

# REQUEST FOR PROPOSAL

## PHASE III CONSTRUCTION OBSERVATION ENGINEERING SERVICES

### F.A.P. 520 (BLISS ROAD) OVER BLACKBERRY CREEK BRIDGE REPLACEMENT Section Number 08-00058-02-BR

#### INSTRUCTIONS TO ENGINEERING FIRMS

Proposals are due at the Division office by **10:00 AM August 4, 2016**.  
Interviews are scheduled for the afternoon of 8-4-2016.

The County will conduct interviews with short-listed firms in compliance with its current Qualifications - Based Selection Process (QBS) for professional services anticipated for this project. **The interviews with the short-listed firms are scheduled for the afternoon of 8-4-2016 from 1:30 am to 4:30 pm. Slots for 1:30 pm, 2:30 pm and 3:30 pm are available on a first come (email) first serve basis.** The interview will be a maximum of 45 minutes. The Consultant should be prepared to make a presentation (a maximum of 25 minutes in length) outlining their qualifications and experience with projects of similar scope and magnitude. The Consultant should also demonstrate their understanding of the project and engineering services required. The remainder of the scheduled time will be a question and answer session. Attendance of any anticipated support staff is encouraged, but will be limited to three representatives from the Consultant. **Attendance of the Project Manager and Lead Resident Engineer and Assistant Resident Engineer/Inspector, as applies, is mandatory.**

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#### I. PROJECT DESCRIPTION

- A. Please reference the Preliminary Scope of Services that was provided when the request for a Statement of Interest was initiated.

## II. PROPOSAL REQUIREMENTS

An electronic copy of the proposal shall be submitted electronically **via KDOT QBS** by **10:00 am** on the date previously stated. The required proposal format is listed below. Please do your best to comply with as much of this information as possible.

The completed Proposal shall include the following items, presented in the following order:

- Cover letter on the firm's letterhead transmitting the Proposal to the County. The cover letter shall describe the composition and proposal contents. Also the cover letter shall include the firm contact individual, including contact information, should questions arise from the submitted Proposal.
- Section 1: Listing of key staff, presented in a company organizational chart format, starting with individuals of a higher ranking or classification near the top of the chart that are proposed to provide the majority of services.
- Section 2: Key staff resumes. **Resumes shall be limited to two pages.**
- Section 3: List of other company support staff that are not anticipated to perform major items of work but that may be available should their assistance be required.
- Section 4: Proposed sub-consultants.
- Section 5: Ongoing or completed projects of similar scope and magnitude that demonstrate the firm has experience in performing work requested by the County for the specific project.
- Section 6: This section also known as the Project Approach or Project Understanding shall be devoted to discussion of the County's project for which services are needed. The following elements shall be included in this section:
  - Project Name
  - Project Location
  - Type of work required (e.g., Phase III Engineering)
  - A statement informing staff that the project site was field checked or was not field checked by some key staff within the firm.
  - An aerial view photograph of the project with some key elements noted, such as name of major roadway, river or creek name, north direction arrow, and other elements deemed necessary or helpful in visually presenting the project location.

- Brief description of existing site conditions. This could be existing geometrics, existing bridge/structure type, known deficiencies, and other items relevant to the project.
- The firms proposed preliminary project approach to obtaining necessary data, evaluating the existing conditions, identifying problems/deficiencies, and proposed methods to correct or tackle and resolve identified problems and deficiencies.
- A list of anticipated challenges or what is anticipated to be the biggest challenge in completing the requested work.

The Proposal shall be in PDF format.

### **III. SELECTION PROCESS**

The selection of the Consultant will be made in compliance with the County's most current Qualifications - Based Selection or QBS Process. The current QBS Process is posted on the County's website. The consultant chosen by the Selection Committee will be the presumptive Consultant for the final negotiations. The County will then conduct negotiations with the first choice firm. If the County is unable to execute a timely contract with the firm with the first choice, the County will then pursue negotiations with second choice firm who have met the basic qualifications, then the third, etc., until an acceptable contract is executed.

