

Introduced by \_\_\_\_\_

First Reading \_\_\_\_\_

Second Reading \_\_\_\_\_

Ordinance No. \_\_\_\_\_

Council Bill No. B 357-06

**AN ORDINANCE**

authorizing the City Manager to execute an engineering services agreement with HNTB Corporation for design of the Hinkson Creek Trail between the Grindstone Nature Area and Stephens Lake Park; and fixing the time when this ordinance shall become effective.

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF COLUMBIA, MISSOURI, AS FOLLOWS:

SECTION 1. The City Manager is hereby authorized to execute an engineering services agreement with HNTB Corporation for design of the Hinkson Creek Trail between the Grindstone Nature Area and Stephens Lake Park. The form and content of the agreement shall be substantially as set forth in "Exhibit A" attached hereto and made a part hereof as fully as if set forth herein verbatim.

SECTION 2. This ordinance shall be in full force and effect from and after its passage.

PASSED this \_\_\_\_\_ day of \_\_\_\_\_, 2006.

ATTEST:

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Mayor and Presiding Officer

APPROVED AS TO FORM:

\_\_\_\_\_  
City Counselor

**SPONSOR: City of Columbia, MO**

**CART ROAD NO./STREET: Hinkson Creek Trail – Gridstone Park to Stephens Lake: Phase 1**

**PROJECT: STP-2100 (518)**

*THIS CONTRACT* is between the City of Columbia, Missouri, hereinafter referred to as the "Local Agency", and HNTB Corporation, hereinafter referred to as the "Engineer".

*INASMUCH* as funds have been made available by the Federal Highway Administration through its Transportation Improvement Program, coordinated through the Missouri Department of Transportation, the Local Agency intends to enhance the Hinkson Creek Trail and requires professional engineering services. The Engineer will provide the Local Agency with professional services hereinafter detailed for the planning, design and construction inspection of the desired improvements and the Local Agency will pay the Engineer as provided in this contract. It is mutually agreed as follows:

## **ARTICLE I - SCOPE OF SERVICES**

### **Objective:**

The objective of the professional services to be provided by HNTB Corporation, hereinafter referred to as HNTB in Exhibits A through D, to the City of Columbia, Missouri Parks & Recreation Department, hereinafter referred to as the Owner, will be the development of a Phase 1 bicycle/pedestrian trail and facilities between Gridstone Creek Park on the south and Stephens Lake Park on the north in Columbia, Missouri. The Phase 1 project limits include only portions of the area between the two parks that serve as termini for the trail corridor. The project includes one pre-fabricated pedestrian bridge. The Owner may elect to bid the bridge as a separate project from the trail work. The area descriptions of the trail portions included in the Phase 1 project are as follows:

### **Project Location:**

The northern portion of the Phase 1 project starts at the recently completed Stephens Park pedway. The pedway is located along the south side of East Broadway at the intersection of East Broadway and Green Valley Drive. The proposed trail alignment extends from this point of origin southeast on Green Valley Drive across the one lane bridge over Hinkson Creek. The trail alignment then turns west and south parallel to Hinkson Creek within or immediately adjacent to Moon Valley Drive right-of-way for approximately 1,025 feet. The proposed alignment then turns in a westerly direction where a 125' to 150' clear span pedestrian bridge would span Hinkson Creek. The alignment then extends southwest to the creek and turns west under the existing Old 63 South bridge and then doubles back up the embankment to the east where the trail ties into the existing sidewalk on the west side of Old 63 South. The total length of the northern portion of the Phase 1 trail alignment is approximately 2,000 feet. This portion of the trail will be 10 feet wide and surfaced with either gravel and/or asphalt.

The southern portion of the Phase 1 trail alignment starts at the south end of the existing sidewalk along the west side of Old 63 South. The walk currently ends approximately 1800 feet north of the intersection of Old 63 South and Stadium Boulevard. From this starting point the proposed trail alignment extends south along the west side of Old 63 South toward Stadium Boulevard. The alignment then turns west along and parallel to the bottom of the north roadway embankment of Stadium Boulevard and extends to the Hinkson Creek Bridge on Stadium Boulevard. The alignment then turns south under the bridge and generally parallels the creek to the east end of the old Ashland Gravel Road bridge. The alignment then turns southeast along the old Ashland Gravel Road alignment to its intersection with the existing sidewalk along the west side of Old 63 South. The proposed trail alignment then follows the existing sidewalk along the west side of Old 63 South to the south

end of the existing bridge over Grindstone Creek. From the existing bridge the trail continues south to its terminus adjacent to the parking area of Grindstone Park. The total length of the southern portion of the Phase 1 trail alignment is approximately 3,800 feet including approximately 1400 feet of existing sidewalk at the southern end. This portion of the trail, excluding the existing sidewalk section that will be used in place, will be 10 feet wide and surfaced with concrete.

## **Scope of Services**

### **Basic Services**

The following scope of work is based on the preliminary alignment developed by the Owner and provided to HNTB during a February 7, 2006 pre-scope meeting for the purpose of developing the engineering scope of work and associated fee for the Phase 1 project.

