

**Kentucky Transportation Cabinet (KYTC)**

**DESIGN-BUILD**

**Instructions to Proposers (ITP)**

May 2019

**Contract No.** 19-9002      **State Project No:** FD52 008 075 175-176  
FD52 008 075 177-179  
FD52 008 075 169-178

**County:** Boone      **Routes:** KY 338, KY 536, and I-75

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## 1. **PROJECT IDENTIFICATION**

**Contract No.** 19-9002

**State Project Nos.** FD52 008 075 175-176  
FD52 008 075 177-179  
FD52 008 075 169-178

**County:** Boone

**Routes:** KY 338, KY 536, I-75

**Local Route Names:** Richwood Road, Mt. Zion Road

### 1.1 **PROJECT SCHEDULE**

The submittal process shall involve a 3-step process (Statements of Qualifications, Technical Proposal, and Price Proposal). Below is a schedule of dates for the submittal:

<b>Date</b>	<b>Submittal</b>
Early May 2019	Advertisement
May 17, 2019	Pre-Proposal Meeting (Mandatory)
May 31, 2019	Statements of Qualifications Due
June 14, 2019	Short-list
June 19, 2019 thru August 14, 2019	Alternate Technical Concept Process
August 30, 2019	Alternate Technical Concept Approvals
October 4, 2019	Technical Proposals Due
October 18, 2019	Price Proposals Due
By October 31, 2019	Project Award
November 1, 2022	Project Completion Date

### 1.2 **PROJECT-RELATED INFORMATION**

The following information is available for review and use by the Design-Build Team (DBT) in the online archive at the following location:

<https://transportation.ky.gov/Construction-Procurement/Pages/Design-Build-Projects.aspx>

- A. Project Map and KMZ's (KY 338, KY 536 and I-75)

The following information is available for review and use by the Design-Build Team (DBT) at the Pre-Proposal Meeting:

#### **6-18: KY 338 Richwood Road Interchange**

- A. Advanced Construction Plans including Roadway, Structures, MOT, Traffic, and Utilities included in contract, and utility reference plans. Final stamped plans will be available on **July 15, 2019.**
- B. Preliminary Railroad Plans
- C. Drainage Folders

- D. Structure Advanced Situation Folders
- E. Standard Supplemental information including geometry, coordinate data, existing manuscript, available dtm's and other.

**6-14: KY 536 Mt. Zion Road Interchange**

- A. Final Construction Plans including Roadway, Structures, MOT, Traffic, and Utilities included in contract.
- B. Drainage Folders
- C. Structure Advanced Situation Folders
- D. Standard Supplemental information including geometry, coordinate data, existing manuscript, available dtm's and other.

**6-20002: I-75 Pavement Rehabilitation Proposal**

- A. Final Proposal Plans (preliminary). Final Proposal Plans will be available by May 30, 2019.

None of the information provided herewith or at the Pre-Proposal meeting should be considered complete or as-built information. The DBT(s) are still required to submit final construction plans. The DBT may choose to present all or portions of the advanced construction plans, and later provided stamped engineering plans, as the final detailed construction plans.

**2. PRE-PROPOSAL MEETING**

The purposed of the pre-proposal meeting is to introduce the project and discuss any preliminary questions that potential Design Build Team members may have.

Location: Boone County Court House  
 2950 Washington Street  
 Burlington, KY 41005  
 Date: May 17, 2019  
 Time: 10:00 a.m. Eastern Time

The meeting is mandatory for contractors and consultants who intend to be leads on a DBT. The Design Build Teams do not need to be finalized at the pre-proposal meeting.

**3. ADDENDA PROCESS**

Addenda to this solicitation may be necessary prior to the closing date and will be furnished by mail, email, or the web to all prospective DBTs if prior to receipt date and to all DBTs determined to be eligible for award if after receipt date. The KYTC will respond to questions that are received by 4:00 pm (EST), Monday 4 days prior to the Statement of Qualifications, Technical Proposal or Price Proposal submittals. The responses will be posted by Wednesday, prior to the submittal deadline.

All questions prior to the award shall be directed to:

Name: Rachel Mills, P.E.,  
Director, Division of Construction Procurement  
Phone: 502-564-3500  
Email: [Rachel.Mills@ky.gov](mailto:Rachel.Mills@ky.gov)  
Subject: CID #: 19-9002 INFRA Design Build - QUESTION

Answers to questions will be posted at: <http://transportation.ky.gov/Construction-Procurement/Pages/Design-Build-Projects.aspx>

#### 4. **DESIGN-BUILD TEAM**

##### 4.1 **PREQUALIFICATION**

It is required that the Design Build Team (DBT) consist of a KYTC pre-qualified Contractor who has engaged the services of KYTC pre-qualified Design Consultant(s) to perform all **work required in the forthcoming ITP. If the Design Consultant(s) submitted does not meet** all the required qualifications, KYTC may reject the DBT's SOQ. All sub-consultants and subcontractors utilized by the DBT on this project shall be pre-qualified to perform work for KYTC or their services shall not be allowed.

To respond to the projects listed in this ITP, the project team shall be prequalified in the specified areas by the Statements of Qualifications due date listed in section 1.1. If there are questions concerning contractor prequalification, contact Mrs. Rachel Mills, PE (502) 564-3500. If there are questions concerning consultant prequalification, contact Mr. Eric Pelfrey, PE (502) 564-4555. Responses that do not have all areas of prequalification fulfilled may be considered non-responsive and will be returned.

##### 4.1.1 **CONTRACTOR PREQUALIFICATION**

Consistent with Section 102.01 of Kentucky's 2012 Standard Specifications for Road and Bridge Construction ("Standard Specifications") all organizations and individuals bidding on Department projects and accepting subcontracts on Department of Highways ("Department") projects shall apply for and receive Department prequalification and possess a Certificate of Eligibility as provided in regulations published by the Department according to KRS 176.140.

The bidding company of the DBT must be prequalified in work type A or C2 to be registered as an eligible bidder for the project. In addition, as part of the Statement of Qualifications (SOQ) to be provided by the DBT, the DBT shall identify the members of the team that are to perform the following **major** items of work:

<u>Work Type</u>	<u>Qualifications for Bidder</u>
Grade and Drain	A
Asphalt Pavement	C2
Concrete Pavement	B
Bridges	E3

**In order to be registered as an eligible bidder for the project, all construction team members for the DBT that are to be used for major items of work shall be prequalified prior to submission of the Statements of Qualifications (SOQ).** Organizations and

individuals providing other services shall be prequalified and possess a Certificate of Eligibility prior to performing the work.

**4.1.2 PROFESSIONAL SERVICES PREQUALIFICATION**

Since the advance construction plans are essentially complete, the DBT only needs to provide the necessary professional services required for finalizing the provided plans, any potential design changes and/or Alternative Technical Concepts (see Section 6.1). The DBT shall provide all necessary services to design and construct all permanent and temporary portions of the project. Work shall conform to current KYTC, federal, and AASHTO standards, practices, policies, guidelines and specifications where applicable. Additional documents identified within the scope of work shall be provided under separate cover as part of the contract documents. KYTC standards, practices, policies, guidelines and specifications shall control in case of a conflict. The standard of care for all such services performed or furnished under this Agreement shall be the care and skill ordinarily used by members of the engineering profession practicing under similar conditions at the same time and locality.

At a minimum, the DBT shall hold the following pre-qualifications by the Statement of Qualifications due date listed in Section 1.1:

- |                  |                      |
|------------------|----------------------|
| Highway Design   | Rural Roadway Design |
| Highway Design   | Urban Roadway Design |
| Highway Design   | Surveying            |
| Structure Design | Spans Under 500 Ft   |

Design firms prequalified shall perform only those tasks which they are prequalified to complete. The DBT shall be aware that changes to the design documents may require the DBT to be prequalified in additional areas. The DBT may also need to have KYTC prequalification's in a variety of disciplines in order to perform. KYTC prequalification's that may be needed include, but not be limited to:

- |                    |  |
|--------------------|--|
| Geotechnical       | Laboratory Testing Services                          |
| Geotechnical       | Drilling Services                                    |
| Geotechnical       | Engineering Services                                 |
| Utility Design     | Communication  |
| Utility Design     | Electrical Level 1                                   |
| Utility Design     | Gas Level 1  |
| Utility Design     | Water & Sewer Level 1                                |
| Utility Design     | Water & Sewer Level 2                                |
| Utility Design     | Utility Preconstruction Coordination                 |
| Utility Design     | Utility Construction Inspection                      |
| Right-of-Way       | Acquisition Services                                 |
| Right-of-Way       | Relocation Services                                  |
| Legal Services     | Titles (According to statewide contract list)        |
| Legal Services     | Condemnations (According to statewide contract list) |
| Traffic Operations | Traffic Engineering Services                         |
| Traffic Operations | Electrical Engineering Traffic Signal Services       |

Traffic Operations      Electrical Engineering Roadway Lighting Services  
Environmental      Hazmat (for ROW acquisition)

Design firms shall be sufficiently staffed and capable of performing the required work on this contract. These design firms may be subcontractors responsible for the design and engineering of the project.

There may be multiple consultants working on the DBT. However, one consultant shall be designated as the Lead Designer. The DBT shall include qualified engineers and surveyors to be in direct responsible charge of engineering and surveying endeavors and who are professionally registered in the Commonwealth of Kentucky. Designs prepared for the project shall be signed and stamped by a licensed Kentucky Professional Engineer. To qualify for selection, interested DBTs shall be prequalified through KYTC for the performance of the work. Licensure shall be acquired prior to performing any work when prequalification requires work be performed by a licensed individual. Services requiring prequalification may only be performed by firms prequalified for those services at the time of performance of the services.

#### **4.2 STATEMENTS OF QUALIFICATIONS (SOQ)**

A DBT shall submit one (1) unbound version of the SOQ, and one (1) CD/DVD or one (1) USB “thumb” drive containing two (2) electronic files of the SOQ as follows:

- A. One electronic searchable single file PDF which does not restrict printing of copying text, images, and other content.
- B. One electronic password-protected single file PDF which restricts copying of text, images, and other content.

The SOQ shall be received no later than 4:00 p.m. Eastern Time on May 31, 2019. The KYTC shall reject any proposal received after aforementioned time and date and return it unopened to the DBT. In order to be considered, the original SOQ shall be signed in blue ink by an authorized representative of the DBT.

The submittal shall either be mailed or hand-delivered to:

Ms. Rachel Mills, P.E., Director  
Division of Construction Procurement  
200 Mero Street, 3<sup>rd</sup> Floor  
Frankfort, KY 40622

The outside cover of the package containing the proposal shall be marked:

Statement of Qualifications for  
Boone County  
KY 338 Interchange, KY 536 Interchange, and I-75  
Item No. 6-18, 6-14, & 6-20002  
CID No. 19-9002  
Design-Build: FY 2019 Design Build #2

#### 4.2.1 **FORMAT**

To ensure a timely and consistent review, the format of the SOQ must adhere to the requirements of this section. The following table lists the maximum number of pages which may be used by the Proposer in the SOQ. Content should be organized by parts as indicated.

<b>Part</b>	<b>Content</b>	<b>Maximum Pages</b>
A	Introduction	2
B	Project Understanding and Approach	16
C	Design-Build Project Team and Resumes	
D	Capabilities and Experiences – Including Form A (Appendix A)	12
<b>Total</b>		30

The SOQ must conform to the following format:

- A. Each page must be 8.5” x 11” with single-space type no smaller than 11-point font. Pages may contain graphics and photographs where applicable.
- B. All pages shall be numbered with a footer depicting, at a minimum, Proposer’s name and page number (Proposer – Page X of XX). Margins shall be at least 1” all around. Deviations from formatting requirements may result in rejection of the SOQ.
  1. Printing should be single-sided, the backs of pages must be left blank.
  2. A single 11” x 17” page may be substituted for two 8.5” x 11” pages.
- C. Binding covers front and back are allowed as well as a transmittal letter; however, information on the outside covers and transmittal letter may not be used for evaluating the SOQ. The insides of the front and back covers must be left blank. No writing, photos, graphs, etc., will be allowed on the inside of covers.
- D. Tabs between pages may be used; however, other than identification on the tab, the tab page must be blank. No writing, photos, graphs, etc., will be allowed on the tab pages other than section identification.
- E. This response will be a “standalone” document. No additional information may be attached to or made reference to via webpage or other means.

##### 4.2.1.1 **Part A – Introduction**

The introduction shall contain the following information:

- A. The Introduction page(s) shall be on the Lead Contractor's letterhead and identify the full legal name and address. (Font, font size, and page margin requirements may be disregarded as it pertains to the Lead Contractor’s letterhead if the Lead Contractor’s standard blank letterhead would violate the formatting limitations.) Proposers who are joint ventures may submit on any letterhead of the joint venture’s members or submit on a new letterhead depicting the joint venture. The Introduction shall be signed by an authorized representative of the Proposer's organization. All signatures in the Introduction submitted with the unbound version of the SOQ shall be original and signed in ink. The electronic versions do not require a signature.

- B. Identify the name, title, address, phone and fax numbers, and e-mail address of an individual who will serve as the Point of Contact for the Proposer.
- C. Identify whether the Lead Contractor will be structured as a corporation, Limited Liability Company, general partnership, joint venture, limited partnership or other form of legal organization.  
Note: The KYTC recommends that Lead Contractors who are joint ventures register their company or fictitious name with the Kentucky Secretary of State.
- D. Identify the full legal name of the Lead Contractor and the Lead Designer for this Project. The Lead Contractor is defined as the prime/general contractor responsible for overall construction of the Project and will serve as the legal entity who will execute the Contract with the KYTC.
- E. Provide the name of the principal(s) or officer(s) of the Lead Designer. Provide the firm's registration number of the Lead Designer confirming that the firm is properly registered with the Kentucky State Board of Licensure for Professional Engineers and Land Surveyors at the time of submittal, who will be responsible for the design work included in this contract. The Lead Designer is the firm that employs the DBT Design Project Manager.
- F. A statement that the Proposer's Lead Contractor and Lead Designer are prequalified with the KYTC in accordance with the requirements of the KYTC.
- G. A statement confirming the commitment of the Key Personnel identified in the submittal to the extent necessary to meet the KYTC's quality and project duration expectations.
- H. A statement warranting that no members of the Proposer have a personal conflict of interest or an organizational conflict of interest. (See Section 5.2)
- I. A statement that the Proposer will comply with the KYTC's DBE goals for this Contract and will comply with the KYTC's Nondiscrimination policy.
- J. A Certification of authorized submitter that information contained within is correct. Include typed name and title, the clause "*I certify that the information included within this document is, to the best of my knowledge, correct as of the date indicated*", the signature (one copy must have original signature, and the date)
- K. A Certification that the Lead Consulting firm is currently registered with the Commonwealth of Kentucky in accordance with KRS 322.060 to perform the engineering services needed for this project, and the firm's Kentucky Registration Number. This includes subconsultant firms. Additional pages are allowed in an appendix to the SOQ to provide subconsultant certification of firm registration and Kentucky Registration Number.



- L. In accordance with Federal Acquisition Regulation 52.209-5, the Vendor shall certify with bid response, that to the best of its knowledge and belief, the Vendor and/or its Principals is (are) not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any State or Federal agency.
- M. In response to a legal opinion concerning the application of Official Order No. 102295, "Conflict of Interest", consultants responding to this advertisement are required to identify any potential conflicts of interest in regards to any financial or other personal interest in a project and/or any financial or other personal interest in any real property that may be acquired for a project. In the case that a potential conflict is identified, the consultant will be asked to recommend a solution in dealing with this conflict.
- N. Indicate Acknowledgement of Receipt (AOR) of proposal addenda and questions and answers. Also include form AOR (See Appendix A) in an appendix to the SOQ.

**4.2.1.2 Part B – Project Understanding and Approach**

Describe the Proposer’s project understanding and anticipated approach to the project; specifically addressing:

- A. Managing bid and procurement risks specific to the Project during procurement,
- B. Monitoring the quality of the Work to ensure high quality for the duration of the Project, and
- C. Ensuring timely initiation of any Roadway design changes and beginning physical project construction on the projects as quickly as possible.

The KYTC has also identified the following as significant tasks with considerable risks involved with the project. Identify the highest risks for each and describe the Proposer’s approach to mitigate and manage the risks to the significant tasks:

- A. Norfolk-Southern Railroad Coordination
- B. Coordination between two interchange projects and associated MOT.
- C. Utility relocations
- D. One additional significant task, as identified by the Proposer, specific to the Proposer’s anticipated approach to the Project.

**4.2.1.3 Part C – Design-Build Project Team**

For the DBT to be eligible for selection, the Lead Contractor and constructors of major items of work must be prequalified as stated previously in the instructions.

For the DBT to be eligible for selection, either the prime or a subconsultant must be prequalified in each service area listed within the advertisement.

- A. List the services (from the KYTC prequalification categories) that the lead contractor and any subcontractor(s) will be performing for this project, and the status of prequalification.
- B. List the services (from the KYTC prequalification categories) that the lead design consultant and any subconsultant(s) will be performing for this project, and the status of prequalification (Prequalified, Submitted and Pending, or Prequalification not required).
- C. For services to be performed by the lead consultant, list the name(s) of the employee(s) intended to perform the work. For subconsultant services, list the firm name.
- D. List the services not applicable for prequalification categories but which may be performed, and the name of the prime employee(s) or subconsultant firm name who intend to perform the work.

The Proposer shall provide sufficient information to enable the KYTC to understand and evaluate the Proposer's Team. Include the following:

- A. The Proposer shall provide an organizational chart showing the "chain of command" of the anticipated roles proposed for the Proposer's organization regarding the Project. The organizational chart shall show Key Personnel, key subconsultants, all named firms that will be performing work (including those firms identified in association with Section 4.1.2 of the ITP regarding prequalification), and other anticipated personnel integral to the success of the Project.  
*Note: Font requirements will not be enforced, but Proposers are to ensure the Organization Chart is legible and clear. One 11" x 17" sheet, folded to 8.5" x 11" size, will be allowed for the Organization Chart. This sheet will count as a single sheet for the purposes of page count. The content of the 11"x17" sheet will be limited to the organizational structure and relationships among the Proposer's team.*
- B. Describe the general experience of the firms that are part of the DBT. Focus on specific firm experience that relates to carrying out the proposed project and how the experience will ensure success of the Proposer's general approach to the Project. Describe any notable expertise or other special capabilities of members of the DBT (Persons or Firms) that are critical to your project approach. Firms listed on Form A shall be specifically addressed as to their role on the Proposer's team.
- C. Identify the Key Personnel as described in Sections 4.2.1.3.1 – 4.2.1.3.7 below. Provide information within the SOQ to demonstrate the abilities of all identified personnel through a description of qualifications, experiences, and performance of similar tasks on previous similar recent relevant projects, background, and education. These qualifications and experience should provide confidence to the KYTC that the Project will be effectively managed through personal competence and accountability. This information shall be expounded through resumes provided in Part C. Resumes for individuals who are

not identified in the SOQ as Key Personnel shall not be included. For all Key Personnel, provide the following information:

1. The individual's position and authority within the Proposer.
2. Previous projects, similar in nature to the proposed project or other significant efforts for which the individual has performed a similar function.
3. Identify percentage of time that the individual will be dedicated to the Project during the following:
  - a. Design phase changes and or ATC process
  - b. Construction phase
4. Relevant experience, professional registrations, education and other components of qualifications applicable to this project.
5. Any unique qualifications.
6. A statement indicating that the individual is currently employed by a member of the Proposer at the time of the SOQ submittal.

Duties may be performed by more than one person. If this is the case, provide information for each person and clarify individual duties. (Note: Part C page count will not be increased.)

Any person proposed as Key Personnel position requiring a Professional Engineering license who is not a Kentucky P.E. at SOQ submission may be proposed if 1) the person is licensed in another state and 2) submits a commitment in the SOQ to becoming licensed in Kentucky prior to Award.

#### **4.2.1.3.1 DBT Project Manager**

The DBT Project Manager shall be ultimately responsible for the Proposer's performance. Ensures that personnel and other resources are made available. Responsible for contractual matters. This position is required for the duration of all design and construction-related activities on the Project.

#### **4.2.1.3.2 DBT Design Project Manager**

The DBT Design Project Manager shall be responsible for actively managing the overall design of the project. Must be an employee of the Lead Designer. Responsible for overall design of the project inclusive of all structures and structural elements (bridge substructures and superstructures, retaining walls), roadway/highway items (alignment, drainage, pavement, signing, lighting, traffic signals, maintenance of traffic, etc.) and railroad. Responsible for the overall design of structures and structural elements that are not included in final plans and/or any changes proposed, see Section 13.3.1 Structure Design. Must be a KY P.E. at the time of Award. The DBT Design Project Manager shall have ten years of experience on major highway projects.

- 4.2.1.3.3 DBT Maintenance of Traffic Lead**  
The DBT Maintenance of Traffic (MOT) Lead shall be responsible for meeting the design and construction requirements of the Contract Documents for all MOT elements on the Project. The DBT Roadway/MOT Lead shall have 10 years of experience working in a similar capacity on major highway projects with complex roadway construction. This position is required for the duration of the Project.
- 4.2.1.3.4 DBT Railroad Coordinator**  
The DBT Railroad Coordinator shall be responsible for coordinating with the Norfolk-Southern Railroad for railroad construction including managing the DBT construction responsibilities and scheduling the NSRR construction responsibilities. Must schedule with the railroad for flagging requirements. This position is required for the duration of railroad involved activities. If there are any adjustments required either due to construction activities and/or approved ATC's, the DBT Railroad Coordinator will be responsible for managing the re-design of the railroad facilities. Any re-design must be completed by a Professional Engineer with railroad design experience.
- 4.2.1.3.5 DBT Utility Relocation Manager**  
The DBT Utility Relocation Manager shall be ultimately responsible for the coordination of construction of any utility relocations necessary to complete the project. If any adjustments are required either due to construction activities and/or approved ATC's, the DBT Utility Relocation Manager will be responsible for the coordinating the design of the utility relocations. The DBT Utility Relocation Manager shall have 10 years of relevant experience in utility relocation and possess any licenses or certifications required for the same.
- 4.2.1.3.6 DBT Project Schedule Representative**  
The DBT Project Schedule Representative will develop a Critical Path Method (CPM) schedule according to the CPM note in Appendix I. The critical path is the sequence of those activities that must be completed in order and within the time frame established so that the schedule completion date can be achieved. The DBT Project Scheduler will develop a critical path baseline schedule which must be approved by KYTC. Monthly meetings with KYTC Project Management will evaluate progress of Work.
- 4.2.1.3.7 DBT Construction Manager**  
The DBT Construction Project Manager actively manages the overall construction of the project. Must be an employee of the Lead Contractor. Responsible for overall construction inclusive of all structures and structural elements (bridge

substructure and superstructure, retaining walls), roadway items (alignment, drainage, pavement, lighting, traffic signals, signage maintenance of traffic, etc.) and railroad. The DBT Construction Manager shall have ten years of experience working in a similar capacity on major highway projects. The DBT Construction Project Manager shall be located in the field office on a full-time basis for the construction duration of the Project unless modification is requested by the DBT and approved by KYTC in its sole discretion.