### **IV. CONTACT INFORMATION**

Any questions regarding the project should be directed to Patrick VerHalen at 630-208-3138 or via email at [verhalenpatrick@co.kane.il.us](mailto:verhalenpatrick@co.kane.il.us).

Any questions regarding the QBS Process should be directed to Steve Coffinbargar at 630-406-7170 or via email at [coffinbargarsteve@co.kane.il.us](mailto:coffinbargarsteve@co.kane.il.us)

We have also included a copy of our Exhibit A, regarding expected Construction Observation Services, at a minimum, for the project Resident Engineer, Project Manager, and field staff for your reference in preparing your RFP as well as for the interview.

**EXHIBIT “A”**  
**Consulted Construction Management/Observation**

**A. OVERVIEW**

**THE CONSULTANT AGREES:**

1. To perform or be responsible for the performance of the following checked engineering services for the COUNTY in connection with the proposed improvement herein described:
  - a. (X) Furnish or cause to be furnished:
    - i. Construction observers and other technical personnel to perform the construction observation. The COUNTY, based upon the project scope, shall direct the amount of personnel.
    - ii. Continuous observation of the work and Contractor’s operations for compliance with the plans and specifications as construction proceeds, however the CONSULTANT does not guarantee the contract performance of the Contractor.
    - iii. Maintain daily records of Contractor’s activity which shall include:
      - (i) Project Diary
      - (ii) Inspector’s Daily Report (I.D.R.)
      - (iii) Quantity Book
      - (iv) Resident’s Weekly Report
      - (v) Paving Summary (Field Book)
      - (vi) All other documentation required by the DEPARTMENT
    - iv. Supervision of construction observers, proportioning engineers, and other technical personnel and also the type, frequency, and location of material testing and sampling.
    - v. Establishment of centerline control and recover benchmarks. Also, random checks or as required by the COUNTY of Contractor’s construction staking activities.
    - vi. Preparation and submission to the COUNTY in required form and number of copies, all partial and final Pay Estimates, Change Orders, records and reports required by the COUNTY. Completion and submittal of the project NOI and NOT documents as well as any other project documents associated with projects having a SWPP plan and appropriate permit(s).
    - vii. Insure that all required evidence of material certification and inspection is received from the Contractor before final payment is made.

- viii. Mark contract plans in red to provide record drawings (As-Built Plans) of the completed project for permanent record. Submit one set of As-Built Plans to the COUNTY at the time of final payment.
  - ix. To prepare for and provide materials as directed by the COUNTY for and attend the Pre-Construction Conference, and provide meeting minutes to the COUNTY no later than 7 days from the date of the meeting.
  - x. To schedule, coordinate, and provide an agenda for weekly progress meetings. Also, to provide meeting minutes to the COUNTY no later than 7 days from the date of the meeting.
  - xi. The basic survey notes and sketches, charts, computations and other data and records prepared or obtained by the CONSULTANT pursuant to this agreement will be made available upon request to the COUNTY without cost and without restriction or limitation as to their use.
  - xii. To submit to the COUNTY a list of the personnel and the equipment he/she proposes to use in fulfilling the requirements of this agreement.
- b. ( X ) Coordinate, furnish or cause to be furnished:
- i. Proportioning and testing of concrete mixtures in accordance with the “Manual of Instructions for Concrete Proportioning and Testing” issued by the Bureau of Materials and Physical Research of the Illinois Department of Transportation and promptly submit reports on forms prepared by said Bureau.
  - ii. Proportioning and testing of bituminous mixtures in accordance with the “Manual of instructions for Bituminous Proportioning and Testing” issued by the Bureau of Materials and Physical Research of the Illinois Department of Transportation and promptly submit reports on forms prepared by said Bureau.
  - iii. All compaction tests as required by the specifications or as directed by the COUNTY and report promptly the same on forms prepared by the Bureau of Materials and Physical Research of the Illinois Department of Transportation.
  - iv. Quality and sieve analysis on local aggregates that are not from approved producers (as listed by the Bureau of Materials and Physical Research of the Illinois Department of Transportation) to see that they comply with the specifications contained within the contract.
  - v. Inspect all materials when the Bureau of Materials and Physical Research of the Illinois Department of Transportation do not provide inspection at the source and submit inspection reports to the COUNTY in accordance with the policies of the said COUNTY.