### **Task 1 – Pre-design Activities**

- 1.1 Base Sheet Preparation: HNTB will utilize the existing aerial photography and planimetric/topographic mapping information provided by Owner to prepare base sheets for preliminary design drawings and general agency coordination and project approvals. HNTB will show the Owner's conceptual trail alignment on the base map sheets and include review notations of the conceptual alignment's design impacts for discussion with the Owner (refer to Task 1.6). HNTB will coordinate with the Owner to determine ground control points utilized in developing the aerial mapping to include in the base drawings.
- 1.2 HNTB will use base sheets from Task 1.1, showing Owner developed conceptual trail alignment, for initiating coordination with required agencies and utility providers as follows:
  - MoDOT District 5 (preliminary identification of potential property acquisition areas).
  - Missouri Department of Natural Resources (Section 106 Clearance & Section 401 and Land Disturbance Permitting). The Section 106 clearance is related to the old bridge over Hinkson Creek at Green Valley Drive.
  - Missouri Department of Conservation (Threatened & Endangered Species Clearance).
  - US Army Corps of Engineers (Section 404 Permitting).
  - US Fish and Wildlife (Threatened & Endangered Species Clearance).
  - City of Columbia, MO ("No-Rise" Certification & Floodplain Development Permit).
  - City of Columbia, MO & Missouri One Call (Utility coordination)
- 1.3 HNTB will assist Owner in determining scope of survey work for areas requiring field surveying to supplement the existing aerial photography and topographic survey. HNTB will use base sheets prepared as part of Task 1.1 to mark the proposed trail centerline alignment and suggested locations for field surveying limits. Owner will contract for field surveying services with others and provide HNTB with additional survey data in AutoCAD format. Field surveying will be tied into the ground control utilized for the aerial surveying. Key information required in the field survey work includes but is not limited to the following:
  - Right-of-way limits or property lines and easements along portions of the trail corridor where the trail alignment is adjacent to private property along city-owned streets or property and portions of trail alignment that are not utilizing existing sidewalks (approximately 3,400 linear feet).
  - Topographic surveying along the portions of trail alignment not utilizing existing sidewalks. Width of survey area to be a minimum of 35' each side of the proposed trail centerline. Surveying should include one foot contours, locations and spot elevations for all surface features including trees, utility structures and other physical features within the proposed trail construction zone (approximately 3,400 linear feet).
  - Field identified/staked survey limits for the two trail crossing under existing roadway bridges and the embankment/hillside area where the trail ramps back up to Old 63 South at Hinkson Creek.

- Five creek cross sections at the pedestrian bridge location. One cross section at the centerline of the bridge and two  $\pm 25'$  on centers up stream and down stream. Surveyor shall obtain level of detail regarding stream bank conditions necessary for design of the pedestrian bridge abutments and trail approaches.
  - Verification of locations from known records for all above and underground utilities within area impacted by trail construction..
- 1.4 Assist Owner in determining scope of subsurface/soils investigation work for areas requiring field soil borings and geotechnical engineering analysis. HNTB will use base sheets prepared as part of Task 1.1 to mark suggested locations for soil borings. Owner will contract for soil boring and geotechnical engineering services with others and provide HNTB with soil boring and geotechnical engineering data for design of trail pavement throughout the alignment and retaining walls (natural boulders or segmental block walls) at bridge underpasses and the pedestrian bridge abutment areas..
- 1.5 Assist Owner in preliminary determination of areas for property acquisition. The extent of areas will be refined during the preliminary design phase when the trail alignment is refined and determined acceptable to Owner (see Task 2.1). HNTB's scope will be limited to providing the Owner with graphic exhibits depicting the general easement area locations required. Owner will conduct all property acquisition tasks, detailed delineation of easement areas and provide HNTB with necessary information impacting trail design.
- 1.6 Prepare Pre-design Summary Document and meet with Owner to review completed task 1.1 to 1.5 activities as part of the preliminary design kickoff. Confirm design decisions and incorporate required review comments as directed by Owner for preparing preliminary design drawings.

*Deliverables – Task 1*

- One (1) copy of base sheets to Owner with suggested project survey limits identified (full size – assumed 24"x 36" sheets).
- One (1) copy of base sheets to Owner with suggested geotechnical survey limits/boring locations identified (full size – assumed 24"x 36" sheets).
- One (1) copy of base sheets to Owner with potential project property acquisitions identified (full size – assumed 24"x 36" sheets).
- One (1) copy of base sheets (half-size) to agencies identified in Task 1.2 for initiation of review/approval process.
- Three (3) copies of Pre-design Summary Document (includes half-size drawings) to Owner for review meeting.
- One (1) electronic copy of all correspondence and project related information/files to Owner and required recipients/attendees.

**Task 2 – Preliminary Trail Design**

- 2.1 HNTB will refine Owner provided trail alignment concept based on aerial and supplemental surveying information. The preliminary design phase will include the following:
- Site visit to review existing vegetation including observations limits of vegetation at Ordinary High Water Mark, etc. Field verify impacts of the conceptual trail alignment from Task 1.1 with survey mapping and existing conditions to determine required alignment changes to best fit the trail to the site conditions (Coordinate with visit for Task 1.6).
  - Preliminary Plan Sheets - Grading plans, Cross sections, General and typical details, Sign details, Drainage details, Fencing details, Erosion control details and Landscape plan and details. Due to the natural character of the site, landscaping will be minimal to restore disturbed areas resulting from the trail construction. Native plants will be utilized to the maximum extent feasible.

