)**

<u>ALLOWANCES</u>: The subcontractor expressly understands that the allowances listed below are included in the above Project Cost and are to be used for the work to be performed over and above the Scope of Work and the Contract Documents. Draws against these allowances will only be permitted with prior authorization from the Construction Manager's on site Project Manager.

TOTAL ALLOWANCES	Fifteen Thousand  DOLLARS	\$15,000	-
TOTAL ALLOWANCES	E.G The	¢15 000	
	DOLLARS		
Allowance #1: Misc Allowance	Fifteen Thousand	\$15,000	

#### **ALTERNATES**

<u>ALTERNATES</u>: The following Alternate(s) are requested be offered by the respective Bidders. In the event the Alternate is accepted, Bidder agrees to perform all Work necessary to complete the Work as modified by the Alternate in full accordance with the Contract Documents, for the following add or deduct from the Base Bid as indicated: (Show amount(s) in both words and figures for Alternates. In case of discrepancy, amount shown in words will govern.)

ALTERNATE DESCRIPTION	WRITTEN DESCRIPTION/AMOUNT(S)	ALLOWANCE FIGURES
Alternate #1:		
Performance/Payment Bond		\$
ADD	DOLLARS	
Alternate #2:		\$
ADD/DEDUCT	DOLLARS	-
Alternate #3:		\$
ADD/DEDUCT —	DOLLARS	

<u>VOLUNTARY ALTERNATES:</u> The following Alternate(s) to Base Bid(s) are voluntary to be offered by the respective Bidders. In the event the Voluntary Alternate is accepted, Bidder agrees to perform all Work necessary to complete the Work as modified by the Voluntary Alternate in full accordance with the Contract Documents, for the following add or deduct from the Base Bid as indicated: (show amounts in both written words and numeric figures for Alternates. In case of discrepancy, amount shown in written words shall govern). Bidder is required to submit sufficient detailed information

to fully describe each voluntary Alternate(s) on a separate sheet(s) attached to this Bid Proposal form. Bidders are encouraged to provide voluntary alternates that provide additional value or savings to the Village.

<u>UNIT PRICES</u>: The following Unit Prices to Base Bid Categories are required to be offered by the respective Bidders. Bidder agrees that the following amounts will be used in determining contract changes from the Base Bid for authorized Changes in the Work. Bidder shall not include these unit costs in the Base Bid amount(s). All unit prices shall include Bidder's mark-up for overhead and profit.

1.	Furnish & Install Standard Storefront Door with Hardware	\$ /SF
2.	Furnish & Install Curtainwall Door with Hardware	\$ / SF
3.	Furnish & Install Metal Panel Infill	\$ / SF
4.	Furnish & Install Interior glass	\$ / SF
5.	Lead Glass	\$ / SF
6.		\$

<u>QUANTITIES</u>: Bidders are required to submit the following quantities. Quantities will be used for the purpose of evaluating bids. Subcontractors will be responsible to provide the appropriate amount of material(s) necessary to complete the work regardless of the quantities listed below.

1.	Metal Panel Infill	SF	ı
2	Stand Stand Stand	QT.	7
2.	Storefront System	SF	-
3.	Curtainwall	SF	7
4.	Interior Glass	SF	ı
••	morior Gass	<u></u>	
5.	Labor Hours	Н	RS
6.	Lead Glass	SF	7

## PLEASE NOTE: ALL BLANKS MUST BE FILLED IN OR YOU MAY BE DEEMED NON-RESPONSIVE

#### LABOR & MACHINE RATES (Attach a Schedule of Equipment and Labor):

<u>Labor/Equipment Rates:</u> The bidder shall provide as a part of his proposal straight time and premium time labor rates for all classifications of trades people and equipment involved with the performance of the work required by this Bid Category. Rates are to include all payroll taxes, insurance fringes, overhead, and profit etc. for a complete unit price and shall remain valid for the term of the contract. Rates are to be composite rates showing the cost for each of the components making up the hourly rate items

	sion of the Bid Proposal, Bidder's worker's compensation Experience Modification Rate (EMR) Work is to be performed is
	sion of the Bid Proposal, Erector (if erector is to sub-tier subcontractor to Bidder) compensation Rate (EMR) for the state in which the Work is to be performed is
Bidder understands that waive any informalities	the Owner /Leopardo Companies Inc. reserve the right to reject any or all Bid Proposals and to or irregularities therein.
Bidder acknowledges	receipt of the following Addenda (identify no. and date of each):
	sions of the Bidding and Contract Documents and certifies that this Bid Proposal is submitted in
required to be licensed requirements of the sta	collusion with any other person or entity submitting a Bid Proposal for the Work. [If Bidder is in the state where the work is performed add "Bidder certifies that it meets all licensing te in which work is to be performed, its current license number and classification are as"] Bidder hereby affixes its authorized signature(s) representing (check one):
A partnership A limited liabil A corporation,	doing business as  tity company, organized in
	(Signature from authorized representatives of each partner are required)
Signature(s):	
Title:	
Name of firm:	
Business address:	
T	
Telephone no.:	
Labor & Mach Subcontractor	QUIRED): ashier's Check (10% of Base Bid) ine Rate Sheet (use subcontractor's own form) Qualification Form (Section 00440 in Project Manual Vol.1) rime Contractor Certification Form (Section 00430 in Project Manual Vol.1)

END OF SECTION 00400.307

#### SECTION 00400.308 BID PROPOSAL FORM – 3-08 – Painting

ISSUE DATE: 11/20/2018

BID DUE DATE: 12/12/2018 1:00 PM

PROJECT: Will County Health Department

501 Ella Avenue Joliet, Illinois

**CONSTRUCTION** 

Attn: Leopardo Companies

Nicole McElroy

NMMcElroy@leopardo.com Senior Project Manager 5200 Prairie Stone Parkway Hoffman Estates, Illinois 60192 MANAGER: LEOPARDO COMPANIES, INC.

ARCHITECT: Kluber Architects + Engineers

FROM:		 	
Name of Bidder:			
Business Address:			
Phone Number:			

Bidder, in compliance with the Invitation to Bid for construction contemplated for Bid Package No. 3 MEP/Finishes/Carpentry/Glazing having carefully examined the Bidding Documents and the site of the proposed Project and the conditions affecting the proposed Work in the Bid Category(ies) including the condition of the Project site, any surface or subsurface obstruction, the actual levels, all excavating, filling in, removal and demolition, measurements and quantities involved in the Work, the availability of labor, materials and equipment, and the weather conditions that may possibly may be experienced in the Project vicinity, proposes to furnish all labor, materials, tools, equipment, machinery, equipment rental, transportation, superintendence, and services as are necessary to perform all Work in the Bid Category(ies) stated in accordance with the Contract Documents for the Base Bid and Alternate amounts stated below.

If identified as one of the apparent lowest bidder(s) for a Bid Category Bidder agrees to meet immediately with the Leopardo Companies Inc. and shall submit post bid information as described in Section 00200 Instructions to Bidders.

Bidder, if awarded a contract, agrees to: (1) execute the Agreement within fifteen (15) days of receiving notice of the award; (2) provide performance/payment bonds and insurance certificates in full compliance with the Contract Documents, (3) submit the Project Safety Program as described in Section 00200 Instructions to Bidders; (4) commence Work upon execution of the Agreement or at such other time as directed in the notice of award, and (5) to complete its Work in accordance with the Contract Documents and within the milestone activity dates and durations set forth in the Bidding Documents and subsequent construction project master schedule established by Leopardo Companies Inc.

TOTAL BASE BID

A. Material

B. Labor

1.

BASE BID: Bidder agrees to perform all Work for Bid Category(ies) as described in the Contract Documents, for the Base Bid(s) stated below. The cost of performance and payment bonds shall be considered as an ADD Alternate. For each Bid Category to be bid, include the Base Bid, written and in figures, the cost of the payment & performance bond which is included in the base bid, written in figures, and the bid category and description.

(Show amounts in both words and figures. In case of discrepancy, amount shown in words will govern).

# Bid Category No 3-08 Painting BID CATEGORY WRITTEN DESCRIPTION/AMOUNT(S) Combined Total Base Bid (including allowances):

IN FIGURES		
 \$		
 \$		

DOLLARS

**DOLLARS** 

**BID AMOUNT** 

TOTAL PROJECT COSTS		\$
	DOLLARS	

#### 2. SCHEDULE OF VALUES: Bid Breakdown (Sum Must Match Above Total Including Allowances)

A. Shop Drawings/Submittals				\$
			DOLLARS	
B. Allowances (See Below for	Total)	Ten Thousand		\$10,000
			DOLLARS	
C. Interior Painting				\$
			DOLLARS	
D. Exterior Painting				\$
			DOLLARS	
E. Intumescent Paint				\$
			DOLLARS	
F. Concrete Sealant				\$
			DOLLARS	
G. High Performance Coatings				\$
			DOLLARS	
H. PlanGrid/Pull Planning				\$
11. 1 failOffu/f uii f failifflig			DOLLARS	Ψ

I. Anything not listed		\$
_	DOLLARS	
J.		\$
	DOLLARS	-

#### ALLOWANCES (INCLUDED IN BASE BID)

<u>ALLOWANCES</u>: The subcontractor expressly understands that the allowances listed below are included in the above Project Cost and are to be used for the work to be performed over and above the Scope of Work and the Contract Documents. Draws against these allowances will only be permitted with prior authorization from the Construction Manager's on site Project Manager.

	DOLLARS	
TOTAL ALLOWANCES	Ten Thousand	\$10,000
	DOLLARS	
	Ten Thousand	\$10,000
Allowance #1: Miscellaneous Paint		

#### **ALTERNATES**

<u>ALTERNATES:</u> The following Alternate(s) are requested be offered by the respective Bidders. In the event the Alternate is accepted, Bidder agrees to perform all Work necessary to complete the Work as modified by the Alternate in full accordance with the Contract Documents, for the following add or deduct from the Base Bid as indicated: (Show amount(s) in both words and figures for Alternates. In case of discrepancy, amount shown in words will govern.)

ALTERNATE DESCRIPTION	WRITTEN DESCRIPTION/AMOUNT(S)	ALLOWANCE FIGURES
Alternate #1:		
Performance/Payment Bond		\$
ADD	DOLLARS	
Alternate #2:		\$
ADD/DEDUCT	DOLLARS	

<u>VOLUNTARY ALTERNATES:</u> The following Alternate(s) to Base Bid(s) are voluntary to be offered by the respective Bidders. In the event the Voluntary Alternate is accepted, Bidder agrees to perform all Work necessary to complete the Work as modified by the Voluntary Alternate in full accordance with the Contract Documents, for the following add or deduct from the Base Bid as indicated: (show amounts in both written words and numeric figures for Alternates. In case of discrepancy, amount shown in written words shall govern). Bidder is required to submit sufficient detailed information to fully describe each voluntary Alternate(s) on a separate sheet(s) attached to this Bid Proposal form. Bidders are encouraged to provide voluntary alternates that provide additional value or savings to the Village.

<u>UNIT PRICES</u>: The following Unit Prices to Base Bid Categories are required to be offered by the respective Bidders. Bidder agrees that the following amounts will be used in determining contract changes from the Base Bid for authorized Changes in the Work. Bidder shall not include these unit costs in the Base Bid amount(s). All unit prices shall include Bidder's mark-up for overhead and profit.