B. **REQUIRED SERVICES AND PROCEDURES FOR CONSULTED CONSTRUCTION MANAGEMENT/OBSERVATION**

The following **Guidelines for Construction Procedures** have been prepared to be used as a guide for prospective consultants during preparation of their Construction Supervision Contract Proposals. This outline will familiarize the consultant with the COUNTY'S Kane County Division of Transportation, (KDOT) policies and procedures for construction supervision. This outline is a generalized list of policies and procedures mostly based on the **Illinois Department of Transportation (IDOT) Division of Highways "CONSTRUCTION MANUAL"** and also the specific requirements and needs of this agency.

1. **DUTIES AND AUTHORITY OF THE RESIDENT ENGINEER/TECHNICIAN**

The Resident Engineer/Technician (Resident) provided by the CONSULTANT, who from this point on shall be referred to, as the Resident along with his/her staff is responsible for all construction details on the project. He/she shall report directly to the (KDOT) Construction Section Chief or his Supervising Project Manager (PM). The Resident is expected to accept delegated responsibility and to make decisions within the authority delegated to him/her. A Resident's first duty is to enforce the contract and specification requirements. The Resident shall assign and schedule all field and material inspection and must maintain daily contact with the Contractor's personnel to proficiently provide the engineering services necessary for the Contractor's continued progress.

In addition the Resident is expected to make the day-to-day decisions to the extent that his/her experience and construction knowledge permit. **However, the Resident is not authorized nor should he/she attempt to revise, delete, or change the contract provisions.** When contract, plan, or specification changes are anticipated the Resident should contact the KDOT PM for guidance. The Resident also shall schedule, attend, and provide meeting minutes for all necessary meetings.

The Resident shall be the KDOT public relations person when dealing those the contract may involve and inconvenience. The Resident shall assure contract compliance with respect to:

- a. Contract Proposal
  - i. Special Provisions
  - ii. Highway Standards
- b. Plans
  - i. General Notes
  - ii. Typical Sections
  - iii. Plan and Profile Sheets
  - iv. Cross Section Sheets
  - v. Highway Standards
  - vi. All Special Detail Sheets
- c. "Supplemental Specifications and Recurring Special Provisions"

- d. “Standard Specifications for Road and Bridge Construction”
- e. Payroll
- f. Pay Estimates
- g. Erosion Control/Drainage
- h. E.E.O. Bulletin Boards
- i. Traffic Control
- j. Documentation
- k. Inspection
  - i. Material
  - ii. Field (Various Construction Operations)
- l. Various Other Items

2. **MEETINGS**

Prior to the start of construction, the KDOT shall arrange a pre-construction conference. All personnel involved with the project, including all necessary utility representatives, Contractor’s personnel, construction supervision personnel, local agency representatives, and KDOT staff shall be requested to attend. The Resident shall be required to attend, run, provide agenda and take meeting minutes to be submitted to the KDOT with copies sent to all other attendees no later than 7 days after the date of the pre-construction conference.

Bi-weekly coordination meetings shall be scheduled and coordinated by the Resident. These meetings shall be for the purpose of coordinating construction activities for the upcoming two weeks, and any other important issues that may arise. The Resident shall be required to attend, run and also provide meeting minutes to be submitted to the KDOT no later than 7 days after the date of the coordination meeting.

3. **DOCUMENTATION**

- a. **Project Diary:** The Project Diary is one of the most essential records kept on the job. The Resident or a designated representative shall be required to keep a daily diary on each contract.