- Preliminary horizontal and vertical alignment for all newly constructed trail sections.
  - Preliminary enlargement plans (5 assumed) and cross sections (as needed) will be developed at the pedestrian bridge crossing location and at the two locations where the trail alignment goes below existing roadway bridges as well as at the north and south termini of the trail corridor where connections are made to existing improvements.
  - Preliminary enlargement plans (2 assumed) for the accessible ramp area at Old 63 South bridge location and the trail area at the northwest corner of the Stadium Boulevard and Old 63 South intersection.
  - Preliminary pedestrian bridge design for a prefabricated bridge. This scope assumes determining the bridge type, size and location as well as coordination with a prefabricated bridge manufacturer acceptable to Owner for developing general bridge design elements, plans, elevations and details.
  - Preliminary refinement of areas requiring property acquisition (see Task 1.5).
  - Required utility and agency coordination and approvals based on preliminary design trail alignment. Refer to Task 1.2 for agencies and type of coordination/approvals.
- 2.2 Preliminary Hydrology Analysis: Hydrology analysis of the three areas where the trail alignment impacts the configuration of the creek bank. These areas include the pedestrian bridge crossing and both locations where the alignment goes below existing roadway bridge structures. The hydrology analysis shall include the following:.
- Review 1995 or more recent Flood Studies for City of Columbia (if available) for information relevant to the trail corridor.
  - Hydraulic Models for Hinkson Creek (FEMA stream): It is assumed that the FEMA models are available and accurately reflect existing conditions. The current effective FEMA model shall be obtained, and reviewed for consistency in respect to the actual conditions. FEMA Flood Insurance Rate Maps applicable to the project are Community – Panel Numbers 290036-0012-B and 0017-B.
  - Hydraulic model tasks (assumed FEMA model is HEC2 or HEC-RAS) + Duplicate Effective - converted and results verified/differences explained.
    - + Corrected Effective – obvious modeling errors corrected
    - + Pre-Project - recent features added (baseline model)
    - + Proposed – the project’s features added and checked preliminarily
  - Encroachment Restriction/Mitigation: Each of the hydraulic constrictions created by the proposed trail or creek encroachment features (assumed 3 locations – see below) shall attempt to have a preliminary solution to mitigate the constriction to a “No Rise” condition.
    - + Pedestrian bridge crossing location.
    - + Trail underpass at Old 63 South roadway bridge.
    - + Trail underpass at Stadium Boulevard roadway bridge.
- Preliminary summary of hydrology analysis, findings and proposed design approach.
- Note: Mitigation measures do not always result in a “No-rise” condition. If a rise in the 100 year flooding elevation cannot be feasibly mitigated, other effort such as a map revisions (CLOMR’s & LOMR’s) processed through FEMA (provided specific criteria are met) will be required as part of additional services beyond the scope of this contract.
- 2.3 404 Permit Application Submittals (preliminary & final design activities).
- Pre-application Site Visit with USACE & MDNR: Contact and accompany representatives from the US Army Corps of Engineers and the Missouri Department of Natural Resources on a site visit to review preliminary plans of the stream crossing/encroachment locations and to discuss

- mitigation options prior to submittal of the 404 permit application. Prepare a written summary of the site visit.
- Vicinity Map & Data Form Preparation: Prepare a vicinity map on USGS base (8.5" x 11"), and stream data forms (8.5" x 11") containing text and photographs of existing stream conditions at bridge crossing/encroachment locations.
  - Permit Application Form Preparation: Fill out permit application form including text for description of project, purpose of project, reasons for stream impacts, types of material to be placed in stream and calculation of amount of each material in cubic yards, calculation of surface area filled, preparation of impact quantity table, and names and addresses of adjoining property owners (provided by Owner).
  - Plan & Cross-Section Exhibit Preparation: Prepare a plan view exhibit and a cross-section/elevation exhibit (8.5" x 11") for the one stream crossing and two encroachment areas for inclusion in the permit application submittal. Each exhibit will show the Ordinary High Water Mark of the stream and will show the structures and materials proposed at those locations, and may include proposed mitigation.
  - Preparation of Stream Mitigation Proposal and Exhibits: Prepare text of stream mitigation proposal discussing the type and extent of proposed mitigation efforts, to be included in the 404 permit application submittal. Separate mitigation plan exhibits (8.5" x 11") will be prepared for inclusion in the application submittal.
- 2.4 Preliminary Design Review Site Visit: Conduct a follow-up site visit to review/confirm impacts of the preliminary design alignment with site conditions (Coordinate with visit in Task 2.3).
- 2.5 Preliminary Specifications: Develop preliminary project specifications editing/utilizing MoDOT Standard Specifications supplements with Special Provisions as needed based on the scope of design (i.e. pedestrian bridge, signage, etc.).
- 2.6 Preliminary Cost Estimate: Prepare quantity take-offs and develop estimate of probable construction cost based on the preliminary design plans..
- 2.7 Quality Control / Quality Assurance: Perform quality control and review of plans, details, hydrology analysis and cost estimate documents.
- 2.8. Preliminary Design Summary Document: Prepare preliminary design summary with design parameters and assumptions for review and approval by Owner. Design summary will include utility and agency coordination updates/status and any outstanding issue requiring action by Owner.
- 2.9 Agency Permitting/Review: Activities shall include the following:
- Agency Coordination: Conduct phone conversations, prepare e-mails, and prepare application submittal cover letter and response letters in conjunction with the permit process.  
Note: Environmental documentation and mitigation of pollutants or other contaminants is not included. Discovery of pollutants or other contaminants in proposed trail locations would require realignment of trail and / or scoping of additional services.
  - City/State/Federal Submittal Review: Submit plans for review to appropriate local, State and Federal agencies. Refer to Tasks 1.2 for listing of agencies. Meetings with reviewing agencies, other than Owner, are not included in the scope of services.
  - FEMA CLOMR: A Conditional Letter of Map Revision (CLOMR) will be completed and filed with FEMA. The filing fee shall be paid by the Owner.
  - No-Rise Certification: Certificate of no-rise shall be filed with the local government agencies (City of Columbia, MO).

