UNIVERSITY OF KENTUCKY
Purchasing Division

INVITATION FOR BIDS

CCK-2663-23
ADDENDUM# 1
10/28/2022

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

IMPORTANT: BID AND ADDENDUM MUST BE RECEIVED BY: 11/04/2022 @ 3:00 P.M. LEXINGTON, KY TIME

Bidder must acknowledge receipt of this and any addendum as stated in the Invitation for Bids.

1. Please refer to and incorporate within the offer, the attached written questions and answers, and additional information from UKPPD.

2. If you have any questions, please contact Ken Scott at the number below or at kennneth.scott@uky.edu.

OFFICIAL APPROVAL
UNIVERSITY OF KENTUCKY

Ken Scott 10/28/2022

Contracting Officer / (859) 257-9102

SIGNATURE

_____

_____
Typed or Printed Name

University of Kentucky
Purchasing Division
322 Peterson Service Building
Lexington, KY 40506-0005

An Equal Opportunity University

UNIVERSITY OF KENTUCKY
Purchasing Division

Written Questions and Answers

CCK-2663-23
Fine Arts Building – Window Replacement

No.	Question	Answer
1.	The specifications call for simulated divided lights (i.e., exterior applied grids and grids between the glass). It is not clear from the window elevations what grid pattern is required. Can you please confirm the grid pattern for all window marks?	Replacement windows shall match those already installed unless otherwise specified. Window types are listed as A, B, D, E, G, & H. Rough dimensions and the number of panes and configuration of the panes are shown in Paragraphs 3.4 (pages 36-39).
2.	The specifications state that asbestos testing is required but it is not clear who is to pay for this testing. Can you please clarify who is responsible for the cost of testing?	The university shall be responsible for testing any suspect materials. To cover unforeseen costs, the following allowances shall be added: $10k for hidden damage of window replacement. $12k for any potential for ground damage.
3.	When do you expect this project to be awarded?	December.
4.	When do you expect the actual work in the field to begin?	Actual work to begin upon arrival of windows on site. Project completion is 210 days from confirmed receipt of windows on campus.

FINE ARTS GUIGNOL BUILDING
465 Rose Street
University of Kentucky
Lexington, Kentucky 40506

UNIVERSITY OF KENTUCKY

SPECIAL CONDITIONS OF THE CONTRACT

FOR CONSTRUCTION BY A GENERAL CONTRACTOR

TABLE OF CONTENTS

ARTICLE 01 GENERAL INFORMATION

1.1 These Special Conditions are intended to modify, supplement, or delete from, applicable Articles of the General Conditions.

1.2 Where any Article of the General Conditions is supplemented by these Special Conditions, the Article shall remain in effect and the supplement shall be added thereto.

1.3 Where Special Conditions conflict with General Conditions, provisions of the Special Conditions take precedence.

ARTICLE 02 FIELD CONDITIONS

2.1 General Contractor will secure all data at the site of the building such as grades of lot, convenience of receiving and sorting material, location of public services, and other information which will have a bearing proposals or on the execution of the Work and shall address these issues in the

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preparation of their bid. No allowance shall be made for failure of the General Contractor to obtain such site information prior to submitting their proposal, and no adjustment to the General Contractor's Contract amount or stipulated time for completion shall be allowed when due to failure by the General Contractor to do so.

ARTICLE 03 (NOT USED)

ARTICLE 04 CONSULTANT

4.1 Wherever in these Contract Documents reference is made to the Consultant, it shall be understood to mean Facilities Engineering & Project Management – Campus, or their duly authorized representatives. (See Article 2 of the General Conditions.)

ARTICLE 05 GEOTECHNICAL REPORT

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

ARTICLE 06 TIME FOR COMPLETION

6.1 The time for Substantial Completion as further defined in Article 1 of the General Conditions shall be 210 consecutive calendar days from the date of commencement as specified in the Work Order letter, and Final Completion shall be thirty (30) days thereafter.

ARTICLE 07 LIQUIDATED DAMAGES

7.1 Should the General Contractor fail to achieve Substantial Completion of the Work under this Contract on or before the date stipulated for Substantial Completion (or such later date as may result from extensions in the Contract Time granted by the Owner), he agrees that the Owner is entitled to, and shall pay the Owner as liquidated damages the sum of $ Five Hundred Dollars ($500.00) for each consecutive calendar day that Substantial Completion has not been met. See Article 3 of the Agreement.

7.2 Should the General Contractor fail to achieve Final Completion of the Work under this Contract on or before the date stipulated for Final Completion (or such later date as may result from extensions in the Contract Time granted by the Owner), he agrees that the Owner is entitled to, and shall pay the Owner as liquidated damages the sum of $ Five Hundred dollars ($500.00) for each consecutive calendar day until Final Completion is reached. See Article 3 of the Agreement.

ARTICLE 08 SUBMITTALS AND SHOP DRAWINGS

8.1 SUBMISSIONS - GENERAL

8.1.1 The General Contractor shall submit each set of Shop Drawings, product data, samples, and test and/or certification reports as a separate item in UK E-Communication®. Projects not utilizing UK E-Communication® must submit all items electronically to the Consultant and the UK Project Manager and Administrative Coordinator.

8.1.2 All sample selections for color shall be submitted for approval at the same time. Color selections shall not be submitted individually.

8.1.3 Any deviation from the Contract Documents shall be noted on the transmittal form comment section.

8.1.4 All submittals are to be reviewed by the General Contractor for compliance with the Contract Documents before submission for approval. All submittals are to be initiated by the General Contractor. Submittals made directly to the Consultant by sub-contractors, manufacturers or suppliers will not be accepted or reviewed.

8.1.5 Re-submittals shall conspicuously note all changes from earlier submissions. Special notation by the General Contractor shall be made to any changes other than those in response to the Consultant's review.

8.1.6 Manufacturers shall, when requested by the Consultant, submit test reports prepared by reputable firms or laboratories certifying as to performance, operation, construction, wearability, etc., to support claims made by the manufacturer of the equipment or materials proposed for inclusion in the Work. General Contractor shall also submit a list of three (3) installations where said equipment or materials have been in service for a minimum of five (5) years.

8.2 SUBMISSIONS - REVIEW

8.2.1 Review of submittals is only for compliance with the design concept and the contract documents. THE CONSULTANT SHALL NOT BE RESPONSIBLE FOR CHECKING DEVIATIONS FROM CONTRACT DOCUMENT REQUIREMENTS OR CHANGES FROM EARLIER SUBMISSIONS NOT SPECIFICALLY NOTED.

8.2.2 The following shall be verified prior to making submittals:

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

8.2.3 Review Stamp designations shall be as follows:

8.2.3.1 “NET = No Exceptions Taken” : Proceed with the Work, no corrections needed.

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

8.2.3.3 "RR = Revise and Resubmit": Do not proceed with the Work, as the submittal does not comply with the Contract Documents. Revisions to the submittal are required for approval. On projects utilizing UK E-Communication, “Send Back a Step” is used in lieu of “Revise and Resubmit"

8.2.3.4 "R = Rejected": Do not proceed with the Work, the submittal is rejected.

8.3 SUBMISSIONS - SPECIAL PROVISIONS

8.3.1 In making a submittal, the General Contractor shall be deemed to be making the following representations:

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8.3.1.1 The General Contractor understands and agrees that he shall bear full responsibility for the products furnished. The General Contractor expressly warrants that products described in the attached submittal will be usable and that they conform to the Contract requirements unless specifically noted otherwise.

8.3.1.2 The General Contractor understands and agrees that, without assuming design responsibility, he expressly warrants that products described in the attached submittal are capable of being used in accordance with the intent of the design documents and that they conform to the Contract requirements unless specifically noted otherwise.

8.3.1.3 The General Contractor acknowledges that the Owner will rely on the skill, judgment, and integrity of the General Contractor as to conformance requirements and subsequent usability.

8.4 SHOP DRAWING AND PROCUREMENT SUBMITTAL LOG

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

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

8.5 Shop Drawings

8.5.1 The General Contractor shall review, approve, and submit Shop Drawings to the Consultant, in accordance with the Consultant's Shop Drawing & Procurement Submittal Log or UK E-Communication®, as herein detailed. By approving and submitting Shop Drawings, the General Contractor represents that he has determined and verified all materials, field measurements, and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

8.5.2 The General Contractor shall submit Shop Drawings required for the Work and the Consultant will review and take appropriate action. The review and approval shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The approval of a separate item will not indicate approval of the assembly in which the item functions.

8.5.3 The General Contractor shall make any corrections required by the Consultant for compliance to the Contract and shall return the required number of corrected copies of Shop Drawings and resubmit new samples until approved. The General Contractor shall direct specific attention, in writing, or on resubmitted Shop Drawings, to revisions other than the corrections called for by the Consultant on previous submissions. The General Contractor's stamp of approval on any shop drawing or sample shall constitute a representation to Owner and Design Consultant that the General Contractor has either determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar date, or he assumes full responsibility for doing so, and that he has reviewed or

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coordinated each shop drawing or sample with the requirements of the Work and the Contract Documents.

8.5.4 Where a shop drawing or sample submission is required by the specifications, no related Work shall be commenced until the submission has been approved by the Design Consultant. A copy of each approved shop drawing and each approved sample shall be kept in good order by the General Contractor at the site and shall be available to the Consultant.

8.5.5 The Consultant's approval of Shop Drawings or samples shall not relieve the General Contractor from his responsibility for any deviations from the requirements of the Contract Documents unless the General Contractor has in writing called the Consultant's attention to such deviation at the time of submission and the Consultant has given written approval to the specific deviation. Any approval by the Consultant shall not relieve the General Contractor from responsibility for errors or omissions in the Shop Drawings.

8.5.6 All submittals are to be submitted electronically by the contractor. Shop Drawings submitted through UK E-Communication® shall be scanned and submitted in color. Mark-ups must be made using visible color when printed. Workflow in UK E-Communication® will be established during the workflow meeting. Each individual Shop Drawing shall have its respective specification number and description highlighted.

8.5.7 Where Shop Drawings include fire alarm, communication systems schematics, sprinkler systems, etc., a sepia of each drawing shall be submitted to the Consultant as part of the "Record" set of drawings.

8.6 SUBMISSIONS - SAMPLES

8.6.1 Office samples shall be of sufficient size and quantity to clearly illustrate functional characteristics of the product with integrally related parts and attachment devices, and full range of color, texture, and pattern.

8.6.2 Products shall not be used until the sample has been submitted to and approved by the Consultant.

8.6.3 A minimum of two (2) samples are required to be submitted to the Consultant for review and approval and will be distributed as follows:

a) One (1) to be retained by the University;

b) One (1) to be returned to the Design Consultant;

c) An additional sample or samples may be submitted, at the General Contractor's option, for distribution to a third party.

8.6.4 Field samples (block, brick, etc.) of materials to be constructed at the site shall be submitted for review as required by the individual section of the Contract Documents.

8.7 SUBMISSIONS - OPERATION AND MAINTENANCE MANUALS

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8.7.1 The University requires a minimum of one (1) bound copies and one (1) digital copy of the final installation, training, operation, maintenance, and repair manuals to be turned over to the Owner's Project Manager and approved for content by the Consultant by or before the time construction is 75% complete. Projects utilizing e-Communication will create digital copy from the Document Library (Closeouts) in e-Communication. The Closeout Log must contain individual line items for each physical copy submitted with corresponding PDF attachments. Operation and maintenance manuals and materials, where specified, for mechanical and electrical equipment and for operating items other than mechanical and electrical equipment must be submitted in PDF format with a separate PDF file for each item. In the event the General Contractor fails to provide these required electronic submittals prior to reaching seventy-five (75%) completion, it is agreed that the Owner at its sole discretion may deduct from the current and subsequent Applications for Payment an amount deemed by the Owner to be sufficient to encourage prompt compliance with this contractual requirement, until such time as acceptable O&M manuals are received.

8.7.2 Manuals provided must be of sufficient detail to enable the Owner or others to install, calibrate, train, operate, maintain, service and repair every system, subsystem, and/or piece of equipment installed on or as part of this Contract. Closeout Documents submitted through UK E-Communication® shall be scanned and submitted in color. Mark-ups must be made using visible color when printed. Each manual must contain:

8.7.2.1 Project Title, Project number, Location, dates of submittals, names, addresses and phone number for the Consultant, General Contractor, and General Contractor's Sub-contractors;

8.7.2.2 An Equipment Index that includes vendor’s names, addresses, and telephone numbers for all equipment purchased on the Project;

8.7.2.3 Emergency instructions with phone numbers and names of contact persons on warranty items shall be uploaded to UK E-Communication®;

8.7.2.4 Copies of each system's air balancing record and each system's hydronic balancing record (1) physical copy and (1) digital copy in eCommunication ;

8.7.2.5 Copy of valve tag list;

8.7.2.6 Copy of As-Built temperature control system drawings and components and sequence of operation;

8.7.2.7 Original copies of the following provided by the manufacturer:

Installation manuals	Instruction Manuals
Training manuals	Calibration manuals
Service Manual	Operation manuals
Parts list	Repair manuals

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Reviewed Shop Drawings	Wire list
	Keying Bit List

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

8.7.2.9 Copies of all inspection and guarantee certificates, manufacturers' warranties with the University of Kentucky listed as the Owner for all equipment provided and/or installed.

8.7.2.10 All manuals shall be as follows: Bound in hard cover three (3) ring (D-type) binder, 1", 1.5" or 2" maximum, indexed and in CSI format, tabbed (4,5,8 or 16th cut), no more than 80% binder fill, white vinyl, presentation type with clear vinyl view cover on front, back and spine and with pockets on front and back. Maximum drawing size in binder shall be folded 11"x17" and shall be hole punched and reinforcements added. Do not put drawings in pockets. Top of all drawings shall be at top or spine side of the manual. Complete drawings must be viewed without opening rings. Provide binders as manufactured by Universal Office Products, Des Plaines, IL. 1"(S# B2-20742), 1.5"(B2-20744), or 2"(B2-20746) or equal.

8.7.2.11 If the binder includes manuals from any single vendor covering several different model numbers, the model used on the Project must be highlighted.

8.7.2.12 Included in the front of the "Operation and Maintenance Manual" shall be a copy of the Interior and Exterior Finish plan and Schedule listing all finish materials, the manufacturer, the finish color, and the manufacturer's paint number.

8.7.2.13 Photograph album containing photos and negatives or digital images (.pdf format) showing buried utilities and concealed items shall be included.

8.8 SUBMISSIONS – AS - BUILT SET OF DRAWINGS

8.8.1 The General Contractor shall submit one (1) electronic copy of As - Built set of drawings in .pdf format indicating all deviations of construction as originally specified in the Contract Documents. These As-Built Drawings will compile information from the General Contractor as well as all Sub-contractors. The General Contractor shall provide a qualified representative to update the As - Built set of drawings as construction progresses. As-Builts submitted through UK E-Communication® shall be scanned and submitted in color. Mark-ups must be made using visible color when printed

8.8.2 The General Contractor shall provide and utilize a camera to photograph the installation of buried utilities and concealed items. The General Contractor shall provide standard 3 1/2" x 5" photographs with negatives, or digital images (.jpeg format), which shall be submitted as part of the Operation and Maintenance Manuals submission. These photos should be mounted in a bound album with labeling as to subject of photo, date, and Project. Such album is to be kept at job site with the As - Built set of drawings until submittal of same.

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8.8.3 Approval of the Final Payment request will be contingent upon compliance with these provisions. The General Contractor's As – Built set of drawings shall be delivered to the Consultant at their completion so that the Consultant may make any changes on the original contract drawings.