#### **4.2.1.4 Part D – Capabilities and Relevant Experience**

Provide specific information as it relates to previous project experience, available resources, and anticipated design/construction methods. Include submission of Form A.

##### **4.2.1.4.1 Project Management Methodologies**

This section should include details describing the following:

- A. How the Proposer will coordinate with stakeholders (Norfolk-Southern Railway, Boone County, Distribution Companies, Businesses, and Utility Companies, etc.).
- B. How the Proposer will coordinate with KYTC to ensure Proposer sharing of information & reporting to ensure a high-quality project.
- C. The Proposer’s internal procedures for planning and monitoring the Project to ensure timely completion and achievement of critical project milestones while considering project risks, available resources, and production levels.
- D. The Proposer’s procedures to ensure cost-effective construction while meeting or exceeding the project requirements.

##### **4.2.1.4.2 Past Projects/Technical Experience – Design and Construction**

The section shall include past projects and technical experience descriptions (not to exceed 10 pages total) that provide narrative depictions of the ten relevant experiences listed on Form A. Technical experience descriptions shall be on distinct pages and not continue across multiple pages, limited to 1 page per experience listed on Form A. The narratives should demonstrate experiences in each of the following areas:

- A. Construction of projects of similar scope and complexity, as applicable to the Contractor.
- B. Timely completion of projects of similar scope and complexity.

- C. Proposed Key Personnel members' roles with the project, if applicable.
- D. Ability to meet or exceed DBE commitments and to properly manage DBEs.

Each technical experience description must include the following information:

- A. A narrative describing the project.
- B. Bid construction costs.
- C. Name of the project, the owner's contract information (project manager name, phone number, e-mail address), and project number. If the owner's project manager is no longer with the owner, provide an alternate contact at the agency that is familiar with the project. The alternate contact must have played a leadership role for the owner during the project.
- D. Dates of design (if applicable) and construction (if applicable).
- E. Detailed description of the work or services provided, and percentage of the overall project actually performed.
- F. Description of original scheduled completion deadlines and actual completion dates, as applicable to the Designer and/or Contractor. Describe reasons for completing the project in advance of the contract completion deadline. Describe reasons for completing the projects later than the contract completion deadline specified within the original contract. Describe any reasons for assessed liquidated damages and/or penalties, if applicable.
- G. Description of project challenges and subsequent mitigation efforts by the Proposer to overcome those project challenges and how these challenges and mitigation efforts may relate to this project.
- H. Description of OJT and DBE efforts, if applicable.
- I. An Owner's reference shall be included for each project listed. As a minimum, the reference shall include an individual's name and current telephone number.

Provide an account (to be only included in Part D) listing all projects designed and/or constructed by the Lead Designer and/or Lead Contractor that have resulted in the assessment of liquidated damages and/or penalties exceeding \$50,000 in the last five years if applicable to the respective role.

#### **4.3 SOQ REVIEW AND SHORT-LISTING PROCESS**

SOQs will be evaluated by a SOQ Technical Evaluation Team to consist of KYTC representatives from KYTC District 6 and KYTC Central Office.

The KYTC’s SOQ Technical Evaluation Team will rank (at their sole discretion) the Proposer’s Statements of Qualifications based upon the evaluation criteria below and in accordance with the KYTC’s internal SOQ Evaluation Guidelines.

The SOQ shall be evaluated and scored based on the following point distribution:

<b>Part</b>	<b>Evaluation Criteria</b>	<b>Maximum Points</b>
B	Project Understanding and Approach	30
C	Design-Build Project Team and Resumes	30
D	Capabilities and Experiences – Including Form A (Appendix A)	40
<b>Total</b>		100

Failure to meet all requirements may render a SOQ non-responsive. The extent to which a Proposer meets or exceeds evaluation criteria will be comparatively ranked by the KYTC SOQ Technical Evaluation Team and will be reflective of the KYTC SOQ Technical Evaluation Team’s rankings (at their sole discretion) of the Statements of Qualifications submitted by Proposers. The KYTC reserves the right to find clerical errors *de minimis*.

The Technical Evaluation Team may be assisted by any number of Technical subgroups and/or subject matter experts within the KYTC, FHWA, County, other involved agencies, and/or contracted by the KYTC.

For each of the ranking topics, the SOQ Technical Evaluation Team will determine the highest ranked Proposer within each ranking topic, with the highest ranked Proposer receiving the maximum number of points. Lower ranked Proposers will receive commensurately lower rankings based on a relative comparison to the highest ranked Proposer. Evaluations and rankings will consider KYTC identified strengths, weaknesses, and committed betterments found within the SOQ.

The KYTC may request the Proposer to affirm an identified committed betterment found within the SOQ. This affirmation request will be made in writing to the Proposer prior to final rankings. If an affirmation request is made by the KYTC, the Proposer shall respond in writing within 48 hrs. either confirming the KYTC’s understanding or clarifying the intent. Any response to the affirmation request may not expound upon the information within the SOQ.

The rankings will be based on the information provided by the Proposer within the SOQ, independent investigation of any information, prior experiences with the Proposer by the KYTC, existing public information, and evaluation information obtained from the owners of previous projects.

The Technical Evaluation Team will present the findings, rankings, and shall make a recommendation to the Executive Level Evaluation Team. This Executive Level Evaluation Team will consist of designees of:

- A. KYTC Deputy Secretary
- B. KYTC State Highway Engineer
- C. KYTC Assistant State Highway Engineer (Project Development)
- D. KYTC Assistant State Highway Engineer (Project Delivery & Preservation)

E. KYTC District 6 Chief District Engineer

The Executive Level Evaluation Team will examine the Technical Level Evaluation Team's findings and will render ultimate selection of the Short-listed Proposers with concurrence from the Technical SOQ Evaluation Team. It is anticipated that only 3 DBT's will be short-listed. The Executive Level Evaluation Team may short-list all responsive proposers.

The Deputy Secretary has final authority to determine the best interests of the KYTC in selection of the Short-listed Proposers.

**5. RESTRICTIONS ON PARTICIPATION IN DESIGN-BUILD CONTRACTS**

To facilitate this procurement, various rules have been established and are described in the following paragraphs.

**5.1 CAMPAIGN FINANCE LAW STATEMENT PURSUANT TO KRS 45A.110 AND KRS 45A.115**

Each member of the DBT shall certify that neither he/she nor any member of his/her immediate family having an interest of ten percent (10%) or more in any business entity involved in the performance of this project, has contributed more than the amount specified in KRS 121.056 (2), to the campaign of the gubernatorial candidate elected at the last election preceding the date of this solicitation. Each member of the DBT further swears under the penalty of perjury, as provided by KRS 523.020, that neither he/she nor the company which he/she represents, has knowingly violated any provisions of the campaign finance laws of the Commonwealth, and that the award of a contract to him/her or the company which he/she represents shall not violate any provisions of the campaign finance laws of the Commonwealth.

A Commonwealth of Kentucky sworn statement regarding campaign financing laws shall be completed and signed by an authorized agent of the DBT and submitted with the Price Proposal by August 16, 2019.

**5.2 CONFLICT OF INTEREST**

The DBT's certify, by the signatures of duly authorized representatives that they are legally entitled to enter into this solicitation and contract and that they shall not be violating, either directly or indirectly, any conflict of interest statute under KRS Chapters 45A or 11A or ethical provisions under KRS Chapter 11A. Forms shall be signed and submitted by an authorized agent of the DBT with the Price Proposal on October 18, 2019.

**5.3 NO CONTINGENT FEES**

No person or selling agency shall be employed or retained or given anything of monetary value to solicit or secure this contract, excepting bona fide employees of the DBT or bona fide established commercial or selling agencies maintained by the DBT for the purpose of securing business. For breach or violation of this provision, the KYTC shall have the right to reject the proposal, annul the contract without liability, or, at its discretion, deduct from the contract price or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee or other benefit.

**5.4 RESTRICTIONS ON COMMUNICATION WITH KYTC STAFF**

From the date of advertisement of the ITP until a contract is awarded, Proposers are not allowed to communicate with any KYTC staff concerning this project except:



- A. During the Pre-Proposal Conference with KYTC staff present
- B. Via written questions to those specified in Section 3
- C. As outlined in the Alternate Technical Concept process in Section 6.1

For violations of this provision, the KYTC may reject the proposal.

## **5.5 PROPOSAL PREPARATION**

The DBT shall follow any pertinent sections of this ITP, in the preparation of the proposal. Failure to provide any of the data required may result in the proposal being excluded from further evaluation.

## **5.6 PAYMENT AND CONDITIONS OF STIPEND**

Subject to the conditions of the ITP, KYTC will provide a payment of \$75,000 to each non-selected, responsive, DBT. The term “payment” as used in this section shall mean \$75,000.

By submitting its Technical Proposal for this project, the DBT forms a contract and agreement with KYTC for its technical proposal, conceptual design, and any approved Alternate Technical Concepts, whether submitted with the technical proposal or not. Furthermore, by submitting its Technical Proposal for this project, the DBT acknowledges that it is eligible for payment if the DBT’s proposal is not selected. The payment shall be payable by the KYTC to the DBT after KYTC enters into contract with the successful DBT, unless payment is waived by the unsuccessful DBT.

The payment shall be due only if the DBT submits a Technical Proposal that is responsive to the ITP as defined herein. The payment shall be full and final consideration for all documents submitted in the Technical Proposal or Approved Technical Concepts. Except for that intellectual property developed apart from or prior to DBT commencing work on the Technical Proposal for this project, KYTC shall retain an undivided joint interest in all rights and intellectual property submitted with the Technical Proposal.

If Technical Proposals have been submitted, but the KYTC does not Award the contract, all responsive DBTs shall receive a payment, unless payment is waived by the DBT. If the KYTC withdraws the contract prior to Technical Proposal submission, no payment shall be made.

An unsuccessful DBT, who otherwise qualifies for the payment, may elect to waive the payment within 10 days of the KYTC’s Award decision and retain its rights to its Technical Proposal and approved Alternate Technical Concepts. By accepting payment of the Stipend, DBTs agree to waive all claims and causes of action against the KYTC related to the project in any way.

## **5.7 DISPOSITION OF PROPOSALS**

All proposals, approved concepts, and preliminary plans become the property of the Commonwealth of Kentucky unless an unsuccessful DBT waives the stipend payment to retain its rights to its technical proposal and Alternate Technical Concepts as identified in Section 5.6. The successful proposal shall be incorporated by reference into the resulting contract.

## **5.8 BONDING REQUIREMENTS**

A 5% bid proposal guaranty per Section 102.09 of the Standard Specifications shall be required to bid this project.

## **5.9 DBT RESPONSE AND PROPRIETARY INFORMATION**

The KYTC shall not disclose any portion of any proposal prior to contract award to anyone outside the KYTC, other than representatives of the federal government, if required, and the members of the Awards Committee or their designates. After a contract is awarded in whole or in part, the KYTC shall have the right to duplicate, use, or disclose all proposal data, except proprietary data as described below, submitted by DBTs in response to this solicitation as a matter of public record. Although the KYTC recognizes the DBT's possible interest in preserving selected data which may be part of a proposal, the KYTC shall treat such information as provided by the DBT pursuant to Kentucky's Open Records Act, KRS 61.870 et seq.

Information areas which normally might be considered proprietary shall be limited to: individual personnel data, customer references, selected financial data, formulae, and financial audits, which if disclosed would permit an unfair advantage to competitors. If a proposal contains information in these areas that a DBT declares proprietary in nature, each sheet containing such information shall be clearly designated as proprietary at the top and bottom of the page and shall be submitted under separate cover marked "PROPRIETARY DATA". Proposals containing information declared by a DBT to be proprietary, either in whole or in part, outside the areas listed above, may be deemed unresponsive to the solicitation and may be rejected.

Except as provided in Section 5.6 the KYTC shall have the right to use all ideas, or adaptations of those ideas, contained in any proposal received in response to the solicitation. Selection or rejection of the proposal shall not affect this right.

## **5.10 PROPOSAL ADDENDA AND RULES FOR WITHDRAWAL**

Prior to the date specified for receipt of offers, a submitted proposal may be withdrawn by submitting a written request for its withdrawal to the Director of the Division of Contract Procurement. Withdrawal of the proposal by the DBT shall forfeit any payment of the stipend that the DBT may have been entitled to receive.

The KYTC shall accept addenda, revisions, or alterations to its proposal from any DBT until close of business (c/o/b) on the due date. The KYTC shall not accept any unsolicited addenda, revisions, or alterations to any proposal after the c/o/b on the due date. If the KYTC issues an addendum to the solicitation after c/o/b on the due date, then any DBT may respond. A DBT's response shall precisely respond to the contents of the Commonwealth's addendum.

The KYTC reserves the right to request clarification or additional information.

## **5.11 DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM**

It is the policy of the KYTC that Disadvantaged Business Enterprises ("DBE") shall have the opportunity to participate in the development and performance of highway construction projects financed in whole or in part by Federal Funds in order to create a level playing field for all businesses who wish to contract with the Cabinet. To that end, the Cabinet will comply with the regulations found in 49 CFR Part 26, and the definitions and requirements contained therein shall be adopted as if set out verbatim herein.

The Cabinet, consultants, contractors, subcontractors, and sub-recipients shall not discriminate on the basis of race, color, national origin, or sex in the performance of work performed pursuant to Cabinet contracts. The contractor shall carry out applicable

requirements of 49 CFR 26 in the award and administration of federally assisted highway construction projects. The DBT will include this provision in all its subcontracts and supply agreements pertaining to contracts with the Cabinet.

Failure by the DBT to carry out these requirements is a material breach of its contract with the Cabinet, which may result in the termination of the contract or such other remedy as the Cabinet deems necessary.

#### **5.11.1 DBE GOAL**

The DBE goal established for this contract is 6% of the total value of the contract.

The DBT shall exercise all necessary and reasonable steps to ensure that DBEs participate in at least the percent of the contract as set forth about as goals for this contract.

#### **5.11.2 OBLIGATION OF THE DBT**

At the pre-construction conference, each member of the DBT shall designate and make known to the KYTC a liaison officer who is assigned the responsibility of effectively administering and promoting an active program for utilization of DBEs.

Contractors are encouraged to use the services of banks owned and controlled by minorities and women.

Further conditions for DBE participation are outlined in Appendix B.

### **5.12 PROTESTS**

The Secretary of the Kentucky Transportation Cabinet, or his designee, shall have authority to determine and resolve protests and other controversies of actual or prospective DBTs in connection with the solicitations or selection for award of a contract.

Any actual or prospective DBT, who is aggrieved in connection with solicitation or selection for award of a contract, may file a protest with the Secretary of the Transportation Cabinet. A protest or notice of other controversy shall be filed promptly, and in any event within two calendar weeks after such aggrieved person knows or should have known of the facts giving rise thereto. All protests or notices of other controversies shall be in writing to:

Secretary, Transportation Cabinet  
c/o Andy Barber, State Highway Engineer  
200 Mero Street, 6<sup>th</sup> Floor  
Frankfort, KY 40622

The Secretary of the Kentucky Transportation Cabinet shall promptly issue a decision in writing. A copy of that decision shall be mailed or otherwise furnished to the aggrieved party and shall state the reason for the decision. The decision by the Secretary of the Kentucky Transportation Cabinet shall be final.

### **5.13 EQUAL EMPLOYMENT OPPORTUNITY ACT**

The Equal Employment Opportunity Act of 1978 applies to all State government projects with an estimated value exceeding \$250,000.

The consultants for the selected DBT must submit the following documents in accordance with the requirements of the ITP—EEO-1: Employer Information Report, Affidavit of Intent to Comply, Employee Data Sheet and Subcontractor Report or a copy of the Kentucky EEO Approval Letter issued by the Finance and Administration Cabinet, Office of EEO and Contract Compliance.

- A. The consultants for the selected DBT may obtain copies of the required EEO documents from the Finance and Administration Cabinet’s Office of Equal Employment Opportunity Contract Compliance website at the following address: <https://finance.ky.gov/offices/Pages/equalOpportunity.aspx>
- B. The consultants for the selected DBT must advise each subconsultant with a subcontract of more than \$500,000 of the subconsultant’s obligation to comply with the KY EEO Act. Further, the selected consultant is responsible for compiling EEO documentation from their subconsultants and submitting the documentation to the Finance and Administration Cabinet, Office of EEO and Contract Compliance.
- C. Failure to complete, sign and submit all required documents will delay the award/contract modification process as incomplete submissions will not be processed.
- D. Pursuant to [KRS 45.610\(2\)](#), the Finance and Administration Cabinet, Office of EEO and Contract Compliance reserves the right to request additional information and/or documentation and to conduct on-site monitoring reviews of project sites and/ or business facilities at any point for the duration of any contract which exceeds \$500,000 to ascertain compliance with the Act and such rules, regulations and orders issued pursuant thereto.
- E. All questions regarding EEO forms or contract compliance issues must be directed to the Finance and Administration Cabinet, Office of EEO and Contract Compliance via e-mail: [Finance.ContractCompliance@ky.gov](mailto:Finance.ContractCompliance@ky.gov) or via telephone: (502) 564-2874.

KYTC will notify the Finance and Administration Cabinet, Office of EEO and Contract Compliance about any change order that increases the value of a contract above \$500,000. At a minimum, this notice should include the contract number, contract amount and contact information for the selected consultant. The Office of EEO and Contract Compliance will contact the selected consultant for required information.

The Finance and Administration Cabinet will maintain a list of approved vendors. This Web-based list will be available to State agencies and the general public. The Finance and Administration Cabinet will not accept compliance certifications from the federal government or other states. Only forms developed by the Finance and Administration Cabinet, Office of EEO and Contract Compliance will be accepted and processed. The Finance and Administration Cabinet will not pre-approve vendors. Unsolicited submittals will not be processed nor will unsolicited submittals be returned to the vendor. The Finance and Administration Cabinet, Office of General Counsel will contact KYTC General Counsel about any selected consultant that fails to comply with the Act. Finance and KYTC will determine the appropriate course of action for noncompliant selected consultants.

The requirements of 41 CFR Part 60 shall apply to this Contract and the DBT shall submit EEO Certification with its Proposal. In addition, within 30 days of Award of Contract, the DBT shall file Standard Form 100 (EEO-1) with KYTC’s Division of Construction

Procurement, unless the DBT has submitted the form within 12 months preceding the date of the Award.

Further conditions regarding the Equal Employment Opportunity act are outlined in Appendix B.

#### **5.14 EMPLOYMENT WAGE, RECORD, AND INSURANCE REQUIREMENTS**

See Appendix C for applicable requirements. It is understood and agreed to by the DBT that the Prevailing Wage Schedule for compensation to employees for the work categories and occupations for the county for which this project is located shall be strictly adhered to.

#### **5.15 VIOLATION OF TAX AND EMPLOYMENT LAWS**

KRS 45A.485 requires the DBT to reveal to the KYTC, prior to the award of a contract, any final determination of a violation by the DBT within the previous five (5) year period of the provisions of KRS Chapters 136, 139, 141, 337, 338, 341, and 342. These statutes relate to the state sales and use tax, corporate and utility tax, income tax, wages and hours laws, occupational safety and health laws, unemployment insurance laws, and workers compensation insurance laws, respectively.

To comply with the provisions of KRS 45A.485, the DBT shall report any such final determination(s) of violation(s) to the KYTC by providing the following information regarding the final determination(s): the KRS violated, the date of the final determination, and the state agency which issued the final determination.

KRS 45A.485 also provides that, for the duration of any contract, the contractor shall be in continuous compliance with the provisions of those statutes which apply to the contractor's operations, and that the contractor's failure to reveal a final determination as described above or failure to comply with the above statutes for the duration of the contract, shall be grounds for the cancellation of the contract and disqualification of the contractor from eligibility for future state contracts for two years.

DBT shall identify one of the following in its Price Proposal submitted on October 18, 2019:

- A. The DBT has not violated any of the provisions of the above statutes within the previous five (5) year period.
- B. The DBT has violated the provisions of one or more of the above statutes within the previous five (5) year period and has revealed such final determination(s) of violation(s). A list of such determination(s) is attached.

#### **5.16 FHWA 1273**

This Highway Improvement Project shall be under the laws and regulations of the Commonwealth. This project is a Federal-aid highway contract and all federal laws and regulations, including FHWA-1273 and Civil Rights.

WHEREAS, the DBT shall outline, undertake and complete the work as described in the Contract Documents in a manner consistent with FHWA Form 1273 (Appendix C of this Advertisement) and all applicable State and Federal laws and regulations.

### **5.17 ACCESS TO RECORDS**

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884. In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004.

### **5.18 RECIPROCAL PREFERENCE (NOT APPLICABLE)**

### **5.19 REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY**

Pursuant to [KRS 45A.480\(1\)\(b\)](#), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by [KRS 14A.9-010](#) to obtain a certificate of authority to transact business in the Commonwealth (“certificate”) from the Secretary of State under [KRS 14A.9-030](#) unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. Therefore, foreign entities should submit a copy of their certificate with their solicitation response. If the foreign entity is not required to obtain a certificate as provided in [KRS 14A.9-010](#), the foreign entity should identify the applicable exception in its solicitation response. Foreign entity is defined within [KRS 14A.1-070](#).

