

01340B01-SUBMITTALS - DRAWINGS, PRODUCT DATA, ETC.

1. PROJECT DOCUMENTATION PACKAGE

Every project must have a complete project documentation package including but not limited to the following items:

1. Program
2. Phase 1 Drawings and Specifications
3. Phase 2 Drawings and Specifications
4. Phase 3 Drawings and Specifications
5. Bid Package Including Phase 3 Drawings, Specs and Addendums
6. Shop Drawings and Submittals
7. Final "Record Drawings" Drawings
8. I,T,O,M,S & R Manuals

Notes:

1. Unless contractually modified, items 2-7 are the responsibility of the project consultant and provisions to meet these requirements shall be a part of the consultants contract responsibilities. See below and on following pages for definition and additional information on content of items above.
2. Minimum quantity of each item specified, additional quantity of each item to be provided to be as specified in the special and/or general conditions sections of the bid documents.
3. Complete documentation package, items 26 above, shall be reviewed by the University before installation starts.
4. See the following pages for details on content of items 1-7 above.

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1. Program (to be completed prior to consultant selection)

Scope of project, budget estimate and project schedule.

Instructions to Consultants.

Basic guidelines on Architecture, Mechanical, Electrical, Utilities, etc.

Copies of applicable UK Standards (CSI format) in hard copy and disk copy of all word processing documents (ASCII .prn or .txt files) and of all drawings (.dwg, .dxf, or .dxb file format that is compatible with AutoCad Release 12 or later).

Consultant drawings shall include documentation and record of all utilities above, below and on the surface of the project area. Clear and direct instructions on drawings and specifications shall be included for every utility addition, removal, abandoned, moved, modified, routed, rerouted, temporarily, undermined, insulated, reinsulated, and repaired. As a minimum, documentation shall include all utility lines shown on the University of Kentucky Utility maps of the project area.

The following statement is to appear verbatim on drawings which relating to excavation and/or subsurface work:

Beginning of Statement:

The following is in accordance with the General Conditions:

The Contract Drawings show the approximate location of the existing and new subsurface utility lines and surface utility. These lines have been identified and located as accurately as possible using available information. The Contractor is responsible for verifying all actual utility locations. If for any reason service by any utility is interrupted, the contractor will work continuously to restore service to the satisfaction of the Owner at no additional cost to the Owner.

Should utilities require relocation or rerouting not shown or indicated to be relocated or rerouted, contact Owner immediately and get required approvals. Any changes to utilities requiring adjustments to contract amount shall be authorized by change order and amount must be equitable based on the lesser of the prevailing rate in the project area or the contract unit pricing.

End of Statement

2. Phase-1 Drawings and Specifications (develop during design in accordance with the project program)

Drawings: floor plan, architectural, electrical, mechanical, site, site utilities, cross sections, etc
Specs: All applicable UK standards and consultant developed specs.

Review, revise request missing drawings and specs if required.

3. Phase-2 Drawing and Specifications (includes Phase-1with revisions)

Drawings: floor plan, architectural, electrical, mechanical, site, site utilities, cross sections, etc
Specs: All applicable UK standard specs and consultant developed specs for CSI divisions 1-16, sequence of operations and other project specific specs.

Review, revise and request missing drawings and specs if required.

4. Phase-3 Drawings and Specifications (includes Phase-2 with revisions) Final review, revise and request missing drawings and specs if required.

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5. Bid Package

Each Bid Package(s) to include the following for each phase:

1. Bidding Requirements
2. Contract Forms
3. Conditions of the Contract
Supplement(s) to Conditions of the Contract per 00400B01
4. Phase-3 Project Specifications
5. Phase-3 Project Drawings
6. Other correspondence and documents as required
7. Drawings and Specs reviewed and stamped by the Ky. Dept. of Housing, Buildings and Construction.

6. Shop Drawings (submitted before construction for review only).

1. Specifications on shop drawings shall include a statement as follows: Shop Drawings will be reviewed as a courtesy only and in no way can shop drawings change, delete or modify any part of the contract documents which include all specifications and drawings. Changes to contract documents require the University to issue a written change order.
2. If design drawings are not used to develop shop drawings, then the consultant will be required to incorporate the shop drawings into the design documents.
3. One copy of consultant approved shop drawings are to be on construction site and available to University's Project Manager for review at all times during construction. One additional exact copy of the site approved shop drawings is to be transmitted to the University's' Project Manager for filing before construction starts.

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7. Final "RECORD" Drawings and Specs

A complete set of "RECORD" drawings, up to date and marked with site changes, are to be on the construction site and available to Project Manager for review at all times before and during construction.

Final "RECORD" drawings, complete with all changes made during construction, shall be transmitted to the UK Project Manager on Mylar and in UK Standard ACAD disk file format. Mylar sheets are to be rolled together in a separate bundle, and transmitted to UK in a cardboard tube. Folded mylar sheets are not acceptable. Drawings and specs must include actual UK Space Inventory Department assigned building and room numbers.