PROJECT MANUAL SECTION 00400.308 – Bid Proposal Form 3-08

1.	PTA-1	\$ /SF
2.	PTA-2	\$ /SF
3.	РТВ	\$ / SF
4.	PTC	\$ / SF
5.	PTD	\$ / SF
6.	SC	\$ / SF
7.	PTE	\$ / SF
8.	PTF	\$ / SF
9.	PTG	\$ / SF
10.	РТН	\$ / SF
11.	РТЈ	\$ / SF

<u>QUANTITIES</u>: Bidders are required to submit the following quantities. Quantities will be used for the purpose of evaluating bids. Subcontractors will be responsible to provide the appropriate amount of material(s) necessary to complete the work regardless of the quantities listed below.

1.	PTA-1	SF
2.	PTA-2	SF
3.	PTB	SF
4.	PTC	SF
5.	PTD	SF
6.	SC	SF
7.	PTE	SF
8.	PTF	SF
9.	PTG	SF

10.	PTH	SF
11.	РТЈ	SF
12.	Total Labor Hours	HRS
	EASE NOTE: ALL BLANKS MUST BE F EMED NON-RESPONSIVE	ILLED IN OR YOU MAY BE
LABO	OR & MACHINE RATES (Attach a Schedule of Equipment and	l <u>Labor):</u>
for all Categ and sh comp	r/Equipment Rates: The bidder shall provide as a part of his propol classifications of trades people and equipment involved with the pagory. Rates are to include all payroll taxes, insurance fringes, overhall remain valid for the term of the contract. Rates are to be components making up the hourly rate items	performance of the work required by this Bid lead, and profit etc. for a complete unit price lead, and profit etc. for a complete unit price leads to site rates showing the cost for each of the
	the date of submission of the Bid Proposal, Bidder's worker's compe state in which the Work is to be performed is	
	The date of submission of the Bid Proposal, Erector (if erector is to rience Modification Rate (EMR) for the state in which the Work is	
waive	er understands that the Owner /Leopardo Companies Inc. reserve the any informalities or irregularities therein.	
Biac	der acknowledges receipt of the following Addenda (identify no	. and date of each):
good requir requir follow	er accepts the provisions of the Bidding and Contract Documents an faith and without collusion with any other person or entity submitted to be licensed in the state where the work is performed adrements of the state in which work is to be performed, its curves:	ting a Bid Proposal for the Work. [If Bidder is d "Bidder certifies that it meets all licensing rent license number and classification are as horized signature(s) representing (check one):
	A partnership A limited liability company, organized in A corporation, organized in Joint venture formed between	(enter state)
	(Signature from authorized representatives o	f each partner are required)
Sign	nature(s):	
Title	2:	

	Will County Health Department
_( )	
QUIRED): ashier's Check (10% of Base Bid) ine Rate Sheet (use subcontractor's own form) Qualification Form (Section 00440 in Project Manual Vol rime Contractor Certification Form (Section 00430 in Pro	
	ashier's Check (10% of Base Bid) ine Rate Sheet (use subcontractor's own form) Qualification Form (Section 00440 in Project Manual Vol

END OF SECTION 00400.308

#### SECTION 00400.313 BID PROPOSAL FORM – 3-13 – HVAC/BAS/TAB

ISSUE DATE: 11/20/2018

BID DUE DATE: 12/12/2018 1:00 PM

PROJECT: Will County Health Department

501 Ella Avenue Joliet, Illinois

CONSTRUCTION

Attn: Leopardo Companies

Nicole McElroy

NMMcElroy@leopardo.com Senior Project Manager 5200 Prairie Stone Parkway Hoffman Estates, Illinois 60192 MANAGER: LEOPARDO COMPANIES, INC.

ARCHITECT: Kluber Architects + Engineers

FROM:			
Name of Bidder:			
<b>Business Address:</b>			
Phone Number:			
i none rannoei.			

Bidder, in compliance with the Invitation to Bid for construction contemplated for Bid Package No. 3 MEP/Finishes/Carpentry/Glazing having carefully examined the Bidding Documents and the site of the proposed Project and the conditions affecting the proposed Work in the Bid Category(ies) including the condition of the Project site, any surface or subsurface obstruction, the actual levels, all excavating, filling in, removal and demolition, measurements and quantities involved in the Work, the availability of labor, materials and equipment, and the weather conditions that may possibly may be experienced in the Project vicinity, proposes to furnish all labor, materials, tools, equipment, machinery, equipment rental, transportation, superintendence, and services as are necessary to perform all Work in the Bid Category(ies) stated in accordance with the Contract Documents for the Base Bid and Alternate amounts stated below.

If identified as one of the apparent lowest bidder(s) for a Bid Category Bidder agrees to meet immediately with the Leopardo Companies Inc. and shall submit post bid information as described in Section 00200 Instructions to Bidders.

Bidder, if awarded a contract, agrees to: (1) execute the Agreement within fifteen (15) days of receiving notice of the award; (2) provide performance/payment bonds and insurance certificates in full compliance with the Contract Documents, (3) submit the Project Safety Program as described in Section 00200 Instructions to Bidders; (4) commence Work upon execution of the Agreement or at such other time as directed in the notice of award, and (5) to complete its Work in accordance with the Contract Documents and within the milestone activity dates and durations set forth in the Bidding Documents and subsequent construction project master schedule established by Leopardo Companies Inc.

<u>BASE BID</u>: Bidder agrees to perform all Work for Bid Category(ies) as described in the Contract Documents, for the Base Bid(s) stated below. The cost of performance and payment bonds shall be considered as an ADD Alternate. For each Bid Category to be bid, include the Base Bid, written and in figures, the cost of the payment & performance bond which is included in the base bid, written in figures, and the bid category and description.

(Show amounts in both words and figures. In case of discrepancy, amount shown in words will govern).

## 1. TOTAL BASE BID Bid Category No 3-13 HVAC/BAS/TAB

BID CATEGORY	WRITTEN DESCRIPTION/AMOUNT(S)	BID AMOUNT IN FIGURES
Combined Total Base Bid (including	ng allowances):	
A. Material	DOLLARS	\$
B. Labor	DOLLARS	\$
TOTAL PROJECT COSTS	DOLLARS	<b>\$</b>
SCHEDULE OF VALUES: Bid B	reakdown (Sum Must Match Above Total Including	Allowances)
A. Shop Drawings/Submittals	DOLLARS	\$
B. Allowances (See Below for <u>Total</u>	Ten Thousand  DOLLARS	\$10,000
C. HVAC Equipment	DOLLARS	\$
D. HVAC Ductwork	DOLLARS	\$
E. HVAC Piping	DOLLARS	\$
F. HVAC Coordination	DOLLARS	\$
G. BAS Material	DOLLARS	\$
	DOLLAND	
H. BAS Labor	DOLLARS	\$

J. Test and Balance		\$
	DOLLARS	
K. Temporary Construction		\$
	DOLLARS	
L. BIM Coordination Per Vol. 1		\$
	DOLLARS	
M. PlanGrid/Pull Planning		\$
	DOLLARS	
N.		\$
	DOLLARS	

#### **ALLOWANCES (INCLUDED IN BASE BID)**

<u>ALLOWANCES</u>: The subcontractor expressly understands that the allowances listed below are included in the above Project Cost and are to be used for the work to be performed over and above the Scope of Work and the Contract Documents. Draws against these allowances will only be permitted with prior authorization from the Construction Manager's on site Project Manager.

TOTAL ALLOWANCES	Ten Thousand	\$10,000	
	DOLLARS		
	Ten Thousand	\$10,000	
Allowance #1: Misc. HVAC Work	Ten Thousand \$10,000		

#### **ALTERNATES**

**DOLLARS** 

ALTERNATES: The following Alternate(s) are requested be offered by the respective Bidders. In the event the Alternate is accepted, Bidder agrees to perform all Work necessary to complete the Work as modified by the Alternate in full accordance with the Contract Documents, for the following add or deduct from the Base Bid as indicated: (Show amount(s) in both words and figures for Alternates. In case of discrepancy, amount shown in words will govern.)

ALTERNATE DESCRIPTION	WRITTEN DESCRIPTION/AMOUNT(S)	ALLOWANCE FIGURES
Alternate #1:		
Performance/Payment Bond		\$
ADD	DOLLARS	Ψ
A D.D. DEDVICE	DOLLAR	\$
ADD/DEDUCT	DOLLARS	
Alternate #3: Voluntary Deduct for Alternative BAS Controls Manufacturer		
DEDUCT	DOLLARS	\$
Alternate #4: Full Continuous		
Flush Out ADD	DOLLARS	\$

Alternate #5: Satisfactory Air Contaminant Testing Prior to Occupancy		\$
ADD	DOLLARS	
Alternate #6: To provide pump and condensate line in server room DEDUCT	DOLLARS	\$

<u>VOLUNTARY ALTERNATES:</u> The following Alternate(s) to Base Bid(s) are voluntary to be offered by the respective Bidders. In the event the Voluntary Alternate is accepted, Bidder agrees to perform all Work necessary to complete the Work as modified by the Voluntary Alternate in full accordance with the Contract Documents, for the following add or deduct from the Base Bid as indicated: (show amounts in both written words and numeric figures for Alternates. In case of discrepancy, amount shown in written words shall govern). Bidder is required to submit sufficient detailed information to fully describe each voluntary Alternate(s) on a separate sheet(s) attached to this Bid Proposal form. Bidders are encouraged to provide voluntary alternates that provide additional value or savings to the Village.

<u>UNIT PRICES</u>: The following Unit Prices to Base Bid Categories are required to be offered by the respective Bidders. Bidder agrees that the following amounts will be used in determining contract changes from the Base Bid for authorized Changes in the Work. Bidder shall not include these unit costs in the Base Bid amount(s). All unit prices shall include Bidder's mark-up for overhead and profit.

1.	\$	/HR
2.	\$	/HR
3.	\$	/HR
	· · · · · · · · · · · · · · · · · · ·	

<u>QUANTITIES</u>: Bidders are required to submit the following quantities. Quantities will be used for the purpose of evaluating bids. Subcontractors will be responsible to provide the appropriate amount of material(s) necessary to complete the work regardless of the quantities listed below.

1.	Labor Hours	HRS
2.	Access Panels	EA
3.	Submittals	WEEKS
4.	Fabrication	WEEKS

# PLEASE NOTE: ALL BLANKS MUST BE FILLED IN OR YOU MAY BE DEEMED NON-RESPONSIVE

#### LABOR & MACHINE RATES (Attach a Schedule of Equipment and Labor):

<u>Labor/Equipment Rates:</u> The bidder shall provide as a part of his proposal straight time and premium time labor rates for all classifications of trades people and equipment involved with the performance of the work required by this Bid Category. Rates are to include all payroll taxes, insurance fringes, overhead, and profit etc for a complete unit price

and shall remain valid for components making up t	or the term of the contract. Rates are to be composite rates showing the cost for each of the the hourly rate items
	sion of the Bid Proposal, Bidder's worker's compensation Experience Modification Rate (EMR) work is to be performed is
	sion of the Bid Proposal, Erector (if erector is to sub-tier subcontractor to Bidder) compensation Rate (EMR) for the state in which the Work is to be performed is
Bidder understands that waive any informalities	the Owner /Leopardo Companies Inc. reserve the right to reject any or all Bid Proposals and to or irregularities therein.
Bidder acknowledges	receipt of the following Addenda (identify no. and date of each):
good faith and without or required to be licensed requirements of the sta follows:  An individual of A partnership A limited liabil	sions of the Bidding and Contract Documents and certifies that this Bid Proposal is submitted in collusion with any other person or entity submitting a Bid Proposal for the Work. [If Bidder is in the state where the work is performed add "Bidder certifies that it meets all licensing te in which work is to be performed, its current license number and classification are as"] Bidder hereby affixes its authorized signature(s) representing (check one):  doing business as (enter state)  organized in (enter state)  ormed between and
	(Signature from authorized representatives of each partner are required)
Signature(s):	
Title:	
Name of firm:	
Business address:	
Telephone no.:	( )
Labor & Mach	QUIRED): ashier's Check (10% of Base Bid) ine Rate Sheet (use subcontractor's own form) Qualification Form (Section 00440 in Project Manual Vol.1) rime Contractor Certification Form (Section 00430 in Project Manual Vol.1)

END OF SECTION 00400.313

#### SECTION 00400.314 BID PROPOSAL FORM – 3-14 – Building Electric/Fire Alarm

ISSUE DATE: 11/20/2018

BID DUE DATE: 12/12/2018 1:00 PM

PROJECT: Will County Health Department

501 Ella Avenue Joliet, Illinois

CONSTRUCTION

Attn: Leopardo Companies

Nicole McElroy

NMMcElroy@leopardo.com Senior Project Manager 5200 Prairie Stone Parkway Hoffman Estates, Illinois 60192 MANAGER: LEOPARDO COMPANIES, INC.

