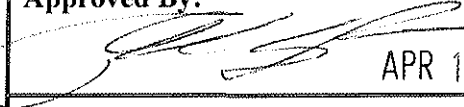
 <b>DEPARTMENTAL POLICY</b> <b>State of Tennessee</b> <b>Department of Transportation</b>	<b>Policy Number : 301-01</b>
	<b>Effective Date:</b> <b>May 1, 2013</b>
<b>Approved By:</b>  <b>APR 15 2013</b>	<b>Supersedes:</b> <b>August 1, 2009</b>
<b>SUBJECT: Standard Procurement of Engineering and Technical Services</b>	

**RESPONSIBLE OFFICE:** Chief Engineer

**AUTHORITY:** TCA 4-3-2303. If any portion of this policy conflicts with applicable state or federal laws or regulations, that portion shall be considered void. The remainder of this policy shall not be affected thereby and shall remain in full force and effect.

**PURPOSE:** To prescribe the policy of the Tennessee Department of Transportation (TDOT) applicable to the retention of consultant services for architectural, engineering, right-of-way and technical services for projects.

**APPLICATION:**

**A. Engineering and Design Related Services**

This policy is to include all engineering and design related services described in Title 40 U.S.C. Chapter 11, Title 23 U.S.C. Section 112 (b)(2), 23 C.F.R. Part 172 and 49 C.F.R. Section 18.36(t).

Broadly defined, these services include program management, construction management, feasibility studies, preliminary engineering, design engineering, surveying, mapping, or architectural related services with respect to construction projects. They may include emergency contracts.

Examples of services included within the scope of this policy are comprehensive transportation planning, project planning, environmental studies, context sensitive solution/design services, cultural resources studies, geotechnical studies, historic studies, archeological studies, socio-economic and environmental justice analyses, drainage studies, inspection services, intelligent transportation system design and development, traffic control systems design and development, roadway design services, structural design services, materials inspection and testing, value engineering, and utility analysis/design services.

**B. Right-of-Way Acquisition Services**

This policy also includes right-of-way acquisition services pursuant to Tennessee Code 12-4-109. These services include contracts for appraisal, acquisition, or relocation services related to the acquisition of land entered into by the Department for the purpose

of acquiring right-of-way and disposing of surplus right-of-way. Since compensation for these services is not paid pursuant to federal regulation, the terms of this policy regarding methodology of compensation are not applicable.

C. Technical Services

Technical services such as inspection of structural steel fabrication, laboratory testing, inspection of welds on existing bridges, overhead sign inspection, underwater inspection, utility installation inspection, geotechnical sub-surface exploration/drilling and lab testing, etc., are also included in this policy.

**DEFINITIONS:**

- A. *Project Specific Contract* - Project specific contracts provide for all the work associated with a specific project that is desired to be contracted with the consultant firm and requires detailed scopes of services. These contracts may provide for all work to be placed under contract at the same time depending on availability of funds. A project specific contract is the traditional type of consultant contract between the Department and a consultant for the performance of a fixed scope of work related to a specific project or projects.
- B. *Multiphase Contract* - Multiphase contracts are similar to project-specific contracts except that the work is divided into phases such as survey, environmental or design. The consultant contract is based on a general scope of work with a maximum contract ceiling. Individual phases are negotiated and the work authorized while future phases may wait until later in the contract period before completing negotiation and authorization. Multiphase contracts are helpful for complex projects where the scope of a future phase is not well defined. Multiphase contracts may be terminated at the end of a phase. A multiphase contract incorporates the work order concept for a specific project.
- C. *On-Call Contract* - On-call contracts cover basic contractual requirements without defining specific projects. They are set up to handle a number of projects or specialized services which are established during the contract period. Generally, these contracts run for a period of two to five years. Work orders are generated to stipulate what work and services are required for specific projects. An on-call contract provides for the repetitive performance of a specific work task or tasks for items such as environmental services, transportation planning reports, surveying, mapping, right-of-way acquisition and relocation services, utility analysis/design, signal design, roadway design, bridge inspection and repair, and construction engineering and inspection. An on-call contract may also provide for the performance of engineering related services for use on projects generally such as the development or revision of design standards and technical manuals.
- D. *General Engineering Related Contract* - General engineering related contracts are for engineering and design related services related to transportation planning, design, or program management for use on projects. Examples include comprehensive transportation planning, the development of design standards and technical manuals, and the development of comprehensive transportation program management manuals.

- E. *Competitive Negotiation* - Competitive negotiation is the preferred method of procurement for engineering related services. These contracts use qualifications-based selection procedures in the manner of a contract for architectural and engineering services under the "Brooks Act" provisions contained in Title 40 U.S.C. Chapter 11 (formerly 40 U.S.C. §541-544). The proposal solicitation process is by public advertisement and provides qualified in-state and out-of-state consultants a fair opportunity to be considered for award of the contract. Price is not used as a factor in the evaluation and selection phases.
- F. *Noncompetitive Negotiation* – Noncompetitive negotiation is used to procure engineering and design related services when it is not feasible to award the contract using competitive negotiation or small purchase procedures. Circumstances which may justify a noncompetitive negotiation include when the service is available only from a single source or there is an emergency which will not permit the time necessary to conduct competitive negotiations.
- G. *Small Purchase Procedures* - Small purchase procedures are relatively simple and informal procurement methods where an adequate number of qualified sources are reviewed and the total contract costs do not exceed the simplified acquisition threshold fixed in 41 U.S.C. 403(11). Competitive negotiation in the manner of a "Brooks Act" qualifications-based selection procedure is not required.
- H. *Technical Service Procurement Procedure* – A technical service procurement procedure is used for the procurement of services as described in this policy at "APPLICATION", Item C, Technical Services. Price quotations are obtained from qualified firms for the specified work either by public advertisement or by requests. Awards are made to the responsible firm whose proposal is most advantageous to the Department with price and other relevant factors in "POLICY", Section IV. C considered.

## **POLICY:**

### **I. DETERMINATION OF NEED FOR CONSULTANT**

- A. The considerations used to determine a business need to employ consultant services are as follows:
  - 1. The magnitude of the work involved for the project as compared to available Department resources.
  - 2. The complexity of the work involved as compared to expertise available within TDOT.
  - 3. The timeframe in which the work must be accomplished and the ability of TDOT to do the work on schedule.
- B. Whenever a Division head determines consultant services are needed, the Division head must submit a written request to its Bureau Chief for approval to procure the consultant services. Upon obtaining approval from the applicable Bureau Chief, the process to select the consultant may be initiated.

