

**PART 2**

Project Management

**Chapter 12**

Project Development

Locally Administered  
Projects (LAP) Manual

## Chapter 12

# PROJECT DEVELOPMENT

- 12.1 [Project Scoping](#)
- 12.2 [Plan Design](#)
- 12.3 [Project Budget, Schedule and Estimates](#)
- 12.4 [Public Involvement](#)
- 12.5 [Plan submittals](#)
- 12.6 [Advertisement and Award](#)

Project Development Checklists – included in each respective section

## INTRODUCTION

### Project Development Process

The Project Development Process guides Preliminary Engineering processes through the use of multi-disciplinary concurrent efforts. It establishes a framework for increased involvement of all stakeholders in the project development lifecycle and promotes coordination and communication, ultimately improving the efficiency and quality of the project.

Offered as a reference, the process documentation may be accessed at: [Project Development Process](#).

### Tiered Approach to Project Oversight

VDOT employs a tiered approach to project oversight. District Offices have delegated review and approval responsibilities for specific, lower-risk projects, identified as Tier 1 projects. Higher risk projects, identified as Tier 2 projects, require VDOT Central Office review and approval. Instructional and Informational Memorandum [IIM-LD-249](#) provides the implementation process for this tiered project oversight process.

With few exceptions, the tiered project oversight process is generally transparent to local governments administering federal or state-aid projects. Project oversight for locally administered projects will follow the same approval processes as VDOT-administered projects. Where clarification is necessary, the “VDOT Responsibilities” sections of this chapter will be identified as applying to Tier 1, Tier 2 or both processes.

Project Oversight Definitions:

Tier 1 projects typically are smaller projects with few risks, are non-federal oversight projects and have construction values of less than \$5 million. Tier 1 Locally

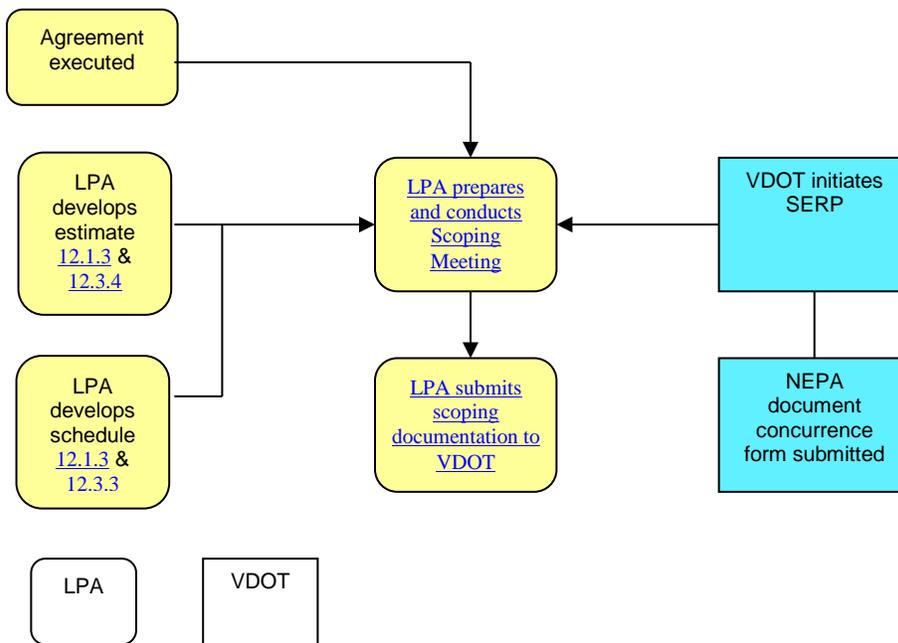
Administered projects will follow the applicable project review processes established by VDOT's districts in accordance with the guidance provided by [IIM-LD-249](#).

Tier 2 projects include large projects, design build projects and all federal oversight and non-federal oversight projects having construction values greater than \$5 million. Tier 2 Locally Administered projects will continue to have VDOT Central Office Division oversight and will follow the review processes outlined in this chapter.

#### Federal Oversight:

FHWA adopted new definitions and guidance for federal project oversight based on identifying Projects of Division Interest (PoDI) and Projects of Corporate Interest (PoCI). Information regarding this approach to project oversight is located in the FHWA document titled "[Projects of Division Interest \(PoDI\)/Projects of Corporate Interest \(PoCI\) Guidance](#)."

## 12.1 - PROJECT SCOPING



### 12.1 PROJECT SCOPING

This chapter includes the following topics

12.1.1 [Introduction](#)

12.1.2 [Applicability](#)

12.1.3 [Scoping Process Requirements](#)

12.1.4 [Tasks / Submittals / File Documentation](#)

12.1.5 [References](#)

[Project Scoping Checklist](#)

### 12.1.1 Introduction

Project Scoping defines the project. During the Scoping process, the LPA Project Manager (PM) will identify those elements of the project that influence how the project will be developed and delivered. The VDOT Project Coordinator is available to assist the LPA Project Manager to facilitate the Scoping process based on project complexity. This section outlines the processes and responsibilities associated with Project Scoping for federal-aid projects and can be used by the LPA to scope their state-aid projects. During project scoping, the project team, under the leadership of the LPA Project Manager, defines the physical limits and features of the project, establishes project estimate and schedule and determines the project oversight level in accordance with Chapter 9.4.2. In most cases, the scoping phase and report should be completed at the conclusion of the preliminary field inspection (PFI) milestone phase. If this duration exceeds twelve months from the execution of the project administration agreement, the LPA must obtain District concurrence.

[VDOT's Project Management Guide](#) can be used as a reference during the scoping process to assist the LPA in defining the activities that will be followed throughout the project lifecycle.

### 12.1.2 Applicability

- Project scoping and the processes outlined in the section are required for all federal-aid projects and those state-aid projects that are developed to qualify as federal-aid eligible.

<b><i>Project Scoping</i></b>		
<i>Federal-aid</i>	<i>State-aid / VDOT Maintained</i>	<i>State-aid / LPA Maintained</i>
X	*	*

\* Formal project scoping and coordination with VDOT is strongly encouraged for all projects. All projects must consider bicycle and pedestrian accommodations.

### 12.1.3 Scoping Process Requirements

Project scoping is the first major project development phase milestone. During this time the project purpose is refined and all available data related to the project such as old plans, aerial photos and any miscellaneous documents are gathered. The project team is also finalized. Each discipline represented on the project team investigates the proposed project from the perspective of their discipline. When applicable, the State Environmental Review Process (SERP) is completed at this time and those results are used as a basis for additional environmental work that may be necessary.

In accordance with Commonwealth Transportation Board's (CTB) Policy, approved



on March 18, 2004, all projects shall consider the accommodation of bicycles and pedestrians at the project scoping stage. Resources regarding Bicycle and Pedestrian Facilities can be accessed at

<http://www.virginiadot.org/programs/bk-default.asp> (Biking and Walking in Virginia).

Determination of bicycle and pedestrian accommodations must be documented in the project file.

When the scoping meeting is held, the LPA Project Manager and the project team will present and discuss their respective project findings. The LPA Project Manager will consolidate the findings into a scoping report for submission to the VDOT Project Coordinator for review.