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity’s solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can visit <https://www.sos.ky.gov/Pages/default.aspx> to register with the Secretary of State.

### **5.20 EXECUTIVE BRANCH CODE OF ETHICS**

See Appendix B for restrictions relating to former KYTC employees.

### **5.21 CERTIFICATION REGARDING RESPONSIBILITY MATTERS**

Federal Funds are used, therefore in accordance with Federal Acquisition Regulation 52.209-5, the Vendor shall certify with bid response, that to the best of its knowledge and belief, the Vendor and/or its Principals is (are) not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any State or Federal agency. "Principals", for the purposes of this certification, means officers, directors, owners, partners, and persons having primary management or supervisory responsibilities within a business entity (*e.g.*, general manager, plant manager, head of subsidiary, division, or business segment, and similar positions).

### **5.22 REQUIRED AFFIDAVIT FOR BIDDERS OR PROPOSERS**

In accordance with [KRS 45A.110](#) and [KRS 45A.115](#), neither the bidder or proposer as

defined in [KRS 45A.070\(6\)](#), nor the entity which he/she represents, has knowingly violated any provisions of the campaign finance laws of the Commonwealth of Kentucky, and the award of a contract to the bidder or Proposer or the entity which he/she represents will not violate any provisions of the campaign finance laws of the Commonwealth. The Proposer must adhere to the following:

- A. The bidder or Proposer swears and affirms under penalty of perjury that, to the extent required by Kentucky law, the entity bidding, and all subcontractors therein, are aware of the requirements and penalties outlined in [KRS 45A.485](#); is properly authorized under the laws of the Commonwealth of Kentucky to conduct business in this state; is duly registered with the Kentucky Secretary of State to the extent required by Kentucky law; and will remain in good standing to do business in the Commonwealth of Kentucky for the duration of any contract awarded.
- B. The bidder or Proposer swears and affirms under penalty of perjury that, to the extent required by Kentucky law, the entity bidding, and its affiliates, are duly registered with the Kentucky Department of Revenue to collect and remit the sales and use tax imposed by [KRS Chapter 139](#), and will remain registered for the duration of any contract awarded.
- C. The bidder or Proposer swears and affirms under penalty of perjury that the entity bidding is not delinquent on any state taxes or fees owed to the Commonwealth of Kentucky and will remain in good standing for the duration of any contract awarded.
- D. The bidder or Proposer swears and affirms under penalty of perjury that the entity bidding, is not currently engaged in, and will not for the duration of the contract engage in, the boycott of a person or an entity based in or doing business with a jurisdiction with which Kentucky can enjoy open trade, as defined in Executive Order No. 2018- 905.
- E. The bidder or Proposer swears and affirms that the entity bidding, and all subcontractors therein, have not violated any of the prohibitions set forth in KRS 11A.236 during the previous ten (10) years, and further pledge to abide by the restrictions set forth in such statute for the duration of the contract awarded.

## **6. PROJECT DESCRIPTION & MANDATORY REQUIREMENTS**

Below are the Purpose and Need Statements for the two interchange reconstruction projects and the Scope for all three projects. The scopes of work identified here and in the stamped construction plans to be provided by July 15, 2019 shall be considered mandatory requirements for the project. As well, the information provided by May 30, 2019 for the pavement rehabilitation project on I-75 shall be considered mandatory requirements.

### **6-18: KY 338 Richwood Road Interchange**

*Purpose and Need:* The purpose of this project is to improve safety and reduce congestion at the I-71/75 and KY 338 (Richwood Road) interchange and within the KY 338 (Richwood Road) corridor, and to develop and implement a comprehensive access management plan for KY 338 (Richwood Road) between Triple Crown Boulevard and US 25 (Dixie Highway).

*Scope:*

- A. Replace the existing interchange at Richwood Rd. (KY 338) and I-71/I-75 with a double crossover diamond (DCD) interchange.
- B. Replace the current intersection at Richwood Rd. and Dixie Highway (US 25) with a single point urban interchange (SPUI).
- C. Construct a two-lane roundabout at the intersection of Richwood Rd. and Triple Crown Blvd.
- D. Eliminate two railroad crossings, Richwood Road and Shorland Drive, by constructing an overpass railroad bridge. Proposed KY 338 Richwood Road will go under the bridge. Construction of the overpass railroad bridge requires construction of a temporary track (shoofly), new laydown yard, and replacement of mainline track. Norfolk-Southern will construct portions of the rail components as detailed in the KYTC/Norfolk-Southern Railroad Construction Agreement (Appendix G) and the railroad plans.
- E. Widen Richwood Rd. from Triple Crown Blvd. to Old Lexington Pike with reconstruction to Shorland Drive. Widen Dixie Highway from Logistics Blvd. to north of Winning Colors. Road widening will allow for the addition of dedicated turn lanes at the interstate and Richwood Rd./Dixie Highway interchanges.
- F. Add a multi-use path and sidewalks, as well as a raised median along Richwood Rd.
- G. Additional requirements such as signals, lighting, signage, etc. as shown in the stamped construction plans.

**6-14: KY 536 Mt. Zion Road Interchange**

*Purpose and Need:* Improve safety and traffic operations within and near the I-71/75 interchange with KY 536 and meet projected travel demand of Boone and Kenton Counties. In addition, the project will support the local and regional goal of economic development and growth in Northern Kentucky.

*Scope:*

- A. Replace the existing interchange at Mt. Zion Road (KY 536) and I-71/I-75 with a double crossover diamond (DCD) interchange.
- B. Widen Mt. Zion Rd. (KY 536) from east of Tiburon Drive to east of Dixie Highway (US 25).
- C. Additional requirements such as signals, lighting, signage, etc. as shown in the stamped construction plans.

**6-20002: I-75/I-71 Pavement Rehabilitation**

- A. I-75 Pavement Rehabilitation from MP 169.439 to MP 179.02
- B. Additional requirements such as lighting, signage, etc. as shown in the I-75 pavement rehabilitation proposal plans.

**Completion Date:**

KYTC has determined that the baseline completion date for the project shall be November 1, 2022. However, the DBT shall identify the contractual completion date and establish the number of calendar days the project will be completed either before or after November 1, 2022.



(See Section 14.2 for correlation of Completion Date and Price Proposal). If the project is not completed by the completion date identified in the DBT's proposal, per Section 108.09 of the Standard Specifications, liquidated damages shall be applied for each calendar day including weekends and holidays. Contrary to current specifications, the liquidated damage rate shall be \$15,000.00 per day, and will be assessed through the winter months and during any times when a work item cannot be pursued due to seasonal limitations.

## **6.1 ALTERNATE TECHNICAL CONCEPT (ATC)**

### **6.1.1 DEFINITION**

An Alternative Technical Concept (ATC) is a change to the Project Scope that provides a solution that is equal to or better than the required scope as determined by KYTC. The ATC process allows for innovation, increased flexibility, time reductions, and cost savings to deliver the best value for the public. Where the Contract Documents reference specific patented, proprietary material; or semi-finished or finished article, product, or item for incorporation into the work, the DBT may submit an ATC for approval of an alternative material, article, product, or item that meets or exceeds the requirements and intent of the Contract work, provided that the material, article, product, or item is equal or better in quality, performance, and function, based upon documented engineering analysis. ATCs are not intended to replace pre-bid questions.

### **6.1.2 SUBMISSION REQUIREMENTS**

DBTs may submit ATC documents for consideration by the KYTC beginning June 19, 2019. KYTC will review all ATCs through August 14, 2019. Each ATC may include multiple issues to be considered by KYTC. The DBTs shall clearly identify each individual portion of the ATC proposal that is a proposed change to the Project Scope.

A DBT shall submit one (1) unbound version of the ATC, and one (1) CD/DVD or one (1) USB "thumb" drive containing two (2) electronic files of the ATC as follows:

- A. One (1) electronic searchable single file PDF which does not restrict printing or copying text, images, and other content.
- B. One (1) electronic password protected single file PDF which restricts copying of text, images, and other content.

Alternate Technical Concepts shall be received no later than 4:00 p.m., Eastern Time, on August 14, 2019. The KYTC shall reject any proposal received after aforementioned date and time and return it unopened to the DBT. In order to be considered, the original ATC shall be signed in blue ink by an authorized representative of the DBT.

The submittal shall either be mailed or hand delivered to:

Rachel Mills, PE, Director  
Division of Construction Procurement  
200 Mero Street  
Frankfort, KY 40622

The outside cover of the package shall be marked:

Alternate Technical Concept for

Boone County  
KY 338 Interchange, KY 536 Interchange, and I-75  
Item No. 6-18, 6-14, & 6-20002  
CID No. 19-9002  
Design-Build: FY 2019 Design Build #2

### **6.1.3 *EVALUATION OF ATCs***

ATCs are approved by the KYTC at its discretion and the KYTC reserves the right to reject any ATC submitted. KYTC shall attempt to evaluate all ATCs and ATC reconsiderations within 14 calendar days of receipt. However, this timeframe cannot be guaranteed, particularly for complex or unusual concepts. KYTC will either accept or deny all ATCs no later than 30 days before proposals are due. KYTC shall not consider any change that would require excessive time or cost for review, evaluation, or investigation.

### **6.1.4 *CONTENTS***

ATCs shall contain the following information detailed below. Incomplete ATC submittal packages shall be returned by KYTC without review or comment. They may be resubmitted before the deadline for ATC submittals.

#### **6.1.4.1 Description**

A detailed description of the ATC including specifications and conceptual drawings.

#### **6.1.4.2 Usage**

A description of where and how the ATC would be used on the project.

#### **6.1.4.3 Deviations**

References to all requirements in the Project Scope that are inconsistent with the proposed ATC, an explanation of the nature of these deviations, and a request for approval of such deviations.

#### **6.1.4.4 Analysis**

An analysis justifying the ATC and demonstrating why modifications or revisions to requirements of the Project Scope should be allowed. Include information on how the ATC meets or exceeds the project goals. Analysis shall present costs/cost savings associated with concept.

#### **6.1.4.5 Traffic and Safety Impacts**

A discussion of the impacts the ATC will have on vehicular traffic, pedestrian traffic, railroad traffic and safety, including an operational analysis, if relevant.

#### **6.1.4.6 Maintenance of Traffic Impacts**

A discussion of the impacts the ATC will have on maintenance of traffic during construction including any impacts on other roadways due to diversion of traffic on proposed or potential detour.

**6.1.4.7 Environmental Impacts**

A discussion of how the ATC is in accordance with the approved Environmental Documents and permits.

**6.1.4.8 Right-of-Way**

A discussion of decreased or additional right-of-way acquisition needed to implement the proposed ATC.

**6.1.4.9 Utilities**

A discussion of decreased or additional utility (public and private) impacts including coordination requirements as a result of ATC implementation.

**6.1.4.10 Maintenance**

A discussion of the long-term maintenance of the proposed ATC.

**6.1.4.11 History**

When applicable, a detailed description of other projects on which the proposed ATC has been used, including contact information (name, title, phone number, address, and email) for project owners that can confirm ATC implementation.

**6.1.4.12 Inspection**

Any additional testing and inspection requirements.

**6.1.4.13 Schedule**

A discussion of project schedule impacts, including design, construction, right-of-way acquisition, utility relocation, and permitting issues.

**6.1.5 *ONE-ON-ONE MEETINGS***

Each short-listed DBT shall be permitted to request one-on-one pre-ATC meetings with KYTC to discuss potential ATCs. Meetings will last no more than two hours. The location of the meetings will be determined by the nature of the ATC. The meetings will be held once every two weeks on Wednesdays beginning June 19, 2019 through August 14, 2019. Short-listed DBTs shall submit a request for a meeting by the Friday in advance of the proposed meeting date. The request must include the issues that the DBT wishes to discuss and/or a general description of the involved ATC concepts in enough detail for the KYTC to select appropriate individuals to attend the meeting. KYTC attendees may participate by teleconference or videoconference. One purpose of one-on-one meetings is to provide DBTs with a general overview of the KYTC's assessment of a proposed ATC's viability. No final decisions will be made during the meeting. Verbal communications, including one-on-one meetings, will be considered non-binding. Discussions during one-on-one meetings shall be confidential.

**6.1.6 *KYTC RESPONSE***

KYTC shall review all ATCs and respond with one of the following determinations:

- A. The ATC is approved and may be included in the DBT's Technical Proposal.
- B. The ATC is approved subject to conditions. The ATC may be included in the DBT's Technical Proposal provided that all approval conditions have

been met. Failure to clearly demonstrate that all conditions have been met may render the DBT's Technical Proposal non-responsive.

- C. The ATC is not approved in its present form but may be resubmitted for reconsideration. The reconsideration request must address all KYTC comments, questions, and concerns. Reconsideration requests must meet all ATC submission and content requirements.
- D. The ATC is not approved. Inclusion of the ATC in the Technical Proposal will render the Technical Proposal non-responsive.
- E. The proposal is not an ATC.

The KYTC may, at its discretion, request additional information or clarification regarding a proposed ATC and/or conduct one-on-one meetings with DBTs to discuss their ATC. Verbal communications regarding ATC proposals shall be considered non-binding.

KYTC will notify the DBT of the decision in writing. Irrespective of an ATC's promise or innovative nature, submissions that do not include all necessary information will be rejected. KYTC will describe the reason(s) for rejection in a written notification. DBT's have the option of addressing KYTC's concerns and resubmitting an updated ATC before the deadline. All discussions pertaining to an ATC must be written or conducted in-person. KYTC is the sole judge of an ATC's merits and acceptability. KYTC reserves the right to reject an ATC request for any reason.

For approved ATC's, the DBT is responsible for completing all engineering plans. The DBT will also be advised by this notification if the ATC requires them to become the Engineer of Record for the entire project or a portion of the project that the ATC replaces.

An approved ATC may be submitted as a bid by the DBT. A schedule of values will be required for this alternative bid submission to support the lump sum price. An approved ATC that consists of multiple elements must be bid as a whole. Selective implementation of less than all the elements could result in the bid's rejection.

Compared to the advanced and/or stamped construction plans, the ATC may introduce extra costs, work, or risk. The ATC lump sum bid must incorporate the additional costs required to complete supplemental work. For example, if the ATC requires additional utility relocation, the DBT is obligated to pay for it. The DBT also takes on any additional risk associated with the ATC; submitted bids must price in the cost of this risk. If KYTC will incur additional costs due to ATC, the Contractor must include them in their bid to ensure a fair comparison and award process. The DBT is responsible for paying excess actual costs over and above the estimate of KYTC's additional costs.

Any ATC, conceptual or approved, that is not submitted with the bid will not be considered a pre-approved value engineering change proposal (VECP).

### **6.1.7 *INCORPORATION INTO TECHNICAL PROPOSAL***

The DBT may incorporate zero, one or more approved ATCs (or conditionally approved ATCs, if all conditions are met) into their Technical Proposal. The Technical Proposal must clearly state which ATCs have been incorporated and indicate what, if any, conditions are met. Approved ATCs should be clearly shown on the Technical Proposal plans. The Price Proposal shall reflect all incorporated ATCs. If the DBT abandons a pre-approved ATC or fails to construct it for any reason, they are obligated to complete the project using the original design, at the awarded cost.

### **6.1.8 *DISCLOSURE***

If, during evaluation of an ATC proposal, the KYTC becomes aware of a deficiency in the Project Scope that would have an impact on the ability of DBTs to make a best value offer, KYTC may, at its discretion, issue an addenda to correct this deficiency.

Other than as listed in the above paragraph, all conversations related to ATC proposals between the KYTC and DBTs shall be kept confidential during the bidding process. ATC proposals may be made public after the payment of the stipend has been tendered and/or upon Contract Execution or as required by Kentucky's Open Records Act. All documents received by the KYTC are subject to KRS 61.870 to 61.884, also known as the Open Records Act, and are subject to release unless a statutory exception exists that exempts the documents from public release. If any information in an ATC or Technical Proposal is to be treated as "confidential or proprietary," the DBT must identify each and every occurrence of the information within the Proposal by:

- A. Listing the page numbers of every occurrence of the "confidential or proprietary" information on the cover sheet submitted with the ATC or Technical Proposal; and
- B. Placing an asterisk before and after each line of the ATC or Technical Proposal that contains "confidential or proprietary" information.  
"Confidential or proprietary" may include trade secrets.

Prior to Award, KYTC shall not share with, or convey to, any person the information provided by the DBT, unless disclosure is required by law or the DBT gives prior written approval for such disclosure. In the event the KYTC is required to disclose any information the DBT considers confidential or proprietary, pursuant to applicable law, KYTC shall notify the DBT in writing prior to disclosing such information. KYTC shall use reasonable efforts to give notice of disclosure at least three days in advance of release. However, upon Award, all information provided to KYTC that was used in the evaluation of the Bids will be considered a public record unless the DBT refuses to accept a stipend (non-selected DBTs) or contract Award (selected DBT). KYTC shall not be obligated to maintain in confidence any information that is not confidential or proprietary including information that: (1) is already known by the state, (2) is or comes into the public domain through no fault of the state, (3) is independently developed by the state, or (4) comes to the state from a third party in a manner not in violation of any obligation of confidentiality by such third party to the DBT. Kentucky law generally requires that documents that contain both confidential and non-confidential information be disclosed with confidential information redacted.

## **7. GENERAL PROVISIONS FOR THE SCOPE OF THE WORK**

The DBT shall provide for the engineering services, design, and preparation of detailed construction plans for the construction of the proposed project. The DBT may choose to present all or portions of the provided stamped engineering plans, as the final detailed construction plans. Any new or updated plans generated by the DBT shall be stamped by the Engineer of Record. The DBT shall provide for the relocation of utilities impacted by the proposed project as described in Section 11. Further, DBT shall provide for the furnishing of materials, construction and completion in every detail of all the work described in this ITP in order to fulfill the intent of the contract.

### **7.1 GOVERNING REGULATIONS**

All services, including but not limited to survey, design and construction work, performed by the DBT and all subcontractors, shall be in compliance with all applicable AASHTO Design Standards, KYTC Department of Highway's Standard Specifications for Road and Bridge Construction, Standard Drawings, MUTCD, Manuals and Guidelines. The railroad work shall be in compliance with all applicable AREMA and Norfolk-Southern Railway guidance and specifications. As a part of the DBT's technical proposal submittal, a detailed general schedule to clearly demonstrate the DBT approach for completing the project shall be submitted. A comprehensive schedule detailing all project milestone dates shall be prepared for KYTC review and approval within 30 days of the award of the contract. This schedule shall show all major design, right-of-way, utility and construction activities and the critical path to completion. The comprehensive Progress Schedule required for this Project is the CPM schedule. The CPM schedule format shall be as described in the CPM Special Note in Appendix I. The DBT shall designate a Schedule Representative who shall be responsible for coordinating with the Engineer during the preparation and maintenance of the schedule and throughout execution of the entire contract.

The fact that the bid items for this Design-Build project are general rather than specific shall not relieve the DBT of the requirement that all work performed and all materials furnished shall be in reasonable conformity with the specifications. The DBT's Consultant shall reference in the plans the appropriate Construction and Material Specifications Item Number for all work to be performed and all materials to be furnished.

It shall be the responsibility of the DBT to acquire and utilize the necessary KYTC and Norfolk-Southern Railway manuals that apply to the design, right-of-way, utility, and construction work required to complete this project.

### **7.2 LUMP SUM BID ITEMS**

For this project, an "all-inclusive" Lump Sum bid item combining the individual projects Lump Sum bid is to be utilized. Each project (KY 338, KY 536, & I-75 Pavement Rehabilitation) will have individual Lump Sum bids that will be combined for the "all-inclusive" Lump Sum bid. The components that are to be incorporated into each project bid item are described throughout the ITP and shall include but are not limited to:

- A. Project Development Services
- B. Grade & Drain
- C. Asphalt and Concrete Paving

- D. Traffic Signals
- E. Signing
- F. Lighting
- G. Railroad Construction/Coordination (KY 338 only)
- H. Structures

The DBT shall provide supplemental cost information and supporting documentation of those costs for each of the components listed. The sum of the individual component costs shall equal the value of the “all-inclusive” single lump sum bid item for the project. Certain aspects and requirements for each of these items are discussed in the following sections. Some components are discussed in multiple sections due to the nature of the work involved. As stated previously, the intent of this “all-inclusive” single lump sum bid item is to incorporate all features of the project into this bid item. Please be advised that three percent (3%) of the total lump sum bid price shall be used as the Demobilization cost for this project.

In addition, the DBT shall be required to furnish the KYTC with a Schedule of Values showing a complete breakdown of the individual project lump sum bid items established for this project at the time of submittal of the DBT price proposal. In order to document how the lump sum bid price was determined, the DBT shall supply, using standard KYTC bid item codes whenever possible, all work items, quantities, units, and prices to support the lump sum bid submitted. Any non-standard bid items used shall be thoroughly explained in the bid proposal. The breakdown shall include all materials to be used in the work and shall be in sufficient detail to provide KYTC with a means to check partial payment requests. The Schedule of Values shall be developed using the current version of Estimator software by Info Tech Inc., Gainesville, FL, 32608, or an equivalent program approved by the Engineer. The DBT shall provide any necessary training and license needed for KYTC to use the software. Submit the Estimator file in the Version required by KYTC. The successful DBT shall be required to update the schedule of values when final designs, or portions of the design, are approved.

The advance construction plans, and later provided stamped engineering plans, will include summaries that demonstrate quantities for individual items. In no instance shall these quantities be considered the final quantities to be used nor should they be considered the only items required to construct the project. The DBT shall draw their own conclusions to determine the items and quantities necessary to construct the mandatory requirements of the project. Also, special notes required by this ITP may indicate specific items of work and methods of payment; however, the DBT shall include all costs for all items and quantities necessary to construct the mandatory requirements of the project into the “all-inclusive” single lump sum bid item. Change order proposals will not be considered based upon items or quantities indicated in this ITP or any of the items conveyed with this ITP. Change order proposals will only be considered when the KYTC elects to add mandatory requirements that were not previously identified in any of the bidding documents.