ARCHITECT: Kluber Architects + Engineers

FROM:			
Name of Bidder:			
Business Address:			
Phone Number:			

Bidder, in compliance with the Invitation to Bid for construction contemplated for Bid Package No. 3 MEP/Finishes/Carpentry/Glazing having carefully examined the Bidding Documents and the site of the proposed Project and the conditions affecting the proposed Work in the Bid Category(ies) including the condition of the Project site, any surface or subsurface obstruction, the actual levels, all excavating, filling in, removal and demolition, measurements and quantities involved in the Work, the availability of labor, materials and equipment, and the weather conditions that may possibly may be experienced in the Project vicinity, proposes to furnish all labor, materials, tools, equipment, machinery, equipment rental, transportation, superintendence, and services as are necessary to perform all Work in the Bid Category(ies) stated in accordance with the Contract Documents for the Base Bid and Alternate amounts stated below.

If identified as one of the apparent lowest bidder(s) for a Bid Category Bidder agrees to meet immediately with the Leopardo Companies Inc. and shall submit post bid information as described in Section 00200 Instructions to Bidders.

Bidder, if awarded a contract, agrees to: (1) execute the Agreement within fifteen (15) days of receiving notice of the award; (2) provide performance/payment bonds and insurance certificates in full compliance with the Contract Documents, (3) submit the Project Safety Program as described in Section 00200 Instructions to Bidders; (4) commence Work upon execution of the Agreement or at such other time as directed in the notice of award, and (5) to complete its Work in accordance with the Contract Documents and within the milestone activity dates and durations set forth in the Bidding Documents and subsequent construction project master schedule established by Leopardo Companies Inc.

<u>BASE BID</u>: Bidder agrees to perform all Work for Bid Category(ies) as described in the Contract Documents, for the Base Bid(s) stated below. The cost of performance and payment bonds shall be considered as an ADD Alternate. For each Bid Category to be bid, include the Base Bid, written and in figures, the cost of the payment & performance bond which is included in the base bid, written in figures, and the bid category and description.

(Show amounts in both words and figures. In case of discrepancy, amount shown in words will govern).

#### 1. <u>TOTAL BASE BID</u> Bid Category No 3-14 Building Electrical/Fire Alarm

<b>BID CATEGORY</b>	WRITTEN DESCRIPTION/AMOUNT(S)	BID AMOUNT IN FIGURES
Combined Total Base Bid (inc	luding allowances):	
A. Material	DOLLARS	\$
B. Labor	DOLLARS	\$
TOTAL PROJECT COSTS		\$
	DOLLARS	
2. SCHEDULE OF VALUES: B	id Breakdown (Sum Must Match Above Total Including	g Allowances)
A. Shop Drawings/Submittals	DOLLARS	\$
B. Allowances (See Below for '	Total) Twenty Thousand  DOLLARS	\$20,000
C. Temporary Power	DOLLARS	\$
D. Existing Generator Startup (ATS, start-up, load bank test, etc.)	DOLLARS	\$
E. Grounding & Lightning Protection		\$
F. Building Lighting- Material	DOLLARS	\$
	DOLLARS	S
G. Building Lighting- Labor	DOLLARS	\$
H. Lighting Control System	DOLLARS	\$

ISSUE DATE: 11/20/2018

Addendum #1 11/30/18

I. Switchgear and Panels		\$
	DOLLARS	
J. Fire Alarm System		\$
	DOLLARS	
K. BIM Coordination Per Vol. 1		\$
	DOLLARS	
L. PlanGrid/Pull Planning		\$
	DOLLARS	
M. Anything not listed above		\$
	DOLLARS	

#### ALLOWANCES (INCLUDED IN BASE BID)

<u>ALLOWANCES</u>: The subcontractor expressly understands that the allowances listed below are included in the above Project Cost and are to be used for the work to be performed over and above the Scope of Work and the Contract Documents. Draws against these allowances will only be permitted with prior authorization from the Construction Manager's on site Project Manager.

TOTAL ALLOWANCES	Twenty Thousand DOLLARS	\$20,000
	DOLLARS	
Allowance #1: Miscellaneous Electrical Work	Twenty Thousand	\$20,000

#### **ALTERNATES**

<u>ALTERNATES:</u> The following Alternate(s) are requested be offered by the respective Bidders. In the event the Alternate is accepted, Bidder agrees to perform all Work necessary to complete the Work as modified by the Alternate in full accordance with the Contract Documents, for the following add or deduct from the Base Bid as indicated: (Show amount(s) in both words and figures for Alternates. In case of discrepancy, amount shown in words will govern.)

ALTERNATE DESCRIPTION	WRITTEN DESCRIPTION/AMOUNT(S)	ALLOWANCE FIGURES
Alternate #1: Performance/Payment Bond ADD	DOLLARS	\$
Alternate #2: Security, AV, & Structured Cabling Conduit DEDUCT	DOLLARS	
Alternate #3: LED Temporary  Jobsite Lighting		
ADD Alternate #4: Installation of	DOLLARS	
Owner provided X-Ray DEDUCT	DOLLARS	\$

<u>VOLUNTARY ALTERNATES:</u> The following Alternate(s) to Base Bid(s) are voluntary to be offered by the respective Bidders. In the event the Voluntary Alternate is accepted, Bidder agrees to perform all Work necessary to complete the Work as modified by the Voluntary Alternate in full accordance with the Contract Documents, for the following add or deduct from the Base Bid as indicated: (show amounts in both written words and numeric figures for Alternates. In case of discrepancy, amount shown in written words shall govern). Bidder is required to submit sufficient detailed information to fully describe each voluntary Alternate(s) on a separate sheet(s) attached to this Bid Proposal form. Bidders are encouraged to provide voluntary alternates that provide additional value or savings to the Village.

<u>UNIT PRICES</u>: The following Unit Prices to Base Bid Categories are required to be offered by the respective Bidders. Bidder agrees that the following amounts will be used in determining contract changes from the Base Bid for authorized Changes in the Work. Bidder shall not include these unit costs in the Base Bid amount(s). All unit prices shall include Bidder's mark-up for overhead and profit.

1.		\$	/HR
2.		\$	/HR
3.		\$	/HR
evalu	NTITIES: Bidders are required to submit the followating bids. Subcontractors will be responsible to prolete the work regardless of the quantities listed below.	ovide the appropriate amount of material(s) no	
1.	Labor Hours		HRS
2.	Access Panels		EA
3.	Floor boxes for electrical and low voltage		TOTAL

# PLEASE NOTE: ALL BLANKS MUST BE FILLED IN OR YOU MAY BE DEEMED NON-RESPONSIVE

#### LABOR & MACHINE RATES (Attach a Schedule of Equipment and Labor):

<u>Labor/Equipment Rates:</u> The bidder shall provide as a part of his proposal straight time and premium time labor rates for all classifications of trades people and equipment involved with the performance of the work required by this Bid Category. Rates are to include all payroll taxes, insurance fringes, overhead, and profit etc for a complete unit price and shall remain valid for the term of the contract. Rates are to be composite rates showing the cost for each of the components making up the hourly rate items

As of the date of submission of the Bid Proposal,	Bidder's worker's compensation Experience Modification Rate (EMR)
for the state in which the Work is to be performed	is

As of the date of submission of the Bid Proposal, Erector (if erector is to sub-tier subcontractor to Bidder) compensation Experience Modification Rate (EMR) for the state in which the Work is to be performed is

Bidder understands that the Owner /Leopardo Companies Inc. reserve the right to reject any or all Bid Proposals and to waive any informalities or irregularities therein.

Bidder acknowledges receipt of the following Addenda (identify no. and date of each):

good faith and without required to be license requirements of the st follows:  An individual A partnership A limited liab	collusion with any oth d in the state where ate in which work is	her person or ent the work is per- s to be performe Bidder hereby affi	ity submitting a B formed add "Bide ed, its current lick ixes its authorized	(enter state)
Joint venture	organized in formed between		and	
Signature(s): Title:	(Signature from a	uthorized repres	entatives of each p	partner are required)
Name of firm:				
Business address:				
Telephone no.:	( )			
Labor & Mac Subcontractor	Cashier's Check (10% hine Rate Sheet (use so Qualification Form (	subcontractor's of Section 00440 in	n Project Manual	Vol.1) Project Manual Vol.1)

END OF SECTION 00400.314

Leopardo Companies Inc.

#### SECTION 00400.316 BID PROPOSAL FORM – 3-16 – Fire Protection

ISSUE DATE: 11/20/2018

BID DUE DATE: 12/12/2018 1:00 PM

PROJECT: Will County Health Department

501 Ella Avenue Joliet, Illinois

CONSTRUCTION

Attn: Leopardo Companies MANAGER: LEOPARDO COMPANIES, INC.

Nicole McElroy

NMMcElroy@leopardo.com Senior Project Manager 5200 Prairie Stone Parkway Hoffman Estates, Illinois 60192

ARCHITECT: Kluber Architects + Engineers

FROM:			
Name of Bidder:			
Business Address:			
Phone Number:			

Bidder, in compliance with the Invitation to Bid for construction contemplated for Bid Package No. 3 MEP/Finishes/Carpentry/Glazing having carefully examined the Bidding Documents and the site of the proposed Project and the conditions affecting the proposed Work in the Bid Category(ies) including the condition of the Project site, any surface or subsurface obstruction, the actual levels, all excavating, filling in, removal and demolition, measurements and quantities involved in the Work, the availability of labor, materials and equipment, and the weather conditions that may possibly may be experienced in the Project vicinity, proposes to furnish all labor, materials, tools, equipment, machinery, equipment rental, transportation, superintendence, and services as are necessary to perform all Work in the Bid Category(ies) stated in accordance with the Contract Documents for the Base Bid and Alternate amounts stated below.

If identified as one of the apparent lowest bidder(s) for a Bid Category Bidder agrees to meet immediately with the Leopardo Companies Inc. and shall submit post bid information as described in Section 00200 Instructions to Bidders.

Bidder, if awarded a contract, agrees to: (1) execute the Agreement within fifteen (15) days of receiving notice of the award; (2) provide performance/payment bonds and insurance certificates in full compliance with the Contract Documents, (3) submit the Project Safety Program as described in Section 00200 Instructions to Bidders; (4) commence Work upon execution of the Agreement or at such other time as directed in the notice of award, and (5) to complete its Work in accordance with the Contract Documents and within the milestone activity dates and durations set forth in the Bidding Documents and subsequent construction project master schedule established by Leopardo Companies Inc.

<u>BASE BID</u>: Bidder agrees to perform all Work for Bid Category(ies) as described in the Contract Documents, for the Base Bid(s) stated below. The cost of performance and payment bonds shall be considered as an ADD Alternate. For each Bid Category to be bid, include the Base Bid, written and in figures, the cost of the payment & performance bond which is included in the base bid, written in figures, and the bid category and description.