***Scoping must be completed within twelve months of execution of the project administration agreement unless concurrence is otherwise obtained from the District. Failure to complete scoping***

***within this time frame may result in the reevaluation of the locality's ability to administer the project in accordance with the Project Administration Agreement.***



By the end of project scoping, **the LPA is required to prepare and submit to the Project Coordinator a scoping report** which includes the following:

- Define project limits
- Identify project issues that may affect project development, such as environmental issues, right of way, design, utilities, construction, etc.
- Finalize the purpose and need of the project
- Refine preliminary project estimates to develop the initial construction cost estimate
- Identify project risks (cost, quality, safety, etc.) and develop risk mitigation strategies
- Finalize a project schedule (each team milestone should be clarified with all team members and reviewed to ensure commitment). For additional information on project scheduling see Section [12.3.3](#).
- Determine the level of citizen involvement and level of NEPA documentation required
- Determination of Bicycle – Pedestrian Accommodations in accordance with CTB Policy
- For federal-aid bridge projects, preliminary touch-down points and the most recent bridge inspection report (for bridges maintained by the LPA)

The [PM-100](#) and accompanying functional area [scoping worksheets](#) may be used by the LPA to document project scoping; **however, VDOT signatures are not required**. The information necessary to meet scoping report requirements may be contained within the application for projects requiring separate project applications, such as TA or HSIP Projects.

*VDOT Responsibilities:*

- *Determine if the project will be developed as a Tier 1 or Tier 2*

*project.*

- *The Project Coordinator will review the submitted scoping report and ensure that it addresses all scoping needs as identified above.*
- *If the project has not been created in the project pool, the Project Coordinator will create a project at this time and will include appropriate VDOT staff as team members in the iPM Communications and Divisions tab.*
- *All project decision or milestone-related documents, including the scoping report, must be uploaded into the iPM documents tab.*
- *The Project Coordinator will upload the initial scoping estimate into PCES.*
- *The Project Coordinator will enter milestone dates using the Project Schedule based on the information provided by the LPA. Milestone dates required are found in Section 12.3.3.*
- *Oversight expectations for Project Development and preliminary oversight expectations for Project Delivery will be identified and provided to the LPA.*
- *Discussion of any potential project costs which may be ineligible for reimbursement*
- *The Project Coordinator will provide project scoping and environmental documents to Civil Rights for review to ensure compliance with Title VI*

### 12.1.4 Key Submittals / Requirements

<b>Task/Submittal/File Documentation</b>	<b>Locality Responsibility (PM)</b>	<b>VDOT PC Responsibility</b>	<b>Submittal Timing/ Recordkeeping Requirements</b>
Review project and solicit information relative to project to establish project team	Determine what information is needed in coordination w/PC	Assist the PM Document the Project Team in iPM.	<b>N/A</b>
Plans, maps, aerials, and other supporting data to identify project area	Distribute materials to the project team	<b>N/A</b>	Not less than 15 days in advance of the scoping meeting
Scoping Coordination or Meeting	Plan, lead, and facilitate scoping coordination or a meeting, if held	The PC may attend if project complexity warrants	<b>N/A</b>
Determine scope and develop complete schedule, and project budget	Prepare and submit Scoping documentation to the PC and project team	Ensure documentation is uploaded to iPM Documents	LPA should retain through project closeout. For state aid projects, documentation must be kept in LPA project files.
Review and outline all tasks and deliverables necessary for project development	Prepare and submit schedule, with milestone dates to the PC	Document tasks and durations in the iPM Schedule. Monitor and update schedule based on locality input.	<b>N/A</b>
Scoping estimate	Provide accurate project scoping estimate in PCES	Ensure project estimate is entered and updated in PCES	<b>N/A</b>
Quarterly Status Report – TA Projects	Submit to Project Coordinator	Ensure documentation is uploaded to iPM Documents	<b>N/A</b>

### 12.1.5 References

VDOT has an established scoping process that is used for VDOT administered projects. This process includes helpful information such as checklists and forms that may be beneficial for the project scoping process. The process is outlined in two procedures, [Initiate Project Scope](#) and [Final Project Scope](#). The LPA is encouraged to use these reference documents as they move through the project scoping process.

## Chapter 12.1 – Project Scoping Checklist

These checklists can be found in their entirety in the [VDOT on line forms library](#)

CH 12.1 - Project Scoping

The project scope, developed by the project team under the leadership of the LPA Project Manager, defines the physical limits and features of the project, establishes the project budget and determines the project oversight level in accordance with Ch 9.4.2 and VDOT Central Office oversight in accordance with IIM-226.5.

SUBMIT	COMPL	F	S-V	S-L	T-A	UCI	Requirement	Reference	
								LAP	Other
	<input type="checkbox"/>	X	X <sup>1</sup>	X <sup>1</sup>			Project Scoping; include discussion of all tasks and deliverables, project limits and footprint	12.1.1 12.1.3	
	<input type="checkbox"/>	X	X	X			Develop Project budget and Project Cost Estimate	12.1.3	
	<input type="checkbox"/>	X	X	X			Develop Project schedule	12.1.3	
	<input type="checkbox"/>	X	X	X			Submit Scoping Report and documentation <sup>2</sup> , includes items outlined in 12.1.3. Project scoping should be completed within 12 months of the Project Agreement being executed.	12.1.3 2.7(b)	23CFR652.565

<sup>1</sup> Formal project scoping and coordination with VDOT is strongly encouraged for all projects

<sup>2</sup>CTB Policy on Bicycle / Pedestrian Accommodations must be considered and submitted for all projects; a complete scoping report is required for any federal-aid project

## 12.2 PLAN DESIGN

This chapter includes the following topics

12.2.1 [Introduction](#)

12.2.2 [Applicability](#)

12.2.3 [Design Standards](#)

12.2.4 [Design Exceptions and Waivers](#)

12.2.5 [Design Elements](#)

12.2.5.1 [Title Sheets](#)

12.2.5.2 [Surveys](#)

12.2.5.3 [Geotechnical Investigations](#)

12.2.5.4 [Traffic Control Devices / Intelligent Transportation Systems \(ITS\) /  
Roadway Lighting](#)

12.2.5.5 [Americans with Disabilities Act \(ADA\)](#)

12.2.5.6 [Hydraulics](#)

12.2.5.7 [Landscaping](#)

12.2.5.8 [Transportation Management Plans \(TMP\)](#)

12.2.5.9 [Noise Barriers](#)

12.2.5.10 [Value Engineering](#)

12.2.5.11 [Constructability Reviews](#)

12.2.5.12 [Utilities](#)

[Plan Design Checklist](#)

### 12.2.1 Introduction

Plan Design is considered part of Preliminary Engineering (PE), which includes all work from preparation of feasibility studies, conceptual, preliminary and final designs up through and including the preparation of bidding documents. This chapter outlines design standards, provides links to relevant VDOT guidelines and addresses considerations for key design elements.

All final plans and specifications shall be *sealed and signed* by a Professional Engineer, Landscape Architect or Land Surveyor licensed to practice in the Commonwealth of Virginia and in accordance with State [Department of Professional Occupation Regulation](#) (DPOR) requirements.

### 12.2.2 Applicability

- Processes in this manual apply to federal-aid projects, projects on the NHS and Primary Routes, and projects to be maintained by VDOT, regardless of funding.
- State-aid projects, off the NHS and maintained by the LPA, will be designed in accordance with this manual; however, VDOT oversight of these designs is limited to technical assistance as requested by the LPA.