## **II. CONSULTANT EVALUATION COMMITTEE**

- A. Establishment of a Consultant Evaluation Committee: The Commissioner shall designate the members of the Consultant Evaluation Committee ("CEC"), which shall at a minimum be composed of the Chief Engineer, Chief of Environment and Planning, Assistant Chief Engineer of Design, Assistant Chief Engineer of Operations, Assistant Chief of Environment and Planning, and the Division Director requiring the service. The Commissioner must approve any change in membership of the CEC prior to advertisement and approve any substitutions. The CEC membership may vary depending on the type of service being procured.
- B. Role: The CEC shall have the responsibility of submitting to the Commissioner a recommended list of qualified firms.
- C. Record of Proceedings: The CEC shall designate either a member or staff person to create and maintain a record of proceedings before the CEC which shall include information submitted to the CEC for consideration, summary minutes of meetings, findings and/or recommendations to the Commissioner.
- D. Advisory Members: The Director of the Civil Rights Office, the General Counsel, and other TDOT officials as the Commissioner may direct shall be notified of and invited to attend each meeting of the CEC. The function of such representatives shall be advisory only.

## **III. PREQUALIFICATION OF CONSULTANTS**

- A. All firms, including any public or private universities, seeking work with the Department under this policy shall have a current prequalification status.
- B. The Department shall post on its internet website at least annually a solicitation advising that consultant services may be sought and requesting that firms interested in performing work to secure prequalification status with the Department. The prequalification procedure shall be available on the TDOT website. The completed prequalification form shall be submitted to the Director of the Design Division.
- C. Firms and their employees must comply with the applicable state licensing law requirements including but not limited to Tennessee Code Annotated Title 62, Chapter 2 (Architects, Engineers, and Landscape Architects), Title 62, Chapter 39 (Real Estate Appraisers), Title 62, Chapter 18 (Land Surveyors), and Title 62, Chapter 36 (Geologists).
- D. Principals and/or responsible professionals of the firm's staff seeking prequalification must be experienced in the disciplines for which prequalification status is sought.
- E. Firms must be of a sound financial standing and have the financial ability to work in the disciplines for which prequalification is sought.

F. Firms may request either an "Unlimited" or "Limited" prequalification status with the Department as described below:

1. Unlimited Prequalification: This level of prequalification allows consulting firms to compete for any projects for which they are professionally and financially pre-qualified with the Department. Continued prequalification at this level requires submittal of the prequalification form every three years. Additionally, the firm must submit the following:

- a) A self-certified, indirect cost rate prepared in accordance with AASHTO guidelines, or a copy of the last cognizant agency audit performed. The indirect cost rate schedule should be submitted annually.
- b) Most current balance sheet.

Prior to contracting, the consulting firm must have an audited indirect cost rate and review of their job costing system. TDOT may require the firm to provide an audited Schedule of Indirect Cost and Rate Calculation prepared by an independent Certified Public Accountant (CPA) which will then be reviewed by TDOT external auditors, or TDOT may choose to prepare the audited schedule. In either case, the firm must provide a full fiscal year of financial information.

2. Limited Prequalification: This level of prequalification allows consultants to compete for (a) projects with fees estimated to be less than the "Small Purchase Maximum Contract Value" per contract (see Section VI) or (b) work as a sub-consultant or as contract labor with fees estimated to be less than the "Small Purchase Maximum Contract Value" per contract. A significant change in scope for which the proposed costs would exceed the "Small Purchase Maximum Contract Value" will require a new contract or unlimited prequalification status. Continued prequalification at this level requires submittal of the prequalification form every three years. Detailed financial information is not required. In lieu of an actual audited overhead schedule, the overhead shall be based on a self-certified indirect cost rate prepared in accordance with AASHTO Guidelines and limited to 125% of the consultant's direct labor cost.

G. Professional prequalification will be based upon employees on the payroll of the consulting firm whether fulltime or part time. Since contract employees are not on the payroll of the firm, the firm cannot be considered pre-qualified for any discipline exclusively done by contract labor, just as a firm cannot be pre-qualified for a discipline based solely upon a sub-consultant's expertise. Any subsidiary of a company not included in the audited indirect cost schedule must be pre-qualified separately. Any employees borrowed from this subsidiary by the parent company or another subsidiary of the same parent company must be treated as a sub-consultant.

- H. The Department will offer assistance for firms needing guidance in record keeping requirements regarding Department contracts. Specific items will be covered to assist DBEs and other small businesses in planning to move out of the “limited” and into the “unlimited” prequalification status.
- I. The Department shall notify all applicants of the results of the review of their application for prequalification. Denied applicants may appeal to the Commissioner whose decision shall be final.
- J. A firm’s prequalification shall begin on the date approved by the Department and has a term of three years with a three-month grace period, at which time the firm must re-apply for prequalification. No notice of prequalification expiration will be given by TDOT.
- K. Expiration or termination of a consultant’s prequalification status may be cause for TDOT to terminate any contract with a consultant.
- L. A name change, merger, buy out or other similar change in status shall cause a termination of the existing prequalification and necessitate the submittal of a new prequalification form.
- M. A firm’s prequalification status shall be terminated if the firm is included on the Federal Excluded Parties List.

#### **IV. COMPETITIVE NEGOTIATION PROCUREMENT PROCEDURE**

##### **A. Confidentiality**

To the extent allowed by applicable State law, all documents relating to the evaluation and selection of consultants, and negotiations with selected consultants, shall remain confidential until selection is complete and a contract is awarded.

##### **B. Consultant Advertisement**

TDOT shall seek Letters of Interest from pre-qualified firms by advertising through its internet website. Advertisement shall provide, at a minimum, the following:

1. General scope of the work.
2. Evaluation criteria.
3. Method of payment.
4. Contact information for project specific questions.
5. Specific location where the Letters of Interest should be mailed or e-mailed.
6. Deadline for submittals of Letter of Interest.
7. A statement that all firms must be pre-qualified or have a completed prequalification form filed with the Department by the deadline for the Letters of Interest.
8. Disadvantaged Business Enterprise (DBE) and Small Business encouragements.