### **7.3 BUY AMERICA**

The DBT shall follow the “Buy America” provisions as required by 23 CFR § 635.410. Except as expressly provided herein, all manufacturing processes of steel or iron materials including but not limited to structural steel, guardrail materials, corrugated steel, culvert pipe, structural plate, prestressing strands, and steel reinforcing bars shall occur in the

United States of America. This requirement further includes but is not limited to the application of:

- A. Coating
- B. Galvanizing
- C. Painting
- D. Other coating that protects or enhances the value of steel or iron products

The following are exempt, unless processed or refined to include substantial amounts of steel or iron material, and may be used regardless of source in the domestic manufacturing process for steel or iron material:

- A. Pig iron
- B. Processed, pelletized, and reduced iron ore material
- C. Processed alloys

The DBT shall submit a certification stating that all manufacturing processes involved with the production of steel or iron materials occurred in the United States.

The DBT shall produce, mill, fabricate, and manufacture in the United States of America all aluminum components of bridges, tunnels, and large sign support systems, for which shop fabrication, shop inspection, or certified mill test reports are required as the basis of acceptance by KYTC.

The DBT shall use foreign materials only under the following conditions:

1. When the materials are not permanently incorporated into the Project
2. When the delivered cost of such materials used does not exceed 0.1 percent of the total Contract amount or \$2,500.00, whichever is greater

The DBT shall submit to the Engineer the origin and value of any foreign material used.

The DBT should be aware that the project has potentially already accepted \$15,000 of foreign materials in the construction of the Duke Transmission on the KY 338 project. Duke may determine that the materials are Buy America certified at a later date. Until that can be confirmed, the DBT should assume that a portion of the 0.1 percent of the total contract amount has already been utilized.

#### **7.4 BASIS OF PAYMENT**

All items covered by Construction and Material Specifications, Supplemental Specifications, Proposal and Special Provision notes with unit price as a basis of payment shall be included in the Lump Sum bid item established for the project. All costs for work and services shall be included in the lump sum item for the Project.

“In progress” payments for the project shall be made utilizing the supplemental cost information included in the schedule of values supplied for each of the components identified as parts of the “all inclusive” single Lump Sum bid item. KYTC personnel shall track and measure the completed individual items within the schedule of values to determine the amounts of the actual “in progress” payments.



## 7.5 FINAL PAYMENT

In addition to the normal requirements in Sections 105.12 and 109 of the Standard Specifications, the DBT shall prepare and submit the following prior to the request for final payment:

- A. All original project files and notes utilized in the preparation of the survey, design and construction of the project.
- B. As-Built Plans in PDF and ArcGIS format previously approved by an engineer.

## 7.6 PRE-DESIGN-PRECONSTRUCTION CONFERENCE

The DBT shall attend a mandatory Pre-Design-Preconstruction Conference to be scheduled upon award and name a Project Manager who shall act as a liaison between the DBT and KYTC.

## 7.7 KYTC CONTACTS

All communication during design and construction shall be with KYTC's Project Manager. All submittals identified elsewhere in this document shall be simultaneously sent to the KYTC's Project Manager and to the other KYTC personnel if designated by the KYTC Project Manager.

District Project Manager:	Robert Franxman
Phone Number:	(859) 341-2700
Email Address:	<a href="mailto:Robert.Franxman@ky.gov">Robert.Franxman@ky.gov</a>

## 7.8 FIELD OFFICE

The DBT shall provide a Field office to be available and completely functional no later than 1 week prior to the start of construction work. Furnish the field office with a means for maintaining a room temperature between 68 and 80 degrees, with electric service, potable hot and cold water and neat, sanitary, enclosed toilet accommodations. Furnish associated lavatory, sanitary and cleaning supplies and arrange for waste disposal. The field office shall be on the project site unless an alternate location is approved by the engineer. The office shall be at least approximately 1000 sf containing space for a meeting area with a conference table and an overall space to accommodate 30 persons and 8 separate desks and chair workstations for use by KYTC. The office shall include Wi-Fi though broadband internet connection with a minimum speed of 100 MBPS as well as a copy machine/printer and refrigerator.

## 8. HAZARDOUS MATERIALS

KYTC is unaware of any hazardous or contaminated materials within the project limits except for the underground storage tanks on KY 338 Parcel 315 and an interceptor/concrete detention pond on Parcel 319. KYTC will coordinate the removal of the storage tanks on Parcel 315 once right of entry is obtained. If right of entry occurs after Award, then KYTC will complete disposal of Hazardous Materials using KYTC forces within 21 calendar days once right of entry is obtained. The DBT will be responsible for the removal of the interceptor/concrete detention pond on Parcel 319 and will take the appropriate steps to coordinate with KYTC for disposal of said materials in accordance with all laws and regulations. The DBT is advised that any other hazardous materials or contaminated areas encountered as a part of the design and construction of the project shall be the responsibility of the DBT to identify and take the appropriate steps to coordinate with KYTC for disposal of said materials in accordance with all laws and regulations.

Should the DBT encounter hazardous or contaminated areas on the project, the DBT shall prepare a Contaminated Materials Management Plan (CMMP) to address the methodologies to be employed by the DBT to minimize the disturbance of contaminated materials and to coordinate with KYTC for disposal of any contaminated materials encountered by the DBT as the result of the DBT's design and construction. KYTC shall retain status as "generator" of all wastes regulated under federal RCRA and applicable state laws. It shall be the DBT's responsibility to identify, and coordinate with KYTC to handle, manage and, if necessary, dispose of, all contaminated materials in accordance with all applicable local, state and federal regulations. It is understood that wherever practicable, contaminated materials shall be managed on the construction site.

Under most circumstances, KYTC will complete disposal of Hazardous Materials using KYTC forces within 21 calendar days. In the event that disposal extends beyond 21 days and delays are caused to the controlling item of the critical path schedule, or the DBT is required to perform disposal of the Hazardous Material, a supplemental agreement will be executed with the DBT according to section 104.03 of the Standard Specifications.

DBT shall have both the responsibility and authority to conduct any additional environmental assessment and/or testing it deems necessary to identify, and coordinate with KYTC to handle, manage, transport and dispose of contaminated materials encountered during construction, within the confines of local, state and federal environmental statutes, regulations and ordinances. All environmental data collected shall be retained for KYTC review and be made available, if requested.

The DBT shall be solely responsible for the health and safety of its own employees with regard to contaminated materials. DBT shall be liable for any loss or damage incurred by its employees or third parties as a result of its management, handling or improper disposal of contaminated materials. DBT shall indemnify KYTC for any damages incurred there from.

DBT shall assure that all contaminated materials requiring off-site disposal are coordinated with KYTC to be transported and disposed of in accordance with applicable local, state and federal laws in a regulated facility approved by KYTC. The DBT shall be responsible for manifesting and gaining approval for disposal of each shipment of contaminated materials designated for disposal at a regulated facility. DBT shall retain copies of all manifests and associated documentation for review by KYTC upon request.

Section 8 for Hazardous Materials shall not apply to asbestos materials present in buildings or structures to be demolished. Section 8 shall only apply to the abatement of underground Hazardous Materials.

## **9. ENVIRONMENTAL**

### **9.1 ENVIRONMENTAL DOCUMENT**

The Richwood Road (KY 338) portion of the project received National Environmental Policy Act (NEPA) clearance via a Categorical Exclusion (CE) Level 3 approved May 2014 and is currently under re-evaluation for the construction phase (anticipated late May 2019).

The Mt. Zion Road (KY 536) portion of the project received NEPA clearance via a CE Level 3 approved October 2014 and re-evaluation for construction phase in January 2019.

The I-75 portion of the project received NEPA clearance through a CE for Minor Projects approved April 2018.

All approved NEPA documents are provided in Appendix D.

The project approvals were based on the impacts identified in the plans as presented in this proposal. Any impacts outside of the identified disturbance areas have not been cleared under the NEPA process. If the Design Build Team chooses to pursue impacts outside of the identified area, it is their sole responsibility to conduct the necessary field work and complete any necessary coordination to obtain environmental clearances, including updates to the environmental document. Additionally, anyone conducting work or fieldwork for any of the clearances will need to be on KYTC's list of approved consultants for the appropriate areas. As part of the environmental clearances for the project, project commitments are outlined below.

## **9.2 THREATENED AND ENDANGERED SPECIES**

In order to comply with restrictions associated with imperiled bats, tree clearing restrictions will be imposed on this project. No clearing of trees 5 inches or greater (diameter breast height) shall occur from June 1 – July 31. Failure to comply will result in violation of the Endangered Species Act. Any questions regarding this requirement should be directed to:

Danny Peake, Director  
Division of Environmental Analysis  
200 Mero Street  
Frankfort, KY 40601

## **9.3 NOISE MITIGATION**

In order to mitigate the noise exceedance criteria, noise barriers will be constructed at multiple locations along I-75 as indicated in the advanced and/or stamped construction plans for both KY 536 and KY 338. Information for the Special Note for Noise Barrier Walls is located in Appendix I.

## **9.4 SURFACE WATER PERMIT**

The DBT shall be aware of Clean Water Act permits issued by the US Army Corps of Engineers (USACE) and the Kentucky Division of Water (KDOW) have been obtained for this project and are provided in Appendix D. An USACE Letter of Permission and a KDOW Section 401 Water Quality Certification were issued on December 2018 and are based on impacts within the KY 338 section of the project as identified in the provided plans.

The DBT shall adhere to the prescribed removal of three non-jurisdictional wetlands on Mt. Zion Road (KY 536) portion of the project. The areas are identified on the plans and shall be cleared utilizing the one-step removal process which dictates the use of a bucket to remove just a thin layer of soil and wetland vegetation prior to construction. The soil and wetland vegetation shall be properly disposed of at an upland location.

The DBT shall be responsible for complying with all provisions set forth in the Permits. KYTC will pay (in advance) any costs or in-lieu fees associated with the permits

as they pertain to the identified impacts within this document. If the DBT chooses to impact areas outside of the areas identified, it is their responsibility to coordinate changes the USACE and KDOW and pay any additional in-lieu fees.

#### **9.5 ASBESTOS COMPLIANCE**

For structures that the DBT will be demolishing, the DBT will be responsible for meeting the requirements of the 10 Day Notice (including asbestos inspection and laboratory results) with the Kentucky Division for Air Quality (DAQ). DEP Form 7036 will be completed and filed with the Florence Regional DAQ Office located at 8020 Veteran's Memorial Drive Suite 110, Florence KY 41042 at least 10 days prior to removal of any impacted structure.

#### **9.6 CONSTRUCTION STORM WATER PERMIT (KYR10)**

Projects that are not required to have a Section 402 Individual KPDES permit, must request coverage under the program's General Construction Storm Water Permit (KYR10). The DBT must submit to KYTC's project manager a BMP plan for the project and receive approval prior to beginning work. All temporary erosion control is the responsibility of the DBT as outlined in the Special Note for Erosion Control found in Appendix I. The DBT will be responsible for filing the Notice of Intent (NOI) with the Kentucky Division of Water requesting coverage under the KYR10 permit. KYTC is the MS4 for the project, therefore, the DBT will not be required to submit any land disturbance forms to SD1.

### **10. RIGHT-OF-WAY (ROW)**

#### **10.1 GENERAL REQUIREMENTS**

KYTC shall be responsible for the procurement of the Right-of-Way for the project. The limits of the Right-of-Way to be procured are defined in the advanced and/or stamped construction plans provided. See Appendix E for additional information regarding the status of each parcel.

KYTC also purchased permanent easements for utility companies which are shown on advanced and/or stamped construction plans.

The DBT shall stake and flag all existing and proposed right of way and easements needed in the field prior to the start of construction. The DBT shall maintain these markings throughout the duration of the project.

#### **10.2 DBT'S PROPOSED RIGHT-OF-WAY PLAN AMENDMENTS**

It shall be the responsibility of the DBT to perform all roadway, rail and bridge construction work within the Right-of-Way and easement limits as depicted in the advanced and/or stamped construction plans provided, except for staging and borrow/waste sites that may be needed for the project. Please see Section 13.2.8 for additional restrictions regarding excess material sites.

If after award, the DBT determines that additional Right-of-Way or easements are required, then the acquisition of the Right-of-Way or easement shall be the responsibility of the DBT. The DBT shall be required to follow the process detailed in Appendix E Right-of-Way Requirements for an approved ATC.

### **10.3 DBT'S PROJECT SCHEDULE and PROCUREMENT of RIGHT-OF-WAY**

KYTC expects to clear the Right of Way by March 1, 2020. It shall be the DBT's responsibility to prepare the Project schedule and phasing based on that date. For individual parcels, see respective Right of Way Status reports provided in Appendix E. The DBT may request for KYTC to prioritize the procurement of parcels in a different sequence to better accommodate the DBT's plans for performing the work. KYTC is committed to working with the DBT to find ways to expedite the design and construction of this Project. However, the final decision on the sequence for procurement of parcels shall be at KYTC sole discretion.

Should KYTC fail to clear the Right-of-Way or easement for a parcel by the above prescribed date it shall be the DBT's responsibility to revise the Project schedule to reflect the new clearance date at no additional cost to KYTC. Failure by KYTC to provide clearance of the Right-of-Way or easement for a parcel by the prescribed date does not in and of itself constitute the need to adjust the Project Completion Date for the Project. In order for KYTC to consider an adjustment to the Project Completion Date as it relates to procurement of Right-of-Way or easements, the DBT must clearly demonstrate that the controlling operation on the critical path identified in the project schedule for the project has been adversely impacted to the point that an extension of the Project Completion Date is warranted.

Contract time shall not be extended due to the length of time required for acquisition of the property necessary to complete the project. The contractor shall be aware that it is possible that condemnation through eminent domain may be required and contract time will not be extended to account for condemnation suits. The only possibilities for extension of contract time due to R/W acquisitions shall be if:

- A. KYTC withholds consent to file suit against a property owner and delays are caused to the controlling item of the critical path schedule, or
- B. A condemnation suit escalates into a "Right to Take" challenge and delays are caused to the controlling item of the critical path schedule.

In the event either of these circumstances occurs KYTC will consider an extension of Contract time according to section 108.07 of the Standard Specifications. Those considerations will be made based upon the date when KYTC withheld consent, or the date when a property owner files a "Right to Take" challenge.

### **10.4 DESIGN-BUILD TEAM CONFLICT OF INTEREST**

If at any time, the DBT or to the best of the DBT's knowledge, any DBT-Related Entity directly or indirectly: (i) acquires or has previously acquired any interest in real property likely to be parcels of the Project Right-of-Way or the remainders of any such parcels; (ii) loans or has previously loaned money to any interest holder in any real property likely to be a Project Right-of-Way parcel and accepts as security for such loan the parcel, or the remainder of any such parcel that is not a whole acquisition, or (iii) purchases or has previously purchased from an existing mortgagee the mortgage instrument that secures an existing loan against real property likely to be a Project Right-of-Way parcel, or the remainder of any such parcel, the DBT shall promptly disclose the same to KYTC. In the case of acquisitions, loans or mortgage purchases that occurred prior to the execution of the Agreement, such disclosure shall be made within ten (10) days after execution of the Agreement.

In the event that the DBT, or any subsidiary or parent company of the DBT, acquires a real property interest, whether title or mortgage, in parcels of the Project Right-of-Way, the real property interest acquired or a release of mortgage as the case may be, shall be conveyed to the Commonwealth of Kentucky, without the necessity of eminent domain.

The DBT shall not acquire or permit the acquisition by the DBT or any DBT-Related Entity of any real property interest in a Project Right-of-Way parcel, whether in fee title or mortgage, for the purpose of avoiding compliance with the laws, practices, guidelines, procedures and methods described.

#### **10.5 CLEARANCE/DEMOLITION OF PROJECT RIGHT-OF-WAY**

The DBT shall be responsible for the clearance/demolition of buildings that are within the project right of way limits as detailed in the advance and/or stamped construction plans or Appendix I Special Note for Building Removal. Prior to demolition of any improvements, the DBT shall obtain photographs of the property and all improvements. The DBT shall also have photos of any other items of dispute in and of a quality suitable for presentation as evidence in court. Following acquisition or possession of any parcel of Project Right-of-Way, the DBT shall:

- A.* Follow property management guidelines as set forth by KYTC Right of Way Manual.
- B.* Secure and protect the buildings, improvements and fixtures on the Project Right-of-Way until they are disposed of or demolished. DBT shall board-up, mow, and winterize as required by KYTC or applicable Law.
- C.* Coordinate with the owner and occupants to assure the clearance of personal property from the Project Right-of-Way, as applicable.
- D.* Provide for any insect and rodent control and initiate extermination as required to protect the adjacent properties and rid the Project Right-of-Way from infestations.
- E.* Secure Governmental Approvals required for demolition and environmental surveys or tests, and notify KYTC in writing of all such activities.
- F.* The DBT shall be required to prepare necessary documentation for disposal of improvements, including the coordination and disposal of all contaminated or hazardous materials encountered, fixtures, and buildings in accordance with applicable Laws.
- G.* Provide written notification to KYTC of any real and/or personal property remaining on the Project Right-of-Way after vacated by the occupants and not acquired as part of the acquisition.
- H.* Terminate all utility service(s) when appropriate.
- I.* Process all required forms, documents and permit applications in order to proceed with the timely demolition or removal of any and all improvements, buildings and fixtures located within the Project Right-of-Way, as applicable.
- J.* Demolish and/or remove all improvements.
- K.* Notify KYTC upon completion of the demolition and clearance of the Project Right-of-Way, as applicable.

## **11 UTILITIES**

### **11.1 GENERAL REQUIREMENTS**

A number of existing utilities are located within or in the vicinity of the Project Right-of-Way, some pursuant to statutory rights and some pursuant to property rights. This Section establishes procedures and requirements for adjusting utilities, if deemed necessary, including such processes as coordination with utility owners, administration of the engineering, construction, and other activities necessary for utility adjustments, and required documentation.

KYTC has begun coordination of utility adjustments with the affected utility owners and has made progress toward the relocation of the utilities. Some utility adjustments may be performed by the utility owner with its own forces and/or contractors and consultants (i.e., utility owner-managed); all others shall be performed by the DBT with its own forces and/or contractors and consultants (subject to any approval rights required by the utility owner for those working on its facilities) (i.e., DBT-managed). The utility owner-managed (primarily aerial utilities) that are relocating their own utilities have provided utility relocation plans and they are included in Appendix F. Utility Impact Notes which provide special notes on the anticipated completion of each company's relocated facilities are included in Appendix F. DBT-managed utilities (primarily underground) have included their relocation plans within the advanced construction plans and are to be included as a part of DBT's construction contract. KYTC has also provided Utility Reference Plans (URP) which provides proposed location of utilities superimposed on the highway construction plans. The KYTC does not guarantee the accuracy of the URP plans and are provided to the DBT for information only.

This Section does not address utility services to the project. Utility services to the project shall be the subject of separate agreements between the DBT and utility owners.

#### ***11.1.1 WHEN UTILITY ADJUSTMENT IS REQUIRED***

A utility adjustment may be necessary to accommodate the project for either or both of the following reasons: (a) a physical conflict between the project and the utility; and/or (b) an incompatibility between the project and the utility based on constructability, future operation, safety, and maintenance. The physical limits of all utility adjustments shall extend as necessary to functionally replace the existing utility, whether inside or outside of the project right-of-way. Section 11.2.4.2 contains provisions that address the acquisition of easements for utilities to be installed outside of the project right-of-way.

Utilities may remain in their existing locations within the project right-of-way if the existing location shall not adversely affect the construction, operation, safety, maintenance and/or use of the project and if the utility is not adversely affected by the project.

The DBT is advised that KYTC will purchase permanent easements for relocation of utilities. Located with the right-of-way Summary Sheets are matrices identifying parcels and tracts where the specific utilities will be located.

#### **11.1.1.1 When Utility Adjustment is required by an ATC**

When utility adjustment is required by an approved ATC, the DBT shall cause all utility adjustments necessary to accommodate construction, operation, maintenance and/or use of the project, in both its initial configuration and in its ultimate configuration. The DBT shall be responsible for preparing and executing all agreement amendments with the utility owners impacted by the change. The allocation of responsibility for the utility adjustment work between DBT and the utility owners shall be specified in the Utility Agreement Amendment executed by the DBT with the respective utility owner. All costs associated with the design, right-of-way (utility easement) and relocation of utilities for this change shall be the responsibility of the DBT. The DBT shall clearly demonstrate in the schedule prepared for the project how the utility relocation work is to be accomplished. No contract time extensions shall be granted to the DBT due to relocation of utilities for the project unless agreed to within the approved ATC.

The DBT's obligations regarding reimbursement to utility owners for all additional costs of utility adjustment work shall be as set forth in the Utility Agreement Amendment prepared for the project by the DBT and in conformance with FHWA's Program Guide for Utility Relocation and Accommodation for Federal-Aid Projects. However, as per FHWA's Program Guide for Utility Relocation and Accommodation for Federal-Aid Project, any "betterments" to the utilities made as part of the relocation work are not eligible project expenses and shall not be included in the project costs. The DBT and the respective utility owner shall clearly demonstrate in the agreement amendment prepared for the change how any "betterments" planned for the Utility facilities during the relocation work are paid for using non-project funds. The DBT shall be responsible for strictly adhering to this requirement. Should it be determined that project funds have been used for betterment of the utility facilities without prior approval by KYTC, an amount equal to the cost determined to be expended upon betterment of the utility facilities relocated for the project shall be deducted from the DBT's contract amount.

### ***11.1.2 CERTAIN COMPONENTS OF THE UTILITY ADJUSTMENT WORK***

#### **11.1.2.1 Coordination**

The DBT shall communicate, cooperate, and coordinate with KYTC, the utility owners, and potentially affected third parties, as necessary for performance of the utility adjustment work.

#### **11.1.2.2 Placement of Utilities**

Longitudinal underground utilities shall not be located within the proposed roadway except as shown on construction and/or utility plans. When crossing the roadway, crossings shall occur perpendicular to the proposed roadway.



**11.1.2.3 Flowable Fill Requirements**

The DBT shall use flowable fill as the backfill media any place underground utility facilities cross under the existing or proposed roadway surfaces.