<b><i>Plan Design</i></b>		
<i>Federal-aid</i>	<i>State-aid / VDOT Maintained</i>	<i>State-aid / LPA Maintained</i>
X	X	X*

\* Projects are to be designed in accordance with this manual; however, VDOT oversight to these designs is limited to technical assistance as requested by the LPA

### 12.2.3 Design Standards

VDOT has adopted the AASHTO *A Policy on Geometric Design of Highways and Streets*, commonly referred to as the AASHTO “Green Book,” as minimum design standards. VDOT’s Road Design Manual meets, or exceeds, all AASHTO Green Book design standards.

All LPA administered projects to be maintained by VDOT, regardless of funding source, shall be designed in accordance with [VDOT’s Road Design Manual](#) or seek a design waiver and/or design exception.

VDOT publishes a series of [Instructional & Information Memoranda](#) as well as other [Manuals and Guides](#), which provide additional guidance and clarification regarding design standards. Local governments are encouraged to use these as additional resources when considering the design features of their projects to ensure consistent state-wide design.

All LPA administered projects to be maintained by the LPA shall be designed in accordance with AASHTO’s Policy on Geometric Design of Highway and Streets (the “Green Book”) or seek a design exception.

LPAs may develop their own design standards and construction specifications, which meet or exceed VDOT and AASHTO. However, they must be reviewed and approved by the VDOT State Location and Design Engineer for projects off the National Highway System, and also by FHWA for projects on the National Highway System. Local governments are expected to notify the VDOT Project Coordinator whenever alternative designs and specifications are being utilized and provide a list of the proposed modified designs and specifications and how those modifications differ from VDOT’s.



For projects to be maintained by VDOT, the LPA Project Manager shall provide the VDOT Project Coordinator a complete electronic plan assembly in single page PDF format to be filed in the VDOT Plan File Library when:

- right of way plans have been completed and approved for right of way acquisition
- project design plans have been completed and approved to advertise

#### 12.2.4 Design Exceptions and Waivers

##### Design Waivers

Designs for projects maintained by VDOT that do not meet VDOT's "minimum" design standards, but exceed AASHTO's design standards require a written Design Waiver. The LPA or its consultant shall prepare and submit the [Design Waiver Form](#) (LD-448)

and any accompanying documentation to the VDOT Project Coordinator as soon as it becomes apparent that a waiver is required. The design waiver review process should take approximately two (2) weeks from the time of receipt of a complete submittal. The VDOT Project Coordinator will forward the design waiver to the District Location and Design Engineer for review and action (approval or denial). Once the review has been completed and action taken, the Design Waiver request will be sent back to the VDOT Project Coordinator for coordination with the Locality LPA Project Manager. **Design waivers are not required on projects that will be maintained by the locality.**

For more information on the Design Waiver process for road projects, refer to [LD-IIM-227](#).

##### *VDOT Responsibilities:*

- *Design Waivers are processed at the District Location and Design Office.*

- *The VDOT Project Coordinator will forward the Design Waiver request to the District Location and Design Engineer for review and action (approval or denial).*
- *The VDOT Project Coordinator will notify the LPA of the decision.*
- *All documents relating to the Waiver and the approval notification must be uploaded into iPM.*

## Design Exceptions

Designs that do not meet the minimum design standards contained in the AASHTO “Green Book” require a written Design Exception. The locality or its consultant shall prepare and submit the Design Exception Form ([LD-440](#)) and any accompanying documentation to the VDOT Project Coordinator as soon as it becomes apparent that an exception is required. The design exception review process should take approximately two weeks from the time of receipt of a complete submittal.

### *VDOT Responsibilities:*

- *VDOT Project Coordinator will forward the Design Exception request through the District L&D Section, to the State Location and Design Engineer for review and action (approval or denial). Once the review has been completed and action taken, the Design Exception request will be sent back to the VDOT Project Coordinator for coordination with the LPA Locality Project Manager.*
- *All documents relating to the Exception and the approval notification must be uploaded into iPM by the PC.*

The Design Exception Form can be accessed at: [LD-440](#)

For more information on the design exception process for road and bridge projects, refer to [LD-IIM-227](#).

## 12.2.5 Design Elements

The following is a list of design elements that are typically required in a set of roadway and bridge plans:

### 12.2.5.1 Title Sheets

VDOT prepared Title Sheet templates for Federal-aid Tier 1 and Tier 2 Projects and for State-aid Projects shall be used. LPA's are responsible for ensuring that the most current version of the applicable title sheet is being used in the plan assembly. Title sheet templates for Federal-aid Projects Tier 1 and Tier 2 Projects and State-aid Projects are available in the VDOT CADD Cell Library. The specific file links are below:

[TIER 1 TITLE LAP FED](#)  
[TIER 2 TITLE LAP FED](#)  
[TITLE LAP STA](#)

In addition, VDOT has prepared title sheets to be specifically used with Design-Build/PPTA projects. These include a RFQ/RFP Plans Submittal title sheet, a Right of Way Submittal title sheet, a Construction Submittal title sheet and an As-Built title sheet. The specific file links are:

[TITLE LAP DB \(RFP/RFQ\)](#)  
[TITLE LAP DB ROW](#)  
[TITLE LAP DB CONST](#)  
[TITLE LAP DB ASB \(As-Built\)](#)

For assistance, LPA's or design firms should contact the CADD Support Helpdesk at [CADDsupport@vdot.virginia.gov](mailto:CADDsupport@vdot.virginia.gov).

For information on Title Sheet requirements, refer to [IIM-LD-204](#).

LPA's are responsible for ensuring that title sheets have the required signatures and that project plans are properly signed and sealed in accordance with Department of Professional and Occupational Regulations ([DPOR](#)). For information on Sealing and Signing Requirements/Title Sheet Signatures, see Section [12.5.3](#).

### 12.2.5.2 Surveys

The first step in physical project development is identifying the project site. In some cases the land may be owned by the State or local government. In other cases, it may be necessary to purchase land for the project. In those cases where the land is already owned by state or local government, it will be necessary to conduct project design surveys to specify where the new construction will take place.

#### Survey Procedures

Section [33.2-1011](#) of the Code of Virginia requires that advance notice be provided to property owners prior to entering their property to ascertain its suitability for highway purposes. VDOT's Survey Manual, which can be accessed at <http://www.virginiadot.org/business/locdes/manual-survey-index.asp>, is a resource for local governments and outlines VDOT's business practices regarding survey. A copy of VDOT's form letters is available from the [Right of Way and Utilities Management System \(RUMS\)](#) forms repository.

Project design surveys – The purpose of a project design survey is to identify the project site sufficiently to allow the development of detailed engineering plans, specifications, and cost and material quantity estimates. Project design surveying must be performed under the supervision of a Land Surveyor (LS) licensed to practice in the Commonwealth of Virginia by the Virginia Department of Occupational Regulation (DPOR). Project design surveys often involve aerial mapping and Global Positioning Survey (GPS) techniques, as well as placement of physical markers. In addition to the project design survey, a survey will be needed for the purposes of legal title transfer.

If the project is on state property, right of entry will be allowed under the project administration agreement. Before a LPA can begin work (including surveying) on a

roadway that is part of the interstate, primary or secondary system of highways, it must secure a land use permit from VDOT. This permit is issued through the VDOT Residency and usually will be issued at no cost.

Survey for land acquisition and title transfer - If the LPA is purchasing land for the transfer to state ownership (underlying fee ownership) or for a federal aid project, the requirements outlined in VDOT's survey manual must be followed. If the LPA is purchasing land for the locally maintained system without federal funds, the LPA can follow its own survey and title requirements.

