

LOCAL PUBLIC AUTHORITY (LPA) PROJECT DEVELOPMENT MANUAL



2020 Edition

Table of Contents

Table of Contentsi
1.0 Introduction1-1
1.1 List of Acronyms1-1
1.2 Authority1-3
1.3 Policy1-3
1.4 Applicability1-3
1.5 KDOT-Administered Projects1-4
1.6 LPA-Administered Projects1-4
1.7 Maintenance of Website Links1-5
2.0 Programming2-1
2.1 Federal Funding2-1
2.2 State Funding2-6
2.3 Public Involvement2-7
2.4 Request for Projects2-8
2.5 Agreements2-9
3.0 Preliminary Engineering Consultant Selection and Agreement
3.1 Participating3-1
3.2 Non-Participating3-2
3.3 Conflict of Interest3-2
4.0 Environmental4-1
4.1 NEPA4-1
4.2 Public Involvement4-2
4.3 KDOT Environmental Review Process4-3
4.4 Design Summary Document4-4
4.5 Permits / Status of Permits (1307)4-4

5.0 Plan Development	5-1
5.1 Design References	5-1
5.2 Design Criteria	5-2
5.3 Preliminary Scoping/Site Review	5-15
5.4 Field Check	5-15
5.5 Office Check	5-16
5.6 Final Check	5-20
5.7 PS&E	5-21
Appendix A	5-23

6.0 Bridge Design	6-1
6.1 Field Check	6-1
6.2 Office Check	
6.3 Final Check	
Appendix A	6-16

7.0 Right of Way	7-1
7.1 Introduction	7-1
7.2 The Valuation Process	7-7
7.3 The Acquisition Process	7-13
7.4 Relocation Assistance	7-18
7.5 Title and Closing	7-21
7.6 Certification of Right of Way	7-21
7.7 Miscellaneous Right of Way Topics	7-22
Appendix A	7-29
Appendix B	7-37

8.0 Stat	tus of Utilities8-	1
8.1	Schedule8-	1
8.2	Responsibilities8-	1

9.0 Letting and Award9-1
9.1 Advertisement/Addendums9-1
9.2 Letting9-1
9.3 Commitment of Funds9-2
9.4 Award of Contract9-2
9.5 Contract Execution and Notice to Proceed9-2
10.0 LPA Administered Procedures10-1
10.1 Introduction10-1
10.2 Administration
10.3 Procedures10-4
Appendix A10-22
11.0 Construction Engineering (CE) Consultant Selection and Agreement
11.1 Inspection Options11-1
11.2 Funding Options11-1
11.3 Conflict of Interest11-3
12.0 Construction and Oversight Responsibilities12-1
12.1 Construction12-1
12.2 Working/Shop Drawings12-1
12.3 Revised Plans12-5
12.4 Project Acceptance and Closeout12-5
13.0 City Connecting Link Improvement Program (CCLIP)13-1
13.1 Program Categories13-1
13.2 Funding and Participating Phases13-2
13.3 Project Application, Selection, and Programming13-3
13.4 Project Responsibilities13-4
13.5 Project Development13-5
Appendix A13-14

14.0 Safety Programs	14-1
14.1 High Risk Rural Roads (HRRR)	
14.2 Local Road Safety Plans (LRSP)	14-2
14.3 Traffic Engineering Assistance Program (TEAP)	14-3
14.4 Practical Road Safety Assessments (PRSA)	14-3
14.5 Additional Resources	14-3

15.0 Emergency Relief (ER) Procedures	15-1
15.1 Initial Procedures	
15.2 Formal Assessment	15-2
15.3 Project Generation	15-3
15.4 Project Finalization	15-4

1.0 Introduction

The purpose of this Manual is to prescribe policies and procedures to be used for the development of state and/or federal aid projects in the State of Kansas. The responsibilities of BLP, other KDOT Bureaus/Districts and the LPAs for these projects are described in this Manual.

1.1 List of Acronyms

The following acronyms are used throughout this LPA Project Development Manual (Manual):

AASHTO – American Association of State Highway and Transportation Officials

ABA – Architectural Barriers Act

ADA – Americans with Disabilities Act

ADAAG – 2004 ADA Accessibility Guidelines

BFS – KDOT Bureau of Fiscal Services

BLP – KDOT Bureau of Local Projects

BOCM – KDOT Bureau of Construction and Materials

BPPM – KDOT Bureau of Program and Project Management

CATX – Categorical Exclusion

CCLIP – City Connecting Link Improvement Program (formerly KLINK and GI)

CE – Construction Engineering

CIT – Certified Inspection and Testing

CMS – Construction Management System

DBE – Disadvantaged Business Enterprise

DDIR - Detailed Damage Inspection Report

DSD – Design Summary Document

EA – Environmental Assessment

EIS – Environmental Impact Statement

ER – Emergency Relief

ESS – KDOT Environmental Services Section

FAPG – Federal Aid Policy Guide

FEMA -Federal Emergency Management Agency

FFE – Federal Fund Exchange

FFY – Federal Fiscal Year

FHWA – Federal Highway Administration

FLAP – Federal Lands Access Program

FONSI – Finding of No Significant Impact

FPIL – Final Paid Items List

HCM – Highway Capacity Manual

HRRR – High Risk Rural Roads

HSIP – Highway Safety Improvement Program

- KDOT Kansas Department of Transportation
- KDWPT Kansas Department of Wildlife, Parks, and Tourism
- KTA Kansas Turnpike Authority
- LPA Local Public Authority
- LRFD Load and Resistance Factor Design
- LRSP Local Road Safety Plan
- MPO Metropolitan Planning Organization
- MSE Mechanically Stabilized Earth
- MUTCD Manual on Uniform Traffic Control Devices
- NBI National Bridge Inventory
- NEPA National Environmental Policy Act
- NHS National Highway System
- NSBP National Scenic Byways Program
- NTP Notice to Proceed
- PE Preliminary Engineering
- PIF Public Interest Finding
- PIL Paid Items List/Bid Tabs
- PIRC Person in Responsible Charge
- PM Project Manager
- PMCP-C Project Manager Certification Program Construction
- PPC Proprietary Product Certification
- PROWAG Public Rights-of-Way Accessibility Guidelines
- PRSA Practical Road Safety Assessment
- PS&E Plans, Specifications, and Estimate
- QBS Qualifications-Based Selection
- ROD Record of Decision
- ROW Right of Way
- ROWCP Right of Way Certification Program
- RSA Road Safety Audit
- SHSP Strategic Highway Safety Plan
- S.O.M. KDOT's Standard Operating Manual
- STBG Surface Transportation Block Grant Program (formerly STP)
- STE State Transportation Engineer
- STIP State Transportation Improvement Program
- STP Surface Transportation Program
- TEAP Transportation Engineering Assistance Program
- TIP Transportation Improvement Program
- TMA Transportation Management Area
- TRB Transportation Research Board
- U.S.C. United States Code
- USFWS United States' Fish and Wildlife Service

1.2 <u>Authority</u>

This document has been developed under the authority granted by <u>KSA 68-401</u>, <u>68-402(b)</u> and <u>68-404</u>, <u>23</u> <u>U.S.C. 109 (o)</u>, and the authority granted under the FHWA/KDOT Risk Based Stewardship and Oversight (RBSO) agreement letter dated May 21, 2015 (*Figure 1*).

1.3 <u>Policy</u>

The Secretary will follow sound engineering, administrative, and managerial practices in the expenditure of federal, state, and local funds and will comply with all applicable federal and state laws in the planning, development, construction, and maintenance of projects as outlined in this Manual. The Secretary has delegated authority to the Director of the Division of Engineering and Design to administer certain preconstruction and construction activities of projects which are developed following procedures outlined in this Manual. This delegation includes the flexibility in selection of criteria, procedures, and operations as allowed by FHWA. The Secretary may delegate the authority to other Divisions to operate under this Manual as appropriate.

1.4 Applicability

Projects covered by this Manual include new construction, reconstruction and resurfacing, restoration, and rehabilitation (3R) types of improvements utilizing state or federal dollars which may either be let by KDOT or the LPA.

Other non-traditional transportation projects such as historic building restorations, etc. are not covered in detail in this manual although some of the typical procedures may apply. These projects may be considered on a project by project basis under the direction of the PM.

Project items covered by this Manual include, but are not limited to: Plans, specifications, estimates, surveys, contract awards, design, inspections, construction, and construction final inspection of projects which are financed with state and/or federal funds on state, county and city routes (including City roads functionally classified as principal arterials which are included on the NHS according to MAP-21). Special procedures need to be followed for all local projects on the NHS, see *Section 10.0 LPA-Administered Procedures* of this Manual. This Manual also addresses the project selection and approval process followed by local governments and KDOT. Other projects may be administered under these procedures when permitted by the FAPG directives.

1.5 KDOT-Administered Projects

Federally funded local projects are administered under exempt-oversight procedures in which the authority has been delegated from the FHWA to KDOT to develop projects under state approved standards and specifications. All federal funded projects administered by BLP will be let by KDOT unless the LPA has been certified and approved to let federal funded projects.

State or federally funded projects let by KDOT will be administered in accordance with the requirements set forth in this Manual. Lettings are held monthly, usually on the third Wednesday at 1:30 PM.

Users wanting to listen to the live audio broadcast of the bid letting can open their web browser, and enter the following address:

http://www.ksdot.org/bureaus/burconsmain/audio.asp

The multicast stream will only be active approximately 15 minutes before the letting time the day of the letting and the session will end after the bid opening.

You may also listen to the audio broadcast of the bid letting through a conference call. Dial (866) 620-7326. The conference code is 5895748207.

1.6 LPA-Administered Projects

Locally administered project (LPA-Administered) procedures provide a method by which KDOT can delegate administrative responsibilities of a project to an LPA while maintaining oversight and federal-aid eligibility verification responsibilities. The respective responsibilities of both KDOT and the LPA are detailed in *Section 10.0 LPA-Administered Procedures* in this Manual.

When a local unit of government performs the project administration for federal and/or state-aid construction projects, KDOT must have assurances the LPA is complying with the requirements of federal and state laws and regulations. This is accomplished by limited reviews of plans and specifications and a series of project development phase summary documents. Information related to the project development phase summary documents is included in this Manual; they are the mechanism with which the LPA certifies that appropriate action has been completed. Project responsibilities associated with obligation of funds, environmental classification determinations, and the processing of NEPA documents remain with KDOT and FHWA.

1.7 <u>Maintenance of Website Links</u>

This manual contains links to websites that are not managed by the Bureau of Local Projects. If a broken link is found, we would appreciate being informed of the issue.

Please report any broken links to <u>mailto:KDOT.LPePlans@ks.gov</u>.

Figure 1

U.S. Department of Transportation Federal Highway Administration

Kansas Division

May 21, 2015

6111 SW 29th, Suite 100 Topeka, Kansas 66614 (785)273-2600 (785)273-2620 (fax) www.fhwa.dot.gov/ksdiv/index.htm

> In Reply Refer To: HDA-KS

MAY 2 2 2015

Mr. Mike King Secretary of Transportation Kansas Department of Transportation 700 SW Harrison Street Topeka, Kansas 66603

Subject: Risk Based Stewardship and Oversight Agreement

Dear Mr. King:

Enclosed is a signed copy of the Risk Based Stewardship and Oversight (RBSO) agreement between the Federal Highway Administration (FHWA) Kansas Division and the Kansas Department of Transportation (KDOT). Section 106 of Title 23, United States Code, requires the FHWA and each State department of transportation to enter into an agreement documenting the extent to which the State will assume specific responsibilities under Title 23. This RBSO Agreement formalizes these assumed responsibilities to address how the Federal-aid highway program will be administered in Kansas and meets the changes to Section 106 under Section 1503 of the Moving Ahead for Progress in the 21st Century Act (MAP-21).

This document is the culmination of many months of work from both KDOT and FHWA staff and I would like to thank the many individuals from various KDOT program offices that provided input into the development of the agreement. I would especially like to thank Mr. Jim Kowach for his leadership in this endeavor and Ms. Barbara Rankin for her legal review and advice.

Although the project responsibility matrix in the document is dated May 31, 2015, these assumed project responsibilities have been in place for over a year and both of our agencies have been operating as such. FHWA continues to enjoy an excellent partnership and a strong working relationship with KDOT and we look forward to many more years of working together to provide a safe and efficient transportation system that meets our customers' needs.

Sincerely yours,

Muhl Bar

J. Michael Bowen, P.E. Division Administrator

Enclosure

Cc: Jerome Younger, Deputy Secretary and State Transportation Engineer, KDOT, w/ attachments Wade Weibe, Director of Partner Relations, KDOT, w/ attachment Barbara Rankin, Chief Counsel, KDOT, w/ attachment

2.0 <u>Programming</u>

2.1 <u>Federal Funding</u>

This section describes the funding programs, processes, documents, and approvals necessary for obtaining federal funds through KDOT, including discretionary or demonstration funds, otherwise known as earmarks. Federal funds are made available to the LPAs each federal fiscal year, October 1 through September 30. A portion of the federal-aid transportation dollars that are made available to the State of Kansas are shared with LPAs. The "pass-through" of federal funds is comprised of the STBG. The funds under this program are distributed to cities and counties based on federal law, state statute, or the policy of KDOT and comprise the "obligation authority" or "allocation" that is distributed to each LPA.

Please refer to FHWA's "<u>A Guide To Federal-Aid Programs And Projects</u>" for more information about all of the federal-aid programs.

STBG funds are allocated to each of the counties in the state in accordance with <u>KSA 68-402(b)</u>, which provides for the distribution to be in the same proportion as the Special City and County Highway Fund and the County Equalization and Adjustment Fund.

LPAs may also apply to KDOT for federal-aid funding from competitive programs. These funding programs will be discussed in detail later in this section.

2.1.1 Federal Fund Exchange (FFE)

The Federal Fund Exchange program is a voluntary program that allows an LPA to trade all or a portion of its federal fund allocations in a specific federal fiscal year with KDOT in exchange for state transportation dollars or with another LPA in exchange for their local funds. See the Bureau of Local Projects website (<u>http://www.ksdot.org/bureaus/burlocalproj/default.asp</u>) for more information regarding the Federal Fund Exchange program and procedures.

2.1.2 <u>Surface Transportation Block Grant Program (STBG)</u>

STBG funds are made available for the federal fiscal year, October 1 through September 30. Any LPA project funded in whole or in part by STBG funds shall be developed following established procedures outlined in *Section 5.0 Plan Development* in this Manual.

STBG provides flexible funding that may be used by State and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. These funds can be used on eligible project expenses related to preliminary engineering, environmental, right-of-way, non-betterment utility relocation/rehabilitation, construction, and construction engineering. However, BLP policy is for STBG funds to be used toward construction and CE expenses only and for typical improvements such as upgrading an existing road, roadway reconstruction, resurfacing, ADA/sidewalk/multi-use path improvements, and bridge projects.

Typically, STBG funds are available to finance up to 80% of eligible project costs with a minimum 20% match from the LPA.

2.1.2.1 STBG Small Urban

Pursuant to 23 USC 133(d)(1)(A), after required program deductions all STBG small urban funds must be divided between urbanized areas of 200,000 or more in population and the remaining 1st class cities (population over 5,000 less than 200,000) in the State.

2.1.2.2 STBG County

STBG funds are allocated to each of the counties in the state in accordance with <u>KSA 68-402(b)</u>, which provides for the distribution to be in the same proportion as the Special City and County Highway Fund and the County Equalization and Adjustment Fund.

2.1.2.3 Transportation Management Area (TMA)

The STBG funding available within a TMA is set by Federal law and those funds may only be used within the planning area of the TMA. In Kansas the TMA's are Mid America Regional Council (MARC) and Wichita Area Metropolitan Planning Organization (WAMPO).

2.1.2.4 Off-System Bridge Program

Federal law and regulations require that not less than 15 percent of a state's apportionment of STBG funds will be used for replacement or rehabilitation of eligible bridges located on a public road that is not on the federal-aid system. To comply with this requirement, KDOT has established an Off-System Bridge Program. The federal funds for this program are set aside prior to distribution of the remaining federal apportionment to eligible LPAs. The program is competitive and local agencies are required to apply for the funds. Projects will be selected for the program from the applications received during the annual application period. Projects approved for the program that fail to meet the fiscal year bid letting must re-apply for funding in a future fiscal year.

To be eligible for the program, the following apply:

- The bridge must have a current NBI inspection report.
- The bridge is only eligible if it is located on a road/street functionally classified as a rural minor collector, rural local road, or urban local street.

This is a federal program and the participation will be maximum 80 percent federal and minimum 20 percent local funding for Construction and CE.

Interested officials may submit an application to BLP for consideration for the Off-System Bridge Program. To be considered for an Off-System Bridge Project, the following documents will be required at the time of application:

- The completed Local Off-System Bridge Program (KDOT Form 1332) application form.
- A scale map of the bridge location.
- A detailed cost estimate.

After the announcement of the selected projects, the LPA must submit a completed <u>Project Programming</u> <u>Request (KDOT Form 1302)</u> to BLP. The PM will coordinate with the LPA in determining an appropriate letting date and project schedule.

2.1.2.5 Transportation Alternatives

The FAST Act eliminated the MAP-21 Transportation Alternatives Program (TAP) and replaced it with a setaside of Surface Transportation Block Grant (STBG) program funding for transportation alternatives (TA). These set-aside funds include a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity.

More information about the TA program may be found at the following websites:

FHWA: <u>https://www.fhwa.dot.gov/fastact/factsheets/transportationalternativesfs.cfm</u> KDOT: <u>http://www.ksdot.org/bureaus/burtransplan/TransAlt.asp</u>

2.1.3 Congestion Mitigation and Air Quality Improvement (CMAQ) Program

The Congestion Mitigation and Air Quality Improvement (CMAQ) Program is a federal program that funds transportation projects or programs which contribute to improved air quality and to relieve congestion. CMAQ projects must follow federal laws and regulations. Although funded by FHWA, if the LPA is an urbanized transit agency the CMAQ project can be administered by the Federal Transit Administration (FTA) by transferring the funds from FHWA to Federal Transit Administration (FTA).

Eligibility for CMAQ funds requires a project to be included in an MPO's current Long-Range Transportation Plan and TIP. In nonattainment and maintenance areas, the project must meet the conformity provisions contained in Section 176(c) of the Clean Air Act and the transportation conformity rule contained in 40 CFR Parts 51 and 93. In addition, all CMAQ projects need to follow the NEPA requirements (explained in further detail in *Section 4.0 Environmental* in this Manual) and meet basic eligibility requirements for funding under <u>Title 23, U.S.C.</u> and <u>Title 49, U.S.C.</u>.

For LPA-Administered projects, KDOT will reimburse the LPA based on eligible expenses as incurred. In most cases, CMAQ projects require a 20% minimum local match. For KDOT-Administered projects, project payments are made directly to the Contractor following established payment procedures.

The funds for CMAQ projects programmed for a designated fiscal year must be obligated within that year. For example, if a project is programmed to let in FFY 2018, the funds must be obligated between October 1, 2017 and September 30, 2018. Any portion of the funding not obligated by this date may no longer be available.

Guidance for CMAQ funded projects can be found at: FHWA CMAQ Guidance

2.1.3.1 CMAQ – Non-Construction Project

Examples of typical CMAQ funded purchase type projects are alternative fuel vehicles, Intelligent Transportation Systems (ITS), and other Special Federal Funding. Contact the PM for procedures related to CMAQ Non-Construction Projects.

2.1.4 Highway Safety Improvement Program (HSIP)

SAFETEA-LU established the Highway Safety Improvement Program (HSIP) as a Federal-aid program. The overall purpose of this program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads through the implementation of infrastructure-related highway safety improvements.

The specific provisions pertaining to the HSIP are defined in <u>Section 1112 of MAP-21</u>, which amended <u>Section 148 of Title 23 United States Code</u> to incorporate these provisions. These requirements include the development of **Strategic Highway Safety Plans (SHSPs)**, in consultation with other key State and local highway safety stakeholders, and several reporting requirements. These requirements were continued in Section 1113 of FAST-ACT.

2.1.4.1 Railway-Highway Crossings Program

As part of the HSIP, funds are set aside each fiscal year for the <u>Railway-Highway Crossings Program (Section</u> <u>130 of Title 23 U.S.C.)</u>. These funds provide for the elimination of hazards and the installation of protective devices at public railway-highway crossings. For more information regarding this program contact KDOT Coordinating Section in the Bureau of Design.

2.1.4.2 High Risk Rural Roads (HRRR)

The High Risk Rural Roads (HRRR) program is intended to improve safety where crashes have been a problem or have a potential to increase in the future. Projects funded through this competitive program receive 90% matching federal funds with maximum dollar amounts decided by committee. Periodically, BLP will request applications for HRRR projects.

For more information about HRRR, please refer to Section 14.0 Safety Programs in this Manual.

2.1.4.3 Transportation Engineering Assistance Program (TEAP)

The Traffic Engineering Assistance Program (TEAP) is a federally funded program that allows local units of government to have traffic safety studies performed at no cost to the LPA. For additional information about this program, please refer to *Section 14.0 Safety Programs* in this Manual.

2.1.5 Emergency Relief (ER) Program

The Emergency Relief (ER) program is intended to provide funding to help with repairs on federal aid routes due to a state and nationally recognized natural disaster. Additional information regarding this program can be found in *Section 15.0 Emergency Relief* in this Manual.

2.1.6 Federal Lands Access Program (FLAP)

Definition

Federal lands access transportation facility— A public highway, road, bridge, trail, or transit system that is located on, is adjacent to, or provides access to Federal lands for which title or maintenance responsibility is vested in a State, county, town, township, tribal, municipal, or local government.

The Federal Lands Access Program was established in <u>Section 204 of Title 23 U.S.C.</u> to improve transportation facilities that provide access to, are adjacent to, or are located within Federal lands. Project selection is determined by a Program Decision Committee (PDC). The committee is composed of a representative of the Central Federal Lands Highway Division (CFLHD), a representative of KDOT, and a representative of the Kansas Association of Counties (KAC). This committee will make programming decisions for the funds.

There is no specified regular date or time of year when a call for projects is issued. This is determined based on fund availability. The CFLHD issues the call when the funds are available and after notification from the PDC to do so.

The application along with other pertinent information about the program may be found at the following website: <u>https://flh.fhwa.dot.gov/programs/flap/</u>

Eligible activities

- Transportation planning, research, engineering, preventive maintenance, rehabilitation, restoration, construction, and reconstruction of Federal lands access transportation facilities located on or adjacent to, or that provide access to, Federal land, and—
 - adjacent vehicular parking areas;
 - acquisition of necessary scenic easements and scenic or historic sites;

- provisions for pedestrians and bicycles;
- environmental mitigation in or adjacent to Federal land to improve public safety and reduce vehicle-caused wildlife mortality while maintaining habitat connectivity;
- construction and reconstruction of roadside rest areas, including sanitary and water facilities; and
- other appropriate public road facilities, as determined by the Secretary
- Operation and maintenance of transit facilities.
- Any transportation project eligible for assistance under title 23 of the United States Code that is within or adjacent to, or that provides access to, Federal land.

2.1.7 National Highway Performance Program (NHPP)

The FAST Act continues the National Highway Performance Program, which was established under MAP-21. The NHPP provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a State's asset management plan for the NHS.

2.1.8 <u>Better Utilizing Investments to Leverage Development (BUILD)</u>

This program provides a unique opportunity for the United States DOT to invest in road, rail, transit and port projects that promise to achieve national objectives. Congress has dedicated nearly \$7.1 billion for ten rounds of National Infrastructure Investments to fund projects that have a significant local or regional impact.

More information about the BUILD program may be found at the following website: <u>https://www.transportation.gov/BUILDgrants</u>

2.2 <u>State Funding</u>

CCLIP projects are state-funded transportation projects administered by BLP.

2.2.1 <u>City Connecting Link Improvement Program (CCLIP) Projects</u>

The City Connecting Link Improvement Program (CCLIP) is a federal and state-funded program that provides funds to cities to address deficiencies or improve a City Connecting Link on the State Highway System. A City Connecting Link is defined as any routing of the State Highway System that is located within the corporate limits of a City. All City Connecting Links are eligible under this program except those on the Interstate System and fully controlled access sections on the Freeway System.

The City Connecting Link Improvement Program consists of three program categories that each

target specific types of improvements:

2.2.1.1 Surface Preservation (SP)

This fund category is intended to address deficiencies in or extend the life of the driving surface. Project scopes may consist of overlay, mill and overlay, pavement patching, joint repair, seals, or similar surface maintenance work. Parking lanes may be included. Construction of ADA curb ramps, as required by Federal Regulation and Department of Justice guidance, will be included. Bridge improvements, curb and gutter repair or replacement, drainage improvements, construction or improvement of sidewalks beyond the ADA ramps, or geometric improvements may be included in a project but shall not be eligible for program funding.

Additional information regarding this program can be found in *Section 13.0 CCLIP* in this Manual.

2.2.1.2 Pavement Restoration (PR)

This fund category is intended to address deficiencies in the road surface that are too extensive or expensive to be addressed by the measures under the SP category. Actions under this category could include full-depth pavement replacement of the entire driving surface or extensive pavement rehabilitation. Other related improvements, such as curb and gutter repair/replacement, storm sewer, parking lanes, or sidewalk construction may be included in the scope of projects and are eligible for the funding. Typically, PR projects will not include any modification of the roadway geometrics other than restoring appropriate cross section.

Additional information regarding this program can be found in *Section 13.0 CCLIP* in this Manual.

2.2.1.3 Geometric Improvement (GI)

This category is intended to address a safety, capacity, or operational need that can be addressed by changing the roadway geometrics. Examples of projects under this category include, but are not limited to, intersection reconstruction to reduce encroachments over the curb from off-tracking of turning trucks; addition or extension of turn lanes; widening of the roadway to accommodate larger vehicles; or sight distance improvements.

Additional information regarding this program can be found in *Section 13.0 CCLIP* in this Manual.

2.3 Public Involvement

The LPA is responsible for public involvement in the selection/prioritization process, which is commensurate with the scope and complexity of the proposed project. At a minimum, public involvement should include a public notice indicating when a governing body will be making a decision on reviewing needs, selecting projects and setting priorities for federal aid projects.

In later stages of project development, more public involvement may be warranted. The public involvement in the project development process will be in accordance with KDOT's publication <u>"Sharing the Future:</u> <u>Public Involvement in the Kansas Transportation System</u>".

More complex projects, or those that have a high potential for environmental impact, may require early and extensive public involvement and extensive documentation in accordance with <u>Code of Federal Regulations</u>, <u>Title 23 CFR, Part 771</u>. Documentation in these cases may be in the form of either an EIS (Class I) or an EA (Class III). The public involvement process flow charts included in KDOT's <u>"Sharing the Future: Public</u> <u>Involvement in the Kansas Transportation System</u>" provide the process used to categorize projects along with the sequence of events that need to be completed for each classification.

See KDOT's Design Manual, Volume I, Part A, Section 5.9 and the KDOT publication <u>"Sharing the Future:</u> <u>Public Involvement in the Kansas Transportation System</u>" for additional information.

2.4 <u>Request for Projects</u>

The Local Public Authority (LPA) is required to submit a Project Request to BLP to program a Federal or State funded project. The project request form must be completed in its entirety, including required attachments and/or supporting information, and submitted to BLP.

BLP will review the request and verify that the project is eligible for funding. The project must meet certain Federal and/or State Guidelines to be eligible for funding. The LPA will be contacted if clarification or more information is required to complete the review. After the review is completed and approved, the project will be assigned a KDOT Project Number and a preliminary project schedule will be established. The project agreement process will also be initiated.

Once the project has been programmed, the project will be administered by BLP in accordance with this Manual.

2.4.1 Construction Project

For infrastructure construction projects, the LPA is required to submit a completed <u>Project Programming</u> <u>Request (KDOT Form 1302)</u> to BLP.

2.4.2 <u>Non-Infrastructure (Procurement) Project</u>

For non-infrastructure or procurement projects, the LPA is required to submit a <u>Non-Infrastructure Project</u> <u>Request (KDOT Form 1312)</u> to BLP.

2.5 Agreements

For local projects administered by KDOT and/or funded by Federal or State funds, an agreement is executed between KDOT and the LPA. Agreements will specify conformity with State and Federal regulations as well as requirements for certain language to be included in consultant contracts.

2.5.1 County Umbrella Agreements

KDOT and counties have executed umbrella agreements in the past pursuant to KSA 68-402b which allow for the Secretary to administer and let federal-aid projects for the County. These agreements cover all situations where the County requests a federal-aid project on their system and the project is funded with federal-aid at an 80% federal, 20% local ratio and there is no maximum on the federal funds obligated for the project. For any project in a county that does not fall under the current umbrella agreement with KDOT, a project agreement will be drafted and sent electronically to the LPA.

2.5.2 Project Agreements

Project agreements will be executed for all local projects administered by KDOT and/or funded by Federal or State funds, unless they are covered by a County Umbrella Agreement. Project agreements are initiated by KDOT and will be sent to the LPA electronically approximately one year before the project letting. The LPA will be asked to execute two copies of the project agreement and mail both back to KDOT for execution. The LPA will receive a copy once the agreement is fully executed.

2.5.3 Supplemental Agreements

Supplemental agreements will be prepared when necessary to change or correct the terms of the original project agreement. The most common reason to supplement a project agreement is a change in funding or scope. Supplemental agreements will be initiated by KDOT and will follow the same process as project agreements.

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3.0 Preliminary Engineering (PE) Consultant Selection and Agreement

The LPA may engage consultants to perform engineering and design related services to develop a Federalaid and/or State-aid funded project. The LPA is encouraged to consult with BLP during the project programming process to identify if preliminary engineering (PE) is eligible to be a participating item for a project.

3.1 <u>Participating</u>

Qualifications-Based Selection (QBS) procedures must be followed when procuring engineering and design related services using federal or state funds where those services are directly related to a construction project. Therefore, the LPA must follow the selection and contracting provisions of the 23 CFR 172 when PE is a participating project cost. This regulation requires contracts for engineering design services utilizing federal/state funds to be awarded based on demonstrated competence and qualifications for the type of professional services required and negotiation of a fair and reasonable compensation.

Upon confirmation that PE is a participating work phase, BLP will send a QBS selection packet that contains instructions to guide the LPA through the QBS process.

To be reimbursed for PE as a participating work phase, QBS procedures must be followed. The LPA will make their consultant selection from the approved list of consultants furnished by KDOT for participating PE services (see link). <u>Preliminary Engineering Pre-Qualified Consultant List - by Category</u>

3.1.1 QBS Process

QBS is required by state statute when federal **or** state dollars are involved in the PE and/or CE of a project. The LPA can use the QBS process for PE and CE concurrently providing the LPA informs the qualified firms at the time of solicitation for the project. The LPA must obtain the current edition of the **Desk Reference for Quality Based Selection of Consultants** from KDOT BLP prior to initiating the QBS process. This information is available at the following link:

http://www.ksdot.org/Assets/wwwksdotorg/bureaus/burLocalProj/Consultant-Selection/PE%20selection%20process%20packet.pdf

This document will provide detailed instructions for the entire QBS process.

3.1.2 Agreement/ Supplemental Agreement

After BLP's approval of the Consultant's proposal, a three-party Agreement is created by KDOT between the Consultant, the LPA and KDOT. Three original copies of the Agreement are sent to the Consultant for signatures. Once the three copies of the Agreement are signed by the Consultant, they forward them to the LPA for signatures. All original copies are then returned to KDOT for further processing. The executed original agreements are then distributed to the respective parties.

Supplemental agreements are changes to the original Agreement due to change of scope or some other amendment. They may be issued at the request of any party and are subject to approval by the same methods as the original Agreement.

3.1.3 Notice to Proceed

A Notice to Proceed must be issued by BLP before any participating consulting work can be performed.

3.1.4 <u>Reimbursement</u>

When PE is participating, the LPA will make the payment to the Consultant then submit a request for reimbursement to BLP. BLP will review the request and reimburse the LPA. Monthly progress reports are required to verify that the payment corresponds with the work that has been completed. The Monthly Progress of Plans & Estimated Construction Costs form is available at:

http://www.ksdot.org/Assets/wwwksdotorg/bureaus/burlocalproj/Forms/Progress_Report.pdf

3.2 Non-Participating

If funds are not participating in the engineering and design related services contract, the LPA may procure the professional services in accordance with its own established policies and procedures which reflect applicable State and local laws and required consultant contract language from the Agreement.

BLP can provide the LPA with a recommended PE agreement template on request.

3.3 Conflict of Interest

Federal and State laws and regulations provide for the protection of the public's interest against fraud, waste, and abuse of government resources. All consulting engineering firms employed on projects administered by BLP are expected to exercise judgment and perform their duties in a way that supports the applicable policies and practices of the State of Kansas and the Local Public Authority. Any situation that would compromise the ability of the consulting firm or its employee(s) ability to act on behalf of KDOT or the LPA is considered a Conflict of Interest.

Conduct or situations that are conflicts of interest include, but are not limited to, the following:

- A consulting firm or its employee has, either directly or indirectly, a financial or personal interest in a contractor, subcontractor, or material supplier connected to the project.
- A consulting firm or its employee unduly influencing decisions on scope changes, design changes, construction revisions, contract change orders and other related issues to minimize or ignore design errors or to positively benefit the firm.

All consultant contracts for Preliminary Engineering Design Services for work to be paid partially or wholly with federal or state dollars will include the following language under the Obligations of the Consultant:

- The Consultant warrants they have no public or private interest, and shall not acquire directly or indirectly any such interest, which would conflict in any manner with the performance of the work under this Agreement. Specifically, the Consultant is prohibited from performing contractor construction staking or any other work that is the construction Contractor's responsibility on this Project.
- 2) The Consultant will not, without written permission from KDOT, engage the services of any person(s) in the employment of KDOT for any work required by the terms of this Agreement.

In addition, every contract for engineering services will include a Code of Conduct Certification, known as Special Attachment No. 2, signed by the Consultant, State Transportation Engineer, and the LPA. By signing this form, the three parties certify that there was no undue influence of any party regarding executing or carrying out the agreement.

The Consultant is responsible to identify and disclose any actual or potential Conflict of Interest on a project.

In addition to these requirements, the consulting firm and its employees shall comply with all other professional responsibilities, code of ethics, or law applicable to the services being provided.

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4.0 Environmental

One of the most important phases of a Federal-aid project is the environmental process. Final design and obligation of federal funds for construction may not proceed until full compliance with the National Environmental Policy Act (NEPA) has been completed and the Design Summary Document (DSD) has been generated by KDOT. If federal funds are being used to acquire any right of way, acquisition may not commence until the NEPA process has been completed. If federal funds are not being used to acquire any right of way, it is encouraged and may be prudent to begin the actual right of way acquisition after the NEPA process has been concurred on by FHWA (or KDOT for class IIA categorical exclusions per the Programmatic Categorical Exclusion Agreement).

4.1 <u>NEPA</u>

The NEPA process consists of an evaluation of potential environmental impacts of any federal aid project that requires permits or authorization from a federal agency. For projects administered through the BLP, the NEPA process begins when KDOT programs the project and assigns it a NEPA environmental class. There are three different levels of analysis that KDOT and the LPA may undertake to comply with the law:

- 1. Preparation of a Categorical Exclusion (CATX);
- 2. Preparation of an Environmental Assessment (EA) which may lead to a Finding of No Significant Impact (FONSI); or
- 3. Preparation and drafting of an Environmental Impact Statement (EIS) and a Record of Decision (ROD).

The Environmental Services Section (ESS) of the Bureau of Right of Way will perform or arrange for the necessary review to fulfill the NEPA requirements for all transportation projects (except CCLIP-SP or FFE). The ESS completes the initial environmental review needed for city and county projects. The acquisition of any necessary environmental permits is the responsibility of the LPA.

Most local projects qualify for a CATX classification after analysis. The PM will review the project scope and details to confirm that the CATX NEPA class is appropriate. CATXs can be classified as IIA or IIB. For instance, an environmental class of IIB is assigned if it includes grading in the scope and an environmental class of IIA is assigned if the scope only includes surfacing or is TA or ER funded.

If the LPA has any question regarding the NEPA class during the pre-programming phase, the PM should be notified as soon as possible. The PM is trained to identify project site conditions that may trigger a higher level of investigation.

Answering yes to any of the following questions should warrant more investigation regarding a NEPA class:

- Is the proposal highly complex?
- Is public or agency interest high?
- Is the project controversial?
- Are conditions stable or highly variable?
- Are there properties affected that are protected by Section <u>4(f)</u>* or <u>6(f)</u>**?

*Section 4(f) – FHWA regulations governing the use of land from publicly owned parks, recreation areas, wildlife and waterfowl refuges, and public or private historic sites. BLP PMs will coordinate all 4(f) *de minimis* considerations.

**Section 6(f) of the Land and Water Conservation Act requires that the conversion of lands or facilities acquired with Land and Water Conservation Act funds be coordinated with the Department of Interior. Usually replacement in kind is required.

Helpful information can be found on the <u>FHWA Environmental Review Toolkit website</u>.

Actions that significantly affect the environment that may trigger a higher level of investigation include, but are not limited to the following: a new controlled access highway, highway project of four or more lanes on a new location, or new construction or extension of fixed rail transit facilities.

4.2 Public Involvement

The LPA is responsible for public involvement in the selection/prioritization process, which is commensurate with the scope and complexity of the proposed project. At a minimum, public involvement should include a public notice indicating when a governing body would be deciding on reviewing needs, selecting projects and setting priorities for federal aid projects. In later stages of project development, more public involvement may be warranted. The public involvement in the project development process will be in accordance with KDOT's "Sharing the Future, Public Involvement in the Kansas Transportation System".

More complex projects, or those that have a high potential for environmental impact, may require early and extensive public involvement and extensive documentation in accordance with 23CFR771. Documentation in these cases may be in the form of either an EIS (Class I) or an EA (Class III). The public involvement process flow charts included in KDOT's "Sharing the Future" provides the process used to categorize projects along with the sequence of events that need to be completed for each classification. See KDOT's Design Manual, Volume I, Road Section, Section 5.9 and the KDOT manual "Sharing the Future" for additional information.

4.3 KDOT Environmental Review Process

KDOT Environmental Services Section (ESS) initiates the memo, "Status of Projects Environmental Concerns (PRELIMINARY)", (Preliminary Memo) as projects are programmed. Depending upon the type of project and the location, ESS may proceed with clearing some of the tasks as appropriate. Tasks that may be cleared at the Preliminary Memo stage by ESS could include: Task 1- Traffic Noise, Task 2 – Air Quality, Task 6 – Farmland Protection, and Task 7 – Hazardous Waste (if no new ROW is being acquired). The remaining task's investigations are initiated as stated on the Preliminary Memo and will be investigated by the governing agencies as ESS sends out project documents (including field check plans) to the various agencies that have oversight responsibilities for these remaining environmental areas.

The field check plans are required to be sent to various reviewing agencies within the state. This is a critical step in the NEPA process and could affect schedule. For projects that are behind schedule and do not have fully developed field check plans, it may benefit the LPA to provide plan and profile sheets to BLP that indicate ROW and construction limits prior to submitting a full set of field check plans. The submitted plan and profile sheets may be used to begin the environmental review process. Please contact the PM prior to submitting plan and profile sheets for this purpose as it may not be allowed in every instance depending on the project.

After each agency has reviewed the pertinent project documents supplied by ESS, correspondence is provided to ESS from the reviewing agency. These letters will note clearances and/or any requirements and/or permits that may need to be met by the LPA prior to proceeding with the project. ESS compiles these letters and generates the "Status of Projects Environmental Concerns: Final Memo" (Final Memo.) The Final Memo summarizes the action or non-action that may need to be taken based on the review of the project documents.

The Preliminary Memo remains an internal document to KDOT ESS and is not circulated. The agency review response letters are archived by KDOT ESS and are not distributed to BLP unless there are concerns that require action. If an agency review letter requires action on the part of the LPA, the letter will be forwarded to BLP and subsequently to the LPA and Project Designer for review. After the Final Memo is received by BLP, it is archived on the Local Projects server and electronic copies are sent to the LPA and Project Designer by the PM.

The LPA will review the Final Memo and agency review letters (if applicable) for any required actions or necessary permits. For example; Task 5 – Wildlife, may indicate that the LPA needs to coordinate with Federal Fish and Wildlife Service (USFWS) before beginning construction. In this case, the LPA or their representative shall contact the USFWS to discover the issue that may be involved with the project. The Kansas Department of Wildlife, Parks, and Tourism (KDWPT) may, in some cases, require an action permit or a "habitat assessment" (to be performed by the LPA or their representative and submitted to KDWPT). The important thing regarding the Memo and agency review letters is that these documents need to be reviewed carefully and action taken when requested. It is imperative to keep the PM up to date regarding

any permits or other documents generated for the reviewing State or Federal agencies. Copies of these documents also need to be sent to the PM.

Timely consideration of these items can be very important to the overall schedule of the project. BLP will not proceed to PS&E until all permits and/or other environmental requirements have been accomplished.

4.4 Design Summary Document

The Design Summary Document (DSD) will be generated by the PM as soon as possible after the followinglisted conditions have been met:

- 1. The Field Check has been completed.
- 2. The project is listed on the current STIP or TIP, as applicable.
- 3. The Status of Projects Environmental Concerns: Final memo has been issued.
- 4. Any other requirements needed for 4(f) or 6(f) considerations are met (if applicable).

If the project includes any federal funds, the DSD will be generated and routed to FHWA for concurrence unless it is classified as a IIA project. Once concurrence is obtained, this document will be archived and emailed to the LPA and Consultant. If the project includes only state funding, it is immediately archived and emailed to the LPA and Consultant. As stated in the DSD, upon receipt of this document, ROW acquisition and final design may begin for the project. If federal funds are being used to acquire any right of way, acquisition may not commence until the NEPA process has been completed. If federal funds are not being used to acquire any right of way, it is encouraged and may be prudent to begin the actual right of way acquisition after the NEPA process (Final Environmental Memo) has been completed.

For grouped projects (Off-System Bridge, HRRR, etc.), use the initial project's federal-aid project number and include the statement: ".... the grouped project is programmed on the 20XX-20XX Kansas State Transportation Improvement Plan (STIP).".

4.5 <u>Permits / Status of Permits (1307)</u>

It is the LPA's responsibility to determine which permits are required for the project. Permits that may be needed for the project will be discussed at the field review or field check meeting. A preliminary list of possible permits that may be needed for the project will be included in the field check report. The LPA will make application for all permits required for the project.

The final list of permits required for the project will be determined by the LPA and/or their representative and submitted to the BLP via the <u>"List of Permits and Status of Same" (Form 1307)</u>.

The Form 1307 shall be filled out and signed by either the LPA or the Consultant and submitted along with office check plans. The Form 1307 shall be updated and submitted with all subsequent plan submittals (up to and including PS&E plans) to BLP. Form 1307 should be sent in electronic format to KDOT.LPePlans@ks.gov. Plans submitted for review will not be accepted unless the completed Form 1307 is included.

Projects may contain mitigation measures in addition to the standard conditions of the applicable permits. If one or more of the applicable permits contains mitigation measures, usually listed as special conditions, the Mitigation box shall be checked on Form 1307. If the applicable permits do not contain mitigation measures/special conditions, the Mitigation box shall not be checked on Form 1307. It will be the LPA's responsibility to address any mitigation/special conditions and incorporate appropriate measures into the plans or specifications as necessary.

Upon request, KDOT will assist the LPA in the development of a project specific special provision to address any special conditions.

All required permits must be obtained prior to the beginning of the PS&E process (approximately **four months** prior to letting). BLP may delay the letting or cancel the project if the Form 1307 has not been received **four months** prior to the scheduled project letting date. All required permits shall be submitted electronically to BLP in their entirety. BLP will log and track the receipt of all project permits. (This Page Intentionally Left Blank)

5.0 Plan Development

The plan development section of this manual is intended to assist the LPA and the designer through the preliminary engineering phase of project development. Information in this section should also be considered during the project planning and programming phase so that the project scope can be as accurate as possible from the beginning.

Note: Use of the word "roadway" in this section applies to all transportation facilities.