(Show amounts in both words and figures. In case of discrepancy, amount shown in words will govern).

## 1. TOTAL BASE BID Bid Category No. 3-16 Fire Protection

	BID CATEGORY	WRITTEN DESCRIPTION/AMOUNT(S)	BID AMOUNT IN FIGURES
	Combined Total Base Bid (includ	ing allowances):	
	A. Material		\$
	_	DOLLARS	
	B. Labor		\$
		DOLLARS	
	TOTAL PROJECT COSTS		\$
		DOLLARS	
2.	SCHEDULE OF VALUES: Bid I	Breakdown (Sum Must Match Above Total Including	Allowances)
	A. Shop Drawings/Submittals	DOLLARS	\$
	B. Allowances (See Below for Tota		\$10,000
		DOLLARS	
	C. Wet Pipe Sprinkler System		\$
	including Service Equipment	DOLLARS	
	D. Dry Pipe Sprinkler System	DOLLARS	\$
	including Service Equipment.	DOLLARS	
	E. Pre-Action System Smoke Systems.		\$
		DOLLARS	
	F. Pre Action System Smoke		\$
		DOLLARS	
	G. Miscellaneous (Fire Extinguishers, Access Doors)	DOLLING	\$
		DOLLARS	
	H. BIM Coordination Per Vol.1		\$
		DOLLARS	

-		\$
	DOLLARS	ψ
J		\$
	DOLLARS	
ALLOWANCES: The subcontractor expression Project Cost and are to be used for the weather than the subcontractor expression.	VANCES (INCLUDED IN BASE BID) essly understands that the allowances listed below are in ork to be performed over and above the Scope of Wor ces will only be permitted with prior authorization fro	rk and the Contract
Allowance #1: Miscellaneous	an and	Ф10.000
Sprinkler Work	Ten Thousand DOLLARS	\$10,000
TOTAL ALLOWANCES	Ten Thousand	\$10,000
	DOLLARS	Ψ <b>20</b> 9000
	nents, for the following add or deduct from the Base Bid ernates. In case of discrepancy, amount shown in words	
	WRITTEN DESCRIPTION/AMOUNT(S)	ALLOWANCE FIGURES
Alternate #1: Performance/Payment Bond ADD	DOLLARS	ALLOWANCE
Alternate #1: Performance/Payment Bond		ALLOWANCE
Alternate #1: Performance/Payment Bond ADD		ALLOWANCE
Alternate #1: Performance/Payment Bond ADD Alternate #2:	DOLLARS	ALLOWANCE
Alternate #1: Performance/Payment Bond ADD  Alternate #2:  ADD/DEDUCT	DOLLARS	ALLOWANCE FIGURES
Alternate #1: Performance/Payment Bond ADD  Alternate #2:  ADD/DEDUCT  Alternate #3:	DOLLARS	ALLOWANCE FIGURES
Alternate #1: Performance/Payment Bond ADD  Alternate #2:  ADD/DEDUCT  Alternate #3:	DOLLARS	ALLOWANCE FIGURES \$

<u>VOLUNTARY ALTERNATES:</u> The following Alternate(s) to Base Bid(s) are voluntary to be offered by the respective Bidders. In the event the Voluntary Alternate is accepted, Bidder agrees to perform all Work necessary to complete the Work as modified by the Voluntary Alternate in full accordance with the Contract Documents, for the following add or deduct from the Base Bid as indicated: (show amounts in both written words and numeric figures for Alternates. In case of discrepancy, amount shown in written words shall govern). Bidder is required to submit sufficient detailed information

ADD/DEDUCT

DOLLARS

to fully describe each voluntary Alternate(s) on a separate sheet(s) attached to this Bid Proposal form. Bidders are encouraged to provide voluntary alternates that provide additional value or savings to the Village.

<u>UNIT PRICES</u>: The following Unit Prices to Base Bid Categories are required to be offered by the respective Bidders. Bidder agrees that the following amounts will be used in determining contract changes from the Base Bid for authorized Changes in the Work. Bidder shall not include these unit costs in the Base Bid amount(s). All unit prices shall include Bidder's mark-up for overhead and profit.

1.	Engineering Services Provided In-House	YES	NO
2.	Furnish and Install Upright Sprinkler Head	\$	/EA
3.	Furnish and Install Semi Recessed Sprinkler Head	\$	/ EA
4.	Furnish and Install 1" Sprinkler Pipe	\$	/ LF
5.	Furnish and Install 1 ½ " Sprinkler Pipe	\$	/LF
6.	Furnish and Install 2" Sprinkler Pipe	\$	/LF
7.	Furnish and Install 2 ½" Sprinkler Pipe	<u>\$</u>	/ LF
8.	Furnish and Install 4" Sprinkler Pipe	\$	/ LF
9.	Furnish and Install Fire Hose Cabinet	\$	/EA
10.	Furnish and Install Head Guard	\$	/EA
11.	Furnish and Install Fire Extinguisher Cabinet with FE	<u>\$</u>	/EA
12.	Furnish and Install Control Valve	<u>\$</u>	/EA
13.	Furnish and Install Flow Switch	<u>\$</u>	/EA
14.	Furnished Access Doors (Installed by Others)	\$	/EA
15.	Furnish and Install 6" Sprinkler Pipe	\$	/LF

<u>QUANTITIES</u>: Bidders are required to submit the following quantities. Quantities will be used for the purpose of evaluating bids. Subcontractors will be responsible to provide the appropriate amount of material(s) necessary to complete the work regardless of the quantities listed below.

1.	1" Sprinkler Pipe	LF
	1 1/ 2 Cardallan Bin -	
2.	1 ½" Sprinkler Pipe	LF
3.	2" Sprinkler Pipe	LF

4.	2 ½ " Sprinkler Pipe	LF
5.	4" Sprinkler Pipe	LF
6.	1" Sprinkler Pipe	LF
7.	All Spoils to Remain On-Site	CY
8.	Furnished Access Doors (Installed by Others)	TOTA
9.	6" Sprinkler Pipe	LF
10.	Labor Hours	HRS
Labor/I for all c Categor and sha compor As of th Experies Bidder	R & MACHINE RATES (Attach a Schedule of Equipment and Labo Equipment Rates: The bidder shall provide as a part of his proposal stra classifications of trades people and equipment involved with the perform ry. Rates are to include all payroll taxes, insurance fringes, overhead, an ill remain valid for the term of the contract. Rates are to be composite ra ments making up the hourly rate items  the date of submission of the Bid Proposal, Bidder's worker's compensati state in which the Work is to be performed is  the date of submission of the Bid Proposal, Erector (if erector is to sub-tie ments making the date of submission of the Bid Proposal, Erector (if erector is to sub-tie ments modification Rate (EMR) for the state in which the Work is to be punderstands that the Owner /Leopardo Companies Inc. reserve the right my informalities or irregularities therein.	rates and premium time labor rates ance of the work required by this Bid and profit etc for a complete unit price tes showing the cost for each of the con Experience Modification Rate (EMR) er subcontractor to Bidder) compensation performed is
	r acknowledges receipt of the following Addenda (identify no. and o	late of each):
good fa require	accepts the provisions of the Bidding and Contract Documents and certi ith and without collusion with any other person or entity submitting a lid to be licensed in the state where the work is performed add "Bidments of the state in which work is to be performed, its current lieger Bidder hereby affixes its authorized An individual doing business as A partnership	Bid Proposal for the Work. [If Bidder is lder certifies that it meets all licensing
	A limited liability company, organized in	_ (enter state)

Leopardo Companies Inc.			Will County Health Department	
A corporation, Joint venture fo		and and presentatives of each p	(enter state)  artner are required)	
Signature(s):				
Title:				
Name of firm:				
Business address:				
Telephone no.:	( )			
Labor & Mach Subcontractor	QUIRED): ashier's Check (10% of Base Bid ine Rate Sheet (use subcontracto Qualification Form (Section 004- rime Contractor Certification Fo	r's own form) 40 in Project Manual V		

END OF SECTION 00400.316

ISSUE DATE: 11/20/2018 Addendum #1 11/30/2018

#### SECTION 00400.317 BID PROPOSAL FORM – 3-17 – Security

ISSUE DATE: 11/20/2018

BID DUE DATE: 12/12/2018 1:00 PM

PROJECT: Will County Health Department

501 Ella Avenue Joliet, Illinois

CONSTRUCTION

Attn: Leopardo Companies

Nicole McElroy

NMMcElroy@leopardo.com Senior Project Manager 5200 Prairie Stone Parkway Hoffman Estates, Illinois 60192 MANAGER: LEOPARDO COMPANIES, INC.

ARCHITECT: Kluber Architects + Engineers

FROM:			
Name of Bidder:			
Business Address:			
Phone Number:			

Bidder, in compliance with the Invitation to Bid for construction contemplated for Bid Package No. 3 MEP/Finishes/Carpentry/Glazing having carefully examined the Bidding Documents and the site of the proposed Project and the conditions affecting the proposed Work in the Bid Category(ies) including the condition of the Project site, any surface or subsurface obstruction, the actual levels, all excavating, filling in, removal and demolition, measurements and quantities involved in the Work, the availability of labor, materials and equipment, and the weather conditions that may possibly may be experienced in the Project vicinity, proposes to furnish all labor, materials, tools, equipment, machinery, equipment rental, transportation, superintendence, and services as are necessary to perform all Work in the Bid Category(ies) stated in accordance with the Contract Documents for the Base Bid and Alternate amounts stated below.

If identified as one of the apparent lowest bidder(s) for a Bid Category Bidder agrees to meet immediately with the Leopardo Companies Inc. and shall submit post bid information as described in Section 00200 Instructions to Bidders.

Bidder, if awarded a contract, agrees to: (1) execute the Agreement within fifteen (15) days of receiving notice of the award; (2) provide performance/payment bonds and insurance certificates in full compliance with the Contract Documents, (3) submit the Project Safety Program as described in Section 00200 Instructions to Bidders; (4) commence Work upon execution of the Agreement or at such other time as directed in the notice of award, and (5) to complete its Work in accordance with the Contract Documents and within the milestone activity dates and durations set forth in the Bidding Documents and subsequent construction project master schedule established by Leopardo Companies Inc.

<u>BASE BID</u>: Bidder agrees to perform all Work for Bid Category(ies) as described in the Contract Documents, for the Base Bid(s) stated below. The cost of performance and payment bonds shall be considered as an ADD Alternate. For each Bid Category to be bid, include the Base Bid, written and in figures, the cost of the payment & performance bond which is included in the base bid, written in figures, and the bid category and description.

(Show amounts in both words and figures. In case of discrepancy, amount shown in words will govern).

#### 1. TOTAL BASE BID

**Bid Category No. 3-17 Security** 

<b>BID CATEGORY</b>	WRITTE	EN DESCRIPTION/AMOUNT(S)	BID AMOUNT IN FIGURES
Combined Total Base Bid (inc	cluding allowances	s):	
A. Material			\$
		DOLLARS	
B. Labor			\$
		DOLLARS	
TOTAL PROJECT COSTS			\$
SCHEDULE OF VALUES: E	Bid Breakdown (S	DOLLARS um Must Match Above Total Includin	g Allowances)
A. Shop Drawings/Submittals			\$
		DOLLAR	S
B. Allowances (See Below for	Total)	Ten Thousand DOLLAR	\$10,000 S
C. CCTV Camera System (Including Wire/Power)			\$
		DOLLAR	S
F. Burglar System (Including Wire/Power)			\$
		DOLLAR	S
G. Access Control System (Including Wire/Power)			\$
		DOLLAR	S
H. PlanGrid/Pull Planning			\$
		DOLLAR	S
I.		DOLLAR	<u>\$</u>
J.		D OBEAN	\$
•		DOLLAR	S

#### ALLOWANCES (INCLUDED IN BASE BID)

<u>ALLOWANCES</u>: The subcontractor expressly understands that the allowances listed below are included in the above Project Cost and are to be used for the work to be performed over and above the Scope of Work and the Contract Documents. Draws against these allowances will only be permitted with prior authorization from the Construction Manager's on site Project Manager.