- 2.10 Preliminary Design Review Meeting: Prepare and distribute preliminary design submittal information and meet with the Owner to present the preliminary design plans, hydrology findings, cost estimate and design summary document. HNTB will document meeting and distribute meeting minutes to attendees and Owner. Any review comments will be verified with Owner and incorporated into the final design documents as directed.

*Deliverables – Task 2*

- One (1) copy of preliminary agency coordination/permitting documents to Owner and one (1) copy to each agency listed in Task 1.2.
- Three (3) copies of Preliminary Hydrology Analysis documents to Owner for review.
- One (1) copy of preliminary 404 Permit application to Owner and one (1) copy to the USACE for comments.
- Three (3) copies of Preliminary Design Summary Document (includes half-size drawings) to Owner for review meeting.
- Three copies of preliminary design submittal (drawings, specifications, cost estimates, etc.) to Owner for review meeting.
- One (1) electronic copy of all correspondence and project related information/files to Owner and required recipients/attendees.

**Task 3 – Final Trail Design**

- 3.1 Based on Owner's approval of preliminary design, HNTB will finalize the trail alignment and design including incorporation of required review comments as directed by Owner. Final trail design will include the following:
- Final Plan Sheets - Grading plans, Cross sections, General and typical details, Sign details, Drainage details, Fencing details, Erosion control details and Landscape plan and details. Due to the natural character of the site, landscaping will be minimal to restore disturbed areas resulting from the trail construction. Native plants will be utilized to the maximum extent feasible.
  - Final horizontal and vertical alignment for all newly constructed trail sections.
  - Final enlargement plans and cross sections (as needed) will be developed at the pedestrian bridge crossing location and at the two locations where the trail alignment goes below existing roadway bridges.
  - Final Enlargement plans for the accessible ramp area at Old 63 South bridge location and the trail area at the northwest corner of the Stadium Boulevard and Old 63 South intersection.
  - Final pedestrian bridge design for a prefabricated bridge. This scope assumes determining the bridge type, size and location as well as coordination with a prefabricated bridge manufacturer acceptable to Owner for developing general design elements, bridge plans, elevations and details.
  - Final refinement of areas requiring property acquisition (see Task 1.5).
  - Final utility and agency coordination based on final design trail alignment. Refer to Task 1.2 for agencies and type of coordination/approvals. HNTB scope includes providing the required documents for the required final review and approvals.
- 3.2 Final Hydrology Analysis: Hydrology analysis of the three areas where the trail alignment impacts the configuration of the creek bank. These areas include the pedestrian bridge crossing and both locations where the alignment goes below existing roadway bridge structures. Finalize the hydrology analysis from the final design effort and design approach. Prepare documentation for approval by Owner for floodplain permit..
- Field Reconnaissance: Visit the project site again; assess the project site based on the issues determined during Preliminary Design.

Owner for printing bid sets as well as a digital copy of specification and drawing files in the format required by Owner..

- 4.2 HNTB shall assist the Owner during the bidding period by attending an Owner-conducted prebid meeting and responding to questions/clarifications raised by prospective bidders. HNTB will prepare written addenda as needed to address questions/clarifications as directed by Owner..
- 4.3 HNTB shall assist Owner in review of the bids and determination of the apparent/responsive low bidder by discussing comparisons and completeness of bids received. HNTB will not attend the bid opening.

*Deliverables – Task 4*

- One copy of bid documents to Owner for printing of bid sets.
- One copy of required addenda to Owner and plan holder of record.
- One (1) electronic copy of all correspondence and project related information/files to Owner and required recipients/attendees.

**Task 5 – Limited Construction Phase Services**

- 5.1 HNTB will attend Owner-conducted preconstruction meeting and assist Owner with any questions/clarifications raised by Contractor..
- 5.2 HNTB will review and advise Owner on required action for Contractor submittals (product data, shop drawings, samples, etc.).
- 5.3 Construction Observation Visits: HNTB will only provide periodic construction observation visits on an as requested, cost per visit basis. The cost per visit shall be paid as a reimbursable expense based on the cost per visit included in Exhibit C – Compensation.
- 5.4 Punch List Visit: HNTB will assist Owner in conducting a project walk through to develop a final punch list for the project at substantial completion. Owner shall conduct the follow-up punch list visit to verify punch list items have been completed satisfactorily. HNTB will not be required to participate in the follow-up punch list visit unless requested by Owner. If requested by Owner, HNTB shall be reimbursed based on the cost per additional site visits included in Exhibit C – Compensation.

*Deliverables – Task 5*

- One (1) electronic copy of all correspondence and punch list to required recipients/attendees.
- One (1) electronic copy of site visit reports (if site visits requested by Owner) to Owner and required recipients..

**ARTICLE II-ADDITIONAL SERVICES**

The Local Agency reserves the right to request additional services, as changed or unforeseen conditions may require changes and services beyond the scope of this contract. In this event, a supplement to this contract shall be executed by the Local Agency and the Engineer and submitted for the approval of MoDOT prior to performing the additional or changed services or incurring any additional cost thereof. Any change in compensation will be covered in the supplement.



Additional services would include, but are not limited to:

- Field Surveying Services (Refer to Task 1.3)
- Geotechnical Engineering (subsurface/soils investigation) Services (Refer to Task 1.4)
- Property Acquisition Services or right-of-way plans (Refer to Task 1.5)
- Hydrology Analysis, Modeling and Design Services, Scouring Analysis, FEMA Map Revisions (CLOMR's & LOMR's) and other similar services not specifically included than items and assumptions included in Basic Services (Refer to Tasks 2.2, 2.3, 2.9 & 3.2).
- Coordination or additional design services related to incorporation of public art into the project.
- As-built or record drawings of constructed trail improvements.
- Labor wage interviews during construction.
- Material testing during construction.
- Any services not specifically described and/or mentioned in the previous task descriptions whether unforeseen, requested or required at a later date by the Owner or other approval agencies.