5.1 Design References

Project design shall be in accordance with accepted engineering practices and all applicable state, AASHTO and federal criteria. These criteria include, but are not limited to the following references:

- 1. "A Policy on Geometric Design of Highways and Streets", AASHTO, current edition (Green Book).
- 2. "Guidelines for Geometric Design of Low-Volume Local Roads", AASHTO, 2019 edition.
- 3. "Roadside Design Guide", AASHTO, current edition.
- 4. "Road Design Manual, Volume I, Road Section, Parts A & B", KDOT, current edition
- 5. "Drainage Design Manual, Volume I, Road Section, Part C", KDOT, current edition
- 6. "LRFD Bridge Design Specifications", AASHTO, current edition.
- 7. "LRFD Guide Specifications for Design of Pedestrian Bridges", AASHTO, current edition.
- 8. "<u>LRFD Bridge Design Manual, Volume III, Bridge Section</u>", KDOT, current edition.
- 9. "Survey Manual, Volume II, Survey Section", KDOT, current edition.
- 10. "Kansas Regional Coordinate System Files", KDOT, current edition
- 11. "<u>Policy for Non-Freeway Resurfacing, Restoration and Rehabilitation (3R) Projects</u>", KDOT Road Memorandum 18-03, October 1, 2018 version.
- 12. "Guide for the Development of Bicycle Facilities", AASHTO, current edition.
- 13. "Guide for the Planning, Design and Operation of Pedestrian Facilities", AASHTO, current edition.
- 14. "<u>Manual on Uniform Traffic Control Devices</u>", (MUTCD), current edition.
- 15. <u>Americans with Disabilities Act (ADA) guidelines and standards</u>, various publications including PROWAG and ADAAG, United States Access Board, current edition
- 16. "<u>Highway Capacity Manual</u>", (HCM), current edition.
- 17. "Traffic Engineering Guidelines", KDOT Bureau of Transportation Safety & Technology.
- 18. "<u>Standard Specifications for State Road and Bridge Construction</u>", (including "Special Provisions to the Standard Specifications"), KDOT current edition.
- 19. "KDOT Access Management Policy", latest version.
- 20. "Pavement Marking Policy", KDOT, latest version.
- 21. "KDOT Utility Accommodation Policy", latest version.
- 22. "<u>A Guide for Accommodating Utilities Within Highway Right-of-Way</u>", AASHTO, current edition.
- 23. "Guide on Evaluation and Abatement of Traffic Noise", AASHTO, current edition.
- 24. "KDOT Temporary Erosion Control Manual", latest version.
- 25. "Guide for Design of Pavement Structures", AASHTO, current edition.

- 26. "Guidance on Traffic Control Devices at Highway-Rail Grade Crossings", FHWA, November 2002.
- 27. All current applicable BLP memos.
- 28. "<u>Urban Street Design Guide</u>", NACTO, current edition.

If not otherwise covered in this Manual, the procedures used shall conform to Federal and Kansas law.

5.2 Design Criteria

5.2.1 General Criteria

The Green Book addresses three types of projects:

- <u>New construction projects</u> are those that construct roads on new alignment where no existing roadway is present.
- <u>Reconstruction projects</u> are projects that utilize an existing roadway alignment (or make only minor changes to an existing alignment) but involve a change in the basic roadway type. Changes in the basic roadway type include widening a road to provide additional through lanes or adding a raised or depressed median where none currently exists, and where these changes cannot be accomplished within the existing roadway width (including shoulders).
- <u>Construction projects on existing roads</u> are those that keep the existing roadway alignment (except for minor changes) and do not change the basic roadway type.

Project development is broader than just geometric design and should consider many factors for all transportation modes. Construction of roads on new alignment and reconstruction projects that change the basic roadway type should utilize the design criteria in the Green Book to the extent practical. Less complex projects on existing roads that do not change the basic roadway type should focus on addressing the performance issues that prompted the project, as well as any other known performance issues within the project limits that are identified in the purpose and need statement (generally shown on the Request for Project form). If some aspects of the geometric design for a road or street do not fully comply with the geometric criteria in the Green Book, but the road or street is performing satisfactorily, there is no need to change those aspects of the existing geometric design for projects in which the basic roadway type will remain the same.

Projects need not address every aspect of poor performance. Designation of the performance issues to be addressed in any given project is an agency management decision, with due consideration of funding availability and the effect that improvements in some aspects of performance may have on other aspects of performance.

Roadway and intersection designs should consider expected pedestrian usage and provide pedestrian facilities and design elements where appropriate. Each of the transportation modes (automobiles, bicycles, pedestrians, transit, and trucks) should be considered in the design of every project on the road and street

network. The balance among transportation modes selected for each road and street should be a conscious decision arrived at after thorough consideration of the needs of each mode, local and regional transportation agency master plans, and community needs.

New construction projects typically utilize the design criteria presented in the Green Book. The Green Book should also be consulted for applicable geometric design guidance in reconstruction projects but, even more than for new construction, reconstruction projects need a flexible, performance-based approach to adapt the design to fit the roadway context and meet multimodal needs. While applying the design criteria for new construction in the Green Book to reconstruction projects is desirable, it may be impractical in many cases because of existing constraints in the corridor and the need to fit the roadway into the community context.

The approaches used to address design for projects on existing roads include:

- Poor infrastructure condition: use NCHRP Report 876, "Guidelines for Integrating Safety and Cost-Effectiveness Into 3R Projects", 2017, which indicates that 3R projects should retain their existing geometric design features unless one of the following applies:
 - $\circ \quad \text{Crash history} \\$
 - Low LOS
 - o Benefit-cost analysis
- Congestion: use HCM. There is no reason for geometric design changes except for those that improve traffic operations or that meet another specific identified need.
- Crashes: use HSM. There is no reason for geometric design changes except for those that improve traffic operations or that meet another specific identified need.

Design flexibility is of critical importance because each project has a specific purpose and need, has specific context and constraints, serves a unique set of users, and fills a distinct position in the transportation network. Flexibility should be exercised to better meet specific project goals or to work within defined constraints. Documentation should be provided to explain why the proposed design is an appropriate solution for the project, how it serves the needs of each transportation mode, how it is expected to perform in the future, and how it fits within available funding.

5.2.2 <u>A Policy on Geometric Design of Highways and Streets (AASHTO Green Book)</u>

Geometric design for new construction projects shall be based on the design criteria included in the AASHTO Green Book (Green Book) or Guidelines for Geometric Design of Low-Volume Local Roads, as appropriate, and as noted on the KDOT Project Authorization (KDOT Form 883). Reconstruction projects should use the Green Book to the extent practical.

5.2.2.1 Design Speed

The design speed is a selected value that is used to determine the design features of a roadway. The design speed is based on the functional classification of the road, the topography, adjacent land uses, expected traffic volumes, anticipated operating speed, and modal mix. The Green Book recommends every effort

should be made to attain a desired combination of safety, mobility, and efficiency while under the constraints of environmental quality, economics, aesthetics, and social or political impacts. Once the design speed is selected, all pertinent features of the roadway, e.g. sight distance or horizontal or vertical curvature, should be designed in accordance with the design speed.

The design speed selected should be consistent with the speeds that drivers are likely to travel on a given roadway. A low design speed should not be selected where the topography is such that drivers are likely to travel at high speeds. Lower speeds are desirable for streets in walkable, mixed-use urban areas and this desire for lower speeds should influence the selection of the design speed. For design of such streets, a target speed should be selected. The target speed is the highest speed at which vehicles should operate and is intended to be used as the posted speed limit. The selected design speed should reflect the needs of all transportation modes expected to use a roadway. It should be inclusive of nearly all the desired speeds of drivers where conditions are such that drivers can travel at their desired speed. It is important that the design speed used for horizontal curve design be a conservative reflection of the expected speed on the constructed facility.

5.2.2.2 Design Exception/Allowance

If, during the development of plans for a proposed project, the LPA determines that there are circumstances that may make it impracticable to meet the applicable design guidelines, the LPA shall make a written request to BLP for a "design exception" using a summary format like the form in Figure 5.1. All supporting documentation should be included with the submittal as attachments to the summary form. Supporting documentation should be consistent with *Section 2.3.4* of the *KDOT Design Manual, Volume 1, Bureau of Road Design*.

A request for a design exception may be made at any time in the design process when sufficient information is available to adequately evaluate the alternative solutions. All design exceptions are subject to approval by the Bureau Chief of BLP. The request may involve one or more of the following controlling criteria:

- 1. Design speed
- 2. Lane width *
- 3. Shoulder width *
- 4. Horizontal curve radius *
- 5. Superelevation rate *
- 6. Stopping sight distance *
- 7. Maximum grade *
- 8. Cross slope *
- 9. Vertical clearance *
- 10. Design loading structural capacity

* Only for "high-speed" (Interstate, other freeways, and roadways with a design speed greater than or equal to 50 mph) NHS facilities.

Justification for the request shall be included along with cost estimates for reasonable alternates. For guidance on information to be included in a design exception, see *Section 2.3.4* of the *KDOT Design Manual, Volume 1, Bureau of Road Design*.

A design allowance may be requested for necessary deviations from criteria or policy not included in the controlling criteria requiring a design exception. Requests for design allowances should be submitted and documented in the same manner as a design exception request.

BLP will respond to the LPA approving or denying the design exception/allowance request. Requests made prior to field check will be addressed as a part of the field check discussions. When the request is made after, or because of, the field check, the approval may be made prior to office check plan review if sufficient details are available on the field check plans or if additional details are submitted with the request. Otherwise, the response will be made after office check plan review. Approved exceptions will be reflected in the Design Summary Document (DSD) or a revised DSD if the DSD is completed prior to the design exception approval.

Figure 5.1: Example Design Exception Request Summary Form

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PRO	DJECT INFORMATION					
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Desi	gn Life:					Letting Date:
DES	SIGN EXCEPTIONS (CHECK	ALL THAT APPLY)				
	Design Speed				Maximum Grade*	
	Lane Width*			1	Cross Slope*	73
	Shoulder Width*			4	Vertical Clearance	
	Horizontal Curve Radius*					tructural Capacity
-	Superelevation Rate* Stopping Sight Distance*			Other:		
* 00	The second s	or frooways, and roady	in mit	tha	a docian chood ar	ater than or equal to 50 mph) NHS facilities.
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5.2.3 AASHTO Roadside Design Guide (Roadside Safety)

Aspects of location, design, roadside appurtenances, and traffic control, including the traffic control plan, shall be given due consideration. This enables the designer to fully evaluate roadside conflicts arising from vehicles leaving the roadway out of control. AASHTO presents a hierarchy of design options for the treatment of fixed objects on the roadside. In order of preference they are:

- Remove the fixed object
- Redesign the fixed object so it can be safely traversed
- Relocate the fixed object to a point where it is less likely to be struck
- Reduce the impact severity by making the object breakaway
- Shield the object with a barrier or impact attenuator
- Delineate the object if none of the above options is appropriate

The AASHTO "Roadside Design Guide", current edition, shall be used in determining the clear zone width for new or completely reconstructed rural roads. Deviations from the clear zone width shall be based on engineering judgment and crash experience. The Roadside Safety Analysis Program (RSAP) is one tool available to designers to evaluate design features on a benefit/cost basis.

The 4th edition of the "Roadside Design Guide" has expanded the discussion of roadside safety in urban or restricted environments. In an urban environment, there is a high density of development, numerous fixed objects (utility poles, fire hydrants, planters, etc.), and frequent intersections (entrances/sideroads) that result in roadways with lower design speeds. In these restricted environments, the application of the clear zone concept may not be practical.

In an urban environment, a clear zone should be provided, but where this is not practical, every effort will be made to clear the roadside of obstacles (e.g., non-breakaway above ground utilities) for a minimum of a six-foot lateral offset from the face of the curb. If, in a very restricted environment, provision of the six-foot lateral offset is not practical, a lesser value will be considered with appropriate documentation.

The presence of a curb alone does not signify an urban environment. Curbs have very limited re-directional capability except at very low speeds. In areas where urban characteristics are not present, regardless of whether the typical section includes curbing, a clear zone as described in Chapter 3 of the "Roadside Design Guide" shall be used.

On projects where a lateral offset is used in lieu of a clear zone do not show the lateral offset as the clear zone distance on the title sheet.

Where feasible, the length of guard rail through fill sections shall be held to a minimum by the use of 3:1 or flatter slopes. Culverts with an opening height of eight feet or more within the clear zone shall normally have guard rail. The need for protection at lower height openings will be based on engineering judgment. The guard rail design criteria for span bridges and bridge length boxes shall be consistent in determining protection for the area of concern. The minimum length of protection needed for an open-span bridge rail

shall be determined with consideration given to the bridge rail as being the hazard. Other considerations of prevailing conditions, e.g., non-traversable slopes, fixed object in clear zone, etc., will be addressed as needing protection on a project-by-project basis. The minimum length of protection needed for a bridge length box should be determined with consideration given to the far wing or near wing (special case for multiple boxes) as being the area of concern. Other considerations should be addressed on a project-by-project basis.

5.2.4 AASHTO Guidelines for Geometric Design of Low-Volume Roads

AASHTO's Guidelines for Geometric Design of Low-Volume Roads may be used to establish criteria for projects on local or minor collector roads with a design average daily traffic volume of 2000 vehicles per day or less. The LPA, or the designer, should notify the BLP project manager of the intent to use these guidelines at the site review/field check meeting to document their use.

5.2.5 AASHTO Guide for the Development of Bicycle Facilities

The Guide for the Development of Bicycle Facilities shall be used to develop projects that provide on-road bike lanes or other off-roadway facilities such as shared use paths or side paths (shared use paths adjacent to the roadway) that are used for multiple modes of non-vehicular transportation. The primary function of bike lanes and shared use paths is transportation as opposed to trails where the primary function is recreational. The primary function for all projects developed under federal Transportation Alternatives funding will be transportation. A facility used by bicycles must be designed for the expected speeds including considerations of horizontal and vertical alignment, path width, clear zone, intersection conflicts and other design considerations similar to what would be considered in the design of a vehicular roadway.

5.2.5.1 Design Speed

Unlike a roadway project where a single design speed is used, the design of a shared used path requires the designer to consider several factors including terrain, user abilities/age, context of the path, prevailing winds, path surface, and other path characteristics. The design speed should be selected based on the criteria in the "Guide for the Development of Bicycle Facilities" and should be shown in the traffic data on the title sheets. If the project includes roadway and shared use path construction, list separate vehicle and bicycle design speeds in the traffic data.

5.2.5.2 <u>Clearances</u>

Similar to a roadway clear zone, a shared use path should provide a 2' clear area beyond the path edge that is clear of fixed objects such as large rocks, utility poles, railings and bridge piers. Path bridges should also provide this clearance resulting in a typical minimum bridge width for a path of 14'-0". If necessary, due to site constrictions, clearances to smooth objects such as a railing may be reduced to 1'-0". When near downward slopes steeper than 3:1, or parallel to water bodies, a wider separation should be considered, and a physical barrier may be required if the separation between the slope and trail is less than 5'. A vertical

clearance of 10' is also required over a shared use path and adjacent clear areas which may require removal or trimming of trees and should be noted on the plans.

Separation between sidepaths and adjacent roadways should be reviewed. A sidepath immediately adjacent to the back of curb is not acceptable as it places a curb high drop-off immediately adjacent to the path. A minimum separation of 5' is desired. If concrete pavement is extended across the separation area to eliminate mowing, an edge line or change in texture should be considered so that the cyclist is aware that this is not additional path width. If parking is allowed on the street adjacent to a sidepath, the vehicle overhang and door swing should be considered in evaluation of clear areas and separation widths.

5.2.5.3 Design Exception/Allowance

Bicycle facilities shall be subject to the same Design Exception/Allowance categories and process as roadways. See *Section 5.2.2.2* above.

5.2.6 FHWA Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)

The Manual on Uniform Traffic Control Devices for Streets and Highways shall be used to establish minimum criteria for permanent and temporary traffic control items incorporated into projects developed through BLP. This includes items such as warrant analyses for traffic signals as required to determine if the work can be included in the project.

5.2.7 TRB Highway Capacity Manual (HCM)

The Highway Capacity Manual shall be used for roadway segment and intersection operational analysis. Use of micro simulation software for operational analysis may be requested by the designer and will be approved for use by KDOT on a case by case basis.

5.2.8 United States Access Board ADA Guidelines

The U.S. Department of Transportation (DOT) adopted the 2004 ADA Accessibility guideline in a Final Rule dated October 30, 2006 (ADAAG). These guidelines provide consistent usability for buildings and on-site facilities but do not address the public rights-of-way pedestrian environment.

The Public Rights-of-Way Accessibility Guidelines (PROWAG) were developed to specifically address designing new or altered public sidewalks, street crossings, and related pedestrian facilities. The PROWAG are not standards until the rule making process is complete but are the recommended best practices for areas not fully addressed by the present ADAAG standards. PROWAG is consistent with the ADA's requirement that all new facilities (and altered facilities to the maximum extent feasible) be designed and constructed to be accessible to and useable by people with disabilities. In this regard DOT (and KDOT) recognized PROWAG as an equivalent facilitation and is the recommended approach for providing consistent usability within public rights–of-way.

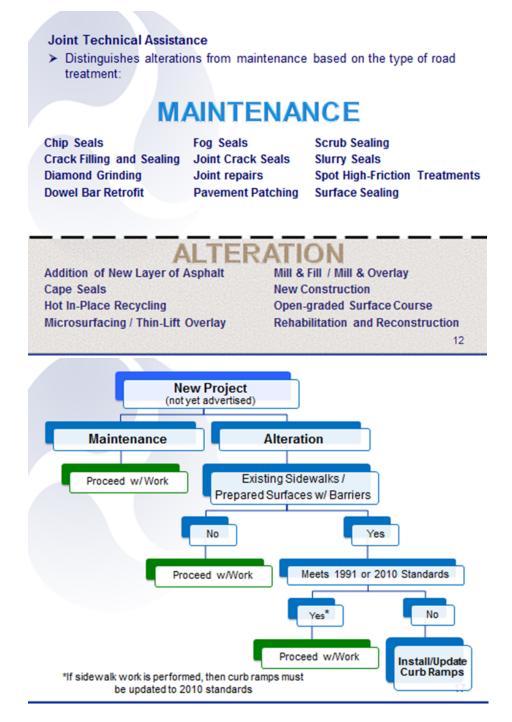
Consistency with ADA in the public rights-of-way can be achieved by agencies and designers in several ways.

- Follow the PROWAG.
- **Follow the ADAAG but supplement with PROWAG <u>only</u> where ADAAG is silent.
- **Follow the ADAAG but must have reasonable and consistent policies for accessibility for persons with disabilities where ADAAG is silent.

**Note: Specification section 824 requires the use of PROWAG criteria for ramp construction.

Additional guidance provided by the Department of Justice (DOJ) clearly defines alterations and action that must be taken due to alterations. That guidance is summarized in the following chart:

Curb Ramp Update Guidance Chart



It is important to note that these guidelines extend to temporary work zone conditions. The temporary traffic control plans must consider the ability of pedestrians, both able and disabled, to travel safely through or around the construction site. The temporary traffic control plans within the Design Plans shall include the designer's plan for handling multi-modal traffic during construction, including detour routes and road/sidewalk closings, if necessary, and installation of alternate or temporary pedestrian accessible paths to

pedestrian facilities in the public rights-of-way. The temporary traffic control plan, including the accessibility aspects, must be in conformance with the latest version of the MUTCD.

5.2.9 KDOT Design Manuals, Policies, & Informational Memos

Project development should be consistent with the most current and applicable KDOT policies and informational memos.

5.2.9.1 Resurfacing, Restoration, and Rehabilitation (3R) Policy

Projects on existing non-freeway state highways will be designed to meet 3R standards. This policy establishes specific minimum design criteria which provide a balance between safety, service and cost. Existing geometric design features are acceptable if they are equal to or better than the minimum criteria established in this policy.

5.2.9.2 Pipe Materials

KDOT has developed a <u>Pipe Policy</u> to identify the materials that will be allowed in various situations and locations around the State.

5.2.9.3 <u>Surveys</u>

With the increasing availability of public domain GIS data, it is possible to generate a document that closely represents a set of design plans by overlaying several data sets over a common base. However, many of these sources were developed as administrative or planning tools. Although these overlays would suffice for concept plans or the delineation of drainage areas, BLP does not consider these data sets sufficiently precise for use as design plans, particularly where permanent or temporary land rights are being acquired or projects that require grading or surfacing.

Many of the KDOT standards bid items or tables used to summarize quantities are based on a traditional Station and Offset layout. For linear transportation projects, the use of coordinate only plans are discouraged.

Alignment control and ties to the public land system shall be provided on the project in accordance with the **"Survey Monument Guidelines for Project/Plan Development"** located in *Appendix A* below. Horizontal control points and benchmarks, including references for recovery, shall be provided on the project site. The establishment of the control points should be established with the same equipment limitations and accuracy requirements as would be required for the bid item "Contractor Construction Staking" to avoid issues in accuracy between the design and construction surveys. The bid item "Contractor Construction Staking" does not allow the use of GPS for the vertical component of control point, finish staking, or critical bridge member staking.

5.2.9.4 Bid Items

On State-let projects, standard KDOT bid items shall be used whenever possible including the proper use of bid item syntax as described in the specification. It is also helpful if the options allowed by the bid item are in a configuration that is currently listed in the <u>KDOT Bid Item List</u>. Where it is not possible to use an existing bid item, the designer will be required to prepare a Project Special Provision. See <u>Section 5.5.1.1.2</u> below.

5.2.9.5 Non-bridge Structures

All non-standard structures, including drainage structures, walls and other miscellaneous structures, should be designed and reviewed by a structural engineer.

The height of retaining walls in this section refers to the height from the top of footing or leveling pad to the top of the wall cap. Retaining walls less than three feet in height are not required to be designed or reviewed by a structural engineer. LRFD Design will be required for retaining walls greater than six feet in height. Retaining walls greater than six feet in height and on KDOT R/W are required to have a serial number. The LPA or the designer should request a serial number in accordance with *Section 6.0 Bridge Design* in this Manual.

Walls less than six feet in height may be bid as "Landscape Retaining Wall" and utilize the design criteria of the National Concrete Masonry Association Design Standards if they meet all geometric criteria in the Specification and are on the Bureau of Materials and Research list of approved systems (or alternatively, provide additional documentation as described in the specification). This landscape retaining wall specification is limited to MSEW and MBW systems. Walls less than 6 feet in height that are not MSEW or MBW systems shall be designed by LRFD criteria and may require preparation of a project special provision.

All cast-in-place concrete structures including conventional retaining walls, integral sidewalk retaining walls, new RCB structures, RCB modifications, wingwall extensions and other miscellaneous structures, will be bid by the individual quantities for concrete, reinforcing steel and excavation (and any other necessary pay items). Plans shall include the appropriate details and material schedules (Bill of Reinforcing Steel) to develop the appropriate quantities.

5.2.10 Design Criteria Tables

The design criteria tables below were developed in compliance with all applicable AASHTO criteria for new construction of all roads and streets except those local roads and minor collectors with a volume of less than 2000 vehicles per day and, where applicable, KDOT Design Manuals. When a conflict exists between the criteria table and other KDOT references, the information contained herein shall control except as supplemented by BLP Memos. For local roads and minor collectors with a volume less than 2000 vehicles per day, refer to the Guidelines for Geometric Design of Low-Volume Roads.

Figure 5.2: Design Guidelines

DESIGN GUIDELINES - RESURFACING, RESTORATION AND REHABILITATION (3R) OF MAJOR COLLECTOR ROADS

DESIGN ELEMENT	-				
AADT CURRENT YEAR	Under 400		400 - 2000		Over 2000
⁽¹⁾ Design Speed	50 mph or less	55 mph to 65 mph	30 mph or less	35 mph to 65 mph	All speeds
⁽²⁾ PAVEMENT WIDTH (ft.)	20	22	20	22	22
SHOULDER WIDTH (ft.)	2	2	4	4	6
⁽³⁾ BRIDGE WIDTH	Traveled way + 2 ft. (each side)		Traveled way + 4 ft. (each side)		Approach roadway width
(4)FORESLOPES	3:1	4:1	3:1	4:1	4:1
CLEAR ZONE	See AASHTO "Roadside Design Guide"				

Notes:

⁽¹⁾Design speed shall be equal to the posted or regulatory speed limit.

- ⁽²⁾Wider lane and shoulder widths should be considered at locations where trucks make up more than 10% of the total traffic volume.
- ⁽³⁾Narrower bridge widths may be considered acceptable to remain in place if they are equal to the approach pavement width. See BLP Memo 03-05 for guidance on requirements for bridge redeck projects. Whether or not bridge widening is warranted, installation of transition guardrails, rehabilitated or new bridge rails, and warning signs should be considered.
- ⁽⁴⁾Flatter slopes should be used if there is a history of run-off-road accidents or at locations where run-off-road accidents are likely to occur (e.g., on the outside of sharp horizontal curves).

References:

"A Policy on Geometric Design of Highways and Streets", AASHTO, 2018

"Roadside Design Guide", AASHTO, 2011

"Designing Safer Roads Practices for Resurfacing, Restoration and Rehabilitation", Special Report 214, TRB, 1987

5.3 <u>Preliminary Scoping/Site Review</u>

For projects with very short development schedules, or those that have unique aspects, it may be prudent to conduct a preliminary project scoping site review. Some preliminary engineering work should be performed to arrive at a concept with or without alternatives. The LPA should coordinate (or have their Consultant coordinate) an onsite meeting with BLP. The meeting will include a discussion of project scope and limits and should include design alternatives that have been considered. The intent of the meeting is to select the best alternative for which to develop plans.

5.4 Field Check

The development of field check plans by the LPA shall be performed in accordance with accepted engineering practices and all applicable state, AASHTO, and federal criteria. A summary of the various guidelines that may apply to a project is given in this manual. KDOT's *Design Manual, Volume I, Bureau of Road Design, Section 2.3, FIELD CHECK PLANS*, is the guide for developing the plans to field check stage. In addition, geometric design guidelines, based on design traffic volume, design speed, functional classification and other pertinent criteria, are given in this manual.

Required documents to be submitted at the Field Check Stage:

- Field Check Plans
- Project Cost Estimate
- Hydraulic Assessment Checklist (HAC) (on applicable projects)

The required documents shall be submitted to BLP in accordance with BLP E-Plan Requirements.

5.4.1 Plan Review

The LPA and/or its Consultant shall be responsible for the completeness and accuracy of the plans. Plans that are not considered to be adequately complete or accurate for field check may be returned to the LPA and/or its Consultant for additional development or revision. BLP's (and others as deemed necessary by the PM) review of field check plans will be for general compliance with the prevailing state, AASHTO and federal criteria for purposes of maintaining federal funding eligibility and ensuring sufficient information is available for a contractor to develop a fair and reasonable bid. This review is not a thorough design review and does not relieve the LPA and/or its Consultant of the duty to provide a design that is well conceived and plans that are complete and accurate.

Field check plans will be reviewed by BLP and other appropriate KDOT Sections, comments will be made, and the review comments will be made available upon return to the LPA.

5.4.2 Railroad Coordination

During the site review/field check it should be determined if the proposed project will have a potential impact on rail facilities. If it appears that work will be near or on railroad right-of-way, the LPA should submit electronic plans detailing the work on or near railroad R/W to the PM. The PM will make the plans available to KDOT Coordinating Section for distribution to the affected railroad for their review. This submittal would occur after all site review/field check comments have been addressed and can be coordinated with the office check submittal. KDOT Coordinating Section will work with the railroad to determine the need for flagging, liability insurance, agreements, and a possible diagnostic review. The LPA will be responsible for providing railroad liability insurance quantities if they are required. Railroad liability insurance quantities should be developed in accordance with *Section 2.6.16* of the *KDOT Design Manual, Volume 1, Bureau of Road Design*.

5.4.3 Field Check Meeting/Report

The field check is an on-site and/or office review of the plans for the proposed improvement to assess project eligibility, appropriateness of scope of work, constructability, safety, and other issues relevant to the project. The PM will schedule a field check meeting after plans have been reviewed and determined to be at an appropriate level of detail.

After the site review/field check has been conducted, the PM will complete a field check report to document the meeting. The report will be distributed to the LPA, designer, and KDOT District and Area offices.

5.5 Office Check

Plans should be submitted for office check after the designer has addressed all plan issues, developed all details, and computed all quantities. All markups/comments which have been made by BLP on the Field Check submittal are made to improve the plans by suggesting or requiring changes. These do not override design decisions made by the designer or the owner. The designer's or owner's choice to disregard any BLP markups shall be discussed with the BLP PM and approved prior to Office Check plan submittal. At this stage, the designer should consider the plans to be complete and, in their opinion, ready for construction letting. Quality control checks should have been performed by the LPA and/or its Consultant to ensure the completeness and accuracy of the plans.

Required documents to be submitted at Office Check Stage:

- Office Check Plans
- Updated Cost Estimate
- KDOT Form 1307, List of Permits and Status of Same
- Traffic Warrants or Studies (if required)
- Design Exception/Variance Request (if required)
- Geology/Soils Reports (if available)
- Updated Hydraulic Assessment Checklist (HAC) (if applicable)

• Any other applicable project/exploratory reports

5.5.1 Plan Requirements

Field Check revisions made in accordance with the archived Field Check plans and Field Check Report will be reflected on the Office Check Plans. The plans at office check stage should be considered a complete checked set of plans. All details and quantities should be completed by the designer, and the plans should have undergone a thorough review by the engineer in charge to assure that the information shown is accurate and complete prior to submittal.

5.5.1.1 General Requirements

Guidance on items to be included in office check plans is in the *KDOT Design Manual, Volume 1, Bureau of Road Design, Section 2.6*.

If environmental mitigation is involved, the PM may forward electronic plans to the ESS so that copies can be sent to the appropriate regulatory and resource agencies. If the project involves construction near a railroad, office check submittal may be used by the KDOT Coordinating Section to determine railroad requirements for the project.

Plans are received and reviewed for general compliance to design guidelines and bid letting requirements by BLP. Detailed review of the plans to ensure that all applicable criteria are met and that the plans have been developed in accordance with KDOT procedures is the responsibility of the project design engineer, whether designed by LPA or Consultant. Plans marked for revision are returned to the LPA or the designer for necessary plan revisions and continuation of the project development process. If the plan review process reveals that the plans are not complete due to errors or omissions, the plans will be returned to the designer with a notification that a subsequent office check will be required. The designer will need to address the comments made on the plans and perform additional quality control checks to ensure that the plans have met the expectations of office check for the next submittal. It is important that these checks be performed prior to the initial office check to avoid the risk of impacting project schedules.

5.5.1.1.1 KDOT Bid Items

All bid items for pay included in the project plans shall be standard KDOT bid items whenever possible. For the list of valid KDOT bid items, please see the list at: <u>https://kdotapp.ksdot.org/BidItemList/BidItemList.aspx</u>

5.5.1.1.2 Non-Standard Bid Items

Three classes of specifications are used in the development of a KDOT project. Theses specification classes are:

• Standard Specifications - The standard specifications are the current edition of KDOT's "Standard Specifications for State Road and Bridge Construction", current edition.

- Special Provisions These are approved supplementary provisions, additions or revisions to the Standard Specification. Essentially these are interim updates to the Standard Specifications and are prepared by Bureau of Construction and Materials. There may be multiple revisions of a Special Provision active at any given time. Typically, the newest version will be included in the project when the Contract Proposal documents are assembled by the BOCM. The proposal documents will identify the specific revision used for the project. The older versions of the Special Provision will be kept active until construction is complete on all projects that have used the older version.
- Project Special Provisions These are approved supplementary provisions, additions or revisions to the Standard Specifications that address conditions specific to an individual project.

If an item is required to be part of the project and cannot be covered by a standard KDOT bid item, the designer shall be responsible for preparing the project special provision. Proposed project special provisions should be submitted to the PM as soon as possible to enable adequate time for the BOCM to review, approve, and assign a special provision number. Project special provisions shall be submitted no later than the PS&E stage of project development.

In determining the need for a project special provision, the following approach should be considered:

- 1. Check existing specification. Verify that the standard specifications do not cover the information needed.
- 2. When possible, use notes on plans rather than creating a special provision.
- 3. If a new bid item is needed, there must be a project special provision to cover it.

If a project special provision is required, it shall conform to KDOT's format for special provisions. Information regarding the preparation of a project special provision can be found in the <u>"Guidelines for Development,</u> <u>Review and Approval of: Standard Specifications for State Road and Bridge Construction and Special</u> <u>Provisions to the Standard Specifications for State Road and Bridge Construction"</u>.

5.5.2 Design Exception/Allowance

The need for a Design Exception/Allowance should be determined no later than the office check stage of project development. Design Exceptions/Allowances should be documented and requested in accordance with the guidance given in this Manual.

5.5.3 Railroad Coordination

If work on the project will encroach on railroad rights of way, an agreement with the affected company may be required. In some cases where temporary or permanent easement is required, the railroad may require a legal description of the needed tract. This requirement should be anticipated when the LPA scopes the project for design since additional survey work and project development time may be required.

In some cases, the proposed work may cause the need for a railroad flagger to be present during portions of the construction.

Quantities for railroad protective liability insurance may also be required if work is done within certain limits of the track(s). For more information regarding railroad protective liability insurance reference *Section 2.6.16* of the *KDOT Design Manual, Volume 1, Bureau of Road Design*.

The need for an agreement, flagger and liability insurance will be determined with the assistance of the KDOT Coordinating Section during the project development process.

5.5.4 Design Summary

KDOT's ESS issues a "Status of Environmental Concerns – Final" memorandum after all environmental clearances have been obtained and all necessary documentation has been completed. This document will also indicate which permits may be required for the project. For additional information on the environmental requirements and documentation for a project see *Section 4.0 Environmental* of this Manual.

Once ESS has issued the final environmental memo, BLP will issue a Design Summary Document that confirms the final determination of the project's design criteria, environmental classification and indicates that all clearances and approvals have been obtained. The Design Summary Document will also indicate if any Design Exceptions have been approved for the project and confirm that the project is programmed on the STIP and/or MPO TIP.

5.5.5 <u>Traffic Signal Warrants</u>

An engineering study may be required to demonstrate warrants are satisfied for modification of existing traffic signals. New traffic signals must meet warrants to be included in the project. Warrants should be submitted as early as possible in the plan development process to the PM. Work proposed for traffic signals that do not satisfy warrants will not be eligible for inclusion in the project.

5.5.6 **Operational Analysis**

An operational analysis may be required when a proposed project modifies an existing condition on or adjacent to a state or federal highway. An operational analysis may also be required to validate preferred design alternatives and/or justify expenditure of federal or state funds on the local system. A copy of the operational analysis should be submitted as early as possible in the plan development process to the PM for review.

5.5.7 Public-Interest Findings and KDOT Certifications

The LPA shall be responsible for providing a PIF to BLP when it is necessary to use public equipment or materials or award contracts on a basis other than competitive low bid. PIFs should be completed as early as possible to allow for BLP review and concurrence as outlined in this Manual.

FHWA guidance regarding PIFs can be found online at: <u>https://www.fhwa.dot.gov/federal-aidessentials/catmod.cfm?id=43</u>.

A specific form is not required for the PIF and the request may take the form of a letter documenting the request. BLP shall review the request and work with FHWA to approve or deny the PIF. The LPA will be notified of the approval or denial of the PIF request.

5.6 Final Check

The purpose of final check is to ensure that all office check comments have been addressed and the plans are ready for PS&E. All markups/comments which have been made by BLP on previous submittals are made to improve the plans by suggesting or requiring changes. These do not override design decisions made by the designer or the owner. The designer's or owner's choice to disregard any BLP markups shall be discussed with the BLP PM and approved prior to Final Check plan submittal. If design changes have occurred since the previous office check, the submittal is a subsequent office check.

Required documents to be submitted at Final Check Stage:

- Final Check Plans
- Updated Cost Estimate
- KDOT Form 1307 (List of Permits and Status of Same)
- Electronic copies of all permits obtained to date
- Drafts or final versions of required project special provisions
- Any other reports or project documentation not previously submitted

5.6.1 Plan Requirements

The LPA and/or its Consultant will address all comments made during the office check of the project. When the designer has addressed all comments from office check and considers the plans to be complete, the plans and other required documentation should be submitted to BLP for final check. Submittal of any project and exploratory reports that have not been previously submitted should also occur at this time. A draft of any project special provisions needed, including any environmental restrictions on the project should also be submitted to BLP at final check to allow for KDOT review and finalization prior to PS&E.

5.7 Plans, Specifications and Estimate (PS&E), KDOT—Administered

The designer will submit Preliminary Plans and documentation to the BLP. The BLP Plan File Manager will transmit the plans to the BOCM to approve the Plans, Specifications and Estimates (PS&E), and supporting documents for the advertising, letting and awarding of the project. BOCM determines the number of working days and prepares the Official Engineer's Estimate and Contract Bid Documents.

The PS&E Submittal should be made **four months prior to the programmed letting date**. Failure to meet the submittal schedule could cause the letting to be delayed and/or the project funding could be jeopardized.

5.7.1 <u>PS&E Plans</u>

After Final Check corrections have been made, the LPA will submit Preliminary (PS&E) Plans to BLP for estimating by BOCM. All markups/comments which have been made by BLP on previous submittals are made to improve the plans by suggesting or requiring changes. These do not override design decisions made by the designer or the owner. The designer's or owner's choice to disregard any BLP markups shall be discussed with the BLP PM and approved prior to PS&E submittal.

5.7.2 Engineer's Estimate

The LPA shall submit the Engineer's Estimate. It should be as detailed as possible showing estimated quantities and unit prices.

5.7.3 Permits

The permits required for the project will be acquired by the LPA or their representative. The <u>List of Permits</u> and <u>Status of Same (KDOT Form 1307)</u> shall be filled out and signed according to <u>Section 4.5</u> of this Manual. The LPA shall submit the signed Form 1307 and copies of all permits.

5.7.4 Right of way certification

Refer to *Section 7.0 Right of Way* in this Manual for Right of Way requirements. The LPA shall submit the signed <u>Right of Way Clearance for Federal Aid Projects (KDOT Form 1306)</u>.

5.7.5 Utility adjustment certification

Refer to *Section 8.0 Status of Utilities* in this Manual for utility relocation information. The LPA shall submit the completed <u>Status of Utilities (KDOT Form 1304)</u>.

5.7.6 Final Plans submitted to BLP

5.7.6.1 Plan requirements

Final Plans will be submitted for letting after PS&E review comments are addressed. The designer will submit an electronic copy in accordance with BLP E-Plans Requirements. The professional seal and signature of the engineer in charge of the design and designated local official must be affixed to the original title sheet at this time. A scanned copy of the title sheet with the original signatures and seal shall be submitted as part of the electronic copy.

Refer to the <u>Specifications for Electronic Plans Submittal</u> for procedures on how to submit plans to BLP.

5.7.6.2 <u>Required Special Provisions/Conditions</u>

The designer shall coordinate with the PM to provide any necessary special provisions/conditions.

5.7.6.3 Work Schedule Requirements

The LPA shall coordinate with the PM to determine work schedule requirements. Any special provisions needed to address schedule constraints should be discussed at this time.

5.7.7 Official Engineer's Estimate

During the PS&E stage, the plans will be reviewed by BOCM and they will prepare the Official Engineer's Estimate.

5.7.8 Working Days

Working days required to construct the project are determined by BOCM. This information is provided to BLP and the LPA to assist in the development of the Construction Engineering (CE) proposal and estimate. Early and late start dates are determined by the KDOT District Office and the LPA.

5.7.9 Estimate of LPA Funds Letter

Notification is sent to the LPA notifying them of the estimated dollar amount of matching funds required.

Appendix A

SURVEY MONUMENT GUIDELINES FOR PROJECT/PLAN DEVELOPMENT

The following guidelines will aid in the project/plan development of projects processed through the KDOT Bureau of Local Projects. These guidelines represent the minimum requirement for an engineered project and are intended to supplement sound engineering and surveying practice and standards of care. The intent of these guidelines is to provide a project that can be constructed independently by the information contained on the project plans and that it meets all Local, State, and Federal statutes and regulations, which is a requirement for federal aid eligibility. These guidelines should be reviewed by the consultant in developing a "Scope of Services" proposal for LPA's and by the LPA to determine if a sufficient "Scope of Services" is being provided by consultants during the Preliminary Engineering Consultant selection process.

The alignment defining the existing right-of-way corridor shall be researched, retraced, and monumented to accommodate the construction effort and/or right of way acquisition on projects meeting any one of the following conditions:

- 1. The project requires acquisition of new rights of way or easements.
- 2. The project includes grading or excavation.
- 3. A new permanent pavement (e.g., concrete or asphalt) is to be constructed.
- 4. The project includes installation or construction of drainage structures (e.g., bridges, concrete box culverts, roadway culverts, entrance pipes).

The manner of replicating and monumenting an existing corridor is detailed in the current *KDOT Bureau of Design, Survey Manual, Section 2.2*, and is incorporated into this guideline by reference. Research shall include original road records, subdivision plats, adjacent deeds, any available road plans, survey records, and land survey reference reports. The section corners and quarter section corners necessary to establish and write legal descriptions for the new rights-of-way shall be recovered or established by a professional land surveyor. This will afford the opportunity to reference the existing right of way to the proposed construction. Appropriate land survey monument ties, to be determined by the adjacent deeds and ownership, shall be made and noted on the plans. This will necessitate the recovery, or perpetuation of PLSS (Public Land Survey System) corners, and/or subdivision plat monuments along or adjacent to the project for the development of proposed right of way descriptions. All land survey activities associated with the project development shall conform to the <u>Kansas Minimum Standards for Boundary Surveys</u> as adopted by the Kansas State Board of Technical Professions.

Projects that are a planned improvement on an entirely new alignment shall be established/monumented in a manner as described in the current *KDOT Bureau of Design, Survey Manual, Section 2.2* as noted above. The project plan should include sufficient ties to the appropriate land survey monuments that control the new right of way descriptions as noted above. This will be determined based upon the adjacent ownership deeds that the acquisition will be based upon.

Survey Monument Guidelines (continued)

Projects that are limited to work within the roadbed and do not require section lines for project control, such as recycling, paving and overlays may still endanger PLSS corners. In order for the construction surveyor to follow the laws on endangered corners, the design consultant or the LPA is required to locate all endangered corners and file the Land Survey Reference Reports prior to submittal of the field check plans. If a PLSS corner cannot be located the Land Survey Reference Report should be filed describing the efforts made to locate the corner. On projects with plan sheets the location and ties to endangered corners shall be included in the plans.

Projects that include grading and/or drainage structures shall reflect the vertical datum for the project, the datum bench mark description and elevation, and shall reflect bench marks established for the project in accordance with the current *KDOT Bureau of Design, Survey Manual, Section 2.3* which is incorporated into this guideline by reference.

Project plans that do not meet the minimum criteria described above will be returned to the submitting firm/agency for corrective action.

6.0 Bridge Design

6.1 Field Check

Plan details for the field check portion of the design process are intended to familiarize our offices and departments with the site before physically visiting the site. The components discussed below are necessary elements of the skeleton of the final project plans. The onsite field check meeting to discuss important details of the project will produce a strategy for the remaining design of the project. This strategy will be enhanced depending on the amount of information provided to BLP in the field check plans. This section explains the bare minimum of what to include on each sheet required for Field Check Plans. If, however, more information is available to the consultant, additional sheets and additional design information may be added to aid in better describing the overall project site, and aid in the cooperative effort of developing the final set of design plans.

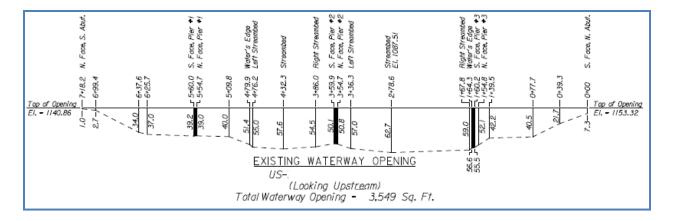
6.1.1 Bridge Plan Assembly

For all bridge length structures, the field check plan should contain, as a minimum, a Contour Map, a Construction Layout at the site of the bridge, and a Typical Section of the proposed bridge(s). As a typical drafting standard, the text on each sheet should be readable from either the bottom of the sheet or the right side of the sheet. As a rule of thumb, field check defines the point where the plans should be approximately 50% complete. However, the total of the bridge sheets may be at only 15-20% complete. The probable structure has been decided upon, with span lengths and location of the bridge decided and the design of the bridge itself has advanced. Once this has been confirmed at the field check meeting the last major aspect, investigating geology, can be organized to allow the design of the bridge to progress to final stages. The three primary sheets necessary for field check plans will be mostly complete by the time of submittal.

A fifteen-digit structure ID is required for every bridge-length structure on the local system. The existing structure ID must be retired and removed from the National Bridge Inventory (NBI) if the bridge is replaced. A new structure ID must be assigned (by BLP) to any newly constructed bridge-length structure. If a particular number is desired by the owner to maintain their own numbering system for new bridges, this number must be decided upon and communicated to the consultant before Field Check Plan submittal. If the desired number is not on the Field Check Plans, or no particular number is desired by the LPA, a number will be assigned and reserved by BLP Bridge during the Field Check Review stage of plan development.