8.9 SUBMISSIONS - SAP EQUIPMENT LIST

8.9.1 Complete equipment list for use with SAP software in electronic spreadsheet format. Data is to be provided in Uniformat format with the information being provided for individual locations as noted in Attachment A – Uniformat Component List. Information is to be provided as follows (PPDMC or CPPD will provide blank Excel spreadsheets in electronic form for use in compiling the information, if desired)

8.9.2 All materials that require preventative maintenance (PM) are listed as in Attachment A. The equipment list is to be provided in Excel spreadsheet format and is to include the information listed in Attachment B

8.9.3 Required maintenance procedure listing each work task in Excel spreadsheet format as shown in Attachment C.

8.9.4 Required frequency of maintenance for the work tasks outlined in 8.9.3 above and included in the Attachment C spreadsheet

8.9.5 Listing of maintenance parts and items: i.e. filters, lubricants, etc. for each work task listed in 8.9.3 above.

8.10 SUBMISSIONS – MAINTENANCE MATERIALS

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

ARTICLE 09 PLANS, DRAWINGS, AND SPECIFICATIONS

9.1 The successful General Contractor can purchase any number of sets of plans and specifications from Lynn Imaging, Lexington, Kentucky (http://www.ukplanroom.com/ or phone Lynn Imaging @ 1.800.888.0693 or 859.255.1021). The General Contractor will be required to pay Lynn Imaging for the cost of duplication for all sets required.

9.2 All drawings, specifications and copies thereof, prepared by the Consultant, are the property of the University of Kentucky. They are not to be used on other Work.

ARTICLE 10 PROGRESS MEETINGS

10.1 In addition to specific coordination and pre-installation meetings for each element of Work, and other regular Project meetings held for other purposes, progress meetings will be held as outlined at the Preconstruction Meeting. Each entity then involved in planning, coordination or performance of Work shall be properly represented at each progress meeting. The following areas will be covered at each progress meeting: current status of work in place, General Contractor's review of upcoming work (2 Week look ahead), schedule status, upcoming outages, new outage requests, shop drawings due from contractors, shop drawings being reviewed, outstanding RFI's, outstanding proposed change orders, change orders, new business, As-Built updated, close-out documents status, defective work in place

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issues, review “pencil copy” of payment application, safety issues and new business or other issues not covered above. With regard to schedule status, discuss whether each element of current work is ahead of schedule, on time, or behind schedule in relation with updated progress schedule; determine how behind-schedule Work will be expedited, and secure commitments from entities involved in doing so; discuss whether schedule revisions are required to ensure that current Work and subsequent Work will be completed within Contract Time; and review everything of significance which could affect the progress of the Work.

10.2 General Contractor shall prepare and submit at each progress meeting an updated schedule indicating Work completed to date and any needed revisions.

10.3 With the express purpose of expediting construction and providing the opportunity for cooperation of affected parties, progress meetings will be held and attended by representatives of:

(1) The Owner's Project Manager

(2) The Consultant.

(3) General Contractor.

(4) Sub-contractors.

(5) Others requested to attend (as deemed necessary by CPMD).

(6) Physical Plant Division Representative

10.4 A location near the site will be designated where such progress meetings will be held. Participants will be notified of the dates and times of the meetings by the Consultant.

ARTICLE 11 CONSTRUCTION SCHEDULE – BAR CHART

11.1 The General Contractor shall prepare construction schedules as a bar chart, with separate divisions for each major portion of the work, and in sufficient detail to identify the plan and sequence of construction to be followed in meeting the requirements of the Contract. Schedules shall include divisions for Work to be accomplished remote from the central construction site, e.g. utilities from outside the construction site to the site for chilled water, steam, electrical, communications, and/or fire service. Such Work shall be scheduled so that disruption resulting from construction will be minimized. Start dates and completion dates for such Work must be maintained and completed in the shortest reasonable time. The sequence of listings shall follow the Table of Contents of the Specifications. Maximum sheet size shall be 30" x 42". The schedule shall show the complete sequence of construction, by activity, with dates for beginning and completion of each element of the Work.

11.1.1 For projects requiring a bar chart schedule instead of a Critical Path Method (CPM) schedule, the following Articles of the General Conditions are amended as follows:

11.1.2 Article 21.4.2 of the General Conditions to the Contract is amended to read as follows:

21.4.2 Requests for an extension of time due to unusually bad weather shall be considered for approval only if it is shown that a) the unusual weather event delayed work on a specific weather sensitive activity or activities that had been planned to be underway on the date(s) on

which the weather event occurred, as shown in the most recent update to the Project schedule that had been submitted to the Owner prior to the date of the event and b) that the delay to that activity or activities is shown to be the proximate cause of a corresponding delay to the contractually required completion dates for the Project that were shown in the most recent update to the Project schedule. The actual dates on which the delay(s) occurred must be stated and the specific activities that were directly impacted must be identified. In the event of concurrent delays, only those activities actually impacting the Project contractually required completion dates will be considered in evaluating the merit of a delay request and in adjusting the schedule. Time extensions will not be considered for concurrent delays not caused by the Owner. Requests for an extension of time which are not supported by this information shall not be considered for approval by the Owner.

11.1.3 Article 21.4.3 of the General Conditions to the Contract is amended to read as follows:

21.4.3 In anticipation of the possibility of delay due to unusual bad weather, the General Contractor shall identify those activities in the schedules, and those activities subsequently added to updated schedules, that might reasonably be expected to be delayed by bad weather.

11.1.4 Article 21.7 of the General Conditions to the Contract is amended to read as follows:

21.7 The Contract Time will only be adjusted for causes specified above. Extensions of time will only be approved if the General Contractor can provide justification supported by the Project schedule or other acceptable data that such changes extend the contractually required date of Substantial Completion, and that the General Contractor has expended all reasonable effort to minimize the impact of such changes on the construction schedule. No additional extension of time will be granted subsequently for claims having the basis in previously approved extensions of time.

11.1.5 Article 21.8 of the General Conditions to the Contract is amended to read as follows:

21.8 In support of requests for an extension of time not caused by unusual inclement weather, and concurrently with the submittal of any such request, the General Contractor shall submit to the Consultant and the Owner a written impact analysis showing the influence of each such event on contractually required completion dates as shown in the updated Project schedule most recently submitted to the Owner prior to the event. The analysis shall include the sequence of new or revised activities and/or durations that are proposed to be added to the existing schedule including related logic. This impact analysis shall include the new activities and/or activity revisions proposed to be added to the existing schedule and shall demonstrate the claimed impact on the contractually required completion dates. The General Contractor will not be granted an extension of time and/or relief from liquidated damages when the delay to completion of the work is attributable to, within the control of, or due to the fault, negligence, acts, or omissions of the General Contractor and/or the General Contractor's contractors, subcontractors, suppliers, or their respective employees and agents. Time extensions will not be considered for concurrent delays not caused by the Owner. In the event of concurrent delays, only that event actually impacting contractually required completion dates will be considered in adjusting the schedule and evaluating the merit of a delay claim. Requests for an extension of time which are not supported by this information shall not be considered for approval.

11.1.6 Article 32.1 of the General Conditions to the Contract is amended to read as follows:

32.1 The General Contractor shall prepare and submit to the Owner and the Consultant a bar-chart type construction schedule for the Work. The schedules shall include all activities

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necessary for performance of the work showing the duration and the planned start and finish dates for each activity. The schedules shall include, but not be limited to, submittal processing, fabrication and delivery of materials, construction, testing, clean-up, work and/or materials to be provided by the Owner, dates and durations for major utility outages requiring coordination with the Owner and the Owner's operations, and significant milestones related to the completion of the Project.

11.2 The schedule shall be submitted to the Consultant and to the Owner for review within thirty (30) calendar days after the date established for the start of Work on the Project as stated in the official Work Order and Notice to Proceed. Review will be only for general conformance to the requirements of the contract. Review comments and/or acceptance of the Contractor's schedule shall not relieve the Contractor of any obligation for compliance with all requirements of the Contract Documents. Such review and comments shall not constitute interference with the Contractor's means and methods of construction, which shall remain solely the responsibility of the Contractor.

11.3 Schedules shall be revised no less frequently than monthly to coincide with regular monthly Project progress meetings and submission of Applications for Payment and shall be updated to indicate progress of each activity to the date of submittal, the projected completion of each activity, any activities modified since previous submittal, any major changes in scope, and all other identifiable changes, and further shall be accompanied by a narrative report to define problem areas, anticipated delays, impact on the progress of the Work, and to report corrective action taken or proposed.

11.4 Initial schedules shall be submitted within thirty (30) calendar days after the date established in Notice to Proceed. After review, required revisions to the schedule shall be completed and incorporated in the schedule within ten (10) calendar days. Up-dated Progress Schedules shall be submitted with each Application for Payment. Submissions must include one (1) opaque reproduction and one (1) electronic copy (disk or CD) along with a transmittal letter.

11.5 Copies of reviewed Schedules are to be provided to the job site file and, as appropriate, to sub-contractors, suppliers, and other concerned entities, including separate contractors. Recipients are to be instructed to promptly report, in writing, problems anticipated by projections shown in schedules.

11.6 The processing of all progress payments is contingent upon the submission of updated schedules.

11.7 The processing of all Change Orders requesting a time extension to the contract are contingent upon the submission and approval of a revised schedule demonstrating that the change order does impact the date of completion for the entire project. Time extension requests associated with Change Orders that do not impact the date of completion for the entire project will be rejected.

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OR:

ARTICLE 11 CRITICAL PATH METHOD (CPM) SCHEDULE

11.1 General Contractor shall prepare Critical Path Method (CPM) type schedules in accordance with General Conditions Article 32 with separate divisions for each major portion of the Work or operation. The schedules submitted for this Project shall be prepared using Primavera P6 scheduling software. If approved by the University, and at the sole discretion of the University, schedules submitted using earlier versions of Primavera scheduling software (Primavera SureTrak or Primavera P3) may be converted to Primavera P6 format by the University for review purposes. However, the University will not be responsible for any inaccuracies that may result from such conversions. All schedule submittals shall include a copy in portable document (.pdf) format as well as a complete copy of the schedule in Primavera P6 electronic file (.xer) format.

11.1.1 CPM schedules shall be based on generally accepted good practices for the development of construction schedules including limited use of long activity durations, long total float values or relationships based on leads or lags. Schedules shall include all activities necessary for performance of the work showing logic (sequences, dependencies, etc.) and duration of each activity. The schedules shall provide information for all elements of the Work in sufficient detail to accurately demonstrate the relative importance of each activity to the successful completion of the Project including but not necessarily limited to the following.

a) Activities to be performed by the University or the Design Team.
b) Activities describing time sensitive submittals and submittal processing.
c) Activities describing fabrication and delivery of key materials or equipment.
d) Activities to identify equipment start-up and testing, system commissioning, and Owner training.
e) Activities to identify Owner Furnished /Contractor Installed and Owner Furnished / Owner Installed material or equipment.
f) Activities to denote all required inspections by the Owner or Design Team, and inspections by state or local agencies including receipt of necessary Certificate(s) of Occupancy.
g) Activities to identify all dates and durations for major utility outages requiring coordination with the Owner and the Owner's operations.
h) Activities to identify all contractually mandated constraints. Non-contractual constraints shall not be included in the Initial or Final Baseline schedules without explanation. Non-contractual constraints are for the convenience of the General Contractor, shall not be a basis for delay claims, and may be temporarily removed by the University when schedules and updates are reviewed.
i) Software coding of each activity to identify the applicable Phase; area and/or sub area where the work occurs; the trade subcontractor or party responsible for completion of the activity; whether the activity is a design activity, a bidding or procurement activity, a submittal activity, or a construction activity; and whether the activity is potentially weather dependent.
j) The University may, at its sole discretion, also require that each activity be coded to indicate the section of the Technical Specifications that applies to the work.

11.1.2 Schedules shall include divisions for Work to be accomplished remote from the central construction site, (for example, modular or prefabricated units to be constructed off-site, or utilities to

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the site from outside the construction site such as chilled water, steam, electrical, communications, and fire service). Such Work shall be scheduled so that disruption resulting from construction will be minimized. Start dates and completion dates for utility construction must be maintained and completed in the shortest reasonable time.

11.2 An Initial Baseline Schedules shall be submitted to the Consultant and to the Owner within thirty (30) calendar days after award of the first bid Package or trade contract, and shall include detailed information regarding Work to be performed during the first ninety (90) days of the Project as well as milestone dates based on hammock or Level of Effort type activities that identify all major elements of the remainder of the Work. Any necessary revisions to the Initial Baseline Schedule shall be completed prior to submittal of the Final Baseline Schedule.

11.3 The Final Critical Path Baseline Schedule shall be submitted to the Consultant and to the Owner within seventy five (75) calendar days after award of the first bid Package or trade contract, shall be consistent with the information contained in the Initial Baseline Schedule prepared in accordance with Article 11.2 above, shall be a complete and comprehensive description of the General Contractor's plan to complete the Work in accordance with the Contract, shall include all activities necessary to complete the Work, and shall show the complete sequence of construction by activity, with dates for beginning and completion of each element of construction as well as an indication of whether the activity might reasonably be delayed or impacted by bad weather. Sub-schedules shall be provided as may be necessary to define critical portions of the entire schedule.

11.3.1 If the Project is to be constructed in multiple phases or using multiple Bid Packages, the date for the start of work on each phase of the Project shall be the date on which the University approves the award of the first Trade Contract for work in that phase or Bid Package.

11.3.2 A separate schedule including decision dates for selection of finishes and delivery dates for Owner furnished items, if any, shall be provided showing submittal dates for Shop Drawings, product data, and material samples, as appropriate.

11.3.3 A separate schedule shall be provided identifying dates and durations for major utility outages requiring coordination with the Owner and the Owner's operations.

11.3.4 Activities, including Outages, which require action by or which are the responsibility of, the Owner or the Consultant under the terms of the Contract shall be properly indicated, and the responsible party shall be identified in the CPM schedule.

11.4 The Consultant will review schedules only for compliance with the intent of the Contract Documents. Such review shall not relieve the General Contractor of any responsibility for compliance with the provisions of the Contract nor shall such review or any review comments constitute an amendment or modification of the Contract requirements. The General Contractor shall be solely responsible for the means and methods to be employed to assure constructions proceeds in accordance with the submitted schedule and for identifying all necessary activities, establishing activity sequencing and assigning activity durations and relationships to assure that the CPM schedule is an accurate and comprehensive description of the plan for the Work.

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11.5 Updated progress schedules shall be submitted to the Consultant and to the Owner concurrently with each Application for Payment to indicate progress on each remaining activity as of the last working day prior to the date of the submittal and the projected completion date of each activity. Updated CPM schedules shall show the accumulated percentage of completion of each activity, and total percentage of Work completed, as of the data date of the update. Each submittal of an update to the schedule shall include a narrative report that identifies and explains activities modified since the previous submittal, major changes in scope and other identifiable changes, problem areas, anticipated delays and impact on the schedule, and shall describe corrective action taken or proposed, and its effect. Schedules will be uploaded in UK E-Communication's Schedules Item Log.

11.6. Submittals shall include a copy in portable document (.pdf) format as well as a complete copy of the schedule in Primavera P6 electronic file (.xer) format along with a transmittal letter and related narrative report.

11.7 Copies of updated CPM schedules are to be provided to the job site file and, as appropriate, to subcontractors, suppliers, and other concerned entities, including separate contractors. Recipients are to be instructed to promptly report, in writing, any problems anticipated in meeting the projected dates shown in the schedules.