### **ARTICLE III - RESPONSIBILITIES OF LOCAL AGENCY**

The Local Agency will cooperate fully with the Engineer in the development of the project, including the following:

- A. Make available all information pertaining to the project which may be in the possession of the Local Agency and the Engineer shall be entitled to reasonably rely on the accuracy and completeness of such information;
- B. Provide the Engineer with the Local Agency's requirements for the project;
- C. Make provisions for the Engineer to enter upon property at the project site for the performance of his duties;
- D. Examine all studies and layouts developed by the Engineer, obtain reviews by MoDOT, and render decisions thereon in a prompt manner so as not to delay the Engineer;
- E. Designate a person in the Local Agency's employ to act as Local Agency's representative under this contract, such person to have authority to transmit instructions, interpret the Local Agency's policies and render decisions with respect to matters covered by this contract;
- F. Perform appraisals and appraisal review, negotiate with property owners and otherwise provide all services in connection with acquiring all right-of-way needed to construct this project; and
- G. Furnish an inspector to observe the contractor's day-to-day operations.

### **ARTICLE IV - PERIOD OF SERVICE**

The Engineer will commence the services within two weeks after receiving written notice to proceed from the Local Agency. The general phases of services will be completed in accordance with the following schedule:

- A. Tasks 1. 1 to 1.6 shall be completed within 20 working days excluding holidays following Owner's written notice to proceed from the Owner. .

- B. Tasks 2.1 to 2.10 shall be completed within 50 working days excluding holidays following approval of Owner of Pre-design Summary Document (Refer to Task 1.6), receipt of Owner provided field survey and soils report information (Refer to Tasks 1.3 & 1.4) and Owner's written authorization to proceed with preliminary design tasks.
- C. Tasks 3. 1 to 3.8 shall be completed within 75 working days excluding holidays following review and approval of preliminary design submittal and Owner's written authorization to proceed with final design tasks.
- D. As requested by Owner based on Owner's actual bidding schedule.
- E. As requested by Owner based on construction actual progress.

The above times are exclusive of review time by other agencies and exclusive of time needed to acquire right-of-way. The Local Agency will grant time extensions for unavoidable delays beyond the control of the Engineer. Requests for extensions of time should be requested in writing by the Engineer, stating fully the reasons for the request.

#### **ARTICLE V - STANDARDS**

The Engineer shall be responsible for working with the Local Agency in determining the appropriate design parameters and construction specifications for the project using good engineering judgment based on the specific site conditions, Local Agency needs, and guidance provided in the most current version of Section VIII of the Local Agency Manual. If the project is on MoDOT Right of Way, then the latest version of PDM and Missouri Standard Specifications for Highway Construction shall be used.

The Engineer shall exercise the same degree of care, skill, and diligence in the performance of its services as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances. No other warranty, express or implied, is included in this contract or in any drawing, specification, report, opinion, or other instrument of service, in any form or media, produced in connection with the services.

The Engineer shall not be responsible for (a) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the project; (b) the failure of any contractor, subcontractor, vendor, or other project participant, not under contract to the Engineer, to fulfill contractual responsibilities to the Local Agency or to comply with federal, state, or local laws, regulations, and codes; or (c) procuring permits, certificates, and licenses required for any construction unless such procurement responsibilities are specifically assigned to HNTB in Article I, Scope of Services.

#### **ARTICLE VI - COMPENSATION**

For services provided under this contract, the Local Agency will compensate the Engineer as follows:

- A. For design services (including services through the construction contract award stage) and construction inspection services, the Local Agency will pay the Engineer the actual costs incurred plus a predetermined fixed fee of \$4,792.55, with a ceiling established for said services in the amount of \$39,979.87, which amount shall not be exceeded.
- B. The compensation outlined above has been derived from estimates of cost which are detailed in Attachment A. Any major changes in services, extra services, exceeding the contract ceiling, or

change in the predetermined fixed fee will require a supplement to this contract, as covered in Article II - ADDITIONAL SERVICES.

C. Actual costs in Sections A and B above are defined as:

1. Actual payroll salaries paid to employees for time that they are productively engaged in services covered by this contract, plus
2. An amount estimated at 49.38% of actual salaries in Item 1 above for payroll additives, including payroll taxes, holiday and vacation pay, sick leave pay, insurance benefits, retirement and incentive pay, plus
3. An amount estimated at 102.10% of actual salaries in Item 1 above for general administrative overhead, based on the Engineer's system for allocating indirect costs in accordance with sound accounting principles and business practice, plus
4. Other costs directly attributable to the project but not included in the above overhead, such as vehicle mileage, meals and lodging, printing, surveying expendables, and computer time, plus
5. Project costs incurred by others on a subcontract basis, said costs to be passed through the Engineer on the basis of reasonable and actual cost as invoiced by the subcontractors.

D. The rates shown for additives and overhead in Sections VI. C.2 and VI. C.3 above are approximate and will be used for interim billing purposes. Final payment will be based on the actual rates experienced during the period of performance, as indicated by the Engineer's accounting records, and as determined by final audit of the Engineer's records by MoDOT.