**11.1.2.4 Betterments**

The utility owner shall be reimbursed only for the cost of constructing the most economical type of facilities that satisfactorily meet the service requirements of the former facilities unless the utility owner specifies a lesser replacement, or if the utility owner has standards dictating larger minimums than the facilities which currently exist. Please see KYTC Policy Manuals and FHWA's Program Guide for Utility Relocation and Accommodation for Federal-Aid Projects for additional requirements in this regard.

**11.1.2.5 Protection in Place**

The DBT shall be responsible for Protection in Place of all utilities impacted by the project as necessary for their continued safe operation and structural integrity.

**11.1.2.6 Abandonment and Removal**

As applicable to work being performed by the DBT, the DBT shall make all arrangements and perform all work necessary to complete each abandonment or removal (and disposal) of a utility in accordance with the approved utility agreement. The DBT shall obtain governmental approvals and consent from the affected utility owner and any affected landowner(s) or shall confirm that the utility owner has completed these tasks.

**11.1.2.7 Service Lines and Utility Appurtenances**

As applicable to work being performed by the DBT, whenever required to accommodate construction, operation, maintenance, and/or use of the project, the DBT shall cause Service Line Adjustments and Utility Appurtenance Adjustments. On completion of these, the DBT shall cause full reinstatement of the roadway, including reconstruction of curb, gutter, sidewalks, and landscaping, whether the utility adjustment work is performed by the Utility Owner or by the DBT.

**11.1.2.8 Early Adjustments (Not Applicable)**

**11.1.2.9 Agreements between the DBT and Utility Owners**

Except as otherwise stated in this Section or in the Agreement, each utility adjustment shall be specifically addressed in a utility agreement amendment. The DBT is responsible for preparing, negotiating, and obtaining execution by the utility owners, of all utility agreement amendments (including preparing all necessary exhibits and information about the project, such as reports, plans, and surveys). A utility agreement or amendment is not required for any utility adjustment consisting solely of protection in place in the utility's original location within the project right-of-way, unless the utility owner is being reimbursed for costs incurred by it on account of such protection in place.

#### **11.1.2.10 Utility Agreements**

KYTC has entered into one or more utility agreements with each affected utility owner to define the design, material, construction, inspection, and acceptance standards and procedures necessary to complete utility adjustments, as well as to define the KYTC and the utility owner's respective responsibilities for utility adjustment costs and utility adjustment activities such as design, material procurement, construction, inspection, and acceptance. A utility agreement may address more than one utility adjustment for the same utility owner. Additional adjustments may be added to an existing utility agreement by a utility agreement amendment.

The DBT shall adhere to each utility agreement.

#### **11.1.2.11 Utility Agreement Amendments**

The DBT may request a modification of an executed utility agreements or any component thereof shall be addressed using a utility agreement amendment. A utility agreement amendment may be used only when the allocation of responsibility for the utility adjustment work covered by that utility agreement amendment is the same as in the underlying utility agreement; otherwise, an additional utility agreement and new encroachment permit shall be required.

Each utility agreement amendment (including any utility adjustment plans attached thereto) shall be subject to KYTC approval as an amendment to the original encroachment permit.

#### **11.1.3 *RECORD KEEPING***

The DBT shall maintain construction and inspection records in order to ascertain that utility adjustment work is accomplished in accordance with the terms and in the manner proposed on the approved utility adjustment plans and otherwise as required by the applicable utility agreement(s) and/or amendments. The DBT may use the modified KYTC Utility Relocation Progress Report.

### **11.2 ADMINISTRATIVE REQUIREMENTS**

#### **11.2.1 *STANDARDS***

All utility adjustment work shall comply with all applicable laws, agency Encroachment Permit requirements, this ITP, regulatory agency approvals, the applicable utility adjustment standards, and the requirements as set forth in the utility company standards and specifications.

#### **11.2.2 *COMMUNICATIONS***

The DBT is responsible for holding meetings and otherwise communicating with each utility owner as necessary to accomplish in a timely manner the utility adjustments necessary to construct the project. KYTC will participate in these meetings if requested by the utility owner or the DBT, or otherwise as deemed appropriate in order to facilitate the progress on the project.

At least five business days in advance of each scheduled meeting, the DBT shall provide notice and an agenda for the meeting separately to KYTC and the appropriate utility owner. The DBT shall prepare minutes of all meetings with utility owners and shall keep copies of all correspondence between the DBT and any utility owner. Copies of these meeting minutes shall be forwarded to KYTC for the project files within one week following the respective meeting.

If an urgent/emergency situation arises, KYTC D-6 utilities will be notified immediately to participate in identifying solutions.

### **11.2.3 UTILITY ADJUSTMENTS MANAGER**

The DBT shall provide a utility adjustment manager with appropriate qualifications and experience for the utility adjustment work required for this project.

The utility adjustment manager's (UM) primary work responsibility shall be the performance of all the DBT's obligations with respect to utility adjustments. The UM shall be authorized by the DBT to approve all financial and technical modifications associated with utility adjustments and modifications to the utility agreement.

### **11.2.4 REAL PROPERTY MATTERS IF CHANGES ARE REQUIRED BY AN ATC OR DBT CHANGE**

The DBT shall provide the services described below in connection with existing and future occupancy of property by utilities if changes are required by an approved ATC or DBT change.

#### **11.2.4.1 Documentation of Existing Utility Property Interests**

It shall be the DBT's responsibility to confirm all existing utility property interest within the project right-of-way claimed by any utility owner.

#### **11.2.4.2 Acquisition of Replacement Utility Property Interests**

The DBT shall be responsible for working with each utility owner for acquiring any replacement utility property interests that are necessary for its utility adjustments. The DBT shall have the following responsibilities for each acquisition:

- A. The DBT shall coordinate with and provide all project information needed to each utility owner as necessary for the utility owner to identify any replacement utility property interests required for its utility adjustments.
- B. If the DBT and/or DBT subcontractors assists a utility owner in acquiring a replacement utility property interest, the DBT shall ensure that the following requirements are met:
  1. The files and records must be kept separate and apart from all acquisition files and records for the project right-of-way.
  2. The items used in acquisition of replacement utility property interests (e.g., appraisals, written evaluations, and owner contact reports) must be separate from the purchase of the project right-of-way.

- C. The DBT shall reimburse the utility owner for all replacement utility property interests required for its utility adjustments. No betterment in terms of property interest shall be paid for using project funds.

### **11.2.5 DOCUMENTATION OF REQUIREMENTS**

The DBT shall prepare and obtain execution by the utility owner of (and record in the appropriate jurisdiction, if applicable), all agreements or amendments including all necessary exhibits and information concerning the project (e.g., reports, plans, and surveys). Each agreement or amendment shall identify the subject utility(ies) by the applicable Encroachment Permit Number and shall also identify any real property interests by parcel number or highway station number or by other identification acceptable to KYTC.

## **11.3 DESIGN IF REQUIRED BY AN ATC**

### **11.3.1 DBT'S RESPONSIBILITY FOR UTILITY IDENTIFICATION**

The DBT bears sole responsibility for ascertaining, at its own expense, all pertinent details of utilities located within the project right-of-way or otherwise affected by the project, whether located on private property or within an existing public right-of-way and including all service lines affected by the approved ATC.

### **11.3.2 TECHNICAL CRITERIA AND PERFORMANCE STANDARDS**

All design plans for utility adjustment work, whether furnished by the DBT or by the utility owner, shall be consistent and compatible with the following:

- A. The project as designed and constructed
- B. Any utilities remaining in, or being installed in, the same vicinity
- C. All applicable governmental approvals/permits
- D. Private approvals of any third parties necessary for such work
- E. KYTC Policies and Procedures as set forth in Kentucky's State Utility and Rail Guidance Manual and as specified in the approved utility agreement.

The DBT shall be responsible for validating that all utility adjustments performed as part of this project adhere to these criteria.

### **11.3.3 UTILITY ADJUSTMENT PLANS**

Utility adjustment plans, whether furnished by the DBT or by the utility owner, shall be signed and sealed by a registered Professional Engineer (PE), if required by the utility owner, regulatory agencies, or KYTC.

#### **11.3.3.1 Plans Prepared by DBT**

Where the DBT and the utility owner have agreed that the DBT shall furnish a utility adjustment design, the DBT shall prepare and obtain the utility owner's approval of plans, specifications, and cost estimates for the utility adjustment (collectively, "Utility Adjustment Plans") by having an authorized representative of the utility owner sign the plans as "reviewed and approved for construction." The Utility Adjustment Plans (as approved by the utility owner) shall be attached to the applicable utility agreement (or amendment) and estimate, which shall serve as the appropriate Encroachment Permit application submitted for KYTC approval. Please be advised that the utility company is ultimately

responsible for execution of the utility agreement or amendment, regardless of who prepares the plans. The DBT is responsible for facilitating this process in a manner such that all requirements are adequately addressed, and commitments fulfilled in accordance with all provisions set forth in the contract documents.

Unless otherwise specified in the applicable utility agreement(s), all changes to utility adjustment plans previously approved by the utility owner (excluding estimates, if the utility owner is not responsible for any costs) shall require written utility owner approval. The DBT shall transmit any KYTC comments to the utility owner and shall coordinate any modification, re-approval by the utility owner, and re-submittal to KYTC as necessary to obtain KYTC approval, as applicable.

**11.3.3.2 Plans Prepared by the Utility Owner**

For all Utility Adjustment Plans to be furnished by a utility owner, the DBT shall coordinate with the utility owner as necessary to confirm compliance with the project plans, including possible changes being proposed by the DBT. Those utility adjustment plans shall be attached to the applicable utility agreement (or amendment) and estimate, which shall serve as the appropriate Encroachment Permit for KYTC approval. The DBT shall be responsible for coordination with the utility company to ensure that all KYTC comments to the utility owner are adequately addressed in the design and construction of the project, including, any modification, re-approval by the utility owner and re-submittal to KYTC as necessary to obtain KYTC approval.

**11.3.3.3 Design Documents**

Each proposed utility adjustment shall be shown in the design documents, regardless of whether the utility adjustment plans are prepared by the DBT or by the utility owner.

**11.3.3.4 Certain Requirements for Underground Utilities**

Casing or long-life materials as specified in accordance with the KYTC Permits Manual and the KYTC Utilities Manual shall be required for use on the project, where applicable.

**11.3.3.5 Utility Agreement or Amendment Submittals**

Each utility adjustment shall be addressed in a utility agreement or amendment prepared jointly by the DBT and the utility owner and submitted to KYTC for review and comment. The DBT shall coordinate with the utility owner to prepare all components of each utility agreement or amendment. Completion of the review and approval process for the applicable utility agreement or amendment, as well as issuance of any required KYTC approvals, shall be required before the start of construction for the affected utility adjustment work.

At its sole discretion, KYTC has the authority to approve the placement of utilities within project right-of-way. It shall be the responsibility of the DBT to work with the utility owner and KYTC D-6 Utilities to prepare all required documentation to be included with each subsequent utility agreement or amendment submittal.

The DBT shall arrange for the utility owner to execute each utility agreement and subsequent Encroachment Permit required to do the work on the Project.

Provisions governing the procedure for and timing of utility agreement or amendment submittals are in Section 11.5 (Deliverables).

All utility adjustments covered by the same initial utility agreement may be addressed in a single Encroachment Permit. Please refer to the KYTC Encroachment Permit Manual for additional information. In general, the utility agreement package required for each utility relocation shall include:

- A. Encroachment Permit application (KYTC).
- B. Utility agreement (executed between the DBT and the Utility Owner).
- C. Utility adjustment plans and specifications as referenced in the utility agreement.
- D. Roadway plans and profile and/or structure plans and X-sections clearly indicating existing and proposed utility location. For utilities deemed acceptable to remain in place by the utility owner and the DBT, the location of the utility, both horizontally and vertically, along with any special construction requirements or protection needed to prevent damage to the facility during construction of the project, must be clearly defined.
- E. Utility relocation cost estimate as defined in the utility agreement including definition and separation of any betterment proposed.
- F. Six complete utility agreement or amendment packages as described herein or as directed by KYTC. Once review and comment is complete, three copies shall be returned to the DBT and utility company for their use.

## **11.4 CONSTRUCTION**

### **11.4.1 GENERAL CONSTRUCTION CRITERIA**

All utility adjustment construction performed by the DBT shall conform to the requirements listed below. In addition, the DBT is responsible for verifying that all utility adjustment construction performed by each utility owner conforms to the requirements described below. In case of nonconformance, the DBT shall cause the utility owner (and/or its contractors, as applicable) to complete all necessary corrective work or to otherwise take such steps as are necessary to conform to these requirements.

- A. All criteria identified in Section 11.3 (Design)
- B. The utility adjustment plans, and agency requirements included in the Encroachment Permit approved by KYTC
- C. Approved utility agreement amendments
- D. All project safety and environmental requirements
- E. Erosion prevention and sediment control requirements

F. Easement acquisition procedures

**11.4.2 INSPECTION OF UTILITY OWNERS' CONSTRUCTION**

The DBT shall set forth procedures for inspection of all utility adjustment work performed by utility owners (and/or their contractors) to verify compliance with the applicable requirements described in Section 11.4.1 (General Construction Criteria). The inspection shall validate that the utility work adheres to the above criteria, is as designed, and conforms to the approved utility agreement and any approved amendments. The DBT should be aware utility facility owners may require a representative from the company to inspect the work performed on that company's facilities during active construction.

**11.4.3 SCHEDULE UTILITY ADJUSTMENT WORK**

The utility adjustment work (other than construction) may begin at any time following issuance of an encroachment permit number. The DBT should be aware there may be seasonal restrictions on utility outages. No time extensions will be granted for any utility company restrictions. The DBT shall not arrange for any utility owner to begin any demolition, removal, or other construction work for any utility adjustment until all of the following conditions are satisfied:

- A. The utility adjustment is covered by an executed utility agreement (and any conditions to commencement of such activities that are included in the utility agreement have been satisfied)
- B. Availability and access to affected replacement utility property interests or public right-of-way have been obtained
- C. If any part of the construction work for the utility adjustment shall affect the project right-of-way, then approvals from the KYTC shall be received
- D. The review and comment process has been completed and required approvals have been obtained for the Encroachment Permit covering the utility adjustment
- E. All governmental and permitting approvals necessary for the utility adjustment construction have been obtained, and any pre-construction requirements contained in those approvals have been satisfied
- F. The DBT has verified that all utility adjustments address the project needs and are not in conflict with one another
- G. The DBT has conducted a preconstruction joint utility meeting to schedule and plan all utility owner adjustments being constructed by the DBT. KYTC shall be invited to attend this meeting
- H. All other conditions to that work stated in the ITP have been satisfied

Any delays incurred due to utility relocation work that the DBT is responsible for on the project are the responsibility of the DBT. This shall include delays incurred due to utility relocations and unforeseen utility repairs. The DBT shall be responsible for direct coordination with all utility companies involved in the project. The DBT will have to coordinate and work in conjunction with any utility owner, no matter if the DBT is physically relocating features for that utility owner or not. In addition, it may be necessary to phase work to avoid active utilities that ultimately become inactive. Relocation of those utilities that will ultimately become inactive may either be performed by the DBT, or the relocation may need

to be performed by the utility owner. Other than utility relocation costs contained in the lump sum bid amount for the project, KYTC will not provide any additional monetary compensation or time extensions for delays caused during the relocation of any utility.

**11.4.4 STANDARD OF CARE REGARDING UTILITIES**

The DBT shall carefully and skillfully carry out all work impacting utilities and shall mark, support, secure, exercise care, and otherwise act to avoid damage to utilities. At the completion of the work, the condition of all utilities shall be equivalent to their use and function prior to construction.

**11.4.5 EMERGENCY PROCEDURES**

The DBT shall provide emergency procedures with respect to utility adjustment work. The DBT shall obtain emergency contact information from, and establish emergency procedures with, each utility owner and KYTC D-6 utility staff.

**11.4.6 UTILITY ADJUSTMENT FIELD MODIFICATIONS**

The DBT shall establish a procedure to be followed if a utility adjustment field modification is proposed by either the DBT or a utility owner, after the utility agreement or amendment (which includes the utility adjustment plans) has been approved. The procedure shall contain, at minimum, the following processes:

- A. The utility owner's review and approval of a utility adjustment field modification proposed by the DBT, or the DBT's review and approval of a utility adjustment field modification proposed by the Utility Owner.
- B. Submittal of plans for the proposed utility adjustment field modification to KYTC for its approval.
- C. Transmittal of utility adjustment field modifications to the appropriate construction field personnel.
- D. Inclusion of any utility adjustment field modifications in the record drawings for the Project.

The DBT shall cause the procedure to be followed for all utility adjustment field modifications, whether the construction is performed by the DBT or by the utility owner.

**11.4.7 SWITCH OVER TO NEW FACILITIES**

After a newly adjusted utility has been accepted by the utility owner and is otherwise ready to be placed in service, the DBT shall coordinate with the utility owner regarding the procedure and timing for placing the newly adjusted utility into service and terminating service at the utility being replaced. The DBT should be aware there may be seasonal restrictions on utility outages. No time extensions will be granted for any utility company restrictions.

**11.4.8 RECORD DRAWINGS**

The DBT shall provide record drawings to each utility owner for utilities adjusted by the DBT, in accordance with the applicable utility agreement(s) or amendment(s).



The DBT shall provide As-Built Record Drawings to KYTC for the DBT-managed utilities. These drawings shall show the location of, and label as such, all abandoned utilities and shall show and label all other utilities, whether remaining in place or relocated, located within the project right-of-way, or otherwise impacted by the project. The DBT shall provide the record drawings for each adjustment to KYTC not later than 90 days after the utility owner accepts the adjustment.

#### **11.4.9 MAINTENANCE OF UTILITY SERVICE**

All utilities shall remain fully operational during all phases of construction, except as specifically allowed and approved in writing by the utility owner. The DBT shall schedule utility adjustment work in order to minimize any interruption of service, while at the same time meeting the project schedule and taking into consideration seasonal demands. Again, the DBT should be aware there may be seasonal restrictions on utility outages. No time extensions will be granted for any utility company restrictions.

Any intentional or accidental disruption of service due to damage to gas, sewer, or water mains caused by any of the DBT's operations without three days advance notice to the utility facility owner shall be cause for liquidated damages in the amount of five thousand dollars per day (\$5,000/day) per occurrence against the DBT until such a time as the utility facility is restored.

Any intentional or accidental disruption of any individual gas, sewer, or water service caused by any of the DBT's operations without three days advance notice to the utility facility owner shall be cause for liquidated damages in the amount of five hundred dollars per day (\$500/day) per occurrence against the contractor until such a time as service is restored.

In the case of a main disruption, liquidated damages shall be charged at the main disruption rate only. Liquidated damages shall not be charged in addition to service disruptions when a main disruption is involved.

Any cost associated with damage during construction shall be the responsibility of the DBT.

#### **11.4.10 TRAFFIC CONTROL**

The DBT shall be responsible for the coordination of all traffic control made necessary by the utility adjustment work, whether performed by the DBT or by the utility owner. Traffic control for utility adjustments shall be coordinated with, and subject to approval by, the local agency(ies) with jurisdiction. Traffic control shall comply with the guidelines of the MUTCD and of Section 12.1 (Maintenance of Traffic) of this ITP document. Delegation of responsibilities regarding who performs the traffic control operations during the utility adjustment work shall be included in the utility agreement or amendment.

If utility construction requires closure of multiple legs of a major intersection or closure of an interstate ramp, 3 days' notice must be provided to KYTC to coordinate with our communications professionals for travel advisory notice.

#### ***11.4.11 UNKNOWN UTILITIES***

If during construction, the DBT uncovers a utility facility that the respective utility company did not know existed, the DBT is to bring this to KYTC's attention immediately. KYTC will review the situation with the respective utility company and the DBT to determine the best course of action to minimize impacts to the utility facility and the project schedule. If it is determined by KYTC that establishing the presence of the unknown utility was not possible by the DBT during the procurement phase, KYTC will consider this a changed condition and work with the DBT and the utility company to make the appropriate adjustments for cost as part of a change order. The project schedule shall only be revised if it can be demonstrated to the satisfaction of the KYTC that the unknown utility conflict has materially affected the critical path for the project.

The DBT shall follow the procedures for extra work/change orders identified in Sections 104.02 (Alterations of Plans or Character of Work), 108.07 (Determination and Extension of Contract Time), and 109.04 (Extra Work) of the Standard Specifications.

### **11.5 DELIVERABLES**

The DBT shall provide all submittals required by the ITP described in this section to meet the project schedule, taking into account KYTC-designated review and response time. For this Project, KYTC requires 10 business days for review, comment, or approval of Encroachment Permits, provided that all required documentation is included with the Encroachment Permit submittal. At the sole discretion of KYTC, if it is determined that additional information is required in order to review and process the Encroachment Permit for approval, the DBT shall revise the encroachment permit application to include the required revisions or missing information as identified by KYTC, and said agency shall have 10 business days from the date of re-submittal for review and comment.

#### ***11.5.1 DBT'S UTILITY TRACKING REPORT AND PROJECT COORDINATION REQUIREMENTS***

The DBT shall maintain a utility tracking report in tabular form, listing all DBT-managed utilities located within the project right-of-way or otherwise potentially affected by the project. The utility tracking report shall include sufficient information regarding all factors needed to reasonably determine the status of each utility to be relocated as part of the project. The DBT shall submit the utility tracking report to KYTC and update it monthly. The DBT shall facilitate, at a minimum, monthly utility company status meetings to discuss any project issues and to update KYTC on the progress being made on the project.

#### ***11.5.2 UTILITY COMPANY CONTACTS***

See Appendix F.

## **12 NORFOLK-SOUTHERN (NS) RAILROAD**

### **12.1 GENERAL REQUIREMENTS**

Railroad construction is a critical component of the KY 338 Project and the DBT shall be responsible for the construction of railroad facilities as detailed in the roadway and bridge construction plans and railroad construction plans which include the railroad bridge and tracks over proposed KY 338, the temporary track (shoofly), and proposed laydown yard

which are included in the provided plans. KYTC will obtain from Norfolk-Southern Railroad: 1) approval for the plans and a 2) railroad construction agreement between KYTC and the railroad. The railroad construction agreement will be provided to the DBT once approved. A draft agreement is included in Appendix G. No work can occur on Norfolk-Southern right-of-way until KYTC receives approval for the railroad plans, the railroad construction agreement and right of entry upon NS property. The railroad construction agreement and right of entry is anticipated to be available by March 1, 2020.