11.8 The processing of all progress payments is contingent upon the submission of an updated CPM schedule. Only payment for bonds and limited General Contractor mobilization costs will be approved for processing prior to receipt of the Initial and Final Baseline schedules

11.9 The processing of all change orders requesting a time extension to the contract is subject to the terms of Article 21 of the General Conditions to this Contract and is contingent upon the submission of a CPM schedule showing that the change order does indeed impact the contractually required completion dates for the Work. Time extensions for Change Orders that do not impact the contractually required completion dates for the Work will not be considered.

11.10 All time extensions shall be negotiated and made full, equitable and final, and incorporated in a revised CPM schedule at the time of Change Order issuance. No reservation of rights shall be allowed.

11.11 Float available in the schedule at any time shall not be considered for the exclusive use of either party to the contract but will be a resource available to both the Owner and the General Contractor. No time extensions will be granted for a delay unless the delay impacts the Project critical path as shown in the updated Project schedule most recently submitted to the Owner prior to the event, consumes all available float or contingency time, and extends the Work beyond the then current Contract completion date(s).

ARTICLE 12 WALK-THROUGH

12.1 After the "Work Order" is issued but before Work by the General Contractor is started, a walk-through of the area is required to document the condition of the space, surfaces, or equipment. It is the responsibility of the General Contractor to schedule the walk-through with the Owner's Project Manager, the Consultant, and other interested parties.

12.2 During the walk-through, General Contractor shall identify all damaged surfaces or other defective items that exist prior to construction.

12.3 The walk-through shall be attended by Owner's Project Manager, a Representative of the user of the facility, the General Contractor and the Consultant

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

ARTICLE 13 OWNER'S CONSTRUCTION REPRESENTATIVE (NOT USED)

ARTICLE 14 FIELD OFFICE

14.1 General Contractor shall make his own provision for field office for his own personnel and for incidental use by their Sub-contractors. Quantity and location are subject to approval of the Consultant and the Owner's Project Manager.

14.2 A field office shall not be required for this Project.

ARTICLE 15 TELEPHONE SERVICE

15.1 General Contractor shall arrange through UKIT Communications and Network Systems for installation of on-site phone, internet and other communications services. Telephone service during the length of construction shall be paid for by the General Contractor. (Cell phone/Nextel service in lieu of UKIT Communications and Network Systems phone service may be utilized at General Contractor's option.)

ARTICLE 16 CONSTRUCTION FENCE

16.1 Construction fencing will be designed and erected around job sites where there is a possibility of injury to employees, students or the public. Special precautions must be taken to protect the visually impaired, disabled, children and others using the University facilities. During active excavation/trenching operations, fencing shall be erected to prevent unauthorized entry into the site. All fencing shall comply with the current requirements of the International Building Code except where the following requirements are more stringent.

16.1.1 All job site perimeter fencing within 5 feet of a walkway, street, plot line, or public right-of-way shall be 8 feet in height. Perimeter fencing that blocks sidewalks must include signs directing pedestrians to a safe walkway or crosswalk. Signage may be attached to the fence, but may also be required to inform pedestrians of sidewalk closures and detours prior to arriving at the closed area. General Contractor shall provide electrical pedestrian and general lighting along the top rail of the perimeter of the construction site fence to provide a minimum illumination level of 1.5 foot candles. Pedestrian and perimeter fence lighting shall be installed in conduit, raceway, and/or pathway system properly supported to the perimeter fence. Open or flexible cabling will not be acceptable.

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16.1.2 All job site perimeter fencing more than 5 feet from a walkway, street, plot line, or public right-of-way shall be a minimum of 6 feet in height unless International Building Code requirements are more restrictive due to the height of the structure and setback.

16.1.3 All fencing shall be of a woven material such as chain link or a solid type fence. Fencing shall include gates required for construction operations. Gates shall be lockable with both the General Contractor's lock, and a lock provided by the Owner. Lock by Owner shall be keyed for the University Best GA key core. All locks to be “daisy-chained” to provide access to the Owner.

16.1.4 It shall be the General Contractor's responsibility to determine the proper quality of materials and methods of installation of the fencing, with the understanding that it must be maintained in good condition, good appearance, rigid, plumb, and safe throughout the construction period. The fence does not have to be new material. The fence is to be erected on fence posts securely anchored in the ground. Provide a top bar or, with prior approval of the owner, a wire shall be run through the top of the fence and attached to the end posts. A tension control device shall be installed as necessary. Use of sandbags, concrete weights, stakes, etc. to hold fence posts in place are not allowed. Penetrations in pavement or landscape walking surfaces may not be made without the approval of the owner. Any damage caused by the fence installation shall be repaired in a manner satisfactory to the owner. When fencing is to remain in place for six (6) months or more a green fabric mesh must be provided for the full height and length of the fence. Fabric should be omitted for one (1) section of fencing where blind corners occur or at pedestrian/vehicle intersections.

16.1.5 The General Contractor shall be responsible for removing and replacing any fence sections and/or posts necessary for access to the site on a daily basis. The General Contractor shall police such conditions to assure the fence and posts are reset in a timely manner and are specifically in place at the close of the working day.

16.1.6 If the General Contractor fails to comply with the requirements of this Article 16, the Owner may proceed to have the work done and the General Contractor shall be charged for the cost of the Work done by unilateral deductive change order.

16.1.7 Plastic construction fencing is not acceptable as a perimeter protection fence.

16.1.8 **UK Project Manager and Contractor may decide on site to only secure area surrounding equipment/scaffolding on ground to ensure public protection during exterior façade work.**

ARTICLE 17 PROJECT SIGN

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

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

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ARTICLE 18 PARKING

18.1 The University of Kentucky will make available for purchase by the General Contractor up to four (4) parking permits. The category of parking permit and location of parking is determined by the Director, Parking and Transportation Services, or a designee. Parking permits may be purchased by the General Contractor to be used by the Contractor and/or the Contractor's subcontractors and employees during the construction period. The cost of each permit is based on the pro-rata annual cost and may be purchased from Parking Services, 721 Press Avenue, after the Contract is executed. Necessary documents required to purchase the passes will be available at the Pre-Construction Conference.

ARTICLE 19 SANITARY FACILITIES

19.1 Restroom facilities in one of the surrounding buildings will be designated at the Pre-Construction Meeting for use by the General Contractor's workforce during construction. The designated restroom(s) and areas accessible to General Contractor must be kept clean and neat during construction. Failure to keep them clean will result in the General Contractor being required to provide portable toilets at his cost at the site. Drinking water shall be provided from an approved safe source so piped or transported as to be kept clean and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing governing health regulations.

ARTICLE 20 RULES OF MEASUREMENT

20.1 Rules of Measurement shall be established by the Consultant in the field. Actual measurement shall be taken in the field. These amounts shall become binding upon the General Contractor and be adjusted as before mentioned.

20.2 The General Contractor shall pay for and coordinate through the Consultant and/or the Owner's Project Manager all associated Work by utility companies including relocation of utility poles, installation of new street lights, relocation of overhead or underground lines, and any other Work called for on the Plans and in the Specifications.

ARTICLE 21 ALLOWANCES

21.1 As stated in the General Conditions to the Contract, the General Contractor shall have included in the Contract Amount all costs necessary to complete the Work. Costs based on "allowances" shall be permitted only for objectively quantifiable items and only with the prior written approval of the Owner.

1. **$12,000.00 ALLOWANCE** for **hidden** carpentry work and Other Specific Repairs as deemed necessary by the UK Project Manager.

2. **ALLOWANCE** FOR Repair of Landscaping & Hardscape Damages; **$5,000**

ARTICLE 22 SEQUENCE OF CONSTRUCTION

22.1 Sequencing will be reviewed at the pre-construction meeting.

22.2 All materials and equipment are to be brought into the project site from the approved staging location and are not to be brought through the existing buildings or loading docks. Any and **all**

exceptions shall be approved by, and closely coordinated with, the Owner's Project Manager in advance of scheduling or performing the work.

22.2.1 The General Contractor shall coordinate any road and sidewalk closings, utility disruptions, etc. which will affect the use of the existing building(s) with the Owner's Project Manager prior to commencing that Work.

22.3 The adjacent buildings and public areas will remain in use and the Owner shall have access to the existing building(s) throughout the duration of the Project. The General Contractor shall coordinate construction activity to assure the safety of those who must cross the Project site and shall provide and maintain the necessary barriers and accommodations for a completely safe route of accessibility. The General Contractor is to insure that all exits provide for free and unobstructed egress. If exits must be blocked, prior arrangements must be made with the Owner's Project Manager.

22.4 The General Contractor shall cooperate with the Owner to minimize inconvenience to, or interference with normal use of existing buildings and grounds by staff, students, other Contractors, or the public. General Contractor shall conduct operations to prevent damage to adjacent building structures and other facilities and in such a manner to protect the safety of building's occupants.

22.5 Special effort shall be made by the General Contractor to prevent any employee from entering existing buildings for reasons except construction business. In particular, use of toilets, drinking fountains, vending machines, etc. is strictly prohibited.

ARTICLE 23 CRANE & MATERIAL HOIST OPERATIONS

23.1 General Contractor shall provide appropriate barriers around crane and material hoist to protect pedestrian-and vehicular traffic around operating area. When crane is operating or moving, flag men provided by General Contractor shall be utilized to prevent pedestrian and vehicular traffic from crossing the pathway of crane lift. General Contractor's flag men shall coordinate these activities with the appropriate security personnel.

23.2 ~~Cranes and material hoists shall be safely secured and inaccessible during non-operating hours. General Contractor shall coordinate operation or erection of a crane or material hoist in the vicinity of the Medical Center with Medical Center Aeromedical Operations (Med-evac helicopter).~~

23.3 Any damage to trees, shrubs or plant material at the placement of crane or material hoist shall be repaired by tree surgery or replaced as directed by Consultant.

ARTICLE 24 UTILITIES

24.1 This Article modifies Article 8 of the General Conditions. The Owner will provide water and electricity for this Project. The General Contractor shall provide for all temporary taps, hoses, lines, boxes, lighting and installation of the same for construction operations. Electricity shall not be used for heating purposes. In the event that the General Contractor is wasteful with these utilities, the Owner shall charge the General Contractor accordingly.

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ARTICLE 25 CLEANING AND TRASH REMOVAL

25.1 The General Contractor shall keep clean the entire area of new construction and shall keep streets used as access to and from the site free of mud and debris.

25.2 All exit ways, walks, drives, grass areas, and landscaping must be kept free from debris, materials, tools and vehicles at all times. Trim weeds and grass within the site area.
25.3 Upon completion of the Work, General Contractor shall thoroughly clean and re-sod grass areas damaged to match existing areas.

25.4 The General Contractor shall be responsible for removal from the site of all liquid waste or other waste (i.e. hazardous, toxic, etc.) that requires special handling on a daily basis.

25.5 Dumpsters will be provided and maintained by the General Contractor.

25.6 During Work at the Project site, the General Contractor shall clean and protect Work in progress and adjoining Work on a continuing basis. General Contractor shall apply suitable protective covering on newly installed Work where needed to prevent damage or deterioration until the time of Substantial Completion. General Contractor shall clean and perform maintenance on newly installed Work as frequently as necessary through remainder of construction period.

25.7 The General Contractor shall be responsible for daily cleaning of spillage's and debris resulting from his and his Sub-contractor's operations, (includes removal of dust and debris from wall cavities), and for providing closed, tight fitting (dustproof if required), waste receptacles to transport construction debris from the work area to the dumpster. Broom clean all floors no less than once a week. The General Contractor shall empty such receptacles into the trash container when full or when directed to be emptied by the Consultant and/or Owner's Project Manager, but not less than weekly. The use of hospital waste and trash receptacles is strictly prohibited, except as otherwise provided by the project specifications.

ARTICLE 26 BLASTING

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

ARTICLE 27 CUTTING AND PATCHING - NEW AND EXISTING WORK

27.1 New Work - Cutting and patching shall be done by craftsmen skilled and experienced in the trade or craft that installed or furnished the original Work. Repairs shall be equal in quality and appearance to similar adjacent Work and shall not be obviously apparent as a patch or repair. Work that cannot be satisfactorily repaired shall be removed and replaced.

27.2 Existing Construction - Refer to Architectural, Mechanical, and Electrical drawings for cutting and patching. All new Work shall be connected to the existing construction in a neat and workmanlike manner, presenting a minimum of contrast between old and new Work. Do all patching of the existing construction as may be required for the new construction to be done. Necessary patching, closing of

existing openings, repairing and touching up shall be included as required for a proper, neat and workmanlike finished appearance. Any existing item that is to remain and is damaged during construction shall be replaced at the General Contractor's expense.

ARTICLE 28 UNRELATED PROJECTS

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

ARTICLE 29 OWNER SUPPLIED MATERIALS (NOT USED)

ARTICLE 30 REMOVED ITEMS

30.1 The following is a list of items to be turned over to the Owner by the General Contractor after removal by the General Contractor. If there are additional items listed in the drawings to be turned over to the Owner, but not listed here, it shall be construed as being listed here.

1. **N/A**

30.2 All items which are identified to be turned over to the Owner must be treated with the utmost care and protected during removal and transport from damage.

30.3 Materials to be turned over to the Owner by the General Contractor shall be delivered to a warehouse within a five (5) mile radius of the Project site.

ARTICLE 31 INTERIOR ENCLOSURE AND DUST ENCAPSULATION

31.1 Areas under construction or renovation shall be separated from occupied areas by suitable temporary enclosures furnished, erected and maintained by the General Contractor. Temporary enclosures shall be dust and smoke tight and constructed of non-combustible materials to prohibit dirt and air borne dust from entering occupied spaces. General Contractor to review with Consultant ways to provide ventilation for dust generated by demolition and fumes/vapors produced during installation of new materials.

31.2 General Contractor is responsible for coordinating with the Owner's Project Manager any equipment to be turned off prior to erecting temporary enclosures.

31.3 General Contractor shall protect all exhaust diffusers, equipment and electrical devices from the collection of dust. All areas shall be checked and cleaned prior to final acceptance of Work.

31.4 Dust and debris from Work operations shall be held to a minimum.

31.5 General Contractor shall construct temporary dust partitions at locations and as detailed on drawings. Closures used for dust barricade shall be constructed of non-combustible materials, (metal studs and gypsum board or fire retardant plywood).

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31.6 General Contractor shall provide additional devices and materials and required to contain dust within Work area and protect personnel during course of Work.

31.7 Areas of minor renovation, consisting of the removal of doors and frames, blocking of openings, and other limited Work shall be separated by a dust partition of fire retarded polyethylene on studs.

31.8 Existing corridor doors may serve as dust barriers, except if removed for refinishing. In such cases, temporary wood doors must be substituted until original doors are replaced.

31.9 The General Contractor may assume existing walls which extend full height, floor to structure, shall be deemed appropriate to contain air borne dust. Cover any voids or penetrations.

31.10 Doors or windows in the perimeter walls surrounding the Project work area shall be sealed off with protective materials in a manner to prohibit dust from escaping the work area. These shall be left in place until all work creating dust is completed. Protective materials shall consist of fire retardant wood, metal studs, gypsum board or flame resistant plastic.

31.11 Entry passage to Work area shall be sealed off with zippered plastic opening or other acceptable means which allows periodic entry and closure of barricade closure.

31.12 Install and maintain a “sticky mat” on the floor in locations where construction crews leave the construction area and prior to entering ANY existing space in the building.