### C. Consultant Evaluation Criteria

The evaluation criteria shall include, at a minimum, the following:

1. Ability and relevant expertise of the firm's personnel to be used in performing the service.
2. Past experience in the required disciplines with TDOT and/or other clients.
3. Qualification and availability of staff.
4. Demonstrated ability to meet schedules without compromising sound professional practices.
5. Evaluations on prior TDOT projects, if available.
6. Size of project and limited or unlimited prequalification status.
7. Amount of work under contract with TDOT, if applicable.
8. Whether the consultant can perform the work efficiently without compromising sound professional practices.
9. Other factors, including interviews and demonstrations, as approved by the applicable Chief.

### D. Sub-consultants for Engineering Services

1. A consultant responding to a request for a letter of interest from TDOT, shall not specifically identify sub-consultant(s). Rather, the letter of interest shall only identify the need to use a sub-consultant and the scope of work to be performed.
2. A consultant who has been short-listed for a project and asked to submit a proposal shall specifically identify any sub-consultant(s) required to complete the project team. All sub-consultants identified on the submittal shall be pre-qualified by TDOT to perform the required tasks or have an application pending prior to submittal of the proposal. It shall be the responsibility of the prime consultant to include a signed statement from each sub-consultant on their own letterhead confirming that they have the staff available and agree to provide the necessary services for the specific item/project listed in the prime consultant's Form DT-0330 Part 2. Failure to meet these requirements will void the submittal.
3. Once a contract has been awarded, the consultant may negotiate directly with sub-consultants. A change in sub-consultants must be approved by TDOT. A written request must be submitted to the TDOT manager, of the functional area involved, to initiate the change. This request must include an explanation of the need to change sub-consultants and the impact on the project schedule and financial elements of the contract. The substitute sub-consultant must be pre-qualified by TDOT to perform the required tasks. After consideration of all factors of the request, TDOT will respond to the request in writing.

E. Phase I Contract Selection

1. The Division advertising for engineering related services shall evaluate current statements of qualification and performance data from those submitting Letters of Interest using the evaluation criteria, and the Division Director shall present those evaluations to the CEC for review. The CEC shall choose several firms who would make viable candidates and who will be invited to submit a proposal.
2. The Department shall issue a list of those firms selected in Phase I and notify firms that were not selected. The firms selected in Phase I shall be requested to submit a proposal for the work. Proposal format requirements, delivery address and deadlines shall be included in the notification sent to firms selected in Phase I. Electronic delivery and receipt of the proposal may be permitted.
  - a) Notwithstanding the forgoing provisions in this Item E.2, applicants for appraisal services will be required to submit a Letter of Interest; however, they will not be required to submit a proposal.
3. The proposal shall contain a section wherein a firm selected in Phase I may identify certified Disadvantaged Business Enterprises (DBEs) that the firm commits to use during the project. Although it is not a mandatory requirement that consultants submitting proposals commit to DBE participation, a good faith effort toward diversity is encouraged in the team make-up. The Commissioner may set DBE goals on projects involving federal funds, in which case the selected consultant must either meet the goal or show good faith efforts to meet the goal, consistent with the DBE program regulations at 49 C.F.R. 26.53.

F. Phase II Contract Selection

1. Project Specific, Multiphase and General Engineering Related Services Contract Selection
  - a) The Division advertising for engineering related services shall evaluate the proposals of firms selected in Phase I using the evaluation criteria.
  - b) Separate formal interviews, if approved as an evaluation criteria, should be structured and conducted with a specified time limit. Competing consultants may be asked to bring additional information or examples of their work to the interviews if such information will contribute to the evaluation process. Specific questions may be asked of each consultant to clarify qualifications, written proposals, or oral presentations.
  - c) The Division Director shall present the Division's evaluation of proposals received from firms selected in Phase I to the CEC for review. The CEC shall recommend



to the Commissioner a list of no fewer than three of the firms deemed most qualified to provide the services required.

## 2. On-call Contract Consultant Selection

- a) The selection process for on-call contracts is generally the same process described for project specific, multiphase and general engineering related services contracts. Additionally, however, the CEC may recommend selection of firms by geographic areas, special expertise, or other methods. The CEC shall evaluate the firms selected in Phase I and presented by the Division Director using the evaluation criteria and shall recommend to the Commissioner a list of no fewer than three of the firms deemed most qualified to provide the services required.
- b) In the case of on-call contracts for appraisal services, the Right-of-Way Division will evaluate the individual appraisers based on their prequalification applications using the evaluation criteria and submit its evaluations to the CEC for review. The CEC shall recommend to the Commissioner a list of no fewer than three appraisers deemed most qualified to provide the services required.

## G. Phase III Contract Selection

The Commissioner shall rank the firms in order of preference based upon the evaluation criteria. The Department will negotiate with the firm(s) in rank order. All considered firms who were unsuccessful in the selection process shall be so notified.

## H. Negotiation of Contract

The following shall apply to all negotiations of scope and cost for contracts, work orders, and supplemental agreements.

1. Determination of Contract Amount: Following a decision to use consultant services, TDOT staff shall prepare an estimate of man-days or project cost required based on:
  - a) Relative difficulty of the proposed assignment or project, size of project, details required, and the period of performance, and,
  - b) A comparison with the experience record for similar work performed both by TDOT personnel and previously negotiated consultant contracts.

This estimate shall be done independently, prior to negotiation, and shall remain confidential to the extent allowed by applicable law.

2. Scope of Work Meeting with Selected Firm: The Director (or his designee) of the TDOT functional area responsible for the services to be acquired will negotiate with the selected firm. Said Director may arrange a conference with the prospective consultant at which the parties must come to a mutual understanding of the scope of

work and all technical and administrative requirements of the proposed undertaking. In lieu of a conference, this may be done by phone or correspondence. Participants at these conferences may include representatives from the offices of External Audit, Civil Rights, and Consultant Contracts. A representative of the Chief of Administration shall be involved as deemed appropriate. The prospective consulting firm may be represented as it wishes; however, a project manager and accounting representative are recommended.

3. Cost Proposal: The prospective consulting firm will be invited to submit a cost proposal for the project. This cost proposal is to be broken down by the various items of work as requested and supported by estimated labor requirements. Instructions shall be given regarding the method of compensation and the documentation needed to justify the proposed compensation.