Final payment is contingent on all required copies of the Final "RECORD" Drawings and Specs being completed, reviewed and approved by the project consultant, formally transmitted to the University designated Project Manager and approved for content by the University Project Manager. Final payment to the contractor shall not be made until these approvals are made in writing.

The scope of the project will dictate whether a full complement of drawings and specs will be provided on this contract. Unless otherwise indicated in the consultant description of services, specs will be required for all CSI Divisions 1-16 and "RECORD" drawings will be required for all aspects of the project including but not limited to:

Architectural:

Floor plan, Key drawing, Reflected ceiling for lighting, tile and suppression heads, etc

Structural:

Drawings plus calculations

Mechanical:

Provide shop drawings and one line riser diagrams of all mechanical systems including but not limited to those provided for HVAC, Plumbing, Fire Suppression and all other systems installed in conduit.

Electrical:

Provide shop drawings, one line raceway (duct and conduit) riser diagrams and wiring diagrams for all Phone Systems, Computer Systems, LAN Systems, FMS Systems, Fire Alarm Systems, Security Systems, Key Access Systems, CCTV Systems, Metering Systems, Monitoring Systems, data lines, low, medium and high voltage electrical systems and all other electrical and communications equipment and systems.

Provide wiring diagrams with wire and terminal block label numbers and wire colors included.

Provide schematic diagrams and theory of operation for every electric, electronic and electric/electronic circuit and system provided.

Complete description data indicating UL listing for all components, all systems components and all complete systems.

Site:

Subsurface, Utilities, Transit, Fire Protection, etc

8. Final I.T.O.M.S & R Manuals

The University requires a minimum of three (3) bound final Installation, Training, Operation, Maintenance and Repair manuals (I,T,O,M,S & R) to be turned over to the Project Manager before final acceptance of the contract. Manuals provided must be of sufficient detail to enable customer 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. Manual must contain an Equipment Index that includes vendors name, address, and telephone number for all

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equipment purchased on the project. All manuals in binders shall be original copies provided by the manufacturer. At minimum these binders must include:

Installation manuals	Calibration manuals
Training manuals	Operation manuals
Service Manual	Repair manuals
Parts list	Wire list

Reviewed shop drawings

Any Computer, Microcontroller, 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.

Copies of all inspection and guarantee certificates. Copies of all manufacturers' warranties as filed with the University of Ky. listed as the owner for all equipment provided and/or installed.

All manuals shall be as follows: Bound in hard cover three(3) ring (D-type) binder, 1", 1.5" or 2"max, 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. Max 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.

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

All drawings in manuals shall have Mylar and ACAD Disk File copies transmitted with the Final "RECORD" Drawings and Specs.

Final payment is contingent on all required copies of the Final I,T,O,M & R Manuals being completed, reviewed and approved by the project consultant, formally transmitted to the University designated Project Manager and approved for content by the University Project Manager. Final payment to the contractor shall not be made until these approvals are made in writing.

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2. SAMPLES

Provide a sample of replacement ceiling tile to be used for replacing damaged ceiling tile if execution of this contract involves removing any ceiling tile.

3. GENERAL DOCUMENTATION INFORMATION

When applicable, the following information is to be in a prominent location on the appropriate drawings:

1. Provide a cover sheet for each set of drawings. When applicable, the following information is to be on the cover sheet: 1. Edition of the Kentucky Building Code for the state review, 2. Construction classification for the state review, 3. Type of occupancy for the state review.
2. Vicinity Map (tailored to someone not familiar with the area).
3. Gross Square Footage.
4. North arrow on all major plans.
5. Hazardous areas and provision to handle hazardous material.
6. Information which may affect future expansion or renovation of the structure (Design for additional floors, additions, utilities, limitations, etc.).
7. Information, of a general nature, which is pertinent to the project.
8. Identify areas or parts of the construction where the design, materials or methods deviate from the generally accepted practice.
9. Structural design loads.
10. Total number of plumbing fixture units.
11. Total design heating load.
12. Total design cooling load.
13. Diversity factor
14. Projected steam demand.
15. Projected chilled water demand.
16. Projected natural gas demand
17. Calculated overall thermal transmittance (Uo) value and the allowable (Uo) value as defined by the BOCA Basic Energy Conservation Code.
18. Gross area.
19. Connected electrical load.

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20. Projected electrical demand.
21. Electrical data to be included on the electrical drawings.
 1. Lighting levels listed for each room as maintained footcandles.
 2. Corridor cut where wireways are to be installed. This must show the location of all above ceiling corridor installations.
 3. Electrical Load Sheet -Watts

	10	30	Expected Demand
a. Lighting			
b. General			
c. Electric Heat			
d. Water Heating			
e. Elevators			
f. Motors			
g. Special			
h. Other			
i. Totals			