31.13 Install and maintain a temporary floor covering in any and all elevators being utilized for this project.

ARTICLE 32 UKIT COMMUNICATIONS AND NETWORK SYSTEMS (NOT USED)

ARTICLE 33 EMERGENCY VEHICLE ACCESS

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

ARTICLE 34 SMOKE DETECTORS / FIRE ALARM SYSTEMS- EXISTING AND/OR NEW FACILITIES

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

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

ARTICLE 35 SURVEYS, RECORDS, and REPORTS

35.1 General: Working from lines and levels established by property survey, and as shown in relation to the Work, the General Contractor will establish and maintain bench marks and other dependable markers to set lines and levels for Work at each area of construction and elsewhere on site as needed to properly locate each element of the entire Project. The General Contractor shall calculate and measure from the bench marks and dependable markers required dimensions as shown (within recognized tolerances if not otherwise indicated), and shall not scale drawings to determine dimensions. General Contractor shall advise Sub-contractors performing Work of marked lines and levels provided for their use in layout of Work.

35.2 Survey Procedures: The General Contractor shall verify layout information shown on drawings, as required for his own Work. As Work proceeds, surveyor shall check every major element for line, level, and plumb (as applicable), and maintain an accurate Surveyor's log or Record Book of such checks available for General Contractor or Design Consultant's reference at reasonable times. Surveyor shall record deviations from required lines and levels, and advise Design Consultant or General Contractor promptly upon detection of deviations exceeding indicated or recognized tolerances. The General Contractor shall record deviations which are accepted (not corrected) on Record Drawings.

ARTICLE 36 TOBACCO PRODUCTS PROHIBITED

36.1 For areas located within Fayette County, Kentucky, the use of all tobacco products is prohibited on all property that is owned, operated, leased, occupied, or controlled by the University. “Property” for purposes of this paragraph includes buildings and structures, grounds, parking structures, enclosed bridges and walkways, sidewalks, parking lots, and vehicles, as well as personal vehicles in these areas. To view the Lexington campus boundaries: http://www.uky.edu/TobaccoFree/files/map.pdf.

36.2 For areas not located within Fayette County, Kentucky, smoking is prohibited in all owned, operated, leased, or controlled University buildings and structures, parking structures, enclosed bridges and walkways, and vehicles. Smoking is also prohibited outside buildings and structures within 20 feet of entrances, exits, air intakes, and windows, unless further restricted by division policy.

36.3 General Contractor employees violating this prohibition will be subject to dismissal from the Project.

36.4 For the full Administrative Regulation see University AR 6:5.
http://www.uky.edu/Regs/files/ar/ar6-5.pdf

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ARTICLE 37 ALTERNATES (NOT USED) N/A No alternates called for on this project.

ARTICLE 38 FIELD CONSTRUCTED MOCK UPS

38.1 Exterior Finishes

38.1.1 After sample selection but prior to ordering exterior finish materials, General Contractor shall accumulate enough material samples to erect sample wall panels to further verify selections made for color and textural characteristics, and to represent completed Work for qualities of appearance, materials and construction; include sample masonry units (face and back-up wythes, plus accessories), window units, roofing finish, etc. to provide a complete representation of the exterior facade for approval by the Consultant; build mock-ups to comply with the following requirements:

38.1.2 Build mock-ups well in advance of the time the finish materials will be needed for inclusion in the Work.

38.1.3 Locate mock-ups at location as reviewed and approved by the Architect and University's Project Manager, generally within 10 feet of existing building, parallel to existing face of building, and exposed to sunlight during daylight hours. Mock-Up to be reviewed twice, once in direct sunlight and once in shade to confirm color characteristics of samples.

38.1.4 Mock-ups Size One completed window shall serve as the Mock up for quality and finish standard for the project.

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

38.1.6 Retain mock-ups during construction as a standard for judging completed Work.

38.2 Interior Finishes

38.2.1 After sample selection but prior to ordering interior finish materials, General Contractor shall accumulate enough material samples to erect sample to further verify selection made for color and textural characteristics, and to represent completed Work for qualities of appearance, materials and construction; include samples of interior finishes, including paint, wood stain, vinyl wallcovering, flooring and ceiling materials to provide a complete representation for approval by the Consultant; build mock-ups to comply with the following requirements:

38.2.2 Build mock-ups well in advance of the time the finish materials will be needed for inclusion in the Work. Mock-ups may be on newly installed wall surfaces.

38.2.3 Locate mock-ups with adequate illumination for observation under intended light levels.

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

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ARTICLE 39 PROJECT COORDINATION VIA COMPUTER

39.1 The General Contractor and subcontractors are required to have an active email account to facilitate coordination of the project during construction and warranty.

39.2 To facilitate project construction coordination between the Consultant, the General Contractor, Subcontractors, and the University of Kentucky as the Owner, UK Capital Project Management Division (CPMD) is hosting an Internet/ Web-based Project Management System (WPMS) to help improve project communication and collaboration. The Consultant shall participate in the use of the WPMS (UK E-Communication® or other system at the Owner's discretion) providing collaboration between Owner, the Consultant and selected contractors.

39.2.1 Owner shall provide the General Contractor and subcontractors with user accounts and appropriate training for the web-based project management tool.

39.2.2 Utilization of, and training in the use of, the WPMS will be arranged for and supervised by Owner.

39.2.3 Participation of General Contractor is mandatory; others as determined by Owner. Participation of Subcontractors is not mandatory but will be offered at their discretion.

39.2.4 All participants are required to have access to the internet and the Microsoft Internet Explorer browser (version 5.0 or higher). A broadband connection to the internet (e.g. Cable modem, ISDN, DSL) is recommended, but not required.

39.2.5 The WPMS shall be utilized for the following functions, as a minimum: Posting Project Files, AE Amendments, Architect's Supplemental Information (ASI's), Closeouts, Consultant Invoices, Contracts, Defective Work in Place, Meeting Minutes, Payment Applications, Proposed Change Orders – Change Orders (PCO to CO's), Punch Lists, Reports (Contractor Daily Reports, Field Reports, Commissioning Reports), RFIs, SAP Equipment List, Schedules, and Submittals. The Document Library (Bid set Plans, Specifications and Addenda will be uploaded by Lynn Imaging.

39.2.6 Site camera monitors may be included at Owner's discretion.

39.2.7 Utilization of the WPMS shall be implemented by the Owner's representative.

39.2.8 Use of the system will provide consistent, real-time information for decision making. Additionally, all project data entered into the system will be archived to facilitate project record keeping. It is anticipated that proper use of the WPMS will improve efficiency of communications and reduce project related paperwork and clerical workload.

ARTICLE 40 HOT WORK PERMITS

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

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ARTICLE 41 INSURANCE

41.1 Employers' Liability Insurance. The General Contractor shall acquire and maintain Employers' Liability insurance with at least $500,000/$500,000/$500,000 limits of liability for all employees who will be working at the Project site.

41.2.1 Commercial General Liability Insurance. **If the work involved requires the use of helicopters**, a separate aviation liability policy with limits of liability of $100,000,000 will be required. If cranes and rigging are involved, a separate inland marine policy with liability limits of $100,000,000 will be required.

41.2.1.1 The limits of liability shall not be less than $1,000,000 each occurrence combined single limits for bodily injury and property damage~~. If split limits are used, they shall not be less than $1,000,000 for each person and each occurrence and $1,000,000 for property damage~~.

41.2.2 Comprehensive Automobile Liability Insurance. Policy limits shall not be less than $1,000,000 for combined single limits for bodily injury and property damage for each occurrence.

41.2.3 Excess or Umbrella Liability Insurance. This policy shall have a minimum of $1,000,000 combined single limits for bodily injury and property damage for each occurrence in excess of the applicable limits in the primary policies.

41.2.4 Workers' Compensation - Statutory Requirements (Kentucky)

APPROVED BY UK RISK MANAGEMENT ON _____

ARTICLE 42 KEY ACCESS

42.1 If Construction Cores are NOT utilized, then one set of keys for access to the renovation project area will be provided to the General Contractor by the University's Project Manager. The General Contractor assumes responsibility for the safekeeping of the key(s) and its use. When leaving the renovation area all doors must be secured.

42.2 All keys must be returned to the University's Project Manager upon completion of project work as one of the requirements for Final Payment. Failure to return the keys may require re-keying of all doors in the work area up to and including the entire building if master keys are issued. The cost of re-keying of the door(s) accessed by the key(s) will be subtracted from the remaining contract dollars including contract retainage.

42.3 All lost or stolen keys must be reported immediately to the University's Project Manager.

ARTICLE 43 CEILING CLEARANCE

43.1 Work above ceiling: All work above an area with lay-in ceiling must be coordinated and installed so there is a minimum of 4" between the top of the ceiling grid runners and bottom of the installation. Installation shall not obstruct equipment access space or equipment removal space. Also, conduit and pipe attached to the wall must be above the 4" minimum level.

43.2 Coordination Between Trades: Request and examine all drawings and specifications pertaining to the construction before installing above ceiling work. Cooperate with all other contractors in locating

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piping, ductwork, conduit, openings, chases, and equipment in order to avoid conflict with any other contractor's work. Give special attention to points where ducts or piping must cross other ducts and piping, and where ducts, piping and conduit must fur into the walls and columns. Make known to other trades intended positioning of materials and intended order of work. Determine intended position of work of other trades and intended order of installation.

ARTICLE 44 METAL ANCHORS

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

ARTICLE 45 CONTRACTOR/SUPERINTENDENT EXPERIENCE

45.1 The Construction Manager and Superintendent are required to have a minimum of five (5) years of construction experience in the past 10 years with projects of a similar nature. Owner may waive this requirement if sufficient information is provided to confirm competency.

ARTICLE 46 LOADING DOCK (NOT USED)

ARTICLE 47 CONSTRUCTION PATH (NOT USED)

ARTICLE 48 HOSPITAL PROJECT PROCEDURE (NOT USED)

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

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

ARTICLE 51 HOSPITAL CONSTRUCTION CERTIFICATION (NOT USED)

ARTICLE 52 APPEARANCE (NOT USED)

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

ARTICLE 54 SAFETY & FIRE PROCEDURES (NOT USED)

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

ARTICLE 56 TREE PROTECTION STANDARDS

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

END OF SECTION

The following specifications, drawings, sketches, diagrams, etc. are for the Contractor's use in understanding the project and layout of the buildings. The Contractor is required to visit the site(s) and obtain all necessary information, measurements, and locations to assure proper manufacturer and installation of the specified windows. To the satisfaction of the Project Manager, the Contractor shall install windows that are specified and listed in this document. There are one hundred thirty-six (136) windows to be replaced. The Contractor is on notice that the Owner will not provide any measurements for the Contractor's use that would make the Owner liable for windows that do not fit or other items required of this

specification/project. The Owner's Project Manager will cooperate fully in aiding the Contractor in the collection of data. Replacement windows shall match those already installed unless otherwise specified in this document.

**Fine Arts Guignol Building – 465 Rose Street,
Lexington, KY 40506**

Intent
The objective of this project is to replace one hundred thirty-six (136) windows of the Fine Arts Guignol Building. The work includes, but is not necessarily limited to:

1. Replacing existing windows as specified,
2. Repairing any damages during installation of replacement windows, and
3. Leaving the interior/exterior premises in a well-ordered and in immaculate condition.

Section I – Procedural and General Practices

1.1 General Conditions

A. Campus Protocol (includes, but is not limited to):

1. If required, a staging site will be determined prior to the start of the project.
2. Permission is required for more than two contractor vehicles on site.
3. There can be no parking under trees in the drip-line of the branches.
4. All turf damages shall be returned to the pre-project condition at the Contractor's expense unless not required by the Grounds Superintendent.
5. Private vehicles parked on campus must have parking permits obtained from the Parking Division office on Press Avenue and be parked at designated parking lots on campus. A private vehicle can be one of the two allowed in the staging area.

6. Without permission, no sidewalk can be parked upon or blocked by contractor vehicles.
7. The UK is a smoke-free campus; smoking is allowed on city streets.
8. Vulgar language and/or unacceptable behavior is not acceptable on campus.
9. With approval, afterhours and weekend work is allowed. and
10. At any time, projects can be stopped and rescheduled due to disrupting classroom work.
11. Classroom finals study-week on Campus is “Quiet Week” on campus with limited activity and noise making by contractor work, and
12. The following week is “Finals Week” and no construction noise is allowed that creates problems for exam taking anywhere on campus.
13. Depending on contractor-equipment and job requirements, protective staging fencing may be required (See Special Conditions – Article 16; Construction Fencing).

1.2 Vendor Appearance and Conduct

A. All contracted vendors performing work for the University of Kentucky must dress in a professional manner. A company uniform is preferred but, if not provided, workers should wear work-attire that is appropriate and not provocative or risqué. Casual sportswear such as shorts, sweat suits, t-shirts, or tank tops are not appropriate apparel (this includes inappropriate statements and/or images on clothing). The attire is intended to portray the image of well-groomed and neat appearing individuals.

B. It shall be the Contractor's responsibility to control the conduct of all his employees while on the University's campus and professional conduct must be exercised at all times. Loud and disruptive conduct will not be tolerated. Cursing and abusive language is prohibited. Further, offensive language, sexual or other types of harassment of University students, faculty, staff, or visitors may result in immediate and permanent dismissal of the offending person(s) from the campus. Courtesy to others must be exercised, displaying a good attitude and character. It must be understood that any worker using or under the influence of alcohol and/or controlled substances (other than prescription medications) will not be allowed on the campus of the University of Kentucky and will be permanently dismissed from working on campus.

1.3 Safety and OSHA Requirements

A. For all work operations and activities on the job site, whether on the ground, in a building or on a roof, the Contractor shall establish, train and/or instruct his/her workers and sub-contractors to comply with all safety requirements and/or implied by local, state and federal regulations.
1. All work shall be done in a professional manner by experienced, qualified workers.
2. Industry standards shall dictate acceptance of all equipment, application techniques, etc.

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3. As required for safety considerations, Contractor should advise field personnel concerning the use of respirators, fresh air masks, protective clothing, etc.
4. The Contractor and/or sub-contractors are responsible for the security of their own materials, tools and equipment on the project site. The owner is not responsible for theft or vandalism to any such tools, material or equipment.

1.4 Hazardous Material

A. The contractor is responsible to inform his employees, sub-contractors, or vendors of the following:
1. Any known chemical hazard that they may encounter during work on this project.
2. If required, have available for each known hazardous chemical precautionary protective measures to be taken under normal conditions and emergencies.
3. Each contractor or sub-contractor bringing chemicals on-site must provide appropriate hazard information for the substances, including material safety data sheets (MSDS), labels, and precautionary measures to be taken when working with or around such substances.

1.5 Lead Paint Abatement

A. Free-falling lead chips and removed lead-paint debris
1. The University of Kentucky will supply approved containers to the contractor for the disposal of lead paint chips and lead debris. A program has been developed and used in accordance with the OSHA standard 29CFR1926.62 (as adopted by the Kentucky OSH Program).
2. The following are the procedures used by the University of Kentucky in the collection and disposal of the lead containing materials. The contractor should utilize these.
   a. In the area where lead paint chips might collect, the area is to be covered with burlap or a similar material.
   b. The accumulated lead chips and debris is to be periodically emptied into the UK provided containers. The burlap and/or similar material can be re-used.
   c. At the end of the project, the UK project manager will arrange for the pick-up and disposal of the sealed container(s) holding the lead containing chips and debris.