6.1.2 Contour Map

Using data compiled from a recent survey, the plan sheet contours should be plotted at 2'-0'' intervals in most cases. The typical scale for a contour map will be 1'' = 50'. Include a simple line sketch elevation view of the existing waterway opening (and any adjacent structures) with substructure elements depicted, along with station and actual elevation or relative elevation of pertinent features such as bottom of streambed, top of opening, etc.



Plan view will include:

- □ At least two P.O.T. references
- □ Centerline curve data if applicable
- □ Centerline with stations above or to the right
- □ Section, township, and range with property owner information
- \Box Type of land use
- □ Any structures, fence lines, drainage structures, etc.
- □ Location, type, and size of utilities and owner information
- \Box Stream name and direction of flow
- \Box Existing right-of-way and existing easement(s)
- □ Contours at 2' intervals
- □ Existing road, path or rail and all existing structures
- D Proposed improvements, right-of-way, easements, Construction Limits
- □ Proposed Bridge
- Proposed channel changes or improvements with stationing, elevations and line sketch of proposed typical cross-sections
- □ Shoofly Detour Alignment and structures, if applicable
- □ If possible, indicate where historic high-water elevation was established
- \Box Standard North arrow with selected scale of the sheet

This sheet will also include notes/callouts for "Remove" and "Construct" as appropriate for the Existing and Proposed bridges. The station at centerline, the old and new fifteen-digit structure numbers, and a short bridge description (with the four-character structure designation) should be included along with the

Demolition Category and Erection Category for the corresponding structures. If no Erection Plans are required by KDOT Specifications it is recommended the designer state "Erection Plans Not Required" instead of the Erection Category. There are some structures KDOT Specifications do not require to have Erection Plans, but do require falsework plans. "Category (X) Falsework" within the "Construct" callout is recommended in this case.

or No Erection Plans Required

Several notes pertaining to the removal of the structure may be needed. If the bridge is steel and may have paint containing lead, this needs to be clearly stated on the contour map, as well as on any other sheets involving removal. Disposal of this material will fall under the contractor's responsibility if there is no salvage on the part of the county. If there is conclusive evidence or testing has indicated use of lead paint on the existing bridge, state this in a note on the sheet. The LPA may wish to salvage part of the existing bridge so a note should specify what elements will be salvaged, where it will be stockpiled, and who will remove the material from the site. If the LPA does not wish to salvage any part of the bridge, it is recommended to place a note stating the same so the issue is clearly addressed and dismissed, or simply include the information in the note specifying the contractor will remove the existing bridge and remove the material from the site and the county does not wish to salvage any part of the bridge. The decision to salvage material from the existing bridge may not have been made before the field check meeting, so this information is only required on the sheet once the Office Check Plans are submitted.

Any "critical path" notes should be placed on the sheet to aid in the overall construction plan. For example, if a channel change or channel improvement is required on a proposed project with limited headroom under the bridge, or if special bridge spill slopes and slope protection are to be constructed at the site, a note stating the Grading Contractor is required to excavate and complete the channel or spill slopes prior to construction of the Bridge should be included.

If the location of the historic high-water elevation was established as a general observation similar to "the bridge overtopped in 2009 by approximately 1 to 2 feet according to local residents," place a note stating the same on the Contour Map. If a known elevation is achieved using visible drift, or high-water marks, indicate the location on the Plan View and include a note stating how the elevation was established.

6.1.2.1 <u>Construction Layout</u>

The sheet should be at a larger scale as compared to the Contour Map so additional detail can be seen, detailed and dimensioned. 1'' = 20' is a typical scale used for the sheet, but may be increased if needed for easier dimensioning and labeling. This sheet will detail and dimension a plan view of the bridge and an elevation view of the bridge along with various pieces of information pertinent to the bridge and construction site characteristics.

6.1.2.1.1 Compliance Requirements

This view will typically include contours at 2'-0" intervals similar to the Contour Map sheet. If the site is fairly level and due to the increased scale, as compared to the Contour Map, 2'-0" intervals may not display enough detail so the interval may need to tighten to 1'-0". Indicating direction of flow for streams and railroad ditches is also required, if applicable. Always include a standard North arrow with the selected scale on the sheet. The increased scale will allow better detail on location and size of any utilities on site. Owner's information will be clearly stated for each utility line.

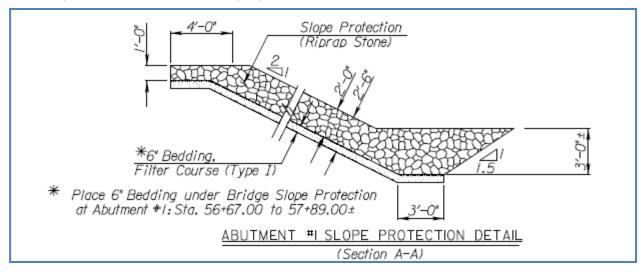
B.M. #16 ¾" bolt head in SE end of S hubguard of bridge over Blue River 81.8' Lt. ©Sta 56+81.0 Elev = 1146.04 B.M. #17 %" bolt head in NW end of N hubguard Big Blue River Bridge 118.7' Lt. ©Sta 64+33.5 Elev - 1159.32

The designer should attempt to show a minimum of two benchmarks within the plan view limits, preferably on opposite sides/ends of the bridge. If the increased scale prevents locating the benchmarks on the plan view on the sheet, describe the locations and state the established elevation. The reference datum description typically placed on the first Plan and Profile sheet will likely need to be repeated on the Contour Map and Construction Layout sheets to simplify the process if the bridge sheets are separated out from the rest of the plan sheets for subcontractors' uses.

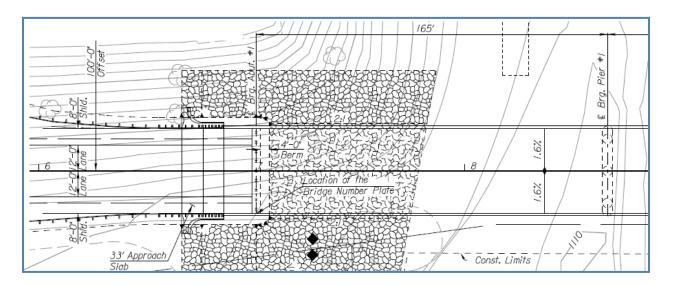
Centerline Project and Baseline should be clearly indicated. Stationing along project centerline should be shown in proportion to the project limits. Existing streambed and proposed streambed (and stationing) is to be clearly defined as well as the name of the stream and the flow direction.

Proposed foundation types and locations should be shown to aid in the geology investigation. Occasionally the project scope does not support the need for a separate Geology sheet so the information provided by the final Geology Report will be placed on the Construction Layout sheet after the investigation.

The extents of any slope protection, shot rock, gabions, drip lines, walls, or other proposed bridges should be shown on the layout graphically with macro dimensions. Any necessary typical sections of these bridges to depict geometric details should also be shown if the same bridges are not examined on additional sheets. Additionally, any channel improvements need to be detailed within the plan view along with section views of the improvements for construction purposes.



The bridge information in the plan view will include span dimensions from bearing to bearing, stationing, callouts for the approach slab sizes, lane and shoulder width dimensions on each end of the bridge, total roadway width on the bridge, plan thickness dimension of the rails or barriers, cross-slope grades on each side of Crown Grade, inside face of rail or barrier to Crown Grade dimension on each side of Crown Grade, Crown Grade offset from Centerline dimension (if applicable), bridge berm dimension at each abutment, and location of any number plate or plaque (if applicable)(number plates or plaques are non-participating items). Limits of slope protection at each abutment is also shown in the plan view both graphically and dimensionally, if the entire limits can fit within the trimmed view of the bridge at the increased scale.



6.1.2.1.2 <u>Elevation View</u>

The elevation view provides a macro-view of the proposed bridge and the foundation elements. It is important to modify the scale for both plan and elevation view in order to accomplish the level of detail necessary on the sheet. The elevation is typically a longitudinal section at the Centerline or Crown Grade of the bridge. All stations and top of deck elevations will be taken at the Crown Grade, Profile Grade or Centerline of the bridge depending on the complexity of the bridge and the designer's preference. It is useful to include the graphic representation and possibly dimensions from the nearest new foundations to the foundation elements of the existing bridge as information the bridge contractor may need in preparing a bid.

Each End of Wearing Surface (EWS) and Centerline (CL) bearing will be labeled with an element number (Abutment 1, Pier 1, etc. if applicable), station to the nearest 0.01 foot, and elevation for top of deck to the nearest 0.01 foot. The elevations will be labeled according to which project line is used (Cr. Gr., Pr. Gr., etc.). Dimension individual span lengths, the remaining distance between centerline of abutment to EWS, as well as the entire EWS to EWS length.

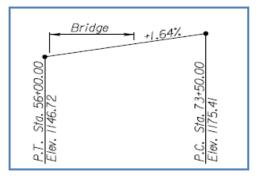
Callout the grade of the roadway, if constant, or simply label as Cr. Gr. VC or something similar and provide a line sketch of the vertical curve near the elevation view. This sketch should contain a not-to-scale graphic of the vertical curve including all pertinent curve information graphically or in a small table as well as the

bridge location shown on the graphic. Horizontal curve data, if applicable, should also be stated on this sheet for further discussion during a field check meeting.

Elevations for this view include Crown Grade (or Profile Grade) at each EWS and each substructure element at centerline of bearing, top of pile or top of shaft, top of berm, and various hydraulic elevations including ordinary high water, design high water, historic high water. Also include the clearance dimension to low structure from design high water.

6.1.2.1.3 Hydraulic Assessment Checklist

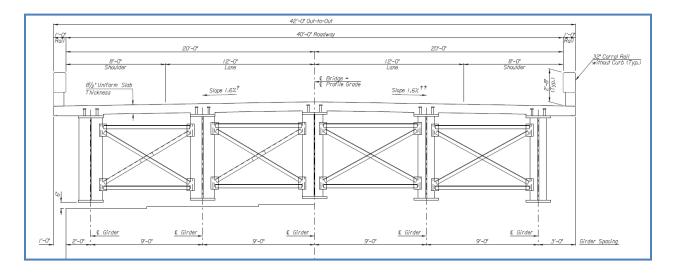
A preliminary <u>Hydraulic Assessment Checklist (HAC)</u> will provide the information required to fill out a standard Drainage Data note. The correct drainage data note will need to be on the plans with the data filled in from the HAC. The data required to be on the final plans changes occasionally, so it is necessary to use the latest electronic HAC and the latest standard note available from the KDOT website.



6.1.2.2 <u>Typical Section</u>

A typical section is required for each proposed bridge, and is very useful to have prepared for the Field Check plan stage. The complexity of the bridge determines how many "typical" sections may be required in the final plans. The purpose of the typical section sheet, in the final plans, is to display typical dimensions, vertical and horizontal spacings, reinforcing steel sizes, cross slopes, bearing types, elevations and to indicate stations of the changing "typical" section in more complex bridges. For purposes of Field Check, the typical section is used to depict a rough approximation of bridge type and size with macro dimensions, proposed rail type and size, deck type and thickness, and proposed cross slope of the bridge. A typical section can be included on another sheet if the bridge is reasonably simple. For example, a RCB standard drawing includes the elevation view of the bridge, the typical section of the bridge, and the bill of reinforcing for the box all on the same sheet. The simplicity of this type of bridge dictates the simplicity of the typical section.

As bridges increase in complexity, the typical section sheet(s) needs to display more information. If the bridge is a relatively basic open span bridge the typical section may include a section near mid-span, and one near an interior support, or a half section at an interior support with the other half depicting the section at mid-span.



6.2 Office Check

Plan details for the office check portion of the design plans concentrate on preparing the remainder of the sheets to explain the details and specifications of the designed bridge. The components discussed below are the necessary elements. The field check plan review and onsite field check meeting addressed changes necessary to the first submittal and the corrections are assumed to have been resolved by discussion or added/corrected. Confirming the Field Check plans allows for the geology investigation to take place in order to furnish that information to the designer for the remaining design of the bridge. This section explains the minimum of what to include for Office Check Plans (See Section 5.5 in this Manual).

6.2.1 Bridge Plan Assembly

The Office Check Plans should contain, as a minimum, a General Notes and Quantities sheet (for open span bridges), a completed Contour Map, a completed Construction Layout (with geology information if a separate sheet is not included), and various structural detail sheets depending on the complexity of the bridge(s) as well as the many standard drawings necessary for a KDOT let project. Office Check Plans should be approximately 95-99% complete. The bridge has been designed and detailed, foundations types, sizes and lengths (depths) have been calculated and detailed, berm slopes are finalized for size and grade, and the final type, size and thickness of any protection measures have also been detailed. If the project necessitates any temporary structures, these structures are also fully designed and detailed at the time the Office Check plans are submitted.

6.2.1.1 General Notes

This sheet will incorporate standard notes into the project as the first sheet concerning bridge length structures. All standard notes are available from KDOT's website.

"Plan Review Summary Information" (Appendix) is a reference to typical notes used when different types of work will be encountered. This is not an exhaustive list as requirements are removed, updated and added frequently. However, the reference does provide the designer with a rough framework to find most of the required notes.

Many of the standard KDOT notes contain language referencing "KDOT," "State," "State Bridge Office," or similar entities. Some of these references need to remain as in the case of "…refer to KDOT Specifications…" however, when the language refers to KDOT as the oversight agency, or as the owner, these terms need to be modified to reflect the world of Local Projects. In a general sense the terms can be modified to "Owner" or "Owner's Engineer," but the designer will need to approach each note modification with a critical eye to assure the correct terms are modified and the note maintains the original intent.

Example:

FALSEWORK INSPECTION: This project has falsework plan requirements which are considered "Category 2" by KDOT specifications. If falsework deficiencies or variations from the approved and sealed plans are found, the falsework design Engineer of Record will provide written approval of the changes. If for the convenience of the Contractor the falsework becomes "Category 1" by the use of non-typical supports; then the inspection and review requirement of "Category 1" will be fully enforced, but at no cost to **the State**. "Category 2" falsework inspection is not paid for directly, but is subsidiary to other bid items.

The Bridge Deck Finishing and Bridge Deck Curing notes below may be used on LPA bridge projects if the following conditions are met:

- The bridge is a KDOT standard Reinforced Concrete Haunch Slab (RCSH) without an overlay.
- The bridge is located on a road with a functional classification of "Local" or "Minor Collector".
- The bridge is on a low volume road with 400 ADT or less.
- The bridge is not on a road with an asphalt or concrete surface.
- The bridge and road surfaces will not receive deicing materials.

BRIDGE DECK FINISHING: Give the surface a suitable texture by transverse grooving perpendicular to the center line of the bridge with a tining float having a single row of fins. Make the grooving approximately 3/16 inch in width at ¾ inch centers, with a depth of approximately ¼ inch.

BRIDGE DECK CURING: Within 15 minutes, or as soon as the surface water disappears, apply 2 coats of Type 2 white liquid membrane forming compound at a minimum rate per coat of 1 gallon per 200 square feet of concrete surface. Place the second coat at right angles to the first coat. Protect the curing membrane against marring for a minimum of 7 days. The Engineer may limit work during this 7-day period.

The "Contractor Furnished PDA" bid item used by LPA's to pay for what is normally referred to as "Test Pile" or "Test Pile Special" must be accompanied by the following note. Also, the project specific special provision titled: "Contractor Furnished Pile Driving Analyzer (PDA)" should be included in with the letting document packet.

CONTRACTOR FURNISHED PDA: Use the Pile Driving Analyzer equipment at the locations shown on the Construction Layout. Use Pile Driving Analyzer equipment and methods compliant with KDOT Special Provision. The piling shall remain in place as permanent piling. Drive the piling to the resistance value of (Strength I divided by Phi).

At any location where problems are experienced, pile damage is suspected, or the Pile Driving Formula Load occurs significantly above the design pile tip elevation, the Owner's designated Engineer may request that the Pile Driving Analyzer (PDA) equipment be used.

6.2.1.2 <u>Quantities</u>

This sheet will incorporate standard bid items into the project as the first or second sheet concerning bridge length structures. All standard bid items are available from KDOT's website.

6.2.1.3 <u>Contour Map</u>

Review the requirements within the Field Check section for the Contour Map. Any missing or unknown information at the time of Field Check should now be on the sheet. Particularly, salvage information and any critical path items should now be known and notes placed on the sheet.

6.2.1.4 <u>Construction Layout</u>

The information from the final HAC will be transferred onto this sheet in the appropriate note. The final HAC is required to consist of revisions to the preliminary HAC and include potential scour information. This is generally the same information necessary for Item 113 data. Item 113 is required for all bridges on the local system, it is suggested to perform the necessary calculations (or perform the electronic model analysis for scour) and enter the data on the HAC so the data is available for the Item 113 Justification form.

Kansas Department of Transportation, Design Manual Volume I (Part C), Road Section, Elements of Drainage & Culvert Design, December 2016 Edition, Table 10.4-1 gives the Guidelines for Design Recurrence Interval (http://kart.ksdot.org/Download/DownloadDetail.aspx?FileID=230) then states the following:

"These guidelines should be applied to the extent practicable for new and existing highway drainage structures. On highway reconstruction or replacement projects, where existing facilities and right-of-way often dictate highway profiles, it may not be feasible to meet these guidelines. In such cases, the designer should endeavor to provide the highest degree of protection that is cost-effective under the existing circumstances. Federal, state, or local floodplain ordinances requiring a greater degree of protection may take precedence over these guidelines."

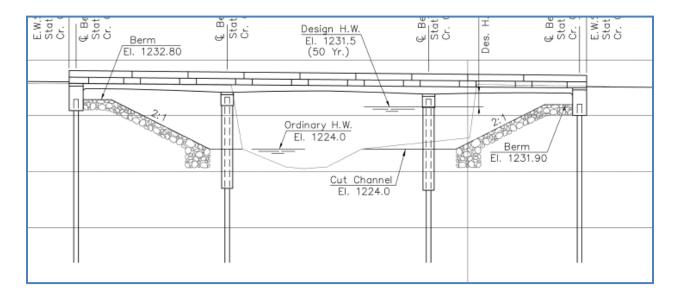
Additionally, the KDOT Bridge Design Manual states:

"...the true design frequency is the frequency flow which overtops the roadway and puts it out of service, or it is the frequency which satisfies the requirements of the allowable water surface elevations."

In a sag vertical alignment where there is no overflow area, the design frequency will be equal to the frequency that will still provide the freeboard decided upon at the field check meeting. Where an overflow area is provided, the design frequency is the frequency that takes the bridge out of full service, or simply at the frequency the road overtops. However, if a Q25 design is all that is necessary for the classification from Table 10.4-1, and Q25 does not overtop the road or even approach the required freeboard, the designer does not typically need to calculate larger frequency intervals unless it is required by other specifications/agencies.

This sheet will now show the location of all Pile Driving Analyzer (PDA) Pile, both in the Plan View and Elevation View. All pile will be labeled, number and length, at each substructure in the Elevation View. PDA Pile must be called out separately due to the additional ten foot of pile length required to perform the PDA test.

Berm slopes are typically 2:1. The slope may be slightly adjusted as needed for the site conditions and soil conditions. Some type of slope protection is common either along the drip lines of the bridge, or protecting the entire slope to prevent erosion from stream flows. The information needed to decide the thickness and size of the slope protection will have been provided from the hydraulics analysis and the geology report for soil types. For stream crossings, typically the bottom of the toe of the slope protection will need to be above the ordinary high-water elevation. If the slope protection is carried down to the streambed at a 2:1 slope, this necessitates longer bridges, and creates a lower "channel" on either side of the real streambed. Creating two ditches of slope protection on either side of the streambed elevation is not an acceptable practice from a design standpoint, or an environmental agency standpoint. Below is an example of bridge berms with slope protection and a special toe. The toe does pierce below the Ordinary High-Water elevation, but the rock is located well removed from the streambed and is "protected" by a fair amount of in-situ streambed material. This design keeps the stream within the natural stream channel during normal flows, and during higher frequency events the berms are protected from erosion. The existing banks are cut horizontal at the OHW elevation and the design does not create "ditches" on both sides of the streambed during normal flows. A designer could also make the decision to protect the horizontal cut to the edge of the natural channel to incorporate some scour protection around the piers, but all riprap would still be above the OHW elevation which is much more acceptable from an environmental agency viewpoint.



For grade separation bridges, the berm slopes will be protected as determined by analysis and any open ditches which convey drainage through the bridge will need to be maintained with the ditch bottoms receiving a minimum of a two-foot thick riprap lining.

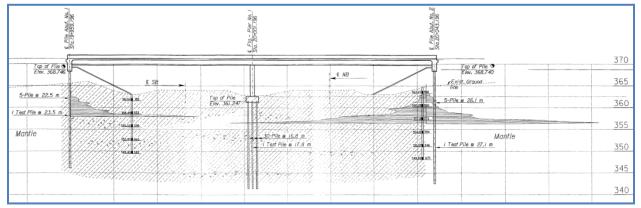
Minimum horizontal and vertical clearances, ditch widths and lane widths must be in accordance with the appropriate specifications given the type of traffic on the bridge and, if applicable, the type of traffic being spanned by the bridge. Dimension required clearances on the Plan and Elevation Views.

6.2.1.5 <u>Geology Sheet</u>

If a bridge is complex a separate geology sheet may be required. A typical geology sheet contains a simplified plan view with bridge dimensions, dimension and spacing of foundation elements, and the type and location of any geology investigation holes (core hole, power auger, air hammer, etc.). The simplified elevation view of the bridge typically contains only stations of the foundation elements, top of pile or shaft elevations, and the data gathered from the geology investigations, as well as the various geology layers which occur beneath the bridge laid out in a matrix of stations vs. elevations.

A probe investigation of a proposed bridge-length culvert is not recommended. If only a probe investigation is done, it must be supported with recorded geology within a reasonable distance of the project site. It is recommended every bridge-length box have a geology boring performed (with SPT testing, Cone Penetrometer, or some type of similar testing done to quantify subsurface conditions) at CL of roadway CL proposed bridge (or at a location as close as reasonably possible to CL-CL).

The Contractor Furnished PDA bid item (page 17-9) is used when driving PDA pile is desired at the site to verify the "generalized" geology information and to maximize pile resistance. In order to maximize the design capacity of the production pile versus the cost of the Contractor Furnished PDA Section 10.5.5.2.3 in the AASHTO LRFD Bridge Design Specifications should be considered. Again, the location of the PDA pile must be designated on the plan view (and elevation view) on the Construction Layout sheet and restated on the separate Geology sheet, if applicable.



6.2.1.6 <u>Typical Section</u>

More complex girders, bar patterns, or bridge geometry can lead to several "typical" sections. For example, if a bridge transitions from a full-super to a normal cross-section across the length of the bridge a typical section would need to be shown at the station of "full super", at the station to start the super-transition, at the station the super reaches +1.6%, +1.6%, the station where 1.6%-0.0% is achieved, and where the normal cross-section (1.6%, -1.6%) occurs. If a site necessitates odd span arrangements the bar patterns may be different across the changing span lengths, so the typical section would need to address these types of changes in some fashion.

For a more common alignment, or more simplistic bridges, the typical section at field check displays macro dimensions of major superstructure elements. In the Office Check plans, the typical section will show a greater amount of detail for superstructure components. Longitudinal reinforcement size and spacing at mid-span and at supports, transverse reinforcement, clearance dimensions, cover dimensions, location of drip grooves, rail dimensions and various other details will be displayed on this sheet as well as the macro dimensions of the major elements.

DESIGN GUIDELINES - NEW AND RECONSTRUCTED BRIDGES

DESIGN ELEMENT			
AADT DESIGN YEAR (vehicles/day)	Under 400	400 - 2000	Over 2000
MINIMUM CLEAR ROADWAY WIDTH FOR BRIDGES ⁽¹⁾	Traveled way + 2 ft. (each side)	Traveled way + 4 ft. (each side) ⁽²⁾	Approach roadway width ⁽³⁾

Notes:

⁽¹⁾Existing minor collector or local road bridges with less than 2000 veh/day may remain in place without widening unless there is evidence of a site-specific crash pattern related to the bridge width.

⁽²⁾Where the approach roadway width (traveled way plus shoulders) is surfaced, that surface width should be carried across the structures.

⁽³⁾For bridges in excess of 100 ft or any on local roads, the minimum width of traveled way plus 3 ft on each side is acceptable.

References:

"A Policy on Geometric Design of Highways and Streets", AASHTO, 2018 "Guidelines for Geometric Design of Low-Volum Roads", AASHTO, 2019

6.2.1.7 Framing Plan

For span bridges incorporating steel/concrete girders or beams, a framing plan is required. The framing plan is a layout of the entire skeleton of the superstructure which shows permanent and temporary diaphragms to be used during erection, labels of each girder/beam, bearing locations, and bearing stiffener desired locations after erection of the girders/beams. Several elevation views and section views at supports/bearings to aid in girder/beam erection process are useful for construction inspectors to verify the final conditions are as the designer intended.

6.2.2 <u>Scour Vulnerability</u>

Any new bridge constructed requires an Item 113 Justification Form. For open span bridges and culverts without floors, this form is to be completed by the engineer responsible for the bridge design. NBI Item 113 is used to identify the current status of a bridge regarding its vulnerability to scour.

A scour assessment of the bridge site needs to be carried out for all open span bridges and culverts without floors that are founded in erodible material. Shallow footings keyed into rock would not need an analysis carried out. However, for every bridge type an Item 113 Justification Form needs to be completed. See the appendix for Item 113 Justification Form an example. The Item 113 Justification Form is available for download on the KDOT Authentication & Resource Tracking (KART) website under "Local Projects Bridge Inspection Docs and Forms".

6.2.3 Load Ratings

Since October 1, 2010, all bridges designed using Load Resistance Factor Design (LRFD) are required to be load rated using LRFR. The engineer responsible for the bridge design shall follow current AASHTO Manual for Bridge Evaluation (MBE) specifications for all required limit states, load factors and resistance factors.

Only one load rating method should be used to load rate the bridge. The rating method should include an Inventory Rating (IR) and an Operating Rating (OR) for:

- The Design Truck (HS-20 for LFR, HL-93 for LRFR),
- The Notional Rating Load (NRL) truck,
- Each of the Special Haul Vehicles (SU4, SU5, SU6, SU7) if the NRL truck OR<1.0,
- All AAASHTO legal rating trucks (T3, T3S2, T3-3) if the Design Truck OR<1.0,
- Emergency Vehicles (EV2, EV3).

The Inventory and Operating load ratings for the standard LRFD and LFD trucks must be entered into a standard load rating table and placed in the plans (typically on the General Notes sheet).

LFD &	LRFR RA	TING FAC	CTORS
Truck	Rating Level	Inventory	Operating
HS-20	(367)	1.36	2.87
2002 LFL) Rating, 17	th Edition	AASHTO
HL-9.3 Lo	ading	1.57	2.04
NRL		$>\!\!<$	1.61
anto the	ual for Brid	an Euglia	1. an

For all new bridges a completed Load Rating Summary Sheet (LRSS) needs to be finished. A LRSS is required to be completed for all the required rating trucks. The LRSS shall be sealed and signed by the Professional Engineer licensed in Kansas with the overall responsibility for analysis of the bridge and the final load rating. The LRSS shall be placed in the bridge record maintained by the LPA and uploaded to the bridge record in the KDOT Bridge Inspection Portal. The LRSS is available for download on the KDOT Authentication & Resource Tracking (KART) website under "Local Projects Bridge Inspection Docs and Forms".

The design plans, Rating Model, and LRSS should be modified with regard to the construction of the bridge to account for any construction modifications or errors. One example of a construction modification which would be necessary to document on the "As-built" plans would be if bearing for all steel pile was achieved 4-5 feet above or below anticipated pile tip elevations. Another would be if the inspector inadvertently used the wrong bearing values to drive to during the pile driving operation and all pile were driven to a bearing 10-15% less than what was specified on the plans. These are small bits of information which could be vital in the future for a bridge widening, or an analysis of the bridge in terms of scour.

6.3 Final Check

Plans for the Final Check submittal shall be complete. All suggestions need to have been addressed in some form by the time Final Plans are submitted. All comments which have been made by BLP on previous submittals are made to improve the plans by suggesting or requiring changes. Suggestions and comments by BLP do not override design decisions made by the designer or the owner. The designer's or owner's choice to disregard BLP markups needs to be approved prior to subsequent plan submittal. The designer needs to communicate the reasoning behind dismissing a markup.

As major portions of the plans are reviewed, the reviewer will often focus on suggested corrections, or newly added details or sheets. As the plans progress, if a detail has been reviewed and is in no need of modifying, that detail typically receives only a cursory review on successive submittals. The designer should not change details after Office Check submittal without drawing attention about those changes to the reviewer by explaining the modification, addition, or deletion to the project manager. An email should be sent to the reviewer highlighting the modifications to the plan sheets.

Minor corrections, quantity modifications, erosion control items, or perhaps incorrect details which may have been missed during previous reviews will likely be the only changes left to be made to final check plans. The PS&E plan submittal will be inclusive of all the noted changes from the previous review. For information see *Section 5.7 PS&E* in this Manual.

<u>Appendix A – Index of Items</u>

Geotechnical Bridge Foundation Investigation Practice

Geology Report Information

Typical Geology Report Foundation Recommendations

Item 113 Justification Form (Open-Span Bridge Example)

Load Rating Summary Sheet

Geotechnical Bridge Foundation Investigation Practice

The procedures employed in any subsurface exploration program are dependent upon a variety of factors which vary from site to site. The project design objectives and the expected site conditions have a major influence on the subsurface exploration and the development of a drilling plan. The objectives of a drilling plan should be to adequately characterize the subsurface conditions at the site so: a) The Designer can analyze the conditions to formulate a cost-effective solution, and b) The Contractor can, in conjunction with any necessary site investigation, prepare a bid which will reflect the work anticipated based on the conditions to be encountered. A secondary objective is to obtain maximum subsurface information from a minimum number of exploratory borings.

The following is a list of requirements for a foundation investigation for State or Federally funded bridge projects developed for funding through the Kansas Department of Transportation.

- 1. Perform a site-specific investigation for all Span Bridge, or Bridge-size Box projects.
- 2. Make one boring at the centerline of each pier bent and abutment for a bridge or center of structure for RCB/RFB. A probe investigation may be carried out for bridge size boxes if additional geology investigations have been done in the surrounding area of the proposed structure to support this substandard practice. Additional borings should be made as necessary to develop a continuous soils and geology profile through the structure area including the bottom of the channel. When the drilling plan can be supplemented with additional information, one boring at the centerline of each abutment may be considered to meet the minimum requirement. The supplemental information should be considered only if it is documented and directly supports an accurate soils and geology profile. When rock is encountered at a span structure, a MINIMUM of at least one of the required borings will obtain a core of the bedrock. An unconfined compression test should be taken at each change in lithology and at a minimum of every 5 feet of depth. Borings should be advanced at least 5 feet below the recommended foundation element elevations.

(Taking advantage of a substandard "probe" investigation at the site for a proposed bridge-size box will not account for the characteristics of the subsurface material(s). The probe may indicate the presence of rock within the immediate reach of the streambed, but this information may be a false negative, or a false positive. Also, it is not only rock which can cause issues for bridge-size boxes. Soils incapable of supporting load may be present a couple feet below streambed. Utilizing a probe investigation for a proposed structure may result in the wrong type of structure (RCB instead of RFB) being selected for design, it may result in large change orders submitted during construction due to stabilizing unsuitable material or removing and replacing unusable material to construct the box on or using a probe may result in building a more expensive RFB when an RCB would have performed adequately.)

- 3. When approach fill embankments of significant height are used at bridge ends founded on compressible material, make at least one boring at the critical location for each embankment location to determine potential problems associated with settlement and stability of the embankment. The borings for the embankments can usually be combined with the borings made for the abutments of the structure. Address slope stability and settlement issues in the geotechnical report.
- 4. Obtain sufficient soil and rock samples from all borings to adequately characterize the subsurface materials to a depth appropriate for the loads and the foundation system to be proposed.₍₁₎
- 5. Appropriate soil sampling should be obtained at five-foot intervals in the soil mantle on at least one of the borings where soil thickness and site conditions warrant. The standard penetration test is the minimum acceptable sampling technique.⁽²⁾ (An incomplete test (50/3", 50/6", etc.) is not an acceptable substitute for testing of material which should be cored. At any point, if there is an incomplete test a core should be taken from that elevation to the bottom of the boring. This is regardless of whether the proposed foundations will be drilled shafts or driven pile. In most cases retrieving only a five-foot core sample is not an acceptable sample.
- Field documentation of rock units present at the site are to be characterized as to stratigraphy (geologic nomenclature of each unit), lithology (basic type of material), physical condition (weathering, bedding, color, etc.) and engineering properties (jointing, strength, etc.).(3)
- 7. Perform sufficient laboratory testing to characterize all subsurface material.(4)
- 8. Information shown on the boring logs should include the following:
 - a. Depth and type of all samples obtained.
 - b. A visual and textural description of the subsurface material.
 - c. Thickness and geologic nomenclature of each stratum encountered.
 - d. A record of the Standard Penetration Test as well as any other tests that have been run.
 - e. An accurate location and top hole elevation for each boring.
 - f. Stabilized groundwater elevation.
- 9. When rock is encountered at shallow depths, make additional transverse borings.(5)
- 10. Furnish a set of office check plans by the Designer to the Geologist and/or Geotechnical Engineer for review of the items related to the geological investigation. Following the review, the plans should be returned to the Designer with any necessary comments.
- 11. Perform the Geotechnical Site Investigations under the supervision of a licensed Geologist or Geotechnical Engineer.

12. For All Foundations; State in the recommendations the Geotechnical Nominal Resistance Calculated, Geotechnical Factored Resistance, Phi factor used, and the governing factor for the design. The units for Pile Foundations should be in KIP. For Drilled Shaft Foundations the Skin Friction Resistance and End Bearing Resistance should both be in KIPS/sq. ft. resistance Spread footings should be KIPS/sq. Ft. resistance.

To provide further guidance, the following "Standard Practice" for Soil Foundation Investigations for Bridges is outlined.

If a new embankment will be placed on a soil foundation, an existing embankment will be widened or the grade elevated by 10 feet, an existing bridge shortened by the replacement structure, or if the new structure will be built on an offset alignment; perform the following for a soils foundation investigation:

- 1. If the depth to bedrock is 10 feet or more, obtain undisturbed soil samples at 5 foot intervals throughout the soils profile on at least one abutment location. If the soils (depths, types) vary between the two abutments, perform a similar sampling strategy at the second abutment.
- 2. Perform consolidation testing on each recovered sample below the water table. As a minimum, perform unconfined compression testing on each recovered sample.
- 3. Perform slope stability analysis of the proposed configuration. If the safety factors are questionable, perform more advanced strength testing.
- 4. Perform a settlement analysis including amount of settlement anticipated and the time frame for the settlement to occur.
- 5. Author an LRFD Geology report detailing findings of the investigation complete with recommendations. A sample report is in the Appendix.

Possible ASTM Standard Tests (varies by site characteristics): D1586, D2936, D 2938, D3740, D5434, D5549, D5607, D6032. This is not an exhaustive list of tests required to create a quality Geology Report for the bridge site(s), but it does cover many of the basics.

Footnotes:

- (1) Soil and rock strengths are needed for the Engineer to calculate bearing capacities for various foundation elements.
- (2) This test should be performed only in non-cohesive soils. Correlations in cohesive soils are discouraged unless considerable data exists to justify the results.
- (3) This is necessary so the Engineer knows what conditions were found in the borings and can apply his knowledge and experience with identified members to adequately perform an analysis. Further, this information allows contractors who are familiar with geologic members and know how they can be excavated to submit an accurate bid.
- (4) Laboratory testing of material obtained from borehole samples is needed for the Designer to perform an engineering analysis which is the basis for recommendations. For example, on any

foundation that relies on end bearing (e.g., a spread footing or drilled shaft), an unconfined compression test of the material on which the foundation will be bearing is considered the minimum testing that should be performed.

- (5) Bedrock encountered at shallow depths may in fact be a "floater" and not a continuous formation of rock. If the bedrock encountered is a "floater" then the amount of rock excavation will be incorrectly identified and further the geology of the site will be misrepresented.
- (6) The Engineer should know what material lies below the foundation element to ensure that the foundation element is on competent material. Therefore the boring should extend a minimum of 5' below the bottom of the proposed foundation element. It's also necessary so minor deviations in the excavation limits can be compensated without additional cost.

Geology Report Information

LRFD Geology incorporates a variety of resistance factors to arrive at a "Maximum Resistance" for drilled shaft, spread footing, or pile foundations.

The "Pile Damage" resistance factor (ϕ_c) (H-pile) of 0.6 (without pile points/tips) or 0.5 (when pile points/tips are used) is applied to calculate the maximum structural resistance of the steel pile (AASHTO 6.5.4.2). HP10x42 with an area of 12.4 sq. in. and a yield stress of 50 ksi will have a maximum structural resistance of 372 kips if pile tips are not used and 310 kips if tips are used. This is the maximum structural capacity of the steel pile.

The geologic layer also receives a bearing resistance factor (ϕ_{dyn}) ranging from 0.10 to 0.80 (AASHTO Table 10.5.5.2.3-1). 0.10 is the resistance factor to be used if the ENR formula is used without any dynamic or static testing on the piles and no field verification of hammer performance. 0.80 can be used with dynamic testing performed on 100% of production piles along with a static load test for each site condition. 0.55-0.65 is typically used if PDA testing is performed on a minimum of 2 piles (current AASHTO specification) at the site then driving criteria is established using the PDA results and the rest of the pile are driven to that criteria using the modified ENR formulas given in the KDOT Specifications. There is also a table for resistance factors (ϕ_{stat}) (AASHTO Table 10.5.5.2.3-2). One "Resistance Determination Method" titled "End Bearing in Rock – Canadian Geotech. Society, 1985" allows a resistance factor of 0.45. This value has been commonly used if no dynamic testing will be performed on site. However, when this phi has been used on projects it has often remained somewhat ambiguous whether the geologic capacity has actually been determined from this method.

Using the maximum resistance factor of 0.65 for dynamic testing, the above capacities are reduced to 242 kips and 202 kips, respectively. The factored nominal resistance for an HP 10x42 pile should not be higher than 121 tons or 101 tons in most geology reports depending on whether pile points are recommended or not. To achieve a higher phi for dynamic testing is cost-prohibitive for an LPA project.

Driving stresses are limited in steel pile to 0.9 times the yield strength of the steel. In most situations 50ksi steel is supplied for steel pile. This equates to a driving capacity of 558 kip, or 279 ton for HP10x42 pile. This does not typically limit the final capacity of the pile due to the damage factor, and bearing resistance factor, but needs to be monitored in circumstances where pile are driven through thick layers of stiff clay, or through thin layers of shale or bedrock in order to get to a layer of geology which will support the loads of the structure.

The term "practical refusal" should not appear in any geology report concerning bridge foundations. The factored nominal resistance of the foundation element should be called out. The capacity of the geologic member should be clearly stated on the borehole report/table. The engineer will specify what Strength 1 design load the foundations must support and determine the size and arrangement of the foundation

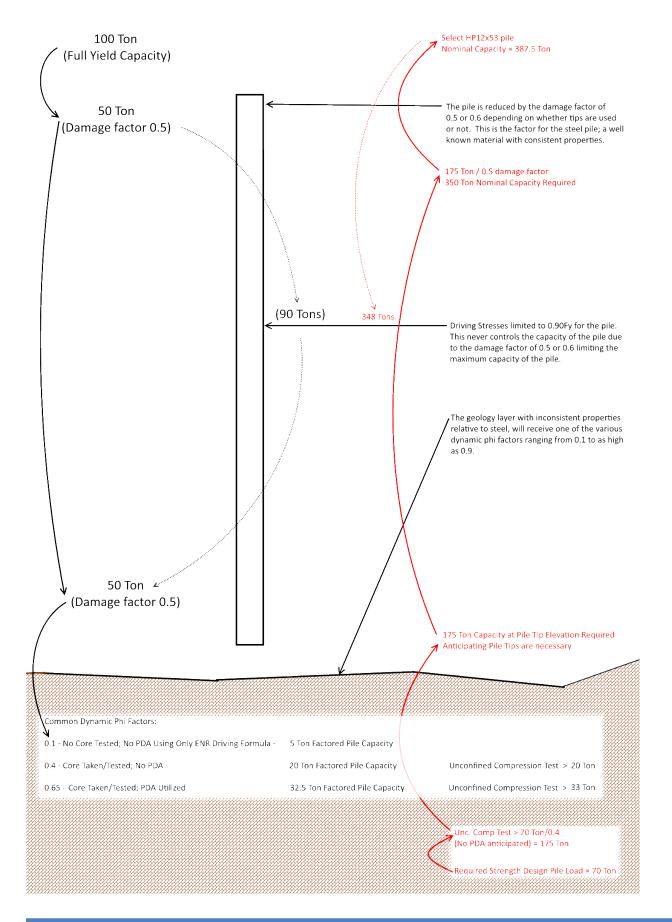
elements to use based upon the factored nominal resistance clearly labeled for various pile sizes in the report.

The example below, for use by the design engineer, will hopefully aid in both the preliminary and final design of the pile foundations. The left side (in black text) is simply an aid to display how much capacity of a fictional 100 ton capacity pile is "lost" in the LRFD design process. A pile with capacity of 100 tons is shown and this value is reduced using the different factors until the dynamic phi factor is selected in the table at the bottom. The far right values in the table would finally give what the unconfined compression test of the geology cores must be (50 Ton for both phi dynamic factors). The tons required at the pile tip determine what the unconfined compression must be for the geology layer, and then the phi dynamic reduces the amount of that geologic capacity the engineer may use. The structure Strength 1 loads must be less than 20 Ton, or 32.5 Ton, depending on the phi dynamic factor used.

The design method, in red, begins at the bottom with the known Strength 1 factored load of 70 ton. The example project is anticipated to have a quality geology investigation performed, but it is not anticipated to have Contractor Furnished PDA performed. Given those two criteria, it is determined to assign a dynamic phi of 0.4 for the pile design. An unconfined compression test of 175 ton is required. Once the geologic capacity is determined, the structural design of the pile must be carried out.

It has been anticipated pile tips or pile points will be used on the project. A damage factor of 0.5 is specified by AASHTO. Ultimately the 175 Ton geologic capacity is divided by the 0.5 damage factor to arrive at a 350 Ton nominal pile capacity. An HP12x53 pile is selected with a nominal capacity of 387.5 Ton. In this case the driving stresses of 0.9*Fy*As will be 348 Tons; this value must not be exceeded during the pile driving procedure.

The diagram referred to above is located on the next page.



Typical Geology Report Foundation Recommendations

Abutment and Pier Foundations

We recommend pile foundations for the abutments and piers for these bridges. Elevations are given for 10x42, 12x53, and 12x74 H-piling. The pile will penetrate the mantle and achieve the required resistance within the underlying weathered shale and sandstone of the Stranger Formation. The designed resistance is governed by the drivability of the pile. A Phi factor of 0.60 is given based on the geologic investigation performed and knowledge of the site.

The following table gives the top of bedrock elevation for the Stranger Formation and the maximum anticipated pile tip elevation at each abutment and pier. If piling achieves bearing at a higher elevation, further driving should cease to avoid damage to the pile. Caution must be exercised not to overdrive the piling resulting in damage to the H-pile

			H Pile	H Pile	H Pile
Location	Centerline Station	Bedrock Elevation	HP 10x42	HP 12x53	HP 12x74
			Elevation	Elevation	Elevation
Abutment 1	700+93.67	765.4	760.4	760.4	760.4
Pier 1	701+41.27	769.8	764.8	764.8	764.8
Pier 2	702+04.75	764.0	759.0	759.0	759.0
Abutment 2	702+52.35	765.2	760.2	760.2	760.2

Road Over Unnamed Creek (D) Br. No. 000000000000001

Road Over Unnamed Creek (D) Br. No. 000000000000001

			H Pile	H Pile	H Pile
Location	Centerline Station	Bedrock Elevation	HP 10x42	HP 12x53	HP 12x74
			Elevation	Elevation	Elevation
Abutment 1	701+05	765.4	762.0	761.0	760.0
Pier 1	701+47	764.8	761.5	760.5	759.5
Pier 2	702+03	763.8	762.0	761.0	760.0
Abutment 2	702+45	764.0	762.2	761.2	760.2

LRFD Design

Resistance and Phi Factor Information (damage factor of 0.6 already applied to arrive at Rn)

	Pile	Pile	Pile
	HP 10x42	HP-12x53	HP-12x74
Rn (kips)	372	465	654
Rr (kips)	223	279	392.4
Phi Factor	0.60	0.60	0.60

Item 113 Justification Form (Open-Span Bridge Example)

Item 113 Justification Form | Bridge Owner

Structure Information

NB Structure Number	415350333233007	Owner	City of Towanda
County Structure Name	Bridge 25	Year Constructed	2016
POA Required?	YES/NO	Feature Intersected	Blue Creek
Date Delivered		Facility Carried	Jersey Street
Dato Domonou		Location	0.05 mi. N of K-10
Critical Inspection Finding	? YES/NO 🖌		
Date Delivered 11-15-2017		Not need	ed for an open-span bridge

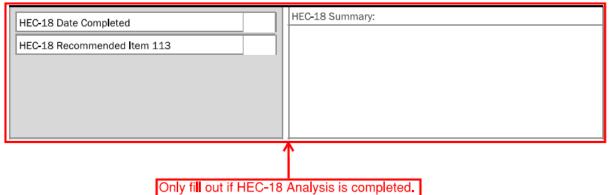
Not needed for an open-span bridge

Summary of Scour Analysis

A	Abutment Scour Recommended Item 113				
R	Rock Scour Recommended Item 113				
	Long Term Degradation (ft)				
	Contraction / Pressure Flow Scour Depth (ft)				
	Pier Scour Depth (ft)				
	Total Assessed Scour Depth (ft) Pier Foundation Depth (ft)				
	Distance from Foundation to Channel Bed (ft)				
Corresponding Item 113 Code					
Extensive Scour Observed?					

