

Project: UTA Headquarters and Slat Lake Central Station

Additional Services for Programming and Conceptual Design:

Additional services are those not included under the Basic Scope of Services, as described herein, and will be performed when authorized by the Architect. Compensation for additional services will be prepared in the format of a proposal at the direction of the Architect. Additional Services include, but are not limited to, the following:

Additional Services that are not currently included and might arise are:

- Vertical Transportation
- Interior Design
- Architectural Lighting
- Accessibility Consulting
- Acoustics, Noise and Vibration Control
- Building Technology Systems

Additional Services from the current consultants include but are not limited to:

Architecture:

- Additional Renderings
- Professional external sourced renderings.
- 3 Dimensional printed or constructed models.
- Value Engineering.
- Additional Concepts beyond the (3) proposed.

Structural:

- Assistance with promotional material for the project
- Adding to or expanding the program of the project after the programming validation phase
- Altering the seismic performance objectives of the project after Concept Design

Transportation

- FTA Grant Program Assistance:
- In addition, WSP will monitor USDOT direction on grants application requirements, criteria, and procedures to help UTA remain well positioned for grant award.

MEP:

- Fire protection sprinkler main layouts
- LEED, Green Communities, NGBS, or WELL Building Standards.
- Computational Fluid Dynamics (CFD) analysis to inform the thermal comfort of building occupants as they are affected by air supply temperatures, flows, and envelope interactions Modeling
- Provision of detailed estimates of construction costs or detailed quantity surveys or inventories of material, equipment, or labor.
- Negotiation of variances with local agencies for mechanical, electrical, or life safety codes.

Sustainability:

- Energy Modeling
- Sustainability Workshops
- Preparation of estimated costs or financial-feasibility studies associated with the work
- Computational Fluid Dynamics (CFD) analysis to inform the thermal comfort of building occupants as they are affected by air supply temperatures, flows, and envelope interactions.
- District and Renewable Energy Assessments

- **LEED Certification Coordination:** WSP will coordinate the LEED certification process by developing an overall LEED strategy, managing the approach to implementing that strategy, ensuring that the project design and construction practices are complying with LEED requirements, and coordinating the documentation process. This scope includes the following activities:
 - **Integrative Process Workshop**
 - Facilitating an integrative design workshop with key and active stakeholders in attendance. This meeting is intended to help develop and articulate the overall sustainability-related strategy and goals for the project, and align the team around a common project vision, and achieve the LEED Integrative Process credit.
 - Complete analysis of Water-Related Systems to quantify the impacts of fixture and fitting water demand, process water demand, and potential water supply sources
 - The Energy-Related Systems analysis will be completed by the energy modeler. If WSP is providing energy modeling, we will complete this analysis.
 - Complete an Integrative Process report summarizing the workshop outcomes and documentation needed to achieve the LEED credit.
 - Meetings: one (1) prep meeting and one (1) workshop follow-up meeting are included in this sub-task.
 - **Green Building Design Coordination**
 - Participating in design team meetings including those related to site, landscape design, architecture, engineering, energy modeling, interiors, lighting, and other specific discipline or strategy areas, and providing input and feedback in terms of managing and implementing project goals
 - Conducting research and technical analyses to support design processes and decision-making, and advising the Client and project team on considerations related to various strategies, technologies, materials, and products
 - Meetings: participation in [10-12] team coordination meetings is included in this sub-task.
 - **Managing LEED Strategy and Compliance**
 - Facilitate a LEED kickoff meeting with the full project team in attendance and develop a LEED Action Plan for the project
 - Manage and regularly distribute the LEED Action Plan which includes the certification approach, target credits, specific credit requirements, relevant calculations, responsible parties, action items, and LEED schedule.
 - Review the project design for LEED compliance and provide guidance to ensure the project is on track to LEED performance benchmarks and requirements
 - Complete LEED documentation where feasible (see LEED Credit Responsibilities Matrix for a list of assumed roles and responsibilities per credit)
 - **Design Phase LEED Coordination and Technical Support**
 - Provide design team with LEED technical resources and other relevant reference materials including one year of complimentary access to LEEDuser.com
 - Support design team by clarifying requirements for achieving and documenting LEED credits
 - Conduct one (1) LEED orientation conference call with each LEED discipline (e.g. architect, owner, MEP, civil, landscape) to support their documentation responsibilities and use of LEED Online
 - Review and comment on the Owner's Project Requirements (OPR) and design team Basis of Design (BOD) as required for LEED certification
 - Meetings: facilitation of **[4-5]** LEED progress meetings (typically after major milestones) are included in this sub-task.
 - **Construction Phase LEED Coordination and Technical Support**
 - Facilitate a one-hour construction phase LEED kick-off meeting with the general contractor / construction manager and construction team to review the project LEED goals, process, tools, construction phase LEED responsibilities, and credit requirements. The meeting will include a detailed discussion of LEED expectations, best practices, and documentation responsibilities for the construction team.
 - Facilitate a one-hour subcontractor LEED kick-off meeting with the major subcontractors, GC/CM, and construction team to review and confirm the subcontractor LEED process, responsibilities, and credit requirements.
 - Review construction management plans including Construction Waste Management Plans, IAQ Management Plans that are developed by the contractor.