In evaluating the consultant's cost proposal(s), the Director shall judge the reasonableness of the proposed compensation and anticipated labor and equipment requirements by the following and other appropriate considerations:

- a) The proposed compensation should be comparable to that of other projects of similar nature and complexity, including as applicable salaries and man-hours to accomplish the work, and allocation of labor within the man-hour estimates.
  - b) The Director, as deemed appropriate, will assess the fairness of the proposed fee.
  - c) The proposed compensation shall be studied for reasonableness and to assure sufficient compensation to cover the professional quality of the work items desired.
4. Contract Negotiations: If the consultant's first cost proposal is rejected by TDOT, the negotiating parties shall hold a second conference to discuss those points of the cost proposal which are considered unsatisfactory. The consultant shall submit a second cost proposal based upon this second conference. If the Department rejects the consultant's second cost proposal, negotiations shall cease and commence with the second most qualified firm. If like negotiations are unsuccessful with the second most qualified firm, TDOT will undertake negotiations with the third most qualified firm and others on the selected list in sequential order. With the concurrence of the Commissioner, the Department may, at any time, in lieu of continuing negotiations, elect to redefine the scope of the project and invite another group of consultants to submit proposals pursuant to "POLICY", Section IV, Competitive Negotiation Procurement Procedure.

#### I. Contract Development and Execution

1. In the event the parties reach agreement, the Director shall submit a written report to the appropriate Chief containing a recommendation regarding all cost related items and an explanation why (a) through (c) in Item H.3. have been satisfied, including

specific information on comparable contracts. This report shall also be provided to the Chief of Administration.

2. The contract will include a clause requiring the consultant to perform such additional work as may be necessary to correct errors in the work required under the contract without undue delays and without additional cost to TDOT.
3. The contract shall contain a clause whereby the consultant must report at least quarterly all amounts paid to any DBE sub-consultants and to any Minority Business Enterprise (MBE) and/or Woman Owned Business Enterprise (WBE) sub-consultants. The Division Director shall likewise report DBE, MBE and/or WBE participation quarterly to the Office of Civil Rights.
4. Method of Payment: Contract fee will be cost plus fixed net fee, fixed fee per unit, or lump sum. Identical cost accounting records must be maintained regardless of the payment method. A single contract may contain different payment methods as appropriate for different elements of the work.
5. Pre-award review of contracts: All engineering and specialized consultant contracts over \$250,000 under this policy shall be reviewed by the External Audit Section of the Division of Finance. In addition to the proposed contract, the External Audit Section shall also receive the final cost proposal, including any items that have been negotiated. The proposed compensation shall be subject to a pre-award audit evaluation. (This requirement is not applicable to services described in "APPLICATION" Section, Item B, Right-of-Way Acquisition Services.)
6. Prior to contract execution, the appropriate Chief (either Engineering or Planning and Environment) must approve the negotiated items and the Chief of Administration must indicate whether the cost items are fair and reasonable.
7. Federal-Aid Contracts: According to the Stewardship and Oversight Plan, as agreed by TDOT and FHWA, for Federal-aid contracts on full federal oversight projects, the FHWA Division Administrator or his representative must approve the negotiated items and the basic contract agreement. Also, environmental contracts in the NEPA phase will require the same FHWA approval. A copy of TDOT's independent estimate or Man-Day estimate and Fee Proposal shall be provided as part of the review and approval. Approval by FHWA is also required for on-call or other contracts if the consultants will be used for environmental contracts in the NEPA phase or on full federal oversight projects.
8. The Director of each applicable Division shall maintain a record of the negotiations and all required approvals.
9. Prior to approval of the contract, the Department must have on file a contract specific Certificate of Insurance for the consultant. It shall confirm that the firm has professional liability insurance for errors and omissions in the amount of \$1,000,000, as a minimum, and the policy shall be maintained for the life of the contract.

Consultants responsible for the disbursement of TDOT funds shall be required to provide evidence of a Fidelity Bond in the amount of \$250,000 maintained for the life of the contract.

#### J. Monitoring of Active Projects

1. After the contract has been approved, a work order issued, and productive work on the consultant's assignment has begun, representatives of the Departmental division requiring the consultant's services and, as appropriate, the Federal Highway Administration, shall periodically review and document the consultant's progress. Said monitoring reviews shall be directed toward assurance that the consultant's assignment is being performed as specified in the agreement, that an adequate staff has been assigned to the work, that project development is commensurate with project billings, and that work does not deviate from the contracted assignment.

Should conditions warrant, these reviews may consist only of an appropriate exchange of correspondence. These reviews shall determine, among other matters, if any changes or supplemental agreements are required for the completion of the consultant's work.

2. An employee of TDOT shall be responsible for each contract or project. Annually and/or at project close, the assigned employee will prepare a performance evaluation report covering such items as timely completion of work, conformance with contract cost, quality of work, and whether the consultant performed the work efficiently. A copy of this report will be furnished to the firm for its review and comments.

#### K. Supplemental Agreements

1. No contract may be supplemented to add work outside the scope of the project or the general scope of services the consultant was initially evaluated to perform. For example, a roadway design contract may be supplemented to add work related to additional phases of project design (e.g. preliminary engineering with related technical services such as survey or geotechnical work, preparation of right-of-way plans, or preparation of final construction plans); however, a project specific or multiphase contract for roadway design shall not be supplemented to add a new project or to add a different type of service, such as construction engineering and inspection. Similarly, an on-call contract shall not be supplemented to add a different type of service, nor shall an on-call contract for a specific term be supplemented to extend the term. For Federal-aid contracts on full federal oversight projects, the FHWA must approve any work orders, change orders, and supplements.

#### L. Contract Accounting Policies

##### 1. Overhead Charge – Basic Agreement or Contract

- a) Federally funded projects: The overhead charge, effective for contracts advertised on or after December 1, 2005, shall be the actual rate as determined in compliance

with Federal Acquisition Regulation Standards and approved by a cognizant agency as defined by 23 CFR 172. The cognizant agency is the home state transportation department, a federal agency, or TDOT in the absence of any of the other. A Certified Public Accountant (CPA) may perform the audit, but the audit work papers may be reviewed by the governmental agency. The overhead rate for firms with multiple offices shall be a combined rate for all offices. The rate for the overhead charge will be valid for a one year accounting period. If the overhead rate expires during the contract period an extension may be considered on a case-by-case basis in accordance with 23 CFR 172.7(b).