-	
I	Current Item 61 Rating -
I	Current Item 62 Rating -
	Extensive Secur Observed
I	Comments:
	Geotechnical inference indicates shale would be resistant to scour unless highly weathered. Downstream channel cutoffs increase likelihood of bed degradation, but bridge does not have a history of scour.

HEC-18 Scour Analysis Results



Final Recommended Item 113 Code

- 5

Load Rating Summary Sheet (page 1 of 2)

ł	Cans	as.		Load I	Rating	g Sumi	mary S	heet for Lo	cal Brid	dges
NBI Bridge #: 00000000045310 County: Allen LPA Bridge ID: 22 Owner: Iola PCG Route Carried: RS 110 NBI Item 43: 402 SBMC				Inspection Key : Year Built : Year Reconst. : Design Load :	2019 HL93	$\begin{array}{c c} ADT: & 125 & vpd \\ ADTT: & 05 & \% \\ f^{*}_{c}: & 4.0 & ksi \\ f_{v}: & 60.0 & ksi \end{array}$				
	Structure	e Type :	Steel Bea	m, Continuc	ous					F _y : 50.0 ksi
Rati	ng Informa	tion Prov	ided :	🔽 Pla	ns	🗆 Fie	ld Measure	ments	Testing	No Information Exists
		Load	Rating Ma	anuals:			Genera	l Load Rating Inform	nation:	Condition Ratings:
LFR/ASR Version : N/A LRFR Version : 2017 AASHTO Design Specs (8th Ed.) MBE Version : 2018 MBE (3rd Ed.)		Cul	Overburden Type : Overburden (in.) : Overlay Type : Overlay (in.) : vert Fill Height (ft.) :	None	Deck: 8 Superstructure: 8 Substructure: 8 Culvert: N Channel:					
Met	hod Used:			LRF	R					Load Rating Evaluation Summary :
c	Truck HL-93	Tons	RF _{INV}		1.75 1.35 RF _{OP} 1	Υc: 0.85 Υs: 1.0 Γons _{op}		olling Structural Elen M Girder/Beam Int	nent	(Areas investigated in load rating) +M Girder/Beam
Design	HL-93 HS20-44	36	1.310		1.830			ivi diruer/Beam Int		Shear at/near Supports
	11520-44	50								Truss Members
	T3	25			3.238	80.9		-M Girder/Beam Int		Floor Beams
	T3S2	36			2.576	92.7		-M Girder/Beam Int		□ Stringers
	T3-3	40			2.560	102.4		-M Girder/Beam Int		Pins
Rating	SU4	27			2.949	79.6		-M Girder/Beam Int		Hangers
d Rat	SU5	31			2.604	80.7		M Girder/Beam Int		Fatigue Prone Details
ASHTO Load	SU6	34.75			2.336	81.1		M Girder/Beam Int		🗖 Deck Overhang
110 H	SU7	38.75			2.115	81.9		-M Girder/Beam Int		Deck between Girders
AAS	NRL	40			2.036	81.4		-M Girder/Beam Int		🗆 Substructure (NBI Item 60 < 4)
	EV2	28.75			3.415	98.1		M Girder/Beam Ext		Masonry Arch
	EV3	43			2.293	98.5		M Girder/Beam Ext		СМР
			See r	next page f	for posti	ng require	ements			NBI Item 70 (Relationship of Operating
Add	itional Con	nments (i	nclude anv se	ection loss, assu	mptions, ha	nd calc. refere	ences. etc.)			Rating to Maximum Legal Load) :
						-	-	lesign plans. A new, s	ealed Load	Equal to or above legal loads
Ratir	ng Summary	Sheet wil	l be require	d with any ne	ew load rat	ing or if the	BrR model is r	modified.		Printed Name (P.E.):
										Wizard of C
										License #: 3003
										P.E. Licensed in Kansas
										Seal & Date
										P.E Stamp Here
										Company : ABCD
										Analyst : SBS
										Analysis Date : 11/21/2018
The P	ationals) for at the	atout	(are) bened	a theoretical	ahusia aifahu	ha sala ang sala sa s	nto incohered and	an a limited communication.	smaking and	
naxin		nits. The LP/						decide to post the structure		rning their condition. The calculated values are the imits.

Load Rating Summary Sheet (page 2 of 2)

Kansas Depertment of Transportation	Load Rating Summary Sheet for Local Bridges	
NBI Bridge # : LPA Bridge ID : Route Carried :	00000000045310 County: Allen 22 Owner: Iola PCG RS 110	
	Maximum Legal Posting Limits	
	NO POSTING NECESSARY	

7.0 <u>Right of Way</u>

7.1 Introduction

This section is focused on the beginning of the right of way (ROW) process. ROW activities begin before any actual construction or fieldwork is started. Like any other project, success with ROW usually depends on planning. This section will discuss the following topics:

- roles
- planning and lead time
- federal funding eligibility
- records and tract files
- contracting work and agreements
- qualifications of ROW personnel, and
- procedural guidelines.

7.1.1 Roles and Responsibilities

Local, State and Federal Agencies all have roles in an LPA project.

7.1.1.1 <u>FHWA</u>

Acquiring ROW for a public project often requires several partners. A project may require a cooperative effort involving the LPA, KDOT and Federal Highway Administration (FHWA). KDOT and FHWA currently have the agreement that KDOT oversees the acquisition of ROW on projects receiving federal funds for compliance with federal acquisition and relocation guidelines.

FHWA has reviewed and approved KDOT's ROW processes for compliance with federal laws and regulations. Therefore, it is to the benefit of the LPA to model their ROW processes on KDOT policies. The LPA must follow both state and federal laws and regulations.

An LPA may develop a written policy and procedure manuals for ROW acquisition. Any written policy and procedure manuals for ROW acquisition developed by the LPA will be subject to KDOT and FHWA review **prior** to use on a federal-aid project.

7.1.1.2 <u>KDOT</u>

For a project to receive state and federal funding, there are a multitude of laws and regulations to which the LPA must adhere. One of KDOT's primary functions is to advise the LPA concerning ROW acquisition so that the federal funding is not jeopardized. KDOT ROW manuals are available upon request to assist the LPA in the acquisition of ROW. Additionally, the BLP PM is familiar with ROW acquisition and is available as a resource throughout the process.

7.1.1.3 FHWA and KDOT and LPA

Yearly FHWA will identify seven local projects in the state of Kansas that are federally funded in any phase and for which ROW was acquired for a review of the LPA's ROW files. One project is selected out of each of the six KDOT Districts and an additional project is selected out of either the Wichita (WAMPO) or Kansas City (MARC) MPO area. The LPA will be notified in writing if their project is selected for review and a time for review will be scheduled. The LPA will make available their staff that was involved in the acquisition for the project. Failure to provide proper documentation to support the fact that state and federal guidelines were followed in the acquisition of ROW could jeopardize funding for the project.

7.1.1.4 <u>LPA</u>

The LPA is responsible for acquiring the necessary ROW for the construction and maintenance of the proposed facility in accordance with all applicable federal and state laws and regulations. The LPA must consider not only ROW acquired in fee simple, but also permanent easements (slopes, drainage, etc.), temporary easements (construction, borrow, etc.), licenses and any other agreements required for the entering on or use of land or property rights for construction and maintenance activities.

The LPA may or may not choose to involve federal funds in the acquisition of ROW. If the LPA is utilizing federal funds in *any* portion of the project (not just ROW), all requirements of the "Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs", also known as the *"Uniform Act"*, apply to the acquisition of ROW. The BLP PM is available to assist the LPA with compliance with the Uniform Act, however compliance with the Uniform Act is the responsibility of the LPA.

In Kansas, LPAs self-certify compliance with the "Uniform Act". This is accomplished by submitting a completed <u>"Right of Way Clearance Form" (Form 1306)</u>) for each project. Each year several ROW reviews are conducted throughout the State. These reviews have frequently identified issues with "Uniform Act" compliance. In most cases, these issues have been minor in nature. However, our goal is to achieve zero issues with ROW acquisition and total compliance with the "Uniform Act". To facilitate this goal, KDOT in association with FHWA and the Kansas Local Technical Assistance Program (LTAP) has developed the KDOT "ROW Certification Program" (ROWCP) that all LPAs must complete prior to ROW self-certification.

This program, a partnership with KDOT, FHWA, and Kansas LTAP consists of watching 6 short videos and taking a written test consisting of 24 questions based on the videos. At least one person from each LPA will be required to be certified (full-time LPA employee) prior to submitting the 1306 form. Also, any ROW-acquisition contractors the LPA may hire to perform any part of the ROW acquisition must be certified. Certification under this program must be renewed every 3 years.

The LPA will be required to take the test after watching the videos. Answers will be sent to KDOT for tabulation, and the LPA will be notified by KDOT via email regarding the results (pass/fail). The test may be re-taken if needed. Videos may be referenced while answering the questions.

After the required ROW for a project has been acquired and cleared for construction, the LPA **must** certify compliance with all applicable laws and regulations by submitting a Form 1306. Failure to comply with this submission will jeopardize the LPA's funding requests and may delay the letting of a project. If no ROW was acquired for the project, the LPA must still submit a completed KDOT Form 1306. Any required field can be marked with a "0".

7.1.2 Planning / Lead Time

One of the most significant challenges in acquiring ROW is the LPA is dependent on factors over which they may have little or no control. Delays may be encountered from property owners, title companies and the court system, just to mention a few. Because of the potential for time delays KDOT recommends scheduling plenty of lead time for the acquisition of ROW.

The following is a sample schedule for ROW activities for an average project such as a widening job containing ten tracts or so. Some time frames for functions may overlap, and complex projects will require more time. Not provided are estimates for Relocation Assistance, as these types of tracts can only be estimated on a case by case basis. Relocation Assistance will require significant time.

Layout and Legal - Preparation of the ROW plans, graphic exhibits, legal descriptions and title reports.	4 Months
Appraisal and Appraisal Review - Time to prepare and review appraisals.	4 Months
Negotiations – Notice of Proposed Public Improvement and Authorization to Acquire (per KSA 26-518) Negotiator making contact, offers, negotiations, securing signatures on contract and closing transaction.	7 Months
Condemnation - Preparation of Condemnation notice, requesting selection of appraisers by commissioners, making service, and making payments. Filing necessary notices, required publications, and property owner mailings.	6 Months
=======	

TOTAL - 21 Months

7.1.3 Federal Funding Eligibility

Costs eligible for reimbursement include real property acquisition, incidental costs of the acquisition, pro rata taxes and/or special assessments, permanent and temporary easements, damages to remainder of real property, court awards and cost of tenant-owned improvements, uneconomic remnants, and construction in exchange for donation. All documents relating to acquisition of the ROW must be available for inspection.

23 CFR 710.203, 710.307 and 710.309 requires that costs for appraisal, negotiation and condemnation *will not* be eligible for federal funding *without prior authorization from the FHWA* to proceed with the activity. This authorization request is made through BLP. Costs incurred prior to the appraisal phase such as ROW estimates, title work, preliminary survey and graphic exhibit and description preparation may be eligible for federal participation and reimbursement as a preliminary engineering activity or as an incidental ROW expense only if the costs are incurred after the corresponding authorization.

7.1.4 <u>Records/Tract Files</u>

The LPA must maintain a separate tract file for each acquisition of real property and all the people displaced (see discussion of Tract--What Is It? in Miscellaneous Topics). LPA records must be sufficient to demonstrate compliance with all applicable laws and requirements and be available for inspection by KDOT, FHWA and possibly other divisions of state and federal government. The LPA must retain records for at least **three years** after the final payment is made for any ROW phase of the project.

Provided below is a list of the minimum records needed to be retained:

- All Correspondence
- Title Documents
- Design Summary Information and Graphic exhibit
- Appraisals and Review Appraisals
- Agency Approval to Make Offers
- Written Offer Letter
- Negotiator's Notes
- Administrative Settlement
- Copy of Signed Contracts
- Conveyance and Closing Documents
- Proof of Payment to Landowners/Tenants
- Relocation Forms
- Relocation Agent's Notes
- Condemnation Documents
- Right of Way Spot Check Form (see Checklist D in Appendix A Checklists)

7.1.5 Contracting Work/Intergovernmental Agreements

If the LPA does not have internal staff necessary to complete the necessary ROW functions, they may contract with a private contractor or with other governmental agencies. When the LPA contracts with outside resources, they should allow additional coordination time in the overall schedule for ROW acquisition.

7.1.5.1 Contracting Work

KDOT Bureau of ROW maintains a list of consulting firms that may be used by the LPA for ROW activities. These services should be contracted in compliance with the applicable requirements for contracting with private contractors, fee appraisers or other specialists. KDOT provides the list of consultants for informational purposes only and does not warrant the services supplied by consultants.

7.1.6 Qualification of Right of Way Personnel

The LPA should have qualified personnel supplying the necessary ROW services. Provided below are minimum qualifications for persons performing ROW program functions. There are ROW functions for which no qualifications have been provided, including property management, land graphic exhibit and description preparation, and condemnation and project management. If you find you require any of these services, or others, consult with the BLP PM for assistance in determining the necessary qualifications. Additionally, KDOT maintains a list of persons who provide services for appraising, review appraising, negotiating and relocation assistance. KDOT does not make recommendations from this list.

Fee Appraisers must

- Have successfully completed technical appraisal training and have experience in appraising the type of property to be appraised. When in doubt, a sample appraisal can be requested.
- Have previous experience preparing appraisals for eminent domain ROW acquisition.
- Be a certified or licensed appraiser.

Fee Review Appraisers must

- Possess the ability to logically analyze the appraiser's approach to value and recognize deficiencies in the appraisal report.
- Be certified or licensed appraiser.

NOTE: When fee review appraiser services are utilized, the LPA still retains the responsibility to approve the amount considered to be just compensation.

Negotiators must

- Have documented experience in performing acquisitions which complies with the requirements of the Uniform Act or be a full-time employee of the LPA or the DOT.
- Be familiar with the requirements of the Uniform Act.
- Demonstrate the ability to understand appraisals and appraisal reviews.
- Be proficient in researching courthouse records and understand the legal title process.
- Demonstrate the ability to interpret ROW plans.
- Possess effective communication skills.

Relocation Assistance Agents must have

• Documented experience in performing relocation assistance which complies with the requirements of the Uniform Act.

- Sufficient ROW knowledge.
- Knowledge of related project disciplines (work within a team).

7.1.7 Procedural Guidelines

The goal of the Uniform Act is to encourage and expedite the acquisition of real property by agreement with the owner, avoid litigation and relieve congestion in the courts, assure fair and equal treatment for all owners, and promote the confidence of the public in land acquisition for public use. To achieve that goal, certain procedures must be followed when acquiring ROW.

This section provides a brief overview of items required to be performed so funding is not jeopardized. The activities are listed in the approximate order in which they should be performed. See *Checklist C - Local Public Agency Project Checklist* in *Appendix A*.

- Contact BLP to inform and perform preliminary startup procedures and determine the scope of the project including what, if any, additional ROW will be needed.
- Prepare the tract files, secure title information, plot existing and proposed ROW lines on construction plans, calculate the acquisition areas, and review access control needs. Estimate the acquisition amount for each tract to determine the complexity of the valuation issue and the appropriate valuation procedure. One item to be wary of is the presence of hazardous waste and contaminated properties, see *Section 7.7.4*.
- Complete the public notification and involvement requirements.
- Request authorization for reimbursement of incidental expenses including appraisals from KDOT and FHWA if participation in payment of these ROW expenses is sought.
- Comply with notification requirements per 49 CFR Part 24.5.
- Determine the amount to be offered as just compensation by an appropriate method (appraisal or through the appraisal waiver process).
- Submit information necessary to request authorization to acquire from KDOT and FHWA if state or federal funding participation in ROW is sought.
- Acquire the ROW and close each transaction.
- If relocation is involved, assist all displaced persons. (Please note that per K.S.A. 58-3502, all acquiring agencies are required to provide relocation assistance to eligible recipients on all projects.)
- If necessary, complete Condemnation proceedings.
- Certify the project ROW is clear by submitting the 1306 form.

A guide detailing the ROW process may be found in *Appendix A, Checklist D*. This checklist is called the *Right of Way Spot Check Form* and is a helpful tool in managing the ROW process.

The following information will describe in more detail suggestions on "how" the ROW functions should be performed to comply with federal funding.

• Title Search

There must be an examination of the county records, and a title report requested for each tract to determine the owner of the property, including mortgage holders and other interested parties. This title report is used to determine the status of title so that merchantable title for the land required can be obtained. The report is also used as an information source for describing land and identifying all persons or entities with an interest in and/or the authority to contract for deed and/or release real estate interests. When examining the county records, the report must show a five-year sales history of property. If there was a transfer of title within the last five years, this requires the researcher to go beyond this five-year window to the previous deed transferring ownership. These records are maintained as a part of the tract file. (Reference 49 CFR Part 24.103 (a) (2))

- Legal Descriptions/Graphic exhibits Legal descriptions and graphic exhibits must be prepared in accordance with Kansas Minimum Standards for Boundary Surveys and Mortgagee Title Inspections Standards of Practice (latest revision).
- Authorization for Right of Way Activities
 - For participating ROW acquisition activities, the <u>offers cannot be made</u> before the Design Summary is issued.
 - For non-participating ROW acquisition activities, it is <u>recommended that offers not be made</u> before the Design Summary is issued.

7.2 <u>The Valuation Process</u>

This section is intended to serve as a brief description of the Valuation Process. The KDOT Bureau of Right of Way maintains a detailed "Right of Way Acquisition Guide for Local Public Agencies" providing additional information. A copy may be found here:

https://www.ksdot.org/Assets/wwwksdotorg/bureaus/burRow/PDF_Files/LPA_Manual_2007.pdf

When the LPA has received authorization to acquire ROW for the project, the Valuation Process is the next step. Fair and just compensation must be considered for all interests regarding acquired property rights.

The Valuation Process may be described in four basic areas:

- Whether to use an appraisal or implement the appraisal waiver process.
- Appraisal Process/Appraisal Waiver Process
- Review Process
- Agency Establishment of Approved Offer

7.2.1 <u>To Appraise or Not to Appraise</u>

The first decision the LPA will need to make during the Valuation Process is whether to obtain an appraisal or utilize the appraisal waiver process. This section will discuss both types of valuations. Decisions regarding which process to utilize should be reached in compliance with all state and federal criteria on this subject to avoid conflicts that may adversely affect federal eligibility for the project.

The following information provides the basis to determine which valuation process is appropriate to use on specific tracts: Before the initiation of negotiations, the property must generally be appraised. There are two exceptions: (1) if the owners decide to donate the property and waive their right to an appraisal (see *Section 7.3.4*) or (2) if the simplicity of the acquisition indicates that an appraisal is not necessary. If one of the exceptions is met, the waiver process may be used.

7.2.2 The Appraisal Process

The format and level of documentation in an appraisal depends on the complexity of the appraisal problem. There are two appraisal report formats that satisfy KDOT and FHWA standards - short form or standard form. The appraiser is expected to use the most appropriate format. The format to be used should generally be specified in the appraisal assignment.

• Short Form Report

A brief narrative discussion must be included covering the overall property, the acquisition, and the acquisition's effect on the remainder of the property. The extent of documentation should be commensurate with the complexity of the appraisal and values involved. In the event of condemnation, the appraiser may be requested to provide before and after values for the property on the short form report. The estimate of just compensation arrived at in a value finding appraisal report reflects the appraiser's opinion of the difference between the before and after values.

The standard three approaches (Market Sales, Income and Cost) should be considered, but often only the Market Sales approach will be developed. The land valuation requires a minimum of two sales, documented, identified, and confirmed in the same manner as comparable sales for a detailed appraisal report.

All items of the acquisition are to be listed on the short form report, even those for which the compensation value is zero. When access control is acquired, it should be listed as "Access Rights" under "Damage to the remaining property".

The Uniform Residential Appraisal Report (URAR), with certain additions, may be used for appraising residential properties when a "Total Acquisition" is involved, or when a "before value" must be developed for a partial acquisition. Photographs of both interior and exterior, as well as a floor plan sketch with approximate dimensions are recommended for any building to be acquired, along with comparable sales sheets with photographs and a sales location map. All or part of this form may be

used to value a residential portion, as defined, of a multi-use property and incorporated in larger report covering the entire property.

• Standard Form Report – Detailed Appraisal Report

Detailed Appraisal Reports are required on either total or partial acquisitions of properties when other less detailed formats are not applicable. In the case of partial acquisitions, this report is referred to as a "Before and After" appraisal.

This type of report should include all applicable approaches to value. Reasons for omitting any traditional approach to value should be clearly stated in the report. The Appraiser may be instructed to limit appraisal analysis to a specific valuation approach or approaches when the inclusion of additional approaches to value would not significantly add to reliability and support of final value estimates, or when recommended by legal counsel.

It is not acceptable to produce an after-acquisition value by subtracting the estimated value of acquisition and damages from the before acquisition value conclusion.

• Opportunity to accompany the appraiser

Regardless of the form used, the appraiser **must** offer the property owner, or their designated representative, a reasonable opportunity to be present during the inspection of the property. All appraisals are prepared in conformity with the "Uniform Standards of Professional Appraisal Practice" (USPAP) as promulgated by the Appraisal Foundation, except as they may conflict with the state and federal requirements for eminent domain, in which case the jurisdictional exception provision of USPAP is applicable.

Provided are some items to consider when determining fair market value, including general requirements, number of appraisals, and appraisal updates.

• General Requirements

No appraiser or review appraiser may have any interest, direct or indirect, in the real property being appraised for the LPA that would in any way conflict with the preparation or review of the appraisal. Compensation for making an appraisal cannot be based on the amount of the valuation (say, as a percentage of or on a charted basis) and an appraiser cannot act as a negotiator for a property he/she has appraised.

• Required Number of Appraisals

In general, only one appraisal is required for each non-complex tract acquired. If there is an extremely controversial or complex appraisal, a change in highest and best use occurs, or a high dollar purchase is contemplated, the LPA may determine that a second appraisal or review is necessary. If federal funds are used in the appraisal costs, the LPA will need to obtain prior approval from KDOT before obtaining the second appraisal if reimbursement will be requested.

• Appraisal Update

An appraisal should be updated or a new appraisal obtained if: (1) additional value information is presented by the owner, (2) a material change in the property or proposed acquisition indicates the need to modify the appraisal, or (3) if a significant delay (depending on market conditions) has occurred since the date of the original appraisal.

7.2.2.1 Tenant-Owned Improvements and Leasehold Interests

Tenants are owners of an interest in real property; their interests cannot be overlooked and should be identified as early as possible. Leases can be either oral or written and they transfer the right to use land and/or buildings or other fixtures to the tenant for a specified rent and for a specified period. The first step in determining a leasehold interest is to obtain a copy of the lease, if possible. Other items to look for and consider are sales tax permits (commercial property) and asking who "owns" the crops on agricultural land or who resides in residential property.

Compensation for a tenant-owned improvement is the amount the land and/or buildings or other fixtures contributes to the fair market value of the whole property or its salvage value, whichever is greater. The appraiser should secure the signatures of both the owner of the land and the tenant on a written agreement stating the land and/or buildings or other fixtures owned by each party. This agreement will be included in the appraisal with a suggested allocation of the appropriate amount for the land and/or buildings or other fixtures to be purchased. The tenant is entitled to accompany the appraiser during an inspection of the tenant-owned land and/or buildings or other fixtures.

If the landowner and tenant don't agree on who owns what, then the LPA needs to include the names of all the owners and tenants together on the same contract and/or acquisition proceeds check, permitting the parties to divide the total amount themselves. The appraiser's suggested allocation of the estimate of just compensation for the tenant and landlord is just that--a suggestion only.

Where there is no dispute on who owns what, the tenant may sign a tenant contract separate from the owner's. This serves as a release of the tenant's interests in the lease. If there are tenant-owned improvements being acquired, these should be itemized on the contract and a subsequent Bill of Sale signed by the tenant transferring ownership of the items to the local agency.

The LPA may not want to accept contracts from an owner or the tenant unless an agreement has been reached with both. If an agreement cannot be reached, both interests can be combined and acquired in a single condemnation proceeding, although either the tenant or the owner are entitled to ask for separate awards at the condemnation hearing. Exceptions may include minor acquisitions, tenants with 30-day verbal leases or farm year-to-year leases for either cash or crop share but have a minimal financial interest. In these cases, the acquisition may be accomplished by having the tenant sign a separate tenant contract. When dealing with landowners and tenants separately the LPA will need to coordinate the surrender of possession from the various interest holders so as not to delay the project.

For example, an LPA finds a tenant who agrees to relinquish his rights of possession on January 1 and the landowner has not agreed to settle. On January 1, the owner is in a precarious situation for the tenant has left the property and rent is no longer being paid. Would it not be wise for the owner to find a new tenant and collect rent until settlement is reached with the acquiring authority? Relocation payments made to tenants are not payments of just compensation. In the situation described above, if a new tenant arrives on the scene, this new-interested party may be entitled to relocation payments. It will be necessary to determine what relocation benefits, if any, the new tenant qualifies for.

7.2.3 <u>The Appraisal Waiver Process</u>

The Appraisal Waiver process estimates fair and just compensation and has also been referred to as an Estimate of Just Compensation. The estimate of just compensation is not a formal appraisal and is used with minimal value purchases. It requires only a one-page form which you can find as *Form G* in *Appendix B*. This form can be used for *minor, uncomplicated acquisitions* where compensation to the property owner does not exceed \$10,000. The \$10,000 figure is exclusive of payments for the cost of tillage, fertilizer, growing crops, agricultural ROW fence.

Please note that simply because the compensation value is less than \$10,000 does not mean that an estimate of just compensation may be used rather than an appraisal. The potential complexity of the acquisition must also be considered. In *Appendix A* is a checklist entitled *Checklist for Determining Complex Tract for Appraisal Purposes*. This checklist can help in determining if an acquisition is complex enough to require an appraisal or, if not, that a compensation estimate may be used.

Consultants may prepare and sign an estimate of just compensation **ONLY IF THEY ARE A LICENSED OR CERTIFIED APPAISER**. Otherwise, an authorized agent for the LPA must sign it.

It is not necessary that the estimator offer the property owner or the owner's representative an opportunity to be present during the property inspection.

The estimator can also serve as the acquisition agent. An administrative approval must be obtained before the offer is made. The administrative approval must be provided by an official of the LPA other than the person making the compensation estimate. If the agency maintains a ROW staff, the agency might assign a qualified licensed or certified appraiser to approve these estimates. Although not required to do so, the local agency may wish to maintain a listing of approved compensation estimates along with who approved the estimates.

Form G can also be used for simple partial acquisitions when damages to the remainder are non-existent or are relatively minor, are easily measured or explained, or are measurable by cost-to-cure. An example of a "simple partial" acquisition would be a strip acquisition from a large property, which does not approach close enough to any improvements to cause possible proximity damages. Any partial acquisition which necessitates reconfiguration of improvements or which damages the improvements cannot use this form.

Any partial acquisition which changes the highest and best use of remaining property also could not be appraised using this form.

There is \$10,000.00 limit to the total value of land and damages when using this form. This type of form does not express before and after values, but only indicates compensation due to the property owner and/or lessee. Value of the land and/or improvements acquired must be supported by applicable data. Any large cost-to-cure items must also be appropriately supported.

7.2.4 <u>The Review Process</u>

All appraisals require review by a qualified review appraiser. The person performing the appraisal review function must be thoroughly familiar with the Uniform Act and eminent domain requirements under the law. An appraisal review may not be performed by the appraiser that made the appraisal of fair market value but may be performed by another appraiser from the same firm/agency. The review appraiser will examine the appraisal to determine it:

- has been completed in accordance with the approved appraisal specifications,
- follows accepted appraisal principles and techniques in valuation of real property in accordance with the USPAP and state law for eminent domain acquisitions,
- contains information necessary to explain, and substantiate the conclusion and estimate of fair market value,
- includes consideration of compensable items, damages, if any, and does not include compensation for items not compensable under state law,
- contains an identification of the buildings, structures and improvements on the land as well as the fixtures which were considered as part of the real property (see discussion of Tenant-Owned Improvements and Leasehold Interests),
- contains an estimate of fair market value for the acquisition and, where appropriate in the case of a partial acquisition, an allocation of the estimate between the real property and damages to the remainder property.

If the LPA does not have a qualified review appraiser on staff, the LPA will need to secure the services of a contracted reviewer. The reviewer's responsibility is to ensure consistency of property values on a project, an adequate investigation of the local market to support the appraisal and that the appraisal conforms to applicable eminent domain appraisal standards.

Upon completion of the review and any corrections or modifications necessary by the appraiser to make the appraisal conform to these guidelines, the review appraiser will attach to the appraisal and place in the tract file a signed and dated statement setting forth the following:

- whether the appraisal is accepted and approved or accepted and not approved,
- the approved amount recommended to be offered as just compensation,
- the understanding that the determination is to be used in connection with a federal-aid highway project,

- the extent of the visual inspection of the tract to be acquired and of the applicable comparable sales,
- that no direct or indirect, present or contemplated future personal interest in the property exists nor that any benefit from the acquisition of the property appraised will occur,
- that this determination has been reached independently based on appraisals and other factual data of record without collaboration or direction,
- the determination shall be documented to show its basis.

7.2.5 Agency Establishment of Approved Offer

The LPA will need to designate a local official to approve the amount to be offered as just compensation following review of the appraisal. This responsibility cannot be transferred to a consultant or contractor. Each file should document a determination of the approved offer signed by an official of the LPA.

49 CFR Part 24.102(d) requires the LPA to establish an opinion of fair and just compensation, offer the full amount believed to represent fair and just compensation, and that the approved amount cannot be lower than the lowest appraisal received.

7.3 <u>The Acquisition Process</u>

KDOT's Bureau of Right of Way Acquisition Section developed a brochure <u>"Real Property Acquisition for</u> <u>Kansas Highways, Roads, Streets, and Bridges"</u>. The LPA must provide the pamphlet to every affected property owner and others with interest in the property and document the transmittal.

Example acquisition forms are provided in *Appendix B*.

7.3.1 Overview and Getting Started

• Title information

Prior to the initiation of the Acquisition Process, adequate title information must be obtained. The LPA will need to recognize early in the process all the interests to be acquired including but not limited to owners, lien holders, tenants, easement holders, and taxing authorities.

• Good Faith Negotiations

Code of Federal Regulations (CFR) Title 49 Part 24.102 (f) requires the LPA to negotiate in good faith and present each owner with a statement of their rights.

By negotiating in good faith, all parties should be given the opportunity to discuss their views, opinions, and concerns. All parties should also have the opportunity to have their thoughts seriously considered, and their questions answered. All parties must be given reasonable opportunity to consider the information and seek counsel if they wish.

Any knowledgeable and qualified member of LPA staff (not a member of the LPA's governing body) may be the negotiator. It is helpful if the negotiator is a Notary Public for notarizing documents signed by property owners, but not a requirement.

The negotiator should personally contact the property owner and tenant of each property on the project. The initial contact with the owner(s) as part of the Acquisition Process will depend on which Valuation Process you have selected, either an appraisal or the Appraisal Waiver Process.

If the Appraisal Waiver Process is used for valuation purposes, the initial contact will be when the acquisition agent completes the compensation estimate form after meeting with the owner. Compensation estimates should not be completed by one representative and delivered by another. The Appraisal Waiver Process is used to reduce the time and expense for the owner and acquiring agency.

State and federal regulations require all LPA's acquiring ROW to reimburse expenses incidental to and necessary for the transfer of property. A partial list of these expenses includes recording fees, transfer taxes, documentary stamps, and evidence of title. These and other eligible expenses may be reimbursed to the owner, or preferably, paid directly to the person(s) entitled to payment. The LPA is not required to pay costs required solely to perfect title or assure that the title to the real property is entirely without defect, surveys and legal descriptions of the real property, or penalty costs and other charges for prepayment of any preexisting recorded mortgage encumbering the real property entered into in good faith.

7.3.2 Minimum Value Purchase

When the administration cost of securing the ROW for a tract approaches or exceeds the value of the acquisition itself, the procedure for acquiring ROW may become disproportionate and cumbersome. Minimum value purchase procedures have been developed to reduce cost and time necessary to acquire less complex tract acquisitions.

Minimal value purchases are uncomplicated acquisitions estimated not to exceed \$10,000 in value, excluding agriculture fence and crops. Minimal value purchases allow for waiving the LPA's requirement that an appraisal be used to determine just compensation. An administrative estimate, called an "Estimate of Just Compensation", is used to establish the amount to be offered as just compensation. The format for an estimate of just compensation is described in *Section 7.2.3* of this Manual. If a negotiated agreement is not reached with the property owner and condemnation is necessary, it would benefit the LPA to have an appraisal made of the property. FHWA has approved the use of minimal value purchases on federally funded projects. By following the compensation estimate process as defined in this Manual, the LPA should be in compliance with state and federal guidelines.

7.3.3 Offers/Notices

Owners and tenants are entitled to written offers reflecting the LPA's approved estimate of fair and just compensation. In the event of relocation, owners and tenants are also entitled to notices informing them of when they will be required to move from the property.

The person negotiating on behalf of the LPA should be prepared to explain the project plans and the impact of the project on the owner's property. As required by Federal law the following must also be presented and explained:

- The written offer of just compensation for not less than the full amount of the reviewed and approved appraisal and approved by the LPA with the amounts for land, improvements, fence and damages separately listed.
- If the acquisition includes relocation of personal property or individual a statement should be provided informing the owner or tenant that they will not be required to move their personal property earlier than 90 days from the date of the notice, nor earlier than 30 days from the date compensation has been made available, if the 30 days from date of payment does not supersede the 90-day notice.
- An informational brochure, <u>"Real Property Acquisition for Kansas Highways, Roads, Streets and</u> <u>Bridges</u>" or an approved alternative.
- The documents to be signed by the owner once the LPA's offer is accepted.

Should the LPA subsequently approve a revised appraisal review or estimate of just compensation for a different amount, a revised written offer must be provided to the owner and/or tenant. *Form D* in *Appendix B* may be used for this requirement.

The date of the offer must reflect the date the written offer of just compensation was presented and all required notices provided. If the offer is accepted, the LPA must pay the agreed purchase price **BEFORE** taking possession of the property.

7.3.4 Donations

There are occasions when property owners have expressed a willingness to donate the ROW needed for a project, especially when the project will provide a benefit to the property and the community in general. The LPA may also accept an owner's offer to donate the ROW in exchange for services rendered that will benefit the owner. If federal funds are involved in ROW, DSD approval must have occurred.

The owner must always be informed of the right to be paid just compensation for the acquisition, as determined by an appraisal. If agreeable to the donation, the owner may waive the right to an appraisal in which case *Form K* shall be completed. If the landowner requests an appraisal in association with donating the property, *Form L* must be completed. These forms must be kept in the tract file. (See *Form K* and *Form L* in *Appendix B*).

The requirements of this provision do not apply to dedications of land for public purposes that may be required as part of the platting process pursuant to K.S.A. 12-752.

7.3.5 Administrative Settlements

The Uniform Act requires that "The head of the agency shall make every reasonable effort to acquire expeditiously real property by negotiation." Negotiation implies an honest effort by the acquiring agency to resolve differences with property owners. Offers to purchase should not reflect a "take it or leave it" position.

The LPA may determine that it is in the public's best interest to make a negotiated settlement with the owner for more than the approved appraisal amount. All negotiated settlement increases must be documented. A written report called an "Administrative Settlement" should explain and provide justification why this settlement is in the public's best interest.

Administrative settlements should describe the acquisition, state the offer of just compensation and the proposed negotiated settlement amount, and introduce information which supports the settlement and the requested approval from the proper authority. The settlement may also include information on recent court awards for similar type property, the property owner's appraisal data, an estimate of trial cost or an opinion of legal counsel. The settlement must be approved by an officer of the LPA acquiring the ROW and not by the negotiator. The person approving the settlement should be able to judge the risk/benefit issues of a potential court action.

If a revised appraisal review showing new valuation or extent of damage information is performed, then a written revised offer must be made and presented to the owner reflecting the updated consideration. See *Form D* in *Appendix B*. If the revised written offer is accepted, an administrative settlement is <u>NOT</u> required.

7.3.6 Eminent Domain-Condemnation

If reasonable efforts have been made and an acquisition agreement cannot be reached, the LPA may need to initiate eminent domain (condemnation) proceedings to acquire the required property rights. The negotiator cannot do or say anything that may be construed as being coercive in nature to obtain the owner's agreement. However, a brief explanation of the eminent domain procedure should be provided to the owner along with the brochure titled <u>"Real Property Acquisition for Kansas Highways, Roads, Streets and Bridges"</u>. This will assist the owner in understanding the process.

The power of eminent domain has been reserved to the state, municipalities, political subdivisions and others by federal and state constitutions and law. In Kansas, the procedure by which a condemning authority exercises its power of eminent domain is established by the Kansas Eminent Domain Procedure Act (K.S.A. 26-501 et seq.).

An administrative condemnation begins with the filing of a petition in the District Court of the county where the property is situated. After statutory notice is given a hearing is conducted by a District Court Judge who determines, upon the face of the petition, that the condemning authority has the power of eminent domain and that the taking is within the lawful purposes of the authority. At that hearing the Judge appoints three disinterested residents of the county to serve as Court Appointed Appraisers and establishes a date on

which the appraisers shall file their report. An appraiser's hearing is then conducted by the Court Appointed Appraisers to determine just compensation to be awarded by the appraisers. Following the hearing, each party to the condemnation has the right to appeal the appraisers' award to District Court.

During condemnation, it is important to include all interests at the condemnation hearing. This includes those interests that may not have a market or compensable interest. Applicable taxing authorities should be included in the listing of interested parties identified in the petition for each tract.

Providing payment to the property owners is an integral part of the Condemnation process. The Court Appointed Appraiser's award must be paid to the Clerk of the District Court before the LPA can require the owner to surrender possession of the property. The award must be paid regardless of any appeals to District Court. Failure to pay this amount into the court within 30 days will "Vacate" the proceeding. If vacated, the LPA must start the condemnation process all over again and be responsible to pay the defendant's legal fees.

7.3.7 <u>Contracts/Agreements</u>

The goal of the Acquisition Process is to reach a mutually acceptable agreement which will be memorialized in a legally binding contract. As a tool for reference, samples of contracts and contract clauses are provided in *Appendix B*. These samples are for reference only and the LPA should consult with local legal counsel as to specific contract and conveyance needs.

7.3.8 Notes/Documentation

It is important that after each contact (phone call, email, personal contact, etc.) with a property owner, the local negotiator completes a written negotiator's contact report, sometimes called negotiator's notes. These notes should summarize each contact and interview with the property owner and should remain in the tract file. These reports will eventually become available for inspection by the public. See *Form F* in *Appendix B* for a sample. Each report should contain as a minimum:

- project number,
- tract number,
- date of contact,
- method of contact (phone or in person),
- name, address and telephone number of the person contacted,
- special instructions, if necessary, for locating that person,
- names of all other persons present,
- names, addresses and phone numbers of attorney or other representatives,
- main points discussed, questions and commitments made by agent,
- principal objections to offer or taking,
- whether offer was accepted or rejected,
- requests made by owners,

- any other highlight discussions of the contact including special instructions for closing, relocation or property management,
- negotiator's signature and date.

7.4 **Relocation Assistance**

K.S.A. 58-3502 requires all agencies acquiring ROW to provide relocation assistance benefits to all eligible persons on all projects. Eligible persons include owners and anyone else lawfully occupying the property. If the LPA anticipates displacements requiring Relocation Assistance, the BLP PM must be notified.

Rights and entitlements of individuals, families, businesses, farms and nonprofit organizations displaced by federal-aid projects are defined by and discussed in the Uniform Act. State Relocation requirements for all other properties being acquired under the threat of Eminent Domain are provided in K.S.A. 26-501 to 26-516. Generally, all persons occupying property to be acquired on the date negotiations begin who are required to move, are eligible for relocation assistance and payments to reimburse the costs of moving personal property to locations off the ROW. In addition, residential displacees who meet minimum occupancy requirements may qualify for replacement housing payments to offset increased costs of obtaining replacement housing.

No person lawfully occupying real property shall be required to move from a dwelling or to move from a business or farm operation without at least a 90-day written notice from LPA. Additionally, the landowner/tenant is given a 30-day written notice to vacate after payment has been made by LPA. If condemned, the 30-day written notice to vacate cannot be issued until the compensation has been finally determined and paid into court by the LPA. See <u>49 CFR, Part 24.102 (j)</u>. Since time for ROW acquisition is a major concern for most projects, relocatees should be dealt with as early as possible.

The KDOT Bureau of Right of Way maintains a policy and procedure manual for Relocation Assistance approved by FHWA. KDOT recommends the LPA work closely with the BLP PM on Relocation Assistance matters, retain a consultant with the necessary experience, and/or obtain a copy of the <u>KDOT Relocation</u> <u>Assistance Manual</u>.

7.4.1 Personal Property Move

Quite often personal property is located on land being acquired. The owner of the personal property is entitled to relocation assistance and payment for the actual and reasonable costs to move the personal property. The owners of personal property may or may not be the owners of the real estate. The move may be reimbursed through itemized bills and receipts paid to a contractor for the move, or a self-move based upon an agreed to amount considered to be fair and reasonable. Additionally, the 90- and 30-day notices discussed in the Relocation Assistance Section (*Section 7.4*) apply to these types of moves.

7.4.2 <u>Residential Moves</u>

The Residential Relocation program was intended to leave the displaced person(s) in a similar situation after the displacement. Eligibility is determined by occupancy, not ownership. Only displaced persons are eligible for the payments, which may or may not be the owner of the property.

The following information is not intended to provide all the necessary information pertaining to Residential Moves. Please refer to the <u>KDOT Relocation Assistance Manual</u> for more specific information.

• Replacement Housing Requirements

Comparable replacement housing must be made available before a displaced person can be required to move from their home. Comparable replacement housing is defined as being functionally similar, in as good or better condition and in a similar area to the house being acquired. The replacement housing must also meet decent, safe and sanitary criteria.

• Replacement Housing Payments

The purpose of this payment is to provide funds if a shortfall exists between the fair market value and the cost of replacement housing. Replacement housing payments may be calculated as supplemental purchase payments or supplemental rental payments.

Supplemental purchase payments are developed for owner occupants by studying the local market to determine what is available at the time of displacement. The cost of replacement is compared to the amount paid for the house by the LPA. The difference between the two costs is considered the Replacement Housing payment.

Supplemental rental payments are available for displaced non-owner occupants and owner occupants that elect not to purchase replacement housing. The present market rent of the property being acquired is compared to adequate replacement housing present for lease in the local market. The present lease value is then compared to the replacement lease value. The difference between the two costs is considered the supplemental rental payment. Displaced tenants may in certain situations apply their supplemental rental payments as a down payment in the purchase of replacement housing.

Please note, the replacement dwelling considered by the Relocation Agent is only for establishing the amount of payment the eligible displacee is entitled. The displacee shall always choose the replacement housing they will occupy. The reimbursement shall be made based upon the amount actually spent by the displacee, not to exceed the relocation agent's study.

• Increased Mortgage Payments

This payment is calculated when displaced owner occupants must refinance at a higher mortgage rate than the mortgage on the property being acquired. The payment is limited to the amount owed and the remaining life of the original mortgage.

• Normal and Customary Closing Costs

These are costs that are normal and customary for real estate transactions in the local market. Qualifying expenses may include abstracting costs, recording fees, and credit reports. Certain other expenses may be excluded, such as "points" or prepaid interest.

• Moving Expenses

In addition to other payments, displaced persons are entitled to reasonable moving expenses. These payments may be based upon reimbursement of itemized bills and receipts from qualified movers, or a scheduled payment system.