This section defines the criteria required for the Project to accommodate and/or relocate facilities and structures for Norfolk-Southern Railroad. The DBT is responsible for coordination with all owning and operating railroads that may be impacted by the work. Details regarding the DBT's plan for railroad coordination shall be addressed in the Railroad Coordination Plan prepared by the DBT for the Project.

Any changes to the provided railroad plans or railroad construction agreement will be the responsibility of the DBT and the DBT will be required to obtain approvals from NS before changes can be executed. These changes will need to be approved by KYTC who must sign the updated construction agreement.

The DBT shall set forth an approach, procedures, and methods for the rail line construction meeting the requirements set forth in the Railroad Agreement provided in Appendix G.

## **12.2 RAILROAD DESIGN STANDARDS IF DBT PROPOSES an ATC OR CHANGES**

If the DBT proposes an ATC or change to the approved railroad plans and/or construction agreement, the DBT shall prepare the geometric design of the railroad facilities and/or roadway elements impacting railroad facilities following the FHWA Railroad-Highway Grade Crossing Handbook, American Railway Engineering and Maintenance-of-Way Association (AREMA), and FHWA Manual on Uniform Traffic Control Devices (MUTCD) and incorporating the usual and customary design standards and operating requirements of the owning and operating railroad(s) that has or is expected to have an agreement with KYTC.

The DBT's design shall minimize service interruptions to existing rail lines.

Construction details and specifications shall conform to KYTC standard specifications and the rules, regulations, and requirements of the owning and operating railroads including those related to safety, fall protection, utility crossings (if required), and protective equipment.

### ***Coordinating Design***

The DBT shall coordinate the design with the owning and operating railroad. This coordination shall include meetings and plan submissions and shall address pertinent commentary provided by the railroad. The DBT is expected to fully consult the railroad(s) in such a manner as to ensure compliance with all standards and provide a viable final design.

### ***Design Costs***

The DBT will be responsible for all design costs including associated costs from NS due to the proposed ATC and/or changes.

### ***Records***

The DBT shall maintain a record of all negotiation, coordination, and construction efforts in relation to the railroad involvement. These records shall be provided in copy to KYTC as completed. Specific documents required are as follows: estimates, design comments, agreements, inspection records, invoices, and change orders

## **12.3 PROJECT WORK AFFECTING RAILROAD OPERATIONS**

Where the Project crosses or impacts a railroad Right-of-Way, operations, or facilities, the DBT shall coordinate the work with the owning and operating railroads. As documented in the approved railroad construction agreement, all costs, fees, work, insurance requirements, and other incidentals associated with these matters shall be the responsibility of the DBT and included in the all-inclusive lump sum bid item. KYTC will retain responsibility for costs of flagging but the DBT shall acquire approval from KYTC regarding the need for flagging services.

### ***Schedule***

The KYTC shall be responsible for obtaining the required approvals, permits, and agreements as required for the work and documented in the approved railroad construction agreement, including any railroad related work. If an approved ATC requires changes to the railroad construction agreement and/or railroad plans, then the DBT is responsible for all costs and schedule impacts associated with the change, including obtaining railroad approval.

The DBT shall be responsible for including and incorporating all railroad related items including the work performed by the railroad into the Project schedule. The DBT shall be responsible for scheduling the work to be completed by Norfolk-Southern railroad as well as the work to be completed by its own forces. It is currently anticipated that Norfolk-Southern forces will be mobilized a minimum of three times. No time delays shall be granted to the DBT for the railroad related work whether the work is part of the stamped construction plans or an approved ATC.

The DBT shall provide 35 calendar days' notice to KYTC for KYTC to advise industry and emergency responders of closures to the at-grade rail crossings of Richwood Road, Shorland Drive or Old Lexington Pike. KYTC will notify affected industries and emergency responders. At no time will it be permitted to close both Richwood Road (KY 338) and Shorland Drive at-grade crossings at the same time; at all times there will be a minimum of a single point of ingress/egress to the industrial park situated on the east side of the existing railroad.

### ***Operation Safety***

The DBT shall arrange with NS for railroad flagging as required with approval from KYTC. These flagging costs will be paid by KYTC as per the railroad construction agreement. The DBT shall comply with the owning and operating railroad's requirements for contractor safety training prior to performing work or other activities on the owning and operating railroad's property.

### ***Railroad Right of Entry Agreement***

In order to enter the railroad's right-of-way to perform the work, KYTC will obtain a Right of Entry Agreement from the railroad and shall coordinate the arrangements of the necessary agreements directly with the owning and operating railroad. The Right of Entry

Agreement is anticipated by March 1, 2020 and a draft will be included in Appendix G when available.

***The DBT Right of Entry Agreement***

The DBT shall cooperate and coordinate with all owning and operating railroads for access by the owning and operating railroad and/or their agents to the rail Right-of-Way as necessary for rail maintenance and operations activities.

***Insurance Requirements***

The DBT shall procure and maintain, prior to working adjacent to and entry upon operating railroad property, insurance policies naming the railroad as named an additional insured.

The DBT shall obtain the following types of insurance:

- A. Comprehensive General Liability Insurance
- B. Contractors' Protective Liability Insurance
- C. Railroad Protective Liability Insurance: The DBT and any contractor shall take out, before work is commenced and to keep in effect until work is completed and accepted, a Railroad Protective Public Liability Policy of Insurance in the name of the Railroad, said policy to be in the form specified in the Federal-Aid Policy Guide 23 CFR, Part 646, Subpart B, issued December 9, 1991, and any subsequent amendments or supplements thereto.

The maximum dollar amounts of coverage with respect to bodily injury, death, and property damage, is limited to a combined amount of \$5,000,000.00 per occurrence with an aggregate limit of \$10,000,000.00 for the term of the policy. Further, the DBT will certify that he/she has Public Liability and Property Damage Insurance in the amounts required by the respective railroad companies for this project. Example insurance requirements are included in the reference documents. The DBT shall verify all insurance requirements with the respective railroads. The policies of insurance specified in this section shall be with a company authorized to do business in the Commonwealth of Kentucky.

- D. Additional insurance policies as may be required as part of the Railroad Construction Agreement.

All insurance policies shall be in a form acceptable to the operating railroad. Copies of all insurance policies shall be submitted and approved by the owning railroad, operating railroad, and KYTC prior to any entry by the DBT upon railroad property.

**12.4 CONSTRUCTION REQUIREMENTS**

The DBT shall comply with all construction requirements and specifications set forth by the owning and operating railroad as well as documented in the Railroad Construction Agreement.

***Cost of Right-of-Way if DBT proposed an ATC or Changes***

The DBT shall be responsible for the cost of coordinating and providing all services required to obtain all necessary Right-of-Way agreements required to perform any railroad related work due to an approved ATC or change.

***Cost of Reimbursements if DBT proposed an ATC or Changes***

The DBT shall be responsible for all reimbursement costs due to an approved ATC or change to any railroad company that may be affected by the work, for reimbursing all costs that any involved railroad companies incur in adjusting its facilities or operations to accommodate the work in compliance with all applicable laws and regulations.

***Design Criteria in Railroad Right-of-Way***

- A. The design of any facilities shall conform to the requirements of the owning and operating railroad specifications and the provisions set forth by the Railroad Agreement.
- B. All railroad tracks and other railroad property must be protected from damage during the work.
- C. All horizontal clearances shall conform to the operating railroad specifications.
- D. All roadway substructure elements within 50 feet 0 inches of the center line of tracks shall be designed per American Association of State Highway and Transportation Officials (AASHTO) LRFD collision load requirements.

***Monitoring Construction***

The DBT shall provide monthly status reports to KYTC.

**12.5 CONTACT INFORMATION**

Norfolk-Southern Railroad contact: TBD

**13. DESIGN AND CONSTRUCTION REQUIREMENTS**

**13.1 MAINTENANCE OF TRAFFIC (MOT)**

In addition to the Governing Regulations listed in Section 7.1 of this document, the DBT shall submit an approach for MOT for the project that incorporates the work required within this ITP as well as propose any innovative ideas that may expedite the work. A Traffic Management Plan shall need to be submitted and approved (form can be found on the KYTC Highway Design Web Page). The advanced and/or stamped construction plans have maintenance of traffic plans for each component of the project that the DBT may choose to utilize. It shall be the responsibility of the DBT to coordinate the MOT between each component. KYTC will entertain changes to the MOT plans through the ATC process as described in Section 6.1.

***13.1.1 GENERAL***

All MOT procedures shall be in accordance with Manual on Traffic Control Devices (MUTCD) except when the KYTC standard drawings or standard specifications are more restrictive than KYTC documents shall govern. The speed limit on any road within the project be reduced by 10 MPH with approval from the engineer. The DBT will be allowed less restrictive procedures if the advanced and/or stamped construction plans have so indicated. The DBT must maintain access to businesses and provides passage for emergency responders.

***13.1.2 MOT RESTRICTIONS***

No lane closures shall be allowed on I-75, KY 338, KY 536 and US 25 during observance of any National Holidays identified in Section 101 of the Standard Specifications and between the dates of November 1<sup>st</sup> and January 15<sup>th</sup>. Under

special circumstances, KYTC reserves the right to restrict the use of lane closures due to unforeseen special events. In principle, the DBT shall maintain the current lane configuration (or better), for the life of the project except as noted in the provided MOT plans. Suggestions for additional working hours may be proposed by the DBT to KYTC as a part of the DBT project proposal.

Temporary Raised Pavement Markers, Type IVA as identified in Section 112 of the Standard specifications shall be required when I-75 traffic lanes are situated outside their normal position.

Delineators for barriers shall be required on temporary concrete barrier wall according to Section 509 of the Standard Specifications.

All temporary striping shall be temporary paint, and all striping removal shall be performed by water-blasting. Temporary tape may only be used for short segments and durations with the approval of the engineer.

The DBT shall submit any updated MOT plans to KYTC for approval. The KYTC will approve or provide comments within 14 calendar days.

Ramp closures shall only be allowed as detailed in the stamped construction plans final proposal plans for the pavement rehab. Multiple ramp closures at a single time must be approved by the engineer unless prescribed in the stamped construction plans. Detours for ramp closures must be as prescribed in the stamped construction plans. Any time a ramp is closed beyond the allotted times specified above disincentive fees will be charged at \$3,500 per hour for each hour or portion of an hour.

#### **13.1.2.1 I-75**

##### **I-75 (Ramp Tie-Ins)**

Traffic control schemes for the ramp tie-ins are included in the stamped construction plans. All work on I-75 to be completed for the ramp tie-ins, except traffic control operations and final pavement markings shall be conducted behind temporary concrete barrier wall as identified in the Standard Drawings. A lane closure for separation must be in place during barrier wall placement. Access to and from the work zone adjacent to the interstate shall be at the beginning or end of the string of barrier wall.

The contractor will be allowed to reduce the number of mainline I-75 lanes open to traffic in each direction during non-peak hours in any phase or direction. From 8:00 PM to 6:00 AM, the contractor will be allowed to reduce traffic to two lanes. From 12:00 AM (Midnight) to 6:00 AM (5:00 AM for Northbound), the contractor will be allowed to reduce traffic to a single lane. Construction operations on I-75 using shoulder closures without barrier wall are prohibited unless they are less than one work shift and positive separation of at least 11 feet is provided. Any time the number of mainline lanes in either the northbound or southbound direction are closed beyond the allotted times specified above and in the plans, disincentive fees will be charged at \$3,500 per

hour for each hour. Ramp closures shall only be permitted during the time periods established in the stamped construction plans.

**I-75 (Bridge Work Included with Pavement Rehab)**

Traffic control schemes for the bridge work associated with the pavement rehab are included in the final proposal plans for the pavement rehab. The contractor will be allowed to reduce the number of mainline I-75 lanes open to traffic in each direction during non-peak hours in any phase or direction. From 8:00 PM to 6:00 AM, the contractor will be allowed to reduce traffic to two lanes. From 12:00 AM (Midnight) to 6:00 AM (5:00 AM for Northbound), the contractor will be allowed to reduce traffic to a single lane. To facilitate the bridge rehab work, the DBT may reduce traffic by one lane for the duration of 30 calendar days Northbound and 30 calendar days southbound. Any time the number of mainline lanes in either the northbound or southbound direction are closed beyond the allotted times specified above and in the plans, disincentive fees will be charged at \$3,500 per hour for each hour or portion of an hour.

**I-75 (Pavement Rehab)**

Traffic control schemes for the pavement rehab are included in the final proposal plans. The pavement rehab portion of the project shall not be completed until the bridge work is complete and all ramps associated with the other portions of the project are fully completed through the top lift of base and fully connected to mainline I-75 as depicted in stamped construction plans.

In addition, the pavement rehab portion of the project shall not be completed during the months of November thru March of any year.

The contractor will be allowed to reduce the number of mainline I-75 lanes open to traffic in each direction during non-peak hours in any phase or direction. From 8:00 PM to 6:00 AM, the contractor will be allowed to reduce traffic to two lanes. From 12:00 AM (Midnight) to 6:00 AM (5:00 AM for Northbound), the contractor will be allowed to reduce traffic to a single lane. To facilitate final resurfacing of the pavement rehab area; the DBT may reduce traffic to two lanes for the duration of 8 weekends (4 weekends NB and 4 weekends SB). A weekend shall be described as the 57 hour period between 8:00 PM on Friday to 5:00 AM on Monday. Traffic shall not be permitted to drive on milled pavement surfaces. Ramp closures will not be permitted for completion of the pavement rehab. Any time the number of mainline lanes in either the northbound or southbound direction are closed beyond the allotted times specified above and in the plans, disincentive fees will be charged at \$3,500 per hour for each hour or portion of an hour.

**13.1.2.2 KY 338, KY 536, US 25, and other roadways**

Traffic control schemes for the construction of these roadways are provided in the stamped construction plans. Any time frames established in the stamped construction plans that prohibit traffic restrictions shall be adhered to in any alternate traffic schemes. Unless specifically required



in the provided stamped construction plans, construction operations on roadways other than I-75 may be allowed without barrier wall during all daylight hours provided any resulting temporary drop-off conditions and signing requirements are adequately addressed. In general, any drop-off condition 4 inches or less shall be protected by barrels or delineators spaced every 40 feet. Drop-offs greater than 4 inches shall be wedged with DGA or other suitable materials on a 3:1 or flatter slope in conjunction with barrels spaced every 40 feet. If a positive separation of 8 feet or greater can be achieved between traffic and the drop-off, no wedging shall be required. Temporary drop-offs during working hours that construction operations are taking place should be kept to a minimum. Drop-offs greater than 4 inches, resulting from excavations directly adjacent to traffic (with no positive separation), shall be limited to 500 feet in length. The intent of this requirement is to keep the temporary "wedging operation" in close proximity to the work to promote safety for the motorist.

### **13.1.3 MAINTAIN PAVEMENT**

Contrary to Section 105.11 of the Standard Specifications, the contractor will be required to perform pothole patching. Upon receipt of the "Notice to Begin Work", the contractor shall be responsible for routine pothole patching. The contractor shall be responsible for patching both directions of I-75 between milepoints 169.439 and 178.02, KY 338 throughout the project length, KY 536 throughout the project length, US 25 throughout the project length and any other pavements encompassed by the project. The contractor shall inspect, and repair issues as necessary and significant spot issues shall be repaired within 24 hours of notice, for the safety and protection of the traveling public and their property and may require temporary, quick repairs. Other, more extensive repairs may need to be scheduled in order to provide a more permanent preventative repair that will last throughout the winter. Maintaining the pavement within the project limits shall be considered a component of the overall traffic control plan and shall be subject to Section 112.03.15 – A) of the Standard Specifications, except that only the prescribed dollar values in that section shall be used in lieu of the project liquidated damage rate.

### **13.1.4 LIGHTING**

Contrary to Section 105.11 of the Standard Specifications, lighting shall be maintained by the DBT. Lighting shall be maintained on the mainline interstate and all associated ramps between milepoints 169.439 and 178.02. Existing or proposed lighting must remain burning throughout the entire timeline of the project; from the date Notice to Begin Work is distributed until the Project Completion Notice is issued. In the event that existing or proposed lighting cannot remain burning, temporary lighting shall be provided that meets the design parameters of the currently existing lighting.

In order to maintain the lighting system, the successful bidder may need to investigate and or perform work in areas beyond the project limits. Maintaining the lighting system shall require the successful bidder to perform any work necessary to ensure all lights remain burning; all necessary shall be performed according to Section 716 of the Standard Specifications. In the event that

maintaining the lighting system requires new poles, transformer bases or light arms, the KYTC will provide those at no cost to the DBT; however, all other materials and devices necessary to maintain the lighting shall be provided by the DBT. Maintaining the lighting system shall be considered a component of the overall traffic control plan and shall be subject to Section 112.03.15 – A) of the Standard Specifications, except that only the prescribed dollar values in that section shall be used in lieu of the project liquidated damage rate.

## **13.2 LOCATION & DESIGN**

This section includes Location & Design Special Provisions that are in addition to the Governing Regulations listed in Section 7.1 of this document.

### **13.2.1 SURVEY**

All project survey requirements shall be in accordance with Section 300 of the KYTC Design Manual. Survey / Staking for construction shall be according to Section 201 of the Standard Specifications; except that KYTC shall not provide any of the services described in Section 201.03.01; those items of work shall be provided by the DBT. Placement of proposed Right of Way monuments, in accordance with KYTC standards, shall be required on this project. Placement of all proposed Right of Way monuments shall be performed by a Registered Surveyor, with a current registration, recognized by the Kentucky State Board of Registration for Professional Engineers and Surveyors. Costs associated for this item shall be borne by the DBT.

The DBT shall provide the following items prior to final acceptance of the As-Built Plans:

- A. Listing of all new monumentation, set (horizontal and vertical) plotted on the As-Built Plans.
- B. Copies of all Deeds, Plats, Maps, and other written evidence used to establish points related to the project including summaries of all parole evidence acquired as part of the survey operation.

### **13.2.2 FUNCTIONAL CLASSIFICATION OF ROADWAY**

Urban Interstate (I-75)  
Urban Arterial (KY 338, KY 536 & US 25)

Interstate Ramp design shall be performed according to the standards established by the KYTC Design Manual.

### **13.2.3 DESIGN SPEED CRITERIA**

65 mph (I-75)  
35 mph (KY 338, KY 536 & US 25) except 25 mph through DCD's and at KY 338/Triple Crown roundabout as detailed on plans.

### **13.2.4 GEOMETRIC CRITERIA**

Design Executive Summaries for KY 338 and KY 536 are included in Appendix C. The DBT's final designs shall be equivalent to these criteria or should offer an improvement to these criteria.

**13.2.5 PAVEMENT**

Approved Pavement Designs, as exhibited on the Typical Sections, are detailed within the advanced and/or stamped construction plans.

Material Transfer Vehicle Required: Yes  X  No    
*See Special Note for Materials Transfer Vehicle in the Standard Specifications.*

Pavement Ride Quality Required: Yes  X  No

*See Section 410 of the Standard Specifications for Asphalt Pavement. Category A shall apply for all Asphalt Pavements on mainline interstate. Category B shall apply for all other Asphalt Pavements.*

*See Section 501 of the Standard Specifications for Concrete Pavement. Category B shall apply for Concrete Pavement.*

In addition to the requirements included in the Standard Specifications, JPC pavements shall be constructed according to the SPECIAL NOTE FOR DOWEL BAR AND TIE BAR PLACEMENT IN JPC PAVEMENT that is included in Appendix I.

**13.2.6 TYPICAL SECTION**

See advanced and/or stamped construction plans for each project. No variations of typical section dimensions permitted.

**13.2.7 DRAINAGE**

See the respective Drainage folders provided in supplemental folder with the advanced and/or stamped construction plans. The drainage design for the projects are challenging and complicated. The DBT will be responsible for managing the drainage during construction and any changes in the design of the drainage structures should be proposed as an ATC.

**13.2.8 EXCESS MATERIAL SITES**

The construction activities of this project may result in a considerable amount of excess material. It is the DBT’s responsibility to dispose of material in compliance with the United States Army Corps of Engineers (USACE) and the Kentucky Division of Water (DOW) rules and regulations pertaining to discharges into U.S. Waters. The DBT will be responsible for obtaining the excess material site(s) and the associated required permits (i.e. Section 404 & 401 permits) and certifications. When applying for permits, obtain approval from KYTC and obtain the permit in the DBT’s name from USACE. The DBT will include the time to acquire the permit in their project schedule. Mitigation requirements resulting from the use of an excess material site will likely be in the form of in-lieu fees and will be the responsibility of the DBT and should be included in the Lump Sum bid. Any work associated with the excess material site will be incidental to the excavation cost including but not limited to the following items: Erosion Control Devices, Clearing and Grubbing, Seeding and Protection, Temporary and Permanent Drainage Ditches and Structures.

Questions concerning any potential impacts to “Waters of the United States” should be brought to the attention of the appropriate District Office for the Army

Corps of Engineers for determination, prior to disturbance. Any fees associated with obtaining permit approvals for the disposal of excess material from the USACE or other appropriate regulatory agencies are the responsibility of the DBT.

### **13.2.9 DESIGN EXCEPTIONS FOR AN APPROVED ATC**

Due to the sensitive nature of the approval process for a Design Exception, it is a requirement that all design exceptions be submitted for consideration to the KYTC in writing no less than 45 days prior to submittal of the Technical Proposal. A detailed explanation of the justification for this exception shall be provided with this request. All DBTs shall be made aware of the request as well as approval or disapproval in writing. KYTC does not intend to approve design exceptions after the contract is awarded unless extreme and unforeseen circumstances may be demonstrated. The safety of the traveling public shall not be compromised by a design exception.