E. The payment of costs under this contract will be limited to costs which are allowable under 23 CFR 172 and 48 CFR 31.

F. **METHOD OF PAYMENT** - Partial payments for services performed in accordance with the provisions of this contract will be made to the Engineer upon receipt of itemized invoices by the Local Agency. Invoices will be submitted no more frequently than one invoice per month. A pro-rated portion of the fixed fee will be paid with each invoice.

G. **PROPERTY ACCOUNTABILITY** - If it becomes necessary to acquire any specialized equipment for the performance of this contract, appropriate credit will be given for any residual value of said equipment after completion of usage of the equipment.

## **ARTICLE VII - COVENANT AGAINST CONTINGENT FEES**

The Engineer warrants that it has not employed or retained any company or person, other than a bona fide employee working for the Engineer, to solicit or secure this contract, and that it has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this contract. For breach or violation of this warranty, the Local Agency shall have the right to annul this contract without liability, or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee, plus reasonable attorney's fees.

## **ARTICLE VIII - SUBLETTING, ASSIGNMENT OR TRANSFER**

No portion of the services covered by this contract, except as provided herein, shall be sublet or transferred without the written consent of the Local Agency. The subletting of the services shall in no way relieve the Engineer of its primary responsibility for the quality and performance of its services. It is not anticipated to utilize subconsultants for the scope of services covered by this contract scope of work.

#### **ARTICLE IX - PROFESSIONAL ENDORSEMENT**

All plans, specifications and other documents shall be endorsed by the Engineer and shall reflect the name and seal of the Professional Engineer endorsing such plans, specifications or other documents.

#### **ARTICLE X - RETENTION OF RECORDS**

The Engineer shall maintain all records, survey notes, design documents, cost and accounting records, construction records and other records pertaining to this contract and to the project covered by this contract, for a period of not less than three years following final payment by the Local Agency. Said records shall be made available for inspection by authorized representatives of the Local Agency, MoDOT or the federal government during regular working hours at the Engineer's place of business.

#### **ARTICLE XI - OWNERSHIP OF DOCUMENTS**

Plans, tracings, maps and specifications prepared under this contract shall be delivered to and become the property of the Local Agency upon termination or completion of the services. Basic survey notes, design computations and other data prepared under this contract shall be made available to the Local Agency upon request. All such information produced under this contract shall be available for use by the Local Agency without restriction or limitation on its use. If the Local Agency incorporates any portion of the Engineer's deliverables into a project other than that for which it was performed, the Local Agency shall save the Engineer harmless from any claims and liabilities resulting from such use.

#### **ARTICLE XII - TERMINATION**

The Local Agency may terminate this contract for its convenience at any time by giving written notice to the Engineer. If this contract is terminated for the Local Agency's convenience, the Engineer will be paid for actual expenses incurred up to the date of termination, plus a pro-rated portion of the fixed fee.

This contract may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with the terms of this contract; provided, however, the nonperforming party shall have 14 calendar days from the receipt of the termination notice to cure or to submit a plan for cure acceptable to the other party. If this contract is terminated for default, the Engineer will be paid for actual expenses incurred up to the date of termination, plus a pro-rated portion of the fixed fee. If this contract is terminated by the Local Agency due to the Engineer's default, the Local Agency may procure completion of the Engineer's services in such manner as it reasonably deems to be in the best interest of the Local Agency. The Engineer will be responsible for any reasonable and immitigable damages the Local Agency may sustain by reason of the termination of this contract due to the Engineer's default.

#### **ARTICLE XIII - DISPUTES UNDER THIS CONTRACT**

In the event of a dispute between the Local Agency and the Engineer arising out of or related to this contract, the aggrieved party shall notify the other party of the dispute within a reasonable time after such dispute arises.

If the parties cannot thereafter resolve the dispute, each party shall nominate a senior officer of its management to meet to resolve the dispute by direct negotiation or mediation.

Should such negotiation or mediation fail to resolve the dispute, either party may pursue resolution of the dispute by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association; provided, however, in the event the parties are unable to reach agreement to arbitrate under terms reasonably acceptable to both parties, either party may pursue resolution in any court having jurisdiction.

During the pendency of any dispute, the parties shall continue diligently to fulfill their respective obligations hereunder.

#### **ARTICLE XIV - SUCCESSORS AND ASSIGNS**

The Local Agency and the Engineer agree that this contract and all agreements entered into under the provisions of this contract shall be binding upon the parties hereto and their successors and assigns.

#### **ARTICLE XV - COMPLIANCE WITH LAWS**

The Engineer shall comply with all federal, state, and local laws, ordinances, and regulations applicable to its services, including Title VI of the Civil Rights Act of 1964 and non-discrimination clauses incorporated herein, and shall procure all licenses and permits necessary for the fulfillment of the Engineer's obligations under this contract.

#### **ARTICLE XVI - RESPONSIBILITY FOR CLAIMS AND LIABILITY**

The Engineer agrees to save harmless the Local Agency, MoDOT and FHWA from judgments and liability to the extent caused by the Engineer's negligent acts or the negligent acts of its employees, agents or subcontractors arising out of the performance of the services under this contract.

#### **ARTICLE XVII - NONDISCRIMINATION**

The Engineer, with regard to the services performed by it after award and prior to completion of the services under this contract, will not discriminate on the ground of race, color or national origin in the selection and retention of subcontractors. The Engineer will comply with Title VI of the Civil Rights Act of 1964, as amended. More specifically, the Engineer will comply with the regulations of the Department of Transportation relative to nondiscrimination in federally assisted programs of the Department of Transportation, as contained in 49 CFR 21 through Appendix H and 23 CFR 710.405 which are herein incorporated by reference and made a part of this contract. In all solicitations either by competitive bidding or negotiation made by the Engineer for services to be performed under a subcontract, including procurements of materials or equipment, each potential subcontractor or supplier shall be notified of the Engineer's obligations under this contract and the regulations relative to non-discrimination on the ground of color, race or national origin.