### **12.2.5.3 Geotechnical Investigations**

LPA's are required to provide geotechnical engineering data consistent with the requirements outlined in the Materials Manual of Instructions, Chapter 3. Local jurisdictions shall coordinate with the VDOT Project Coordinator in advance of performing subsurface exploration. Laboratory testing for VDOT projects requires that the testing laboratory be certified by the AASHTO Materials Reference Laboratory (AMRL). Chapter 3 of the Manual of Instructions can be accessed at the following link:

<http://www.virginiadot.org/business/resources/bu-mat-MOI-3.pdf>

The use of alternate bid items or speculative amounts in the bidding process is generally NOT an acceptable replacement for complete geotechnical investigations.

### **12.2.5.4 Traffic Control Devices/Intelligent Transportation Systems (ITS) / Roadway Lighting**

VDOT's Traffic Engineering Design Manual, which can be accessed at <http://www.virginiadot.org/business/locdes/traffic-engineering-manual.asp>, is VDOT's standard and recommended for design elements related to traffic control devices, ITS and Roadway lighting.

### 12.2.5.5 Americans with Disabilities Act (ADA)

The [Americans with Disabilities Act of 1990 \(ADA\)](#) is legislation intended to provide adequate accessibility to all persons. Title II of ADA applies to State and Local Governments and its requirements affect design, construction and **maintenance of all** transportation projects, regardless of the funding source.

VDOT's policy is to provide facilities for persons with disabilities in accordance with the Code of Virginia, [Section 15.2 –2021](#).

For more information on ADA requirements related to transportation facilities, refer to [LD-IIM-55](#).

The ADA requires that **all** new construction, reconstruction and alterations to existing pedestrian facilities be constructed in accordance with federal accessibility standards. Pedestrian facilities include sidewalks, shared use paths or other public walkways. Where such facilities intersect a street, the portion of the street used by pedestrians, whether marked as a crosswalk or not, is also considered part of the pedestrian facility.

Project activities are considered an “alteration” if they involve changes to the structure, grade, function or use of the street or sidewalk. Examples include full depth pavement replacements, widening, resurfacing, signal installation, pedestrian signal installation and other work of similar scale and effect.

When the scope of a transportation project includes modifications to existing pedestrian facilities, those facilities must be brought up to current accessibility standards. For example, if a street resurfacing project alters the sidewalk, curbs or street surface in the crosswalk area, curb ramps must be installed as part of the project. If curb ramps already exist, but do not meet the current accessibility standards, those ramps must be either reconstructed or retrofitted to meet the current accessibility standards.

FHWA and the Department of Justice (DOJ) issued a Joint Technical Assistance (JTA) memorandum on the requirements to provide curb ramps, in accordance with Title II of the ADA, whenever roads are altered through resurfacing. The JTA memorandum clarifies the definition of an “alteration” during road surfacing activities, requiring compliance with Title II of the ADA. The memorandum can be accessed at <http://www.ada.gov/doj-fhwa-ta.htm>. Also, see [TE-377](#) for additional information.

#### **12.2.5.5 Hydraulics**

All projects that will be maintained by VDOT, except those improvements undertaken through the Rural Rustic Roads program, must be designed in accordance with VDOT’s Drainage Manual, which can be accessed at <http://www.virginiadot.org/business/locdes/hydra-drainage-manual.asp>, and is available as a resource for local governments.

#### **12.2.5.7 Landscaping**

It is recommended that all Landscape Plans, which will be maintained by the Department, be designed in accordance with VDOT’s Guidelines contained in [Appendix B \(1\) of the Road Design Manual](#) as well as [LD-IIM-253](#).

#### **12.2.5.8 Transportation Management Plans (TMP)**

[23 CFR 630 Subpart J](#), also referred to as the Work Zone Safety and Mobility Final Rule, applies to all State and local projects that receive Federal-aid highway funding and provides a decision-making framework known as Transportation Management Plans (TMP) that consider broader safety and mobility impacts of work zones across project development stages, and the adoption of additional strategies that help manage these impacts during project implementation. The TMP is not a separate document, but is used in the development of traffic control in construction plans. A TMP is a set of strategies which working together, should improve the safety and

functionality of temporary traffic control during construction. These strategies are divided into three broad groups which are captioned as: 1) Temporary Traffic Control, 2) Public Information; and 3) Transportation Operations. The degree of a project's TMP requirements is based on the project's level of complexity. VDOT's guidelines categorize a project into one of three types of transportation management. The Guidelines are available at:

[http://www.extranet.vdot.state.va.us/locdes/electronic\\_pubs/iim/IIM241.pdf](http://www.extranet.vdot.state.va.us/locdes/electronic_pubs/iim/IIM241.pdf)

#### **12.2.5.9 Noise Barriers**

When warranted based on noise analysis, noise wall profiles should be included in the plans. Most noise barriers are designed by the contractor with local review and approval on the locally maintained system. VDOT concurrence is required on roads that will be maintained by the Department.

#### **12.2.5.10 Value Engineering**

Federal regulations outline requirements for Value Engineering (VE) studies and the Code of Virginia requires a VE study on all projects exceeding \$5 million in construction cost. The locality will complete the VE process and, all recommendations must be submitted to VDOT. The final decision as to which recommendations are incorporated into the final plans is made by the Chief Engineer for all federal aid projects and any project to be maintained by VDOT.

VDOT has a VE team which is available to assist, guide or lead LPAs in the development of the VE process and or study. Additional information regarding value engineering studies can be found on the VDOT [Value Engineering Web site](#).

#### **12.2.5.11 Constructability Reviews**

The purpose of a constructability review is to determine if a project can be constructed as designed with the information provided on the drawings, specifications and copied notes.

Constructability reviews shall be conducted by the LPA for all projects to be maintained by VDOT and for federal aid projects. Constructability reviews are recommended for any other projects on the locally maintained system. Additional information on performing constructability reviews can be found in [VDOT's Road Design Manual](#), Chapter 2G-5.

#### **12.2.5.12 Utilities**

Private utility companies may be reimbursed for relocating utilities that are in conflict with the project, at project expense, when they have been located on easement or have prior rights in the existing location. It is also recognized that some localities have franchise agreements with utility companies that require the company to move its utility because of a project, at the company's expense. In that case, the locality shall enforce the terms of its agreements in order to save project funds. Utility relocations have to be viewed as regional efforts, since all utility relocations within a region compete for a utility's time and resources. Early coordination with utility owners is highly recommended.

In order to pay for utility adjustments as a project expense, a detailed utility plan and cost estimate needs to be prepared. Eligible project expenses for utilities basically result in the in-kind replacement of any utilities that are in conflict with the project. Any county without an existing utility franchise agreement when administering a VDOT sanctioned project under a land use permit or transportation project agreement shall have the same authority as the Department pertaining to the relocation of utilities. In accordance with the above, it is recognized that in some instances the locality's utility facility owner may want to provide upgraded utilities or to install new utilities while the highway is being disturbed for construction purposes. This is known as "betterment," and is generally not an eligible project cost. It makes sense to perform betterment work at the same time the project is being constructed, so the contractor may perform the work during construction, with the utility facility owner being responsible for the cost of the betterment portion from a different

funding source. For information pertaining to local participation in the cost of utility adjustments and storm sewer improvements (betterment), see [IIM-LD-146](#).

VDOT's Right of Way and Utilities Manual, Volume II

(<http://www.virginia-dot.org/business/row-default.asp>) provides additional references to the processes and procedures regarding utility relocations and betterments.