Allowance #1: Miscellaneous Security Allowance	Ten Thousand	\$10,000
	DOLLARS	
TOTAL ALLOWANCES	Ten Thousand	\$10,000
	DOLLARS	
Alternate is accepted, Bidder agrees to in full accordance with the Contract Do	rnate(s) are requested be offered by the respective Bidder perform all Work necessary to complete the Work as modi ocuments, for the following add or deduct from the Base Bid r Alternates. In case of discrepancy, amount shown in word	fied by the Alternate l as indicated: (Show
ALTERNATE DESCRIPTION	WRITTEN DESCRIPTION/AMOUNT(S)	ALLOWANCE FIGURES
Alternate #1:		
Performance/Payment Bond ADD	DOLLARS	\$
Alternate #2: Furnish & install all C complete security system	onduit for	
ADD	DOLLARS	
Alternate #3: Delete LED lights outside each room		\$
deduct	DOLLARS	
Alternate #4: Provide wireless in lieu of hardwired for panic		\$

<u>VOLUNTARY ALTERNATES:</u> The following Alternate(s) to Base Bid(s) are voluntary to be offered by the respective Bidders. In the event the Voluntary Alternate is accepted, Bidder agrees to perform all Work necessary to complete the Work as modified by the Voluntary Alternate in full accordance with the Contract Documents, for the following add or deduct from the Base Bid as indicated: (show amounts in both written words and numeric figures for Alternates. In case of discrepancy, amount shown in written words shall govern). Bidder is required to submit sufficient detailed information to fully describe each voluntary Alternate(s) on a separate sheet(s) attached to this Bid Proposal form. Bidders are encouraged to provide voluntary alternates that provide additional value or savings to the Village.

<u>UNIT PRICES</u>: The following Unit Prices to Base Bid Categories are required to be offered by the respective Bidders. Bidder agrees that the following amounts will be used in determining contract changes from the Base Bid for authorized Changes in the Work. Bidder shall not include these unit costs in the Base Bid amount(s). All unit prices shall include Bidder's mark-up for overhead and profit.

deduct

DOLLARS

1.	Add/Deduct per Card Reader	\$ /EA
2.	Add/Deduct per Security Dome Camera	\$ / EA
3.	Add/Deduct per Security Multilense Camera	\$ / EA
4.	Add/Deduct per Exterior 180 Camera with Wall Mount	\$ / EA
5.	Add/Deduct per Exterior Pole Camera with Pole Mount	\$ / EA
6.		\$ / EA
7.		\$ / EA
8.		\$ /CY
9.		\$ /CY
evalu	NTITIES: Bidders are required to submit the following quantities. Quating bids. Subcontractors will be responsible to provide the appropria lete the work regardless of the quantities listed below.	
2.	Card Reader	TOTAL
	Card Reader  Dome Camera	TOTAL
3.		
	Dome Camera	TOTAL
3.	Dome Camera  Multilense Camera	TOTAL
<ul><li>3.</li><li>4.</li></ul>	Dome Camera  Multilense Camera  Exterior 180 Camera with Wall Mount	TOTAL  TOTAL
<ul><li>3.</li><li>4.</li><li>5.</li></ul>	Dome Camera  Multilense Camera  Exterior 180 Camera with Wall Mount  Exterior Pole Camera with Pole Mount	TOTAL  TOTAL  TOTAL

# PLEASE NOTE: ALL BLANKS MUST BE FILLED IN OR YOU MAY BE DEEMED NON-RESPONSIVE

#### LABOR & MACHINE RATES (Attach a Schedule of Equipment and Labor):

<u>Labor/Equipment Rates:</u> The bidder shall provide as a part of his proposal straight time and premium time labor rates for all classifications of trades people and equipment involved with the performance of the work required by this Bid

	aclude all payroll taxes, insurance fringes, overhead, and profit etc. for a complete unit price or the term of the contract. Rates are to be composite rates showing the cost for each of the he hourly rate items		
	sion of the Bid Proposal, Bidder's worker's compensation Experience Modification Rate (EMR) Work is to be performed is		
As of the date of submission of the Bid Proposal, Erector (if erector is to sub-tier subcontractor to Bidder) compensation Experience Modification Rate (EMR) for the state in which the Work is to be performed is			
Bidder understands that waive any informalities of	the Owner /Leopardo Companies Inc. reserve the right to reject any or all Bid Proposals and to or irregularities therein.		
Bidder acknowledges	receipt of the following Addenda (identify no. and date of each):		
good faith and without c required to be licensed requirements of the star follows:  An individual of A partnership A limited liabil A corporation,	sions of the Bidding and Contract Documents and certifies that this Bid Proposal is submitted in sollusion with any other person or entity submitting a Bid Proposal for the Work. [If Bidder is in the state where the work is performed add "Bidder certifies that it meets all licensing te in which work is to be performed, its current license number and classification are as"] Bidder hereby affixes its authorized signature(s) representing (check one):  doing business as (enter state)  organized in (enter state)  organized between and		
	(Signature from authorized representatives of each partner are required)		
Signature(s):			
Title:			
Name of firm:			
Business address:			
Telephone no.:	( )		
Labor & Machi	QUIRED): ashier's Check (10% of Base Bid) ine Rate Sheet (use subcontractor's own form) Qualification Form (Section 00440 in Project Manual Vol.1) rime Contractor Certification Form (Section 00430 in Project Manual Vol.1)		

END OF SECTION 00400.317

#### SECTION 00400.321 BID PROPOSAL FORM – 3-21 – Signage

ISSUE DATE: 11/20/2018

BID DUE DATE: 12/12/2018 1:00 PM

PROJECT: Will County Health Department

501 Ella Avenue Joliet, Illinois

CONSTRUCTION

Attn: Leopardo Companies

Nicole McElroy

NMMcElroy@leopardo.com Senior Project Manager 5200 Prairie Stone Parkway Hoffman Estates, Illinois 60192 MANAGER: LEOPARDO COMPANIES, INC.

ARCHITECT: Kluber Architects + Engineers

FROM:		 	
Name of Bidder:			
Business Address:			
Phone Number:			

Bidder, in compliance with the Invitation to Bid for construction contemplated for Bid Package No. 3 MEP/Finishes/Carpentry/Glazing having carefully examined the Bidding Documents and the site of the proposed Project and the conditions affecting the proposed Work in the Bid Category(ies) including the condition of the Project site, any surface or subsurface obstruction, the actual levels, all excavating, filling in, removal and demolition, measurements and quantities involved in the Work, the availability of labor, materials and equipment, and the weather conditions that may possibly may be experienced in the Project vicinity, proposes to furnish all labor, materials, tools, equipment, machinery, equipment rental, transportation, superintendence, and services as are necessary to perform all Work in the Bid Category(ies) stated in accordance with the Contract Documents for the Base Bid and Alternate amounts stated below.

If identified as one of the apparent lowest bidder(s) for a Bid Category Bidder agrees to meet immediately with the Leopardo Companies Inc. and shall submit post bid information as described in Section 00200 Instructions to Bidders.

Bidder, if awarded a contract, agrees to: (1) execute the Agreement within fifteen (15) days of receiving notice of the award; (2) provide performance/payment bonds and insurance certificates in full compliance with the Contract Documents, (3) submit the Project Safety Program as described in Section 00200 Instructions to Bidders; (4) commence Work upon execution of the Agreement or at such other time as directed in the notice of award, and (5) to complete its Work in accordance with the Contract Documents and within the milestone activity dates and durations set forth in the Bidding Documents and subsequent construction project master schedule established by Leopardo Companies Inc.

<u>BASE BID</u>: Bidder agrees to perform all Work for Bid Category(ies) as described in the Contract Documents, for the Base Bid(s) stated below. The cost of performance and payment bonds shall be considered as an ADD Alternate. For each Bid Category to be bid, include the Base Bid, written and in figures, the cost of the payment & performance bond which is included in the base bid, written in figures, and the bid category and description.

(Show amounts in both words and figures. In case of discrepancy, amount shown in words will govern).

TOTAL BASE BID Bid Category No. 3-21 Signage		
BID CATEGORY	WRITTEN DESCRIPTION/AMOUNT(S)	BID AMOU IN FIGUR
Combined Total Base Bid (including	ng allowances):	
A. Material		\$
	DOLLARS	
B. Labor		\$
	DOLLARS	
TOTAL PROJECT COSTS		\$
	DOLLARS	<u> </u>
A. Shop Drawings/Submittals	DOLLARS	\$
B. Allowances (See Below for Total		\$40,000
D. Allowances (See Delow for 10tal)	DOLLARS	
C. Furnish Interior Signage		\$
	DOLLARS	}
D. Furnish Exterior Signage		\$
	DOLLARS	\$
E. Installation		\$
	DOLLARS	
F. PlanGrid/Pull Planning	DOLLARG	\$
	DOLLARS	•
C		•

#### ALLOWANCES (INCLUDED IN BASE BID)

<u>ALLOWANCES</u>: The subcontractor expressly understands that the allowances listed below are included in the above Project Cost and are to be used for the work to be performed over and above the Scope of Work and the Contract

**DOLLARS** 

Documents. Draws against these allowances will only be permitted with prior authorization from the Construction Manager's on site Project Manager.

Allowance #1: Type N kiosk (stated in specs)	Twenty-Five Thousand-Shown on drawings	\$25,000
	DOLLARS	
Allowance #1: Misc. (stated in	Fifteen Thousand Shown on drawings	
specs)		\$15,000
	DOLLARS	
TOTAL ALLOWANCES	Forty Thousand	\$40,000
	DOLLARS	

#### **ALTERNATES**

<u>ALTERNATES:</u> The following Alternate(s) are requested be offered by the respective Bidders. In the event the Alternate is accepted, Bidder agrees to perform all Work necessary to complete the Work as modified by the Alternate in full accordance with the Contract Documents, for the following add or deduct from the Base Bid as indicated: (Show amount(s) in both words and figures for Alternates. In case of discrepancy, amount shown in words will govern.)

ALTERNATE DESCRIPTION	WRITTEN DESCRIPTION/AMOUNT(S)	ALLOWANCE FIGURES
Alternate #1: Performance/Payment Bond ADD	DOLLARS	\$
Alternate #2:		\$
ADD/DEDUCT	DOLLARS	-

<u>VOLUNTARY ALTERNATES:</u> The following Alternate(s) to Base Bid(s) are voluntary to be offered by the respective Bidders. In the event the Voluntary Alternate is accepted, Bidder agrees to perform all Work necessary to complete the Work as modified by the Voluntary Alternate in full accordance with the Contract Documents, for the following add or deduct from the Base Bid as indicated: (show amounts in both written words and numeric figures for Alternates. In case of discrepancy, amount shown in written words shall govern). Bidder is required to submit sufficient detailed information to fully describe each voluntary Alternate(s) on a separate sheet(s) attached to this Bid Proposal form. Bidders are encouraged to provide voluntary alternates that provide additional value or savings to the Village.

<u>UNIT PRICES</u>: The following Unit Prices to Base Bid Categories are required to be offered by the respective Bidders. Bidder agrees that the following amounts will be used in determining contract changes from the Base Bid for authorized Changes in the Work. Bidder shall not include these unit costs in the Base Bid amount(s). All unit prices shall include Bidder's mark-up for overhead and profit.