- Facilitate **[2-3]** LEED progress meetings (typically after major milestones) with owner, contractor, and construction team
 - Facilitate regular (usually monthly) LEED check-in calls with the contractors (in addition to the meetings outlined above) to progress of LEED documentation and submittals
 - GBCI Coordination and the LEED Submittal
 - Register the project with the Green Business Certification Inc. (GBCI) and set up LEED Online, including inviting participants
 - Facilitate all correspondence with GBCI / USGBC, including project registration, credit interpretation requests (CIRs), project submittals, and appeals
 - Review all LEED credit documentation upon completion by responsible parties and prior to submittal to GBCI for accuracy, consistency, and appropriateness
 - Submit all outstanding documentation to GBCI per LEED requirements and coordinate team response to GBCI comments
 - LEED Credit Responsibilities Matrix
 - WSP will distribute a LEED Credit Responsibilities Matrix at the beginning of the project to confirm team member LEED responsibilities. Primary responsibility for a credit includes all coordination to ensure that the project achieves the specific LEED requirements and uploading documentation to LEED Online. Secondary responsibility includes providing calculations, information, and supporting data (e.g. drawings, cut sheets, credit calculations, etc.). WSP will assign documentation responsibilities for the LEED prerequisites and credits.
- Daylight Analysis: Sustainability will provide daylight analysis to help optimize the project design for effective, high-quality daylight and glare mitigation. Daylight-modeling software will be used to quantify daylight levels throughout the project relative to the LEED daylight metrics of Spatial Daylight Autonomy (sDA) and Annual Sunlight Exposure (ASE).
 - Services:
 - Work with the design team to review the daylight modeling results and evaluate strategies for improvement. Strategies to evaluate may include building massing, glazing orientation, ceiling height and shape, external and internal shading, passive and active glare-control systems (e.g., light shelves, automated shades, etc.), glazing selection, space planning, and surfaces and finishes.
 - Develop modeling scenarios for each building as follows:
 - One (1) daylight model (typically in the SD or DD phase), including all regularly occupied spaces
 - One (1) daylight model update (typically in the DD phase) to evaluate design changes, options, and potential daylight improvements (e.g., interior glazing, light shelves, brighter floor surfaces)
 - One (1) final daylight model to document the LEED v4 Daylighting credit. Results will include compliance with the Spatial Daylight Autonomy (sDA) and Annual Sunlight Exposure (ASE) thresholds required by LEED
 - Deliverables:
 - Daylight Analysis Report summarizing the key findings and recommendations of the analysis, including LEED and annual daylight metrics and suggestions on improving daylight performance
 - Documentation for the LEED Daylighting credit uploaded to LEED Online
- Whole-Building Life-Cycle Assessment: Complete a whole-building Life-Cycle Assessment (LCA) per the requirements of LEED v4 Building Life-Cycle Impact Reduction: Option 4 – Whole-Building Life-Cycle Assessment credit.
 - Services:
 - Our assessment will use LCA software to complete an LCA of the complete building envelope and structural system to determine the environmental impacts of the project on each of the six impact categories below:
 - Global warming potential (greenhouse gases), in CO₂e
 - Depletion of the stratospheric ozone layer, in kg CFC-11
 - Acidification of land and water sources, in moles H⁺ or kg SO₂
 - Eutrophication, in kg nitrogen or kg phosphate
 - Formation of tropospheric ozone, in kg NO_x or kg ethene
 - Depletion of nonrenewable energy resources, in MJ