## Chapter 12.2 – Plan Design Checklist

These checklists can be found in their entirety in the [VDOT on line forms library](#)

CH 12.2 - Plan Design

Plan Design is considered part of Preliminary Engineering (PE), which includes all work from preparation of feasibility studies, conceptual, preliminary and final designs up through and including the preparation of bidding documents. This chapter outlines design standards, provides links to relevant VDOT guidelines and addresses considerations for key design elements.

SUBMIT	COMPL	F	S-V	S-L	T-A	UCI	Requirement	Reference	
								LAP	Other
	<input type="checkbox"/>	X	X	--			Design meets VDOT Standards	12.2.3	
	<input type="checkbox"/>	X	X	X			Design meets AASHTO Standards	12.2.3	
	<input type="checkbox"/>	X	X	--			Approved plans submitted electronically (PDF format) at advertisement	12.2.3	
	<input type="checkbox"/>	X	X	X			LD-440 for Design Exception (to AASHTO standards)	12.2.4	
	<input type="checkbox"/>	X <sup>1</sup>	X	--			LD-448 for Design Waiver (to VDOT Standards)	12.2.4	
	<input type="checkbox"/>	X	X	--			Use VDOT prepared title sheet templates	12.2.5.1	
	<input type="checkbox"/>	X	X	X			Compliance with Americans with Disabilities Act (ADA)	12.2.5.5	
	<input type="checkbox"/>	X	X	--			Preparation of TMP	12.2.5.8	

	<input type="checkbox"/>	X	X	X			Value Engineering for Projects over \$5 million	12.2.5.10	
	<input type="checkbox"/>	X	X	--			Conduct constructability review	12.2.5.11	

<sup>1</sup> Federal-aid projects on locally maintained roads do not require design waiver; AASHTO is minimum standard

## 12.3 PROJECT BUDGET, SCHEDULE, AND ESTIMATES

This chapter contains the following topics:

12.3.1 [Introduction](#)

12.3.2 [Applicability](#)

12.3.3 [Project Schedules](#)

12.3.4 [Project Budgets and Estimates](#)

12.3.5 [Tasks / Submittals / File Documentation](#)

12.3.6 [References](#)

[Budget, Schedule and Estimates Checklist](#)

### 12.3.1 Introduction

This chapter outlines the actions required to develop, update and monitor project development schedules, estimates and budget. The LPA's project manager is responsible for the development and management of the schedule, estimates and budget for Preliminary Engineering, Right of Way and Construction throughout the entire project life cycle. It is critical that both schedules and estimates be updated regularly within VDOT's systems (iPM Schedule and PCES), because they are utilized for developing our annual federal strategy for obligation of funds.

Project scheduling is essential in monitoring and managing project development. At project scoping, a schedule must be established reflecting key milestones in project development. As these milestones are met, or when the timeframe must be changed, the schedule must be updated and documented in the iPM Schedule by the VDOT Project Coordinator.

Estimates must be current and maintained in VDOT's Project Cost Estimating System (PCES). The purpose of PCES is to collect data for a specific project and, based on the data entered; determine a budget for that project. Project budgets should be reviewed and estimates must be updated at every project milestone. Project budgets will be affected by significant changes in the project scope and or schedule and should be updated accordingly.

### 12.3.2 Applicability

- Accurate schedules and estimates should be established and updated regularly for all project categories by the locality, in coordination with their VDOT Project Coordinator.

<b><i>Project Budget, Schedule, &amp; Estimates</i></b>		
<i>Federal-aid</i>	<i>State-aid / VDOT Maintained</i>	<i>State-aid / LPA Maintained</i>
X	X	X

### 12.3.3 Project Schedules

Every project requires a schedule and the LPA Project Manager is responsible for the overall development and management of the project schedule with collaboration and support from project team members. Scheduling encompasses a combination of required tasks and project information to relate unique project characteristics with available resources and time requirements. A complete project schedule should be developed during the scoping process with input from the team members. The number of tasks required in the schedule will depend on the complexity of the project.

A [Schedule Tool](#) is available and recommended for LPA use that will accommodate the majority of project types and varying circumstances. The schedule tool uses default “typical” tasks and durations which can be modified to fit individual project needs. The Schedule Tool utilizes basic scheduling logic to develop a realistic schedule that correlates with the VDOT local project scheduling templates.

The LPA Project Manager shall submit, as part of the scoping package, a final baseline project schedule to include at a minimum the following key milestone dates:

- Scope Project
- Project Definition Form (EQ 429) Submittal , when applicable
- NEPA Document Completion
- Right of Way & Utilities Federal Authorization Request / Submission of complete R/W Plans and RW301/EQ201
- Right of Way Acquisition start date (when applicable)
- Advertisement Date



**VDOT’s strategy for the expenditure of federal funds is prepared utilizing the project schedule and key milestone dates for**

preliminary engineering, right of way and construction that is developed during the scoping process for each project. It is critical that the locality develops and submits realistic dates for each of these phases. Annually VDOT submits its expenditure strategy to FHWA with the expectation that localities will meet the projected dates. Localities are accountable for meeting the submitted schedule, and failure by the LPA to meet project schedules may risk future funding for locally administered projects.

*VDOT Responsibilities:*

*The Project Coordinator will enter, monitor and maintain the following key milestones in the iPM Schedule module at the beginning of the project:*

- *Scope Project (22)*
- *SERP (18) when applicable*
- *Final Environmental Document (NEPA Complete) (33) when applicable*
- *Authorize R/W and Utilities (52)*
- *Plan Submission Date (PS&E Submittal Date) (72X)*
- *Construction Authorization (79)*
- *Advertise Project (80)*

*The Project Coordinator or VDOT Construction Project Monitor, as applicable, will input the following dates for tracking purposes within 10 business days of completion of the activity:*

- *Award Contract (84)*
- *Administer Contract (Construction start and complete dates) (91).*
- *After construction completion and submission of [C-5](#), project status changed to 'Construction Complete' and dates entered in the Project Pool.*

### **12.3.4 Project Budgets and Estimates**

#### **12.3.4.1 Project Budgets**

The LPA is fully responsible for monitoring the project budget. When estimates (see section 12.3.4.2 below) identify a budget shortfall, the LPA Project Manager must identify available funding sources. If additional funding is necessary, the VDOT Project Coordinator must be notified so that the Project Administration Agreement can be modified and any impacts to the SYIP or SSYP can be addressed.

The federal obligation strategy is based on schedules and estimates provided by LPAs for LPA administered projects. LPAs are expected to meet the schedule to ensure that federal obligations are not lost. The VDOT Project Coordinator has the responsibility, after consultation with the LPA Project Manager, to delay scheduled activities, if in the Project Coordinator's judgment; the schedule is unrealistic and will have an adverse impact on the federal obligation strategy or the funding program.

*VDOT Responsibilities:*

- *Schedules and estimates for locally administered projects must not be changed without the locality's concurrence. However, when the schedule is unrealistic and may create funding problems, the Project Coordinator may request that the schedule be modified. Any modifications must first be discussed with the LPA Project Manager and coordinated through the District Planning and Investment Manager and Central Office Infrastructure Investment Division.*
- *Authorization to begin activities in each phase will not be issued until the phase is fully funded or funds to complete the phase have been identified.*
- *When projects are "limited funding," that is the project will not receive additional federal or state-aid, the LPA is responsible for securing additional funding necessary to complete the phase/project and identifying the funding in the project administration agreement.*

#### 12.3.4.2 Project Estimates

The LPA is required to provide a revised project estimate at key project milestones and as necessary when the project estimates change due to scope, funding or other modifications. The LPA may use VDOT's estimating system (PCES) or their own; however, all estimates must be included in PCES. For LPAs that use their own estimating systems, the estimate can be manually uploaded into PCES. When uploading estimates to PCES, the **PCES Alternate [Right-of-Way Worksheet](#) and/or [Alternate Utilities Worksheet](#) must be used**. The use of a lump-sum estimate is **not** adequate for submittal to FHWA for RW authorization.