B. Window removal
1. During the removal of the windows the grounds area is to be covered with burlap or similar material to collect any paint chips. This collected material shall be periodically emptied into the approved containers (see paragraph 1.5A). The windows can be placed into a construction dumpster and be disposed of as construction debris.

1.6 Asbestos Sampling

A. Due to the age of the building, asbestos putty is a possibility. The Fine Arts building was completed in 1950. Asbestos began to be phased out of construction and materials

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beginning in the 1980's through the 90's. It is assumed that testing results for asbestos in the window putty will most likely be positive; therefore, testing for asbestos will be necessary before work is to begin.

1.7 Window Associated PCB's

A. The Fine Arts building was completed in 1950. Putty was utilized for the windows glazing. The original windows are still in place with the original putty except for the few locations where broken glass may have led to replacements.

B. Because PCBs were utilized primarily between 1950 and 1980, it is assumed that any putty found in the working area has an increased possibility of containing PCBs. The contractor should take necessary precautions.

1.8 Performance Requirements

A. The Contractor is expected to provide competent and experienced workers on site during the entire project. There shall be on site supervision for all phases of the project. Inferior work will be rejected and any such work removed and redone to the satisfaction of the Owner. The Owner's decision shall be final.

1.9 Quality Assurance

A. Provide test reports from an AAMA certified laboratory verifying performance as specified in section 3.2.

B. Provide test reports and window manufacturer's letter of certification showing compliance with AAMA/WDMA/CSA 101/I.S.2/A440-08 and AAMA 910-93 for the appropriate window type.

C. Test reports shall be no more than four years old.

D. Any drawing, sketch, photo or specification is intended to establish basic project details. The contractor will be expected to make modifications to meet field conditions and to ensure the fitting of components or construction results. Owner's approval of major modifications will be required.

E. General Contractor
The contractor and his sub-contractors are expected to have satisfactorily been in business doing similar work as described in this specification for a minimum of ten (10) years. If requested, he should be ready to provide examples of his completed projects and customer information.

1.10 Delivery, Storage and Handling

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A. Packing, Shipping, Handling and Unloading: Contractor shall protect all products from damage during these processes.

B. Acceptance at site: Owner and Contractor shall examine each component and accessory as delivered and confirm that material and finish is undamaged. Damaged material shall be rejected.

C. Storage and Protection: Contractor will adequately protect units against damage from the elements, construction activities, theft, and other hazards before, during, and after installation.

1.11 Coordination

A. Contractor should coordinate work with any other jobs that are occurring on or around the job site, along with any such offices that work out of the building/location. Contractor to ensure weather resistance of the building during the project and protection of interior materials and finishes.

1.7 Demolition and Disposal

A. Unless directed by this specification or instructions given on-site at the time of removal, the contractor shall be responsible for the removal and disposal of all items associated with the installation of the new windows. This shall include the existing window units and all disposable items associated with installation of sash-panels for exhaust or intake grills, piping, ductwork, etc. (See paragraphs 1.5, 1.6, and 1.7 for hazardous waste disposal).

B. Should the contractor encounter hazardous materials at any given location other than those listed or described paragraphs 1.5, 1.6, and 1.7 in this specification, he shall cease work at that location, notify the Project Manager of the hazard, and continue with window installations at other locations. The Owner shall be responsible for the abatement/removal of the material.

C. Should there be building defects encountered (other than the normal and visual) in the process of the work of this specification and not of his making, the contractor shall notify the Project Manager and, as is possible, continue the work at other locations. The Project Manager and the Contractor shall mutually agree on a solution to the unexpected situation.

1.13 Collateral damages

The contractor is responsible for the repair and/or replacement of building interiors, furnishings, and building exterior elements and/or landscaping damaged during the project, and must be repaired prior to final payment. This means to return all identified damages minimally to the existing condition prior to the start of the construction process.

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This applies to plantings and/or brick pavers/walks around the building. Repairs must meet the approval of the Project Manager.

1.14 Access

Scaffolding and/or other means of elevating the workers are acceptable to access the exterior of the building. It is expected that cleanliness and care will be exercised to protect the surrounding sidewalks, turf, sections of the building not being worked on, as well as fencing and signage redirecting/diverting pedestrian traffic from the work zone.

1.15 Water Pit Cautions

For any work requiring materials to be brought by vehicle (i.e. trucks/lifts), the contractor shall be aware of any existing water pit covers along the chosen path to the site. The contractor is to proceed with caution and avoid driving over any possible pit covers. Any covers found on the sidewalks are rated specifically for sidewalks and will possibly fracture under pressure from heavy machinery. Contractor will be responsible for any damaged pit covers. Avoid water pit covers where necessary.

Section II – Products

2.1 Materials

A. **Aluminum Windows**

1. Extruded aluminum shall be 6063-T5 or T6 alloy and tempered.
2. Fasteners
   a. Fasteners shall be aluminum, non-magnetic stainless steel, or other materials warranted by the manufacturer to be non-corrosive and compatible with aluminum window members, trim, hardware, anchors and other components of the window units.
   b. Exposed fasteners shall not be permitted on exterior except where unavoidable for the application of hardware.
3. Weather-strip
   a. Provide double weather-stripping using silicone-coated woven pile with polypropylene fin center complying with AAMA 701.
4. Thermal Barrier
   a. All exterior aluminum shall be separated from the interior aluminum by an integrally concealed, low-conductance structural thermal barrier in a manner that eliminates direct metal-to-metal contact.
   b. Thermal barrier de-bridge space shall not be less than 3/16”.
   c. Thermal barrier shall be poured-in-place two-part polyurethane that has been in use on similar units for a period of not less than two years and has been tested to demonstrate:
   d. Resistance to thermal conductance and condensation.
   e. Adequate strength and security of glass retention.
5. Hot Melt Silicone and Glazing Beads
   a. Hot Melt Silicone shall conform to AAMA 800 specification.

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b. Glazing beads shall be extruded aluminum and shall be of sufficient strength to retain the glass.

6. Sealant
   a. Sealant shall be non-shrinking, non-migrating elastomeric type conforming to AAMA 803 and AAMA 808.
7. Glass Units
   a. 1-inch Insulated Glass Units
   b. Low E
   c. Exterior – Clear
   d. Internal – Clear

B. **Paint**
1. Primer shall be PPG Seal Grip Universal Sealer/Primer that is a low odor alkyd/oil base that will block wood tannin stains.
2. Finish shall be Porter Paint Advantage 900 Acrylic Enamel (Semi-Gloss) which is a waterborne, low odor, non-yellowing and fast drying product.
3. Colors formulas to be supplied by the University of Kentucky.

C. **Wood Products**
1. Where specified and/or required, any replacement wood elements shall be Cypress or mahogany and be primed on all sides prior to installation. Any substitute shall have the Project Manager's approval.
2. Patching materials for repairing existing wood elements that are to have a "natural" finish, the wood chosen shall be like-wood with similar wood-grain.

D. **Caulk**
1. Caulking shall be Sherwin Williams Loxon H1 One Component Low-Modulus Hybrid sealant Class 50 or approved substitute.

E. **Waterproofing material**
1. If required and for any exterior masonry waterproofing, use Chem-Trete BSM-40 waterproofing or other product as recommended by the Chem-Trete representative (Jack Schwein jschwein@fuse.net or cell phone (513) 289-4867.

Section III Windows

3.1 Fabrication

A. General
1. Units shall be able to be re-glazed without dismantling the master or sash frame.
2. All aluminum frame and sash extrusions shall have a minimum wall thickness of 0.080". Sill of master frame shall have a minimum wall thickness of 0.094"
3. Mechanical fasteners, welded components, and hardware items shall not bridge thermal barriers. Thermal barriers shall align at all frame and sash corners.

B. Frame
1. Master frame shall be no less than 4" depth.
2. Frame components shall be mechanically fastened.

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C. Sash
1. Sash frame shall have a minimum wall thickness of 0.080".
2. Sash frame horizontal extrusions shall be of tubular design.
3. Mitered sash corners shall be mechanically fastened.

D. Screens (if specified)
1. There will be no screens in this project

E. Finish
1. Fluropon® (AAMA #2605)
2. 10-year warranty
3. Clear Anodized Class I

F. Glass and Glazing
1. All units shall be factory glazed.

G. Panning
1. Factory designed and manufactured exterior perimeter window panning shall be provided with all replacement windows.
2. Perimeter panning at the side brick surfaces, at the lintels, and the sills may not be required depending on the manufacturing process. Panning will be required on the wide separating windows between multi-unit windows.
3. Panning shall be manufactured to match the window color unless otherwise noted in the specifications.
4. Panning should be no less than 24 gauge.

3.2 Testing and Window Performance Requirements

A. Units shall comply with air, water and structural requirements as specified in AAMA/WDMA/CSA 101/I.S.2/A440-08 and AAMA 910-93 for type and classification of window units required.

B. Windows shall conform to all AAMA/WDMA/CSA 101/I.S.2/A440-08 and AAMA 910-93 requirements for the type and classification of window units required. In addition, the following performance criteria must be met:
1. Air Infiltration Test
   a. With the window sash closed and locked, test unit in accordance with ASTM E 283 at a static air pressure difference of **6.24** psf.
   b. Air infiltration shall not to exceed **<0.3** cfm per square foot of crack.
2. Water Resistance Test
   a. With window sash closed and locked, test unit in accordance with ASTM E 331 & ASTM E 547 at a static air pressure difference of **10** psf.
   b. There shall be no uncontrolled water leakage.

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c. Uniform Load Structural Test with window sash closed and locked, test unit in accordance with ASTM E 330 at a positive and negative static air pressure difference of **75** psf.
d. There shall be no glass breakage, permanent damage to fasteners, hardware parts, support arms, or actuating mechanisms, or any other damage that would cause the window to be inoperable.
e. There shall be no permanent deformation of any mainframe, sash, panel, or sash member in excess of L/175 of its span.

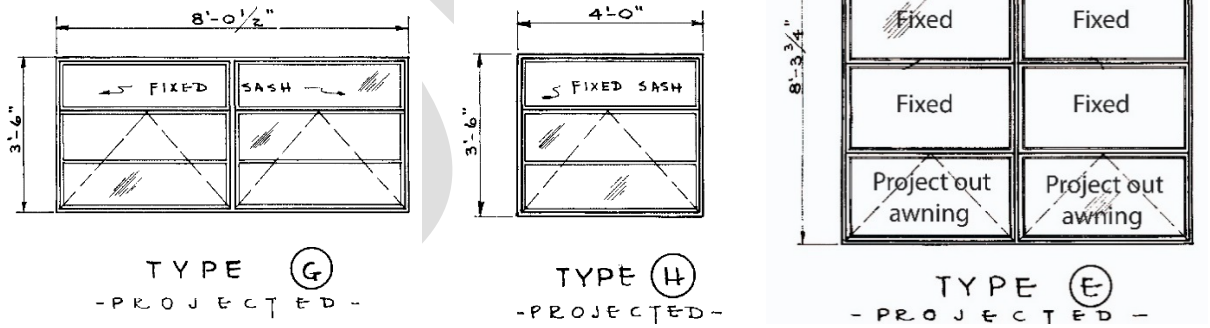
3. U Value: **.355**

3.3 Submittals

A. Prior to manufacture, submit shop drawings, finish samples, test reports, and warranties.
1. Shop drawings to be supplied shall indicate type of glazing, and window finish.
2. Other samples may be requested if so directed by the Project Manager.

3.4 Window Design Specifications

A. Awning Window Type
1. Windows shall be **Winco Windows Project-Out Series 1150S (AW – 100)** or approved substitute. For types G & H, the bottom two sashes will project out with a fixed sash above. Type E shall have a bottom sash project out with the top 3 sashes fixed. (see attached photos following for the exact design). Contractor is responsible for his own measurements and drawings.

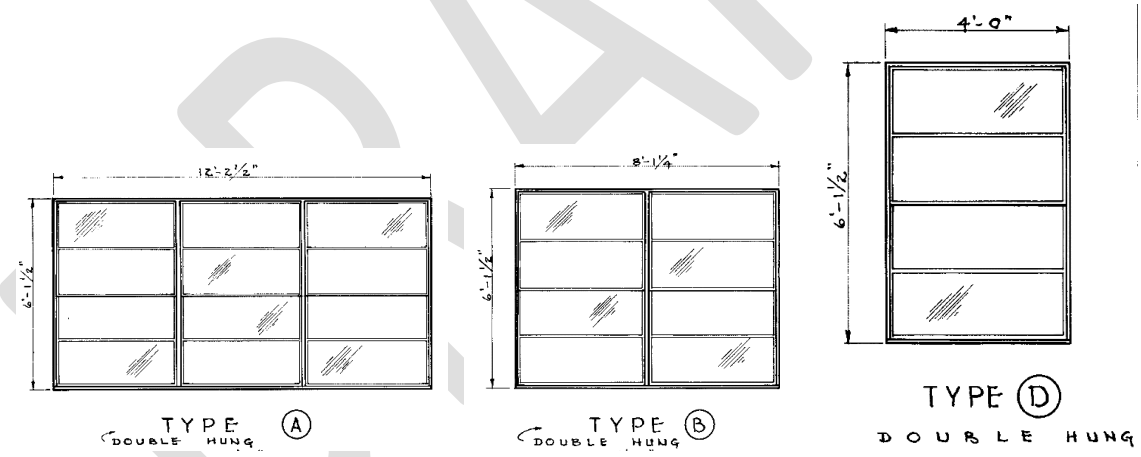


2. Substitute shall be equal to and/or exceed the Winco stated specifications and test results in every category or will be rejected.
3. Windows shall be awning style, swing out
4. Finish color shall be "Clear anodized class 1,"
5. Sash shall have the appropriate factory installed crank opening device,

6. Sash shall have 1" Insulated Glass Units:
   a. Internal glass 3/16" clear with PPG SolarBan 60 soft coat Low E on the #3 surface (See addition information elsewhere in the specs)
   b. External glass 3/16" Gray tint.
   c. 1 ¼" Muntin on Exterior, Winco D4-324 and Between the Glass Muntins
7. Sash shall have tamper-proof screws,
8. Sash shall have aluminum glazing beads,
9. Sash shall have Black WE spacer,
10. Install factory designed and manufactured exterior perimeter window panning on with all replacement windows,
11. Contractor to provide shop drawing/cut sheets/details prior to manufacturer.
12. Subsill to be Winco TB-102 with Sill Flashing D33-124.
13. Mullions to be Winco TB-119 mullion set.

B. Double Hung Window Type

1. Windows shall be double-hung model 4500S by Winco Windows. or approved substitute. Others may submit their comparable top-of-the-line models (AW-60) for review and possible acceptance as an equal. Any substitute shall be top-of-the-line models or will be subjected to rejection. (Contractor is responsible for his own measurements).



2. Sashes are to be one pane,
3. Finish color shall be "Clear anodized class 1,"
4. Bottom sashes shall have two white bronze sweep locks,
5. Top sashes shall have a white bronze drift latch and pull handle
6. Top and bottom sashes shall have 1 inch insulated glass units
7. Internal glass 3/16" clear PPG SolarBan 60 soft coat low E,
8. External glass 3/16" Gray tint (SolarBan 60 PPG)
   a. 1 ¼" Muntin on Exterior, Winco D4-324 and Between the Glass Muntins
9. Sashes shall have Ulta-lift balances,
10. Sashes shall have tamper-proof screws,

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11. Sashes shall have aluminum glazing beads,
12. Sashes shall have tilt capability,
13. Upper sash shall have a white bronze drift latch,
14. Sashes shall have Black WE spacer,
15. Screens will not be part of this specification
16. Manufacturer/Contractor to provide shop drawing/cut sheets/details prior to manufacture of windows
17. Panning specified in section 3.1G.
18. Subsill to be Winco D14-102 with Sill Flashing D33-124
19. Mullions to be Winco M-3 mullion set.