7.4.3 Non-Residential Moves

Displaced farms, businesses, and non-profit organizations are also eligible for Relocation Assistance benefits, but the benefits are different that those provided for residential moves. The basic concepts of the major benefits are provided in this Manual.

Re-establishment expenses

These payments are designed to reimburse the actual expenses incurred to re-establish the farm, business, or non-profit organizations in the new location. The present maximum reimbursement for these types of expenses is \$20,000. Offering and providing these services will require specific knowledge and experience.

• Searching Expenses

In some cases, the displace is entitled to searching expenses in the search for a new location for their farm, business, or nonprofit organization. The present maximum reimbursement is \$2,500. Offering and providing these services will require specific knowledge and experience.

• Incidental Expenses

Other costs incurred in the move may also be eligible for reimbursement. For example: the reprinting of stationary presently on hand with the new address, loss of personal property because of the move or discontinuance of the operation, or the purchase of subsequent personal property required as part of the move. Implementation and offering these services will require specific knowledge and experience.

• Moving Expenses

The displaced non-residential occupant is entitled to actual and reasonable moving expenses. The payments may be based upon itemized bills and receipts from a qualified mover, or payments may be made to the displacee as part of a self-move. If the displacee opts for a self-move the LPA should contact the BLP PM for assistance in establishing payment.

• In Lieu of Payment

The displace may opt to receive a payment based upon the net income of the displace over the last two years. This type of payment is in lieu of all other payments and only available to non-residential

displacements. The minimum payment is presently \$1,000 with a maximum payment of \$40,000. Offering and providing these services will require specific knowledge and experience.

7.5 <u>Title and Closing</u>

Title and Closing involves examining the legal title to property, determining what actions must be taken to obtain clear title to the ROW and working with the owner to complete the transaction. The desired results are to secure all the documents necessary to ensure clear title of the land is conveyed to the LPA. The closing agent should be someone other than the person who negotiated and/or drafted the contract with the property owner.

If the contract for deed method is used by the LPA (first a contract is signed by the owner accepting the offer and later a deed is signed conveying the land), then the title documents must be drafted from the language of the contract. Sometimes the deed is prepared in advance and signed at the time the offer is accepted. At the time of offer being presented, mortgage holders, lien holders, and taxing authorities must be notified and their interests waived or released as it pertains to the property acquired by the LPA. Mortgage lien releases are not required for properties less than \$10,000 in value where there are no other liens on the property and the remainder of the tract still holds the majority value providing sufficient security to the mortgage holder with the ability to recoup funds to pay off the lien in the event of default or foreclosure. All conveyances should be recorded in the Office of the Register of Deeds.

Providing payment to the owners is an integral part of the Title and Closing process. The timing of the payment must ensure title has been passed to the LPA, but the owner of the property cannot be required to surrender possession until payment has been received.

KSA 75-6201, 75-6202 and 75-6203 requires agencies to assist in the collection of property taxes and assessments when the property is being acquired for a public use. Applicable taxing authorities should be included during the title and closing process. Payments for Relocation Benefits are exempt from this requirement as set out in KSA 58-3507. Additionally, <u>since 1991, all real estate transactions have been subject to reporting requirements of the IRS. The LPA must provide appropriate 1099's to the IRS and all parties receiving payments. Even when State funds are used for payment, the 1099 reporting responsibility remains with the local agency.</u>

7.6 <u>Certification of Right of Way</u>

The <u>Form 1306</u> is required from the LPA prior to advertising for construction bids to build the project. BLP must receive this certificate signed by the LPA **four months** prior to the actual letting of the project. This certificate **must** be completed as follows:

• The identification information including, city, county, project number and date.

- The location of improvements and the scope of the project.
- Statement that requirements of paragraph 1 have been met.
- Completion of all six (6) areas of Paragraph 2. If no tracts are needed for the project, then either entering a "None" or "0" response is acceptable.
- Any railroad and utility companies that are affected by the project must have agreements drafted and signed. These agreements will reflect the arrangements made with the company(s) for coordination of work on the project.
- Signature block is signed and dated by the LPA. (Unless required by local by-laws or ordinances, Certification does not have to be signed by governing body.) The person signing must have completed the ROWCP.
- Returned to the BLP PM **four months** prior to letting.

7.7 Miscellaneous Right of Way Topics

This portion of the Manual provides information on miscellaneous topics that the LPA could find useful. These include:

- Access control
- Advance acquisition
- Easements
- Hazardous waste/contaminated properties
- Parcel or Tract -What is it?
- Typical questions
- Potential problems
- Where do I find?
- Outdoor Advertising Procedures

7.7.1 Access Control

Access rights are the rights of adjoining property owners to have unrestricted access to and from the highway. Access Control is the term used when these rights are restricted or controlled. Controlled Access Facilities are discussed in K.S.A. 68-1901, 68-1902, 68-1903, 68-1904 and 68-1905.

Cities, counties, and highway authorities may establish controlled-access facilities. When such facilities are established, property owners adjoining the road do not have the right to enter or leave this road unless specifically granted by the highway authority at the time of, or subsequent to the establishment. For existing roadways that have not been previously designated controlled-access, the rights of the adjoining property owner(s) may be acquired. State law specifically states that these rights may not be acquired by prescription or adverse possession--they must be acquired.

In general, acquiring the rights of access to a property does not reduce its market value if reasonable access remains after the acquisition. Therefore, quite often the value or worth of restricting access across a

property and allowing access at certain specific locations is zero dollars. There are some cases though where a change in potential property use and market value occurs and the appraiser must determine the difference in the value before and after the acquisition due to the restriction of access.

7.7.2 Advance Acquisitions

An advance acquisition is the acquisition of ROW before the final environmental document is approved or before the final design of a highway has been approved. There are two main types of advance acquisitions, hardship acquisition and protective buying.

If federal funds are to be used in the acquisition of the ROW, the KDOT and FHWA must approve both hardship and protective buying acquisitions. Neither hardship nor protective buying acquisitions will be approved before: (1) public notice has been given of the preferred location of the facility or (2) the public hearing/notification requirements have been met. If state funds are to be used in the acquisition of the ROW, KDOT must give prior approval for the advance acquisitions.

➤ Hardship Acquisition

Hardship acquisitions usually occur when a property owner makes a written request to the LPA to acquire the property in advance of the normal time scheduled for acquisition due to a "hardship". The hardship acquisition request to the KDOT by the LPA must include the estimated cost of the acquisition, relocation and incidental costs along with supporting documentation. Justifications must include reasons why the project causes a condition for the owner that is different from or disproportionate to the inconvenience suffered by the majority of others in the project area. Also, a statement is necessary indicating that reasonable alternatives are not open to the property owner that would accomplish relief of the situation without acquiring the property at this time.

Once the LPA initiates the acquisition process a serious commitment has been given to the property owner. The LPA has accepted an obligation to proceed with the acquisition, even if the property must be acquired through condemnation. Federal participation is dependent upon the agency's ability to condemn if necessary. Requests from owners for hardship acquisitions must contain a waiver of all impediments to a condemnation and an agreement to be condemned should negotiations prove unsuccessful. This is to safeguard against the LPA not being able to accomplish their condemnation due to the early nature of a hardship acquisition.

> Protective Buying

Protective buying is purchasing property in advance of the project to preserve a preferred or essential location for the proposed project. Requests to KDOT for protective buying must include the estimated cost of the acquisition. The LPA must give reasons why the request should be considered such as, the costly development or physical alteration of a property is imminent, a zoning change is occurring which will add substantial costs to the tract acquisition, or a reconstruction of improvements damaged by fire or natural disaster is imminent.

Care must be taken so the final project design is not changed or influenced as the result of an advance acquisition. If the early acquisition of a tract is approved but the ROW is ultimately not needed for the project, the LPA will be responsible for the total cost of the acquisition.

7.7.3 Easements

Easements are interests in real property that permit the use, but not the ownership, of land. Easements are rights to perform specific acts on land. They may be temporary or permanent in nature. Temporary easements may be held for a specific or an indefinite time. The purposes of easements are as varied as there are uses for real estate. Each easement must be examined to determine the reduction in value to the land directly affected, the remaining property, and how much compensation is due the owner. In some cases, they may not cause a damage to or reduction in the value of property.

All easements, whether temporary or permanent, must be considered as a right in land which must be acquired. All easements must be acquired and certified prior to the PS&E phase of the project.

7.7.4 <u>Hazardous Waste/Contaminated Properties</u>

Contamination of property by hazardous materials has become an area of great concern in the development of highway projects. Early detection of contamination of the ROW to be acquired is extremely important in determining project cost, project timing and potential liability. There must be a visual inspection of the possible contamination very early in the project development. Contaminants or items of concern may be as common as petroleum products, above ground or underground fuel storage tanks (USTs), battery waste, building material containing asbestos, certain paints and their residues.

Contamination may appear as soil which is oozing, an area devoid of vegetation, an area which is sunken, an area containing junk containers or other less obvious junk material, or in even less obvious ways. Former gas stations may be identified by UST vent pipes, pump islands or characteristic structural features. Signs of contamination or awareness of prior uses (such as gas station, a manufacturing plant, a dry cleaner, a body shop, homes built prior to 1975, etc.) should lead to further study of the possibility of contamination.

If there are signs of contamination, or if there are USTs present on the property, good business practices require the property be further evaluated regarding recommended remedial measures and costs prior to proceeding with the acquisition of the property. In addition, state and federal laws administrated through the Kansas Department of Health and Environment and the EPA may need to be considered. Should a property already be acquired at the time contamination is verified, former owners may be determined to be responsible for the clean-up costs but recouping of such costs can prove difficult.

If you encounter any indications of contamination of any necessary right-of-way, *IMMEDIATELY* contact the BLP PM for further advice and assistance on how to proceed.

7.7.5 Parcel or Tract - What is it?

A parcel may also be described as a tract or tracts of land, or an improvement, or a legal property right owned by a single entity or multiple entities and operated as a single unit. All or part of the larger unit may be required for highway ROW or damaged by highway construction or maintenance.

There are three tests used to determine what constitutes a parcel or tract; unity of use, proximity, and unity of ownership. Unity of use is not limited to the existing use but also the highest and best use to which the property may be put. Proximity is not limited to tracts abutting each other, but rather tracts within proximity that a larger parcel is still a practical, economic unit. Unity of ownership may or may not prove indicative of what makes up a parcel or tract.

• <u>Example</u> - 240 acres of a farm (Farm A) is in the name of just John Smith who is married to Mary. John and Mary Smith jointly own a 240-acre farm (Farm B) one mile away from the first farm, but the properties do not share a common property line. Both farms are farmed together by the couple, but Mary is only on the title for Farm "B". Therefore, these would be two separate tracts due to the fact they have two separate owners and the parcels are not contiguous with each other.

7.7.6 <u>Typical Questions</u>

Provided below are frequently asked questions and answers:

How does an LPA find an appraiser, a relocation agent or some other ROW professional? Answer: The BLP PM can provide a list of ROW services consultants who perform and who are familiar with federal and state policies/guidelines.

Can an LPA use a local appraiser?

Answer: If the local appraiser is certified or licensed and qualified to do eminent domain appraisals, then a local appraiser can be used.

Can an employee of the LPA do an appraisal?

Answer: No, but they may complete an "Estimate of Just Compensation" form for acquisitions that are "simple" and compensation is \$10,000 or less per tract.

How long does it take to do an appraisal?

Answer: Depending on the complexity of the tract and the availability of appraisers, the process may take from 6 to 8 weeks or longer.

How long does it take to review an appraisal?

Answer: Depending on the complexity, it can take from 3 to 4 weeks.

Who can act as the agency's negotiator? **Answer**: A qualified full-time employee of the LPA, or a fee negotiator.

Can the negotiator offer less than the approved appraisal? **Answer**: No.

Can the final agreed compensation exceed the approved appraisal? **Answer**: Yes, provided written documentation in the form of an Administrative Settlement is furnished. It is recommended that the BLP PM be consulted prior to the LPA's commitment to the increased amount.

Can the LPA use its own legal staff for condemnation in the name of the agency? **Answer**: Yes, but first contact the BLP PM to make them aware of the situation.

When is possession of condemned property secured?

Answer: When the proceeds of the condemnation proceeding are deposited with the court. If Relocation is involved, the 90-day and 30-day rules do apply as set out in *Section 7.4* of this Manual.

Does the LPA have to acquire temporary easements before we can let our project or can a "Right of Entry" be used?

Answer: Yes, these interests must be acquired and certified prior to the construction of the project. The use of Rights of Entry is not an acceptable alternative to acquiring a temporary easement. (See the *Section* 7.7.3.)

If there is no Federal funding in right-of-way acquisition, must I follow these procedures? Answer: Yes, if there is Federal funding in **any** phase of the project or program, federal law requires many of these procedures to be followed regardless of federal funding involvement. Additionally, it is recommended that these procedures be followed for all projects, regardless of the funding source.

7.7.7 Potential Problems

The following are LPA potential problem areas frequently encountered on projects. These issues need to be addressed by the LPA.

- *Project Size/scope* -- These concepts need to be seriously considered when a project is contemplated. If done properly, planning and project scoping can save considerable extra work later. If the LPA lacks sufficient expertise to size and scope the tract and/or project accurately, it is advisable to contact the BLP PM for assistance.
- Adequate title search -- An early and accurate title search is necessary to determine all ownership interests. An accurate title search must be made for each tract early in the ROW process. This search must identify the owner and mortgage holders, lessees, judgment holders and major tenants.

- *Right of way plans* -- LPA project planning and construction design must include consideration of existing ROW and construction needs to ensure all necessary land and property rights are fully acquired the first time.
- *Lead time identification* -- Attention must be paid to lead time needs. Failure to understand ROW acquisition procedures can add additional time and delay the letting of the project.
- Local right of way administration or management -- Many LPA's are not sufficiently staffed to handle anything other than minor or routine "strip-type" acquisitions. Some LPA's may be limited to low value, uncomplicated acquisitions valued using a Compensation Estimate.
- *Part-time and inexperienced professional staff* -- Many LPA's cannot justify or generate the necessary funding to retain full-time staff which may only be involved with ROW projects from time to time. Consequently, when a project occurs your agency may be understaffed. In these situations, the LPA may want to consider using KDOT assistance and/or consultant resources.
- Appraisal process and product questions -- Some LPA's have expressed a desire to ignore in disbelief the value of the appraisal process and the appraisal itself, the product of this process. Federal and state laws and regulations have been written, passed and implemented to reinforce the premise that the appraisal process works, helping to protect both the public in general and the individual property owner affected by public works projects.

7.7.8 Where Do I Find....?

Included is a list of references and an abstract of what is contained in those resources. Many of these references may be obtained from BLP, KDOT's Bureau of Right Way, or the FHWA.

- *KDOT Bureau of Right of Way Policy and Procedures Manuals* -- These manuals collectively cover all aspects of the ROW process. Topics covered include Appraisal, Acquisition, and Relocation Assistance.
- *Kansas Statutes Annotated* K.S.A. has many chapters and sections which apply to the purchase of ROW for highway purposes. The manner prescribed for most procedures are found in Chapters 12, 13, 75 and 76.
- *Federal Regulations* -- The primary ones are 23 CFR and 49 CFR Part 24. 23 CFR deals with highways in general. 49 CFR Part 24 is implementing regulation covering the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended.
- Department of Treasury, Internal Revenue, 26 CFR Sec. 1.6045-4 -- The IRS regulations describing the reporting of real estate transactions are found in this section.

Appendix A – Checklists

Appendix B – Forms

Note: Fillable PDF versions of the **Checklists** and Microsoft Word versions of the **Forms** are available for your use.

Please contact your BLP PM or email <u>KDOT.LPePlans@ks.gov</u> to obtain them. Ask for the "ROW Docs 2018.zip" file.

Appendix A - Checklists

The following checklists are included in this appendix:

- Checklist A Checklist for Determining Complex Tract for Appraisal Purposes
- Checklist B Local Public Agency Right of Way Staffing Needs Inventory
- Checklist C Local Public Agency Project Checklist
- **Checklist D** Right of Way Spot Check Form

Note: Fillable PDF versions of the **Checklists** are available for your use.

Please contact your BLP PM or email <u>KDOT.LPePlans@ks.gov</u> to obtain them. Ask for the "ROW Docs 2020.zip" file.

Checklist A - Checklist for Determining Complex Tract for Appraisal Purposes

LPA:	Project N	lo.:
Name of Person Contacted:		Title:
Phone No.:	Date of Contact:	Time:

It is the responsibility of the LPA to determine the complexity of a tract. The following are yes/no questions, to provide guidance and assistance in making that determination. If the answer to any of these questions is yes (or even maybe), the tract may have sufficient complexity to classify it as "complex". A "yes" answer should be an alert that more questions need to be asked.

- 1. Is the acquisition over \$10,000?
- 2. Is the acquisition anything more than a "strip acquisition"?
- 3. Are there any buildings, wells, signs, etc. being affected?
- 4. Is the acquisition severing any buildings from the remainder?
- 5. Are trees, shrubs, or any other landscaping involved?
- 6. Is the ROW line closer to any building after the acquisition to require analysis of possible proximity damages?
- 7. Is access to the property changed or limited?
- 8. Is the current highest and best use of the property going to be changed because of the acquisition?
- 9. Does a significant amount of the total compensation involve items other than land value?
- 10. Are there any borrow areas?
- 11. Is there reason to believe this tract will proceed to condemnation?
- 12. Is more land than is needed being acquired?
- 13. Are there any other considerations that complicate the valuing of this tract?

Checklist B - Local Public Agency Right of Way Staffing Needs Inventory

РА:		
Project No.:	Date:	
Project Location:		
.imits:		
Contact Person:	Telephone #:	
Signature:	Title:	
CHECK BELOW IF YOU REQUIRE ASSI	STANCE IN THE AREAS ITEMIZED	
MANAGEMENT	NEGOTIATIONS	
Training in ROW functions and	Contract drafting for acquisitions	
procedures	Tenant interests	
Determining sufficient Lead Time	Required procedures to follow	
necessary to acquire Right of Way properly	Required record keeping	
Measuring Scope or difficulty of Right of		
Way Acquisition	CONDEMNATION	
	General procedures	
ENGINEERING AND DESIGN	Notice preparation	
Adequate title search	Establishing a hearing date	
Improvements located on plans	Conduction hearing in-Agency	
Plans cross sections		
Property legal descriptions	RELOCATION ASSISTANCE	
Land Surveyor's property graphic exhibits	Moving personal property	
	Residential relocations	
ENVIRONMENTAL ASSESSMENT	Business moves	
Underground storage tanks		
Hazardous waste	TITLE AND CLOSING	
Asbestos	Determining all interests in land	
	acquisition	
	Title transfer procedures	
	Payment of transfer costs	
	Payment of acquisition costs	

APPRAISALS	PROPERTY MANAGEMENT
Minor tracts (\$10,000 or less)	Asbestos removal and disposal
Regular partial acquisitions (\$2500 to	Renting property
\$15000)	Building demolition contracting
Major significant acquisitions (over	Selling unneeded (excess) Right of Way
\$15000)	
	LEGAL
APPRAISAL REVIEW	Administrative advice - Title and Closing,
Minor tracts (\$2500 or less)	Condemnation hearing, appeals to District Court
Regular partial acquisitions (\$2500 to \$15000)	court
Major significant acquisitions (over	
\$15000)	
Ş13000)	
OTHER PERTINENT INFORMATION	
1. Number of tracts involved in this proje	ect
2. Is Relocation Assistance involved in th	is project?
3. Date of last public improvement acqui	isition
a) What type of project was acquire	ed?
b) Was the DOT Right of Way Office	e involved?
4. Do you have copies of current DOT RC	
5. Names of and functions performed by	
COMMENTS/QUESTIONS?	
comments/ colonons:	

Checklist C - Local Public Agency Project Checklist

LPA: _____

Project: _____

	YES	NO	N/A
PLANNING AND PREPARATION:			
Notified DOT of project			
Contact BLP PM for Right of Way information			
Scope project and consider right of way needs			
Prepare tract files			
Research title			
Layout right of way needs			

REQUESTS AND APPROVALS:		
Request authorization for incidental right of way		
reimbursement		
Apply for hardship/advance purchases (if any)		
Receive environmental clearances		
Receive authorization to acquire right of way		

Provide good faith negotiations		
Offer Relocation Assistance		

WRAPPING UP:		
All tracts acquired or condemned		
Secure possession of all tracts		
Clear all properties		
Plan turn in		
Let project		

Other remarks:

Checklist D - Right of Way Spot Check Form

Proj	ect #	t:	City/C	ounty:		
Owr	ner:		Tenan	t:		
Гуре	e of l	Prop	erty: Type c	of Acquisition: Permanent or T	emporary	
Y	Ν	N/A			Date:	Amount:
			 Was a Certificate of Title prepared to identify landowner a recommended practice, but a record of five-year ownership a required.) 			
			2. Was a Brochure furnished to landowner or tenant? (Requi	red.)		
			3A. Was ROW acquired by donation?			
			If yes, did owner/tenant sign the waiver? (Skip to #14.)			
			3B. Was a "Waiver of Appraisal" used? (If less than \$10k, "Es	timate of		
			Just Compensation" [Form G] may be used; must be signed by	y LPA staff.)		
			If yes, was it completed on proper format?			
			3C. Was appraisal completed on proper format?			
			 Was appraisal/Waiver of Appraisal completed by the prop (Licensed or Certified/LPA staff) 	er individual?		
			5. Was review appraisal required? (If appraised, a review app	oraisal is required.)		
			If yes, was it completed on proper format?			
			If yes, was it completed by the proper individual?			
			6. Did LPA approve and establish Just Compensation? (Includ	e documentation of		
			delegation of authority for staff to approve or commission/co	ouncil meeting minutes.		
			Just Compensation must be established before a written offer	r.)		
			7. Was revised/review appraisal completed? (Used if there a	re errors in the orginal,		
			the landowner does not agree with the original, etc.)			
			8. Was written offer presented on proper format? (Tract acr	es, \$/acre, tract \$.)		-
			9. Were persons displaced or personal property relocated?		-	
			If yes, was 90-day written notice to vacate presented?			
			If yes, was 30-day written notice to vacate presented?	(Required.)		
	_		10. Was an administrative settlement used?			_
-			11. Were condemnation proceedings properly instituted by A	Nova 22 AC 19822	_	
			12. As part of the acquisition, was landowner/tenant reimbu	rsed for misc. fees?		
			13. Was full payment made prior to possession? (Copy of che	eck, etc.)		
			14. Were all acquisition documents properly filed of record?			
			15. Is the negotiator's log adequate?			
			16. Are there any signs of coercion?			
			17. Was the acquisition conducted without evidence of discri	imination?		

Page 1 of 2

2/2020

	RIGHT OF WAY SPOT CHECK FORM	
Appraiser:	Review Appraiser:	
Negotiated By:		
Reviewed by:	Agency: KDOT	
Reviewed by:	Agency: FHWA	
Location of review:	Date of review:	
Additional Information:		
Required Follow-up Documents:		

Appendix B – Forms

- **Form A** Initial Agency Contact Letter Informs property owner that part of their property is to be acquired for the project and that an appraiser will be contacting them soon.
- Form B Appraisal Mailing Letter
- Form C Offer Letter to Purchase
- Form D Revised Offer Letter to Purchase
- Form E Tenant's Release of Damage
- Form F Right of Way Acquisition and Negotiation Notes
- Form G Estimate of Just Compensation used to document estimate
- Form H Standard Appraisal Report
- Form I Short Form Appraisal Report
- Form J Appraisal Assumptions, Compliances and Facts
- **Form K** Donation Form, Appraisal Waived Property owner signs this donation form to waive rights to just compensation. This form also waives right to an appraisal.
- **Form L** Donation Form, Appraisal Not Waived Same as Form L except the right to an appraisal is not waived.
- **Form M** Administrative Settlement
- Form N 90-Day Guarantee
- Form O 30-Day Notice to Vacate

Note: MS Word versions of the **Forms** are available for your use. Please contact your BLP PM or email <u>KDOT.LPePlans@ks.org</u> to obtain them. Ask for the "ROW Docs 2020.zip" file.

Form A - Initial Agency Contact Letter

Date Landowners Name Address City, State Zip

Re: <u>Project Number</u> Tract Number

Dear Landowner:

The Agency is planning a Street, Intersection, Etc. project which requires the purchase of a portion of your property. A survey has been conducted to determine the amount of your land which the project requires.

In the near future, an appraiser will be contacting you to secure your permission to inspect your property for the purpose of valuing it. The appraiser will offer you the opportunity to be present during this inspection if you so desire.

Enclosed is a copy of <u>"Real Property Acquisition for Kansas Highways, Roads, Streets, and Bridges"</u>.

Sincerely,

Agency

Form B - Appraisal Mailing Letter

Date

Landowners Name Address City, State Zip

Re: <u>Project Number</u> Tract Number

Dear: Landowner

The <u>Agency</u> is planning a Street, Intersection, Etc... project which will require additional Right-of-Way along the route. County records indicate that you have ownership interest in land that is affected by the proposed construction project.

I have been assigned to appraise the land to determine value of the acquisition required from your property. The purpose of this letter is to give you the plan information for your land and offer to meet with you or your representative to inspect your property and discuss the project.

The enclosed booklet explains the process we use in acquiring property for highway projects. Additionally, I have included a legal description and drawing of the planned project as related to your property.

Please contact me at <u>Phone Number</u> to arrange an appointment. Sincerely,

Appraisers Name Right of Way Property Appraiser Enclosures Cc: Tract File

Form C - Offer Letter to Purchase

PROJECT:		DATE:
COUNTY:		TRACT NO:
LOCATION:	A tract of land in	

Dear :

The Agency Name has approved a program for the construction and improvements of the abovementioned project. To accomplish the anticipated improvements, it will be necessary to acquire certain real property as indicated on the engineering plan and more particularly described in the instruments which will be presented to you for signature(s), if you are receptive to the offer.

Based upon the fair market value of such real property, as determined by established procedures, the Agency Name offers you the sum of _____ Dollars (\$_____) for your real property, which has been determined to be just compensation for your property, or the portion thereof to be acquired.

The amount quoted includes the following items:

Real property to be acquired as right of way: _____ (Acres)

Buildings acquired with right of way: _____

Other easements, if any: Permanent _____ (Acres), Temporary _____ (Acres)

The following tenant owned improvements are not included in the above quoted amount(s):

If you desire to retain the buildings located on the proposed right of way, the amount of the offer is reduced to _____ Dollars (\$_____). Also, if the buildings are retained, you will be required to post a bond to insure the removal of improvements in the amount of \$_____.

The basis of the offer was established by an appraisal made by personnel trained in real estate appraisal techniques. The appraisal process is designed to establish the fair market value of the property. The original appraisal is further considered and reviewed by one of the Agency's reviewing appraisers who will also perform a visual inspection of the property. The appraiser disregards any decrease or increase in the before value caused by the project for which the property is being acquired.

The above offer will not be altered unless additional value information or evidence is presented or otherwise becomes known to the Agency Name. In such case, it will then be necessary to have an administrative review to determine if the offer should be changed. Should our offer not be acceptable to you, our only alternative under established procedure is to proceed under the laws of eminent domain (sometimes known as "condemnation" procedure).

In the event of either negotiation or condemnation, the landowner will be paid in the full amount of the negotiated settlement, or the amount of just compensation allowed by the court appraisers, prior to the time the Agency Name will require the landowner to vacate the property.

The fifteen items set forth in K.S.A. 26-513 (listed below), if applicable to your property, were considered in ascertaining the amount of compensation and damages. Other factors may also have been considered. They were not considered as separate items of damages but were considered only as they affect the total compensation and damages established by our appraiser.

- 1. The most advantageous use to which the property is reasonably adaptable.
- 2. Access to the property remaining.
- 3. Appearance of the property remaining, if appearance is an element of value in connection with any use for which the property is reasonably adaptable.
- 4. Productivity, convenience, use of the property taken, or use of the property remaining.
- 5. View, ventilation and light, to the extent that they are beneficial attributes to the use of which the remaining property is devoted or to which it is reasonably adaptable.
- 6. Severance or division of a tract, whether the severance is initial or is in aggravation of a previous severance; changes of grade and loss or impairment of access by means of underpass or overpass incidental to changing the character or design of an existing improvement being considered as in aggravation of a previous severance, if in connection with the taking of additional land and needed to make the change in the improvement.
- 7. Loss of trees and shrubbery to the extent that they affect the value of the land taken, and to the extent that their loss impairs the value of the land remaining.

- 8. Cost of new fences or loss of fences and the cost of replacing them with fences of like quality, to the extent that their loss impairs the value of the land remaining.
- 9. Destruction of a legal nonconforming use.
- 10. Damages to property abutting on a right of way due to change in grade where accompanied by a taking of land.
- 11. Proximity of new improvements remaining on condemnee's land.
- 12. Loss of or damage to growing crops.
- 13. That the property could be or had been adapted to a use which was profitably carried on.
- 14. Cost of new drains and loss of drains and the cost of replacing them with drains of like quality, to the extent that such loss affects the value of the property remaining.
- 15. Cost of new private roads or passageways or loss of private roads or passageways and the cost of replacing them with private roads or passageways of like quality, to the extent that such loss affects the value of the property remaining.

Value of entire property of interest "before" taking	\$
Value of entire property of interest "after" taking	\$
Value of the right of way to be acquired:	
	\$
Value of the permanent easement to be acquired:	
	\$
Males of the terror of	
Value of the temporary easement to be acquired:	<u>^</u>
	\$
Right of way and easement minimum compensation	adjustment: \$
	·
Minimum compensation \$ less land	
and easement total \$ = \$	
Damages:	
	\$

Cost to cure items:	
	\$
TOTAL COMPENSATION AND MEASURE OF DAMAGES:	\$
Agency Nam	ne
BY:	

Acquiring Agent

Form D - Revised Offer Letter to Purchase

PROJECT:		DATE:
COUNTY:		TRACT NO:
LOCATION:	A tract of land in	

Dear

:

The Agency Name has approved a program for the construction and improvements of the abovementioned project. To accomplish the anticipated improvements, it will be necessary to acquire certain real property as indicated on the engineering plan and more particularly described in the instruments which will be presented to you for signature(s), if you are receptive to the offer.

Based upon the fair market value of such real property, as determined by established procedures, the Agency Name offers you the sum of _____ Dollars (\$_____) for your real property, which has been determined to be just compensation for your property, or the portion thereof to be acquired.

The amount quoted includes the following items:

Real property to be acquired as right of way: _____ (Acres

Buildings acquired with right of way: _____

Other easements, if any: Permanent _____ (Acres Temporary _____ (Acres

The following tenant owned improvements are not included in the above quoted amount(s):

If you desire to retain the buildings located on the proposed right of way, the amount of the offer is reduced to _____ Dollars (\$_____). Also, if the buildings are retained, you will be required to post a bond to insure the removal of improvements in the amount of \$_____.

The basis of the offer was established by an appraisal made by personnel trained in real estate appraisal techniques. The appraisal process is designed to establish the fair market value of the property. The original appraisal is further considered and reviewed by one of the State's reviewing appraisers who will also perform a visual inspection of the property. The appraiser disregards any decrease or increase in the before value caused by the project for which the property is being acquired.

The above offer will not be altered unless additional value information or evidence is presented or otherwise becomes known to the Agency Name. In such case, it will then be necessary to have an administrative review to determine if the offer should be changed. Should our offer not be acceptable to you, our only alternative under established procedure is to proceed under the laws of eminent domain (sometimes known as "condemnation" procedure).

In the event of either negotiation or condemnation, the landowner will be paid in the full amount of the negotiated settlement, or the amount of just compensation allowed by the court appraisers, prior to the time the Agency Name will require the landowner to vacate the property.

The fifteen items set forth in K.S.A. 26-513 (listed below), if applicable to your property, were considered in ascertaining the amount of compensation and damages. Other factors may also have been considered. They were not considered as separate items of damages but were considered only as they affect the total compensation and damages established by our appraiser.

- 1. The most advantageous use to which the property is reasonably adaptable.
- 2. Access to the property remaining.
- 3. Appearance of the property remaining, if appearance is an element of value in connection with any use for which the property is reasonably adaptable.
- 4. Productivity, convenience, use of the property taken, or use of the property remaining.
- 5. View, ventilation and light, to the extent that they are beneficial attributes to the use of which the remaining property is devoted or to which it is reasonably adaptable.
- 6. Severance or division of a tract, whether the severance is initial or is in aggravation of a previous severance; changes of grade and loss or impairment of access by means of underpass or overpass incidental to changing the character or design of an existing improvement being considered as in aggravation of a previous severance, if in connection with the taking of additional land and needed to make the change in the improvement.
- 7. Loss of trees and shrubbery to the extent that they affect the value of the land taken, and to the extent that their loss impairs the value of the land remaining.
- 8. Cost of new fences or loss of fences and the cost of replacing them with fences of like quality, to the extent that their loss impairs the value of the land remaining.

- 9. Destruction of a legal nonconforming use.
- 10. Damages to property abutting on a right of way due to change in grade where accompanied by a taking of land.
- 11. Proximity of new improvements remaining on condemnee's land.
- 12. Loss of or damage to growing crops.
- 13. That the property could be or had been adapted to a use which was profitably carried on.
- 14. Cost of new drains and loss of drains and the cost of replacing them with drains of like quality, to the extent that such loss affects the value of the property remaining.
- 15. Cost of new private roads or passageways or loss of private roads or passageways and the cost of replacing them with private roads or passageways of like quality, to the extent that such loss affects the value of the property remaining.

Value of entire property of interest "before" taking	\$	
Value of entire property of interest "after" taking	\$	
Value of the right of way to be acquired:		
	\$	
	ې	
Value of the permanent easement to be acquired:	<u> </u>	
	\$	
Value of the temporary easement to be acquired:	<u> </u>	
	\$	
Right of way and easement minimum compensation a	idjustment: <u>\$</u>	
Minimum compensation \$ less land		
Minimum compensation \$ less land and easement total \$ = \$		
and easement total \$ = \$		
and easement total \$ = \$ Damages:		
and easement total \$ = \$	\$	
and easement total \$ = \$ Damages:		
and easement total \$ = \$ Damages:		
and easement total \$ = \$ Damages:		

TOTAL COMPENSATION AND MEASURE OF DAMAGES: \$_____

Agency Name

BY: ----

Acquiring Agent

Form E - Tenant's Release of Damage

Date

<u>City/County</u> <u>Project Number</u> <u>Tract Number</u>

Know all men by these present that _____ agree on this _____ day of _____, ____, in exchange for and in consideration for the benefits derived from the project which include _____ do release, remise and forever cease to claim to themselves, their heirs executors and assigns any and all damages arising out of the building of Road, Intersection, Etc. Project No. _____, ____County, and agree to hold the Agency harmless from any and all other damages of any nature whatsoever.

Negotiator

Form F - Right of Way Acquisition and Negotiation Notes

Project Number

Tract Number

<u>Landowner</u>

City/County

TITLE INFORMATION:

Owners of Record Information

NEGOTIATION NOTES:

Complete Narration of Contacts

FOLLOW-UP/PENDING:

If Any

DATE

By: Signed by Negotiator

Form G - Estimate of Just Compensation

It is determined that an appraisal is not required because the valuation problem is uncomplicated and the fair market value of the acquisition area is estimated at \$10,000 or less.

COUNTY:		PROJE	CT NO:		TR NO	:
OWNER:		TENA	NT:			
ADDRESS:		ADDR	ESS:			
CITY/ST:		CITY/S	ST:			
PHONE:		PHON	E:			
Insp Date:		Insp'd	With			Date Acq'n Booklet Furnished:
COMPARA	BLE SALES					
Sale Sale	Locati	on	Sale		Unit	
No. Date	e (S-T-R)) Price	Area	Value		

NOTES:

PROJECT REQUIREMENTS:

Item	Area	Unit Value	Value

OTHER ACQUISITION ITEMS:

COST TO CURE ITEMS:

ESTIMATED TOTAL COMPENSATION

Partial Take:	Feder	al Project No:		
Whole Take:	State	Project No:		
Other:	County:	Tract No:		
Location and	Address:			
Legal Description:				
Owner's Name and Address:				
Present Use: Zoning:	Highe	st & Best Use:		
Subject Property Sales Record (last 5 yrs. required). If none, check				
Grantor/Gran	itee Date	Book/Page Pric	e Verified By	

Purpose of the Appraisal: The purpose of the appraisal is to estimate the compensation due the owner for, or as a result of, the acquisition of a part or all of his/her real property, or interest therein, for a highway or related purpose.

VALUATION SUMMARY Area of Whole Property: Areas to be Acquired: Acquisition Needs Unit Price Value

Other Acquisition Items (List and show value):

Area of Remainder:

Cost to Cure (List and show value):

Other:

TOTAL COMPENSATION

Date of Appraisal:

Dated:

Appraised By:

Form I - Short Form Appraisal Report

Partial Take		Federa	l Number:		
Whole Take		State P	roject:		
Other		County	<i>'</i> :		
Tract No:					
Location and A	\ddress	:			
Legal Descript	ion:				
Owner's Name	e and A	ddress:			
Tenant's or Le	ssee's:				
Present Use:		Zoning	:		
Highest and B	est Use:	Before	- /	After –	
Subject Prope	rty Sale	s Record	d (last 5 yr	s. required).	. If none, check ().
Grantor/Grant	tee	Date	Book/Pag	e Price	Verified By

Purpose of the Appraisal: The purpose of the appraisal is to estimate the compensation due the owner for, or as a result of, the acquisition of a part or all of his/her real property, or interest therein, for a highway or related purpose.

VALUATION SUMMARY

Area of Whole Property: Acres

Areas to be Acquired:

Other Acquisition Items:

Cost to Cure (List and show value):

Estimated Just Compensation

DATED:

APPRAISED BY:

Form J - Appraisal Assumptions, Compliances and Facts

Project No. _____

Tract No. ______

PURPOSE OF THIS APPRAISAL:

To estimate the market value of the ownership interest, and the leasehold interest if any, in this property before the proposed acquisition by the City/County of ______and the market value of the same interest in the remainder property immediately after the proposed acquisition. In the case the proposed acquisition causes only limited damage, the purpose is to estimate total loss in value caused by the acquisition without reporting before and after values. This appraisal considers the loss in value, if any, of owner's rights in advertising signs being acquired and is made without consideration of any enhancement that might accrue from the proposed improvement.

DEFINITION OF MARKET VALUE:

The cash price which would be arrived at as between a voluntary seller willing but not compelled to sell and a voluntary purchaser willing but not compelled to buy, both whom are acting freely, intelligently and at arm's length, bargaining in the open market for the sale and purchase of the real estate in question.

DEFINITION OF HIGHEST AND BEST USE:

The allowable use, for which sufficient demand can be shown, at which at the date of the appraisal is most likely to produce the greatest net return to the property over a given period of time.

DATE OF VALUATION:

The values of this property, both before and after the proposed acquisition, are estimated as of

_____, 20____.

FIVE YEAR DELINEATION OF TITLE: (If none, so state)

Type of Date of Sale <u>Grantor Grantee Instr. Instr. Book Page Price</u>

LEASES:

Name of Lessee:

Lessee's Mailing Address:

Discussion of lease and its terms:

DATE OF INSPECTION AND INVITATION:

I personally inspected the	subject property on	, 20, and
interviewed	who is the	I
offered	an opportunity to acco	ompany me on my inspection of this
property and he that invitation.		ion. This invitation was extended by
	on	, 20
la sus sus all southerst. Helevels		

(personal contact, telephone or letter)

Form K - Donation Form, Appraisal Waived

Date:	
County:	
Project:	
Fed. Project:	
City:	
Tract No.:	

DONATION OF RIGHT OF WAY AND WAIVER OF APPRAISAL

The undersigned owner(s), having been fully informed of their right(s) to have the property appraised, and to receive just compensation based upon an appraisal, have decided to waive their right(s) to an appraisal and to donate their property interests to the City or County.

The undersigned owner(s) further state(s) that the decision to waive their right(s) to an appraisal was made without undue influences or coercive action of any nature.

Form L - Donation Form, Appraisal Not Waived

DATE	_
COUNTY _	
PROJECT	
CITY	
TRACT NO.	

DONATION OF RIGHT OF WAY

This letter will serve to verify we were fully informed and advised of our rights to receive just compensation for the acquisition of a portion of our property for the construction of the above noted project.

We further wish to acknowledge that because of the benefits to be derived from this street/road improvement, we waive all right for compensation and will donate the necessary land to the City or County of the State of Kansas.

Form M - Administrative Settlement

PROJECT NUMBER:	
COUNTY:	
CITY:	
TRACT NUMBER:	
OWNER(S) NAME:	
APPRAISED VALUE:	
TOTAL SETTLEMENT AMOUNT APPROVE	D:
SETTLEMENT RECOMMENDED BY:	
APPRAISER:	
REVIEWING APPRAISER:	
AQUISTION AGENT:	
JUSTIFICATION FOR SETTLEMENT:	
NEGOTIATOR	APPROVED BY

Form N - 90-Day Guarantee

DATE: _____

PROJECT NO.: _____

COUNTY: _____

TRACT NO.:	JOB NO.:
------------	----------

OWNER:	

TENANT: _____

Dear _____:

The City or County has initiated negotiations for the acquisition of all or a portion of the property you occupy.

The purpose of this notice is to inform you that you will not be required to move ANY SOONER than 90 days from the date of this notice. In other words, this notice is your GUARANTEE of a minimum of 90 days.

Once the City or County has acquired the right to legal possession, either by purchase or condemnation, you will be given a written 30-day notice to vacate which will specify the exact date that you must vacate the property. In no event will the 30-day notice require you to move before 90 days from the date of this notice.

RELOCATION ASSISTANCE AGENT

Form O - 30-DAY NOTICE TO VACATE

DATE:		
PROJECT NO.:		
COUNTY:		
TRACT NO.:	JOB NO.:	
OWNER:		
TENANT:		
Dear:		

The City/County has acquired the property located at ______.

The purpose of this letter is to advise you that the City/County must now obtain possession of the above stated property. It will be necessary for the above stated property to be vacated on or before ______.

If you cannot comply with the above-stated vacation date, please contact me at

-----·

You are also advised that if you are eligible for a payment for moving your personal property, you will not receive such payment until all personal property has been removed. You are also responsible for the removal of trash.

The Relocating Agency will not be responsible for any personal property remaining on the above-stated property after the above-stated date.

We hope that this will result in a minimum of inconvenience to you, but it is a necessary step to allow the State to proceed with the required preliminary work.

Sincerely,

Relocation Assistance Agent

8.0 Status of Utilities

It may be necessary to relocate utilities that are located within project construction limits. Utilities include but are not limited to lines, facilities, and systems for producing, transmitting or distributing power, electricity, communications, cable TV, lighting, heat, gas, oil, crude products, water, steam, waste water, storm water not connected with highway drainage, and other similar commodities, including fire and police signal systems and street lighting and traffic control systems, which directly or indirectly serve the public.

8.1 <u>Schedule</u>

For KDOT-administered projects, all necessary utilities should be relocated at least **four months** prior to the letting date of the project. BLP may delay the letting of any project that does not have the necessary utilities relocated **four months** prior to the scheduled project letting date. The LPA will submit the <u>Status of</u> <u>Utilities (KDOT Form 1304)</u> to the PM before any project plans will be processed for PS&E.

For LPA-administered projects, all necessary utilities should be relocated prior to the letting date of the project. The LPA will submit the Form 1304 to the PM with other contract documents.

8.2 <u>Responsibilities</u>

8.2.1 LPA (KDOT-Administered Projects)

The LPA is responsible for facilitating the relocation of all utilities for a project. The LPA will coordinate as necessary with the utility owners to make certain that all utilities requiring relocation for the project are relocated before the project is let. Under certain circumstances the utilities requiring relocation may need to be relocated concurrent with construction. In any case, it is the LPA's responsibility to provide the <u>Status of Utilities (KDOT Form 1304)</u> to the PM before the project plans are processed for PS&E. BLP may delay the letting or cancel the project if the Form 1304 has not been received **four months** prior to the scheduled project letting date. Each revision of the LPA-submitted Form 1304 will be dated and signed by the LPA or their representative.

It is important that the Contractor has accurate information available regarding the status of utilities before bidding on the project. If, for any reason before letting, the status of utilities changes from the original Form 1304 submission, it is the LPA's responsibility to submit a revised Form 1304 to BLP. Any valid additional claims by the Contractor due to delay because of utility relocation issues will be charged to the LPA and will not be funded as a participating item.

