

**UNIVERSITY OF MICHIGAN HOSPITALS AND HEALTH CENTERS
FACILITIES PLANNING AND DEVELOPMENT**

2101 Commonwealth, Suite B
Ann Arbor, MI 48105-5759

EXHIBIT “A”

GENERAL REQUIREMENTS

- The AE shall obtain a signed and authorized Project Initiation Directive (PID) issued by the UMH FPD Lead.
- The AE shall obtain a completed and signed CSA Worksheet (Exhibit D1) from the UMH FPD Lead directing the detail level of services desired.
- AE shall prepare a Continuing Services Agreement (CSA) within five working days of receipt of CSA Worksheet (D1).
- Meeting minutes for all project meetings during all phases of Professional Services, with the exception of Construction Progress meetings, shall be prepared by the Design Professional and distributed to the UMH FPD Lead via email in PDF format within three working days of meeting.
- Design Professional shall field verify all existing dimensions, communication, fire alarm, special systems HVAC, plumbing, fire protection and all other built-in equipment.
- FPD Key plans are provided for the convenience of the Design Professional, but cannot replace detailed field verification.
- All drawings issued by the Design Professional shall reflect actual field conditions. Any discrepancies in wall, door or window locations found between actual field conditions and UMH Key plan shall be marked up on plots of the files in question and submitted to the UMH Facilities Document Coordinator.
- Prepare a work plan of tasks for the Investigation Phase with target complete dates for all tasks, including information required from UMH staff and tasks to be completed by Design Professional.
- All project deliverables, including meeting minutes, cost opinions, estimates, reports, drawings, emails, etc. shall contain the correct RTN number, correct project name and the date of issue.
- The Design Professional shall adhere to UMH Design Guidelines for all design work. Access to these documents is available via the following website: <http://www.med.umich.edu/facilities/plan>. Deviations to the guidelines shall be reviewed and approved in writing by UMH Design Manager, prior to incorporation into the documents.
- Drawings shall include north arrow, graphic scale, RTN number and official project name, date and keyplans indicating building location on each partial plan sheet. Except for keyplans, provide a minimum scale of 1/8" = 1'-0".
- Design Professionals shall not assign room numbers.
- Do not have any communication with any governmental or code agencies unless specifically directed and/or authorized to do so by the UMH FPD Lead.

DESIGN PROFESSIONAL’S BASIC PROFESSIONAL SERVICES

For each Project, which may be released to the Design Professional at the Owner’s sole discretion, the Design Professional’s Basic Professional Services shall be divided into three distinct Phases. Any or all Phases or services may be applicable as requested by the Owner. Each Phase shall be distinct to allow the Owner to decide whether to proceed to the next Phase prior to further commitment of professional effort. The individual Phase deliverables are further defined as hereinafter set forth:

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PHASE I – Investigation Phase

During the Investigation Phase the Design Professional shall do the following:

- 1) Meet with the Owner’s representative(s) to define the scope of service and prepare CSA. Meeting minutes shall be distributed to UMH FPD Lead via email in PDF format and is required within three working days of meeting.
- 2) Collect information, including equipment lists, system descriptions, functional and space needs and operational narratives, space inventory, key plans, and record construction documents.
 - a) Obtain AutoCAD key plans from FPD.
 - b) Unless specifically directed otherwise, commission a pre-design air test report if responsible for coordinating the schedule and any special needs or limitations with the Building Manager and the Air Testing Company.
 - c) Obtain record construction documents through the UMH Document Coordinator.
- 3) Inspect site of renovation, as-built condition of space, and other ‘due-diligence’ work needed to insure that program prepared:
 - a) Has all pertinent issues covered.
 - b) Infrastructure, and space, needed to accomplish project is in place, or needed additional work and costs are included in ‘Program Statement’.
 - c) Note and address any obvious code violations in project area.
 - d) Needed work in areas above, below, or adjacent project areas are noted.
 - e) Review of FCA (Facilities Condition Assessment) documents to determine if known deficiencies exist. UMH FPD Lead shall direct how to include FCA deficiencies within the project scope of work.
- 4) Prepare drawings and submit to Owner for Owner’s review and comments.
 - a) Prior to follow up design team meetings, distribute review materials, including revised programs, floor plans, meeting minutes, drawings or other review material to Design Manager a minimum of 24 hours prior to scheduled meeting.
 - b) In addition to Demolition and New Work Floor plans, provide additional drawings and specifications as specified in Exhibit D1 to fully explain the schematic scope of work.
 - c) The Design Professional shall validate system capacities for all proposed modifications of existing systems.
 - d) Design Professional shall provide proposal solutions and cost for identified system deficiency.
 - e) Design Professional shall review the structural capacity of the building for the proposed use.
- 5) Prepare a written Investigative Report which may include (refer to Exhibit D1):
 - a) An executive summary of no more than one page that defines the purpose of the project, a brief summary of existing conditions, Design Professional’s recommendations, construction cost estimate total and gross square footage of new and/or renovated space.
 - b) A space program. Include net to gross factors if a new work plan is not provided.