C. Building window types:

1. **Window type A_ Double hung**

   i. Forty three (43) Type A windows
   ii. Rough dimensions: 6'-1 ½" x 12'-2 ½"
   iii. Type A windows are 3 panes wide (equal widths) x 4 panes high (equal heights).

2. **Window type B_Double hung**

   i. Thirty five (35) Type B windows
   ii. Rough dimensions: 6'-1 ½" x 8'-1 ¼"
   iii. Type B windows are 2 panes wide (equal widths) x 4 panes high (equal heights).

3. **Window type C**
   i. There are no type C windows in this project.

3. **Window type D_ Double hung**

   i. Twenty seven (27) Type D windows
   ii. Rough dimensions: 6'- 1 ½" x 4'-0"
   iii. Type D windows are 1 pane wide x 4 panes high (equal heights).

4. **Window type E_ Project out awning**

   i. Six (6) Type E windows
   ii. Rough dimensions: 8'-3 ¾" x 8'-0"
   iii. Type E windows are 2 panes wide (equal widths) x 4 panes high (equal heights)
   iv. Top three sashes are to be fixed while bottom sash projects out (see images above).

5. **Window type G_ Project out awning**
   i. Twelve (12) Type G windows
   ii. Rough dimensions: 3'-6" x 8'-0 ½"

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iii. Type G windows are 2 panes wide (equal widths) by 3 panes high (equal heights)
iv. Top sash is fixed while bottom two sashes project out (see images above).

6. **Window type H_ Project out awning**
   i. Thirteen (13) Type H windows
   ii. Rough dimensions: 3'-6" x 4'-0"
   iii. Type H windows are 1 pane wide by 2 panes high (equal heights)
   iv. Top sash is fixed while the bottom two sashes project out (see images above).

Note: There are several windows with air conditioning units in the bottom sashes. EVERY window with an AC unit is to be removed and disposed of properly.

Note: AC units are to be removed and disposed of properly.

Note: Replacement of windows with AC units shall be last windows to be replaced. Contractor to coordinate with University project manager.

Note: Several window units contain screens that will NOT be replaced in the installation of the new windows. The existing screens shall be removed and disposed of properly.

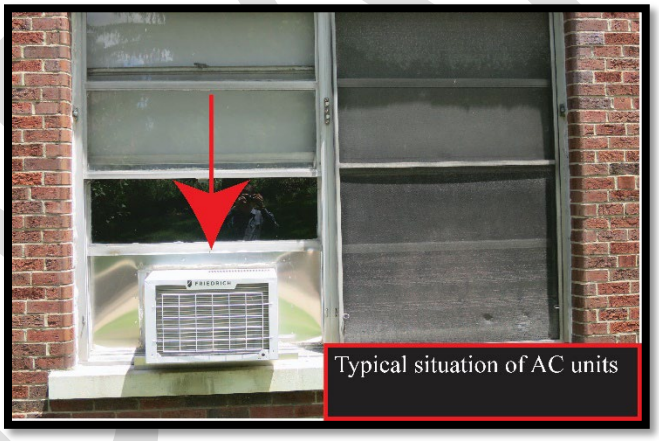

Fig 1.

Note: With every window type, the Contractor is responsible for their own measurements.

Note: Side F contains security bars in three (3) of the windows; these bars are to be removed and disposed of properly.

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Fig 2.

3.5 Warranties

A. Manufacturers Warranties

1. Submit written warranties from window manufacturer for the following:
   a. Windows furnished are certified as fully warranted against any defects in material or workmanship under normal use and service for a period of **five (5) years** from date of fabrication.
   b. The pigmented organic finishes on windows and component parts (such as panning, trim, mullions, and the like) are certified as complying fully with the requirements of the AAMA **260X** specification and fully warranted against chipping, peeling, cracking or blistering for a period of **ten (10) years** from date of installation.
   c. The insulating glass units shall be warranted from visual obstruction due to internal moisture for a period **of ten (10) years**. The manufacturer shall furnish a test report and notice of product certification from an independent laboratory showing compliance per ASTM E 2190-02 as pass/fail.

3.6 Execution

A. Job Conditions

1. At locations designated, furnish and install aluminum architectural windows complete with hardware and related components as shown on drawings and specified in this document.
2. Contractor is responsible to measure openings and to verify that openings are dimensionally within allowable tolerances, plumb, level, clean, provide a solid anchoring surface, and are in accordance with the approved shop drawings.

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Note: Should there be building defects encountered (other than the normal and visual) in the process of installation of the new windows and not of his making, the Contractor shall notify the Project Manager and continue the installation of windows at other locations. The Project Manager and the Contractor shall mutually agree on a solution to the unexpected issue.

B. Installation
1. Work to be completed in accordance with the approved shop drawings and specifications by skilled tradesmen.
2. Set units plumb and level in a single plane for each wall plane without warp or rack of frames or sash. Adequately anchor units in place separating aluminum and other corrodible surfaces from sources of corrosion or electrolytic action.
3. Where panning is installed, it shall be of the same or similar design as the existing window framing contours it covers and shall be factory provided.
4. Contractor to install new interior-perimeter window opening trim if damaged in the installation and/or existing trim is damaged prior to window installation process.
5. All interior damages to framing, paint, and/or tile window stools shall be repaired to match existing,
6. Adjust window units for proper operation after installation.
7. Furnish and apply sealants to provide a weather tight installation.
8. Leave all exposed surfaces clean, smooth, and free of debris.

C. Anchorage
1. Adequately anchor to maintain permanent position when subjected to normal movement and loading.

D. Interior framing and trim
1. Installation of the windows will necessarily require:
   a. In some locations, drywall/ceiling tile repair around or near the window openings will be necessary. Any repairs will be made to look like the original openings with any new repair work or repainting.

      Note: Any touch up painting shall be done from corner to corner and from floor to ceiling; i.e. if touchups are needed in a particular area, the entire surface of that area will need to be repainted in order to maintain a cohesive aesthetic.

   b. In some areas there will be limited room for adjustments and repositioning of the new windows due to low ceilings and tight framing. Any damages to the walls, trim, or tile/brick window stools shall be repaired or replaced to the project manager's satisfaction.
   c. The Contractor is responsible for all furniture moving and replacing to original locations.
   d. The Contractor shall remove and re-install all types of blinds and/or shades existing in the window openings.

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Note: Should any blind and/or shade be in disrepair and is in need of replacement, the Owner will purchase new units for the contractor to install. The Contractor shall provide proper measurement for the new units.

E. Cleaning and Protection

1. After completion of installation, units shall be inspected, adjusted and promptly cleaned to prevent damage to finish or glazing.

   Note: Cleaning includes a final inspection and cleaning of the glass surfaces inside and out.

2. Remove excess sealant, labels, dirt and other substances.
3. Initiate all protection and other precautions required to ensure that units will be without damage or deterioration at time of acceptance.
4. Once the protective film is removed, apply a coating of WonderGlass to the outside surfaces of the glass. (http://wonderpaint.com/downloads/WP_WonderGlass-TechSheet.pdf).

Section IV Drawings and Photos

4.1 Drawing Symbols

This symbol indicates a location that already has a replacement window in place and is not in this contract.

This symbol indicates locations for windows to be replaced.

4.2 Floor Plan – Site Identification

A. The following floor plan identifies the locations for the installation of the proposed windows. The exterior walls of the building have been labeled for ease of identifying the locations for each type of window. They are as follows:

1. Side A: Seventeen (17) window units.
2. Side B: Thirty three (33) window units.
3. Side C: Zero (0) window units.
4. Side D: Twenty six (27) window units.
5. Side E: Twenty one (21) window units.

DRAFT

6. Side F: Thirteen (13) window units.
7. Side G: Two (2) window units.
8. Side H: Twelve (19) window units.
9. Side I: Four (4) window units.

DRAFT

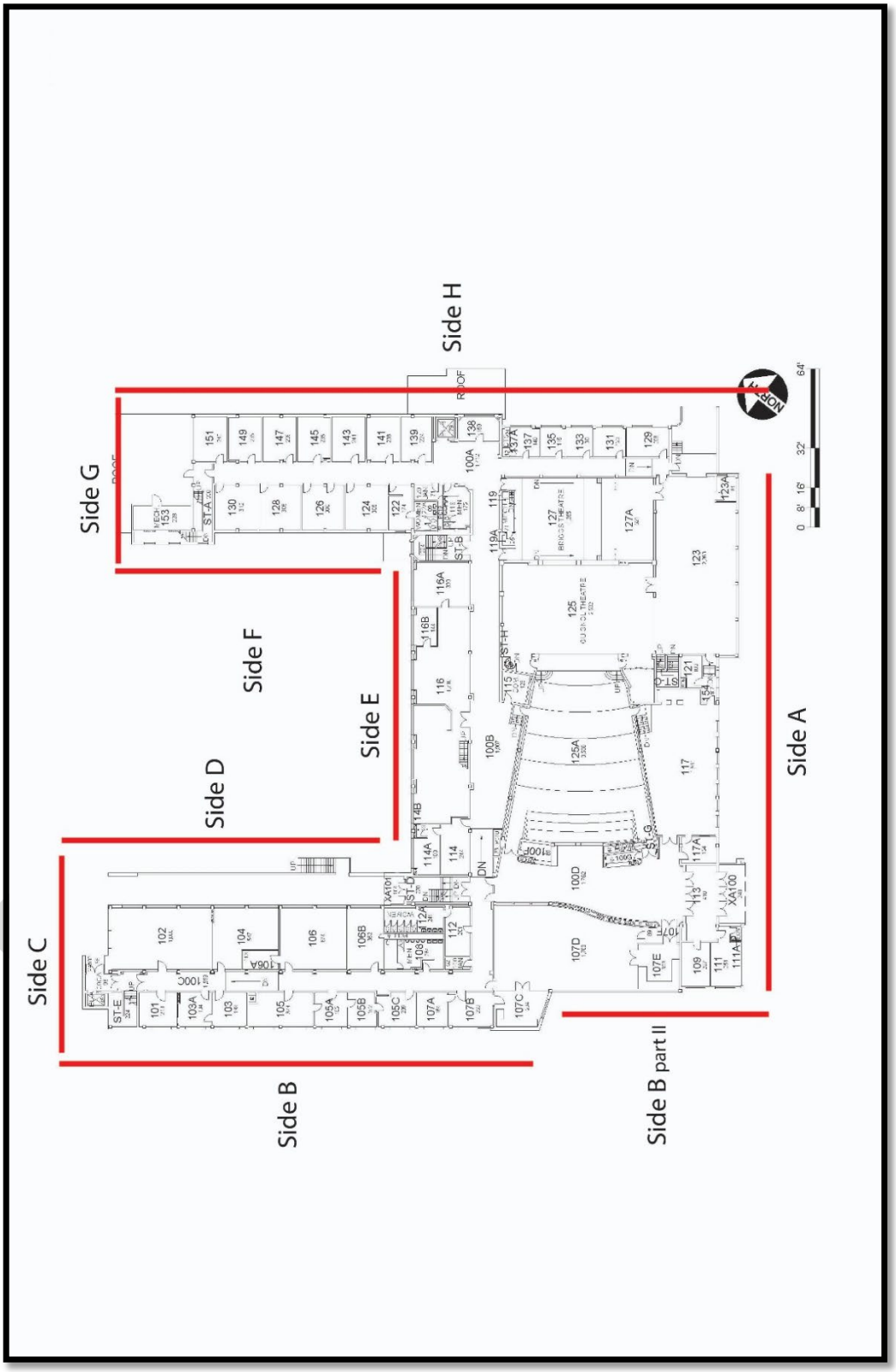

Side H
Side G
Side F
Side E
Side D
Side C
Side B
Side B part II
Side A
NORTH
0 8' 16' 32' 64'

Fig 3.

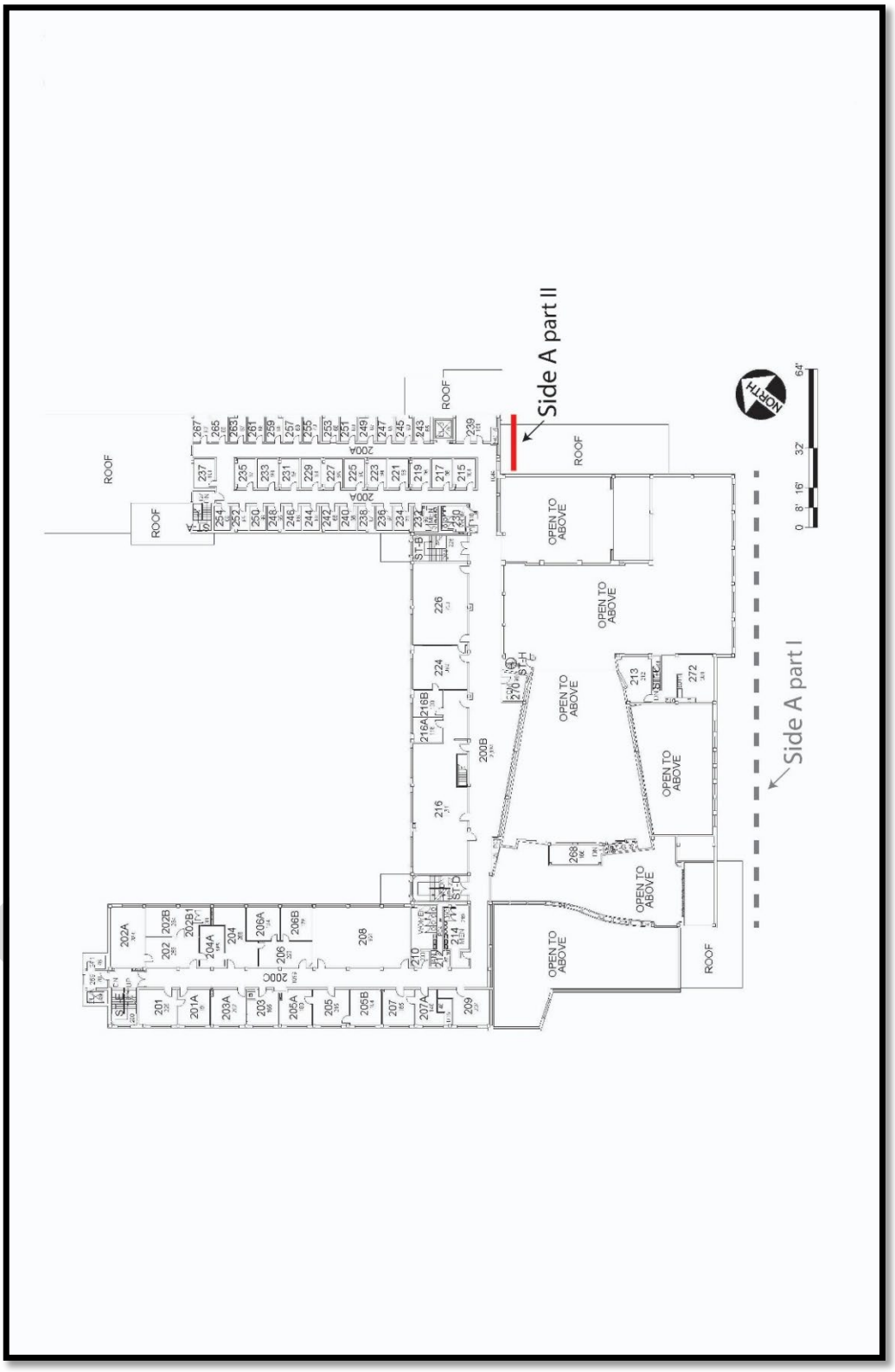

Side A part II
Side A part I
NORTH
ROOF
OPEN TO ABOVE
200A
200B
200C
ST-B
ST-C
ST-D
ST-H
SHAFT
0 8' 16' 32' 64'

Fig 4.