1.	Room Plaques	\$ /EA
		•
2.		\$ /HR

<u>QUANTITIES</u>: Bidders are required to submit the following quantities. Quantities will be used for the purpose of evaluating bids. Subcontractors will be responsible to provide the appropriate amount of material(s) necessary to complete the work regardless of the quantities listed below.

1. Labor Hours	HRS
2.	
3.	
PLEASE NOTE: ALL BLANKS DEEMED NON-RESPONSIVE	S MUST BE FILLED IN OR YOU MAY BE
LABOR & MACHINE RATES (Attach a Schedu	le of Equipment and Labor):
<u>Labor/Equipment Rates:</u> The bidder shall provide For all classifications of trades people and equipme Category. Rates are to include all payroll taxes, include all payroll taxes, include all payroll taxes.	as a part of his proposal straight time and premium time labor rates nt involved with the performance of the work required by this Bid surance fringes, overhead, and profit etc. for a complete unit price Rates are to be composite rates showing the cost for each of the
As of the date of submission of the Bid Proposal, B for the state in which the Work is to be performed in	idder's worker's compensation Experience Modification Rate (EMR) s
	rector (if erector is to sub-tier subcontractor to Bidder) compensation in which the Work is to be performed is
Bidder understands that the Owner /Leopardo Conwaive any informalities or irregularities therein.	npanies Inc. reserve the right to reject any or all Bid Proposals and to
Bidder acknowledges receipt of the following A	Addenda (identify no. and date of each):
good faith and without collusion with any other perequired to be licensed in the state where the warequirements of the state in which work is to be collows:	ontract Documents and certifies that this Bid Proposal is submitted in a proposal or entity submitting a Bid Proposal for the Work. [If Bidder is work is performed add "Bidder certifies that it meets all licensing be performed, its current license number and classification are as hereby affixes its authorized signature(s) representing (check one):
A partnership A limited liability company, organized in	
A corporation, organized in	(enter state)
Joint venture formed between	and
(Signature from author	ized representatives of each partner are required)
Signature(s):	
Title:	

PROJECT MANUAL SECTION 00400.321 – Bid Proposal Form 3-21

Leopardo Companies Inc.	V	Vill County Health Department
Name of firm:		
Business address:		
Telephone no.:	_( )	
ATTACHMENTS (REC		
	shier's Check (10% of Base Bid) ne Rate Sheet (use subcontractor's own form)	
Subcontractor (	Qualification Form (Section 00440 in Project Manual Vol.1)	177.14)
Signed Copy Pr	ime Contractor Certification Form (Section 00430 in Project Ma	nual Vol.1)

END OF SECTION 00400.321



DEPARTMENT: DATE:

WILL COUNTY HEALTH DEPARTMENT BP# 3 – PRE-BID WORKSHOP/CONFERENCE TUESDAY, NOVEMBER 20, 2018 11:00 A.M.



NAME	COMPANY	PHONE	BP# - Scope of Work	EMAIL ADDRESS
BRIAN DESPAIN	AIR DESIGN	6302405683	HVAC	BDESPAIN@ AIR DESIGN SYS. COM
MIKE UYSALOGLU	Floorin Resource	847 - 640-7300	Florin.	
SCOTT M'GUIRE	FE MORAN FIRE PATT-	224-250-4686	FIRE SUPP.	- A-6-3-4-7-
au Vandurbert	Excel Electric Inc.	(815)464-5550	electric	estimating oexcelel com
Tejal Gajjar	Poulos Construction	(13)626 8600	Caropentry	admin@ poulas construction.
Taressa Leonardo	JU	9154124226	BA   FA	taressa, faso, leonardo Q je
Mike VIIrich	Smith Painting Servery	815-518-5528	3-08	Smith Pourting 200 Cred
KEVIN Himmelman	OMEGA PLUMBINS	815-693-81n	3-15	Khimaelman@onega Dunbing.com
TIM JOHNSON	EDWARDSENGINEERING	847-507-0016	HVAC	timiphnson Dedwards engineering.com
Elizabeth Bilatta	wests	8155304783		BIVOHa DWILLCOUNTYheatta
Sue Olenek	WCHD	815405-0744		Scheneke will county health org
JOCK MCGRIHY	BRADGORD	847-652-6492		TACK C BRADINESSYSTEMS. CO.
Ali Younes	Flo-Tech Mechanical System	630-543-1118	HUAC	A Vounes & Flotech mechanical.com
RICK GROSS	AMS	630-320-7744	HVAC/PWMB	RGROSSE AMS-PMT. COM



**DEPARTMENT:** DATE:

WILL COUNTY HEALTH DEPARTMENT BP# 3 - PRE-BID WORKSHOP/CONFERENCE 11:00 A.M. **TUESDAY, NOVEMBER 20, 2018** 

Leopardo

NAME	COMPANY	PHONE	BP# - Scope of Work	EMAIL ADDRESS
JEFF ANGSTAUT	STONHARD)		3-04	
ROBERT HTU	STON HATE TO	- Availa	3-44	Thillo Storhard. com
Tom Muldugt	MTH Industries	A A A A A A A A A A A A A A A A A A A	3-04	+mchugh@mthindustros,co
Andre Ranger	None		3-	AUNDO HEEKD COM
BAND WORDZAKEN	Ashach & Varaselow		3.7	RANDYO AYCHEDENTA
Jim Isberg	CES			frist h
Tom Maris	MECHANICAL INC		3-13 3-15	THAME @ MICHING. COM
BOBLAMB	RUDER ELECTRIC	815-932-8660	3.14,17,18,19	blamb@ruderelection.com
CHNE PRORNICZ	PACE SYSTEMS INC	650-310 6655	BUN, 1718.19. KNO	CRORWITE PALE-Spines.
DAJE GREY	RIO'NEIL	630-906-1300	3-13/3-15	daveg @ rjone 11. com
Steve Martin	Peak Electric	708-233-1600	3 - 7	Steve @ Peakelec.com
Bill Deppert	Peak Electric	708-825-7783	3-7	bill & Peakelec. com
Katie Olbrot	Correct Digital DisplayInc.	815-416-8560	5-29	Katie acorrected com
Zach Douglas	Douglas Floering	632-870-2764	3-03/3-01	zach@daylusflooring.com
John HAVER'S	DB17 32425	708-995-1973	3-04/3-01	JUHNEJBM SQUIGSING. CUM



DEPARTMENT: DATE:

WILL COUNTY HEALTH DEPARTMENT BP# 2 - PRE-BID WORKSHOP/CONFERENCE TUESDAY, OCTOBER 16, 2018

2:00 P.M.



NAME	COMPANY	PHONE	BP# - Scope of Work	EMAIL ADDRESS
PAT DWYER	AIR QUALITY	(815)485-6867		Estimating @ AgithVAC.Co
A STATE OF THE STA			- Marian	
ADDRESS.				
- Joseph III			ALAMAN	
100000				



#### FLO-TECH

MECHANICAL SYSTEMS, INC.

1300 National Ave. Ste. A . Addison, IL 60101-3149

Ali Younes Project Engineer

1 (630) 543-1118

Cell (630) 847-6666

Fax (630) 543-1497

ayounes@flotechmechanical.com



Web:www.poulosconstruction.com 735 South Laramie Avenue



Mike Uysalogiu

Field Supervisor & Measures

mikeu@frcmall.com p. 847-514-1220

f. 847-640-9631

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#### Taressa Faso Leonardo

Commercial Account Executive, North America **Building Technologies & Solutions** 

Johnson Controls 2010 Swift Dr, Oak Brook, IL 60523 United States Cell +1 815 412 4226 taressa.faso.leonardo@jci.com www.johnsoncontrols.com

#### F.E. MORAN FIRE PROTECTION



femoranfp.com

#### SCOTT MCGUIRE

Sales Executive

2165 Shermer Road Suite D Northbrook, IL 60062

(847) 498-4870 Office 24-Hour (847) 714-8321 Direct (224) 250-4686 Cell (847) 498-9084 Fax

scott.mcguire@femoran.com

Brian DeSpain Drafting / CAD Designer

# INNOVATION, QUALITY, SAFETY,

bdespain@airdesignsys.com Direct: 630.861.7647 | Fax: 630.654.2211 | Ceil: 630.240.5683 12011 West 91st Street I Willow Springs, IL 60480

1000 East Park Avenue Maple Shade, NJ 08052 m: 312.735.9035

800.854.0310 856.321.7634

CMG/MIDWEST jangstadt@stonhard.com





om McHugh uality Control Engineer 5101 Darmstadt Road Hillside, IL 60162

(708) 498-1100 Ext 295 (708) 498-1195 DIRECT (708) 990-6799 MOBILE (708) 498-1101 FAX tmchugh@mthindustries.com

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#### Jim Isberg

Foreman/Project Manager

2447 Reeves Road Joliet, IL 60436 www,CEScomplete.com

O 815.207.7708 F 815.741.3345 C 815.693.1558 Jisberg@CEScomplete.com

**I**EFF **A**NGSTADT REGIONAL CONSTRUCTION MANAGER

HQ: 1000 East Park Avenue Maple Shade, NJ 08052

m: 312.802.3781

t: '800.854:0310

f: 856.321.7634

ROBERT HILL TERRITORY MANAGER SOUTHWEST CHICAGO

rhill@stonhard.com



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Carpenter Contractors

Asbach & Vanselow, Inc. 1000 Brown Street, Suite 311 Wauconda, IL 60084

TEL: (847) 487-4664 x23 CELL: (847) 490-4734 Email: randy@avcorpentry.com



MECHANICAL INC.

Illinois Freeport - Westmont Rockford - Fox Lake - Peoria

Milwaukee, WI Omaha, NE

815.235.1955 office 815.670.9285 cell tmatus@mechinc.com www.mechinc.com

#### TOM MATUS

Startegic Growth Manager

A Helm Group Company

## Ruder Electric, Inc.

Commercial and Industrial Robert L. Lamb - Estimator

(815) 932-8660 Fax (815) 932-7005 pbile (815) 693-6077

1075 Lesco Rd • Kankakee, IL 60901

#### **Gene Prorwicz Director - Special Systems**

2040 Corporate Lane, Naperville, IL 60563 Office: 630-395-2240

Cell: 630-310-6655 Fax: 630-395-2250

E-mail:gprorwicz@pace-systems.com

Α



#### Dave Grey **Construction Manager**

25 S. Lake St. ontgomery, IL 60538 Mail: daveg@rjoneil.com Phone: 630-906-1300 Fax: 630-906-1369 Cell: 630-742-6016



### PEAK ELECTRIC, INC.

#### Bill Deppert

Estimator/Project Manager Communications Division.