The LPA Project Manager is responsible for preparing and uploading the project estimate in PCES. In doing so, the locality must select the current milestone stage using drop-down selection and recommended estimate in PCES at the intervals stated in the previous paragraph.

The PCES system will automatically generate a budget adjustment revision request if the updated project estimate results in a 10 percent increase or decrease or a difference of \$50,000 or more.

#### 12.3.4.3 Quantity Summaries / Engineer's Estimates (Prior to Advertisement)

Quantity summaries should be computed and developed utilizing quantity take-offs from the plans. An accurate summary of quantities is critical to prospective contractors interested in submitting a bid on the project. This information leads directly to the Engineer's Estimate, which combines the computed quantities of work and the estimated unit bid prices. The Engineer's Estimate should be updated, as necessary, up until the bids are opened.

### 12.3.5 Key Submittals / Requirements

<b>Task/Submittal/File Documentation</b>	<b>Locality Responsibility</b>	<b>VDOT Project Coordinator Responsibility</b>	<b>Submittal Timing/ Recordkeeping Requirements</b>
Establish project schedule	Develop and provide a project schedule to include all tasks needed to complete the project to the VDOT Project Coordinator.	Enter appropriate milestones dates in the iPM Schedule.	After completed scoping process
Maintain project schedule	Provide the VDOT Project Coordinator with schedule changes in a timely manner. Provide the VDOT Project Coordinator dates scheduled tasks are completed in a timely manner.	Monitor and update the project schedule in iPM, as appropriate based on input from the LPA Project Manager.	N/A
Provide timely and accurate estimates in PCES	Enter the project estimate in PCES and update	Review estimates and provide technical assistance	At key project milestones or as necessary

### 12.3.6 References

- Project Cost Estimates - [23 CFR 630 \(a\) \(4\)](#)
- Project Development Schedules - [http://www.virginia-dot.org/business/resources/Project\\_Development\\_Schedules.pdf](http://www.virginia-dot.org/business/resources/Project_Development_Schedules.pdf)
- Project Development Budget and Estimates - [http://www.virginia-dot.org/business/resources/Project\\_Development\\_Budget\\_and\\_Estimates.pdf](http://www.virginia-dot.org/business/resources/Project_Development_Budget_and_Estimates.pdf)
- PCES Users Guide - <http://isyp/scoping/docs/PCES.pdf>

## Chapter 12.3 – Budget, Schedule and Estimates Checklist

These checklists can be found in their entirety in the [VDOT online forms library](#)

CH 12.3 - Budget, Schedule & Estimates

The LPA is responsible for the development and management of the schedule, estimates and budget for Preliminary Engineering, Right of Way and Construction throughout the entire project life cycle.

<i>SUBMIT</i>	<i>COMPL</i>	<i>F</i>	<i>S-V</i>	<i>S-L</i>	<i>T-A</i>	<i>UCI</i>	<i>Requirement</i>	<i>Reference LAP</i>	<i>Other</i>
	<input type="checkbox"/>	X	X	X			Submit schedule related forms as part of the scoping package	12.3.3	
	<input type="checkbox"/>	X	X	X			Submit updated schedule at key milestones and as needed	12.3.3	
	<input type="checkbox"/>	X	X	X			Submit updated project estimates at key milestones and as needed	12.3.4	

## 12.4 PUBLIC INVOLVEMENT

This chapter includes the following topics:

- 12.4.1 [Introduction](#)
- 12.4.2 [Applicability](#)
- 12.4.3 [Purpose of Public Participation](#)
- 12.4.4 [Types of Public Involvement](#)
- 12.4.5 [Public Participation Requirements](#)
- 12.4.6 [Public Participation Procedures](#)
- 12.4.7 [Transcript of Public Hearing](#)
- 12.4.8 [Location and/or design approval for projects on which a hearing or hearings are held](#)
- 12.4.9 [Location and/or design approval for projects on which a posting of notice of willingness to hold a hearing](#)
- 12.4.10 [Tasks / Submittals / File Documentation](#)
- 12.4.11 [Regulatory References](#)
- 12.4.12 [Miscellaneous References](#)  
[Public Involvement Checklist](#)

### 12.4.1 Introduction

This section discusses the processes and responsibilities associated with Public Information and Participation for federal-aid projects. The final outcome of this process should be that all projects are developed in a manner that provides the general public with a well-publicized opportunity to both review and discuss the proposed plans and potential impacts for the project.

During the development of transportation projects it is essential that public participation be considered. LPA's have a responsibility to provide residents of their community and other interested parties with an opportunity to participate, by expressing their viewpoints and concerns, in the development of the project. It is incumbent upon the LPA to include public participation opportunities before the project has reached a point where it becomes impractical to make extensive modifications. LPA's across the Commonwealth have robust public participation processes in place for their land planning and zoning programs, and are encouraged to broaden the scope of those existing processes to include transportation projects.

Public participation may range from individual meetings with affected residents to informal community meetings or area wide project development workshops and citizen information meetings to formal Public Hearings on a project. LPA's undertaking transportation projects, whether the project is state funded or federally funded, must adhere to the requirements outlined in this chapter for an opportunity for a public hearing under certain circumstances.

Where a locally administered project requires the preparation of an Environmental Assessment (EA) or Environmental Impact Statement (EIS), the LPA is required to either hold a public hearing or post a willingness to hold a public hearing on the project, in accordance with the requirements of this chapter.

### 12.4.2 Applicability

- Federal-aid Highway Projects and State-aid Highway Projects that are **NOT** federally exempt must follow the processes defined in this chapter.
- State-aid Highway Projects that have a federal exemption must follow processes defined in [§15.2-2204](#), [§15.2-2239](#), § [15.2-1800](#) and any other sections of the Code of Virginia applicable to a LPA’s capital improvement program. The LPA will certify adherence to those processes as noted in Chapter 5 (state funded projects) of this manual.

<b>Public Involvement</b>		
<i>Federal-aid</i>	<i>State-aid / VDOT Maintained</i>	<i>State-aid / LPA Maintained</i>
<i>X</i>	*	*

\* State-aid projects that are not federally exempt shall follow the processes applicable to Federal-aid projects.

### 12.4.3 Purpose of Public Participation

Public Hearings and Public Information Sessions provide the general public with a well-publicized opportunity to both review and discuss proposed plans for a highway project. Project information should be provided in sufficient detail to allow property owners along a project corridor or others with an interest in a project to identify specific features or property that may be impacted by the proposal, discuss those with a member of the project team and if necessary, provide a mechanism for the expressing and documenting concerns or views related to the project.

### 12.4.4 Types of Public Involvement

- **Willingness to hold a public hearing** - If a project is noncontroversial, does not have the potential to substantially impact adjoining property, and is unlikely to generate requests for a hearing, a willingness to hold a public

hearing may be used rather than scheduling a public hearing.

