

Landscape Architectural Services
to be provided by Designworks, Inc. for Designated Sites

SCOPE OF LANDSCAPE ARCHITECTURAL SERVICES

12/15/00

The PROJECT, as used herein, refers to providing professional landscape architectural design services for the preparation of construction documents and to provide construction administration services for West Memorial Park in Rapid City, South Dakota. The preliminary construction budget for proposed park improvements has been set at approximately \$ 140,000. The proposed park improvements including in this phase of work include:

- xeriscape landscape component
- riparian landscape component
- public demonstration garden
- water conservation techniques
- drought resistant grasses & plants
- use of efficient irrigation
- use of low maintenance methods
- park land use planning
- pedestrian circulation & accessibility
- amphitheater or gathering area
- garden layout design
- landscape & irrigation design
- site grading and drainage
- soil evaluation and amendments
- floodway and floodplain issues
- other park & recreation opportunities

The following tasks are anticipated based on the project objectives and desired elements as outlined by the City of Rapid City.

A. INVENTORY AND ANALYSIS PHASE:

Task Force Input & Programming: DESIGNWORKS will meet with OWNER Representatives to discuss all project requirements, and to determine all goals and objectives for park improvements. The design team will conduct meetings with representatives from the City of Rapid to solicit input and ideas.

Review Park Information: Designworks will collect and review available project information as provided by the City of Rapid City such as property & topographical survey information, utility plans, street and utility maps, drainage studies, floodway maps, geotechnical information, and other available planning information.

On-Site Inventory & Analysis: DESIGNWORKS will visit the project sites to investigate existing conditions, inventory natural resources, and to identify all potential development problems. Natural wetland areas, riparian habitats, and other environmental features will be delineated. All available information will be carefully analyzed to determine opportunities and constraints at West Memorial Park.

Prepare Base Maps: OWNER will provide DESIGNWORKS with survey information on (AutoCad) compatible computer files for project area. DESIGNWORKS will prepare background maps as necessary for the preparation of construction drawings.

Research Park Issues: The design team will research any special topics and compile required information for the garden design work. Principles and techniques for xeriscape design, water conservation, and other demonstration garden criteria will be researched.

B. DESIGN DEVELOPMENT PHASE:

Circulation Study: Alternatives for providing access and circulation throughout the park and demonstration garden will be evaluated. Pedestrian circulation & accessibility, bicycle traffic and control, emergency access & security control, parking, and opportunities for recreational and interpretive trails will be examined.

Land Use Study: Some of the issues to be evaluated will include park development potential, land-use compatibility, and recreational opportunities. The project will carefully assess both on-site and adjacent land uses to determine appropriate improvements within the park area. Consideration will also be given to sensitive environmental and cultural issues.

Alternative Park Concepts: DESIGNWORKS will prepare a minimum of two park layout concepts for West Memorial Park indicating locations for demonstration garden and other potential park improvements. Concepts will be graphically illustrated to indicate park planning and development options.

Landscape Design Applications: DESIGNWORKS will provide preliminary landscape concepts for demonstration garden including applications of xeriscape and riparian habitats. Concepts will demonstrate techniques for use of drought tolerate plantings, methods to conserve water, and an approach to reduce maintenance requirements.

Technical Design Evaluation: Preliminary grading and drainage, security lighting, utility services, and environmental issues will be evaluated. Options will be appraised to determine most cost effective way to implement the proposed demonstration garden. City representatives will be consulted on the technical requirements for utility services.

Preliminary Cost Estimates: DESIGNWORKS will prepare a preliminary estimate of the probable cost for each phase of demonstration garden construction work.

Concept Design Review: Optional concepts and recommendations will be presented to the City of Rapid City representatives for additional input and comments. During the design review, concepts will be evaluated and alternatives selected for refinement. Designworks will provide a *minimum of two (2) revisions to design* development prior to preparation of construction documents. Priorities for proposed development will be outlined.

C. CONSTRUCTION DOCUMENT PHASE:

Garden Area - Layout Documents: DESIGNWORKS will provide construction layout documents as necessary for horizontal control. Demonstration Garden layout documents are to include dimensioned layout plan, expand area plans, detail references, and general notes as required for bidding and construction.

Garden Area - Grading Documents: DESIGNWORKS will provide grading plans as necessary for vertical control. DESIGNWORKS will prepare construction documents required for earthwork, site grading, drainage, slope stabilization, and erosion control as necessary to develop the Demonstration Garden. Grading documents are to include existing and proposed contours and spot elevations, and specifications as required for bidding and construction.

Garden Area - Irrigation Documents: DESIGNWORKS will provide final irrigation design and prepare construction documents for automatic underground irrigation system. *The system is to have flow monitoring capabilities to document water usage.* Irrigation documents are to include irrigation plan, hydraulic calculations, irrigation equipment schedule, installation details, and specifications as required for bidding and construction.

Garden Area - Landscape Documents: DESIGNWORKS will provide final landscape design and prepare construction documents for the installation of trees, shrubs, and other ground cover applications at the proposed project site. *On-site soils will be evaluated and amended as necessary to optimize soil moisture and nutrient levels.* Landscape documents are to include planting plan & details, plant material schedule, erosion control & soil prep, and landscape specification as required for bidding and construction.

Garden Area - Construction Details and Specifications: DESIGNWORKS will provide details and technical specifications as required for construction of the demonstration garden including walkways, landscape structures, *directional & interpretive signage*, and other custom park features as required for bidding and construction.

Coordination & Review: DESIGNWORKS will provide *95% construction document submittal for additional input and review.* Construction plans, specifications, and construction budget will be revised and submitted to Owner Representatives for final review and approval.

Final Revisions & Plotting: DESIGNWORKS will revise construction documents as necessary and will prepare final documents for bidding. DESIGNWORKS will submit to the City of Rapid City reproducible drawings and an original copy of specification.

D. BIDDING PHASE:

Prepare Bid Items & Quantities: DESIGNWORKS will provide the OWNER with a list of construction bid items, calculate quantities, and the estimated cost of construction.

Bidding / Negotiate Contract for Construction: DESIGNWORKS will submit original bid & construction documents to the City of Rapid City for bidding. DESIGNWORKS will be available to answer questions from bidders and to clarify bidding requirements. DESIGNWORKS will assist OWNER representatives to negotiate contract for construction.

E. CONSTRUCTION ADMINISTRATION PHASE:

Construction Administration: DESIGNWORKS will provide construction administrative services for project as described above. Construction administration services are to be limited to: answer contractor questions, provide supplemental information, issue corrective action memos, review pay applications, and to provide interim on-site observation during construction.

F. OPTIONAL SERVICES:

Develop Educational Literature (Optional): If requested, DESIGNWORKS will prepare educational literature and will develop a color brochure that addresses the definition and purpose of Xeriscape, and major landscape components. Illustrations of several Xeriscape themes will be included such as classic garden and mountain woodland. Xeriscape irrigation and maintenance will be briefly covered. A listing of step-by-step procedures to planning, designing, purchasing, and installing a Xeriscape will be given. Also a visitor's guide for the demonstration garden will be prepared. The guide will include a map of the garden and identification of major garden components.

SERVICES NOT INCLUDED:

The following services are not included within this designated scope of services:

- Provide site topographical survey information.
- Provide geotechnical engineering for subsurface exploration.
- Preparation of "front-end" specifications.
- Printing & issuing construction document to bidders.
- Printing of educational literature.
- Full time construction inspection.
- Preparation of as-built drawings.
- Educational workshops as to be conducted by the City of Rapid City.
- Reports required by the City of Rapid City to be submitted to the Bureau of Reclamation.
- Operational and management plans