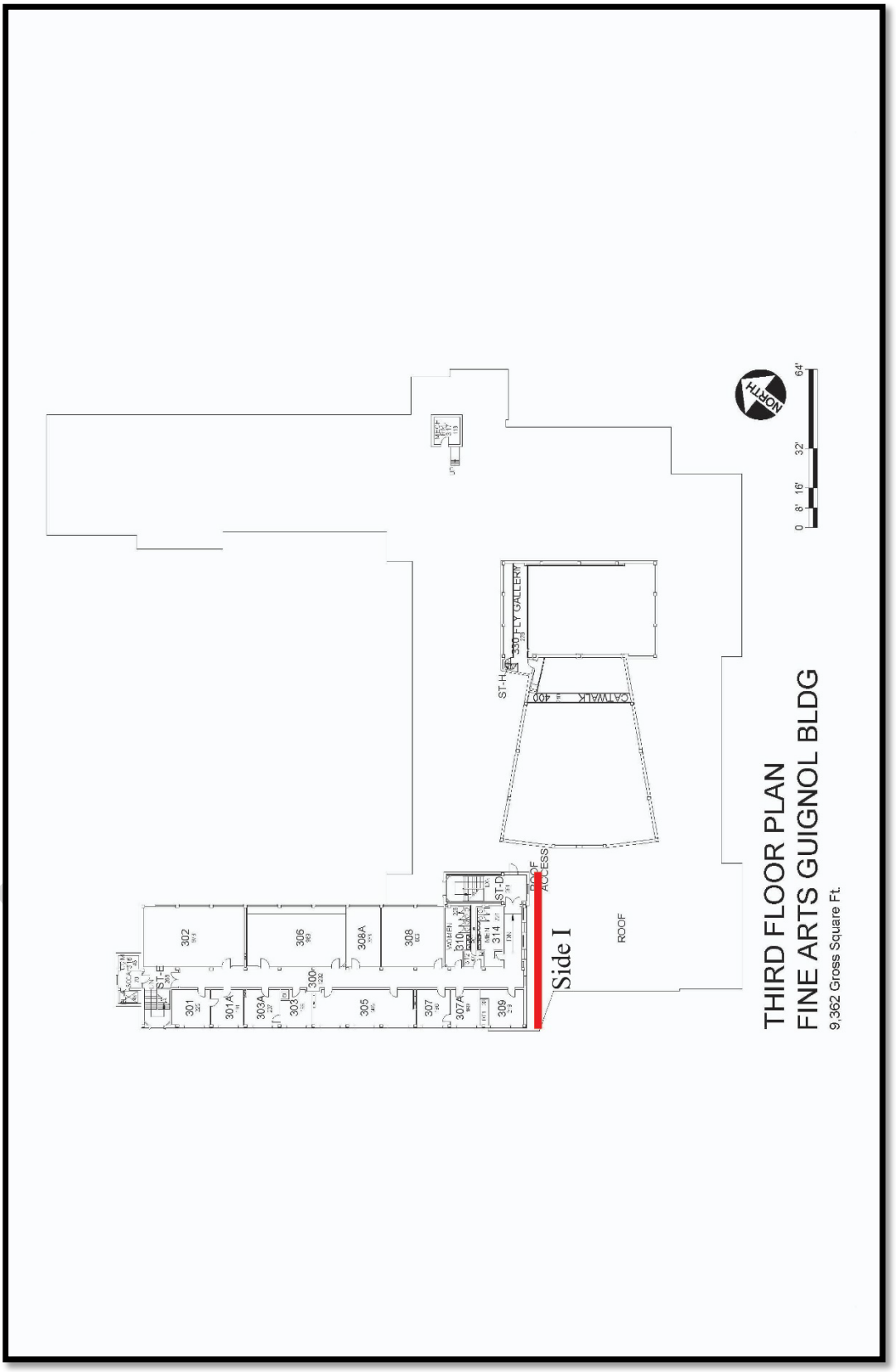

NORTH
0 8' 16' 32' 64'
THIRD FLOOR PLAN
FINE ARTS GUIGNOL BLDG
9,362 Gross Square Ft.
Side I
ROOF
ROOF ACCESS
CATWALK
ST-D
ST-E
ST-H
302
306
308A
308
310
314
301
301A
309A
303
300
305
307
307A
309

Fig 5.

Fig 6.

Side A: There are seventeen (17) windows to be replaced on side A.

1. One (1) type G window.
2. Eleven (11) type H windows.
3. Five (5) type E windows.

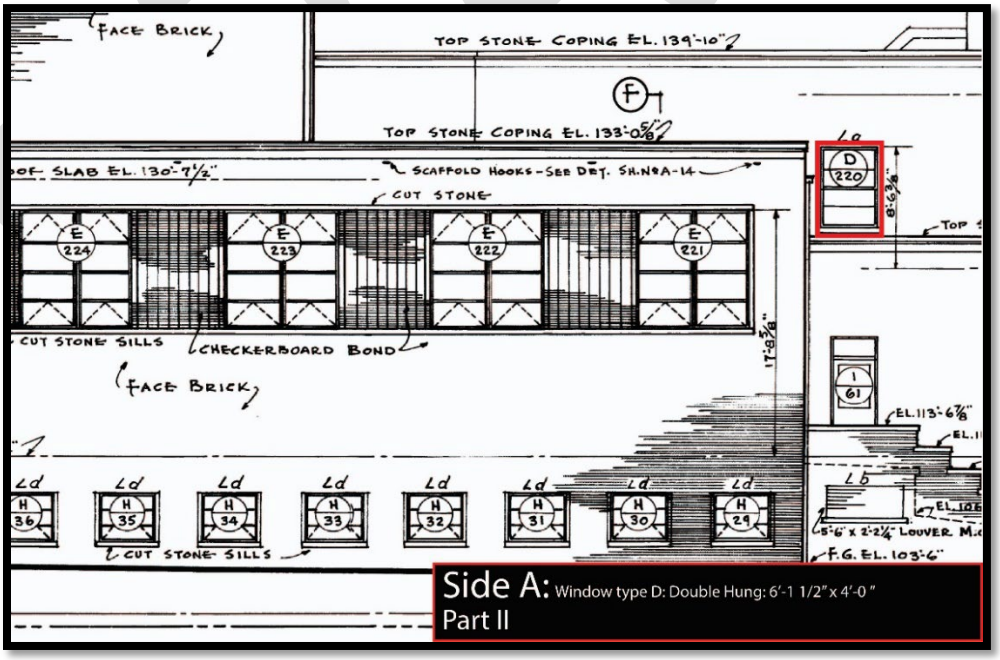


Fig 7.

Side A part II: There is one (1) window to be replaced on side A part II. (Reference figure 4)

1. One (1) type D window.

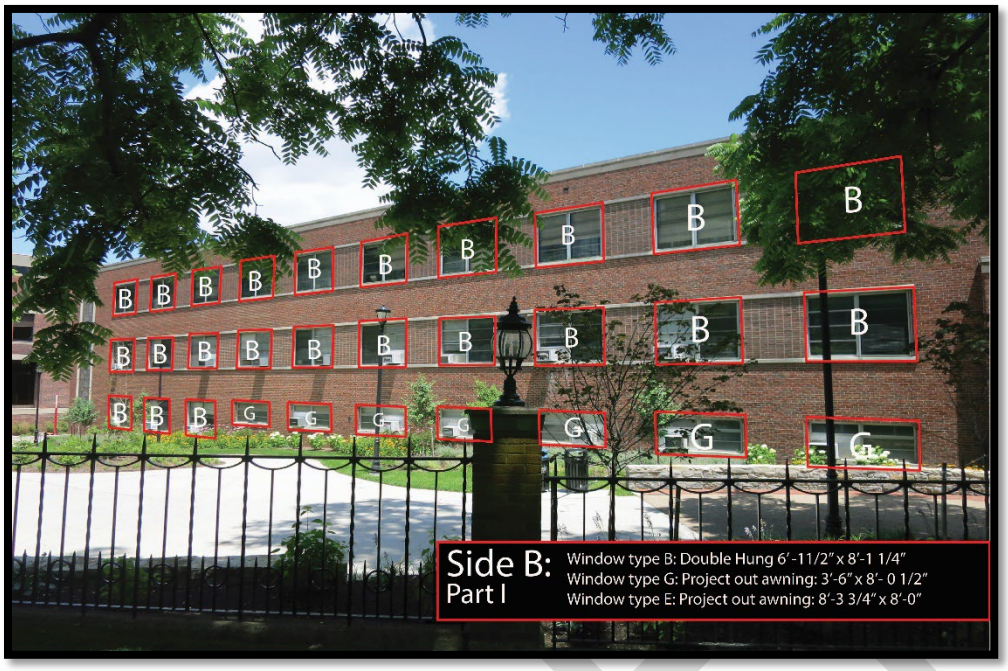


Fig 8.

Side B: There are thirty (30) windows to be replaced on side B part I.

1. Twenty-three (23) type B windows.
2. Seven (7) type G windows.

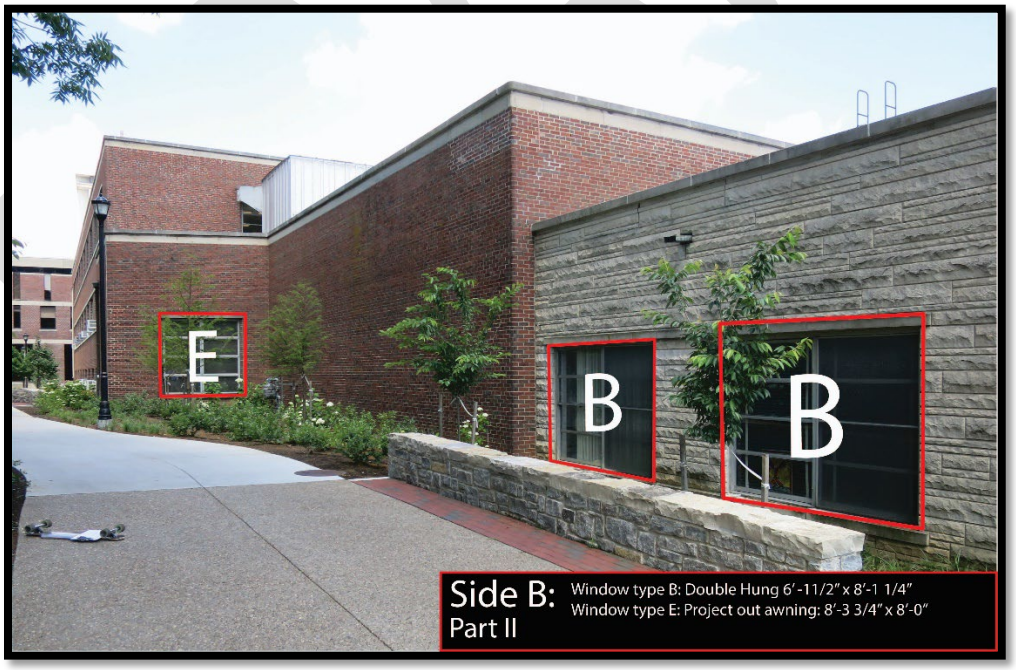


Fig 9.

Side B: There are three (3) windows to be replaced on side B part II.

1. One (1) type E window.
2. Two (2) type B windows.

Fig 10.

Side C: There are zero (0) windows to be replaced on side C.

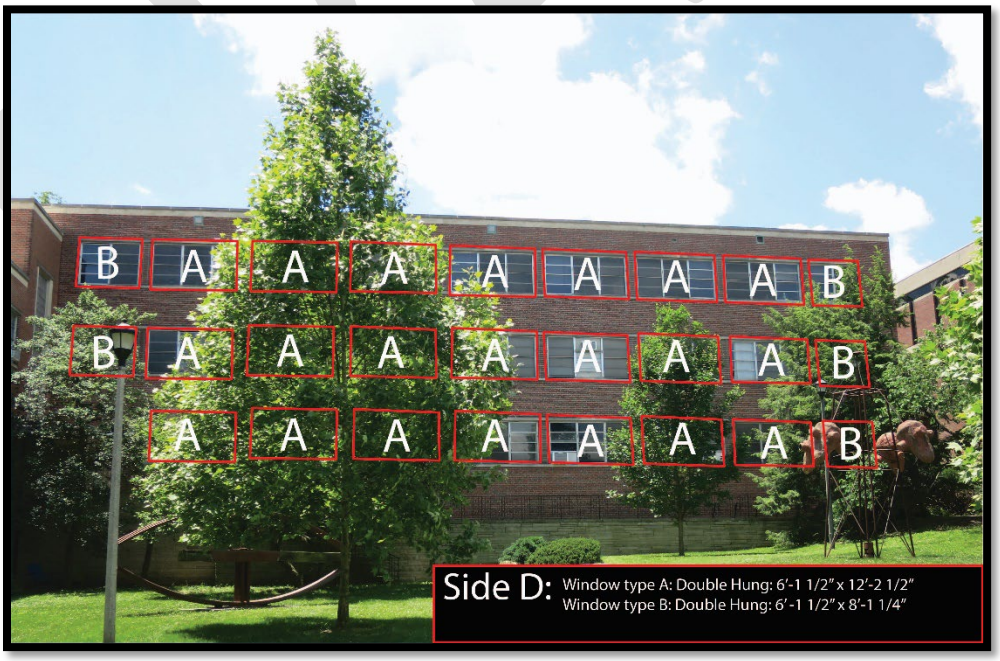


Fig 11.

Side D: There are twenty-six (26) windows to be replaced on side D.

1. Twenty-one (21) type A windows.
2. Five (5) type B windows.

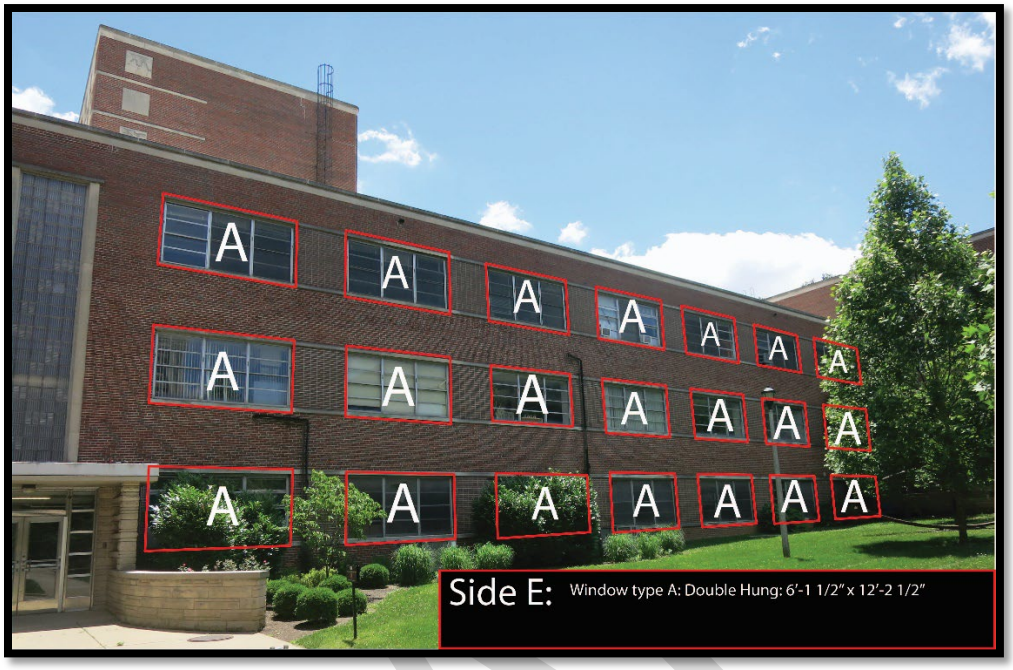


Fig 12.