8.2.2 LPA (LPA-Administered Projects)

The LPA is responsible for facilitating the relocation of all utilities for a project. The LPA will coordinate as necessary with the utility owners to make certain that all utilities requiring relocation for the project are relocated before the project is let. Under certain circumstances the utilities requiring relocation may need

to be relocated concurrent with construction. In any case, it is the LPA's responsibility to provide the <u>Status</u> of <u>Utilities (KDOT Form 1304)</u> to the PM with other contract documents. Each revision of the LPA-submitted Form 1304 will be dated and signed by the LPA or their representative.

It is important that the Contractor has accurate information available regarding the status of utilities before bidding on the project. Form 1304 must be included in the contract documents. Any valid additional claims by the Contractor due to delay because of utility relocation issues will be the LPA's responsibility and will not be funded as a participating item.

8.2.3 KDOT (KDOT-Administered Projects)

BLP is responsible for processing the LPA-furnished Form 1304 and transmitting this information to KDOT BOCM in preparation for the project letting. The BOCM includes this information in the project bidding proposal.

9.0 Letting and Award, KDOT-Administered

Once the PS&E process is complete and final plans have been submitted to BLP, the project will be advertised by KDOT for letting.

9.1 Advertisement/Addendums

Advertisement occurs **one month** prior to the scheduled letting for the project. Information will be available to prospective bidders and subcontractors. That information, known as the Proposal Form, includes the Project Electronic Bidding System (EBS) file on either KDOT's or Bid Express' website (which includes DOT Form 202, required contract provisions and the unit prices list), special provision list, project special provisions, special provisions, standard specifications, plans, exploratory work documents, any additional contract information, and any addendums or amendments the Secretary provides for the Project.

On occasion, the LPA, the designer, or KDOT will receive questions from prospective bidders during the advertisement period. All questions from Contractors should be directed to KDOT BOCM through the <u>Bid</u> <u>Express</u> website. This ensures that all questions and answers are provided to all contractors. If it is determined that information in the Proposal Form is unclear, consideration will be given to revising documents (including plans) and/or issuing an addendum to the Proposal Form so that all bidders are made aware of the situation. The LPA/Designer will be responsible for providing answers to these questions and providing revised quantities and/or documents upon the request of BLP.

If an error or omission in the Proposal Form is discovered during the advertisement period that is determined by BLP to be significant enough to warrant addressing prior to letting, an addendum will be issued to all plan holders by BOCM. Information to support the addendum, including plan details, bid items, quantities, specifications and reports, shall be submitted to the project manager by the LPA upon request. The PM will transmit the information to KDOT BOCM for inclusion by addendum.

9.2 Letting

KDOT lettings are generally conducted on the **3**rd **Wednesday of each month at 1:30 PM**. A schedule of future lettings can be found at: <u>http://www.ksdot.org/burconsmain/letdates.asp</u>

Lettings are broadcast with live audio on the day of the letting and may be listened to at: <u>http://www.ksdot.org/burconsmain/audio.asp</u> or you may listen through the conference call at (866) 620-7326. The conference call code is 5895748207.

All bids opened and read on the day of the letting are considered preliminary and must be checked and verified by BOCM. As-read bids may be viewed after the letting at: https://kdotapp.ksdot.org/AllProjectDetail/default.aspx

9.3 <u>Commitment of Funds</u>

Once BLP has been notified of the results of the as-read bids, BLP will contact the LPA to request a verbal indication as to whether the bid will be accepted.

If the bid is not accepted, the LPA is required to indicate in writing (electronic mail is acceptable) that the bid was rejected. Upon receipt of that notification from the LPA, BLP will notify BOCM who in turn will notify bidders that the bid was rejected.

If the LPA verbally indicates that the bid will be accepted, then BLP will generate the Authority to Award Contract Commitment of City/County Funds packet. This packet contains a cover letter, the Authority to Award Commitment of City/County Funds resolution, an invoice that details the LPA's required amount of matching funds based on the actual bids and construction inspection (CE) contract, and a copy of the As Read bids detailing the number of bids, the bidders and corresponding bids. The packet, or copy by electronic mail, should be received by the LPA as soon as possible after the letting.

9.4 Award of Contract

The lowest responsible and responsive bidder is obligated to the bid for a period of **45 days**. This period can be extended at the request of the LPA (through BOCM), but the Contractor is not obligated to agree to an extension.

The Authority to Award resolution shall be executed by the LPA as quickly as possible and returned to BLP. Once BLP receives the executed Authority to Award resolution, or electronic copy of resolution, BLP will notify BOCM to initiate the process to execute the construction contract. Hard copies of the resolution returned to BLP will be forwarded to BFS for record keeping.

If the LPA fails to submit the Authority to Award letter back to BLP, the bid will be considered rejected and the Contractor will be notified.

The LPA is required to submit the local matching funds to BLP within **50 days** of the letting date unless other arrangements have been made in advance.

9.5 Contract Execution and Notice to Proceed

After the executed contract has been returned from the Contractor and delivered to the local KDOT Construction office by BOCM, a Pre-Construction meeting will be held (usually at the administering KDOT construction office). It is advisable for the LPA and designer to contact the BLP PM or KDOT Area Engineer after the award of contract for details of the pre-construction conference. Typically, the date KDOT issues the Notice to Proceed is determined at the Pre-Construction meeting.

10.0 LPA-Administered Procedures

10.1 Introduction

10.1.1 Purpose

KDOT, in cooperation with the FHWA, has developed a program through which local units of government may administer their own state and federal funded projects with oversight from KDOT.

Under this program, the LPA will certify that it will follow the LPA-Administered Procedures identified in this Section. The purpose of this section of the Manual is to outline the responsibilities of BLP and the LPA for federal-aid and/or state-aid projects that are administered by the LPA with oversight by BLP.

MAP-21 has identified all principle arterials as being a part of the NHS. For additional procedures that involve projects with principle arterials, see *Section 10.3.2.1.4* below for more information.

10.1.2 Compliance Requirements

BLP will determine, by review of plans and other project documents, whether the requirements of the program have been met.

Certain minimum criteria have been established for the LPA to be approved to administer state and federal funded projects. These criteria are intended to provide verification that projects will be developed in accordance with all applicable laws, regulations, criteria, and accepted engineering practices. The following are the minimum criteria for certification and recertification:

- 1. LPA must have a full-time, public employee in responsible charge. More than one person may share the duties of the Person in Responsible Charge (PIRC), but all must be certified through KDOT's LPA Project Manager Certification program.
- LPA must employ a licensed professional engineer (LPA-PM) to manage each project; the PIRC may also be the LPA-PM if they meet the criteria. The licensed professional engineer may be publicly employed or a consultant. There may be different project manager for design and construction. All project managers must be certified through KDOT's LPA Project Manager Certification program.
- 3. BLP must approve all locally developed design criteria manuals and specifications. Any revisions to these documents must be approved by BLP before use on the project.
- 4. LPA must submit a current organizational chart and EEO policy to BLP. Any revisions to these documents must be submitted to BLP within 30 days.
- 5. LPA must review this and other applicable sections of this Manual including all appendices.
- 6. LPA and BLP staff should meet and discuss procedures and responsibilities.

7. LPA should develop procedures for project development including planning, design, letting, and contract administration. These procedures shall be submitted to BLP for approval every **three years** to maintain their certification. All subsequent changes to the LPA's procedures shall be submitted to BLP immediately for approval. As an alternative, the LPA may commit to follow the procedures in this Manual.

10.1.3 KDOT Responsibilities

KDOT has oversight of the projects administered under this program. In cooperation with the FHWA, KDOT has determined this oversight will include the following:

- 1. Determine that the LPA is suitably equipped and organized to discharge the duties of the <u>Code of</u> <u>Federal Regulations, Title 23 CFR Part 771</u>.
- 2. Review of LPA's design and construction policies, manuals, standards, and specifications.
- 3. Confirm that adequate acceptance, independent assurance sampling and testing, and manufacturers' materials certifications are incorporated in the LPA's materials process.
- 4. Develop and approve the Project Authorization (KDOT Form 883).
- 5. Authorize the LPA to proceed with the project.
- 6. Designate a BLP Project Manager.
- 7. Provide environmental oversight and coordinate with resource agencies.
- 8. Participate in project field checks.
- 9. Review and concur in PS&E.
- 10. Request authorization of federal funds.
- 11. Obligate federal funds for the project.
- 12. Issue an Authority to Administer the project (the LPA may proceed to Advertise the project for a minimum of 30-days).
- 13. Concur in award of the construction contract.
- 14. Review LPA Approved Sub-Contractors form.
- 15. Confirm all Contractors have an EEO policy on file with the Office of Contract Compliance.
- 16. Attend the Pre-Construction conference.
- 17. Create a contract in CMS for tracking of project costs and for reimbursement documentation.
- 18. Process LPA invoices in CMS for payment.
- 19. Track DBE participation monthly.
- 20. Determine funding participation in change orders. This includes concurrence in/approval of all change orders prior to the Contractor beginning the work.

- 21. Assist the LPA during construction with issues involving materials testing, inspection, and construction.
- 22. Provide project closeout documents to KDOT Bureau of Fiscal Services including all changes from the original contract.
- 23. Participate in the final inspection of the project.
- 24. Confirm compliance with non-<u>Title 23 CFR Part 771</u> laws and regulations, i.e., Davis-Bacon, NEPA, Relocation Assistance Act, Buy America, Debarment, etc.

10.1.4 LPA Responsibilities

10.1.4.1 Person in Responsible Charge and Project Manager(s)

- 1. Submit a request to develop the project under the approved procedures; include the project manager contact information and proposed design criteria. PIRC
- 2. Administer inherently governmental project activities, including those dealing with cost, time, adherence to contract requirements, construction quality, and scope of project. PIRC
- 3. Direct project staff, agency or consultant, to carry out project administration and contract oversight, including proper documentation. PIRC
- 4. Be aware of the qualifications, assignments, and on-the-job performance of the agency and consultant staff at all stages of the project. PIRC
- 5. Develop a project schedule (<u>City Administered Project Schedule</u>) and cost estimate and submit to the BLP Project Manager. LPA PM
- 6. Execute the project agreement through BLP and proceed with project development. PIRC
- 7. Maintain familiarity of day to day project operations, including project safety issues. PIRC
- 8. Submit Field Check review package in accordance with the <u>E-plans submittal instructions</u>. LPA PM
- 9. Conduct Field Check meeting and provide written meeting minutes to PM. LPA PM
- 10. Submit Final Check review package in accordance with the <u>E-plans submittal instructions</u>. LPA PM
- 11. Include project on applicable transportation plan. This must be complete prior to obligation of funds. For more information, see *Section 2.0 Programming* in this Manual. PIRC
- 12. Submit PS&E review package in accordance with the <u>E-plans submittal instructions</u> (including required contract specifications for Federal-aid projects.) LPA PM
- 13. Advertise project (minimum 30-day). LPA PM
- 14. Review bids for signs of collusion. LPA PM
- 15. Award construction contract. PIRC
- 16. Submit signed contracts and Letting Summary Documents along with Bid Tabs and PIL organized by work type in Excel format to be used by KDOT Bureau of Fiscal Services. LPA PM

- 17. Fill out LPA Approved Sub-Contractors Form and submit to BLP. LPA PM
- 18. Invite PM to the pre-construction meeting. LPA PM
- 19. Provide PM with half-size set of construction plans. LPA PM
- 20. Send PM a copy of the Notice to Proceed (NTP) document. LPA PM
- 21. Visit and review the project on a frequency that is commensurate with the magnitude and complexity of the project. PIRC and LPA PM
- 22. Submit monthly reimbursement requests to BLP PM. LPA PM
- 23. Review financial processes, transactions, and documentation to ensure that safeguards are in place to minimize fraud, waste, and abuse. PIRC
- 24. Submit change orders with necessary documentation including determination of participating and non-participating items to PM. Signed by PIRC; submitted by LPA PM.
- 25. Review materials certifications. LPA PM
- 26. Provide PM with the Construction Summary Documents, including the <u>Final Paid Items List (FPIL)</u> and the Notice of Acceptance. Signed by PIRC; submitted by LPA PM.

10.2 Administration

Federal-aid fund categories and fiscal and audit responsibilities are discussed in *Section 2.0 Programming* in this Manual.

10.3 Procedures

10.3.1 Procedures Outline

Normal phases of project development will include Initiation; Scoping and Scheduling; Preliminary Design; Final Design; and Construction. Each phase involves activities and events needed to complete the project while verifying to KDOT compliance with applicable State Laws and Regulations as well as the <u>Code of</u> <u>Federal Regulations, Title 23 CFR, Part 771</u> (Environmental Impact and Related Procedures) and applicable Non-Title 23 CFR, Part 771 federal requirements. Activities listed are common to the various types and scopes of projects that are developed under federal aid non-full oversight procedures. Forms listed may be used, or the LPA may develop, with KDOT's approval, its own forms for submittal to KDOT to accomplish the verification.

10.3.2 Project Development Procedures for Locally Administered Projects

10.3.2.1 Initiation, Scoping and Scheduling Phase

10.3.2.1.1 LPA Project Identification – Primary Responsibility - LPA

For more information, see *Section 2.0 Programming* in this Manual.

10.3.2.1.2 Public Involvement – Primary Responsibility – LPA

The LPA is responsible for a public involvement process that is commensurate to the scope, complexity and potential of environmental impact of the proposed project. Public involvement should begin at the earliest stages of project development and continue throughout the project development process. It should be done in accordance with KDOT's <u>Sharing the Future: Public Involvement in the Kansas Transportation</u> <u>System</u>. The level of public involvement will be dependent upon the complexity of the project, potential for significant social or environmental impacts, and amount of controversy generated. Less complex projects involving little or no environmental impact may involve only a public informational meeting. More complex projects which have a high potential for environmental impact will need early and continuous public participation during project development and extensive documentation in accordance with <u>Code of Federal</u> <u>Regulations, Title 23 CFR, Part 771</u>. Documentation in these cases may be in the form of either an Environmental Impact Statement (EIS) (Class I) or an Environmental Assessment (EA) (Class III). The public involvement process flow charts included in KDOT's <u>Sharing the Future: Public Involvement in the Kansas</u> <u>Transportation System</u> provide the process used to categorize projects along with the sequence of events that need to be completed for each classification in order to comply with the federal requirements.

10.3.2.1.3 Request for Construction Project – Primary Responsibility - LPA

The LPA shall submit the <u>Request for Construction Project (KDOT Form 1302)</u> along with supporting information such as a project schedule, map, detailed estimate, TIP, award letter if not from BLP, etc. (See <u>LPA Administered Project Schedule</u> in the *Forms and Documents* area of the BLP <u>LPA Administered Projects</u> webpage for an example.) Once this information is received by BLP, the project shall be programmed. After review, the BLP shall generate the Project Authorization (KDOT Form 883) and create the City/State Agreement. Non-infrastructure and procurement projects should use Form 1312.

For more information, see *Section 2.0 Programming* in this Manual.

10.3.2.1.4 NHS Approval Procedure – Primary Responsibility - LPA

For projects on principal arterials, the LPA must request special approval to administer federally funded projects on the NHS. This request needs to document the reasons for the request, demonstrate that the LPA has successfully administered a non-NHS project, and be submitted to BLP for approval. BLP will discuss all requests to administer NHS projects with the FHWA.

10.3.2.1.5 <u>Environmental Process – Primary Responsibility – BLP</u>

When the project is authorized and the Project Authorization (KDOT Form 883) is executed, the KDOT Bureau of Right of Way, Environmental Services Section (ESS) will perform initial reviews and make initial contacts with the environmental regulatory agencies to ascertain the potential for environmental impacts. For more information, see *Section 4.0 Environmental* in this Manual.

10.3.2.2 Preliminary Design

10.3.2.2.1 Consultant Selection Process – Primary Responsibility – LPA

For information, see Section 3.0 PE Consultant Selection and Agreements and Section 11.0 CE Consultant Selection and Agreements in this Manual.

10.3.2.2.2 Consultant Selection Process Certification – Primary Responsibility – LPA

When federal funds are used in the preliminary engineering, the LPA will provide KDOT documentation that appropriate steps have been completed and that the process complied with all applicable regulations. Any work done prior to obligation of federal funds will be non-participating.

For more information, see Section 3.0 PE Consultant Selection and Agreements and Section 11.0 CE Consultant Selection and Agreements in this Manual.

10.3.2.2.3 Field Surveys - Primary Responsibility – LPA

The LPA is responsible for the acquisition of all survey and geotechnical data that is necessary for the development of the plans. Data gathering techniques and procedures will be commensurate with the complexity of the project and will be in accordance with State statutes and accepted survey practices.

10.3.2.2.4 Design Exception Request – Primary Responsibility – LPA

For information, see *Section 5.0 Plan Development* and *10.3.2.3.1 (Design Exception Approval)* in this Manual.

10.3.2.2.5 Field Check Plans Preparation and Submittal – Primary Responsibility – LPA

The development of Field Check plans by the LPA shall be in accordance with recognized prevailing design criteria which are provided in *Section 5.0 Plan Development, Appendix A*. The LPA may request use of local criteria if they are consistent with these criteria/guidelines. The LPA administering the project is responsible for the completeness and accuracy of the plans. KDOT's <u>Design Manual</u>, Volume 1 (Part A and B), Road Section, Section 2.3, FIELD CHECK PLANS is the guide for plan preparation.

The LPA shall provide electronic Field Check plans and project cost estimate, per the instructions on submitting <u>E-Plans</u>, to BLP for KDOT distribution, review and processing.

10.3.2.2.6 Field Check Plans Review - Primary Responsibility – BLP

BLP will distribute the Field Check plans for review within KDOT and external agencies, as applicable.

10.3.2.2.7 Field Check Meeting and Report - Primary Responsibility – LPA - Coordination with BLP

The LPA will schedule the Field Check meeting time and location in coordination with BLP, Consultant and all other necessary parties. The LPA will conduct and take minutes of the meeting. The Consultant or LPA will provide sets of plans for use at the meeting. BLP will review comments and will discuss any necessary actions with LPA and Consultant. After the meeting, the Consultant or the LPA will distribute meeting minutes and provide BLP with a response to the issues identified/discussed in the meeting. When BLP receives the meeting minutes and issues response, BLP will generate a Field Check Report and provide to the LPA, Consultant, and all other necessary parties.

During the site review/field check meeting it should be determined if the proposed project will have a potential impact on rail facilities. If it appears that work will be near or on railroad right-of-way, the LPA will coordinate with the railroad to determine the need for flagging, liability insurance, agreements and a possible diagnostic review.

10.3.2.2.8 Environmental Process Continuation - Primary Responsibility – LPA

For information, see *Section 4.0 Environmental* in this Manual.

10.3.2.2.9 Public Involvement Process Continuation - Primary Responsibility – LPA

Although the public is involved in the early stages of project development for the more complex projects, additional public input may be needed in the early stages of preliminary design so that public opinion can be reflected in final design. Informational meetings may be needed at this stage along with environmental investigations to confirm the Environmental Classification shown on the Project Authorization (KDOT Form 883) and/or to provide input for use in the appropriate environmental documents.

10.3.2.2.10 Public Interest Finding (PIF) – Primary Responsibility - LPA

Federal-aid regulations specifically allow deviation from some standard practices through a public interest finding (PIF) or a determination of cost effectiveness. If the LPA requests to deviate from a standard practice, the LPA shall submit a PIF to BLP explaining the need for the deviation and why it is in the public's best interest to allow it. BLP shall review the request and work with FHWA to approve or deny the PIF.

10.3.2.3 Final Design

10.3.2.3.1 Design Exception Approval – Primary Responsibility – BLP

BLP will respond to the LPA approving or denying any design exception request. Requests made prior to Field Check will be addressed as a part of the Field Check discussions. When the request is made after or because of Field Check discussion, the approval may be made prior to Final Check plan submittal if sufficient plan information or other details are provided to support the request. Approved items will be reflected in the Design Summary Document.

For more information, see *Section 5.0 Plan Development* in this Manual.

10.3.2.3.2 ROW Activities Initiated - Primary Responsibility – LPA

For information, see *Section 7.0 Right of Way* in this Manual.

10.3.2.3.3 <u>Utility Adjustments Initiated – Primary Responsibility – LPA</u>

Coordination with affected utility companies may begin at any time in the project development process. Early coordination is recommended to minimize negative impacts on the project schedule.

For information, see Section 8.0 Status of Utilities in this Manual.

10.3.2.3.4 Environmental Review Process/NEPA – Primary Responsibility – KDOT/LPA

All environmental reviews and clearances (such as noise, air quality, farmland, archaeological, historical, wildlife, Section 4(f), etc.) will conform to applicable federal and state law. When the reviews are complete, and all agencies have submitted their comments, KDOT's Environmental Services Section will transmit a "Status of Project's Environmental Concerns – Final" memo to BLP. Once received by BLP, the PM will distribute to the LPA.

For information, see *Section 4.0 Environmental* in this Manual.

10.3.2.3.5 ROW Acquisition Completion – Primary Responsibility – LPA – Coordination with BLP

<u>Right of Way Clearance for Federal Aid Projects (KDOT Form 1306)</u> must be completed and returned to BLP on all projects even if no rights of way are being acquired. All persons involved with the right of way process must be certified through KDOT's Right of Way Certification Program (ROWCP), see *Section 7.1.1.3*.

For more information, see *Section 7.0 Right of Way* in this Manual.

10.3.2.3.6 Utility Adjustments Completion – Primary Responsibility – LPA – Coordination with BLP

For information, see Section 8.0 Status of Utilities in this Manual. Include Form 1304 in contract documents.

10.3.2.3.7 Permits Obtained – Primary Responsibility – LPA

For information, see *Section 4.0 Environmental* in this Manual. Include permits in contract documents.

10.3.2.3.8 Additive Work – Primary Responsibility – LPA – Coordination with BLP

The use of additive work bidding will require prior approval from the PM. The project's defined scope of work must be included in the base bid.

If the LPA chooses to include additive work bidding procedures, the LPA shall be required to prioritize the additions in order of consideration. Selection of the Contractor shall be based on the sum of the base bid plus the selected additive work items in order of consideration. If the LPA has any questions regarding the procedures for this, please contact the PM to discuss. Separate DBE goals may be required for additive work.

10.3.2.3.9 PS&E Package Submittal – Primary Responsibility – LPA

The LPA will submit to BLP all necessary documentation for the PS&E approval. As a minimum, this documentation will include completed plans, project specifications and contract documents, engineer's estimate of probable cost, <u>Status of Utilities (KDOT Form 1304)</u>, <u>Right of Way Clearance for Federal Aid Projects (KDOT Form 1306)</u> and <u>List of Permits and Status of Same (KDOT Form 1307)</u>. This shall all be submitted to the PM electronically via the <u>FTP site</u>.

PS&E documents shall be submitted a **minimum of 30 days** prior to the desired advertisement date.

10.3.2.3.10 Contract Documents - Primary Responsibility- LPA

The LPA shall be responsible for the completion, execution and implementation of all contract documents, which may include, but are not limited to, proposals, notice to contractors, special provisions, bidding requirements and conditions (KDOT's "Standard Specifications for State Road and Bridge Construction", <u>Section 102</u>), bid bond, and the proposal schedule.

The <u>Required Contract Specifications</u> shall be included on all Federal-aid projects.

Additionally, per 23 CFR 635.109(a)(1)(i-iv), the following changed conditions contract clauses shall be made part of, and incorporated in, each highway construction project approved under 23 U.S.C. 106:

(1) Differing site conditions

(i) During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as

inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the site is disturbed and before the affected work is performed.

(ii) Upon written notification, the engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipated profits, will be made and the contract modified in writing accordingly. The engineer will notify the contractor of the determination whether or not an adjustment of the contract is warranted.

(iii) No contract adjustment which results in a benefit to the contractor will be allowed unless the contractor has provided the required written notice.

(iv) No contract adjustment will be allowed under this clause for any effects caused on unchanged work.

For non-Federal-aid projects, only these Contract Specifications are required:

0	08-10-66 (LPA)	Certification – Non-collusion & History of Debarment
0	08-04-92-R3 (LPA)	Certification – Contractual Services with a Current Legislator or a
		Current Legislator's Firm
0	01-01-11 (LPA)	Tax Clearance Certificate

The following two (2) paragraphs **must be placed above the signature line in the bidding document**:

PARAGRAPH #1 (For projects WITH Federal funds)

REQUIRED CONTRACT PROVISIONS:

The current versions of the following Required Contract Provisions (I-IV) require the Contractor to furnish information. The Contractor shall complete and submit with its proposal these provisions. The City/County of ______ will reject proposals that fail to contain completed Required Contract Provisions I, II and III and may reject proposals that fail to contain completed Required Contract Provision IV.

Ι.	08-10-66 (LPA)	Certification – Non-collusion & History of Debarment
<i>II.</i>	04-26-90 (LPA)	Declaration – Limitations on Use of Federal Funds for Lobbying
<i>III.</i>	07-19-80 (LPA)	DBE Contract Goal
IV.	01-01-11 (LPA)	Tax Clearance Certificate

PARAGRAPH #1 (For projects with NO Federal funds)

REQUIRED CONTRACT PROVISIONS:

The current versions of the following Required Contract Provisions (I-IV) require the Contractor to furnish information. The Contractor shall complete and submit with its proposal these provisions. The City of will reject proposals that fail to contain completed Required Contract Provision I and may reject proposals that fail to contain completed Required Provision IV.

Ι.	08-10-66 (LPA)	Certification – Non-collusion & History of Debarment
IV.	01-01-11 (LPA)	Tax Clearance Certificate

PARAGRAPH #2 (For ALL projects)

CERTIFICATION:

Note: <u>Davis-Bacon wage rates</u> used for a project shall be those in effect **no more than 10 days** prior to the letting. Per FHWA, "A contracting agency is responsible for incorporating the applicable wage rate determination into each federally-assisted contract entered into pursuant to competitive bidding procedures. When notice of a change to a wage determination is published in the Federal Register 10 days or more before the opening of bids, the USDOL requires that the new wage determination be incorporated into the contract by amendment. <u>29 CFR1.6(c)(3)(i)</u>". Davis-Bacon wage rates are required to be followed on all federal-aid projects.

Some LPA's may wish to utilize contract incentives/disincentives (liquidated damages) for either timely or untimely completion of part or all of the work for a specified period (hourly, working day, calendar day, or calendar completion date. Should the LPA choose to use Contract Incentives/Disincentives, this shall be included in the preliminary contract documents submitted during PS&E. If the LPA has adopted the Kansas Department of Transportation Standard Specifications for Road and Bridge Construction (Current Version) and accompanying Special Provisions, the Incentive/Disincentives are outlined in Sections 108.7 and 108.8. If the LPA has their own Specifications, the incentive/disincentive language should be included in the Current Specification or in a Special Provision with the requirements for the incentive/disincentive defined for the prospective bidders. Incentives/disincentives are a participating part of the contract as outlined in 23 CFR 635.127. LPAs must, as part of their DBE program, include a contract clause to require prime contractors to pay subcontractors for satisfactory performance of their contracts no later than 30 days from receipt of each payment made to the prime contractor. The LPA must ensure prompt and full payment of retainage from the prime contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed. One of the following methods must be used to comply with this requirement:

- 1) The LPA may decline to hold retainage from prime contractors and prohibit prime contractors from holding retainage from subcontractors. (Preferred)
- 2) The LPA may decline to hold retainage from prime contractors and require a contract clause obligating prime contractors to make prompt and full payment of any retainage kept by prime contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed.
- 3) The LPA may hold retainage from prime contractors and provide for prompt and regular incremental acceptances of portions of the prime contract, pay retainage to prime contractors based on these acceptances, and require a contract clause obligating the prime contractor to pay all retainage owed to the subcontractor for satisfactory completion of the accepted work within 30 days after your payment to the prime contractor. (Discouraged)

For purposes of this section, a subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the LPA. When an LPA has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed. The LPA's DBE program must provide appropriate means to enforce the requirements of this section. These means may include appropriate penalties for failure to comply, the terms and conditions of which the LPA sets. The program may also provide that any delay or postponement of payment among the parties may take place only for good cause, with your prior written approval. The LPA may also establish, as part of their DBE program, any of the following additional mechanisms to ensure prompt payment:

- A contract clause that requires prime contractors to include in their subcontracts language providing that prime contractors and subcontractors will use appropriate alternative dispute resolution mechanisms to resolve payment disputes. The LPA may specify the nature of such mechanisms.
- 2) A contract clause providing that the prime contractor will not be reimbursed for work performed by subcontractors unless and until the prime contractor ensures that the subcontractors are promptly paid for the work they have performed.
- 3) (3) Other mechanisms, consistent with this part and applicable state and local law, to ensure that DBEs and other contractors are fully and promptly paid.

10.3.2.3.11 PS&E Review – Primary Responsibility – BLP

Upon receipt of the PS&E package from the LPA, BLP will review the documents to confirm that the project complies with State and/or Federal requirements.

The estimate will be distributed by BLP to the Program Consultant in KDOT's Office of Contract Compliance to determine the DBE goal. Once the PM receives the DBE Goal, the LPA will be notified so that the DBE Goal may be updated in the project proposal.

The PM will review the LPA's documents to verify that all required specifications are included. Federal-aid projects have <u>Required Contract Specifications</u> that must be included. See the previous section for non-Federal-aid Required Contract Specifications.

Upon completion of the review, PS&E approval by KDOT will be obtained.

10.3.2.3.12 Obligation of Funds – Primary Responsibility – LPA/BLP/FHWA

After PS&E plans and documents have been approved by BLP, KDOT BPPM will request FHWA to obligate the project's federal funds. The project agreement must be executed before obligation of funds. For projects within an MPO, the TIP must be up to date before obligation of funds.

After the funds have been obligated, the PM will submit the Authority to Administer the project for approval by the BLP Bureau Chief.

After the Authority to Administer has been approved, it will be submitted to the LPA via electronic memo (Authority to Bid) by email. The LPA shall advertise the project for **a minimum of 30 days**.

10.3.2.3.13 Contract Addenda – Primary Responsibility – LPA – Coordination with BLP

If it is necessary that changes must be made after a project is advertised, project addenda shall be provided to all potential bidders and shall be issued with sufficient time for contractors to prepare their bids. Copies of all addenda shall be submitted to BLP for review and to confirm that the previous PS&E approval continues to be valid after the changes are made. The LPA shall not let the project to bid until all applicable addenda have been approved by the BLP.

10.3.2.3.14 <u>Construction Engineering (CE) Agreement – Primary Responsibility – LPA – Coordination</u> with BLP

For information see *Section 11.0 CE Consultant Selection and Agreements* in this Manual.

10.3.2.3.15 Public Involvement Continuation – Primary Responsibility – LPA

The public involvement process should be continuous and provide input from interested parties throughout the project development.

10.3.2.4 Letting

STATEMENT OF POLICY

The Kansas Department of Transportation's <u>Construction Manual</u> (CM), <u>Standard Specifications for State</u> <u>Road and Bridge Construction</u> (Standard Spec), required contract provisions, and recurring special provisions have been approved by the Federal Highway Administration (FHWA) for use on highway and similar construction projects when Federal money is involved as a means to comply with Federal laws and regulations. Therefore, when projects sponsored by local units of government involve federal money, all letting, and construction activities shall be regulated by these documents. All activities contained therein are not listed below as procedures to follow since not all activities are applicable to LPA's projects; however, as foreseen and unforeseen situations arise during the course of a project that are not covered below, policies and procedures contained in the CM and Standard Spec shall be used to resolve the situation.

These procedures and regulations were written for KDOT personnel; however, since these projects involve federal monies and are being completed with oversight of KDOT, appropriate representatives of the local units of government should use the procedures and regulation as if they were written for their use.

Exception: The LPA can use their own specifications and procedures if they have been reviewed and approved by KDOT.

10.3.2.4.1 <u>Letting Process -- Primary Responsibility – LPA</u>

The LPA is responsible for following the letting process as documented in this section or the LPA's approved procedures manual.

10.3.2.4.2 Project Schedule and Plans Distribution - Primary Responsibility – LPA

After given authority to administer, the LPA will confirm the project letting date and provide full, complete and accurate plans, specifications and special provisions for examination purposes by interested and qualified contractors. These will be made available **at least 30 days before** the scheduled letting date.

10.3.2.4.3 Advertisement - Primary Responsibility-LPA

After the date is set for receipt of proposals, the LPA will give notice of such letting to prospective bidders. The notice shall conform to the requirements set forth in KDOT's "Standard Specifications for State Road and Bridge Construction", <u>Section 102.1</u>. The Notice describes the contemplated work, informs the prospective Contractor to obtain bidding proposal forms, identifies the location of plans and specifications, identifies the time and place for the public opening and reading of proposals and reserves the LPA's right to reject bids.

10.3.2.4.4 <u>Contractor Prequalification: Prime, Sub-Contracting, and EEO – Primary Responsibility –</u> LPA

All prime contractors must be on <u>KDOT's list of pre-qualified contractors</u> as a prerequisite to submitting a responsive bid. (The LPA's proposal must include this requirement.)

All contractors working on any State/Federal-Aid project must have an EEO policy on file with the Office of Civil Rights Compliance. Each contractor and is responsible for submitting their company's <u>EEO policy</u> on their company letterhead, a <u>letter of appointment</u> of the company's EEO officer, and the <u>DOT 1049 CFR</u> <u>Form.</u> If a contractor has 50 or more employees, an Affirmative Action Plan is also required. Please contact KDOTs Office of Civil Rights Compliance with any questions. (785.296.7940)

See *Appendix A* for a table of *EEO and DBE Documentation* that is required for Federally funded projects. The LPA is responsible for receiving, checking and submitting to BLP.

10.3.2.4.5 Public Opening of Proposals – Primary Responsibility – LPA

The LPA shall be responsible for the letting place and schedule and for the notification of interested participation of the same. The LPA shall conduct the letting in accordance with state laws and regulations. Proposals shall be opened and read in public at the time and place indicated in the Notice to Contractors. This procedure shall follow instructions listed in <u>Sections 102.15-18</u> of KDOT's "Standard Specifications for State Road and Bridge Construction".

10.3.2.4.6 Letting Review and Authority to Award

10.3.2.4.6.1 Bid Analysis - Primary Responsibility – LPA/KDOT

The LPA will, after the proposals are opened and read, evaluate the bids to confirm that funds are being spent in the most effective manner, that there was good competition in the bidding, and the lowest practicable price for the project was received. The review will include a comparison of the bid prices with respect to the Engineer's Estimate and other factors that may include the following:

- Number of bids
- Distribution or range of the bids
- Identity and geographic location of the bidders
- Urgency of the project
- Unbalancing of the bids
- Current market conditions and workloads
- Comparison of bid prices with similar projects in recent lettings
- Justification for significant bid price differences
- Potential for savings if the project is re-advertised
- Other factors as warranted

As a part of this review, the LPA must review the bids for collusion. The Department of Justice, Antitrust Division has a <u>Red Flags of Collusion checklist</u> to help prevent and detect collusion.

Copies of the detailed bid tabulations will be submitted to BLP for review by the BOCM.

10.3.2.4.6.2 Bid Approval - Primary Responsibility – LPA – Coordination with BLP

The proposals shall be considered by the LPA in accordance with <u>Section 103.1</u> of KDOT's "Standard Specifications for State Road and Bridge Construction". Once reviewed, the lowest responsible and responsive bidder should be approved. If any of the required certifications have not been signed by the Contractor, their bid will be considered non-responsive and will be rejected. In addition, the DBE goal for the project must be met for the bid to be considered responsive unless Good Faith Effort documentation has been submitted and approved by KDOT. The LPA will also verify that the apparent low bidder is on KDOT's list of approved contractors (<u>https://www.ksdot.org/hwycont.asp</u>). The LPA shall submit to BLP its recommendation for award, detailed bids from all bidders, and copies of all required certifications for the apparent low bidder (Checklist for Authority to Award).

10.3.2.4.6.3 <u>Concurrence in Award - Primary Responsibility - BLP</u>

BLP will review the information submitted by the LPA and confirm that all requirements have been satisfactorily met. When it has been determined that all requirements are met, the LPA will submit "Authority to Award Contract" document for KDOT execution. The executed "Authority to Award Contract" document will then be sent to the LPA.

10.3.2.4.6.4 Award and Execution of Contract – Primary Responsibility - LPA

Upon notification of the "Authority to Award" from KDOT, the LPA shall award and execute a contract in accordance with <u>Section 103</u> of KDOT's "Standard Specifications for State Road and Bridge Construction", or the LPA's KDOT-approved procedures may be used.

Both a Hard Copy and an electronic copy of the fully executed contract with all required certifications will be submitted to the PM prior to issuing the Notice to Proceed. The electronic copy shall be in pdf form and all sections shall be bookmarked.

10.3.2.4.6.5 Letting Summary Document - Primary Responsibility – LPA

Upon completion of the Letting Phase, the LPA shall provide BLP with a "*Letting Summary Document*" that certifies the letting process has been completed and the contract has been awarded in accordance with the requirements of this document as well as Section 102, 103, and 104 of the KDOT "Standard Specifications for State Road and Bridge Construction". The "*Letting Summary Document*" shall be submitted to the PM prior to issuing the Notice to Proceed.

An example of the "*Letting Summary Document*" is included in *Appendix A* of this section. A breakdown of the project construction costs (<u>Paid Item List</u>) by work type (i.e., roadway, surfacing, bridges, traffic signals, and common items) and with non-participating items identified in an Excel spreadsheet shall be submitted to BLP at this time.

10.3.2.4.6.6 Request for Project Exemption Certificate – Primary Responsibility LPA

After the "Authority to Award" has been issued by BLP, the LPA must complete a "REQUEST FOR PROJECT EXEMPTION CERTIFICATE (Department of Revenue Form PR-76)" available from KDOR at: <u>https://ksrevenue.org/pdf/pr76.pdf</u>

If the LPA has attained "agent" status through KDOR, they must submit a copy of the document granting them "agent" status and a copy of the Form PR-76 issued by the LPA to the Contractor. A publication containing more information about this form and the process can be found at:

https://www.ksrevenue.org/pdf/pub1520.pdf

or you may contact the Kansas Department of Revenue (KDOR) directly at the address or phone shown below:

Kansas Department of Revenue (KDOR) 120 S.E. 10th Avenue Topeka, KS 66612-1588 Phone: (785)296-3081 FAX: (785)296-7928

After the LPA completes the form, they need to return it to the address stated above. KDOR will assign the LPA an Exemption Certificate Number specific to the project. A copy of the document from KDOR assigning the Exemption Certificate Number must be provided to BLP prior to issuing the "Notice to Proceed."

After the project is completed, the LPA shall complete the "State of Kansas Project Completion Certification" (KDOR Form PR-77) available from KDOR at:

https://www.ksrevenue.org/pdf/pr77.pdf

This certifies that all materials purchased by the Contractor were exempted from payment of sales tax. This form must be delivered to the LPA and kept on file for 5 years after project finalization.

10.3.2.4.6.7 Sub-Contractor Approval

After award, the LPA will submit the BLP LPA Sub-Contractor Approval Form and <u>DBE Commitment Letter</u>(s) to the PM for review prior to issuing the Notice to Proceed to the Contractor. All sub-contractors working on any State/Federal-Aid project must have an EEO policy on file with the Office of Civil Rights Compliance. Each sub-contractor is responsible for submitting their company's <u>EEO policy</u> on their company letterhead, a <u>letter of appointment</u> of the company's EEO officer, and the <u>DOT 1049 CFR Form</u>. If a sub-contractor has

50 or more employees, an Affirmative Action Plan is also required. Please contact KDOTs Office of Civil Rights Compliance with any questions. (785.296.7940). The PM will notify the LPA if a sub-contractor does not have a policy on file. The sub-contractor will not be allowed to work on the project until the Office of Civil Rights Compliance verifies that they have a policy on file.

10.3.2.5 Construction Phase

10.3.2.5.1 Pre-Construction Meeting – Primary Responsibility - LPA/KDOT

The LPA shall coordinate with the PM regarding the Pre-Construction Conference date and location.

10.3.2.5.2 Notice to Proceed - Primary Responsibility - LPA

Following the instructions in <u>Section 108.1</u> of KDOT's "Standard Specifications for State Road and Bridge Construction", the LPA shall provide a written notice to the Contractor to proceed with the contract work including, when applicable, the date for commencement of the contract time for performance. This notice shall be submitted to BLP electronically.

10.3.2.5.3 <u>Contract Administration - Primary Responsibility - LPA - Coordination with KDOT</u>

The LPA is responsible for implementing and controlling the work described and required in the project contract including requirements of the Construction Engineering agreement. Control of the work should follow instructions provided in Sections 2.07 through 2.13 of KDOT's "<u>Construction Manual</u>", current edition, where 'Field Engineer' is the LPA PM, 'Inspector' is the LPA's CE Inspector, and 'District Engineer' is the PIRC. Traffic is to be handled during construction in accordance with the plans and the current edition of FHWA's "<u>Manual on Uniform Traffic Control Devices</u>" (MUTCD). Monitoring shall be performed to confirm the Contractor's compliance with Davis-Bacon wage requirements, EEO, DBE, and other contractual requirements.

The LPA shall pay the Contractor and submit a voucher for reimbursement to BLP on a **monthly** basis using the <u>Payment Request Form (KDOT Form 1313</u>). Appropriate data shall be provided to justify the amount of reimbursement and non-participating amounts clearly noted, with a billing summary sheet. The voucher will be checked by BLP and processed for payment. A copy of the <u>Certificate of Subcontractor Work</u> <u>Payment (KDOT Form 1010LP)</u> and <u>Monthly DBE Payment Affidavit (KDOT Form 1008)</u> shall be included with the reimbursement requests. Any changes to subcontractors must be approved using the same procedures as initially followed; If the DBE goal is affected, discuss with BLP.

The LPA shall maintain contact with BLP throughout the project. The LPA shall submit monthly construction progress reports to the PM. BLP will conduct audits of documentation, certifications and billing during the project construction. BLP shall be invited to all project progress meetings and be invited to the final inspection.

10.3.2.5.4 Change Orders - Primary Responsibility - LPA - Coordination with KDOT.

Often changes occur during construction of a project that requires adjusting the compensation paid to a Contractor. All changes must be within the scope and limits of the project. All change order requests must be submitted to the PM using the <u>Contract Change Order Form (KDOT Form 1314</u>) for review and approval **before the work is initiated**. KDOT will provide email concurrence on all changes within **3 business days**. If the LPA does not receive prior approval, the items on that change order may be deemed non-participating, as per the "Code of Federal Regulations", Title <u>23 CFR 635.120</u>. KDOT's role is to provide general administrative oversight and to determine the amount of federal participation.

Change orders will be submitted using the unit prices from the original bid tabs when possible. If unit prices for the work aren't included in the original paid items list, the LPA will conduct an independent cost analysis (per 23 CFR 635.120) for the proposed work. The LPA will submit to BLP the cost analysis and the proposal from the Contractor as backup documentation for the negotiated price. If line items are deleted or zeroed out by change order, they will be listed at the bottom of the pay estimate, in the change order section, as negative amounts. Line items shall never be completely removed from the original bid tabs/paid items list. When changing an existing item, you must use the existing unit price.

Non-participating items shall be clearly marked on the original bid tabs, plans, pay estimates and change orders. Email correspondence regarding the prior approval and determination of federal participation of the change order items, between the LPA and KDOT, shall be submitted as backup documentation with change orders. Once the determination of participation has been made, the items will be marked accordingly on the pay estimates.

The LPA will conduct a cost analysis of all changes to the contract included in the change order request. Per KDOT's "Standard Specifications for State Road and Bridge Construction", <u>Section 104.9a</u>, all direct and indirect costs associated with the Contract Change, including labor, materials, equipment, overhead, profit, impact costs and other costs for which the Contractor claims compensation is owed. Do not include prohibited costs as listed in Subsection 104.9c.

All changes must be listed on the <u>Final Paid Items List (FPIL</u>), and units and unit prices must be the same as on the Bid Item List. For example, if the bid item is 1 LS \$10,000, it can only be adjusted in \$10,000 increments.

10.3.2.5.5 <u>Public Involvement Complete – Primary Responsibility – LPA</u>

Public involvement is a continuous and ongoing process during project development and should continue through the construction phase. The LPA is responsible to implement measures, appropriate for the specific project, to keep the public informed of project activities and to respond to their input.

10.3.2.5.6 Materials Certification - Primary Responsibility - LPA

The LPA is responsible for materials certifications as documented in KDOT's "Construction Manual", <u>Section</u> <u>2.08</u>, and KDOT's "Standard Specifications for State Road and Bridge Construction", <u>Section 2600</u>. These certifications will verify the Contractor has furnished materials that meet specified requirements.

Materials sampling, testing procedures and materials certification requirements must be included in the LPA procedures manual and followed on each project. Materials testing personnel must be properly certified.

See KDOT's "Standard Specifications for State Road and Bridge Construction", <u>Section 106</u> for information on QC/QA or Verification testing.