If the indirect cost rates provided by a cognizant agency or independent CPA are in dispute, the parties to any proposed new contract must negotiate a provisional indirect cost rate or TDOT's External Audit Section shall perform an audit to establish a rate for the specific contract. Only the consultant and TDOT may dispute the indirect cost rate.

- b) State funded projects: The overhead charge, effective June 14, 1996, for all State funded projects shall be the actual overhead rate, adjusted by policy limits described in (i) and (ii) below. Pursuant to TCA 54-1-130, the adjusted rate cannot exceed a maximum of 145%.
  - (i) Any bonus, employee management incentive program, or any other type payments to an owner, partner, officer, or associate owning more than 2% interest in the firm, shall be considered as a distribution of profits and shall not be allowed in arriving at the overhead rate.
  - (ii) Indirect/administrative portion of individual salaries shall be limited to the amount paid to the Commissioner of TDOT.

2. Overhead Computation— Supplements, Work Orders and Addendums

- a. The overhead charge on supplements, work orders or addendums to contracts entered into after June 14, 1996 and advertised before December 1, 2005 shall be the fixed overhead rate stated in the basic contract and will not exceed the maximum of 145%. This fixed overhead rate will also remain in effect for the life of the basic contract.
  - b. The overhead charge on supplements, work orders or addendums to contracts advertised on or after December 1, 2005, shall be the most recent overhead rate approved by the TDOT External Audit Section.
3. Travel: Travel and subsistence charges shall be in conformance with the State of Tennessee Comprehensive Travel regulations. Air travel shall be pre-approved by the functional area manager. Actual expenses, not to exceed the commercial rate, for the use of company owned airplanes are allowable as a direct charge.

4. Net Fee Calculation: The fee for profit is negotiable. The maximum allowable net fee is 13% and should be negotiated depending on the type work, complexity, time restraints, etc., of the project. Net fee is calculated using the following formula:  $\text{Net Fee} = 2.35 \times \text{Direct Salary} \times \text{Allowed Net Fee Rate}$ .

For **cost plus** fixed net fee contracts, net fee shall be invoiced as follows:

- a) Net fee is invoiced based on the total approved net fee multiplied by the estimated percentage of project completion during the invoicing period as stated in the progress report, less any previous partial payments; or,
  - b) For construction engineering and inspection (CEI) contracts, payments of net fee shall be based on the actual labor costs not to exceed the total approved net fee. The net fee for each progress billing shall be determined using the consultant's actual direct labor for the specific billing period multiplied by 2.35 times the negotiated net fee percent.
5. Standard Invoice: All invoices for contracts under this policy shall use a standard invoice (see Attachment A).
  6. Contract and Project Closing: The functional area manager is responsible for keeping up with contract costs and knowing when a contract is complete. He is also responsible for closing the contract in a timely manner. By letter to the consultant, the functional area manager shall affirm that the contract or work order has been satisfactorily completed. A copy of the completion notice shall be sent to the Division of Finance and the Consultant Contracts Office (see Attachment B for an example). In the event that additional services are required within the original scope of the project, the contract or work order may be re-opened. All terms and conditions of the contract shall remain the same.
  7. Retainage shall not be required for new Engineering and Technical Services Contracts.
  8. Audit Requirements
    - a) Pre-award audits consist of a review of a proposed indirect cost (overhead) rate based upon historical data, review of the consultant's job cost accounting system, and review of project man-day or unit price proposals. Awarded contracts are subject to interim and final audits. The audits consist of determining the accuracy of invoice charges by reviewing time sheets, payroll registers, travel documents, etc. Charges that cannot be supported will be billed back to the consultant. Annual audits of the indirect cost rate for non-fixed indirect cost rate contracts will be required and adjustments to the invoiced billing rate may be necessary based on audit results.
    - b) Audit Reports: TDOT shall provide FHWA copies of completed audit reports of Federal-aid contracts on full federal oversight projects within ten (10) business days of completion of the audit report. When findings or deficiencies are reported, TDOT shall provide FHWA the corrective action plan to correct the findings or deficiencies.

9. Computer Aided Drafting and Design (CADD) Expenditures: All CADD equipment and software expenditures are to be treated as part of overhead. CADD expense will not be allowed as a direct expenditure based on an allocation rate.

10. Facilities Capital Cost of Money (FCCM) Rate: FCCM referenced in 48 CFR 31.205-10 shall be allowed as part of overhead and applied to direct labor.

#### 11. Direct Costs

- a) Include job related expenses which are required directly in the performance of project services such as travel, subsistence, long distance telephone, reproduction, printing, etc. These should be itemized as to quantities and unit costs in arriving at the total cost for the expense.
  - b) The proposed direct cost shall not exceed the Department's maximum allowable rate when a rate for such cost is specified. All direct costs must show supporting documentation for auditing purposes. Documentation for proposed rates should show how they were developed including historical in-house cost data or names and phone numbers of vendors that supplied price quotes along with receipts, invoices, etc., if available.
  - c) Electronic equipment, such as personal computers, cameras, and cellular phones, shall be included in the consultant's overhead.
  - d) The cost of the use of the consultant's vehicle(s) to the Department's project shall be paid for according to Attachment C, Schedule of Vehicle Reimbursements.
12. Collection of Funds Due as Result of Contract Audit: Once an audit is completed and the consultant is found to owe the Department, the External Auditor will notify in writing the consultant, the appropriate Consultant Contracts Office, and the Finance Director. The Finance Director will contact the consultant in writing about the indebtedness and request payment within 30 days from the date of the letter. If after 30 days payment is not received, the consultant will then be notified by the Finance Director that any funds held in retainage or funds owed to the consultant under other agreements will be used to satisfy the indebtedness. If funds or payables to the consultant in the Department's possession are in excess of the indebtedness, anything owed the consultant will be remitted under normal payment procedures. If the funds in the Department's possession are not sufficient to satisfy the indebtedness, the Finance Director will discuss the matter with the Department's legal counsel and take appropriate action.

#### M. Geotechnical Contracts

Contracts for geotechnical services are considered separately because they may involve a mixture of two types of services, i.e., geotechnical studies (engineering services) and sub-surface exploration/drilling or laboratory testing (technical services). Additionally, some firms offer one or the other of these services, others offer both, and others offer some

combination as well as other services, e.g., design. Firms offering both services must, for accounting purposes, separate the two operations. Cost of equipment, supplies, etc., used in technical services may not be applied towards overhead computations for engineering services.