#### **ARTICLE XVIII – ATTACHMENTS and APPENDIXES**

The following exhibits are attached hereto and are hereby made part of this contract:

Attachment A - Estimate of Cost

Attachment B - Breakdown of Overhead Rates

Attachment C - Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions.

Attachment D - Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Lower Tier Covered Transactions.

Executed by the Engineer this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Executed by the City this \_\_ day of \_\_\_\_\_, 20\_\_.

**FOR: The City of Columbia, Missouri**

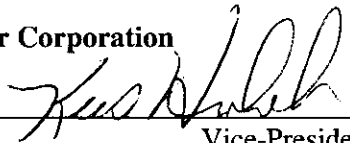
**BY:** \_\_\_\_\_  
**Title:** H. William Watkins, City Manager

APPROVED AS TO FORM:

ATTEST: \_\_\_\_\_  
Sheela Amin, City Clerk

\_\_\_\_\_  
Fred Boeckmann, City Counselor

**FOR: Engineer Corporation**

**BY:** \_\_\_\_\_  
  
Vice-President

ATTEST: \_\_\_\_\_

**ATTACHMENT A**

**ESTIMATE OF COST**

<b>DESIGN PHASE</b>	<u>Hours</u>	<u>Rate</u> <u>(Salary Only)</u>	<u>Cost</u>
<i>Pre-Design/Preliminary Design (Tasks 1-2)</i>			
Senior Professional (LA)	16	\$42	\$672
Senior Professional (Civil)	8	\$45	\$360
Professional (Civil)	15	\$35	\$525
Professional (Hydrology)	30	\$23	\$690
Professional (LA)	67	\$25	\$1675
Technician	107	\$18	\$1926
Project Administrator	2	\$26	\$52
 <i>Final Design (Task 3)</i>			
Senior Professional (LA)	18	\$42	\$756
Senior Professional (Civil)	4	\$45	\$180
Professional (Civil)	14	\$35	\$490
Professional (Hydrology)	18	\$23	\$414
Professional (LA)	49	\$25	\$1225
Technician	84	\$18	\$1512
Project Administrator	2	\$26	\$52
 <i>Bidding Phase (Task 4)</i>			
Senior Professional (LA)	3	\$42	\$126
Senior Professional (Civil)	0	\$45	\$0
Professional (Civil)	18	\$35	\$630
Professional (Hydrology)	0	\$23	\$0
Professional (LA)	12	\$25	\$300
Technician	0	\$18	\$0
Project Administrator	2	\$26	\$52
<b>SUBTOTAL</b>			<b>\$11,637.00</b>
<i>Payroll Overhead (Est. at 49.38% X SUBTOTAL)</i>			\$5,746.35
<i>General and Admin. Overhead (Est. at 102.10% X SUBTOTAL)</i>			\$11,881.38
<b>TOTAL LABOR &amp; OVERHEAD</b>			<b>\$29,264.73</b>
 <i>Fixed Fee (14.5% X TOTAL LABOR &amp; OVERHEAD)</i>			 \$4,243.39
<b>TOTAL LABOR, OVERHEAD &amp; FIXED FEE</b>			<b><u>\$33,508.12</u></b>
 <i>Other Direct Costs</i>			
Travel, 6 trips @ 270 miles X \$0.445			\$720.00
Photo Copies			\$200.00
CAD Plots			\$900.00
Misc.			\$50.00
<b>SUBTOTAL DIRECT COSTS</b>			<b><u>\$1,870</u></b>
<b>TOTAL FOR DESIGN PHASE</b>			<b><u>\$35,378.12</u></b>



## CONSTRUCTION PHASE

	<u>Hours</u>	<u>Rate</u> <u>(Salary Only)</u>	<u>Cost</u>
Senior Professional (LA)	12	\$42	\$504.00
Professional (Civil)	10	\$35	\$350.00
Professional (Hydrology)	24	\$25	\$600.00
Project Administrator	2	\$26	\$52.00
<b>SUBTOTAL</b>			<b>\$1,506.00</b>
<i>Payroll Overhead (Est. at 49.38% X SUBTOTAL))</i>			\$743.66
<i>General and Admin. Overhead (Est. at 102.10% X SUBTOTAL))</i>			\$1,537.63
<b>TOTAL LABOR &amp; OVERHEAD</b>			<b>\$3,787.29</b>
<i>Fixed Fee (14.5% X TOTAL LABOR &amp; OVERHEAD)</i>			\$549.16
<b>TOTAL LABOR, OVERHEAD AND FIXED FEE</b>			<b><u>\$4,336.45</u></b>
<i>Other Direct Costs</i>			
Travel, 2 trips @ 270 miles X \$0.445			\$240.30
Photo Copies			\$25
CAD Plots			\$0
Misc.			\$0
<b>SUBTOTAL DIRECT COSTS</b>			<b><u>\$265.30</u></b>
<b>TOTAL FOR CONSTRUCTION PHASE</b>			<b><u>\$4,601.75</u></b>
<b>PROJECT TOTAL</b>			
TOTAL LABOR & OVERHEAD			\$33,052.02
TOTAL FIXED FEE (14.5% TOTAL LABOR & OVERHEAD)			\$4,792.55
TOTAL LABOR, OVERHEAD & FIXED FEE			\$37,844.57
TOTAL DIRECT COSTS			\$2,135.30
<b><u>GRAND TOTAL FOR PROJECT</u></b>			<b><u>\$39,979.87</u></b>

