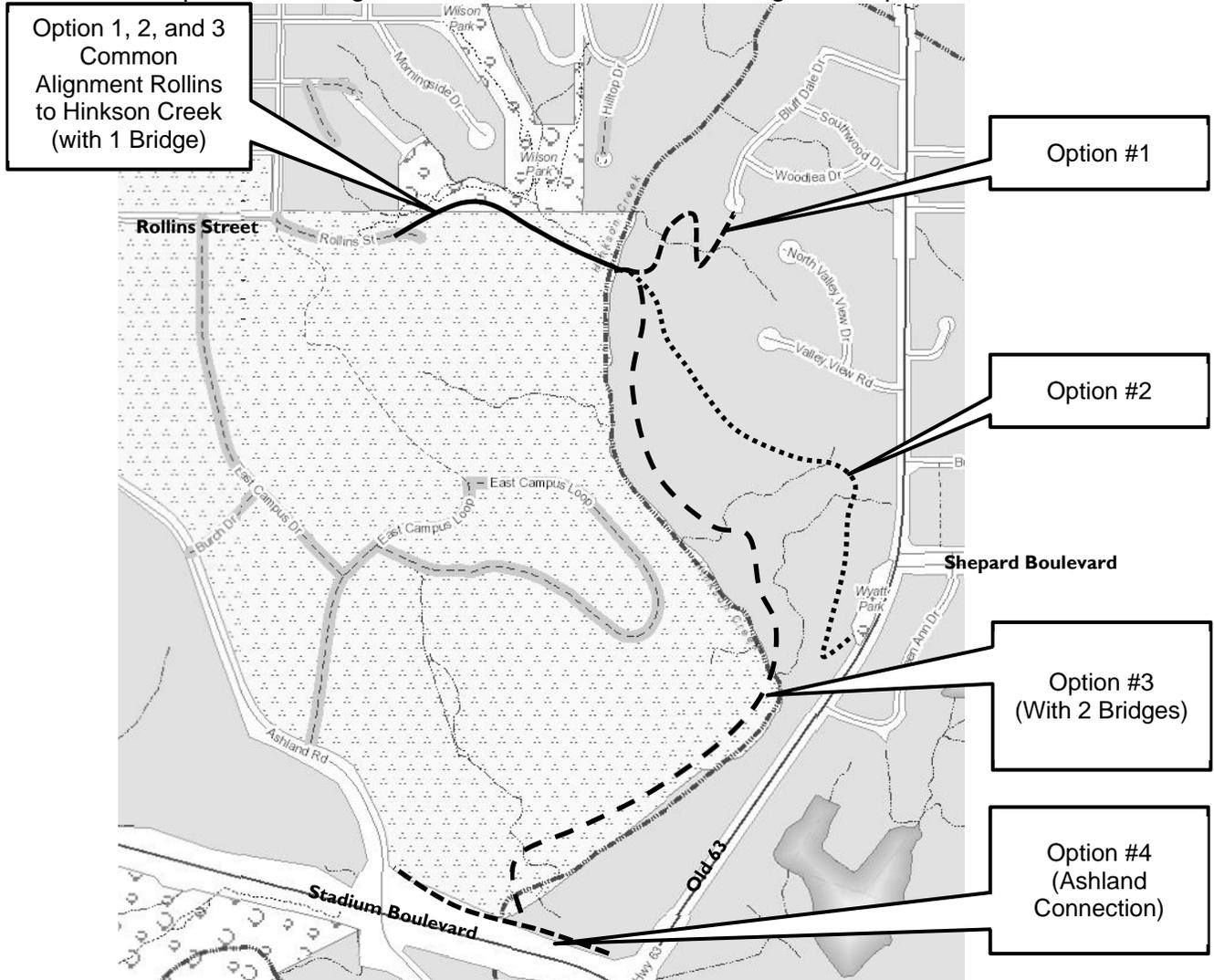


**EXHIBIT A – SCOPE OF SERVICES
BASIC DESIGN DUTIES**

The following scope of services was prepared based on the following assumptions:

1. Shepard to Rollins Trail Connection CPP 9999(523)

- a. **Phase A-** Services include the alignment/conceptual study of four potential trail alignments; Three options connecting from the east end of Rollins Street to the pedway and bike lanes on Old 63, and one option connecting Ashland Road to Old 63. Potential alignments/options shown below.



- b. **Phase B –** Survey and design of the option selected in Phase I.
 - i. Not included in this scope - To be negotiated upon completion of Phase A.

2. SERVICES ASSUMPTIONS

- a. All plan sets submitted are half-sized black and white plans on bond paper unless otherwise noted.