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- c) Affinity relationship studies, conceptual block plans, layouts and massing studies if required.
 - d) Clear drawings indicating scope of demolition and new work.
 - e) Description of existing conditions and recommendations for new work. Note any assumptions that were taken, or necessary, when preparing the report. If the reason for any given assumption is not obvious-define the reason.
 - f) Owner's moveable equipment requirements. Obtain preliminary equipment lists, size and utility information from assigned UMH Capital Equipment Planner.
 - g) Owner's interior design requirements. Obtain preliminary interior finish information, including quality levels and specialty items, and preliminary furniture program from assigned UMH Interior Designer.
 - h) Engineering systems requirements of new project. Coordinate engineering requirements and concepts with assigned UMH Engineer(s). Coordinate new work requirements with UMH Security, Telecommunications, MCIT, Biomedical Engineering and others designated by UMH FPD Lead regarding all special systems.
 - i) Site and parking requirements, both during construction and upon completion (if applicable).
 - j) An analysis of existing buildings and systems conditions including major system variables as needed. If needed, obtain air balancing information, loadings on equipment, etc. This shall include all associated work, back to 'main source' as needed to maintain overall building system integrity.
 - k) A description of regulatory performance requirements and restrictions, and any existing code violations needing to be addressed, with recommendations. Review proposed solutions with regulatory agencies. Assist Owner with all meetings with Regulatory Agencies. Provide a list of all applicable codes and regulatory agencies.
 - l) Estimated construction costs for all aspects of the Project. See Exhibit E for estimating format requirements.
 - m) Detailed Phasing Plans, if required for continued operation or occupancy of adjacent spaces, supplemented by a narrative.
 - n) Where maintenance of critical services to occupied spaces will be compromised, provide a tentative sequence of work noting likely outage durations.
 - o) If specifically requested, provide a projection of significant operating costs or life resulting from the Project and estimate significant life-cycle operating and maintenance costs of new architectural, mechanical and electrical components where there is significant variance between alternate designs.
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- 6) ID - Provide investigative planning for Interior Design services, including preliminary finish information, furniture program, drawings and budgetary information.
 - 7) Equipment - Provide investigative planning for Equipment Planning services, including preliminary equipment lists, size and utility information, and budgetary information.
 - 8) AV - Provide investigative planning for Audio Visual Planning services, including preliminary equipment lists, size and utility information and budgetary information.
 - 9) Obtain review comments from the UMH FPD Lead. Respond promptly to any review comments on the report, and promptly revise and reissue report if required.

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PHASE II – Construction Document Phase

NOTE: Funded projects which are managed by UMH Facilities Planning and Development during the Construction Document Phase are generally constructed internally by UMH Construction Services, or may be in buildings leased by UMH. Funded projects which will be competitively bid to General Contractors are generally managed by UM A/E/C Construction Management. The following requirements apply specifically to Construction Services projects. UM A/E/C maintains a separate professional services agreement.