**ATTACHMENT B**  
**OVERHEAD RATE BREAKDOWN**  
**FOR YEAR 2005**

<b>DIRECT LABOR BASE</b>	<b>\$115,420,915</b>	
<b>PAYROLL ADDITIVES</b> (list individual components)		<b>% DIRECT</b>
	<u>BASE</u>	<u>LABOR</u>
Paid Leave	\$20,997,331	18.19%
Employee's Insurance	\$15,742,479	13.64%
Payroll Taxes	\$13,425,524	11.63%
Miscellaneous Employee Benefits	\$6,829,048	5.92%
<i>Total Payroll Additives</i>	<b>\$56,994,382</b>	<b>49.38%</b>
<b>GENERAL AND ADMINISTRATIVE OVERHEAD</b> (list individual components)		
Indirect Salaries	\$26,378,757	22.85%
Rent and Maintenance	\$19,248,439	16.68%
Insurance	\$8,204,365	7.11%
Taxes	\$1,464,947	1.27%
General	\$36,043,452	31.23%
Bid & Proposal / Marketing	\$19,926,676	17.26%
Firm Support Services	\$6,405,109	5.55%
Other Expense (Income)	\$168,643	0.15%
<i>Total General and Administrative Overhead</i>	<b>\$117,840,388</b>	
102.10%		
<b>TOTAL FAR ALLOWABLE OVERHEAD</b>	<b>\$174,834,770</b>	<b>151.48%</b>

\* Overhead percentages should be taken out to 2 decimal places

## ATTACHMENT C

### CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS - PRIMARY COVERED TRANSACTIONS

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#### INSTRUCTIONS FOR CERTIFICATION

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
4. The prospective primary participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," "proposal" and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-- Lower Tier Covered Transaction" provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded

from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to check the Nonprocurement List.

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

**Certification Regarding Debarment, Suspension, and Other Responsibility Matters -Primary Covered Transactions**

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
  - a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
  - b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
  - d. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

## ATTACHMENT D

### CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION--LOWER TIER COVERED TRANSACTIONS

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#### INSTRUCTIONS FOR CERTIFICATION

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to whom this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended,


debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION--LOWER TIER COVERED TRANSACTIONS**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Source

Mike Hood  


**TO:** City Council  
**FROM:** City Manager and Staff   
**DATE:** Aug 8, 2006  
**RE:** Engineering Services Contract for the Grindstone Nature Area to Stephens Lake Park trail project.

**EXECUTIVE SUMMARY:**

Staff has prepared for Council consideration an ordinance authorizing the City Manager to execute an agreement with the HNTB Corporation of St. Louis, Missouri in the amount of \$39,979.87 to provide engineering services to complete construction drawings for the Grindstone Nature Area to Stephens Lake Park trail project. The HNTB Corporation has been selected for this project in accordance with the City's Pre-Qualified Professional Consultant procurement guidelines, but City ordinances require this agreement to be approved by Council since the fee is in excess of \$20,000.00.

**DISCUSSION:**

The scope of this agreement is to provide construction drawings for the first phase of the proposed recreation trail connecting Grindstone Nature Area and Stephens Lake Park. The proposed trail project is shown on the attached plan. This project will be funded by a Federal Highway Administration Surface Transportation Enhancement Grant and a Prior Year Appropriation from the ¼ 1999 Sales Tax.

Because of the firm's expertise with this type of work, staff's recommendation is to hire the HNTB Corporation to complete the necessary design work for this project. It is anticipated that this project will be constructed in the summer of 2007.

**Suggested Council Action:**

Approval of the ordinance.

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Fiscal Impact

YES x

NO

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Other Info.

Project number:  
C00245

COLUMBIA COLLEGE

BENTON SCHOOL

FREEDOM HOUSE

WALNUT

STEPHENS COLLEGE

LEE SCHOOL  
PAQUIN PARK

UNIVERSITY AVE.

COLLEGE AVE.

UNIVERSITY OF MISSOURI

OLD US 63

BROADWAY

WILLIAM

CLIFF DR. PARK

OLD US 63

STADIUM BLVD.

ROCK QUARRY RD.

BINDSTONE CREEK

HINKSON CREEK

CONLEY ROAD

HWY. 63

EXISTING UNDERPASS UNDER ROAD BRIDGE

EXISTING CONCRETE TRAIL SECTION

CREEK CROSSING USING MODIFIED EXISTING BRIDGE

PROPOSED BRIDGE

PROPOSED UNDERPASS UNDER EXISTING BRIDGE

PROPOSED 8' WIDE CONCRETE PEDEWAY

PROPOSED UNDERPASS UNDER EXISTING BRIDGE

PROPOSED UNDERPASS UNDER EXISTING BRIDGE

- EXISTING TRAILS AND SIDEWALKS
- HINKSON CREEK TRAIL PHASE 1 (FUNDED)
- HINKSON CREEK TRAIL PHASE 2 (UNFUNDED)

- EXISTING CITY PARKS
- OTHER CITY LANDS, SCHOOLS \* CITY SCHOOLS
- EXISTING PRIVATE PARKS AND RECREATION FACILITIES
- UNIVERSITIES AND COLLEGES
- EXISTING FLOODPLAINS FOR POTENTIAL TRAILS



**PROPOSED HINKSON CREEK TRAIL EXTENSION**  
 3-7-01 DRAWN BY: MSS  
 REVISED: 12-27-05 MSS