1. Sub-surface Exploration/Drilling: These services shall be procured as required by applicable law and in accordance with the procedures noted in "POLICY", Section VII, Technical Service Procurement Procedure.
2. Geotechnical Studies Only: These services shall be procured as noted in "POLICY", Section IV, Competitive Negotiation Procurement Procedure.
3. Geotechnical Studies and/or Laboratory Testing Combined: The services of these firms shall be procured as noted in "POLICY", Section IV, Competitive Negotiation Procurement Procedure. The technical services costs shall be negotiated by the Geotechnical Engineering Section Manager, Materials and Tests Division, based on usual industry standards.
4. Geotechnical Studies and/or Sub-surface Exploration/Drilling and/or Laboratory Testing within another Engineering Services Firm: These services shall be procured as part of the larger contract, e.g., roadway design. Payment for sub-surface exploration/drilling shall be invoiced as a direct cost. Overhead cost restrictions as previously stated in Section IV, Item L, Contract Accounting Policies, also apply to hourly labor charges. Geotechnical studies shall be invoiced as other engineering services.

#### N. Sub-consultants for Engineering Services

1. Geotechnical Studies and/or Sub-surface Exploration/Drilling and/or Laboratory Testing within another Engineering Services Firm: These services shall be procured as part of the larger contract, e.g., roadway design. Payment for sub-surface exploration/drilling shall be invoiced as a direct cost. Overhead cost restrictions as previously stated in Section IV, Item L, Contract Accounting Policies, also apply to hourly labor charges.. Geotechnical studies shall be invoiced as other engineering services.



## 2. Geotechnical Studies Firms as Sub-Consultants

- a) Geotechnical Studies Only: The services of these firms may be procured by negotiation with the prime consultant as described previously herein.
- b) Geotechnical Studies and Sub-surface Exploration/Drilling and/or Laboratory Testing Firms as Sub-Consultants: The services of these firms shall be procured by negotiation with the prime consultant. However, costs associated with sub-surface exploration/drilling and/or laboratory testing shall be negotiated under the direction of the Geotechnical Engineering Section Manager, Materials and Tests Division.

## O. Sub-consultants Not Covered Under Engineering Services

In the event a sub-consultant is required whose hiring process, as a prime, would be governed by "POLICY", Section V, Noncompetitive Negotiation Procurement Procedure, or Section VII, Technical Service Procurement Procedure, or other state policy, that sub-consultant shall be retained by the same method used if he were a prime.

1. Example: Design consultants are occasionally asked to provide laboratory testing services under their design contract. These services procurement methods are described under "POLICY", Section VII, Technical Service Procurement Procedure. The design consultant shall use, and document, the procedures described under "POLICY", Section VII, Technical Service Procurement Procedure, when hiring the laboratory testing consultant.
2. The functional area manager responsible for the project should monitor the hiring and documentation of sub-consultants by the prime. Documentation should detail the method used and should be satisfactory for a final project audit.

## V. NONCOMPETITIVE NEGOTIATION PROCUREMENT PROCEDURE

The following procedures shall be used by the Department in those circumstances where there exists only one viable source for the desired services, when competition among available sources is inadequate or in emergencies when adherence to normal procedures will entail undue delays for projects requiring urgent completion.

Upon determination of a need for this type of procurement, TDOT shall request an estimate from the qualified firm for the accomplishment of the desired assignment. The request for an estimate shall define the full scope of the desired services, together with minimum performance specifications and standards, the date materials and services are to be provided by the consultant to the Department, and the required assignment completion schedule. Response to the request for an estimate shall be evaluated, giving due consideration to such matters as a firm's professional integrity, compliance with public policies, records or past performances, financial and technical resources, and requested compensation for the assignment. For Federal-aid contracts on full Federal oversight projects, the Department

shall submit justification and receive approval from the FHWA before using this form of contracting in accordance with 23 CFR 172.5 (3).

## **VI. SMALL PURCHASE PROCUREMENT PROCEDURE**

When the contract cost of the services does not exceed the simplified acquisition threshold established in 48 CFR 2.101 of the Federal Acquisition Regulations (FAR), which is currently \$150,000, small purchase procedures may be used. Contract requirements should not be broken down into smaller components merely to permit the use of small purchase procedures.

Price negotiations will be obtained from an adequate number of qualified sources with a minimum of two. Awards will be made to the responsible firm whose proposal is most advantageous to the program with price and other relevant factors considered.

## **VII. TECHNICAL SERVICE PROCUREMENT PROCEDURE**

The following procedures shall be used by the Department for procurement of the services described in "APPLICATION", Item C, Technical Services. Price quotations shall be obtained from qualified firms for the specified work either by public advertisement or by requests. A minimum of three firms is required, if available. Awards will be made to the responsible firm whose proposal is most advantageous to the program with price and other relevant factors considered.

**PROCEDURE:** This policy includes several attachments that may, from time to time, need to be changed. The Chief Engineer (or Assistant Chief Engineer designee) may approve a change to an attachment as long as the change does not require a policy revision. An attachment change is effective when a signed and dated copy is distributed and posted on the Department's policy web page.

# EXAMPLE – Lump Sum Invoice

ATTACHMENT A, PAGE 1

Job No. 78787  
Inv. No. 0787

**HYPOTHETICAL ENGINEERING CO., INC.**  
Consulting Engineers  
1000 Jackson Blvd., Chattanooga, TN 37110-1234  
PH: (423) 247-2011

January 7, 2003

Project Monitor: John Doe

Tennessee Dept. of Transportation  
Mr. Jeff Jones  
Civil Engineering Director  
Design Division, Suite 1300  
James K. Polk Building  
Nashville, TN 37243-0348

Agreement No. 9777  
Work Order No. 6  
PIN 123456.00: 1-240-(144)14,  
79006-1131-44, 79008-1127-44  
PIN 123457.00: 1-55-1(67)0,  
79004-1121-44, 79005-1128-44

For professional services relative to project I-240 from Carter Blvd. to Smith Rd., SHELBY COUNTY

Progress Billing No. 6

Work Order No. 6 Ceiling: \$100,000.00

80% complete as of 12/31/02	\$ 80,000.00
Less previously invoiced	<u>70,000.00</u>
AMOUNT DUE THIS INVOICE	\$ 10,000.00

I, the undersigned, do hereby certify that the above invoice is true and correct to the best of my knowledge and that payment has not been received or costs previously invoiced.