The diary shall be a bound hardback book; there must be a separate diary on each Contract and a separate diary for each year. All entries throughout the diary shall be in ink.

The first entry in the diary shall be on the inside cover. This entry shall include the year, the official designation of the section (County, Section number, Route, District number, Job number, and Contract number), the name of the Contractor, and the

name and signature of the Resident. A list of all personnel (inspectors) assigned to or working on the project also shall be printed on the inside cover, and each person shall put his/her initials after his/her name. KDOT's return address shall be noted on the inside cover so that it may be returned if ever lost.

An entry must be made in the project diary for each day of the project, including weekends and holidays, except when the project is officially suspended. Entries must begin by the official start date or when the Contractor begins work, whichever is first. The diary shall contain a day-to-day record of all significant items relating to the project. The date and day of the week shall be shown on the top of the page. Also, the time(s) of arrival and departure of the Resident or staff shall be listed under the date. A description of the day activities, and the number and the type of workers for the general contractor and each of the subcontractors shall be recorded for each day. Other information that shall be documented in the project diary is:

- i. Weather.
- ii. Progress schedule controlling item of work.
- iii. Working days charged and reason for partial or non-working days.
- iv. Traffic control inspections and changes.
- v. Description and hours of material inspection (done by Material Consultants)
- vi. Important discussions with Contractor(s).
- vii. Official visitors and inspections.
- viii. Opening and closing of detours.
- ix. Work and materials rejected and reasons.
- x. Time of discontinuing or resuming work and reasons.
- xi. Account of any time spent by Contractor's workers or equipment on disputable items of work.
- xii. The presence of railroad flaggers and whether the Contractor is to be reimbursed for their services.
- xiii. Length and cause of any delay.
- xiv. Dates on which payment began and end for Engineer's Field Office, or any other calendar-month item.
- xv. Description of important faxes and telephone calls. Unusual conditions, if any, such as high water, bridge failures, accidents/injuries, etc.

- b. **Inspector's Daily Report (IDR):** An Inspector's daily inspection field report shall be kept the Resident and or his/her staff for each contract. I.D.O.T. form BC-628 shall be used for the documentation of daily work. This form is available as a spreadsheet on Microsoft Excel and is available from the KDOT. Completed IDR forms shall be kept in chronological order in a 3-ring hard cover binder. The items shall be checked on the right side of the report when they are entered the Quantity Book. The information contained on this report shall identify:

- i. Date
- ii. Name of Contractor/Sub-Contractor(s) that performs on pay items
- iii. Weather
- iv. Item #
- v. Pay Item
- vi. Location of work
- vii. Quantity and Units
- viii. Evidence of Material Inspection.



ix. Calculations and Sketches (if applicable)

Note: Calculations and sketches shall be used to justify quantities of all items having foot, Square foot, square yard, and cubic yard units. The calculations and sketches shall be based on accurate field measurements and shall be presented in a neat and concise manner on the bottom of the form, on the back page, and or on a separate additional sheet placed after IDR form sheet. Someone other than the person who performed the original calculations shall check all calculations.

- c. **Quantity Book:** A Quantity Book shall be kept the Resident and or his/her staff for each contract. IDOT form OC-625 shall be used for the documentation of quantities for federally funded projects only. A similar KDOT Quantity Book Form shall be used for all other projects. The KDOT Quantity Book Form is available as a spreadsheet on Microsoft Excel and is available from the KDOT. A separate Quantity Book sheet shall be provided for each contract pay item. A title page listing the official designation of the section, the name address, and telephone number of the Contractor, and the address of KDOT shall be provided. Also, a sheet index page listing item number, item, and page number shall be provided. The Quantity Book Sheets (in numerical order), title page, and sheet index page shall all be kept in a 3-ring binder. Quantities shall be placed in this form daily.
- d. **Field Books:** Hard cover, bound field books shall be used by the Resident and or his/her staff to record all field measurements including but not limited to the following information:
- i. Daily field measurements used to justify quantities shown in the IDR
  - ii. Permanent survey records, layout checks, cross-sections
  - iii. PCC paving summary
  - iv. Bituminous concrete paving summary
  - v. Pile driving records
  - vi. Depth checks (PCC and bituminous paving, sub-base, topsoil, curb and gutter, etc.)