Side E: There are twenty-one (21) windows to be replaced on side E.

1. Twenty-one (21) type A windows.

Fig 13.

Side F: There are thirteen (13) windows to be replaced on side F.

1. Thirteen (13) type D windows.

Fig 14.

Side G: There are two (2) windows to be replaced on side G.

1. Two (2) type D windows.

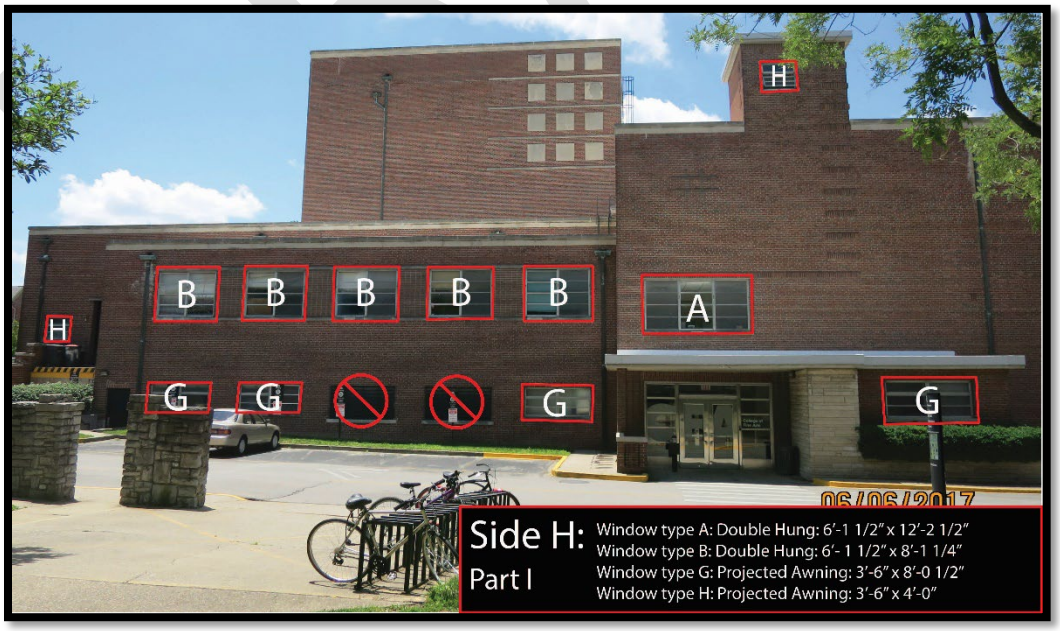


Fig 15.

Side H: There are twelve (12) windows to be replaced on side H.

1. One (1) type A window.
2. Five (5) type B windows.
3. Four (4) type G windows.
4. Two (2) type H windows.

Fig 16.

Side H: There are seven (7) windows to be replaced on side H.

1. Seven (7) type D windows.

Fig 17.

Side I: There are four (4) windows to be replaced on side I.

1. Four (4) type D windows

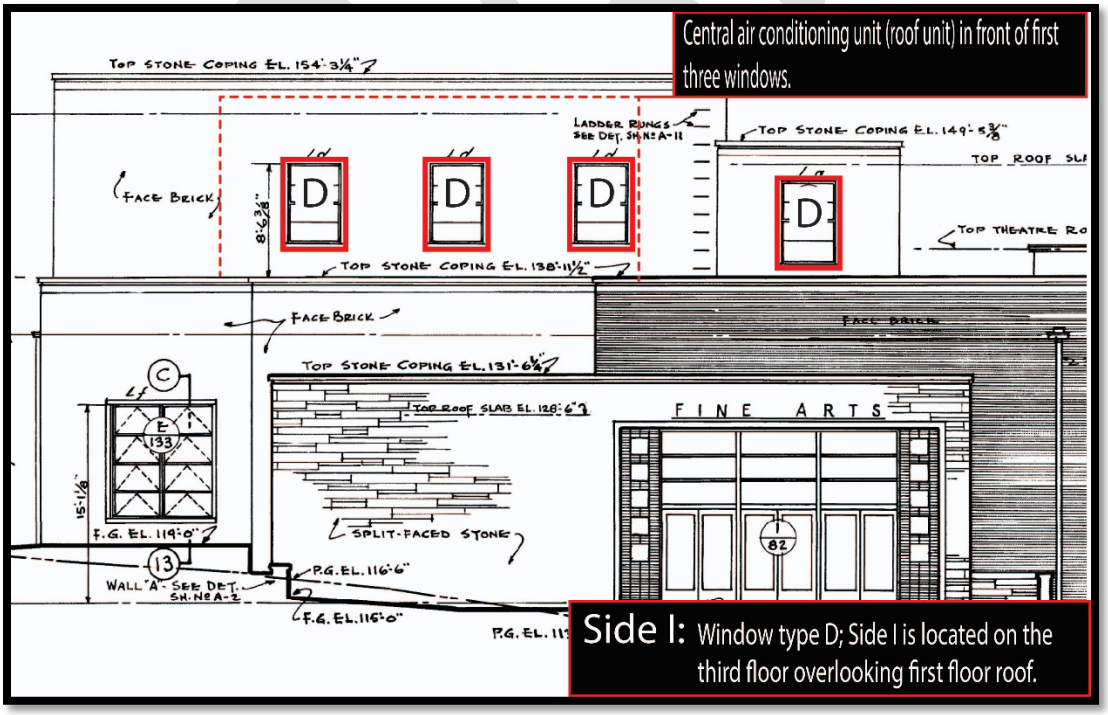


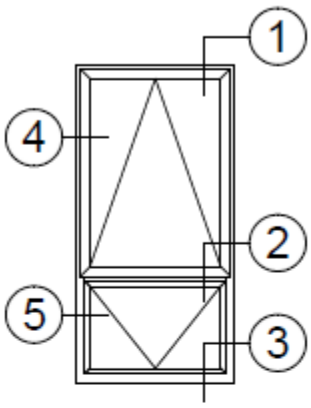
Fig 18.

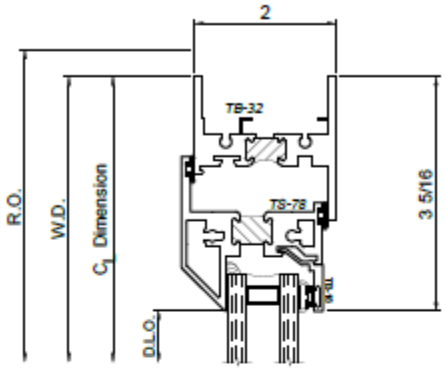
Side I: Elevation profile of the four windows in need of replacement. (See aerial image above).

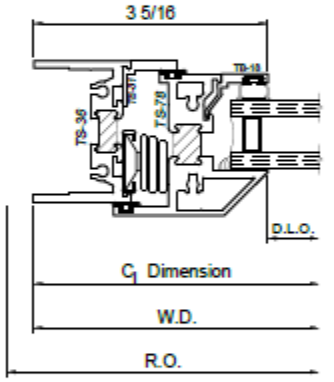
1150S Series 2" Thermal Fixed, Casement & Projected Windows
Product Details - PO|PI - Awning|Hopper

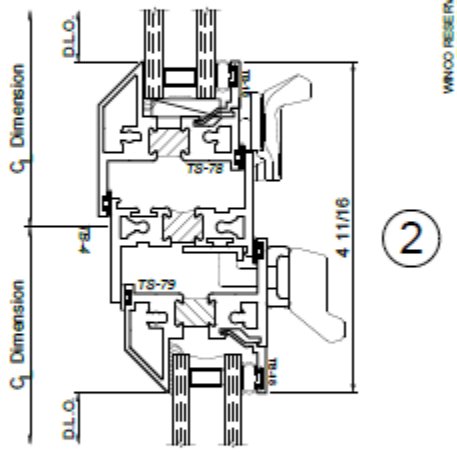
WINCO WINDOW

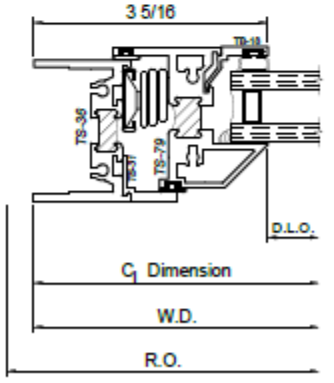
Note: Multiple configurations of this window system are available. Refer to the WINCO website for additional options or contact your local WINCO Sales Representative for information.

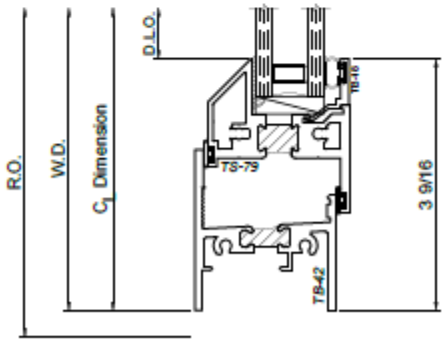












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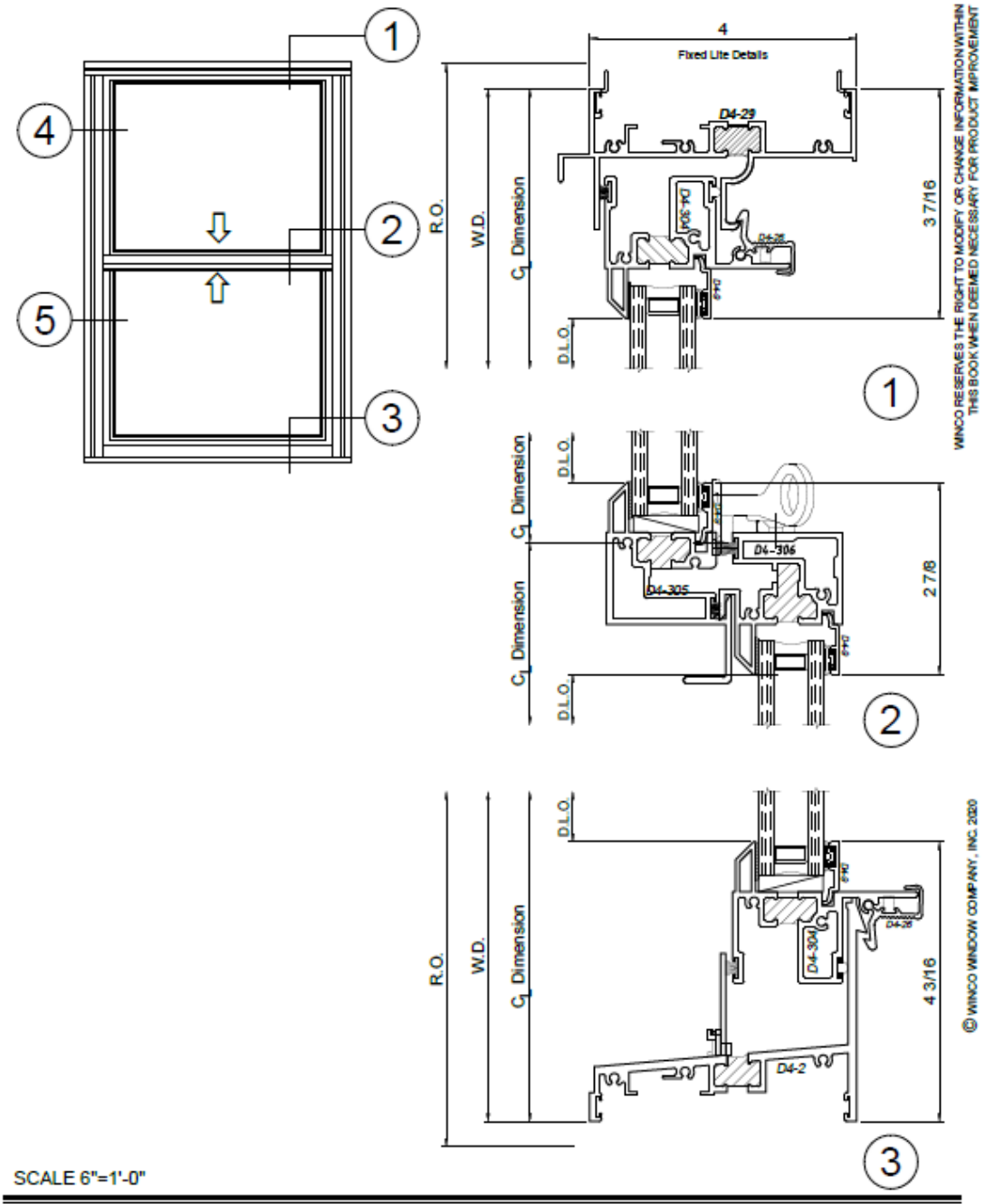
SCALE 6"=1'-0"

4500S Series 4" Thermal Fixed & Double Hung Windows
Product Details - Double Hung Window Head and Sill Details

WINCO WINDOW

Note: Multiple configurations of this window system are available. Refer to the WINCO website for additional options or contact your local WINCO Sales Representative for information.



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SCALE 6"=1'-0"

4500S Series 4" Thermal Fixed & Double Hung Windows
Product Details - Double Hung Window Jamb Details

WINCO WINDOW

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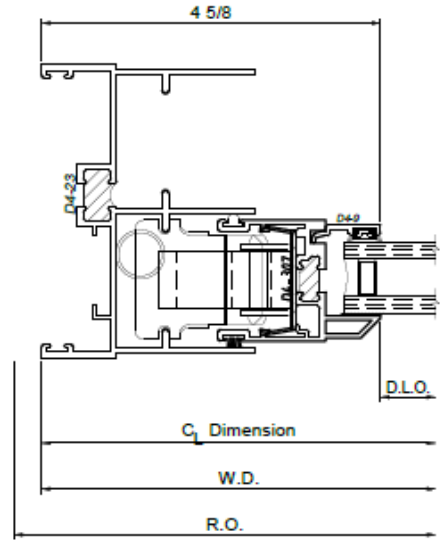

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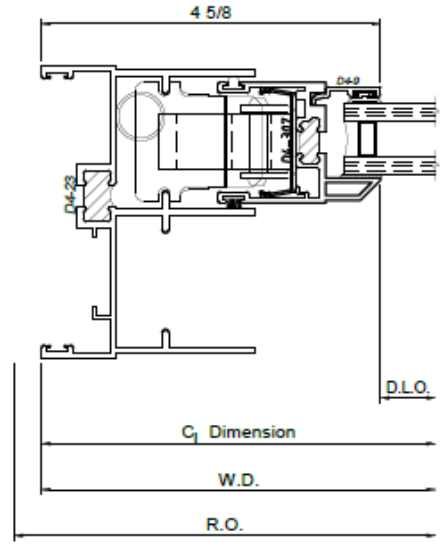

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SCALE 6"=1'-0"

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END SPECIFICATION