By \_\_\_\_\_ (Principal's Signature) \_\_\_\_\_  
(Principal's typed name and title)

# EXAMPLE – Cost Plus Net Fee Invoice

ATTACHMENT A, PAGE 2

Job No. 37281

Inv. No. 0183

CONSULTANT'S INHOUSE  
PROJECT AND INVOICE NO.

## HYPOTHETICAL ENGINEERING CO., INC.

Consulting Engineers

1000 Jackson Blvd., Chattanooga, TN 37110-1234

PH: (423) 247-2011

January 7, 2003

ONLY IF CONTRACT IS A  
CONTINUING AGREEMENT

TDOT Project Monitor: John Doe

FEDERAL PROJECT NO.

Tennessee Dept. of Transportation

Jeff Jones

Civil Engineering Director

Design Division, Suite 1300

James K. Polk Building

Nashville, TN 37243-0348

Agreement No. 9099

Work Order # (If Applicable)

PIN 123456.00: I-240-1(144)14,

79006-1131-44, 79008-1127-44

PIN 123457.00: I-55-1(67)0,

79004-1121-44, 79005-1128-44

A PIN relates to a route. Since an  
agreement can have more than one route, it  
can have more than one PIN.

STATE PROJECT NO.

For professional services relative to project I-240 from Carter Blvd. to Smith Rd., SHELBY COUNTY

Progress Billing No. 2

Dec. 1, 2002 - Dec. 31, 2002

I. Direct Labor: (Per Schedule No. 1 attached) \$ 2,890.00

II. Overhead: Payroll Additives and General  
& Administrative (\$2,890.00 @ 100.00%) 2,890.00

III. Direct Costs: (Per Schedule No. 2 attached) 114.00

IV. Other Costs: (Per Schedule No. 1 - Premium Labor) 260.00  
(Per Schedule No. 3 attached) 7,000.00

SUBTOTAL **USUALLY SUB-CONSULTANT COSTS** \$13,154.00

V. Net Fee (6.0% completion of work per this  
invoice X \$10,000 net fee ceiling  
based upon attached progress report) **NOT A PERCENTAGE OF DIRECT  
LABOR AND OVERHEAD** 600.00

AMOUNT DUE THIS INVOICE \$ 13,754.00

### SUMMARY

Contract Ceiling: \$200,000.00

Total Invoiced through Dec. 31, 2002 \$ 50,000.00

Less amount previously invoiced 36,246.00

AMOUNT DUE THIS INVOICE \$ 13,754.00

I, the undersigned, do hereby certify that the above invoice is true and correct to the best of my knowledge and that payment has not been received or costs previously invoiced.

By (Principal's Signature)  
(Principal's typed name and title)

**EXAMPLE – Cost Plus Net Fee Invoice pg 2****ATTACHMENT A, PAGE 3**

Attachment A, Page 2  
 Contract No. 9099  
 Job No. 37281  
 Inv. No. 0183

**SCHEDULE NO. 1**

Employee	Title	Rate Per Hr.	Tot Hrs.**	Amount	Overtime Hrs.	Amount
Anderson, A. C.	Principal	20.00	20	\$ 400.00		
Brown, B. D.	Engineer	18.00	60	1,080.00	20	\$ 180.00
Carr, C. E.	Jr. Engineer	16.00	50	800.00	10	80.00
Drake, D. F.	Designer	13.00	30	390.00		
Earp, E. G.	CADD Tech	8.00	20	160.00		
Fort, H. T.	Secretary	6.00	10	60.00		
Subtotal (Premium Labor)						\$ 260.00
Subtotal (Direct Labor)				\$2,890.00		\$2,890.00
<b>TOTAL</b>						<b>\$3,150.00*</b>

BREAKDOWN MAY ALSO BE BY TYPE OF WORK E.G. SURVEYS, DESIGN, ETC.

**\* BREAKDOWN OF LABOR COSTS BY PROJECT:**

79006-1131-44:	\$ 900.00	79004-1121-44:	\$ 775.00
79008-1127-44:	\$ 700.00	79005-1128-44:	\$ 775.00
I-240-1(144)14:	\$1,600.00	I-55-1(67)0:	\$ 1,550.00

\*\* Tot. Hrs. = Direct Labor Hrs. + Premium Labor Hrs.

CALCULATIONS FOR MILEAGE, MEALS, LODGING  
 AND LARGE EXPENSES MUST SHOWN AS  
 ILLUSTRATED BELOW

INDIVIDUAL MEAL CALCULATIONS ONLY IF  
 APPLICABLE – SEE PG 7 OF TRAVEL REGS.

**SCHEDULE NO. 2**

Automobile (480 mi. @ \$.10 per mi.)	\$ 48.00
Lodging (1 person x 1 night x \$50.00/night attending conference in Nashville)	50.00
Meals (1 person x 1 day x \$16.00 per diem)	16.00
<b>TOTAL</b>	<b>\$ 114.00*</b>

Rates used above are for example purposes only. ALWAYS check Travel Regs for VALID current rates on Mileage, Meals and Lodging

**\* BREAKDOWN OF DIRECT COSTS BY PROJECT:**

79006-1131-44:	\$ 20.00	79004-1121-44:	\$ 30.00
79008-1127-44:	\$ 34.00	79005-1128-44:	\$ 30.00
I-240-1(144)14:	\$ 54.00	I-55-1(67)0:	\$ 60.00

TYPICALLY, SCHEDULE 3 IS USED FOR SUB-  
 CONSULTANT SERVICES

**SCHEDULE NO. 3**

Aerial Photography (Eastern Aerial Surveys, Inc. - copy of invoice attached)	\$3,000.00
Subsurface Investigations, Evaluation Reports (M. R. Ross, Inc. - copy of invoice attached)	\$4,000.00
<b>TOTAL</b>	<b>\$7,000.00*</b>

**\* BREAKDOWN OF OTHER COSTS BY PROJECT:**

79006-1131-44:	\$2,000.00	79004-1121-44:	\$1,000.00
79008-1127-44:	\$3,000.00	79005-1128-44:	\$1,000.00
I-240-1(144)14:	\$5,000.00	I-55-1(67)0:	\$2,000.00

XYZ CONSULTANTS, INC.  
 110 North Third Street  
 P.O. Box 159  
 Selmer, Tennessee 38375

September 27, 2001

Tennessee Department of Transportation  
 Regional Transportation Manager 2  
 P.O. Box 429  
 Jackson, TN 38302-0429

Re: State Project No. - 55002-2225-14  
 Federal Project No. - NH-5(35)  
 McNairy County, Billing  
 XYZ Consultants, Inc.