All field books shall be identified with the following information and shall include:

- vii. Route(s) description, section number, year, and the field book number (Ex.: Field Book #1) shall be listed on the front cover with a black marker.
  - viii. Project designation and KDOT) address on the inside cover.
  - ix. An index page that contains enough detail to show a reviewer the contents and location of the contents within the field book.
- e. **Resident's Weekly Report:** A weekly report containing a record of the contractor's progress shall be kept by the Resident. IDOT form BC-239 shall be used for the Resident's Weekly Report. This report shall be filled out weekly, signed by the Resident and approved by the KDOT PM. A copy shall be delivered to the Contractor's office as soon as possible (at no time shall the Contractor receive the copy later than 7 days from the date of the report). Copies of the report shall marked c.c. for:
- i. Contractor
  - ii. Project file (KDOT)

iii. Resident's file

f **Other periodic reports** for traffic control and project issues shall be completed and maintained as per IDOT policy and procedures.

The Resident shall keep his/her copies in chronological order, and contained within a hard covered 3-ring binder.

#### 4. **CHANGE ORDERS**

Whenever it becomes apparent that extra work is necessary on a project, the Resident shall contact KDOT. KDOT shall determine the appropriate course of action. Payment for extra work shall be classified as either an Agreed Unit Price or a Force Account. In the case when an Agreed Unit Price shall be used, The Resident shall submit a formal request letter to the Contractor. This letter shall list the requested item, unit, and estimated quantity for an Agreed Unit Price along with all pricing documentation required to support the proposed costs. Once the Contractor's Agreed Unit Price letter is received, the KDOT shall review it. If the Agreed Unit Price letter is found acceptable, the Resident shall prepare the appropriate Change Order form and submit it to KDOT for further processing by IDOT.

In the case when a Force Account shall be used, the process shall be same as that of an Agreed Unit Price, except that the Resident shall submit a formal request letter to the Contractor requesting an estimated amount for time, equipment and material costs for the proposed Force Account work.

No extra work shall be permitted unless authorized by the KDOT.

The Resident shall document **all extra work**, whether as an AUP or Force Account, daily by using IDOT form BC-635 and both the Contractor and the Resident will retain copies.

Materials used on Force Account work that will be incorporated in the job must meet with required inspection certs or letters.

The amounts of Labor, Equipment and Materials claimed by the Contractor on his submitted itemized bill, which he prepares at the completion of the extra work, must agree with the daily amounts shown on the completed BC-635 forms.

Refer to Article 109.04 of the Standard Specifications.

The completed itemized bill shall be submitted to KDOT for approval, and Change Order processing.

Once KDOT and/or IDOT (Bureau of Construction), as the case may be, have approved the Change Order, the Resident shall add the Agreed Unit Price(s) or Force Account(s) to the next pay estimate as a line item.

All Change Orders shall be either IDOT form BC-22 (for projects using Federal funds) or a KDOT Change Order form. The KDOT Change Order form is available as a spreadsheet on Microsoft Excel and can be obtained from the KDOT.

5. **PAY ESTIMATES**

The Resident shall prepare an Engineer's Payment Estimate (pay estimate) for submittal and payment at least once a month for each contract. All documented partially and completed work that has all required material inspection should be shown for payment on the Engineer's Payment Estimate form. This form shall be used for all projects (except projects using Federal funds). The form is available as a spreadsheet on Microsoft Excel and is available from KDOT.

The Resident shall meet with the Contractor before the pay estimate is submitted to insure agreement of all quantities included in the pay estimate for the month. Any discrepancy or disagreement between the contractor and the consultant shall be immediately reported to the KDOT. The Resident shall then submit the draft pay estimate to KDOT for review and processing of payment.

