### NEBRASKA DEPARTMENT OF ROADS

#### **REQUEST FOR PROFESSIONAL**

#### **CONSULTING SERVICES**

#### **JANUARY 2004**

The Nebraska Department of Roads plans to select consulting firms to complete work as described for the following projects

## Standard Work Categories

100 = Corridor Studies (Location Studies)

102 = Transportation Planning

103 = Traffic Operation Studies

104 = Traffic Operations Design

105 = Highway Design

107 = Bridge Design

201 = Aerial Photogrammetry

207 = Geological Studies

208 = Bridge Structural Analysis

For further information regarding the Standard Work Categories, please refer to the Certification Procedure Manual (available on the Department's website at <a href="http://www.dor.state.ne.us">http://www.dor.state.ne.us</a> (go to "Doing Business" then "Consultant Services & RFP's").

The anticipated "Notice to Proceed" for all the projects is included for information only so that submitting firms may schedule their staff. The dates are not exact and will depend upon the ability to schedule scope of work meetings and negotiations with the selected firm and Department staff.

It is the Department's policy to allow a maximum overhead rate of 160% for contractual services funded with state funds. This policy does not apply to project 9. In addition, the Department has a policy that limits to 48% of base salary, the amount of individual employee bonuses, allowed to be used in the overhead computation (this applies to all projects).

Design on all projects will be completed using "English" units.

The first group of project packages includes two projects involving railroad viaducts. A maximum of four firms will be short-listed for interviews.

### 1. Scottsbluff NW Viaduct, NH-71-3(121), CN 51267

Phase 1 – Location study for structures over the BNSFRR tracks including necessary public meetings to conduct a locations public hearing.

Phase 2 – work includes preliminary/functional design, ROW Ownership plans, preliminary bridge design (TS&L's), public hearing.

Phase 3 – includes final roadway and bridge design, ROW Design (appraisal and negotiation plans).

Standard Work Categories: 100, 105, 107A

NOTES:

- a. A study that includes a concept for this project has been completed for the City of Scottsbluff and is included in the project specific information. The information contained in this study is preliminary and key location study elements are required for completion.
- b. Department staff will perform any environmental documentation required.
- c. Survey activities will begin upon completion of the location study and will be done by the Department's district office.
- d. Department staff may perform final bridge design. A decision will be made closer to the time this activity commences.
- e. Anticipated notice to proceed date of March 2004.

### 2. Columbus Viaduct, NH-30-5(125), CN 31382

Phase 1 – Engineering Review concept study for a replacement viaduct over the UPRR tracks including improvements to traffic operations at adjacent intersections north of the viaduct. A public information meeting may be included in this phase.

Phase 2 – work includes preliminary/functional design, ROW Ownership plans, public hearing.

Phase 3 – includes final roadway design, ROW Design (appraisal and negotiation plans).

Standard Work Categories: 103, 104, 105

NOTES:

- a. Refer to the project related exhibits for the specific project requirements and preliminary traffic recommendations.
- b. Department staff will perform any environmental documentation required.
- c. Survey activities will begin upon completion of the engineering review study and will be done by the Department's district office.
- d. The Department is at the end stages of completing the bridge TS&L's. The design includes utilization of the existing foundations/piers and reconstruction of half the bridge per phase. The profile will remain essentially the same. Final bridge design is expected to be performed by Department staff.
- e. Anticipated notice to proceed date of March 2004.

The second group of project packages includes two projects involving new and reconstruction to four-lane roadways. A maximum of four firms will be short-listed for interviews.

# 3. Kearney West, STPD-30-4(147), CN 42339

Phase 1 Engineering Review and public information meeting

Phase 2 Preliminary/functional roadway design, ROW Ownership plans, design public hearing

Phase 3 Final roadway design, ROW Design (appraisal and negotiation plans)

Standard Work Categories: 105

Note:

- a. The Department has completed engineering review level concepts. Further investigation into engineering review elements and a public information meeting will be required to complete this document.
- b. The Department has completed a control flight. Upon completion of the engineering review, the department will either perform photogrammetric mapping in-house or use an on-call mapping firm.
- c. Department staff will perform any environmental documentation required.
- d. A notice to proceed for this project is anticipated in April 2004.