Dear Sir:

In accordance with State Agreement No. 0076, we have completed the following services:

Relocations have been completed on the following tracts:

- |   |          |
|---|----------|
| 1. Tract 006, Julia Howell, Owner ..... | \$145.00 |
| 2. Tract 013, Edna King, Owner .....    | \$145.00 |
| 3. Tract 016, Pam Wicker, Tenant .....  | \$145.00 |

Submitted claim forms for business relocation on the following tracts:

- |   |          |
|---|----------|
| 1. Tract 016, R and R Sales, Tenant .....   | \$580.00 |
| 2. Tract 016, Redmon Lime Co., Tenant ..... | \$580.00 |
| 3. Tract 023, Boot Corral, Tenant .....     | \$580.00 |
| 4. Tract 069, Hwy. 45 Sawmill, Owner .....  | \$580.00 |

A business relocation has been completed on the following tract:

- |  |          |
|--|----------|
| 1. Tract 021, Good Times, Tenant ..... | \$145.00 |
|--|----------|

Negotiations have been completed on the following tracts:

- |                    |          |
|--------------------|----------|
| 1. Tract 074 ..... | \$429.00 |
| 2. Tract 080 ..... | \$429.00 |
| 3. Tract 089 ..... | \$429.00 |

The following tracts have been closed:

- |                    |         |
|--------------------|---------|
| 1. Tract 074 ..... | \$60.00 |
| 2. Tract 080 ..... | \$60.00 |
| 3. Tract 089 ..... | \$60.00 |

A check in the amount of \$\_\_\_\_\_ made payable to XYZ Consultants, Inc. will be appreciated.

Sincerely,

By \_\_\_\_\_ (Principal's Signature)  
 (Principal's typed name and title)

**ABC APPRAISAL**

September 27, 2001

Tennessee Department of Transportation  
Regional Chief Appraiser  
4005 Cromwell Rd.  
Chattanooga, TN 37422

State Project No. – 21001-2255-14  
Federal Project No. – STP-26(8)  
DeKalb County

Dear Sir:

The following appraisals have been completed for DeKalb County and are submitted for payment.

**APPRAISAL INVOICE**

<u>Tract</u>	<u>Fee</u>	<u>AMT. Due</u>
16	\$2,500.00	70% \$1,750.00
21A	\$3,000.00	\$2,100.00
32	\$2,000.00	\$1,400.00
TOTAL DUE .....		\$5,250.00

Sincerely,

By \_\_\_\_\_ (Appraisers Signature)  
(Appraisers typed name and title)  
(Appraisers License No.)

Right-of-Way Solutions, LLC  
6220 Greenlee  
Suite #1  
Arlington, Tennessee 38002

**Bill To**

Tennessee Department of Transportation  
Regional Transportation Manager 2  
P.O. Box 22368  
Chattanooga, TN 37422-2368

Re: State Project No. - 21001-2255-14  
Federal Project No. - STP-26(8)  
DeKalb County

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>RATE</u>	<u>SERVICED</u>	<u>AMOUNT</u>
Closings	Closing Completed; Tract 1A	1	150.00		150.00
Closings	Closing Completed; Tract 44	1	150.00		150.00
Closings	Closing Completed; Tract 56	1	150.00		150.00
Condemnations	Tract Condemnations; Tract 80	1	825.00		825.00
Condemnations	Tract Condemnations; Tract 92	1	825.00		825.00
Condemnations	Tract Condemnations; Tract 112	1	825.00		825.00
Condemnations	Tract Condemnations; Tract 132	1	825.00		825.00
Condemnations	Tract Condemnations; Tract 133	1	825.00		825.00
<b>TOTAL</b>					<b>4,575.00</b>

By \_\_\_\_\_ (Principal's Signature)  
(Principal's typed name and title)



**ATTACHMENT B**



STATE OF TENNESSEE  
**DEPARTMENT OF TRANSPORTATION**

505 Deaderick Street  
Suite 1300 James K. Polk Building  
NASHVILLE TN 37243-0348

(DATE) \_\_\_\_\_

M. \_\_\_\_\_

CONSULTANT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

SUBJECT: COMPLETION NOTICE

Agreement No. \_\_\_\_\_ Work Order # \_\_\_\_\_ (if applicable)

Project No: \_\_\_\_\_ PIN \_\_\_\_\_

Description: \_\_\_\_\_

County: \_\_\_\_\_

Dear M. \_\_\_\_\_:

This letter is to advise you that your firm has satisfactorily performed the work outlined under the subject contract or work order. You should submit your final invoice for this contract/work order as soon as possible.

*If a retainage has been held for this contract, and a retainage invoice is not received within 90 days of this notification, this office requests that the Division of Finance release all retainage on this contract or work order.*

*(If applicable) Current records show \$\_\_\_\_\_ is being held in retainage (if applicable).*

If you have any questions, please contact this office.

Sincerely,

\_\_\_\_\_  
Project Manager

/\_\_\_\_\_  
cc:

Program Development & Administration Division  
Finance Division  
Design Division Manager  
Design Division Contract Section

## Policy 301-01

### ATTACHMENT C

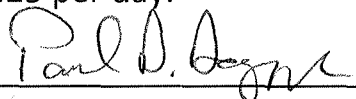
## **POLICY FOR STANDARD PROCUREMENT OF ENGINEERING AND TECHNICAL SERVICES**

### Vehicle Reimbursement Schedule

For all projects except Construction Engineering and Inspection (CEI), the consultant shall be reimbursed at the rate specified in the State of Tennessee Comprehensive Travel Regulations in effect at the time the cost was incurred.

For CEI projects, the consultant shall be reimbursed at the rate of \$27.00 per day for compact trucks used on the Department's (TDOT's) projects. For full sized pick-up trucks used on the Department's projects, the consultant shall be reimbursed at the rate of \$30.25 per day.

Rate changes are approved:

  
\_\_\_\_\_  
TDOT Chief Engineer

  
\_\_\_\_\_  
Date