The following items need to be individually discussed for any requested design exception:

- A. Amount and character of traffic
- B. Type of project (e.g. new construction, 3R)
- C. Accident history relevant to the exception request
- D. Specific information pertinent to the type of exception being requested (i.e. deferral of bridge widening requests should address structural and function adequacy of existing bridge and project a future time for widening and etc.)
- E. Underlying reason for requesting exception
- F. Effect, if any, exception shall have on other standards (i.e. design speed exception would affect requirements for grade, curvature, sight distance, etc.)
- G. Effect of the exception on the safety and operation of the facility
- H. Cost of attaining full standards (phrases such as obtaining the standard would be too “costly” or beyond the scope of the project are of little value in making a decision)
- I. Future improvements and their relation to the requested exception
- J. Any features which would tend to mitigate the deviation

### **13.2.10 FUEL AND ASPHALT ADJUSTMENTS**

Fuel and asphalt price adjustments, as detailed in the supplemental specifications, shall be applicable for this project. Payments are based on actual quantities placed per day rather than estimated values and the base “index” values used to determine price adjustments shall be based on the values for the first of the month for when the price proposals are submitted to KYTC.

### **13.2.11 FENCING**

Right of Way fencing is required as detailed on the provided advance and/or stamped construction plans. Right of Way fencing locations shall be designed according to any design or permitting manual. The DBT shall be responsible for removing existing Right of Way fencing when it conflicts with the design.

### **13.2.12 ADDITIONAL DESCRIPTION OF REQUIRED WORK AND SPECIAL PROVISIONS**

All areas disturbed along residential properties shall be restored using sod as the seeding and protection. Vertical concrete surfaces in excess of 30 inches in height and 48 inches in width shall receive an architectural treatment as detailed in the advanced and/or stamped construction plans. Approach roads and commercial entrances may require reconstruction, as a part of this reconstruction, existing widths and profile grades shall be maintained or improved upon. This may require work off the existing Right of Way and in accordance with Section 10 of this document. Intelligent compaction of soils, aggregates and asphalt mixtures shall be used in along with paver mounted temperature profiles and E-ticketing as described in Appendix I.

## **13.3 STRUCTURES**

### **13.3.1 STRUCTURE DESIGN**

KYTC has provided final structure plans including geotechnical reports for all structures except as noted below. The DBT can construct all structures as proposed in the stamped construction plans. However, if the DBT proposes any ATC's that deviate from the proposed plan and receives KYTC approval, then the DBT becomes the Engineer of Record for the proposed structure and assumes any liability/responsibility associated with the proposed design (See Section 6.1.6).

#### **13.3.1.1 Railroad Bridge over KY 338**

Any proposed changes to the railroad bridge over realigned KY 338 through the ATC process shall also be approved by Norfolk-Southern Railroad. No time delays shall be granted to the DBT for the railroad related work (See Section 12).

#### **13.3.1.2 I-75 Soil Nail Wall**

See Special Note for Soil Nail Wall in Appendix I.

#### **13.3.1.3 Retaining Wall # 3**

Retaining Wall # 3 has a conceptual layout and a geotechnical report, however the DBT will be responsible for final design. The DBT will submit the final retaining wall design which will be reviewed by KYTC within 14 calendar days.

#### **13.3.1.4 Noise Walls along I-75**

See Special Note for Noise Walls in Appendix I.

### **13.3.2 STRUCTURE DESIGN / ADVANCE SITUATION FOLDER FOR AN APPROVED ATC**

The DBT shall have a consultant DBT member pre-qualified in Structure Design Bridges under 500 feet for submittal and final design of any structures with an approved ATC. The DBT shall be responsible for preparing any structure plans required. The structure plans shall be developed in accordance with Division of Structure Design Guidance Manual

(<http://transportation.ky.gov/bridges/GuidanceManual.htm>). Review times shown

in the Guidance Manual shall begin when a submittal is received. Submittals required shall be Advance Situation Folder, Stage 1 Preliminary Plans, Stage 2 Preliminary Plans, Stage 1 Final Plans and Stage 2 Final Plans. The structure plans shall be signed and sealed by a Licensed Professional Engineer. Structures may be submitted individually. The Division of Structural Design shall provide drawing numbers for each structure. The DBT shall present electronic copies in PDF format of plans and calculations for all submittals to the Division of Structural Design. This shall be in addition to any required hard copies.

### **13.3.3 DESIGN AND CONSTRUCTION REQUIREMENTS OF STRUCTURES**

All design and structure construction shall be in compliance with all applicable AASHTO design criteria as well as current KYTC standards.

All Shop Drawings shall be approved by Engineer of Record (EOR). PDF copies shall be provided to the Division of Structural Design.

### **13.3.4 FOUNDATION INVESTIGATION AND GEOTECHNICAL INVESTIGATIONS**

All geotechnical information utilized for the design of the roadway, railroad, and structures are included in Appendix H. Any additional information needed by the DBT for foundation investigation and all geotechnical investigations necessary to prepare the DBT's technical and price proposals shall be the responsibility of the DBT. The subsequent reports shall be submitted for review and approval by KYTC Geotechnical Branch. Please allow 14 calendar days for this review. Existing Geotechnical Information is for information purposes only.

### **13.3.5 GEOTECHNICAL, FOUNDATIONS, SLOPES, AND WALLS**

All geotechnical information and geotechnical reports to date are in Appendix H. Any additional geotechnical information needed by the DBT for roadway and foundation investigation and any geotechnical investigations necessary to prepare the DBT's bid shall be the responsibility of the DBT. The subsequent reports shall be submitted for review and approval by the Cabinet's Geotechnical Branch. Please allow 14 calendar days per submittal for this review.

- A. The DBT's Geotechnical engineering firm shall be prequalified for Geotechnical engineering work (Engineering, Laboratory Testing and Drilling) in Kentucky.
- B. Design shall be in accordance with AASHTO LRFD Bridge Design Specifications, latest edition, except where overridden by state design standards. All design shall use LRFD methods except where such methods are not provided for in the AASHTO design manual, or these requirements. Where state standards recommend ASD design methods, equivalent LRFD methods shall be used. Specific approval to use non LRFD methods is required. In addition, AREMA standards will be used for the railroad bridge design.
- C. All geotechnical design and geotechnical explorations performed by the DBT shall be completed and submitted to KYTC in accordance with the latest copy of the KYTC Geotechnical Guidance Manual. The design shall be in accordance with the Guidance Manual except where overridden by these

requirements. Meetings and submittals shall be in accordance with the Geotechnical Manual.

If the DBT performs any changes through an approved ATC that requires additional geotechnical design or explorations, the DBT shall produce and submit a Foundation Analysis and Design Report for each structure and a Geotechnical Engineering Roadway Report for slopes and subgrade design. These reports shall include all engineering analyses and design recommendations.

- D.* If the DBT determines that additional subsurface explorations are necessary to properly design and construct the work in accordance with KYTC requirements, the DBT shall perform the subsurface explorations and analysis at its own expense. The DBT shall selectively locate subsurface explorations on the basis of field observations, and design considerations. Location of explorations shall be as topography, site conditions, soil conditions, and design factors dictate.

The DBT shall provide all subsurface exploration plans and explorations to KYTC in accordance with the KYTC Geotechnical Manual. DBT will be responsible for Maintenance of Traffic according to the MUTCD for any explorations affecting traffic. If any explorations are needed on the Railroad Right of Way, the DBT must obtain approval from the Railroad.

- E.* Foundations for structures shall be designed in accordance with the KYTC Geotechnical Guidance Manual, KYTC Structural Guidance Manual, AASHTO LRFD Bridge Design Specifications, and with applicable Special Notes located in the Appendix I to this Project Scope document. In addition, AREMA standards will be used for the railroad bridge design.

- F.* The DBT shall design retaining walls in accordance with the KYTC Geotechnical Guidance Manual, KYTC Structural Design Guidance Manual, AASHTO LRFD Bridge Design Specifications, and with applicable Special Notes located in Appendix I.

- 1.* The DBT shall design foundations for gravity retaining walls in accordance with the KYTC Geotechnical Manual. The gravity walls shall be constructed in accordance with KYTC Standard Drawing RGX-002. The geometry of the gravity walls may vary from the Standard Drawing only if approved by the KYTC.
- 2.* Gabion basket retaining walls shall not be permitted for permanent construction.
- 3.* Metal “Bin” type retaining walls shall not be permitted for permanent construction.
- 4.* Only pre-approved Mechanically Stabilized Earth (MSE) wall systems shall be used on this Project. See the Special Note for MSE retaining walls located in Appendix I for pre-approved systems. Only inextensible reinforcement shall be allowed. Norfolk-Southern has indicated that they will not permit MSE structures on or near the right-of-way.

5. A consistent formliner as detailed in the advanced and/or stamped construction plans will be used throughout the project for all wall types, except for the I-75/KY 338 south abutment soil nail wall.
- G. Reinforced soil slopes shall not be designed at a slope ratio steeper than one (1) Horizontal to one (1) Vertical. Reinforced soil slopes shall be designed in accordance with design procedures presented in the latest version of Publication No. FHWA NHI-00-043, "Mechanically Stabilized Earth Walls and Reinforced Soil Slopes."
- H. If an ATC is pursued, the DBT shall be responsible for analysis and design of soil slopes. Slopes steeper than three to one (3H:1V) shall be reinforced. Slopes three to one (3H:1V) or flatter may require reinforcement or other remediation measures depending on soil conditions:
1. Where embankment settlement is anticipated to exceed 3 inches in total settlement, the DBT shall submit an instrumentation plan for review to monitor settlement and determine when the pavement section can be placed.
  2. All geotechnical instrumentation shall be left in place for future readings after the project has been completed. Instrumentation destroyed by the DBT shall be replaced at the DBT's expense.
  3. Shale cannot be used in the upper two feet of the subgrade.
  4. If shale that has a possibility of being acidic producing is used on the project, testing shall be required to determine the acidic producing potential. Acidic producing shale cannot be left exposed. The acidic producing shale shall be encased with a minimum 2.5-foot layer of compacted clay soil. A minimum of 4 feet of clay shall be required on top of the embankment to control the corrosion of guardrail and/or sign post, etc. from the acidic shale. Sulfate resistant cement (ASTM C-150 Type II) shall be used for subsurface structures such as pipes, culverts, bridges, etc.
  5. The subgrade should be constructed in accordance with the pavement design specifications. For a chemically stabilized subgrade a minimum preliminary CBR design value of 3.0 (CBR valued will be decided after soil testing is complete) is recommended for the soil beneath the chemically stabilized subgrade. Chemical treatment for the top 8 inches of subgrade is recommended (Stockpiling of soil may be required). The chemical identified for treating the soil types encountered on this project shall be lime. It is suggested that 6 percent, by dry mass, be utilized to determine plan quantities, using an average dry density to be determined after soil testing is complete. The chemical shall be applied in accordance with Section 208 of the current edition of Standard Specifications for Road and Bridge Construction; however, contrary to Section 208 of the Standard Specifications, the curing time and testing of the subgrade may be constructed with an expedited schedule according to Appendix I. Where chemical stabilization is not feasible (cross over's, tie-in's, etc...) a minimum of 1 foot of Kentucky Coarse #2's, 3's or 23's shall be used. The granular material shall be wrapped with Geotextile Type IV Fabric.
  6. Any ponds located within project limits shall be drained and mucked out a minimum of 3 feet. This material shall just be limited to final dressing of



slopes. Refill shall consist of suitable earth material or Kentucky Coarse #2's, 3's or 23's. The granular material shall be wrapped with Geotextile Type IV Fabric.

7. Some areas of deep organic soils may be encountered. The organic material shall be removed. This material shall just be limited to final dressing of slopes. Refill shall consist of suitable earth material or Kentucky Coarse #2's, 3's or 23's shall be used. The granular material shall be wrapped with Geotextile Type IV Fabric.
  8. If springs are encountered during construction, proper mitigation procedures shall be followed to allow for positive drainage.
  9. Working platforms for Embankment or subgrade construction, consisting of limestone, may be needed in some areas. The granular material shall be wrapped with Geotextile Type IV Fabric.
  10. Foundation embankment benches and longitudinal perforated pipe underdrains shall be constructed in accordance with Standard Drawings RGX-010 and RDP-006. If stability is a concern the benches shall be constructed one at a time beginning with the lowest bench. Each bench shall be backfilled prior to excavation of the next bench. This procedure shall be followed to help maintain stability of the existing slopes in these areas.
- I. Excavation support methods may be required. A dewatering method may be needed in some areas. The DBT shall be responsible for the stability of any excavations or temporary cuts. Protection of adjacent structures and utilities is the responsibility of the DBT. The DBT shall be responsible for any damage to the existing infrastructure. Any damage shall be repaired immediately.
  - J. No blasting is expected and shall not be utilized for removal of materials.

## **13.4 PERMANENT TRAFFIC CONTROL**

### **13.4.1 PAVEMENT MARKINGS AND DELINEATORS**

The DBT shall utilize the pavement striping, intersection markings, lane markings, and delineator posts as detailed in the advanced and/or stamped construction plans and in accordance with the MUTCD and applicable KYTC standards. If the DBT chooses to make a change to the provided construction plans through an approved ATC, the DBT shall provide striping plans for review and approval by KYTC. The DBT shall also provide inlaid pavement markers on I-75, KY 338, KY 536, and US 25 according to the specification in Appendix I. The DBT shall be aware that removal of existing pavement marker castings and permanent patching of the resultant hole with Fibercrete, or an approved equal, is required.

Other special provisions in addition to the Governing Regulations are listed in Section 7.1 of this document.

### **13.4.2 SIGNING SPECIAL PROVISIONS**

All temporary signing shall be provided by the DBT for this project. Detour signage shall be submitted, approved and erected for any approved closures and any other closure deemed necessary by the Engineer. The DBT shall expect that up to 12 variable message boards may be required at a single time.

The DBT shall utilize the permanent sign plans as detailed in the advanced construction plans. If the DBT chooses to make a change to the advanced construction plans through an approved ATC, review of the permanent signing plans may take up to 21 days. The DBT shall fabricate and install all permanent signage for the project.

Other special provisions in addition to the Governing Regulations are listed in Section 7.1 of this document.

#### **13.4.3 TRAFFIC SIGNALS SPECIAL PROVISIONS**

Construction and implementation of new traffic or reconstructed signals for the project shall be addressed as part of the DBT bid proposal. Traffic signals shall be completed as shown on the respective construction plans at the following intersections:

##### KY 338 Intersections

Paddock Drive, Frogtown Road, DCD ramps at I-75, Best Pal Drive, and the SPUI interchange at US 25.

##### KY 536 Intersections

DCD ramps at I-75, Biltmore Boulevard, Sam Neace Drive, Berberich Drive, and US 25.

Temporary signals shall be completed for the KY 338 project at Chambers Lane and Shorland Drive as detailed in the advanced and/or stamped construction plans. The temporary signals will be connected to the railroad signals at each intersection for railroad pre-emption. Coordination with Norfolk-Southern will be required for establishing the pre-emption.

Traffic data for use in the design of the signalized intersections has been provided in Appendix C. If the DBT chooses to make a change to the advanced and/or stamped construction plans through an approved ATC, the DBT shall provide plans for review and approval of the new traffic signals. Review of the traffic signal plans may take up to 21 days.

KYTC has ordered the mast arms for the signals on the KY 536 (6-14) project and will be available by award of the design build contract. KYTC will order the mast arms for the signals on the KY 338 (6-18) project after the ATC process to ensure no changes to the stamped plans are required. These mast arms will be made available to the DBT once delivered in the spring 2020.

Other special provisions in addition to the Governing Regulations are listed in Section 7.1 of this document.

#### **13.4.4 ROADWAY LIGHTING SPECIAL PROVISIONS**

Construction and implementation of new lighting for the project shall be addressed as part of the DBT bid proposal as detailed in the advanced and/or stamped construction plans. If the DBT chooses to make a change to the advanced and/or stamped construction plans through an approved ATC, the DBT shall provide

plans for review and approval of the new lighting. Review of the lighting plans may take up to 21 days.

Temporary lighting may be required at the KY 338/Triple Crown intersection until permanent lighting is in place for the roundabout configuration.

Other special provisions in addition to the Governing Regulations are listed in Section 7.1 of this document.

## **14 PROPOSAL SUBMISSION AND SELECTION CRITERIA**

For determination of the successful bidder, the DBT shall be required to provide the KYTC two separate bidding submittals for the project. The first submittal shall be a technical proposal and the second submittal shall be a price proposal. The Scoring Committee will evaluate the technical proposal and provide a score to the Awards Committee. The price proposal shall be submitted after the Scoring Committee has completed scoring the proposals and the Awards Committee will establish an overall score. The KYTC's Project Awards Committee will select the winning Design Build Team for this project and the award will be made accordingly. The price proposals will be opened on October 18, 2019 and the award will be made by October 31, 2019.

All properly submitted proposals from proposers allowed to submit a proposal shall be accepted by the KYTC. However, the KYTC reserves the right to request necessary amendments which may become part of the DBT's proposal; reject all proposals; reject any proposal that does not meet mandatory requirements; or cancel this solicitation, in the best interest of the KYTC. For comparison purposes, the Awards Committee shall prepare a cost estimate based upon information provided by the DBTs in the proposal submittals. For acceptance purposes, the KYTC may use this estimate to accept or reject any or all proposals.

The KYTC also reserves the right to waive minor irregularities in proposals providing such action is in the best interest of the KYTC.

If the KYTC waives minor irregularities, such waiver shall in no way modify the solicitation requirements or excuse the DBT from full compliance with the specifications and other contract requirements if the DBT is awarded the contract.

The Scoring Committee members shall evaluate and score the technical proposal. This evaluation shall be based on the information contained in the DBT's technical proposal concerning the information outlined below.

### **14.1 TECHNICAL PROPOSAL (15%)**

A DBT shall submit one (1) unbound version of the Technical Proposal, and one (1) CD/DVD or one (1) USB "thumb" drive containing two (2) electronic files of the Technical Proposal as follows:

- A. One electronic searchable single file PDF which does not restrict printing or copying text, images and other content.
- B. One electronic password protected single file PDF which restricts copying of text, images and other content.

The Technical Proposal shall be received no later than 4:00 p.m., Eastern Time, on October 4, 2019. The KYTC shall reject any proposal received after aforementioned time and date

and return it unopened to the DBT. In order to be considered, the original Proposal shall be signed in blue ink by an authorized representative of the DBT.

The submittal shall either be mailed or hand-delivered to:

Ms. Rachel Mills, P.E., Director  
Division of Construction Procurement  
200 Mero Street, 3<sup>rd</sup> Floor  
Frankfort, KY 40622

The outside cover of the package shall be marked:

Technical Proposal for  
Boone County  
KY 338 Interchange, KY 536 Interchange, and I-75  
Item No. 6-18, 6-14, & 6-20002  
CID No. 19-9002  
Design-Build: FY 2019 Design Build #2

#### ***14.1.1 INCORPORATION OF TECHNICAL PROPOSAL***

All Technical Proposal elements that exceed the requirements of the Bid Documents (i.e., can reasonably be interpreted as offers to provide higher quality items or additional services) shall be incorporated by reference into the awarded DBT's Contract requirements.

#### ***14.1.2 TECHNICAL PROPOSAL EVALUATION***

The Technical Proposal shall be developed using narratives, tables, charts, plots, drawings, and sketches as appropriate. The purpose of the Technical Proposal is to document the proposed DBT's understanding of the Project; its acceptance and/or selection of appropriate design criteria; and its approach for completing any required design, coordinating with aerial utility relocation, constructing underground utilities, managing and meeting project schedule, providing quality management, and performing construction activities.

A DBT may submit only one proposal. The format and content are as specified. Alternate proposals shall not be allowed. Each proposal shall be prepared simply and economically, providing a straightforward, concise description of the DBT's ability to meet the requirements of this solicitation. Fancy bindings, colored displays or promotional materials shall receive no evaluation credit. Emphasis shall be on completeness and clarity of content. The KYTC retains the right to request, receive and consider additional information and clarifications throughout the evaluation process.

The Technical Proposal shall be evaluated on how well each of the following items is addressed:

<b>Part</b>	<b>Evaluation Criteria</b>	<b>Maximum Points</b>
A	Project Schedule, Organization and Management	20
B	Understanding of roadway design and bridges, structures, geotechnical concepts and ATCs. Special attention to the construction of innovative interchange types (i.e. Double Crossover Diamond (DCD) and Single Point Urban Interchange (SPUI)).	10
C	Railroad Experience (understanding of design, coordination, construction and ATCs)	20
D	Understanding of Maintenance of Traffic challenges and ideas for improvements including ATCs.	20
E	Construction (includes Construction Management Plan, Quality Plan, and Safety Plan)	15
F	Utility Coordination and Relocation Plan	15
G	DBE Plan	Pass/Fail
<b>Total</b>		100

The Technical Proposal shall be organized in Parts as indicated.

Technical Proposal content requirements are found in the following sections as well as within the Project Scope.

**14.1.2.1 Part A – Project Schedule, Organization, and Management**

Include a detailed general schedule to clearly demonstrate the DBT approach for completing the project. The schedule should demonstrate the DBT’s understanding of the critical items that will need to be completed in order to meet the proposed contractual completion date. The DBT will demonstrate the critical path including major milestones that must be met to ensure project completion.

The proposed schedule shall carry forward and be integrated to each section of the technical proposal.

The Proposed Contractual Completion Date of the successful Proposer shall become the Fixed Completion Date for the contract. KYTC has determined that the baseline completion date for the project shall be November 1, 2022.

Demonstrate an integrated team approach between the team members including the contractors, designers, subcontractors, DBE firms, Norfolk-Southern Railroad and KYTC. Describe the team’s experience on delivering similar major projects. Describe the qualifications and experience of the Key Personnel assigned to the project, specifically how they have performed these tasks on previous projects and how they will collaborate for the KY 338 and KY 536 Interchanges as well as the I-75 pavement rehabilitation.

Demonstrate that the DBT has the capability to effectively communicate and coordinate with the KYTC public information team.

Provide a project organization chart for the Project, showing the relationships between DBT Management and Key Personnel shown on the chart and the functional relationships with other critical participants on the DBT.

Describe the DBT's concept of design management, right of way acquisition if needed, utility relocation, railroad coordination, and construction management and how they interrelate with the other elements of the DBT's organization for the Project. Identify a staffing plan including specific responsible personnel and organizational units. Provide a design and construction organization chart, as a subset of the project organization chart, for the Project showing the relationships between functions shown on the chart and the functional relationships with subconsultants and subcontractors. The chart shall also indicate how the DBT intends to divide the Project into work segments to enable optimum construction performance.