## Jct US-281 West, Grand Island, STPD-30-4(140), CN 41704

Phase 1 Engineering Review and public information meeting

Phase 2 Preliminary/functional roadway design, ROW Ownership plans, design public hearing
 Phase 3 Final roadway design, ROW Design (appraisal and negotiation plans)
 Standard Work Categories: 105

- Note: a. An uncompleted 'draft' engineering review is provided in the project exhibits. Further investigation into engineering review elements and a public information meeting will be required to complete this document.
  - b. The Department will complete photogrammetric mapping.
  - c. Department staff will perform any environmental documentation required.
  - d. A notice to proceed for this project is anticipated in April 2004.

Three firms will be short listed for the following project.

# 5. Nebraska City Southeast, F-75-2(1040), CN 10800B

Phase 1 Preliminary/functional roadway design, ROW ownership plans, preliminary bridge design (TS&L), and public hearing for an interchange of highways US-75 and N-2 just south of Nebraska City.

<u>Phase 2.</u> Final roadway and bridge design, ROW design (appraisal and negotiation plans). Standard Work Categories: 105, 107, 201

- Note: a. A control flight will be performed this spring. Photogrammetric mapping is included with this work.
  - b. A preliminary design for a single point urban interchange has been developed for this location. New traffic modeling and analysis activities will be necessary to update this concept. The Department will provide traffic Information.
  - c. Department staff will complete any environmental documentation required for this project.
  - d. A public hearing is currently in the schedule. An informal information meeting may be adequate in lieu of a formal public hearing.
  - e. A notice to proceed for this project is anticipated in May 2004.
  - f. No exhibits are available for this project.

The following three projects will expire in the near future or are being renewed.

### 6. Geologic Surveys

Standard Work Category: 207

- Note:

  a. This work will be divided into two sub-categories. Sub-category A includes roadway and bridge geotechnical engineering, i.e. soil borings for roadway design and bridge borings for abutment and pier design as well as MSE walls. Subcategory B includes site investigations as necessary for corridor selections by NDOR and as required by DEQ Part "A" and "B" and remedial action as required by Part "C".
  - b. The Department plans to select three firms for each sub-category.
  - c. The time period for the initial selection will be one year with the Department having the option to utilize the selected firms for an additional three years on an annual renewal basis for a possible total of four years.
  - d. Interviews will be conducted with up to four firms (for each subcategory) should the Department determine interviews necessary.

# 7. Missouri River Bridge Underwater Inspections

Standard Work Category: 208

Note: a. This work includes in-depth underwater inspection of six Missouri River Bridges.

All bridge inspection must be completed within seven months after the consultant is given a notice to proceed.

- b. Interviews will be conducted with up to three firms should the Department determine interviews necessary. The Department plans to select one firm.
- c. The first contract will be for the 2004 inspections with the State having the option to use the selected consultant for the 2009 inspections. The underwater inspections are done every five years.
- The bridges requiring underwater inspections include I-680, I-480, US-275, N-2, and US-159.

# 8. Quality Assurance Inspection of Steel Girders

Standard Work Category: Not applicable

To administer and insure quality services, NDOR requires inspection to be done by an AWS Certified Welding Inspector (CWI). Following is a description of the work to be performed under this continuous contract project:

- 1. Review of applicable welding procedures, welder certification and submitted material Test records;
- 2. Audit review of fabricators QA/QC procedures;
- 3. Verify qualified welders are using approved welding procedures according to AASHTO AWS D1.5: 2002;
- 4. Review fabrication operations for general conformance to the project requirements;
- 5. Monitor welding operations for proper welding procedure parameters; during welding, provide periodic review to insure parameters are being maintained;
- 6. After welding and prior to materials submittal for nondestructive evaluation, visually review completed weldments for compliance to specific quality requirements;
- 7. Review all required remedial action and record repair procedures;
- 8. Ensure correct radiographic procedures are followed and results are reviewed;
  - 8.1. Tension Joints 100 % x-rayed
  - 8.2. Compression Joints 25 % x-ray each joint
- 9. Inspect and verify given camber allowance in final laydown of girders;
- 10. Final check of all field splices and insure allowable tolerances are meet;
- 11. Review material surface preparation and cleanliness for conformance to project specifications:
- 12. Prepare shipping releases and physically identify material released for shipment and tag with NDOR tags;
- 13. Prepare all project Quality Assurance Documentation for submittal to NDOR for permanent record;

Note:

- The time period for the initial selection will be one year with the Department having the option to utilize the selected firms for an additional three years on an annual renewal basis for a possible total of four years.
- b. Firms interested in this work shall supply is list of cities the firm has inspectors located on a full time basis, demonstrating the ability to eliminate travel and per diem costs.
- c. Each individual CWI's experience providing the services listed above, and a client reference list, shall be provided in the proposal.
- d. Firms shall supply hourly rates for their Certified Welding Inspectors in the proposal. Rates shall be supplied for the first and second two-year periods.
- e. All firms that provide acceptable qualifications, experience, CWI location, and cost effective rates, as determined by the Department, will be considered for selection. Interviews will be conducted with each interested firm should the Department determine interviews necessary.

The following project includes a transit needs study for rural Nebraska. Three firms will be short listed for interviews on this project.

# 9. Nebraska Statewide Rural Transit Needs Study

Standard Work Category: 102

Purpose – To determine both short and long term transit needs including, but not limited to quantity and location of service, funding, ITS, facilities, vehicles, dispatch systems, and related equipment.

NOTE: Interested firms must demonstrate familiarity with federal transit laws, rules, and regulations and be able to demonstrate experience in Transit Need Studies, preferably with another state highway transportation agency of similar geographical characteristics as Nebraska.. The following information should be considered a general scope of work. Interested firms are required to provide a more detailed approach to this project as detailed later in this RFP.

- A. Public outreach and project administration:
  - Ensure that the state's rural transit needs are accurately and properly identified.
  - Ensure that area transit stakeholders have "buy in" to decisions made as a consequence of the needs assessment.
- B. Data Collection:
  - Socioeconomic trends in rural areas.
  - Existing historic trend information.
  - Funding trends
- C. Rural area demand estimation for short and long term:
  - Type of service needed (non emergency medical, nutritional, social, recreational).
    - o Facilities and equipment needed
  - Quantity and cost of service including facilities and equipment.
  - Stand alone or merged transit agencies.
  - Mechanism for periodic updates for long term needs.
- D. Market research:
  - Statewide rural transit survey.
  - Funding sources (local, state, federal)
    - Willingness to allocate additional funds for rural services.

The Department reserves the right to accomplish services for future phases on all the above projects with the selected consultant, select another consultant or utilize its own forces.

All proposals for design services must include computer capability. Computer designs must be compatible with MicroStation, the State's CADD system and must follow the Department's drafting procedures, guidelines, *and file naming convention*. Use of Geopak design software will be a selection factor for projects that require production of roadway construction plans.

Inclusion of a Disadvantaged Business Enterprises(s) is not a requirement in the selection of a project team.

Approach to the project "IS NOT" a selection factor during the short list selections (except on project #9), however, any issue including approach may be discussed by the short listed firms at the interviews.

PLEASE DO NOT CALL OR WRITE DEPARTMENTAL STAFF FOR ADVANCE INFORMATION. ALL DISCUSSIONS WITH THE DEPARTMENT SHOULD BE DIRECTED TO THE AGREEMENTS ENGINEER AT 402-479-4778.

THE DEPARTMENT WILL NOT HOLD A BRIEFING. All project related information is available on the Department's website. If viewing this information is not possible, please call the Agreements Engineer at 402-479-4778 to receive hard copies of this information. The information will be promptly mailed.