8400 S. 77th Avenue Bridgeview, IL 60455

Email: Bill@peakelec.com

Phone: (708) 233-1600 Fax: (708) 233-1603

Cell: (708) 825-7783



3677 Illinois State Route 71 Sheridan, IL 60551 Office: 815.695.1000 Fax: 815.496.2777 david@correctdd.com

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John Kavouris, P.E.	708 995 1478
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# Will County Health Department

## Bid Package No. 3 Pre-Bid Conference

11/20/2018

# **Project Team**

- Owner: Will County
- Construction Manager: Leopardo Construction
- Design Architect: Kluber Architects + Engineers
- MEP Engineer: Kluber Architects + Engineers
- Structural Engineer: Kluber Architects + Engineers
- □ Civil Engineer: HR Green
- Landscape Designer: HR Green





#### **General Information**



- 501 Ella Avenue, Joliet IL 60433
- Two Story Building -Masonry on Cold Formed Metal Stud Framing with a Metal Panel System and EPDM Fully adhered Roof
- Total Building Area: 73,200 SF
- Total Site Area: 9.1 Acres







## **Bid Packages**

- □ Bid Package #1 Site Improvements
  - CLOSED
- Bid Package #2 Enclosure/Structural Steel/Misc. Metals/Elevator
  - CLOSED
- Bid Package #3 MEP/Finishes/Carpentry/Glazing
  - Documents Issued 11/20/2018
  - Bid Due Date 12/12/2018
  - Award 01/08/2019





## **Bid Package Documents**

- Leopardo Construction Project Manual Vol. 1 dated 11/20/2018 (Front End Documents) including Leopardo Construction Subcontract Master Agreement, Work Authorization, Insurance Requirements, Bonding Criteria, Bond Forms, Draw Procedure, Certified Payroll Forms, and Tax Exempt Letter
- Leopardo Construction Project Manual Vol. 2 (Kluber Specifications) dated 11/20/2018
- Bid Package 1 Drawings dated 09/24/2018
- Bid Package 2 Drawings dated 10/22/2018
- Bid Package 3 Drawings dated 11/20/2018





## Project Manual Notes and Bid Form Specifics

- Instruction to Bidders-Section 00200
- Works Scope-Section 00220
- Bid Proposal Forms-Section 00400 (Required with Sealed Bid)
- Bond Requirements-Section 00610 (Required with Sealed Bid)
- Insurance Requirements-Section 00620
- Schedule and Site logistics Plan-Section 00230
- Temporary Construction-Section 01520
- □ Layout-Section 01530
- Project is Tax Exempt for permanently installed materials only -Section 00880
- Qualification Forms-Section 00440 (Required with Sealed Bid)
- Each Bidder must bid on all Alternates (Required with Sealed Bid)
- Voluntary Alternates are accepted and encouraged
- Each Bidder must bid on all unit prices listed in the Bid Proposal that are applicable to the Bid Category (Required with Sealed Bid)
- Subcontractor must comply with the most current County Prevailing Wage parameters
- Permits General Building Permit by Owner, all other permits and fees by subcontractor
- Successful bidder must become licensed to do work in Will County
- ANY EXCEPTIONS OR CLARIFICATIONS OF ANY OF THE BID DOCUMENTS OR BID PROCEDURE CAN RESULT IN A BIDDER BEING DEEMED NONRESPONSIVE.





## Required with Bid or DISQUALFIED

- □ Trade Specific Bid Proposal Form SIGNED
  - Include Completed Alternate Sheet As Applicable
  - Submit ONE Original, TWO Hard Copies and ONE Electronic File
  - Section 00400 of the Project Manual Volume 1
- □ Bid Bond or Cashier's Check at 10% of the Base Bid amount (No money order or company checks)
- Prime Contractor Certification Form SIGNED
  - Section 00430 of the Project Manual Volume 1
- Qualification Form SIGNED
  - Section 00440 of the Project Manual Volume 1
- Labor & Machine Rate Sheet
  - Use Subcontractor's Own Form (Include as Attachment to Bid Form)





## Bid Evaluation/Recommendation

- Apparent low bidders must attend post bid meeting during which they must provide the following information:
  - Designation of work to be performed by the bidder with own forces.
  - List of subcontractors and major suppliers.
  - Manpower and equipment commitments (including that of any subcontractors).
  - Name of superintendent/on-site foreman and project manager.
  - Commitments to schedule milestones.
- After completion of the post bid interview process, LCI will provide an award recommendation to Will County
- A Notice of Award will be issued after approval





## Bid Evaluation/Recommendation

BID CAT	EGORY DESCRIPTION	DATE/TIME
3-01	Hard Tile	12/17/2018 - 11:30 am-12:30 pm
3-02	Ceilings (Acoustical)	12/17/2018 - 2:00-3:00 pm
3-03	Resilient Flooring/Carpeting	12/17/2018 - 10:00-11:00 am
3-04	Epoxy Flooring	12/17/2018 - 1:00-1:30 pm
3-05	Fence and Gates	12/18/2018 - 12:00-1:00 pm
3-06	Carpentry	12/14/2018 - 3:30-5:00 pm
	Doors/Frames/Hardware	
	Millwork	
	Toilet Accessories/FE/FEC	
3-07	Glazing- Int. & Ext.	12/17/2018 - 8:00-9:30 am
3-08	Painting	12/18/2018 - 9:30-10:30 am
3-09	Operable Partitions	12/17/2018 - 3:30-4:00 pm

# Bid Evaluation/Recommendation

BID CATEGORY DESCRIPTION		DATE/TIME
3-10	Lockers TENTATIVE	12/18/2018 - 2:00-3:00 pm
3-11	Window Treatments	12/17/2018 - 4:30-5:00 pm
3-12	Toilet Compartments	12/18/2018 - 11:00-11:30 am
3-13	HVAC/BAS/TAB	12/13/2018 - 8:00-10:00 am
3-14	Electrical/Fire Alarm	12/13/2018 - 10:30 am-12:30 pm
3-15	Plumbing	12/13/2018 - 1:00-3:00 pm
3-16	Fire Protection	12/14/2018 - 8:00-9:30 am
3-17	Security/Surveillance	12/13/2018 - 3:30-4:30 pm
3-18	AV Equipment & Cabling	12/14/2018 - 10:00-11:30 am
3-19	Structured Cabling	12/14/2018 - 12:00-1:30 pm
3-20	Lab Equipment & Casework	12/14/2018 - 2:00-3:00 pm
3-21	Int. & Ext. Signage	12/18/2018 - 8:00-9:00 am

## **Temporary Services**

- Portable Toilets by LCI
- Dumpsters By LCI Unless Otherwise Noted In Individual Work Scopes
- □ Reference Project Manual Section 01520 Temporary Construction For All Requirements





#### **Job Procedures**

- Weekly superintendent meetings with pull planning
  - A mutually established weekly time
  - Full time on superintendent or foreman required
- Jobsite communication
  - Subcontractor supervisory personnel must have cellular phone and IPAD with PlanGrid Application





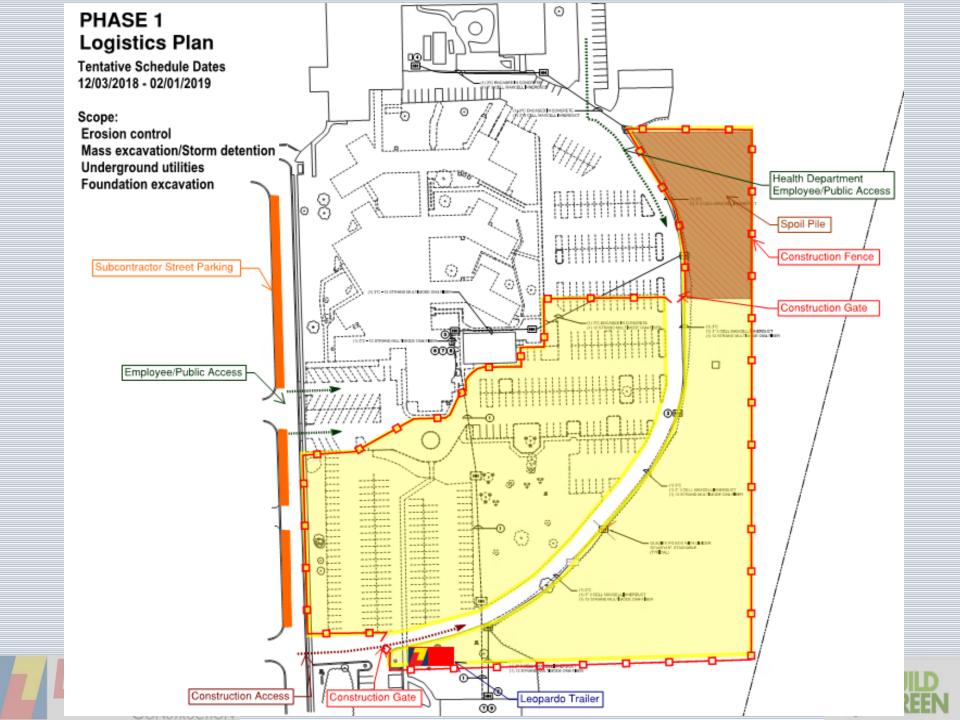
## **Project Schedule – Milestone Activities**

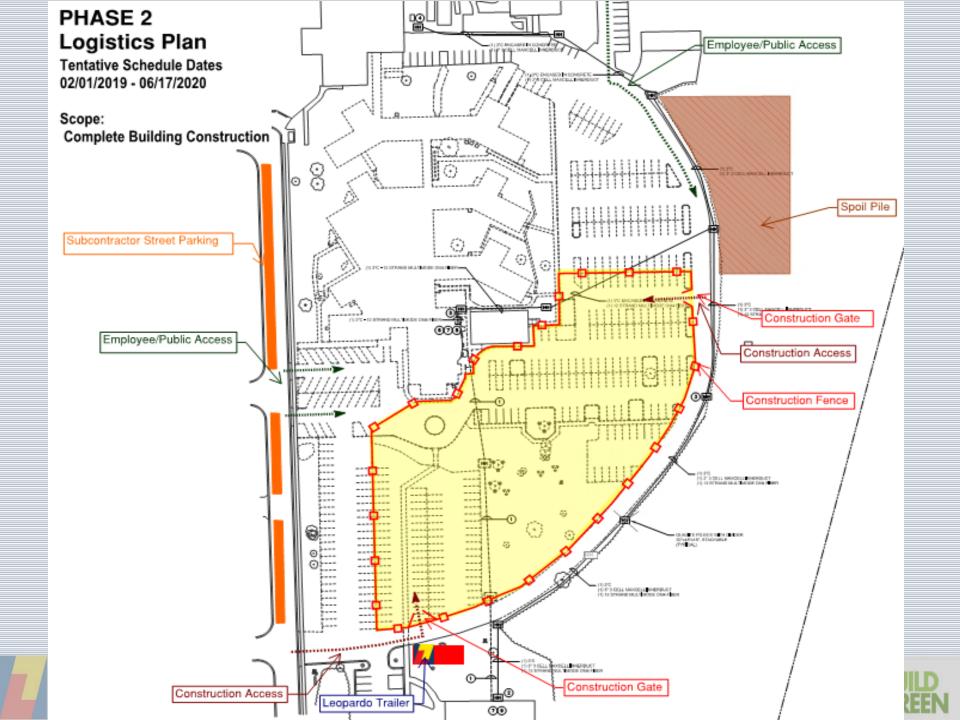
MILESTONE ACTIVITY	SCHEDULED START
1. Mobilization	12/03/2018
2. Earthwork	12/10/2018
3. Underground Utilities	12/31/2018
4. Steel/Load Bearing Masonry	05/08/2019
5. Enclosure	07/17/2019
6. Interior	09/11/2019
7. Site Concrete (Phase 1)	04/20/2020
8. Asphalt Paving (Phase 1)	05/04/2020
9. Building (Phase 2) Substantial	06/17/2020
10. Parking (Phase 3) Substantial	08/20/2020
11. Final Substantial	12/20/2020