- **Individual (one-on-one)** – When an interested party has requested that a public hearing be held, often a separate meeting with that interested party can be held to address concerns. If the interested party's concerns are adequately addressed, a separate public hearing is not required.
- **Formal Public Hearing** – The formal public hearing process is conducted as a structured meeting between the project team and public audience at a designated time. The project team presents the project to the audience and then the audience is provided an opportunity, one at a time, to respond with comments and questions. All activities and comments are recorded and entered into a hearing record. The record is held open for at least 10 days after the hearing for additional written comments to be submitted. Prior to the formal process individuals may discuss the proposed project with team members for an one-on-one explanation and discussion about their specific concerns and questions. Individuals have the opportunity to have their comments and questions recorded verbally, in writing or delivered directly to the project team as a part of the formal hearing activities.
- **Open Forum Public Hearing** – The open forum public hearing is conducted in an open meeting format. Individuals may arrive at various times, be given a brief hearing orientation and directed to project team members for one-on-one explanations and discussions about their specific concerns and questions. Individuals have the opportunity to have their comments and questions recorded verbally or in writing for the hearing record. No structured meeting is conducted as part of the open forum public hearing.

#### 12.4.5 Public Participation Requirements

According to federal regulations found in [23 CFR 771.111\(h\)\(2\)\(iii\)](#) one or more public hearings or the opportunity for hearing(s) must be held for any federal-aid project which requires: significant amounts of right-of-way; substantially changes the layout or functions of connecting roadways or of the facility being improved; has a substantial adverse impact on abutting property; otherwise has a significant social,

economic, environmental, or other effect; or for which FHWA determines that a public hearing is in the public interest.

Federal-aid projects which are processed with a Categorical Exclusion (CE), a Programmatic Categorical Exclusion (PCE), or a Blanket Categorical Exclusion (BCE), by definition, have been found to not to have any significant social, economic or environmental effects. When none of the other criteria exist, these projects may not require a formal public participation or public hearing process. Anytime an environmental assessment is necessary, a public hearing must be held or an opportunity for a hearing must be offered.

LPAs must ensure that other Virginia Code requirements applicable to local governments have been met. VDOT takes a more conservative approach in their project administration by providing an opportunity for a public hearing for nearly all construction projects.

The decision regarding the level of public involvement must be documented during the scoping process with the concurrence of the VDOT Project Coordinator. **The burden of proof that a public hearing or an opportunity for a public hearing (i.e. posting of a willingness) is not necessary, lies with the local government administering the project and should be fully documented during the scoping process.** For example, a sidewalk construction project on existing right of way would be an example of a project which does not normally meet the criteria for a public hearing and may proceed without one provided the criteria that requires a hearing is not met.

The following are guidelines which may be used for determining when public hearings are to be held, or when a "willingness to hold a public hearing" is sufficient. They are:

- Projects on roadway corridors, which are completely on new location, require a location public hearing followed by a design public hearing.
- Projects within the existing roadway corridor with a predominant portion of the

work on new location require a combined location and design public hearing.

- Projects within the existing roadway corridor that have a significant social, economic or environmental impact require a design public hearing.
- Projects within the existing highway corridor where significant social or environmental impacts, or both, are anticipated require publication of a notice of willingness to hold a design public hearing. The locality will hold a design public hearing if a request for such a hearing is made, and the issues raised in relation to the request cannot be resolved through any other means.

When a significant period of time has passed since an initial public hearing or willingness notification, the potential impacts of the project and the concerns of affected citizens may change. Accordingly, there may be a need for additional public participation. If changes in land use, population or impact to the environment have taken place within the project area, a public hearing may be necessary.

*VDOT Responsibilities:*

- *Project Coordinator will review determination of public involvement requirements at scoping.*

#### **12.4.6 Public Involvement Procedures**

- **Public Notification** – Public notices are published as a means to inform the public of various proposals and invite public participation. Minimally, public notice in a newspaper is required but additional methods should be pursued if the locality believes that they will help in reaching the public and improve public involvement in the project. Methods of public notification for a public hearing or a willingness to hold a public hearing include:
  - Paid public notice must be made in a local newspaper – at least twice – the first notice must appear 30 days before the hearing date and the second notice between five days to twelve days before the hearing.
  - News releases
  - Letters to adjacent property owners

- Posting of notice in local businesses and public facilities
  - Notifications of special interest groups and affected governmental agencies
  - Signs and/or message boards within the project corridor or limits
  - Postings on a public or project website
  - Newsletters (project, home owners association, community, etc.)
- Newspaper notification must include:
    - Date, time, place and type of meeting
    - Description of project
    - Statement that tentative Project schedules will be discussed
    - Right of way relocation and assistance information
    - Statement of opportunity for written and oral comments
    - Statement of availability of project information 30 days prior to the hearing and the availability of the environmental assessment (EA) or draft Environmental Impact Study (DEIS) (if Federally funded) at specified locations prior to the hearing. Environmental information is to include 106 and Agricultural Forestal District statements
    - Availability of project materials (plans, brochure and environmental documentation)
    - Non- discrimination clause (found in Chapter 17)

When an Environmental Assessment (EA) or Environmental Impact Statement (EIS) is required, it must be available for comment a minimum of 15 days prior to the public hearing and must be available for review at the public hearing. Comments must be accepted for 30 days after the EA is available.

EISs have additional public notice requirements that are beyond the scope of discussion of this manual. When an EIS is necessary, the LPA will be required to enter into a separate memorandum of agreement (see Chapter 15.2.1), which will include public involvement requirements.

- **General** - Because of the unique nature of highway projects, particularly the use of many visual aids, plans and charts, it is recommended that public participation activities be undertaken at a facility that can accommodate public review of these items.
- To encourage input from all interested parties, public hearings and the facilities where they are held must:
  - be ADA compliant
  - accommodate the hearing impaired
  - accommodate the visually impaired
- In addition, the following are required:
  - Public Hearings be preceded by a period where the public can review project documents
  - Provide for the recording of and/or transcription of verbal comments
  - Public hearings are to remain open for an additional 10 calendar days after adjournment in order to receive written comments (Note: Comment for environmental assessments must be accepted for a total of 30 days).

*VDOT Responsibilities:*

- *Project Coordinator will review notice of public hearing or notice of willingness to hold public hearing for federally funded projects.*
- *Project Coordinator will review Project Information Sheet and coordinate reviews, as needed, by District Preliminary Engineer and Public Affairs.*

### **12.4.7 Transcript of Public Hearing**

Whenever a public hearing is held, a record of the hearing must be prepared to provide documentation of the proceeding. The Transcript must include:

- A title page including project information
- table of contents,
- Hearing details (date, time and location)

- Sign in sheet
- Oral comments
- Written comments
- Any other documents submitted for the record
- Copy of public notice and documentation of public notification
- Brochure
- Reproductions of any other displays from the hearing

Copies of the transcript must be forwarded to the VDOT Project Coordinator and for review and transmittal to FHWA and the Commonwealth Transportation Board as appropriate.

*VDOT Responsibilities:*

- *Project Coordinator will review transcript and will process for approval according to the 2 Tiered Approach to Project Oversight.*

**12.4.8 Location and/or design approval for projects on which a hearing or hearings are held**

After study of the comments received from the public, environmental considerations, costs, design standards and the evaluations of any studies completed as a result of the public involvement procedures, the transcript will be compiled. The transcript will be summarized and issues addressed by the LPA Project Manager to develop a recommendation. This recommendation will be to be forwarded by the VDOT Project Coordinator to the District Administrator's Designee for distribution to the appropriate approving authority in accordance with [VDOT's Tier 1/Tier 2 approval processes](#) and [VDOT's Public Involvement Manual, Location and/or Design Approval Process Flow Charts \(pages 42 and 43 of 89\)](#).