At a minimum, the Technical Proposal should address personnel assigned to manage project development in the following areas:

- A. Project Manager\*
- B. Design Manager\*
- C. Project Scheduler\* (Project Development & Construction)
- D. DBE/EEO Project Plan Coordinator

At a minimum, the Technical Proposal should address personnel assigned to manage the construction for the following areas:

- A. Project Manager\*
- B. Construction Manager \*
- C. MOT Lead\*
- D. Railroad Coordinator\*
- E. Utility Relocation Manager\*
- F. Quality Control Manager for Construction Materials
- G. Roadway Construction
- H. Bridge Construction
- I. Drainage and Environmental Construction
- J. Maintenance of Traffic
- K. Public Safety
- L. Project Safety
- M. Environmental/Permits/Erosion Control\*\*

*\* Must be the same as the previously submitted with the statements of qualifications (SOQ). Key Personnel may not at any time be removed,*

replaced, or added without written approval of KYTC. Requests for removal, replacements, and additions shall be submitted in writing. To qualify for approval, the written request shall document that the qualifications of the proposed replacement or addition will be equal to or better than those of the Key Personnel submitted in the SOQ.

*\*\*Can be the same as the Environmental Compliance Manager assigned to manage design development.*

Describe the qualifications and experience of the individuals assigned to these tasks and describe the specific management tasks they will perform. Include information relative to each individual’s familiarity with the proposed project and similar projects.

Provide a detailed report of all current projects being worked on by members of the DBT and identify all areas where individuals will have significant responsibilities outside of the proposed project.

Individuals must be currently employed by a member of the DBT.

KYTC shall use the following criteria to distribute Project Organization and Management points:

Component of Project Organization and Management		Percentage of Proposed Project Organization and Management Points
A.1	Project Schedule, Completion Date & Organization	60
A.2	Project Management Plan	20
A.3	DBT Experience on projects of similar complexity	20

**14.1.2.2 Part B – Roadway Design, Bridges, Structures, and Geotechnical Concepts**

The design approach indicated in the Technical Proposal shall reflect an understanding of roadway & drainage design, bridges, structures, and geotechnical concepts for the Project. Bridges, Structures, and geotechnical concepts are critical components of the Project. The KY 338 project includes a railroad bridge, the US 25 SPUI bridge, 14 retaining walls, a soil nail wall, and noise walls. The KY 536 project has 7 retaining walls. At a minimum, the Technical Proposal shall address the following issues:

- A. An understanding of the Project criteria, basic configuration and mandatory elements for the project;
- B. An understanding of roadway design for innovative intersection/interchange types including DCD, SPUI, and roundabouts.

- C. An understanding of the proposed management of drainage during construction including construction of proposed 72” pipe on KY 338, and other storm sewer and detention basins.
- D. Describe any specific features that would reduce the need for maintenance or would make inspection/maintenance procedures more efficient, safer, and/or less costly.
- E. Describe how the proposed structures will accommodate the future maintenance functions, including but not limited to, control of drainage, replacement of the deck joints and seals, replacement of the bearings, and future deck replacements.
- F. Describe how the DBT will perform and manage the geotechnical challenges associated with the project.
- G. Discuss settlement of embankments and ways the DBT intends to address.
- H. Discuss the DBT’s plan for disposal of excess material including any potential excess material sites.
- I. List expected geotechnical issues anticipated and the anticipated approach that will be used to resolve those issues. Indicate if any of the proposed solutions will require additional maintenance or monitoring during the life of the facility. Indicate if the proposed solution(s) will restrict future construction adjacent to the structures, including installation and repair of utilities.
- J. Indicate the experience of the geotechnical engineer and the contractor in designing and installing the proposed geotechnical solutions and foundation systems identified. State if geotechnical specialty subcontractors are proposed for design and/or installation of the geotechnical solutions or foundation systems.
- K. Include discussion of any approved ATCs.

KYTC will use the following criteria to distribute Roadway Design, Bridges, Structures, and Geotechnical Concepts points:

	<b>Component of Roadway Design, Bridges, Structures, Geotechnical Concepts and ATCs</b>	<b>Percentage of Proposed Roadway Design</b>
<b>B.1</b>	Understanding Roadway and Drainage Design Concepts	25
<b>B.2</b>	Understanding of Bridges and Structures Concepts	40
<b>B.3</b>	Understanding of Geotechnical Challenges including retaining walls and excess material sites	35

**14.1.2.3 Part C – Railroad Experience (coordination and construction)**

The Technical proposal shall indicate the DBT’s experience with railroad coordination and construction. The Technical proposal shall address the following railroad issues:



- A. Provide experience managing projects involving railroad and required coordination with the railroad. Demonstrate that the DBT has considered railroad coordination in determining the proposed construction schedule.
- B. Provide experience performing railroad construction including railroad bridge and track construction experience.
- C. Indicate specific experience working with Norfolk-Southern Railroad.
- D. If DBT proposes an ATC that affects the railroad, then indicate experience with railroad design.

KYTC will use the following criteria to distribute Railroad Experience points:

Component of Railroad Experience		Percentage of Proposed Roadway Design
C.1	Railroad Coordination and Construction Experience	80
C.2	Norfolk-Southern Railroad Experience	20

**14.1.2.4 Part D – Understanding of Maintenance of Traffic challenges and ideas for improvements.**

The Technical proposal shall indicate the DBT’s understanding of the projects MOT challenges. The DBT should provide ideas for potential improvements. The Technical proposal shall address the following MOT issues:

- A. Provide experience managing projects with similar MOT challenges particularly involving roadways with high percentage of truck traffic and roadways with railroad crossings.
- B. Provide experience with delivering projects and managing traffic for innovative intersection/interchange such DCD, SPUI, and roundabouts.
- C. Propose any ideas for potential improvements. Include discussion of any approved ATCs.

KYTC will use the following criteria to distribute Understanding of MOT points:

<b>Component of Understanding MOT</b>		<b>Percentage of Proposed Roadway Design</b>
<b>D.1</b>	Experience managing projects with similar MOT challenges	80
<b>D.2</b>	Ideas for potential improvements	20

**14.1.2.5 Part E – Construction**

The Technical proposal shall address the following construction issues:

- A. Provide a brief narrative description of the DBT’s overall plan for constructing the Project. Describe the construction concept that will be used for each construction phase. Specifically describe how traffic will be maintained. Describe in general the anticipated construction work for each phase.
- B. Provide a narrative description of the DBT’s proposed major buildable units (see Section 16) and how these will be constructed in the phasing described above. Provide a schedule showing when the major buildable units will be constructed. Discuss project risks and approach to address risks.
- C. Describe the DBT’s approach to achieve quality expectations. Describe the relationship between the construction, inspection, materials sampling testing, and acceptance functions.
- D. Describe the safety considerations specific to this Project. Discuss the firm's overall approach to safety.
- E. Demonstrate that the DBT has considered proposed right of way clearance dates, utility relocations, railroad elements, permitting, constructability, and maintenance of traffic activities in determining the proposed construction schedule.
- F. Describe the DBT’s plans and procedures to ensure timely deliveries of materials to achieve the project schedule. Include information with respect to anticipated fabrication times. Also describe anticipated staging areas needed.

KYTC shall use the following criteria to distribute Construction points:

Component of Construction		Percentage of Construction Points
<b>E.1</b>	Construction Sequencing and Logistics	40
<b>E.2</b>	Approach to Achieving Quality	20
<b>E.3</b>	Coordination with Utilities, Railroad, Permitting, and Maintenance of Traffic	20
<b>E.4</b>	Safety	20

**14.1.2.6 Part F – Utility Coordination and Relocation Plan**

Both public and private utilities are present throughout the footprint of the KY 338 and KY 536 Interchange projects. The DBT shall be required to coordinate with the utility companies for the clearance of the overhead utilities and the relocation of the underground utilities.

The Technical Proposal shall address the following utility issues:

- A. Describe the proposed coordination with utility owners.
- B. Demonstrate that the DBT has considered utilities in determining the proposed construction schedule.

KYTC shall use the following criteria to distribute Utilities points:

Component of Utility Coordination and Relocation Concepts		Percentage of Proposed Utilities Points
<b>F.1</b>	Utility Coordination/Relocation Plan	100

**14.1.2.7 Part G – Disadvantaged Business Enterprise (DBE) Plan**

Contractors shall include the following certification in the Technical Proposal. PROPOSALS SUBMITTED WHICH DO NOT INCLUDE CERTIFICATION OF DBE PARTICIPATION WILL NOT BE ACCEPTED. These bids will not be considered for award by the Cabinet and they will be returned to the bidder.

“The proposer certifies that it will secure participation by Disadvantaged Business Enterprises (“DBE”) in the amount of 6% percent of the total value of this contract and that the DBE participation will be in compliance with the requirements of 49 CFR.”

Component of DBE Plan		Percentage of Proposed DBE Plan Points
<b>G.1</b>	DBE Statement	Pass / Fail

### **14.1.3 TECHNICAL PROPOSAL SCORING**

The following table provides a general indication of anticipated scoring of each evaluation criteria.

<b>Definition</b>	<b>Scoring Range (percentage)</b>
The Technical Proposal component demonstrates an approach that is considered to significantly exceed the ITP requirements and objectives in a beneficial way (providing advantages, benefits, or added value to the Project) and that provides a consistently outstanding level of quality. Must have a significant strength or number of strengths and no weaknesses.	90-100
The Technical Proposal component demonstrates an approach that is considered to exceed the ITP requirements and objectives in a beneficial way (providing advantages, benefits, or added value to the Project) and offers a generally better than acceptable quality. Must have strengths and no significant weaknesses.	80-89
The Technical Proposal component demonstrates an approach that is considered to meet the ITP requirements and objectives and offers an acceptable level of quality. It has strengths even though minor or moderate weaknesses exist.	70-79
The Technical Proposal component demonstrates an approach that is marginally acceptable.	60-69
The Technical Proposal component demonstrates an approach that contains no strengths and contains minor or significant weaknesses.	0-59

### **14.1.4 FORMAT OF TECHNICAL PROPOSAL**

The technical proposal is limited to 35 pages 8.5” by 11” which shall include the information requested in this solicitation. The DBT may provide unlimited 11” by 17” pages for supporting details and graphics (i.e. plan sheets, profiles, etc.). An 11” by 17” sheet shall not contain only text but shall contain pictures, graphs, charts, plans, or other graphics. Any plans that indicate changes from the advanced construction plans shall be completed with a readable scale on 11” by 17” sheets. The DBTs are encouraged to be as concise as possible. The technical proposal shall include a statement of acceptance of the advanced construction plans and any changes proposed by the DBT through an approved ATC.

## **14.2 PRICE PROPOSAL (85%)**

The total price offered by the DBT for its Proposal for all work specified in the Contract is referred to herein as the “Price Proposal”. The Price Proposal shall be organized to correspond to the items listed in this section.

### **14.2.1 PRICE PROPOSAL**

Provide a hardcopy of Form PP (Price Proposal) included in Appendix A. The price proposal shall bear original signature(s) by an authorized employee of the Proposer. All other methods of submitting the Price Proposal shall be considered non-responsive and ineligible for Award.

Price Proposals are qualified based on Sections 7.1 and 7.2 and evaluated on the basis of Section 14.3. The final Price Proposal shall be a Lump Sum Bid dollar amount.

The procedure for calculation of price proposals on this project involves an “A & B” concept. Where:

A = the dollar amount of the All-Inclusive Project Cost.

B = the number of calendar days the selected completion date is before or after November 1, 2022 (see Section 6).

The “B” component shall have a daily dollar amount that will be used to calculate the total “B” cost component of the project. The value of each "B" day shall be \$15,000.

If the selected completion date is earlier than November 1, 2022; the following formula shall be used:

$$\text{Price Proposal (PB)} = A - (B \times \$15,000)$$

If the selected completion date is later than November 1, 2022; the following formula shall be used:

$$\text{Price Proposal (PB)} = A + (B \times \$15,000)$$

The resulting single Price Proposal (PB) shall be used to calculate the DBT's overall score according to the Value Based Formula displayed in Section 14.3 of the Instructions to Proposers. The "B" day value is for comparison purposes only. The successful proposer will be compensated the full "All Inclusive Project Cost" used to calculate the Price Proposal.

In addition, to the price proposal the DBT shall be required to furnish the KYTC with an initial Schedule of Values showing a complete breakdown of the lump sum bid item established for this project. Due to Federal funding, the schedule of values shall be divided into the three projects of KY 338, KY 536, and I-75 since each will need to be tracked separately. In order to document how the lump sum bid price was determined, the DBT shall supply, using standard KYTC bid item codes whenever possible, all work items, quantities, units, and prices to support the lump sum bid submitted. Any non-standard bid items used shall be thoroughly explained in the bid proposal. The breakdown shall include all materials to be used in the work and shall be in sufficient detail to provide KYTC with a means to check partial payment requests. The Schedule of Values shall be developed using the current version of Estimator software by Info Tech Inc., Gainesville, FL, 32608, or an equivalent program approved by the Engineer. The DBT shall provide any necessary training and license needed for KYTC to use the software. Submit the Estimator file in the Version required by KYTC.

#### **14.2.2 BID BOND**

Provide a Bid Bond. The KYTC Bid Bond form is available on-line at:

<http://transportation.ky.gov/Organizational-Resources/Forms/TC%2014-14.pdf>

or by contacting the KYTC at 502-564-3500. Each Proposer shall submit a Bid Bond with its Proposal in the amount of at least five percent of the Proposal Price, issued by a surety meeting the requirements of the Contract. Alternatively, DBTs may submit cash, a certified check, or a cashier's check payable to KYTC in this amount. A Bid Bond shall not be conditioned in any way to modify the minimum five percent required. Proposals that fail to include a Bid Bond or cash deposit in compliance with this subsection shall be deemed non-responsive and shall be rejected by KYTC.

This bond shall be submitted with the Price Proposal in the same sealed envelope and will not be opened until completion of the review of the Technical Proposals.

#### **14.2.3 DOCUMENTS REQUIRED FOR KYTC BID**

The DBT shall take note and review the following documents and provide the necessary affidavits and certifications required. These documents can be found in the Documents for Bid Appendix B.

- A. Required Affidavit for Bidders, Proposers, and Contractors
- B. Secretary's Order 11-004, Vendor Document Disclosure
- C. Provisions Relative to KRS 45A.485
- D. Documents Required for Federal Projects. The documents include:
  - 1. Employment Requirements Relating to Nondiscrimination of Employees
  - 2. Executive Branch Code of Ethics
  - 3. Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity

#### **14.2.4 SUBMITTAL REQUIREMENTS**

KYTC shall not accept Price Proposals by facsimile or electronic transmission. Any Price Proposal that fails to meet the deadline or delivery requirement shall be rejected and returned to the DBT without having been opened, considered, or evaluated. The KYTC shall not be responsible for a late Bid due to failure of the DBT to allow sufficient time for delivery of the Price Proposal.

The Price Proposal, Bid Bond, an updated Acknowledgement of Receipt of proposal addenda, form AOR (see Appendix A) and above required documents shall be placed into a sealed envelope.

Sealed Price Proposals shall be submitted by mail or hand by 2:00 PM (EST) August 16, 2019 to:

Mrs. Rachel Mills, P.E., Director  
Division of Construction Procurement  
200 Mero Street, 3rd Floor  
Frankfort, KY 40622

The outside cover of the package containing the proposal shall be marked:

Price Proposal for  
Boone County  
KY 338 Interchange, KY 536 Interchange, and I-75  
Item No. 6-18, 6-14, & 6-20002  
CID No. 19-9002  
Design-Build: FY 2019 Design Build #2

KYTC shall not open Price Proposals until the completion of the evaluation of the Technical Proposals.

### **14.3 VALUE-BASED FORMULA USED FOR SELECTION**

Scoring of the Technical Proposal and Price Proposal plan shall be combined using a normalized weighted formula as follows:

$$SB = 100 [0.15 (TB/TH) + 0.85 (PL/PB)]$$

Where

PB = DBT's Price Proposal  
PL = Lowest Price Proposal (all DBTs)  
TB = DBT's Technical Proposal Score  
TH = Highest Technical Proposal Score (all DBTs)

The DBT's Overall Score (SB) shall be rounded to a tenth of a point. Rounding of Scores to the nearest tenth of a point shall be accomplished by the round-up method: e.g., 75.45, 75.46, 75.47, 75.48, and 75.49 would be rounded up to 75.5; and 75.41, 75.42, 75.43, and 75.44 shall be rounded to 75.4. The DBT with the highest overall score shall be recommended to the KYTC Awards Committee for Contract Award. In the event that two or more DBTs achieve the same rounded final score (SB), the "tied" DBT with the lowest Price Proposal (PB) shall be recommended to the KYTC Awards Committee for Contract Award. The KYTC Awards Committee has final authority to determine the best interests of the KYTC in awarding (or not awarding) the Contract.

## **15 PLAN SUBMITTALS AND REVIEW REQUIREMENTS**

### **15.1 QUALITY CONTROL**

The DBT, upon selection by the Awards Committee, shall be responsible for the professional quality, technical accuracy and adherence to the Governing Regulations listed in Section 7.1 of this document, for all plan submittals required under this contract.

The DBT shall immediately notify the KYTC of any apparent discrepancy between the various design and construction manuals and the Conceptual Documents.

Unless stated otherwise, review comments do not revise the scope or intent of the project and do not constitute a request for changes beyond the current contracted Scope of Services.

In the event the KYTC determines that any required submission is incomplete, contains inaccuracies which preclude a meaningful review, or does not adhere to the Governing

Regulations listed in Section 7.1 of this document, the KYTC will advise the DBT of the short comings and direct the DBT to revise and resubmit the plan. No time extension shall be granted as a result of such action. The KYTC will schedule a review meeting or issue review comments as appropriate.

In the event the DBT believes that any review comment, or orders issued by the KYTC, require a change to the scope of the agreed work, the DBT shall first contact the KYTC for clarification and shall, within 10 days of receipt of the comments or orders, provide written notice to the District Project Manager and Project Engineer concerning the reasons why the DBT believes the scope has been changed.

**15.2 MAJOR DESIGN DECISION**

Separate submittals for concurrence with major design decisions are required. Major design decisions involve significant utility relocation, unforeseen acquisition of ROW, traffic operation or geometric decisions that involve two or more viable solutions, and any other decision that impacts the public, operation of the facility or future maintenance.

When the DBT becomes aware of additional decisions during the course of the design, they shall advise KYTC’s Project Manager in writing.

**15.3 CONSTRUCTION PLANS**

After the review comments for the final plan review submission have been complied with, and following approval of the design documentation, the DBT shall prepare plan sets for use during construction. All review comments shall be resolved in writing by the DBT to satisfaction of the KYTC before DBT submits the construction plans. Each plan sheet shall have its last revised date noted on the sheet and clearly marked “Approved For Construction”. Physical construction shall not begin until the plans marked “Approved For Construction” (by the Project Manager) are delivered to each party on the Plan Distribution Table below. KYTC will comment on these plans within 14 working days of their submission by the Project Manager. No time extensions will be approved by the Project Manager if the plan distribution is not completed and project delays occur as a result.

The DBT shall supply full size (22”x35”) and/or half size (11”x17”) paper prints and electronic pdf version of each plan submission simultaneously to the parties indicated below:

<b>Plans Distribution Table</b>	<b>Number of half size sets</b>
KYTC District Office	4
KYTC Central Office	2

**16 BUILDABLE UNITS**

**Definition:** Buildable Units are portions of the projects which may be designed, reviewed and built with only limited controls and assumptions coming from the design of other portions of the project. Often a Buildable Unit will be defined by a geographic area within the plan, but it may also be defined by types of work or construction stages which may require or permit similar, nearby work to be divided into separate Buildable Units. All Buildable Units shall summarize the materials required to construct that portion of the project. The summary shall include the Construction and Material Specifications Item Number, and a description of the materials to be used.



**General:** The DBT may break the project work into two or more separate BU which may be progressed through design and construction with minimal or known effect on each other and/or which may be dealt with sequentially such that sufficient data is available for design and review of each BU. In order that the design and construction of one BU may proceed without significant approved information from an associated BU, the DBT may develop and propose assumptions which will allow for the first BU to proceed through design and/or construction. These assumptions shall be submitted for review and comment but their accuracy and effort upon the final design are the sole responsibility of the DBT. Should error in these assumptions result in additional work, remedial work or other changes to assume an acceptable design or should they result in the need to remove work and substitute additional work, the DBT shall be responsible for all such costs including, removal of unacceptable materials from the site, modification, additional work, repairs, etc. as necessary to produce an acceptable result.

If the DBT elects to develop Buildable Units, The DBT shall prepare, for review by the KYTC, a table of Buildable Units for the project with each BU described in detail. This table of Buildable Units will be approved or comments given within 14 calendar days after the submission. If the table is approved, the DBT shall modify the Progress Schedule to show a separate group of activities for BU and these activities shall encompass all of the design and construction work in each BU. Work activities shall be further separated in the Progress Schedule to show a meaningful completion status (i.e. separate activities comprising the placement of a bridge deck on steel beams shall describe; shoring, form building, steel placement, placement of conduit & joints, pouring concrete, forming parapets, pouring or slip forming parapets, provision of membranes, provision of wearing surfaces, curing, repair, form removal, cleaning, etc.)

The Final Review Submission and construction plans shall specifically be identified by the Buildable Unit code. If the design of a BU requires input information from an adjacent or related BU, the source for that information in previously approved plans shall be cited or the DBT shall provide an estimated value of the data. The input data shall also be carefully identified. In the same way any assumption, calculations or results from the stage and BU which are used as input to another BU to verify previous assumptions. Should assumptions not match values calculated later, the DBT shall re-analyze all affected components and determine appropriate changes. Should those elements have already been constructed, the DBT shall recommend repairs, adjustments, modifications or replacement of the existing work as necessary to comply with the Scope of Work. All costs for re-design, re-submission, modifications, removals, disposal of materials and new work needed to remedy the project and bring it to compliance shall be borne by the DBT and no time extensions shall be approved for this.

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