The pay estimate form for projects using Federal funds shall be received from IDOT (Bureau of Construction – FAUS Projects) once a month. The Resident shall enter in the quantities, sign his/her name to the bottom of the form and forward to the KDOT PM for review and submittal to IDOT (Bureau of Construction – FAUS Projects) for processing of payment. Also, the Resident shall send a copy to KDOT for the job file, as well as retain a copy for Resident's file.

6. **INSPECTION MATERIAL**

**An independent Materials Consultant shall perform all required material inspection for all projects. The Materials Consultant shall be under the direct employment of Consultant and shall be either approved or assigned by the KDOT.** The Resident shall coordinate direct, and schedule all material inspection with the Materials Consultant. The Material Consultant shall not be responsible for determining when, what, and where they should be performing material inspection. The Resident shall determine the type, frequency, and location as required by the IDOT Project Procedures Guide (Sampling Frequencies for Testing and Inspection) and/or KDOT.

All billings for material inspection services shall be checked and verified with the Project Diary by the Resident or his/her staff for correct dates, hours, and charges. Any disparities shall be reported to KDOT as soon as possible. Copies of all material inspection billings shall be kept in the Resident's file.

Materials inspection and documentation is the responsibility of the Materials Consultant. However, the Resident and his/her staff shall verify that the quality, quantity, and frequency of all material inspection reports meet the requirements of IDOT (Bureau of Materials). Copies of completed material inspection reports shall be retained in the Resident's file.

7. **PLAN QUANTITY ACCEPTANCE**

The acceptance of plan quantities as final quantities for a number of the pay items is acceptable providing that KDOT and the Contractor agree in writing that the plan quantities are accurate and will be used as final quantities. The Resident shall receive a list of the items from **KDOT** that KDOT would like to agree upon.

The Resident and or his/her staff shall, from the plans, verify the accuracy of the quantity of each item on the list. The Resident shall then submit his/her findings, which shall include all calculations used to determine the accuracy of the quantity on the list to KDOT. The KDOT will review the Resident's calculations to determine which items to include on IDOT form BC-981. This form shall be presented to the Contractor at the Pre-Construction Conference and be reviewed, signed, and returned to KDOT before any construction work has begun.

8. **CONSTRUCTION LAYOUT VERIFICATION**

All construction layout and staking shall normally be provided by the Contractor and paid for by the item "Construction Layout Stakes". The Resident and or his/her staff shall recover and identify all horizontal control points, benchmarks, and right-of-way corners (for newly acquired parcels) prior to construction. The Resident shall instruct Contractor to submit copies of all field book information regarding layout on a daily basis to be retained in the Resident's file. The Resident and or his/her staff shall use standard survey methods to randomly check all horizontal locations and elevations for every staking operation. The Resident and or his/her staff shall document all layout checks in a field book. In the event that an error is found, the Resident shall notify the Contractor immediately and insure that he/she corrects the error as soon as possible. If an unnecessary amount of layout errors persist, the Resident shall notify KDOT as soon as possible.

9. **TRAFFIC CONTROL INSPECTION**

Inspection of all traffic control devices, signing, pavement marking, etc. shall be inspected by the Resident or his/her staff at least twice a day when the Contractor is working and once a day when is the Contractor not working. **One of the traffic control inspections shall be done at the later part of the day, before the contractor leaves, to allow time for the contractor to correct any deficiencies before they leave at the end of the day.** The Resident and or his/her staff shall verify that all traffic control is accordance with the Traffic Control plan, and all applicable standards. The Resident and or his/her staff shall notify the Contractor as soon as possible of any and all deficiencies including:

- a. Downed and/or damaged signs
- b. Downed and/or damaged barricades or sign panels
- c. Worn, missing or conflicting temporary pavement marking
- d. Malfunctioning or damaged temporary traffic signals and temporary roadway lighting

The Resident shall list the times of inspection, descriptions of any and all deficiencies, and description of conversation with Contractor in the Daily Diary and complete the

appropriate IDOT forms for Traffic Control Inspection for daytime and/or nighttime inspection.