Other relevant information includes the following:

- 1. DR Form 498, "Architect, Engineer, and Related Services Detail Statement".
- 2. Consultant selection committee evaluation factors.
- 3. Drug Free Workplace Policy guidelines.
- 4. Nebraska Department of Roads Submittal Form.

Interested firms must have a current DR Form 497, "Architect, Engineer, and Related Services Certification Form" on file with the Department prior to January 7, 2004.

All firms must have an acceptable "Drug-Free Workplace Policy" on file with the Department or submit one prior to execution of an agreement for a project. The "Drug-Free Workplace Policy" is not a submittal requirement.

Submittals should be sent to:

Agreements Engineer Nebraska Department of Roads 1500 Highway 2 P.O. Box 94759 Lincoln, NE 68509-4759

ALL INFORMATION MUST BE RECEIVED BY 5:00 PM, ON Wednesday, January 28, 2004. **NO EXCEPTIONS TO THE 5:00 PM DEADLINE WILL BE GIVEN.** 

#### SUBMITTAL REQUIREMENTS

- 1. A letter of interest not to exceed 2 pages. One letter of interest per submittal is all that is necessary.
- "Department of Roads Submittal Form January 2004" (2 pages). This form must be filled out
  with respect to the prime and the sub for all projects of interest to the consultant. If the form
  is not filled out with respect to each project of interest to the consultant, the State will
  assume the consultant is not interested in that project.
- 3. A narrative responding to the various evaluation factors established by the Department not to exceed 10 pages.
- 4. A maximum of 10 pages of additional supportive material such as charts, tables or photos.
- 5. DOR Form 498 not to exceed 6 pages for the prime and 6 pages for each sub. A separate DR Form 498 must be submitted for each sub-consultant to be used.

#### NOTE:

- 1. Eight (8) copies of submittals are required for firms submitting on projects 1 through 8. A separate submittal of six (6) copies is required for firms submitting on project 9, the Nebraska Statewide Rural Transit Needs Study.
- 2. A page is considered to be 8 1/2 x 11, printed on one (1) side, single or double-spaced.
- 3. Submittal covers and dividers between the sections are allowed and not included in the page limit.
- 4. Folds out pages are not allowed.

The Agreements Engineer will post the list of short-listed firms and the interview schedule on the Departments website by 5:00 PM on Monday, February 9, 2004.

### **INTERVIEWS FOR PROJECTS 1 THROUGH 8**

The Department's selection committees will conduct interviews of the short listed firms at the Department of Roads Central Complex, 1500 Highway 2, Lincoln, Nebraska, at the following times and room locations:

8:00 AM - 5:00 PM on Thursday, February 19, 2004 in the Highway Commission Room 103 8:00 AM - 5:00 PM on Friday, February 20, 2004 in the Auditorium.

Interviews for projects 1 through 5 (and projects 6-8, if necessary) will be 30 minutes (20-minute presentation and 10 minutes for questions and answers). The time limitations will be strictly adhered to.

# INTERVIEWS FOR PROJECT 9 (Nebraska Statewide Rural Transit Needs Study)

The Department's selection committees will conduct interviews of the short listed firms at the Department of Roads Central Complex, 1500 Highway 2, Lincoln, Nebraska, at the following times and room locations:

9:00 AM – 3:00 PM on Tuesday, February 17, 2004 in the Highway Commission Room 103.

Interviews will be 45 minutes (30-minute presentation and 15 minutes for questions and answers) for all projects. The time limitations will be strictly adhered to.

The Agreements Engineer will notify final selected firms by telephone by 5:00 pm Wednesday, February 25, 2004 following voting by the selection committee. The Agreements Engineer will post the final selected firms on the Departments website by 5:00 PM on Wednesday, February 25, 2004.

**EQUAL OPPORTUNITY EMPLOYER** 

John L. Craig, Director Nebraska Department of Roads