- Work with the project team, following LEED v4 guidance, to confirm the assumptions for the baseline and design case buildings. Our LCA report will include recommendations for improving environmental impact categories that do not show at least a 10% reduction in environmental impacts.
- Deliverables:
 - Summary of LCA tools, identifying the various LCA tools that can be used to meet the credit requirements of LEED v4 Building Life-Cycle Impact Reduction, along with the costs, pros, and cons of each tool available
 - Life-Cycle Assessment Report, including environmental impacts of standard building envelope and structural systems, LEED v4 compliance, recommendations for environmental impact improvements, and a summary of the LCA assessment methodology

Fire Protection:

- Any meetings, site surveys, or site inspections not outlined above
- General consulting on life-safety and code-related issues beyond the hours identified above
- Any drawing or submittal reviews in excess of those outlined above
- Design of any systems or subsystems not outlined above
- Water-flow test for purposes of fire-sprinkler design criteria
- Preparation or presentation of a formal appeal
- Timed Egress Analysis or Egress computer modeling
- Analysis, calculations, computational fluid dynamic modeling, or rational analysis documentation associated with any atria for this project
- Services related to redesign or changes to the adopted codes

Landscape:

- Lighting Design and photometric analysis of outdoor spaces.
- Other phases of work like Schematic Design, Design Development, Construction Documentation, Bidding and Negotiation, and Construction Observation.
- Design standards and guidelines
- Design and detail associated with extensive green roof and/or outdoor amenity decks except as noted herein.
- Preparation of rezoning or platting drawings or presentations
- Preparation of Design Review Board or equivalent submittal or presentation or any City presentations
- Preparation of 3D renderings or presentation artwork. No physical or digital presentation models, or visual simulations.
- Preparation of tree/ arboricultural or wetland surveys, inventories and reports including wetland or tree preservation/ transplantation design and engineering.
- Electrical engineering for landscape lighting including electrical circuitry diagrams and lighting of building facades, canopies, amenity terraces, or interiors and lighting control systems.
- Preparation of environmental graphic design/ signage or public art.
- Structural engineering for shade pavilions, trellises, landscape walls, ramps/ steps, decorative fencing and catenary lighting systems supports.
- Design and programming of digital media, LED visual screens, Wi-Fi, or other SMART technological systems.
- Site "as-built" drawings or site survey needed to prepare "as-built" drawings.
- Energy consumption and irrigation water budgets including calculations, studies or reports or LEED applications or site certification auditing or green building code notes and/or submittal.
- Cost estimates or any coordination associated with the cost estimate being prepared by another firm.

Civil:

- Site Entitlements

Historic Preservation:

- Travel, excessive.
- If the existing South Bldg, located at 603 W 200 S, becomes surprisingly important to SHPO and the additional groundwork above Basic Services for research becomes more than anticipated.

Parking:

- Programming Phase services
- Develop a preliminary financial pro-forma for the parking structure.
- Review intended operation of the parking garage and other associated operating assumptions.
- Provide list of requested data for the operating expenses of the existing parking garage.
- Project annual operating expenses including but not limited to:
 - direct labor and fringe benefits;
 - utilities;
 - supplies;
 - on-going maintenance (contracts and equipment)
 - snow removal; and
 - long-term structural maintenance (a sinking fund for periodic major expenses).
- Project annual revenues for transit, monthly and daily parking.
- Summarize our assumptions and projections in a memorandum.

Cost Consultant:

- Value Engineering and cost reduction studies
- LCCA
- Estimating more than one design solution for each design discipline.
- Estimate comparison and reconciliation with those prepared by others.