Not included in this scope, but can be added as an Additional Service:

1. Surveying, design and permitting.
2. Additional bridges or structures
3. City Structural/Building Permits
4. City Structural Special Inspections
5. Lighting design
6. Traffic studies
7. LOMR or CLOMR
8. Threatened or endangered species surveys, habitat studies
9. Cultural resource surveys
10. Bidding and Construction Contract Administration Services
11. Resident Project Representative Services

Note – Some tasks indicate where a subconsultant will be assisting TranSystems. This does not modify TranSystems obligations to complete the overall scope of services. Specifying the subconsultant’s tasks in this scope provides the most effective documentation to reduce misunderstandings.

Phase A

- 1000 Base mapping
 - a. Review the Hinkson Creek FEMA mapping to confirm floodway and floodplain limits.
 - b. Receive electronic GIS mapping from CITY.
 - i. EDSI to create CAD base map and TIN.
- 1001 Conceptual Trail Analysis
 - a. Review relevant Council meeting minutes provided by Columbia and the “Garth to Gans Interchange Rollins-Hinkson-Stadium Connection” Report issued by Access Engineering on May 13, 2008, and the “Low Water and Under Crossing of Hinkson Creek at Old 63” Feasibility Study issued by HNTB on March 13, 2009.
 - i. Landworks Studio to also review documentation.
 - b. Based on GIS mapping, develop the initial alignments and profiles.
 - i. Conduct a desktop environmental scan of the proposed alignments to determine the documented issues in regards to wetlands, threatened and endangered species, cultural and historic properties, and hazardous materials. Publically available data will be utilized from the following sources: the National Wetland Inventory, U.S. Fish and Wildlife Service, Missouri Department of Conservation, National Register of Historic Places, Missouri Department of Natural Resources, and the Environmental Protection Agency.
 - ii. Analyze on-street and off-street facilities for Option #4.
 - iii. Determine initial bridge length based on FEMA mapping of Hinkson Creek Floodway for Common Alignment, and the two bridges on Option #3.
 - iv. Analyze bridge options, based on cost, constructability, long-term maintenance, and aesthetics.
 - v. Determine initial bridge scour protection methods for the bridges based on approximated flow rates.
 - vi. Determine modal shift potential of each alignment and connectivity to the Getabout and transit systems.
 - vii. Landworks Studio to review landform/landcover and offer suggestions on alignments, trail typology.
 - viii. SCI to review ground level photographs and existing geotechnical reports and offer suggestions on bridge abutment and retaining wall typology.

- c. Submit conceptual layouts, profiles, and general structural elements to the CITY for review.
- I002 Technical Trail Blazing
- a. Immediately prior to trailblazing, meet with CITY for one hour to discuss trail section, land cover management, bridge type, wayfinding destinations, and trail entry treatment. No displays will be presented, but pictures of similar installations/concepts will be shared.
 - b. Facilitate a technical trail blazing expedition to modify the proposed layouts for the trail documenting important features found in the field. The CITY and TranSystems team members will attend. (Project Manager, Trail Designer, Environmental Scientist, Water Resource Engineer, and Landscape Architect.)
 - i. The lead landscape architect from Landworks Studio will participate in trail blazing.
 - c. Update conceptual information.
- I003 Interested Parties (IP) Hearing
- a. Prepare presentation and other materials for an IP meeting. Prepare four 24"x36" displays and 100 black and white project comment cards. Anticipated displays:
 - i. Welcome and general project information
 - ii. Land cover management
 - iii. Display of alignments on base map
 - iv. Options analysis matrix
 - b. Attend a three hour IP hearing facilitated by the CITY. Meeting format assumed to be an open-house format.
 - i. One staff member from TranSystems to attend.
 - ii. One staff member from Landworks Studio to attend.
 - c. Summarize comments and submit summary and copies of comments to the CITY.
- I004 Design Memorandum
- a. Prepare a memorandum documenting alternatives considered, advantages / disadvantages, modal shift, construction cost, recommended concept, etc.
 - i. Landworks Studio to review memorandum and offer comments.
 - b. Also list applicable design criteria and construction standards for the project, bridge type, retaining wall types, and constraints.
 - c. Attend one City Council meeting.

Phase B

To be negotiated after Phase A.

∞ END OF SCOPE ∞

EXHIBIT A – PROPOSED PROJECT SCHEDULE

Note – Assumed notice to proceed on October 6, 2014 and field data is not significantly affected by weather.

Milestone	Submittal to City Date
Base Map completed	October 20, 2014
Conceptual Layouts and Profiles to the City	November 21, 2014
Technical Trail Blazing	December 16, 2014
IP Hearing	January 14, 2015
Design Memorandum to the City	February 2, 2015
Presentation to City Council	February 19, 2014