Materials testing personnel performing materials tests on Federal-aid projects must be witnessed by BCM personnel. Mass witnessing events take place in each KDOT District on a yearly basis. Most consultants already participate. It is the LPA's responsibility to contact the local KDOT construction office to inquire about mass witnessing events.

10.3.2.5.7 Final Closeout - Primary Responsibility – LPA

Once the project is substantially complete, the LPA will coordinate with the Contractor, the Inspector, and the PM to perform a walk-through of the project. Any corrective measures to be addressed by the Contractor will be noted and a schedule to complete the corrective work (if any) will be determined. Once the LPA is satisfied that the project is complete, they will begin the final closeout process for the project.

The LPA is responsible for creating and submitting the following documents to the PM:

- Notice of Acceptance. This document notifies the Contractor that the LPA has accepted the project and that the Contractor is relieved of their responsibility for maintenance of barricades, lights and watchmen, and will no longer be required to perform additional work or maintenance.
- **DBE Summary Report**. This document shows that the DBE goals were met.
- Construction Summary Document. This document certifies that all project activities (PE, CE, and Construction) have been completed in accordance with federal and state laws and regulations as well as KDOT's "Construction Manual" and/or the LPA's approved procedures manual. The document will include a final statement that the Contractor has provided appropriate materials certification for the project.
- Final Acceptance of Federal-Aid Project Constructed Under Exempt Oversight. This document states the LPA's acceptance of the project and compliance with all federal regulations and material certifications.
- State of Kansas Project Completion Certificate (PR-77). This document certifies that all tax-exempt materials purchased under the exemption certificate were incorporated into the project.
- **Paid Items List by Work Type**. This document provides a final breakdown of costs by work type (i.e., roadway, surfacing, bridges, traffic signals, and common items) with the participating and non-

participating items clearly separated. It must include all costs associated with the project regardless of funding source.

• Final Invoice.

Examples of these documents are provided in *Appendix A* below.

10.3.2.5.8 Project Audit - Primary Responsibility – KDOT

Costs shall be audited according to the "The Single Audit Standards" set forth in <u>Federal O.M.B. Circular A-133</u>, "Audits of States, Local Governments, and Non-Profit Organizations" and in the "Code of Federal Regulations", Title <u>49 CFR 18</u>.

10.3.2.5.9 Final Payment - Primary Responsibility – KDOT

After the audit is completed, KDOT will submit the final claim to FHWA. After FHWA concurs with the final claim, KDOT will provide the LPA with a "Final Statement of Costs" for final settlement.

10.3.2.5.10 <u>Retention of Records – Primary Responsibility – LPA</u>

The LPA is responsible for retaining all project records for five years after the project's completion.

<u>Appendix A – Index of Items</u>

Documentation of Public Meeting

Authority to Bid

Checklist for Authority to Award

Authority to Award Contract Document from LPA

Letting Summary Document

KDOT BLP LPA Approved Sub-Contractors Form

Example of DBE Commitment Letter

EEO and DBE Required Documentation

Final Transmittal

Notice of Acceptance

DBE Summary Report

Construction Summary Document

Final Acceptance of Federal-Aid Project Constructed Under Exempt Oversight

Paid Items List by Work Type

Final Invoice

Project Completion Certificate (PR-77)

Documentation of Public Meeting

KDOT Project No	
LPA Project No.:	
Project Name:	
Project Limits:	
Meeting Location	
Meeting Date and	Time:
Translation Servio	ces: Yes No If yes, what language(s):
Presenters:	
Total number of c	ttendees (approx.):
Contents/Attachm	ients:
A. Comment B. Notices	response matrix eet(s) s received

Authority to Bid

Dwight D. Eisenhower State Office Buildin 700 S.W. Harrison Street Topeka, KS 66603-3745	g Department of Transportation Bureau of Local Projects	Phone: 785-296-386 Fax: 785-296-69 kdot#publicinfo@ks.gr http://www.ksdot.o
Julie L. Lorenz, Secretary Michael J. Stringer, P.E., Chief		Laura Kelly, Govern
June 25, 2019		
Re: 23 U-2334-01		
SRTS Phase 2		
City of Lawrence		
Douglas County		
Mr. Dave Cronin. P.E.		
City Engineer City of Lawrence		
6 East 6 th Street		
Lawrence, Kansas 66044		
Dear Mr. Cronin,		
6/21/2019 and the Federal Hig	Estimate (PS&E) for the reference hway Administration has approve hereby authorized to take bids for	ed the obligation of funds for this
submit a copy of the low bidde DBE's acceptance of his subco	ed and the City has identified the er's bidding documents, a copy of ontract offer to this office. Upon d the contract and issue the Notic	f the bid tabs, and a copy of the satisfactory review by KDOT, we
Sincerely,		
Bill Legge, P.E. Local Road Engineer		
BL		
c: Jake Baldwin, P.E., City o file	of Lawrence	

Checklist for Authority to Award

	ITEMS REQUIRED FOR AUTHORITY TO AWARD
PROJE	CT LETTING DATE
	All required provisions that were included during PS&E review are still included?
	LPA reviewed bids for collusion (memo)?
	Submit bid tabs to Construction & Materials for review.
	Receive comments from Construction & Materials regarding review of bid tabs?
	04-26-90: Declaration - Limitations on Use of Federal Funds signed by Contractor?
	08-10-66: Certification – Non-collusion and History of Debarment signed by Contractor?
	07-19-80: DBE Contract Goals completed and signed by Contractor?
	DBE Commitment Letter signed by DBE?
	01-01-11: Tax Clearance Certificate completed and signed by Contractor?
	Does listed DBE participation equal or exceed the established DBE goals?
	Are listed DBE contractors on the approved DBE list?
Revise	d 10/2014 Checklist for Authority to Award

Authority to Award Contract Document from LPA

December 1, 2014
John Smith
Bureau of Local Projects
Kansas Department of Transportation Dwight D. Eisenhower State Office Building
700 SW Harrison Street, 3 rd Floor
Topeka, KS 66603-3745
XX N-XXX-01 GEOMETRIC IMPROVEMENTS - CITY OF ANYTOWN
Dear Mr. Smith:
Please find the attached AUTHORITY TO AWARD CONTRACT COMMITMENT OF FEDERA L/STATE FUNDS
that has been executed by the City of Anytown. You will also find a copy of the bid tabulation resulting
from the letting on November 30, 2014, and the required contract documents indicating Contractor
compliance with the following items:
 Certification – Non-collusion and History of Debarment;
 Declaration - Limitations on use of Federal Funds for Lobbying;
 Certification - Contractual Services with a Current Legislator or a Current Legislator's Firm;
 DBE Contract Goals (DBEs are on the approved KDOT list); and
 DBE subcontractor commitments.
Acme Construction Company, the design consultant, and Anytown staff have reviewed the detailed bid
tabulations and compared them with other recent bid lettings on similar projects in the City of Anytown.
We find no evidence of contractor collusion or bid rigging.
We are requesting KDOT authorization, so we can award this contract by December 15, 2014. Please
return the fully executed copy to my attention.
If you have any questions or comments, please contact meas seen as possible
If you have any questions or comments, please contact me as soon as possible.
Sincerely,
Sally Jones, PE
Project Manager, Anytown, KS
Attachment
Attachment

Authority to Award Contract Document from LPA (Continued)

Project No.: XX N-XXXX- STP-NXXX()	01 (Project Name) (01)		
WHEREAS bids we performance of work covered	re received at Anytown ed by plans on the abov		
WHEREAS the bidd	er and low bid or bids o	on work covered on thi	s project were:
CONTRACTOR	ADDRESS	TYPE OF WORK	AMOUNT
Acme Construction Co.	P.O. Box 1234 Anytown, KS 66xxx	Grading, Surfacing, Seeding	\$1,000,000.00
Recommended for Approva	l:	Date	
City of Anywhere Title			
		Date	
Catherine M. Patrick, P.E. State Transportation Engine	eer		

Letting Summary Document

L	ETTING SUMMARY DOCUMENT November 6, 2013
	-01 / HSIP-N054(501) ulevard & Lackman Road Traffic Improvements
Johnson County	
MEMORANDUM TO: BU	ureau Chief - Bureau of Local Projects
dates indicated in accord	nced project was advertised in publications listed below on the lance with Section 102.01 KDOT's Standard Specification for construction, current edition.
Publication Legal Record	Date Advertised 7/23/13, 7/30/13, 8/6/13, 8/13/13, 8/20/13
Kansas Register	7/25/13, 8/1/13, 8/8/13, 8/15/13, 8/22/13
for State Road and Bridg	prequalified in accordance with KDOT's Standard Specification ge Construction, current edition, and KDOT's Construction en from KDOT's list of pre-qualified contractors.
	nts that were used fulfilled federal and state requirements in res and with the City of Lenexa's Project Procedures Manual.
Hall, 12350 W. 87 th Stree	the proposals took place August 29, 2013 at Lenexa City et Parkway, Lenexa, Kansas in accordance with State Law h the City of Lenexa's Project Procedures Manual.
	est responsible and qualified bidder was accepted and on October 15, 2013 in accordance with the City of Lenexa's ual.
Tim Green, PE City Engineer	
	/ 12350 West 87th Street Parkway / Lenexa, Kansas 66215-2882 Lenexa / P.O. Box 14888 / Lenexa, Kansas 66285-4888

KDOT-BLP LPA Approved Sub-Contractors Form

		CMS Contract Number:	
County:		KDOT Project No.	
	1	_PA City:	
	Prime Co	ontractor:	
The LPA hereby	y Certifies that (Check one):	
contain the Provisions, Opportunity The require	aided contracts. These con applicable Required Contra Specific Equal Employme (Responsibilities, and FHV ments of this Contract Pro ly incorporated into such s	ract applicable Required Co nt Equal Employment Opp VA-1273. Requirements. The app vision will Contract provision will I	ontract Provisions, Specific
Sub-Contractor	DBE (Y or N)	Line Items Responsible for	Total Amount
		TOTAL	- \$
		PA APPROVAL	
		, (Day)	20 (Year)
	By		

Example of DBE Commitment Letter

City offices of the set of the se
CITY MANAGER PO Box 708 66044-0708 785-832-3000 www.lawrenceks.org FAX 785-832-3405
July 31, 2019 Traffic Management LLC 2378 Cheyenne Rd
Holton, KS 66436 Safe Routes to School Phase 2 23 U-2334-01 DBE SUBCONTRACT
Your firm received a subcontractor commitment in this letting. The information is listed below. If this agrees with your records and if you are ready, willing, and able to perform this work please sign and date below and fax, email, or mail a copy within 48 hours.
SUBCONTRACTPROJECTCONTRACTORAMOUNTLINE ITEMS23 U-2334-01Traffic Management\$6,450.002
If you have any questions, please contact this office at (785) 832-3196. Sincerely,
Jake Baldwin, PE Senior Project Engineer
Signature: Amy Bunks Date: 11.31/2019
We are committed to providing excellent city services that enhance the quality of life for the Lawrence Community

EEO and DBE Required Documentation

Document	Frequency	Who Retains
EEO Policy – prime & subs	Calendar Year	Office of Civil Rights Compliance
DBE Certification	At Contract Award Only 60% of DBE supplier value can be used 	DBEs and Office of Civil Rights Compliance
Wage Rate Interviews	One employee/company/quarter	LPA
Certified Payroll	Weekly (within 7 calendar days of pay)	Contractor and LPA
Bulletin Board	Details posters required for project	Contractor
Bulletin Board Check Sheet	Maintain during project	LPA
Form 239* Field Construction Administrator's Report	When Project is 20-30% complete	LPA and BLP
<u>Form 270</u> (or similar from LPA) DBE Payment Affidavit	End of Project	LPA, BLP and Office of Civil Rights Compliance
Form 294* Additional Classification Request Form	As needed for job classes not in contract	Contractor, LPA, BLP and BOCM
Form 1003 Federal-Aid Highway Construction Employment Data Summary	Monthly (contracts over \$500,000)	Contractor and BLP
<u>Form 1008</u> Monthly DBE Payment Affidavit	Monthly - One per each DBE subcontractor (by the 5 th for preceding month)	BLP
Form 1010LP Certificate of Subcontractor Work and Payment	Monthly (within 15 calendar days after making subcontractor payment)	Contractor, LPA and BLP
Form 1014* Commercially Useful Function	One for Each DBE per project (when DBE's work is 1/3 to 1/2 complete)	LPA and BLP
Form 1391 (FHWA) Federal-Aid Highway Construction Contractors Annual EEO Report *Request from the BIP	Annually to Civil Rights Compliance (last full pay period of July)	Office of Civil Rights Compliance

*Request from the BLP PM

Final Transmittal



Notice of Acceptance

CITY OF OLATHE
NOTICE OF ACCEPTANCE
X OF CONTRACT OF PORTION OF CONTRACT
TO Gunter Construction Company CONTRACTOR
CITY OLATHE PROJECT NO. 3-C-002-11 KDOT PN 46 N-0568-01
TYPE OR NET 0.122 KILOMETERS BRIDGE NO. Turn Lane Addition LENGTH OF PROJECT: GROSS 0.122 KILOMETERS
PREVIOUS SURFACE TYPE NEW SURFACE TYPE Asphalt
DATE CONTRACTOR COMPLETED WORK <u>November 14, 2013</u>
contractual requirements and the following conditions:
RECOMMENDED BY: APPROVED BY
RECOMMENDED BY: APPROVED BY Clipped Broject Engineer City Engineer
There at the Chipp
The clip D- Project Engineer City Engineer
The state of the portion of the contract and to the conditions stated above.
This is to affirm that I agree to the acceptance of the portion of the contract and to the conditions stated above.
This is to affirm that I agree to the acceptance of the portion of the contract and to the conditions stated above. CONTRACTOR SIGNED BY NOTE: Contractor's signature required only for acceptance of portion of contract. This form to be mailed

DBE Summary Report

City of Olathe DBE SUMMARY REPORT MEMORANDUM TO: Bureau Chief, Bureau of Local Projects Date: December 5, 2013 Project: 151st & Mahaffie Geometric Improvements Johnson County KDOT Project No. 46N-0568-01 Contractor: Gunter Construction Company Contract Amount: <u>\$153,086.98</u> DBE SUBCONTRACT ITEMS SUBCONTRACTOR AMOUNT PERFORMED \$13,000 7 Tenoch Construction, Inc Project Enginee

Construction Summary Document

CONSTRUCTION SUMMARY DOCUMENT DATE: December 1, 2014
DATE. December 1, 2014
Project: XYZ Geometric Improvements Project Location: Nowhere County
Location. <u>Howner County</u>
MEMORANDUM TO: Bureau Chief, Bureau of Local Projects
MEMORANDON 10. Bureau Ginei, Bureau of Local Hojeets
Notice to proceed on the referenced project(s) was issued to <u>Acme Construction Company</u>
Contractor(s) on April 1, 2014 in accordance with Section 101.43, KDOT's Standard Specification fo State Road and Bridge Construction, current edition.
Contract administration was completed in accordance with the requirements referenced in
Section 15.3.2.5, LPA Project Development Manual.
Notice of Acceptance of the contracted work was issued to the contractor(s) in accordance
with Section 105.17, KDOT's Standard Specification for State Road and Bridge Construction, current edition.
cutton.
Materials Certification was completed in accordance with Section 2.07, KDOT's Constructio
Manual, current edition, and Section 2600, KDOT's Standard Specification for State Road and Bridge Construction, current edition.
Preliminary Engineering (PE) performed by the PE consultant was accepted as complete.
Construction Engineering (CE) performed by the CE consultant was accepted as
complete.
City Engineer

Final Acceptance of Federal-Aid Project Constructed Under Exempt Oversight

СП	Y OF OLATHE
	E OF FEDERAL – AID PROJECTS INDER EXEMPT OVERSIGHT
KDOT PROJECT NO. <u>46-N-0568-01</u>	CITY: OLATHE
DESCRIPTION OF IMPROVEMENT AS PROGR removal of existing curbs and pavement, storm sew related work and appurtenances necessary to comple	AMMED: <u>400 L.F. of turn lane addition with demolition and</u> er modifications, traffic signal modifications, and all other ete the project.
CONTRACTOR'S NAME:	CONTRACT AMOUNT:
Gunter Construction Company	\$153,086.98
C	
FINAL INSPECTION:	BY:
APPROVAL:	BY:Celia J. Duran, P.E City Engineer DATE:
· · · · ·	
í	
2/10/98	City Form V-2698
2/10/98	City Form V-2698

Paid Items List by Work Type

Item Name ng and Grubbing Tation and Grading Tation and Concrete Tation and Concrete Concrete Type B Concrete Pavement Type B Concrete Pavement Type B Concrete Sidewalk (5' width) ADA Handicap Sidewalk Ramp art Curb Inlet T5" RCP 6" HDPE Underdrain T5" RCP G" HDPE Underdrain Tation Cold Plastic Line Tation Cold Plastic Line Tation White Cold Plastic Line Tation White Cold Plastic Line Tation White Cold Plastic Line Tation Tat	Qty 1 245 93 371 429 359 259 408 233 1 1 1 9 193	Unit L.S. C.Y. S.Y. S.Y. S.Y. S.Y. S.Y. S.Y. L.F. S.Y. ea. ea. ea. ea.	Unit Price 1,145.00 100.00 50.00 11.00 25.00 71.00 83.00 17.00 30.00 120.00 120.00	Total Price 1,145.00 24,500.00 4,650.00 4,081.00 6,006.00 8,975.00 18,389.00 4,897.00 6,936.00	Unit Price	Total Price
ation and Grading and Gutter Removal and Disposal ralk Removal and Disposal gregate Base (OP-Modified AB-3) 2" Superpave Asphaltic Concrete 8" Superpave Asphaltic Concrete Base 10" Concrete Pavement Type B Concrete Curb & Gutter 4" Concrete Sidewalk (5' width) ADA Handicap Sidewalk Ramp ert Curb Inlet to Junction Box 4*x4" Curb Inlet 15" RCP 6" HOPE Underdrain id Yellow Cold Plastic Line id White Cold Plastic Lane Line id White Cold Plastic L-Walk Line	245 93 371 429 359 259 408 233 1 1 1 1 9 9	C.Y. S.Y. S.Y. S.Y. S.Y. S.Y. S.Y. L.F. S.Y. ea. ea.	100.00 50.00 11.00 25.00 71.00 83.00 17.00 30.00	24,500.00 4,650.00 6,006.00 8,975.00 18,389.00 4,897.00 6,936.00		
alk Removal and Disposal gregate Base (OP-Modified AB-3) 2" Superpave Asphaltic Concrete 6" Superpave Asphaltic Concrete Base 10" Concrete Pavement Type B Concrete Curb & Gutter 4" Concrete Sidewalk (5' width) ADA Handicap Sidewalk (5' width) ADA Handicap Sidewalk Ramp eff Curb Inlet to Junction Box 4'x4" Curb Inlet 15" RCP 6" HDPE Underdrain id Yellow Cold Plastic Line id White Cold Plastic Lane Line id White Cold Plastic X-Walk Line	371 429 359 259 59 408 233 1 1 9 193	S.Y. S.Y. S.Y. S.Y. S.Y. L.F. S.Y. ea. ea.	11.00 14.00 25.00 71.00 83.00 17.00 30.00	4,081.00 6,006.00 8,975.00 18,389.00 4,897.00 6,936.00		
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id White Cold Plastic X-Walk Line	80 424	L.F.	2.50	200.00		
tod White Cold Plactic Extension Line	223	L.F.	3.50	780.50		
blid Yellow Cold Plastic Extension Line	415	L.F.	1.25	518.75 161.00		
blid White Cold Plastic Stop Line	45	L.F.	14.00	630.00		
Arrow White Cold Plastic	5	ea.	185.00	925.00		
Thru Arrow White Cold Plastic	3	ea.	275.00	825.00		
Signal Reconstruction (Mahaffie Street)	1	L.S.	35,950.00	35,950.00		
zation	1					
Mobilization	1	L.S.	1,000.00	1,000.00		
	1	L.S.	1,162.04	1,162.04		
ge to Traffic Signal Cabinet	1	LS	(2,816.31)	(2,816.31)		
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Final Invoice (Page 1 of 2)

PROJECT NAME: 151st & Mahaffie Turn Lane ENGINEER: Schlagel and Associates			,		DATE: 11/13/2 CONTRACTOR: (OL 2.0098 struction	12
				Unit	Contract	Units	Value of Work	%
ltem#	ltem	Quanity	Unit	Cost	Price	to Date	Completed	Complet
1	Clearing and Grubbing	1	LS	1,145.00	\$1,145.00	1	\$1,145.00	100%
2	Excavation and Grading	245	CY	100.00	\$24,500.00	245	\$24,500.00	100%
з	Curb and Gutter Removal and Disposal	93	SY	50.00	\$4,650.00	93	\$4,650.00	100%
4	Sidewalk Removal and Disposal	371	SY	11.00	\$4,081.00	371	\$4,081.00	100%
5*	6" Aggregate Base (OP-Modified AB-3)	429	SY	14.00	\$6,006.00	429	\$6,006.00	100%
6*	Install 2" Superpave Asphaltic Concrete	359	SY	25.00	\$8,975.00	359	\$8,975.00	100%
7*	Install 8" Superpave Asphaltic Base	259	SY	71.00	\$18,389.00	259	\$18,389.00	100%
8*	Install 10" Concrete Pavement	59	SY	83.00	\$4,897.00	59	\$4,897.00	100%
9	Install Type B Concrete Curb & Gutter	408	LF	17.00	\$6,936.00	408	\$6,936.00	100%
10	Install 4" Concrete Sidewalk (5' width)	233	SY	30.00	\$6,990.00	233	\$6,990.00	100%
11	Install ADA Handicap Sidewalk Ramp	1	Ea	1,390.00	\$1,390.00	1	\$1,390.00	100%
12	Convert Curb Inlet to Junction Box	1	Ea	2,250.00	\$2,250.00	1	\$2,250.00	100%
13	Install 4'x4' Curb Inlet	1	Ea	3,000.00	\$3,000.00	1	\$3,000.00	100%
14	Install 15" RCP	9	LF	100.00	\$900.00	9	\$900.00	100%
15	Install 6" HDPE Underdrain	193	LF	15.00	\$2,895.00	193	\$2,895.00	100%
16*	4" Solid Yellow Cold Plastic Line	80	LF	2.50	\$200.00	80	\$200.00	100%
17	6" Solid White Cold Plastic Lane Line	424	LF	3.50	\$1,484.00	424		100%
18	6" Solid White Cold Plastic X-Walk Line	223	LF	3.50	\$780.50	223	•	100%
19	6" Dotted White Cold Plastic Extension Line	415	LF	1.25	\$518.75	415		100%
20	12" Solid Yellow Cold Plastic Diagonal Line	23	LF	7.00	\$161.00	23		100%
21*	24" Solid White Cold Plastic Stop Line	45	LF	14.00	\$630.00	45	\$630.00	100%
22	Turn Arrow White Cold Plastic	5	Ea	185.00	\$925.00	5	-	100%
23	Turn/Thru Arrow White Cold Plastic	3	Ea	275.00	\$825.00	3		100%
24	Word Symbol White Cold Plastic	1	Ea	250.00	\$250.00	1		100%
25	Permanent Street Signing	2	Ea	300.00	\$600.00	2	\$600.00	100%
26	Traffic Signal Reconstruction (Mahaffie St)	. 1	LS	35,950.00	\$35,950.00	1		100%
27*	Sod - (Tall Turf Type Fescue)	518	SY	6.00	\$3,108.00	518		100%
28	Erosino Control and SWPPP Compliance	1	LS	600.00	\$600.00	1		100%
29	Mobilization	1	LS	6,305.00	\$6,305.00	1	-	100%
30	DBE Mobilization	1	LS	1,000.00	\$1,000.00	1		100%
31	Temporary Traffic Control	1	LS	3,450.00	\$3,450.00	- 1	• • • • • • • • • • • • • • • •	100%
32	Construction Staking	1	LS		\$950.00	- 1		100%
33*	Additional Milling	1	LS	1,162.04	\$1,162.04	- 1		100%
34**	Damage to Traffic Signal Cabinet	1	LS	(2,816.31)	(\$2,816.31)		(\$2,816.31)	100%

Unused Materials on Hand

\$0.00

Final Invoice (Page 2 of 2)

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			Unit	Contract	Units	Value of Work	%
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REVISED CO	NTRACT AMOUNT			\$153,086.98			
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Total	Value of Work and Unused Material	on Hand				\$153,086.98	
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	Previous Retainage			\$7,639.77			
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	unt Remaining on Contract			\$0.00			
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Office of Policy & Research Kansas Department of Revenue 915 SW Harrison Street Topeka, KS 66612-1588			Phone: (785) 296-3498 Fax: (785) 296-7928
PRC	STATE OF K DJECT COMPLETIC		£
TO: <u>City of Olathe</u>	Name of Entity to whom Project E	vemption Certificate was Issue	4
100 0 0 0 0	, ,	-	
100 E Santa Fe Street	Olathe City	Kansas State	66061 Zip Code
Gunter Construction Compar	ny		
Contractor/Subcontractor 510 Southwest Boulevard, S	te A		
Contractor/Subcontractor	te A		
Contractor/Subcontractor 510 Southwest Boulevard, S P.O. Box and/or Street Number Kansas City, KS 66103	te A and Name	<u>12/6/13</u> Date	
Contractor/Subcontractor 510 Southwest Boulevard, S P.O. Box and/or Street Number Kansas City, KS 66103 City, State Zip Multiple of Authoriz Signature and Title of Authoriz	te A and Name <u>President</u> ed Representative <u>INSTRUCTI</u>	Date	
Contractor/Subcontractor 510 Southwest Boulevard, Si P.O. Box and/or Street Number Kansas City, KS 66103 City, State Zip Machine Contractor Signature and Title of Authoriz Upon completion of a tax exen was performed. A copy of this Research, 915 SW Harrison St	te A and Name <u>Arepresentative</u>	Date ONS nish this certification to the tax o the Kansas Department of Re . All invoices must be retaine	venue, Office of Policy &

11.0 Construction Engineering (CE) Consultant Selection and Agreement

The LPA may engage consultants to perform CE and related services for a federal-aid and/or state-aid funded project. The LPA must follow the selection and contracting provisions of the 23 CFR 172. This regulation requires engineering and design contracts utilizing federal/state funds be awarded based on fair and open competitive negotiations, demonstrated competence and professional qualifications, known as Qualification Based Selection (QBS).

It is necessary for any personnel providing inspection, sampling or testing duties to be CIT certified in the required classifications. (CIT Certified inspection is not required for Surface Preservation (SP) category projects in the CCLIP Program.) The LPA will make their consultant selection from the approved list of consultants furnished by KDOT.

11.1 Inspection Options

The LPA has two options for the inspection of federal or state funded projects:

- 1. Inspect the project utilizing certified LPA staff. (To supplement staff, option 2.b. must be used.)
- 2. Request the services of a certified consultant.
 - a. Select the consultant from the approved As-Needed list of consultants furnished by KDOT.
 - b. Utilize the QBS process. Refer to *Section 3.0 PE Consultant Selection and Agreement* in this Manual for the QBS process. BLP will send the packets outlining the necessary requirements and procedures to the LPA **six months** prior to the scheduled letting.

11.2 Funding Options

The LPA may fund the CE inspection entirely with LPA funds (non-participating) or utilize matching funds (participating).

11.2.1 Participating

BLP will provide the LPA with working days or a calendar completion date to be used to submit a proposal and estimate to BLP for approval. Refer to *Section 3.0 PE Consultant Selection and Agreement* in this Manual for agreement procedures.

Supplemental agreements are changes to the original agreement. They may be issued at the request of any party and are subject to approval by the same methods as the original agreement. A CE supplemental agreement may be requested either during construction or after the construction is complete. Any supplemental request will be submitted to the KDOT field office with written documentation and a detailed estimate that provides justification for extra compensation or time extension. Approval by the local KDOT construction office and the LPA is necessary before the request is reviewed and approved by the KDOT District Engineer and the KDOT Bureau of Construction and Materials. Once the supplemental agreement request has the necessary approvals, BLP will create the supplemental agreement. BLP will distribute the supplemental agreement to the necessary parties for signatures. Originals are to be returned to KDOT for further processing.

11.2.1.1 LPA Inspection

The LPA will submit a CE proposal, a detailed estimate, and a list of KDOT certified inspectors to BLP. If the LPA needs additional inspection staff, the LPA may enter into a contract with a qualified sub-consultant. The LPA will pay the sub-consultant directly. To receive reimbursement, the sub-consultant must have been selected utilizing the QBS selection process. The sub-consultant must be a part of the CE proposal and estimate approved by BLP.

11.2.1.2 Consultant Inspection

Consultants on the As-Needed list have been selected using the QBS process.

Refer to Section 3.0 PE Consultant Selection and Agreement in this Manual for details on the QBS process.

The working days or a calendar completion date are provided to the Consultant by the LPA. The Consultant provides the LPA with a proposal, detailed estimate of costs, and a list of KDOT certified inspectors. A Consultant may enter into an independent agreement with a sub-consultant if additional certified inspection staff is necessary. The LPA will forward the negotiated proposal and original detailed estimate to BLP for review. On approval, BLP will initiate a three-party agreement. Refer to *Section 3.0 PE Consultant Selection and Agreement* in this Manual for agreement procedures.

11.2.2 Non-Participating

The LPA has the option not to use Federal or State-Aid in the inspection. This option allows the LPA to utilize LPA forces and/or consultant services without utilizing the QBS process. If consultant services are used, a KDOT qualified consultant must be selected due to the use of federal or state-aid in the construction. All inspector and inspection guidelines need to be followed as if the CE is a participating item. BLP will execute a contract with the LPA and Consultant. The LPA will pay the Consultant directly with no reimbursement coming from KDOT.

11.3 Conflict of Interest

Federal and state laws and regulations provide for the protection of the public's interest against fraud, waste, and abuse of government resources. All consulting engineering firms employed on projects administered by BLP are expected to exercise judgment and perform their duties in a way that supports the applicable policies and practices of the State of Kansas and the Local Public Authority. Any situation that would compromise the ability of the consulting firm or its employee(s) ability to act on behalf of KDOT or the LPA is considered a Conflict of Interest.

Conduct or situations that are conflicts of interest include, but are not limited to, the following:

- A consulting firm or its employee has, either directly or indirectly, a financial or personal interest in a contractor, subcontractor, or material supplier connected to the project.
- A consulting firm or its employee unduly influencing decisions on scope changes, design changes, construction revisions, contract change orders and other related issues to minimize or ignore design errors or to positively benefit the firm.

All consultant contracts for Construction Engineering Inspection Services for work to be paid partially or wholly with federal or state dollars will include the following language under the Obligations of the Consultant:

- 1) The Consultant warrants they have no public or private interest, and shall not acquire directly or indirectly any such interest, which would conflict in any manner with the performance of the work under this Agreement. Specifically, the Consultant is prohibited from performing contractor construction staking or any other work that is the construction Contractor's responsibility on this Project.
- 2) The Consultant will not, without written permission from KDOT, engage the services of any person(s) in the employment of KDOT for any work required by the terms of this Agreement.

In addition, every contract for engineering services will include a Code of Conduct Certification, known as Special Attachment No. 2, signed by the Consultant, Deputy Secretary of Transportation and State Transportation Engineer, and the LPA. By signing this form, the three parties certify that there was no undue influence of any party regarding executing or carrying out the agreement.

The Consultant is responsible to identify and disclose any actual or potential Conflict of Interest on a project.

In addition to these requirements, the consulting firm and its employees shall comply with all other professional responsibilities, code of ethics, or law applicable to services being provided.

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12.0 Construction & Oversight Responsibilities (KDOT Let)

After project letting, control for construction oversight is provided by the KDOT Area office. BLP encourages the LPA to keep in contact with the Area office for regular project updates. This section provides guidance for contract and design issues that may be encountered.

12.1 <u>Construction</u>

These projects are KDOT administered, therefore the LPA will not coordinate or direct any work. Any work performed by the Contractor without KDOT Area Engineer approval may be non-participating and result in additional costs to the LPA. Any work performed by the Contractor, outside the scope of the project, will not be permitted as a part of the project or construction contract. The LPA should reference the KDOT Construction Manual for project construction related items. The manual is available through the <u>KDOT</u> <u>Construction & Materials website</u>.

12.1.1 Change Orders

Conditions in the field will not necessarily be those anticipated when the plans and proposal were prepared. Omissions, errors, and plan changes may require correction before the project is finaled.

Situations will arise when the quantities indicated in the plans are considerably more or less than those provided in the contract. The Project Inspector shall check the applicable Specifications to determine how changes in contract quantities are handled. See *Section 104 "Scope of Work"* of the Standard Specifications for the change order process.

All changes in unit prices and additional items of work (whether participating or non-participating) must be made valid through a Change Order to the Contract.

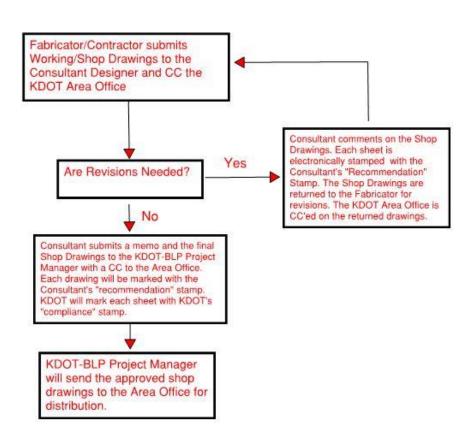
Generation and approval of all change orders associated with the project is the responsibility of the KDOT Area office. LPAs are encouraged to request information regarding change orders prior to KDOT approval. Refer to the <u>KDOT Construction Manual</u> for additional information.

12.2 <u>Working/Shop Drawings</u>

Refer to Section 101 of the Standard Specifications for State Road & Bridge Construction for the definition of Working/Shop Drawings.

12.2.1 Road

Refer to the KDOT Road Design Manual (available on the <u>KART website</u>) for specific instructions regarding working/shop drawings. The Contractor/Fabricator shall submit electronic working/shop drawings to the Design Consultant for review. The KDOT Area Office will be CC'ed on this submittal. Recommended (final) working/shop drawing submittals shall include distribution email addresses for the Contractor and fabricator. Working/Shop drawings will be stamped by the designer as recommended for approval (each sheet will be stamped), with or without corrections and forwarded to BLP. BLP will process and distribute recommended shop drawings. Any intermediate submittals will not be submitted to BLP.



BLP Shop Drawing Procedure

12.2.2 Bridge

Any drawings for structures need to be submitted to the PM following procedures outlined in the Road section above.

The following information is a guide summarizing requirements for the post letting review of various fabrication, and field plan document requirements. The Specification, General Notes, Engineering Seal requirements and risk categories which are to be considered are grouped together to ease locating the various pieces of information. The Design Engineer must consider some or all of these, based on the type of project, when estimating the Construction Services portion of the Contract.

Some of the information within this section is familiar to the designer, such as shop plan, falsework plan and shoring plan review. Other information has been implemented by KDOT to provide oversight during the construction process. It is KDOT's intent to assign higher risk operations a more stringent review and oversight process. As such, the highest level of risk occurs when a project has construction operations over either railroad or vehicular traffic. The designer is encouraged to review the specifications associated with the type of work being performed, and choose the appropriate General Note thus indicating to the Contractor the level of risk and therefore, oversight which can be expected.

Plan Review Summary Information										
Plan Type	rmation	# of Plan Copies	Lead Time Required	Note	Numbers to Review	P.E. Stamp Required	Plan Review	Recommend Approval		
Share Data "	Consultant	*	Project Specific	6000 6210 6010 6220 6100 6410 6110 6420 6111 6600 6115 6620 6120 6625	6200 6210 6220 6410	No	No	* *		
Shop Details	In House	*	Project 6111 Specific 6120		6111 Project 6115 pecific 6120	6111 t 6115 c ⁶¹²⁰	6111 ct 6115 ic ⁶¹²⁰	100000000000000000000000000000000000000	No	Yes
Shoring	Standard	*	3 weeks	30 35 300		Yes	Yes	Yes		
	Railroad Category (1)	*	6 weeks 4 weeks	1030 4100 4105 4115 4120	4130 4140 7800 7810	Yes	Yes	Yes		
Falsework	Category (2)	*	4 weeks	4100 4106 4110 4120	4130 4140 7800 7820	Yes	Distric	t Policy		
	Category A	(1)		3000	6521	No	No	No		
Erection	Category B	*	4 weeks	3010 5210 6420	6522 6523	Yes	Yes	Yes		
	Category C	*	4 weeks	6520	8700	Yes	Yes	Yes		
	Category A	(1)		3000	6521	No	No	No		
Demolition	Category B	*	4 weeks	3010 5210 6420	8700 9001 9002	No	No	No		
	Category C	*	4 weeks	6520	9002	Yes	Yes	Yes		
Pour Sequence	Discuss Possible Changes at Precon Meeting	*	2 Weeks	4140 4200 5100 5110 7000 7210 7215	7300 7301 7310 7311 7312 7320 7330 7400	No	Yes	Yes		

Based on project complexity, the specifications and the notes listed in this document may only be the base of what is required.

* Electronic submittal conforming to 105.10 (b) of the Standard Sepcifications for State Road and Bridge Construction

* * General Compliance Stamp

12.3 <u>Revised Plans</u>

Revised plans, if required, are to follow procedures in *Section 2.7.3* of the KDOT Road Design Manual available on the <u>KART website</u>. The KDOT Construction Office and/or BLP will determine when revised plans are necessary. The Contractor, KDOT Area Office, BLP and LPA should be involved in all plan changes. Revised sheets shall be submitted electronically by the designer to BLP.

12.4 Project Acceptance and Closeout

The KDOT Area Office will perform final acceptance and generate all forms required for closing out project documentation after project construction is completed.

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13.0 City Connecting Link Improvement Program (CCLIP)

The City Connecting Link Improvement Program (CCLIP) is a federal and state-funded program that provides funds to cities to address deficiencies or improve a City Connecting Link on the State Highway System. A City Connecting Link is defined as any routing of the State Highway System that is located within the corporate limits of a City. All City Connecting Links are eligible under this program except those on the Interstate System and fully controlled access sections on the Freeway System.

13.1 Program Categories

The City Connecting Link Improvement Program consists of three program categories that targets specific types of improvements:

13.1.1 Surface Preservation (SP)

(Previously known as KLINK.) This fund category is intended to address deficiencies in or extend the life of the driving surface. Project scopes may consist of overlay, mill and overlay, pavement patching, joint repair, seals, or similar surface maintenance work. Parking lanes may be included. Construction of ADA curb ramps, as required by Federal Regulation and Department of Justice guidance, will be included regardless of the funding source. Bridge improvements, curb and gutter repair or replacement, drainage improvements, construction or improvement of sidewalks beyond the ADA ramps, or geometric improvements may be included in a project but shall not be eligible for program funding.

13.1.2 Pavement Restoration (PR)

This fund category is intended to address deficiencies in the road surface that are too extensive or expensive to be addressed by the measures under the **SP** category. Actions under this category could include full-depth pavement replacement of the entire driving surface or extensive pavement rehabilitation. Other related improvements, such as curb and gutter repair/replacement, storm sewer, parking lanes, or sidewalk construction may be included in the scope of projects and are eligible for the funding. Typically, **PR** projects will not include any modification of the roadway geometrics other than restoring appropriate cross slope.

13.1.3 Geometric Improvement (GI)

This category is intended to address a safety, capacity, or operational need that can be addressed by changing the roadway geometrics. Examples of projects under this category include, but are not limited to, intersection reconstruction to reduce encroachments over the curb from off-tracking of turning trucks; addition or extension of turn lanes; widening of the roadway to accommodate larger vehicles; or sight distance improvements.

13.2 Funding and Participating Phases

Projects in the **SP** category will be funded solely with state and city funds. Funding for the Construction and Construction Engineering work phases in the **PR** and **GI** categories will be a combination of city, state, and/or federal funds. All other work phases in the **PR** and **GI** categories will be paid with city and/or state funds.

KDOT will determine the total amount and source of funds to be made available for the CCLIP annually as well as the amount and fund source(s) for each project awarded. In addition, KDOT will determine the distribution of the available funds among the three program categories based on the applications received and a prioritized selection process.

The maximum dollars that KDOT will provide for an individual project in each program category is as follows:

- 1. Surface Preservation: \$300,000
- 2. Pavement Restoration: \$1,000,000
- 3. Geometric Improvement: \$1,000,000

Required matching funds for projects in all program categories are based on population in accordance with the following table:

	Participation Ratio			
	Minimum	Maximum		
City Population	City	State/Federal		
Group	%	%		
0-2,499	0	100		
2,500 - 4,999	5	95		
5,000 - 24,999	10	90		
25,000 - 49,999	15	85		
50,000 - 99,999	20	80		
100,000 -	25	75		

The most recent <u>U.S. Census data</u> will be used for accurate population data. The City Connecting Link Resolutions & Agreements (found at <u>https://dmsweb.ksdot.org/resolutions/</u>) and <u>KDOT City Maps</u> will be used for determining eligible route limits.

Eligible costs for **SP** category projects include only construction and construction engineering (CE). Eligible costs for **PR** projects include preliminary engineering (PE), construction, and construction engineering (CE). Eligible costs for **GI** projects include preliminary engineering (PE), utility adjustments, right-of-way acquisition, construction, and construction engineering (CE).

13.3 Project Application, Selection, and Programming

BLP will solicit applications for CCLIP projects for each year in which funding is available. Prior to the submission of applications, cities are encouraged to review the proposed projects with the KDOT District or Area Engineer. Governmental bodies within urbanized areas (populations greater than 50,000) should also submit copies of their applications to their Metropolitan Planning Organization's (MPO's).

The *City Connecting Links "CCLIP" Program* application form (KDOT Form 1330) (*Figure 13.1*) must be completed in its entirety, including required attachments, and sent to BLP prior to the required deadline. The deadline is stated in the most recent BLP Memo announcing the CCLIP program for a given fiscal year. Contact the BLP for the latest memo and the most current version of the application. Each City is allowed one project per fiscal year in which funding is available.

NOTE: All forms for the CCLIP Program can be downloaded from the BLP website located at <u>http://www.ksdot.org/burLocalProj/default.asp</u>.

The application package may be submitted electronically (preferred method) or on 8 ½ X 11 paper.

The KDOT District Engineer (or their designated representative) and BLP staff will meet with City representatives and review each application. This meeting will be the opportunity for City representatives to identify the project's importance and to provide sound reasons for funding priority. All new or changed applications will be visited on site; repeat applications may be discussed by phone.

BLP and the District Engineers will determine the appropriate program category for each project and prioritize project applications within each District. BLP will develop a statewide program based on this prioritization and input from all District Engineers. BLP will submit this list of projects to the Secretary for approval.

The project selections will typically be announced prior to the end of the calendar year in which the application process occurred. Each City that applies will receive notification stating whether or not their project has been selected. Refer to *Section 2.0 Programming* for programming information and procedures.

When a project is selected for funding, KDOT and the LPA will enter into an agreement that outlines the requirements and responsibilities for the project.

13.4 **Project Responsibilities**

13.4.1 KDOT

The Director of the Division of Engineering and Design and the Chief of BLP are responsible for administering the CCLIP Program and recommending the project list to the Secretary for approval.

The Director of the Division of Engineering and Design is responsible for project administration following the announcement of the selected projects in the Highway Improvement Program. The Chief of BLP is responsible for project development and coordination with the cities, including plan review and coordination with the District Engineers, and preparation of agreements for all projects under this program.

All contracts for the construction of projects in the Pavement Restoration (PR) and Geometric Improvement (GI) categories shall be let by KDOT unless the City is authorized to administer projects through the KDOT LPA Administered project development procedures (see *Section 10.0.*) KDOT will be responsible for making payments to the Contractor. KDOT will request the City's matching funds at the time of letting. BLP will review the plans for compliance with applicable procedures and requirements.

The Director of the Division of Operations is responsible for the final acceptance of the construction activities.

BLP is responsible for the oversight of agreements for the construction of the approved CCLIP-SP projects, reviewing Request for Reimbursement documentation and making payment to the city.

13.4.2 <u>LPA</u>

Cities are responsible for plan development, right of way acquisition, and utility relocations on all CCLIP projects.

Cities participating in the CCLIP-SP program will be responsible for all preliminary engineering (including plan preparation), letting a contract for construction (after it has been reviewed by BLP) and construction administration per the Project Agreement. Cities that hire consulting firms for professional services are responsible for ensuring that the firm is aware and familiar with the guidelines and all related correspondence as needed throughout the Project. The City/Consultant is solely responsible for the development and accuracy of the plans, specifications and estimating for the CCLIP-SP Project. Plans and specifications must be approved by BLP prior to the city advertising the project for bids.