10. **FINAL INSPECTIONS**

- a. **Traffic Signal/Roadway Lighting Installation:** Once Traffic Signal/Roadway Lighting installation have been completed and energized, the Resident shall schedule a Pre-Turn On inspection with the Contractor and KDOT. The Contractor shall address any deficiencies that are discovered as soon as possible. Once all deficiencies have been addressed, the Resident shall schedule a Turn On inspection with the Contractor, Maintenance Contractor, IDOT representative, controller manufacturer's technician (Traffic Signals) and the KDOT.
- b. **Overall Project Inspection (Final Walk-Through):** Upon notice from the Contractor of completion of the entire project, the Resident shall schedule a walk-through inspection with the Contractor, KDOT and any other agency (Municipal and/or State) representatives if there is any outside agency funding. The inspection shall consist of walking the length of all portions of roadway (both sides). The Resident shall include any and all deficiencies that are discovered in the Resident's Punch list. The Punch list shall be addressed to the Contractor and signed by the Resident. The Punch list shall be mailed to the Contractor, and a copy shall be sent to KDOT. Once all deficiencies have been addressed, the Resident shall conduct another inspection with the Contractor to insure that all the items on the punch list have been addressed.

11. **FINALING OUT OF PROJECTS**

Upon receiving notice of project completion from the Contractor, the Resident shall schedule a meeting with the Contractor and KDOT to finalize quantities for all items per contract. Once final quantities are agreeable with both the Contractor and KDOT, the Resident shall prepare an Engineer's Semi-Final Pay Estimate, which shall include all final quantities with 1% retainage. The Engineer's Semi-Final Pay Estimate shall then be submitted to KDOT for review and processing of payment.

The Resident shall also prepare Engineer's Final Pay Estimate, which shall be the same as the Engineer's Semi-Final Pay Estimate with the exception that the retainage shall be reduced to 0%. This final pay estimate shall be presented on the Engineer's Final Pay Estimate form, which can be obtained from KDOT. The Resident shall also prepare and submit to KDOT the following:

- a. Balance Authorization sheet(s)
- b. Explanations for changes in total dollar values that exceed \$2000.00 per item
- c. Any un-approved Change Orders

The Balance Authorization form is available as a spreadsheet on Microsoft Excel and can be obtained from KDOT.

Once the Engineer's Final Pay Estimate is submitted to IDOT for approval, the Bureau of Materials shall check all items for the required materials inspection and certification. The Resident shall receive a list of material deficiencies from KDOT. The Resident then shall make a formal request to the Contractor and or the Materials Consultant for all needed material inspection and certification. Once the Resident receives all requested material

inspection and certification, he/she shall submit it directly to I.D.O.T. (Bureau of Materials).

12. **RECORD DRAWINGS, JOB BOX AND PROJECT PHOTOS (NEW)**

The Resident and or his/her staff shall provide a complete full sized set of record drawings (as built plans) to KDOT for their records. The record drawings shall be marked as "RECORD DRAWINGS" dated and initialed by the individual(s) who prepared them. **All sheets, regardless of whether they will be modified, shall be marked as "REVISED" in an appropriate box or space.** The drawings shall consist of a 24"x 36" size set of project plans that have all changes and additions tagged by clouds or similar easy to see markings in red ink.

The consultant shall provide professionally scanned copies of all "RECORD DRAWINGS" plans, as well as the entire project job box, in PDF format as part of the engineering services for the project. Copies of all photos taken by the RE and staff in JPEG format shall also be included in the final documents. These documents may be submitted on dedicated hard drives, flash drives or CDs, intended for archiving of important documents, depending on the file sizes.

**Scanning of the job box to create a digital version is not a substitute for the actual paper job box, which is required per IDOT standards and protocol.** Unless otherwise directed by IDOT, the consultant will still maintain a traditional paper job box for the project which will be reviewed and processed by IDOT and then returned to the County in the traditional fashion.