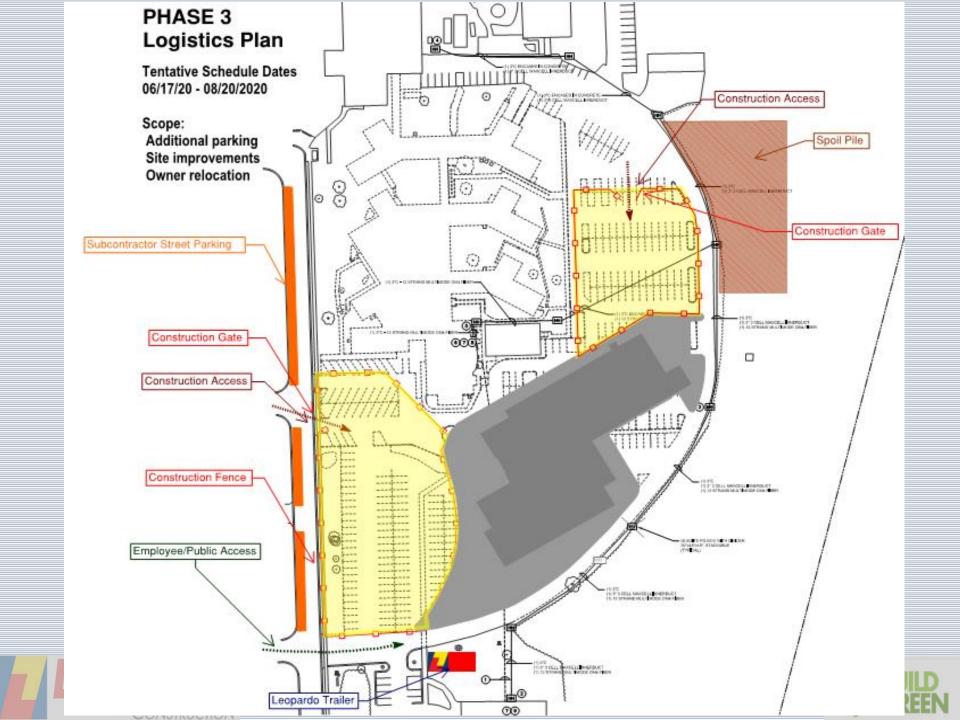
(Detailed schedule can be found in Section 00230 of the Project Manual)

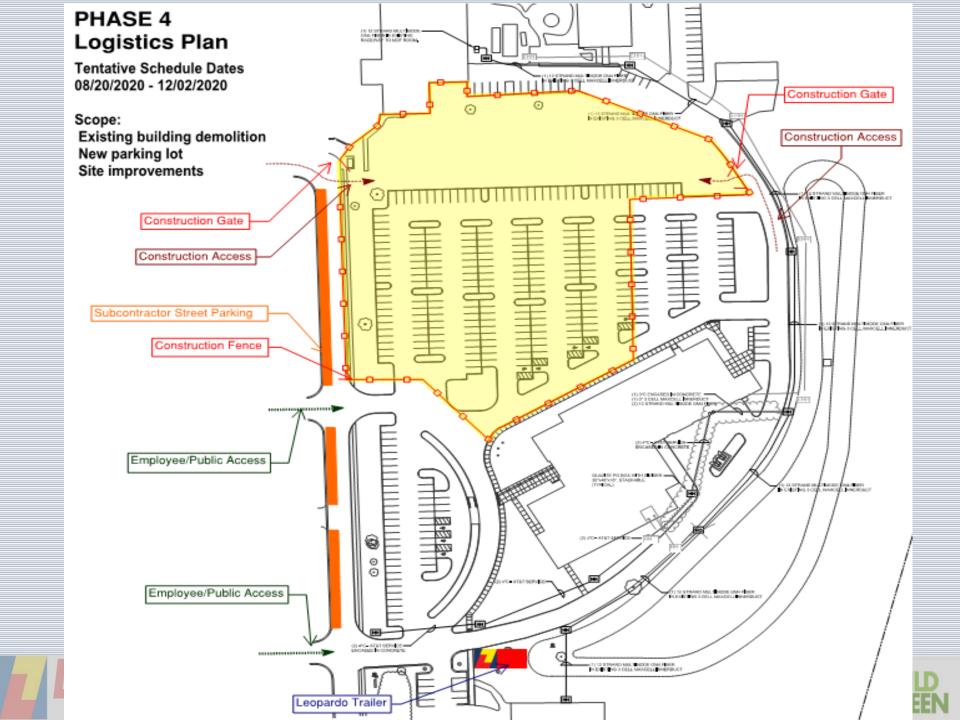












## Scope of Work – General Items

- Scope of work and completed Bid Form will become part of contract documents along with requested:
  - Alternates
  - Allowances
  - Unit Prices
- Things to consider:
  - Tax Exempt
  - Project Labor Agreement (PLA)
  - Schedule
  - Pull Planning
  - PlanGrid
  - Temp Construction





#### 3-01 Hard Tile

- Things to consider:
  - Floor Prep
  - Protection during & upon completion





## 3-02 Acoustical Ceilings

- Things to consider:
  - Grid
  - Tile





### 3-03 Resilient & Carpet

- Things to consider:
  - Floor Prep
  - Protection during & upon completion
  - Flash coving around lab casework and fume hoods





### **3-04 Epoxy**

- Things to consider:
  - Floor Prep
  - Protection during & upon completion
  - Mock-ups per specifications





#### 3-05 Fences and Gates

- Things to consider:
  - Excludes temporary construction
  - Includes dumpster enclosure panels.





### 3-06 Carpentry

- Things to consider:
  - Milestone Dates
  - Cold Form Framing
  - Metal stud and Drywall
  - Lockers?
  - Blocking/Plywood at (mechanical equipment, roof, owner supplied equipment, etc.)
  - Temporary Construction in scope and Project Manual Vol. 1
  - Includes Furnish and Install of
    - □ DFH, Millwork, and Specialties





# 3-07 Exterior and Interior Glazing

- Things to consider:
  - Design & Engineering Included
  - Thermal/Moisture Protection Coordination with Ext. Sealants
  - Decorative Railing Included
  - Coordination with misc. metals and steel sub at decorative stair
  - Stairs by misc. metals sub





## 3-08 Painting/Wall Coverings/Sealed Concrete

- □ Things to consider:
  - Prep & Protection
  - Includes door/frame caulking & painting
  - Paint steel ladders, roof hatch, exposed steel items per scope
  - Intumescent paint
  - Wall Coverings
  - Sealed concrete?





## 3-09 Operable Partitions

- Things to consider:
  - Engineering per specs
  - Coordinate drawings with Structural steel
  - Multiple mobilizations (see scope)





#### 3-10 Lockers

- Things to consider:
  - Include mail slot, mirror & any items in Lockers
  - Excludes Benches





#### **3-11 Window Treatments**

- Things to consider:
  - Provide own scaffolding/scissor lift
  - Coordination with carpenter on blocking





## **3-12 Toilet Compartments**

- Things To Consider:
  - Blocking by Carpentry Scope
  - Excludes Toilet Accessories





## 3-13 HVAC/BAS/TAB

- Things To Consider:
  - See Scopes For Delineation Of Work
  - Review all drawings and not just M sheets for coordination
  - Mechanical Plan in Project Manual Vol. 1
  - Third Party Cx Plan in Project Manual Vol. 2
  - Fume Hood Utilities
  - Owner Furnished Equipment Coordination
  - Lab Casework/Equipment Coordination
  - Temporary Construction in scope and Project Manual Vol. 1
  - Add alternate for flush and air test. Excluded in base





### 3-14 Electric/Fire Alarm

#### ■Things to consider:

- See Scopes For Delineation Of Work
- Review all drawings and not just E and FA sheets for coordination
- Mechanical Plan in Project Manual Vol. 1
- Third Party Cx Plan in Project Manual Vol. 2
- Owner Furnished Equipment Coordination
- Lab Casework/Equipment Coordination
- Temporary Construction in scope and Project Manual Vol. 1
- All Low Voltage Conduit By This Trade Except Site Conduit (by Site Electrician)
- In-wall Installations with Recessed Safety Showers
- Coordination with Civil Drawings





## 3-15 Plumbing

- Things to consider:
  - See Scopes For Delineation Of Work
  - Review all drawings and not just P sheets for coordination
  - Mechanical Plan in Project Manual Vol. 1
  - Third Party Cx Plan in Project Manual Vol. 2
  - Owner Furnished Equipment Coordination
  - Lab Casework/Equipment Coordination
  - Temporary Construction in scope and Project Manual Vol. 1
  - Safety Showers and Lab Equipment/Casework Coordination
  - Coordination with Civil Drawings





#### **3-16 Fire Protection**

- Things to consider:
  - See Scopes For Delineation Of Work
  - Review all drawings and not just FP sheets for coordination
  - Mechanical Plan in Project Manual Vol. 1
  - Third Party Cx Plan in Project Manual Vol. 2
  - Owner Furnished Equipment Coordination
  - Lab Casework/Equipment Coordination
  - Temporary Construction in scope and Project Manual Vol. 1
  - Coordination with Civil Drawings





# 3-17 Security, Paging Equipment, and Cabling

#### Things to consider:

- See Scopes For Delineation Of Work
- Review all drawings and not just T sheets for coordination
- Mechanical Plan in Project Manual Vol. 1
- Third Party Cx Plan in Project Manual Vol. 2
- Owner Furnished Equipment Coordination
- Coordination with Civil Drawings
- Include All Wiring and Equipment
- All Conduit By Building and Site Electrician
- Electrical/Low Voltage Cabling Coordination
- Doors, Frames, Hardware Coordination





## 3-18 Audio Visual Equipment and Cabling

- Things to consider:
  - See Scopes For Delineation Of Work
  - Review all drawings and not just T sheets for coordination
  - Mechanical Plan in Project Manual Vol. 1
  - Third Party Cx Plan in Project Manual Vol. 2
  - Owner Furnished Equipment Coordination
  - Include All Wiring and Equipment
  - All Conduit By Building and Site Electrician
  - Electrical/Low Voltage Cabling Coordination





### 3-19 Structured Cabling

- Things to consider:
  - See Scopes For Delineation Of Work
  - Review all drawings and not just T sheets for coordination
  - Mechanical Plan in Project Manual Vol. 1
  - Third Party Cx Plan in Project Manual Vol. 2
  - Owner Furnished Equipment Coordination
  - Lab Casework/Equipment Coordination
  - Include All Wiring and Equipment
  - All Conduit By Building and Site Electrician
  - Electrical/Low Voltage Cabling Coordination
  - Include All Telephone/Data Systems





## 3-20 Lab Equipment & Casework

- Things to consider:
  - See Scopes For Delineation Of Work
  - Coordination with all MEPFP/SEC/AV/SC trades
  - Prewired Casework and Fume Hood by this sub and Requirements
  - Floor protection for installation
  - Owner Furnished Equipment Coordination





# 3-21 Interior & Exterior Signage

- Things to consider:
  - Electrical coordination
  - Maintenance Access
  - Blocking coordination with Carpentry subcontractor
  - See allowances included shown on drawings





#### 3-22 Scissor Lift

- Things to consider:
  - Electrical requirements
  - Site plan coordination





#### **Document Clarification**

Questions are to be directed to:

Nicole McElroy | Senior Project Manager 5200 Prairie Stone Parkway Hoffman Estates, IL 60192

Phone: 847.783.3226

NMMcElroy@leopardo.com

Use Bid RFI Form for All Inquires





### **Important Dates**

- Cut-off for final questions is 12/05/2018 by 1 PM (7
   Calendar Days Before Bid is Due)
- Final Addendum will be sent 12/07/2018 by 1 PM (5
   Calendar Days Before Bid is Due)
- Delivery or mail, to the attention of the Will County Executive's Office at 302 N. Chicago Street., 2ND Floor, Joliet, IL 60432 no later than Tuesday 1:00 PM December 12, 2018
- □ Bids will be opened publicly on 12/12/2018 at 1 PM at the Will County Executive's Office at 302 N. Chicago Street., 2ND Floor, Joliet, IL 60432





## **QUESTIONS???**