Upon receipt, sign and seal two original copies of the City/State Agreement and return them to BLP for execution. After the Agreement is fully executed, BLP will transmit an original copy to the City for its records. The City is responsible for providing the Consultant (if applicable) a copy of the City/State Agreement after it is executed. A City/State Agreement must be fully executed before the Project is to be let to contract, otherwise, loss of funding could occur.

The City will coordinate with the KDOT District for final acceptance of the construction activities on all CCLIP-SP projects. The City will be responsible for all payments to the contractor; KDOT will reimburse eligible costs upon completion of the project and receipt of appropriate documentation. The City is responsible for the storage and archival of all CCLIP-SP Project plans, files, and contract documents.

13.5 Project Development

13.5.1 Pavement Restoration (PR) and Geometric Improvement (GI)

Project Development for CCLIP-PR and CCLIP-GI projects follow the procedures outlined in *Section 5.0 Plan Development* for a KDOT-let project.

13.5.2 Surface Preservation (SP)

Project development for CCLIP-SP project is outlined below and are unique in that these projects are locally let projects utilizing state funds.

13.5.2.1 Plan Requirements

The City/Designer will prepare "Field Check" plans to be submitted electronically to BLP for review. BLP and the Area Engineer will review plans for compliance with CCLIP-SP requirements and general conformance to KDOT plan format. The plans will be returned to the City/Designer with comments from KDOT.

The City/Designer will modify the plans as recommended by KDOT and submit Final Check plans to BLP for review. After the final check review has been completed by BLP, the City will be notified electronically that the plans are acceptable. At this time, the City will submit a Construction Cost Estimate, a proposal, and the Final Set of plans to BLP with the title sheet sealed, signed, and dated by a Professional Engineer licensed in the state of Kansas for the Plans, Specifications, and Estimate (PS&E) process.

The Construction Cost Estimate (See *Figure 13.2*) should be developed using a spreadsheet. The <u>estimated</u> number of working days required to complete the Project will be indicated at the bottom of the page.

13.5.2.1.1 <u>Temporary Traffic Control and Detour Routes</u>

Projects that do not require phasing may be bid as Lump Sum. It is recommended that on projects that require phasing or relocation of temporary traffic control devices a Lump Sum bid not be used. This determination can be made between KDOT and the City at the field check stage.

Traffic Control within the city during the CCLIP-SP project construction is a major concern on all CCLIP-SP Projects. Most CCLIP-SP Projects route traffic through construction and do not require a detour. **Project** requests for an official detour route are to be reviewed by the KDOT District and Area Engineers and submitted to BLP at least three (3) months before the anticipated letting date to allow KDOT enough time for review and approval of detour signing and surfacing needs. If the detour extends outside the city

limits, the County Engineer must concur with the detour plan **in writing.** A copy of said letter of concurrence must then be submitted to KDOT's District, Area, and BLP offices.

13.5.2.1.2 ADA/PROWAG Accessibility

It is essential that LPAs maintain consistency with ADA in the public rights-of-way when designing public transportation projects.

By Federal Regulation as stated in 28 CFR 35.151(i): Altered streets, roads, and highways must contain curb ramps where there are curbs or other barriers to a pedestrian walkway (i.e., sidewalk).

By Federal Regulation as stated in 28 CFR 35.151(b): Alteration is a change that affects or could affect the usability of all or part of a facility (such as a road).

Additional guidance provided by the Department of Justice (DOJ) clearly defines alterations and action that must be taken due to alterations. That guidance is summarized in the following charts.

Joint Technical Assistance

Distinguishes alterations from maintenance based on the type of road treatment:

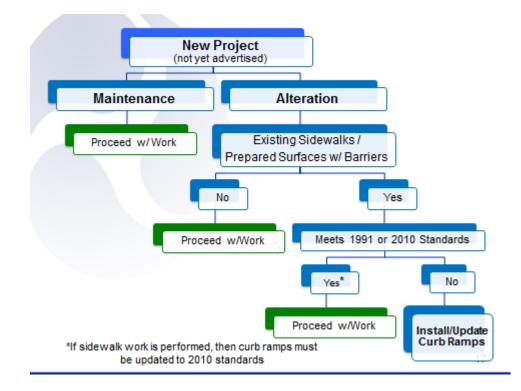
MAINTENANCE

Chip Seals Crack Filling and Sealing Diamond Grinding Dowel Bar Retrofit Fog Seals Joint Crack Seals Joint repairs Pavement Patching Scrub Sealing Slurry Seals Spot High-Friction Treatments Surface Sealing

TERATIO

Addition of New Layer of Asphalt Cape Seals Hot In-Place Recycling Microsurfacing / Thin-Lift Overlay Mill & Fill / Mill & Overlay New Construction Open-graded Surface Course Rehabilitation and Reconstruction

12



The Temporary Traffic Control plan must also consider the ability of pedestrians, both able and disabled, to travel safely through or around the construction site. The City shall provide a temporary traffic control plan within the design plans, which includes the City's plan for handling multi-modal traffic during construction, including detour routes and road closings, if necessary, and installation of alternate or temporary pedestrian accessible paths to pedestrian facilities in the public Right of Way within the Project Limits. The City's temporary traffic control plan must be in conformity with the latest version of the Manual on Uniform Traffic Control Devices (MUTCD), as adopted by the Secretary, with Proposed Right-of-Way Accessibility Guidelines (PROWAG), and with FHWA rules, regulations, and guidance pertaining to the same.

13.5.2.1.3 Traffic Signal and Crosswalk Review

The City is responsible for making sure that all existing traffic signals and crosswalks on the city connecting link are justified and warranted. If questions arise about the condition, placement, marking, or warrant of a traffic signal or crosswalk, the City/consultant shall investigate said traffic signal or crosswalk and consult with BLP. Only existing pavement markings for existing school crossings or crosswalks along the connecting link may be replaced in their previous location without preapproval from KDOT.

13.5.2.1.4 Video Detection Systems (VDS)

Video Detection Systems are participating project components in the CCLIP-SP Program when cost savings will result from the installation of such a system in lieu of in-pavement traffic signal loops.

If modifications to the original VDS plan are required during construction, an "As-Built" plan set should be provided to BLP once the Project has been completed and accepted by the KDOT Area Office.

13.5.2.1.5 Pavement Markings

The City/Consultant is solely responsible for using and referencing the Manual on Uniform Traffic Control Devices (MUTCD) throughout the development of the plans.

Pavement marking bid items must be bid individually-**not by Lump Sum.** Use proper methods in computing pavement marking quantities.

Long-life pavement marking materials are recommended when the ADT is equal to or greater than 5000 vehicles per day or when the speed limit is equal to or greater than 45mph. KDOT recommends the use of epoxy pavement markings on all concrete pavements.

13.5.2.2 Participating and Non-Participating Items

KDOT will participate in the cost of Construction and Construction Engineering as stated in *Section 13.2* of this Manual. Preliminary Engineering/Design and Utility Adjustment costs are not eligible for reimbursement in the CCLIP-SP Program; however, KDOT is required by the Kansas Legislature to obtain the total actual cost incurred in all phases of the project. The City is required to report the actual costs of Preliminary Engineering/Design and Utility adjustments to KDOT on the form shown in *Figure 13.11*. Items eligible for CCLIP-SP funding include manhole adjustments, milling, overlays, aggregate or paved shoulders (if already existing), concrete pavement, thin bonded concrete overlays, joint repair, slurry seals, bituminous seals, ultra-thin bonded overlay, concrete and asphalt pavement patching, subgrade improvement, reconstruction, traffic control, transporting of salvageable material (millings), striping, pedestrian access to the State Highway as required by Federal Regulation, traffic signal loops on the state highway and that portion of the traffic signal loops that lie inside the return on side streets, and pavement marking on the connecting link. Video-detection systems are participating, except on side streets. They require pre-approval, as well as additional details, and a bill of materials to be included in the final design plans. Resurfacing work is participating out to the curb returns on side streets.

Items typically non-eligible for CCLIP-SP funding include but are not limited to: bridge deck patching, utility adjustments, curb and gutter, overlay of curb and gutter, adjustment or reestablishment of survey markers, drainage appurtenances, driveways, entrances, sidewalks, construction warranties, traffic loop construction outside the return on a side street, video detection on side streets, and construction outside of the curb and gutter. Work performed outside the Project limits on side streets, or outside the city limits, items with unit price changes from the let price (other than items with price adjustment specification in the bid documents) and any other items deemed non-eligible by the Secretary are non-eligible for state participation.

13.5.2.3 Proposal Requirements

1. Cover Page

Items that should be included on the Cover Page:

- a. Include the full Project Number, (i.e. (US)75-63 U-1672-01)
- b. Include the Program Fiscal Year (i.e. FY 2015)
- c. Include the Project Location (e.g. US-24 (Main St.), from Iowa St. to Kansas St.)
- d. Include the Project Scope (e.g. 3" mill and 3" BM-2 overlay)
- e. Include the name of the City
- f. Include the name of the County
- g. Current date of printing
- h. Preliminary Specifications Book should be stamped "Preliminary"
- i. Be consistent in the use of English units.
- 1. Contract Documents
- 2. Performance Bond
- 3. Payment Bond
- 4. Notice to Proceed
- 5. Technical Specifications
- 6. The City may use their project specifications, however, the most recent version of KDOT's <u>Standard Specifications for State Road and Bridge Construction</u> is recommended for use. Designers that use KDOT specifications are encouraged to incorporate applicable KDOT standard drawings into the final design plans. The Project specifications should include the following:
 - a. Include all applicable special provisions.
- 7. The City is responsible for the custody and archival of the project specifications and official contract documents.

13.5.2.4 Advertisement, Letting, and Award

The final design plans and Proposal shall be sealed, signed, and dated by a Professional Engineer licensed in the State of Kansas. After review of the final design plans, specifications, and cost estimate, BLP will issue an electronic "Authority to Advertise." **Projects let to contract without the "Authority to Advertise" are subject to loss of funding.** (See *Figure 13.3* for an example.)

A recommended minimum advertisement period is **30 days**. If circumstances require a shorter advertising period, it must be approved by BLP prior to advertisement. Advertisements should be included in publications such as local, area and regional newspapers to promote optimum competition.

The City will administer the Project Letting. When the bids have been opened and read, the City will forward to BLP:

- 1. Notification of the letting date
 - 2. The Bid Tabs
 - 3. The Contract Specification
 - 4. The name of the recommended Contractor
 - 5. The Contract Amount
 - 6. Certified statement of a review of the bid documents indicating no evidence of fraud or collusion. (See *Figure 13.4* for an example.)

BLP will issue an "Authority to Award" the contract. (See *Figure 13.5* for an example.) The City shall also submit electronically to BLP copies of the "Notice of Award" and the signed contract documents. **Contracts signed prior to receiving the "Authority to Award" from BLP are subject to loss of funding.**

Note: These documents are required for reimbursement to the City and eventual audit of the project.

After the "Authority to Award" has been issued by BLP, the City must complete a "REQUEST FOR PROJECT EXEMPTION CERTIFICATE (Department of Revenue Form PR-76)," which can be filled out electronically at the following address: <u>https://ksrevenue.org/pdf/pr76.pdf</u> or if the City has attained "agent" status through KDOR, they must submit a copy of the document granting them "agent" status and a copy of the Form PR-76 issued by the City to the Contractor.

A publication containing more information about this form and the process can be found at: <u>https://www.ksrevenue.org/pdf/pub1520.pdf</u> or you may contact the Kansas Department of Revenue (KDOR) directly at the address shown below.

Kansas Department of Revenue (KDOR) Docking State Office Building 915 SW Harrison Street Topeka, KS 66612-1588 Website: <u>https://www.ksrevenue.org</u> Email: kdor_tac@ks.gov

After the City completes the form, they need to return it to the address stated above. KDOR will assign the City an Exemption Certificate Number specific to a given CCLIP-SP Project. A copy of the document from KDOR assigning the Exemption Certificate Number must be provided to BLP prior to issuing the "Notice to Proceed."

After the Project is completed, the City shall complete the "State of Kansas Project Completion Certification" (KDOR Form PR-77) (See *Figure 13.6* for an example.), obtained from the KDOR, which certifies that all materials purchased by the Contractor were exempt from payment of sales tax. This form must be delivered

to the City and kept on file for 5 years after project finalization. A copy of the Form PR-77 must also be provided to BLP before reimbursement can be processed.

13.5.2.5 <u>Construction</u>

After the "Notice of Award," the signed contract documents, and the completed KDOR Form PR-76 have been received from the City, BLP will create a contract and enter an "Actual Start Date" in CMS and notify the Area Engineer of the letting date, the name of the Contractor and the contract amount. The Area Engineer will issue a "Notice of Actual Start Date" to the City. The City may then issue a formal "Notice to Proceed" to the contractor. BLP and the Area Engineer should be sent a copy of the "Notice to Proceed." BLP will enter the date of the Notice to Proceed into CMS.

The City is responsible for keeping track of the **total actual costs** of construction, construction engineering (CE), preliminary engineering (PE, i.e. design costs), and utility adjustments incurred during the Project. **Reimbursement for construction and CE shall be based upon the contract bid prices.** Only **actual costs incurred** by the Contractor will be eligible for reimbursement. In addition, the City is responsible for keeping track of all eligible/participating and non-eligible/non-participating costs for the Project.

The City is also responsible for having their CCLIP-SP Project quality inspected, and the materials tested in accordance with the Project specifications.

13.5.2.6 Request for Reimbursement

See *Figure 13.7* for a complete checklist of the items required for reimbursement.

13.5.2.6.1 <u>Certification of Completion</u>

After the Project has been completed and the Contractor has been paid in full by the City, the City shall transmit to the KDOT Area Engineer a "Certification of Completion" letter notifying KDOT that all work has been completed in substantial compliance with the final design plans, specifications, and contract documents. This letter shall contain verification from a licensed Professional Engineer employed by the City that the Project was completed in compliance with the City/State Agreement, final design plans, specifications, and contract documents. A copy of this letter shall be sent to BLP as a part of the detailed billing for reimbursement (see Section 13.6.2.6.3 below).

13.5.2.6.2 Notice of Acceptance

The Area Engineer will perform a final inspection to verify that the Project was constructed within substantial compliance of the final design plans, specifications, and cost estimate. The Area Engineer will then acknowledge and concur with the "Notice of Acceptance" (KDOT Form 232) that the project was built to substantial compliance with the approved plans, contract and specifications. The Area Engineer will notify BLP and the City of concurrence, and then the City can submit detailed billing to BLP for reimbursement of the Secretary's share in the eligible construction and CE items of the Project.

13.5.2.6.3 Detailed Billing for Reimbursement

The City shall submit a Detailed Billing for reimbursement of construction and construction engineering (CE) expenses to BLP. A copy of this information shall also be submitted to the Area Engineer for their information. The City should **label each detail** with the City Name, Project Number, Fiscal Year, and date. **All Project costs must be tabulated, verified, neatly summarized, and accounted for**.

Complete and submit the <u>CCLIP-SP Project Reimbursement Summary Form (KDOT Form 1328)</u> (*Figure 13.8*) to BLP along with the detailed billing.

13.5.2.6.3.1 Final Summary of Actual Construction expenses

This is a recapitulation of actual bid items, quantities, unit costs, and total amount. Separate the eligible/participating items and costs and the non-eligible/non-participating costs. (See *Figure 13.9* for an example.)

13.5.2.6.3.2 Final Summary of Actual Construction Engineering (CE) Expenses

1. Lump Sum Method

CE services can be paid for by Lump Sum if it has been agreed upon by the City and the Consultant. If this method is used, a copy of the CE Agreement between the City and Consultant must be submitted to KDOT for payment.

2. Itemized Method

This method is an accounting of all construction engineering (CE) costs. Separate all eligible/participating CE costs and the non-eligible/non-participating CE costs in a spreadsheet. (See *Figure 13.10* for an example)

State the entity responsible for performing the CE-the City or their Consultant (include the name of the Consultant).

The following items should be included on the DETAIL SHEET:

- a. The employee's name.
- b. The employee's job title and inspection certification number (if certified).
- c. The employee's total number of hours worked.
- d. The employee's pay rate.
- e. The extension showing the total contract amount (hours times pay rate).
- f. Overhead and the rate that is charged.
- g. Net Fee.
- h. Direct Expenses.
- i. Total requested (using spreadsheet formulas).
- j. Check the spreadsheet formulas.

13.5.2.6.3.3 Actual PE (Design) / Utility Cost Summary Form (KDOT Form 1327)

Complete and submit the <u>Actual PE-Utility Cost Summary Form (KDOT Form 1327)</u> (See *Figure 13.11*) to BLP. These costs are non-participating, but are required by the Kansas legislature to obtain the total **actual** cost incurred for the Project.

13.5.2.7 Project Audit/Final Voucher

BLP will indicate that the Project is ready for audit as soon as the audit voucher is completed. Normally, final payment to the city will be completed within two (2) weeks. The City shall make its records and books available to representatives of the Secretary for audit for a period of five (5) years after date of final payment for reimbursement. If any such audits reveal payments have been made with state funds by the City for items considered non-participating, the City shall promptly reimburse the Secretary for such items upon notification by the Secretary.

<u>Appendix A – List of Figures</u>

- Figure 13.1 CCLIP Application Form (1330)
- Figure 13.2 Construction Cost Estimate
- Figure 13.3 CCLIP-SP Authority to Advertise Project
- **Figure 13.4 CCLIP-SP Project Certification of Bid Documents**
- Figure 13.5 CCLIP-SP Authority to Award Project
- **Figure 13.6 Project Completion Certificate**
- **Figure 13.7 Items Required for Reimbursement**
- Figure 13.8 CCLIP-SP Reimbursement Summary
- **Figure 13.9 Final Construction Cost Expenses**
- Figure 13.10 Summary of Actual CE Expenses
- Figure 13.11 Actual PE-Utility Cost Summary

KANSAS DEPARTMENT OF TRANSPORTATION - BUREAU OF LOCAL PROJECTS

CITY CONNECTING LINK IMPROVEMENT PROGRAM (CCLIP) APPLICATION

Program Category:	Surface Preservation (SP)	
Program Fiscal Year:	2020	
Submittal Date:	3/7/2016	

Name of City:	Emerald
County of Project Location:	Johnson
Population of City:	2500
State Highway of Project:	K-123

Primary Contact Name and Title:	John Doe, City Engineer
Contact Address:	123 Acme Way, Emerald City, KS 65555
Phone:	(913) 555-1234
E-mail Address:	Jdoe@xyz.org

Project Location:

Improve K-999 from the W. city limits of Emerald City to the E. city limits of Emerald City.

Project Scope:

Milling and overlay.

Project Length: 3.142 miles

RR within 1/2 mile?	RR Company Name	No. of Tracks	Existing Crossing Protection
No			

Project Cost Estimate								
	Participating		Non-Participating		Total		Comments	
Preliminary Engineering (Design)		-	\$	35,000.00	\$	35,000.00		
CE (Inspection)	\$	56,000.00	\$	-	\$	56,000.00		
Right of Way		-	\$	-	\$	-		
Utility Adjustments	\$	-	\$	15,000.00	\$	15,000.00		
Construction Total	\$	375,000.00	\$	-	\$	375,000.00		
Milling	\$	50,000.00	\$	-	\$	50,000.00		
Surfacing (Asphalt)	\$	325,000.00	\$	-	\$	325,000.00		
			\$	-	\$	-		
			\$	-	\$	-		
			\$	-	\$	-		
			\$	-	\$	-		
	\$	-	\$	-	\$	-		
	\$	-	\$	-	\$	-		
Inflation Amount at 4.5% / year	\$	60,843.00	\$	7,058.00	\$	67,901.00		
Total Estimated Project Cost	\$	491,843.00	\$	57,058.00	\$	548,901.00		

Program Maximum:	\$ 300	,000.00	
Allowable Project Maximum:	\$ 315	,789.47	to not exceed Program Maximum
Local Share Percentage:	5%		KDOT Share Percentage: 95%

KANSAS DEPARTMENT OF TRANSPORTATION - BUREAU OF LOCAL PROJECTS

CITY CONNECTING LINK IMPROVEMENT PROGRAM (CCLIP) APPLICATION

Program Category:	Surface Preservation (SP)						
Program Fiscal Year:	1	2020					
Submittal Date:	3/	7/2016					
Local Match (5%))	\$	15	,789.47			
Local Match over the Max		\$	176	,053.53			
Non-Participating		\$	57	,058.00			
Total Local Share		\$	248	,901.00			
Total Requested from KDOT	\$	300	,000.00				

Coordination Information:

Describe any known KDOT or other projects that may need coordination: None.

Has the proposed project been discussed or reviewed by any KDOT field staff? (Yes or No)YesIf so, who?John Smith

Attachment Checklist:

a. Project Map

b. Detailed cost estimate

Completed applications should be emailed to:

KDOT.LPePlans@ks.gov

To confirm receipt, if you do not receive an email response, please follow up with a call to the Bureau of Local

CCLIP-SP Resurfacing Construction Cost Estimate

Project No. (K) or (US) -__-_ U-___-01 FISCAL YEAR 20__ ___ Highway (_____ Street/Avenue), (from _____ Street to _____ Street) Date: _____

			KDOT	1	KDOT		NON
BID ITEM	UNIT				KDOT	NON-	
		PRICE	ELIGIBLE		ELIGIBLE	ELIGIBLE	ELIGIBLE
			QUANTITY		COST	QUANTITY	COST
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TOTALS:				\$			\$
GRAND TOTAL (Eli	aible±Nor	-Eliaible Item	ne).				\$
	gibie Tivol		io).				Ψ

Estimated Number of Working Days



Authority to Advertise CCLIP-SP Project

Date: x/xx/20xx

City of xxxxxx, KS

Project Number XX U-XXXX-01

The Bureau of Local Projects has approved the Plans, Specifications, and Estimate (PS&E) for the referenced project. Therefore the City is hereby authorized to take bids for contract after a minimum 30-day advertisement.

This is a City-administered project utilizing State funds.

After the lowest responsible bidder has been identified, the City is required to submit the project bid tabs and other project bidding documents to the Bureau of Local Projects (via email) for review. Upon satisfactory review, authorization from the Bureau of Local Projects will be given to the City via a separate document to award the contract and issue the Notice to Proceed.

(BLP Project Manager) (Title) (XXX) XXX-XXXX xxxx.xxxx@ks.gov

CCLIP-SP PROJECT CERTIFICATION OF BID DOCUMENTS

Project Number	
Project Description	
Date of Bid Letting	
Name of Recommended Contractor	
Amount of Recommended Bid	

The City of ______, KS certifies that the bid documents from all bidders have been reviewed and that the review indicates there is no evidence of fraud or collusion.

(City Official)

(Date)

Authority to Award CCLIP-SP Project Date: XX/XX/XXXX City of XXXXXXX, KS Project Number XX U-XXXX-01

The Bureau of Local Projects has reviewed the bid documents for the referenced project and concurs with the City's recommendation to award the contract to ______

After the contract has been approved by the City and signed by all parties, please forward an electronic copy of the signed contract and pertinent documents to the Bureau of Local Projects (via email). Also, please forward the below-listed milestone dates as they occur:

- Notice to Proceed Date
- Actual Work Start Date (may be the same as the Notice to Proceed)
- Date Work Completed
- Notice of Acceptance Date (from KDOT Area Engineer)

(BLP Project Manager) (Title) (XXX) XXX-XXXX xxxx.xxxx@ks.gov

cc: Mike Bowser, Lisa Roth

STATE OF KANSAS PROJECT COMPLETION CERTIFICATION

ТО:				
Name of Entity to whom Project Exemption Certificate was Issued				
Street Address	City	State	ZIP	
This is to certify, to the best of my	knowledge and belief, that all materia	als purchased under Exempt Department of Revenue, we		
building or project for which the ex or (cc), as amended.	emption was issued and were entitled			
Contractor / Subcontractor				
P.O. Box and/or Street Number a	nd Name			
Street Address	City	State	ZIP	
Signature and Title of Authorized	Representative	Date		

INSTRUCTIONS

Upon completion of a tax exempt project, the contractor must furnish this certification to the taxpayer for which the work was performed. A copy of this certification must also be forwarded to the Kansas Department of Revenue, Office of Policy and Research, 915 SW Harrison Street, Room 230, Topeka, Kansas 66612-1588. All invoices must be retained by the contractor for a period of five (5) years and are subject to audit by the Kansas Department of Revenue.

ITEMS REQUIRED FOR REIMBURSEMENT

PROJECT No.:

□ Notice of Award

□ Signed Contract Documents

□ "State of Kansas Project Completion Certification" (KDOR Form PR-77)

Certification of Completion Letter

□ Notice of Acceptance by KDOT Area

□ Final Summary of Construction Expenses

(separate participating from non-participating)

□ Change Orders

□ Final Summary of Actual CE Expenses

□ Actual PE (Design) / Utility Cost Summary Form

□ Project Reimbursement Summary Form

CCLIP-SP PROJECT REIMBURSEMENT SUMMARY FORM

1	for ACTUAL	Construction	and Constr	notion En	aimaamima	(CE)	Europage	$\bigcap_{m} (1, \cdot)$
t	for <u>ACTUAL</u>	Construction	and Constr	испон гл	gineering	(UE)	EXDENSES	OHIVI
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The City official must complete this form and submit it along with detailed billing to obtain reimbursement for the CCLIP-SP Project

Agreement Number	Date			
Project No.	Fiscal Year:			
Project Description				
Project Scope, i.e., Type of Work Done:				
Project Length (ft. or miles)	City Phone:			
City of, KS	Consultant Phone:			
1. Actual Project Eligible (participating) Construction Cost:				
2. Actual Project Non-Eligible (non-participating) Construction Cost:				
Total Actual Construction Cost:				
3. Actual Project Eligible (participating) Construction Engineering Cost:	(1) + (2)			
4. Actual Project Non-Eligible (non-participating) Construction Engineering Cost:				
Total Actual Construction Engineering Cost	:			
	(3) + (4)			
5. Gross Project Cost (Total Construction + Total Construction Engineering):	(1) + (2)+(3) + (4)			
6. LESS ADJUSTMENTS Item No. 2 abov	/e:			
Item No. 4 abov	/e:			
Subtotal:				
7. Has the contractor been paid in full? YES NO $(1) + (3)$				
8. Does the City desire reimbursement by Electronic Deposit? YES NO FEIN No.				

9. I hereby certify that the above bill is correct, and remains due and unpaid, and that the amount claimed therein is actually due according to the law (Claimant signature, position, and date required for payment).

CCLIP-SP Resurfacing Final Construction Cost Expenses

Project No. (K) or (US) -__-_ U-___-01 FISCAL YEAR 20__ ____ Highway (_____ Street/Avenue), (from _____ Street to _____ Street) Date: _____

UNIT BID KDOT **BID ITEM** UNIT KDOT NON-NON PRICE ELIGIBLE ELIGIBLE ELIGIBLE ELIGIBLE QUANTITY COST QUANTITY COST (Actual) (Actual) \$ TOTALS: \$ \$ GRAND TOTAL (Eligible+Non-Eligible Items):

Date: Final Summary of Construction Engineering (CE) Expenses (ACTUAL):

CCLIP-SP Resurfacing Project Project No. (US)XX-XX U-XXXX-01, FY 20____ US-24, (Tenth Street), from the SCL north to Elm Street.

Payroll Expenses:	PARTICI	PATING:		
Inspector Snyder, Bill Woods, Tiger Vermeil, Dick Nicklaus, Jack Sub-Total:	<u>Title</u> ENGR ET IV ET III ET II	<u>Rate</u> \$72.00 \$55.00 \$50.00 \$45.00	Hours 14.00 1.00 65.00 10.00	<u>Amount</u> \$1,008.00 \$55.00 \$3,250.00 \$450.00 \$4,763.00
Overhead:		141.04%		\$6,717.74
Materials Testing:				\$240.00
Additional Expenses (Non-Payroll): Supplies: Mileage (Personal Vehicles): Total PARTICIPATING CE Expenses:				\$7.40 \$59.78 \$81.60 \$7,106.52
				<u> </u>
Payroll Expenses:	NON-PA	RTICIPATING:		
<u>Inspector</u> Snyder, Bill Woods, Tiger Vermeil, Dick Nicklaus, Jack Sub-Total:	<u>Title</u> ENGR ET IV ET III ET II	<u>Rate</u> \$72.00 \$55.00 \$50.00 \$45.00	Hours 2.00 5.00 14.00 6.00	<u>Amount</u> \$144.00 \$275.00 \$700.00 \$270.00 \$1,389.00
Overhead:		141.04%		\$1,959.05
Materials Testing:				\$80.00
Additional Expenses (Non-Payroll): Supplies: Mileage (Personal Vehicles):				\$2.50 \$16.00 \$7.50
Total Non-Participating Expenses:				\$2,065.05
Grand Total CE Expense (Eligible+Non-Elig. CE)				\$9,171.56

ACTUAL PE-Utility Cost SUMMARY FORM

Please COMPLETE this form and return to BLP

The ACTUAL PE-Utility cost consists of **ALL** of the PE and Utility adjustment costs that have been incurred by the time the CCLIP-SP Project has been completed to substantial compliance and acknowledged by the KDOT Area Engineer.

City:	State Fiscal Year
CCLIP-SP Project Number	NOA Date
1. Total ACTUAL Preliminary E	ngineering (Design) Cost:
2. Total ACTUAL Utility Adjust	ment Cost:
3. Comments:	

I hereby certify that the above ACTUAL costs are correct to the best of my knowledge and belief.

Signature of City Official

Position

Date

For questions please contact the BLP Project manager at (785) 296-3861.

Note: This information is required by the Kansas Legislature.

14.0 Safety Programs

14.1 High Risk Rural Roads (HRRR)

The HRRR program is a portion of the Highway Safety Improvement Program (HSIP). The HSIP is a core Federal-aid program with the purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned roads and roads on tribal land. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads with a focus on performance. KDOT's HRRR program is focused on any rural major or minor collector or a rural local road with significant safety risks. Funds available will be used on projects targeted to improve safety through a variety of projects and programs.

14.1.1 Eligibility

All Counties are eligible for safety improvement projects. Eligible roadways include rural major collectors, rural minor collectors, and rural local roads. Eligible projects include strategies and activities that correct or improve a hazardous road location or feature or address a roadway safety problem. Proposed site-specific projects must be supported by crash data. Crash data is not required for systemic improvements. Proposed improvements should align with the goals of the <u>KDOT Strategic Highway Safety Plan</u> and preferably a Local Road Safety Plan (LRSP).

14.1.2 Project Limitations

Federal participation in the cost of projects will be 90-percent for most safety projects; certain safety project may be funded at 100-percent including signing, pavement markings, or rumble strips per 23 U.S.C. 120(c)(1). When the scope of a project is broader than just 23 U.S.C. 120(c)(1) listed elements, then the increased Federal share applies only for elements listed in 23 U.S.C. 120(c)(1) and the remaining elements of the project are only eligible for the standard (non-increased) Federal share.

14.1.3 Participating Phases

FHWA will participate in at least a portion of the cost of construction and construction engineering on all selected projects. If requested, funding for preliminary engineering will also be considered. Counties will be responsible for any costs associated with right of way acquisition or utility adjustments.

14.1.4 Application Procedure and Requirements

As a part of the call for projects, required forms will be included in the call for projects notification. Prior to the submission of applications, Counties are encouraged to review the proposed projects with the KDOT District or Area Engineer. The application package should be submitted electronically by or before the application deadline.

14.1.5 Project Selection and Programming

A committee comprised of individuals from BLP and other appropriate groups (such as the Kansas Association of Counties) will review and discuss the applications and selections, if any, will be made. Each County that applies will receive notification stating whether their project has been selected. Refer to *Section 2.0 Programing* of this Manual for programming information and procedures.

14.1.6 Project Responsibilities

14.1.6.1 <u>KDOT</u>

BLP is responsible for project development oversight and coordination with the Counties including plan review and preparation of agreements. Projects will be let to contract by KDOT.

The Director of the Division of Operations is responsible for the final acceptance of the construction activities.

14.1.6.2 <u>County</u>

Counties participating in the HRRR program will be responsible for plan preparation, either by their own engineering staff or a consultant. Counties that hire consulting firms for professional services are responsible for ensuring that the firm is aware and familiar with the guidelines and all related correspondence as needed throughout the Project. The County/Consultant is solely responsible for the development and accuracy of the plans, specifications and estimating for the project.

Upon receipt of the County/State Agreement, sign and seal two original copies of the County/State Agreement and return them to BLP for execution. After the Agreement is fully executed, BLP will transmit a copy to the County for its records.

14.1.7 Project Development

Project development will be coordinated through the assigned PM. See other sections of this Manual for Project Development requirements, especially *Section 5.0 Plan Development* of this Manual.

14.2 Local Road Safety Plans (LRSP)

Local Road Safety Plans are intended to build on the foundation established by the State Highway Safety Plan. Local Road Safety Plans provide a proactive, systematic approach to implement safety measures within local jurisdictions. A consultant will cooperate with local officials to develop a plan with the goal of increasing the overall safety for roadway users. The plan will include an analysis of crashes, safety strategies to address the crash types identified, and an implementation plan to accomplish safety enhancements. See *Figure 14-1* below for more information.

14.3 Traffic Engineering Assistance Program (TEAP)

The TEAP program provides funding for traffic safety studies and traffic engineering assistance at no cost to the LPA. Qualified on-call consultants are hired by KDOT to provide traffic engineering assistance to the LPAs. TEAP duties are then assigned to the on-call consultants based on area of expertise, familiarity with the area, or present work load.

14.3.1 Application & Study Selection Process

The TEAP annual cycle coincides with the Federal Fiscal Year (FFY). There is no formal ranking system in place, but fundamental safety considerations are a priority. Other considerations include the expected cost of the study, geographical location, and the number of studies that have been performed for the LPA recently. A <u>TEAP Application Form</u> can be found at the <u>KDOT Local Projects web page</u>.

As the studies are selected, the TEAP Administrator assigns the study to one of the TEAP consultants. The Consultant will review the application and discuss with the LPA the scope and process for conducting the study and provide a work order to BLP for approval. BLP will provide an approved work order to the Consultant.

14.3.2 Reports

The Consultant will provide a draft report for review. BLP will distribute the draft to other KDOT offices for their review as appropriate. After the review, comments on the draft will be returned to the Consultant for their incorporation into the final report. The consultant will distribute the final report to the LPA, BLP, and KDOT Area Engineer. BLP will distribute copies to FHWA, Traffic Engineering, and the KDOT library.

14.4 Practical Road Safety Assessments (PRSA)

A PRSA is an examination of a corridor by a multidisciplinary team to identify opportunities for improvements in safety for all road users. To initiate a PRSA contact BLP. See *Figure 14-2* below for the process.

14.5 Additional Resources

14.5.1 FHWA Safety

The focus of the FHWA Safety Program is to encourage safer roadways. The FHWA Office of Safety works with Federal, State and Local partners and others in the transportation community to develop and promote programs and technologies to improve the safety performance of our Nation's roadways to reduce the number of fatalities and injuries. Check their website for more information: <u>https://safety.fhwa.dot.gov/</u>

The <u>Manual for Selecting Safety Treatments on High Risk Rural Roads</u> – Provides information on improving safety on HRRRs including safety benefits, a cost-effectiveness comparison of safety treatments, applicability of treatment deployment, maintenance costs, and decision-making processes for selecting treatments.

14.5.2 Kansas Local Technical Assistance Program (LTAP)

Kansas (LTAP) is one of 58 centers across the United States that promotes the national LTAP mission of fostering a safe, efficient, and environmentally sound surface transportation system by improving skills and knowledge at local governments through training, technical assistance and technology transfer.

Kansas LTAP services are developed primarily for local public works agencies and their employees throughout Kansas, and to consultants and contractors who provide services for local governments. In operation since 1983, services include a newsletter, in-person and webinar training, video and publication resource library and technical assistance. For a fact sheet on Kansas LTAP services, along with other services of the University of Kansas Transportation Center, <u>click here</u>.

Kansas LTAP receives support from the Federal Highway Administration (FHWA), the Kansas Department of Transportation (KDOT), and the University of Kansas. Their website is: <u>http://kutc.ku.edu/ltap</u>

14.5.2.1 Local Field Liaison via LTAP

The Local Field Liaison program is designed to provide safety-related information, training, and support to LPAs. This onsite support is intended to identify safety needs on local roads; help determine countermeasures; and provide a reasonable level of assistance as needed in implementation of improvements including directing LPAs to possible sources of funding for improvements, though low-cost improvements are the primary focus. For more information, please see the LTAP website: http://kutc.ku.edu/ltap/local-field-liaison

14.5.3 Traffic Assistance Services for Kansas (TASK)

The TASK program provides quality training in highway safety. See their website for more information: https://conferences.k-state.edu/task/

Figure 14-1 Local Road Safety Plans



Figure 14-2

Practical Road Safety Assessment (PRSA) Process

- Receive written request from County
- Acknowledge receipt of request
- Research location
 - o Roadway type
 - o Crashes
 - o ADT
 - Entrances
- Determine appropriate team members
 - o FHWA: Safety Engineer
 - KDOT-District: Area Engineer
 - KDOT-BLP: Local Road Engineer for County
 - KDOT-BLP: Roadside Safety Lead
 - KDOT-BLP: PRSA Lead
 - County: Engineer/Road Supervisor/Director of Public Works (if no County Engineer, suggest that the County's engineering consultant participate)
 - o County Sheriff: Officer
 - Local user: school, business, property owner
 - Adjacent County: Engineer/Road Supervisor/Director of Public Works
 - KCA: Local Road Engineer
 - LTAP: Local Field Liaison (optional)
- Determine schedule for review
- Send out briefing packet with information available (and PRSA info for new members) and list of PRSA members with title and contact info
- Pre-review meeting (can be on-site before review)
- Review
 - o Prompt lists
 - Take photos
- Discuss
- Develop recommendations and prioritize
- Write report
- Send report to County
- Receive County plan of action
- Plan of action implemented

Aim of a PRSA is to answer the following questions:

- What elements of the road may present a safety concern: to what extent, to which road users, and under what circumstances?
- What opportunities exist to eliminate or mitigate identified safety concerns?
- Would this be a good candidate for an HRRR project?

15.0 Emergency Relief (ER) Procedures

The ER program is intended to provide funding to help with repairs on Federal-Aid eligible routes necessary due to a declared natural disaster or catastrophic failure from an external cause. The funding is available for federal aid routes that are <u>not</u> classified as local roads or rural minor collectors. In general, there needs to be a **minimum of \$700,000** estimated in total damage for the entire geographical area affected by the disaster for routes to be eligible for this program.

The <u>FHWA Emergency Relief Manual</u> (found at: <u>http://www.fhwa.dot.gov/reports/erm/er.pdf</u>) is the main reference document for the ER program.

Typically, most Federal-Aid eligible roadway infrastructure is not eligible for Federal Emergency Management Agency (FEMA) funding. Some items may be eligible such as traffic control or debris removal. The FEMA guidance can be found at <u>https://www.fema.gov/media-library/assets/documents/111781</u>.

15.1 Initial Procedures

KDOT and LPAs are empowered to begin emergency repairs immediately to restore essential traffic service and to prevent further damage to Federal-aid highway facilities. Properly documented eligible expenses will later be reimbursed based on availability of funding after the FHWA Division Administrator makes a finding that the disaster is eligible for ER funds.

15.1.1 Declaration Process

To be considered for ER funding, a disaster declaration/proclamation is required. This is done by either a major disaster declaration by the President under the Stafford Act (42 U.S.C. 5121 et seq.) or the Governor of the State issuing an emergency or disaster proclamation and FHWA concurring on the declaration.

Only those areas of the State included in the Governor's proclamation or the President's declaration may be considered for ER funding.

The State's Disaster Declaration page may be found at: <u>http://www.kansastag.gov/kdem.asp?PageID=434</u>.

15.1.2 Preliminary Assessments

When KDOT learns of a disaster event, efforts will be made to estimate the amount of damage that has occurred. To be eligible to utilize the ER program, \$700,000 in wide-spread damages to the state and local federal-aid road system need to be estimated. KDOT BLP will send a notification to affected LPAs asking for damage information on any eligible routes:

- Specific GPS location (decimal format)
- Map showing RS routes and limits of damage

- Location Description (begin and end description from nearest major intersection, etc.)
- Preliminary cost estimate
- Pictures of damage (before and after repairs)
- Point of Contact information
- Other information pertinent to describe the damage

BLP Project Managers will coordinate with LPAs to develop a list of possible sites to be funded. Individual locations should have a minimum of \$5,000 in estimated repair/replacement costs to be eligible.

The LPA should:

- 1. Review the Federal ER Manual.
- 2. Maintain records for any work performed at affected sites and include a separate file for each location which includes, but is not limited to:
 - i. Timesheets
 - ii. Equipment sheets
 - iii. Material receipts
 - iv. Pictures The LPA must document all damage with photographs of the damage before any repairs are made.
- 3. Create a summary spreadsheet with daily individual expenses separated by site.

15.2 Formal Assessment

When it becomes apparent the threshold will be met, KDOT and FHWA will visit the affected sites with the LPA to assess damages.

At the site, a formal estimate of damages will be made by completing the <u>Detailed Damage Inspection</u> <u>Report (DDIR, FHWA Form 1547)</u>. It is best to complete the entire form before leaving the site. The Mobile Solution for Assessment & Reporting (MSAR) software will be used if possible (by KDOT and FHWA).

15.2.1 Funding Determination

For detailed explanations of eligible repairs, see the <u>FHWA Emergency Relief Manual</u>.

15.2.1.1 Eligible

15.2.1.1.1 Emergency Repairs

The intent of emergency (temporary) repairs is to permit the immediate performance of work to restore essential traffic that cannot wait for a finding of eligibility and programming of a project. Emergency repair work should be accomplished in a manner that will reduce additional work required for permanent repairs. Emergency repairs are eligible for reimbursement at **100% of costs for the first 180 days after the disaster**.

15.2.1.1.2 <u>Permanent Repairs</u>

The ER program provides for the repair and restoration of highway facilities to pre-disaster conditions. Restoration in kind is therefore the predominant type of repair accomplished with ER funds. Any additional protective features or changes to the function or character from that of the pre-disaster facility are generally not eligible for ER funding unless justified based on economy of construction, prevention of future recurring damage, current design criteria, or technical feasibility. Permanent restoration work may not be eligible if performed prior to authorization by the FHWA. Work determined to be more economical or practical to complete in association with the emergency repairs may be eligible. Permanent repairs are reimbursed at 80% by the FHWA. Permanent restoration work not performed in conjunction with emergency repairs will be administered as a contracted Federal Aid Highway Project.

15.2.1.2 Ineligible

15.2.1.2.1 Debris Removal

Disaster-related debris removal that is eligible for FEMA funding is not eligible for ER funds.

15.2.1.2.2 <u>Heavy Maintenance</u>

Heavy maintenance operations are not eligible for reimbursement. Heavy maintenance is usually performed by highway agencies to repair damage normally expected from seasonal and occasionally unusual natural conditions or occurrences. It includes work at a site required as a direct result of a disaster that can reasonably be accommodated by KDOT or the LPA's maintenance, emergency, or contingency program. Examples include work necessary to repair minor damage due to eroded shoulders, filled ditches and culverts, pavement settlement, mud and debris deposits, slope sloughing, and slip-outs in cut or fill slopes.

It is not the intent of the ER program to relieve an agency of its maintenance responsibility simply because a storm of unusual character and extent causes serious damage to roads and to public and private property.

15.3 Project Generation

15.3.1 Project Programming

BLP will use the FHWA <u>DDIR</u> to program projects for sites approved for funding. Contracted projects will be let and administered by KDOT.

15.3.2 Agreements

KDOT will generate agreements for reimbursement of expenses or contracted projects according to the FHWA DDIR. The agreements will be sent out to the LPA for signature and are then to be returned to BLP for the appropriate KDOT signatures and routing.

15.3.3 Contract Requirements

Contracts for both permanent repair work and emergency repairs must incorporate all applicable federal requirements. As such, FHWA Form 1273 must be included in all contracts.

15.4 Project Finalization

15.4.1 Construction Site Visits

KDOT will visit the project sites as required by construction oversight procedures for KDOT-let projects. KDOT will visit the project sites after the work has been performed for a Force-account method project to verify that the work performed was in accordance with the FHWA <u>DDIR</u>.

15.4.2 Audit – Force Account Method

An audit of the claims submitted by the LPA will be performed to check compliance with the FHWA regulations. Employee hours (labor rates may include benefits), equipment logs, and material sheets are compared with pictures, work performed, and the project estimate.

15.4.3 Payments

KDOT will make appropriate payments for ER work after proper documentation has been received and reviewed.

15.4.4 Final Acceptance

KDOT will submit a completed Final Acceptance of Federal-Aid Project (KDOT Form 299) to the KDOT Bureau of Fiscal Services when final payment is complete.