- 1) Meet with the Owner’s representatives to further define project requirements.
- 2) Confirm all assumptions contained within the Investigative Report. Design professional shall notify UMH FPD Lead of all changes to funded scope of work that will impact the construction costs, construction duration, or is outside the approved scope of work.
- 3) Continue to meet regularly with design team as required to fully develop the scope of work.
- 4) Review furniture layout provided by UMH Interior Design to insure compliance with architectural, structural, mechanical and electrical systems. Incorporate furniture plan into Construction Documents for reference.
- 5) Obtain final equipment lists and equipment cut sheets from UMH Capital Equipment and prepare refined equipment plans for review by the Owner. Include Equipment Commodity Code numbers assigned by UMH Capital Equipment on the Equipment Plans. Fully coordinate equipment into the construction documents, including clearances, utilities, power requirements and heat generated for optimal performance.
- 6) Review door and hardware functions with the design team and UMH Security. Provide complete hardware sets and specifications, including all electrical hardware and wiring diagrams.
- 7) Generate a Room Finish Schedule for Owner input and approval and incorporate into Construction Documents. Obtain final finish selections, including manufacturer, model and color selections and any patterns from UMH Interior Design. Include all finish selections on Complete CD Owner Review documents.
- 8) Prepare Design Development drawings (when specifically requested as a deliverable during the Design Kick-off Meeting), outline specifications (tailored to this project), and full descriptions for each of the architectural, civil/structural, mechanical and electrical systems; show schematic and riser diagrams, contractor furnished equipment, construction cost estimate and submit all such documents to the Owner. If requested, submit sketches, copies of all calculations, cut sheets of proposed products, and cost estimates of the various systems studied with a recommendation and justification of the system proposed. Design Professional shall provide proposed solutions and costs for any identified system deficiencies.
- 9) Prepare Construction Drawings with construction cost estimates and submit to UMH FPD Lead for CD Review at percentages of completion as requested, including 100% complete. All documents within set, and all disciplines, shall be to stated completion percentage. Alert UMH FPD Lead immediately (and prior to expected delivery date) if unforeseen circumstances prevent the documents from being completed to stated percentage of completion. Do not submit documents that are not to the stated level of completion without the specific permission of UMH FPD Lead. If additional information or decisions are required by UMH staff, clearly identify needed information on the title sheet of documents, or on a separate document which accompanies the CD’s. Communicate clearly and regularly with UMH FPD Lead what items are outstanding, so that all issues known to the Design Professional can be resolved prior to 100% CD review. Submit with the documents an indexed

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copy of all design calculations to include structural design, heating, plumbing, air conditioning and electrical if requested.

- 10) Obtain Construction Documents review comments, sign-off from Owner’s Clients, and approval to proceed from UMH FPD Lead. Promptly respond in writing to all UMH design review comments on the comment forms and attach to the meeting minutes. Issue revised documents for Construction within 5 business days unless directed otherwise by the UMH FPD Lead.
- 11) Submit sealed sets of Construction Documents for final review and approval by the appropriate regulatory agencies where required and authorized by the UMH FPD Lead. Design Professional shall pay plan review fees directly as a reimbursable expense. Submit copies of sealed CD’s, plan review forms and transmittals to UMH FPD Lead. Design Professional shall respond promptly, in writing, to all plan review comments by regulatory agencies, and shall revise the documents as required to obtain regulatory approval as a basic service.
- 12) Prepare operational narrative for MDCH HFES plan review if directed in CSA worksheet. Otherwise, assist UMH with preparation of operational narrative.
- 13) ID - Provide furniture layouts, finish schedules and budgetary information for review by UMH Interior Designer, coordination with construction documents, and for purchasing by UM.
- 14) Equip – Provide final equipment lists, size and utility information, and budgetary information for review by UMH Equipment Planner, coordination with construction documents and for purchasing by UM.
- 15) AV - Provide final equipment lists, size and utility information, and budgetary information for review by UMH Equipment Planner, coordination with construction documents and for purchasing by UM.

PHASE III – Construction Phase

During the Construction Phase the Design Professional shall do the following in a timely manner:

- 1) At the Owner’s direction, participate in construction “kickoff” meeting and attend construction progress meetings as outlined in CSA worksheet.
- 2) Respond in writing to RFI’s within two business days. Revise drawings or prepare supplemental drawings as required and issue with unique sheet numbers.
- 3) Clarify ambiguities in Construction Documents.
- 4) Review/approve or take other appropriate action with regard to shop drawings and samples. Solicit and incorporate comments from UMH FPD staff, including Interior Design and Engineering.
- 5) Prepare Field Orders and Bulletins.
- 6) Conduct field observation of construction as a basis for determining conformance with the Construction Documents.
- 7) Participate, as necessary, with the Owner in all interaction with regulatory agencies for reviews and inspections.
- 8) Prepare and submit punch lists to the UMH FPD Lead; number and timing to be designated on the CSA worksheet.
- 9) Review O&M Manuals in the same manner as that of any other contractor submittal.
- 10) Review change quotations and make recommendations for Owner acceptance.
- 11) Prepare as-built documentation based on redline drawings provided.