The District Administrator's Designee will distribute the transcript, proposed responses and recommendations to the appropriate VDOT contacts and decision makers who will coordinate location/design approvals as required by state and federal law.

Once the recommendation is approved, the LPA is encouraged to advise those who provided comments during the public hearing. This response should note any changes in the proposal as presented at the public hearing and respond directly to the individual's comments or questions.

**12.4.9 Location and/or design approval for projects with a posting of notice of willingness to hold a hearing:**

For projects on which the Notice of Willingness to hold a public hearing process is sufficient to satisfy the public involvement requirements, final location/design approval is coordinated by the VDOT Project Coordinator in accordance with [VDOT's Public Involvement Manual, Location and/or Design Approval Process Flow Charts \(pages 42 and 43 of 89\)](#) and applicable state and federal laws.

Once the approvals are obtained, the locality is encouraged to advise those who provided comments during the public hearing. This response should note any changes in the proposal as presented at the public hearing and respond directly to the individual's comments or questions.

**12.4.10 Tasks/ Submittals / File Documentation**

<b><i>Task/Submittal / File Documentation</i></b>	<b><i>Locality Responsibility</i></b>	<b><i>VDOT PC Responsibility</i></b>	<b><i>Submittal Timing / Recordkeeping Requirements</i></b>
<ul style="list-style-type: none"> <li>Determination of public participation requirements</li> </ul>	Prepare and submit to PC	Concur with locality decision	At Scoping
<ul style="list-style-type: none"> <li>Notice of Public Hearing in newspaper (2x) and posting</li> </ul>	Post and send notice to PC	N/A	Not less than 30 days prior to PH approximately one week prior to PH
<ul style="list-style-type: none"> <li>Notice of Willingness to Hold a Public Hearing in newspaper (2x) and other appropriate notifications</li> </ul>	Post and send notice to PC	PC Reviews for completeness. Support is available from Public Affairs Office if needed.	Not less than 15 days prior to the expiration of willingness period <u>and</u> approximately one week prior to expiration date of willingness.

<ul style="list-style-type: none"> <li>Draft of Project Information Sheet(s) <i>Section 3.03 and Appendix A-1 of the <a href="#">Public Involvement Manual</a> includes a listing of the suggested documents for Public Information session / Public Hearing.</i></li> </ul>	Prepare and submit to PC	PC Reviews for completeness. Support is available from Public Affairs office if needed.	30 days prior to hearing
<ul style="list-style-type: none"> <li>Draft Project Information Sheet(s)</li> </ul>	N/A	Review and provide comments to locality. Support is available from Public Affairs office if needed.	10 business days
<ul style="list-style-type: none"> <li>Final Project Information Sheet(s)</li> </ul>	Prepare for public hearing	N/A	5 days prior to hearing
<ul style="list-style-type: none"> <li>Conduct the Public Hearing - Section 3.05 and Appendix A-3 of the <a href="#">Public Involvement Manual</a> provides guidance on holding a Public Hearing</li> </ul>	N/A	N/A	N/A
<ul style="list-style-type: none"> <li>PH Transcript Appendix A-5 (Transcript Submission) of the <a href="#">Public Involvement Manual</a> outlines the preparation of the Transcript</li> </ul>	Prepare and submit to PC	Process in accordance with 2 Tiered Project Oversight process	Prepared and submitted to VDOT PC 15 days after close of written comment period; final comments provided to LPA within 15 days of their submittal
<ul style="list-style-type: none"> <li>Location and/or design approval in accordance with Tier 1 / Tier 2 processes and VDOT's <a href="#">Public Involvement Manual, Location and/or Design Approval Flow Charts.</a></li> </ul>	N/A	CTB for location, Chief Engineer for design	45 days for CTB approval, 30 days for design approval

#### 12.4.11 Regulatory References

- [23 CFR 771.111 \(h\)](#)
- [23.128](#)
- [40 CFR 1500-1508](#)
- [Executive Order 12898 - Environmental Justice](#)
- [24 VAC 30-380 \(Virginia](#)
- § [33.2-208](#) subsection B of the Code of Virginia
- [§51.5-40 of the Code of Virginia](#)
- § [33.2-332](#) of the Code of Virginia
- § [33.2-333](#) of the Code of Virginia

### **12.4.12 Miscellaneous References**

#### **VDOT Policy Manual for Public Participation in Transportation Projects**

VDOT's Public Involvement Manual defines how VDOT conducts the public participation process on its projects and documents specific requirements for how VDOT addresses FHWA's public involvement regulations. This manual also includes helpful information such as templates for hearing notices and project information brochures and checklists for hearing activities. Accordingly, the LPA is encouraged to use this manual as a reference.

[http://www.virginiadot.org/business/resources/LocDes/Public\\_Involvement\\_Manual.pdf](http://www.virginiadot.org/business/resources/LocDes/Public_Involvement_Manual.pdf)

#### **VDOT CADD Manual**

VDOT's CADD manual includes many references for the production of Public Hearing Displays. Localities and their consultants are encouraged to utilize these guidelines and templates as they prepare for public hearings. These can be found in the [VDOT CADD Manual, Appendix G](#)

## Chapter 12.4 – Public Involvement Checklist

These checklists can be found in their entirety in the [VDOT online forms library](#)

CH 12.4 - Public Involvement

This section outlines the processes and responsibilities associated with Public Information and Participation for federal-aid projects. The final outcome of this process is that all projects are developed in a manner that provides the general public with a well-publicized opportunity to both review and discuss proposed plans and potential impacts for the project.

<i>SUBMIT</i>	<i>COMPL</i>	<i>F</i>	<i>S-V</i>	<i>S-L</i>	<i>T-A</i>	<i>UCI</i>	<i>Requirement</i>	<i>Reference LAP</i>	<i>Other</i>
	<input type="checkbox"/>	X	X	X			Public Hearing Requirements determined at Scoping	12.1 12.4.1 12.4.3	23CFR771.111 23USC128
	<input type="checkbox"/>	X	X	X			Offer public involvement opportunities as directed by applicable code. Projects with a CE, PCE or BCE <u>may not</u> require public involvement opportunity.	12.4.2	
	<input type="checkbox"/>	X	*	*			<b>If opportunity is offered, or a public hearing is held:</b> Project information documents & public notice prepared and submitted to PC for review by district PE manager, DCRO and Public Affairs	12.4.6	Public Involvement Manual
	<input type="checkbox"/>	X	*	*			Notice of Public Hearing or Willingness Published 2x and submit	12.4.5 12.4.6	Public Involvement Manual
	<input type="checkbox"/>	X	*	*			Public Hearing Transcript Prepared & Submitted (within 15 days of close of written comment period)	12.4.7	23CFR771.111 23USC128
	<input type="checkbox"/>	X	*	*			Location and Design Approval	12.4.8 12.4.9	Public Involvement Manual

\* If determined by VDOT that a Willingness or Public Hearing is required, then this item is applicable

## 12.5 PLAN SUBMITTALS

This chapter contains the following topics:

- 12.5.1 [Introduction](#)
- 12.5.2 [Applicability](#)
- 12.5.3 [Sealing and Signing Requirements / Title Sheet Signatures](#)
- 12.5.4 [Plan Reviews](#)
- 12.5.5 [Location and/or Design Approval](#)
- 12.5.6 [Right of Way Plan Approval](#)
- 12.5.7 [Advertisement Plan Approval Process](#)
- 12.5.8 [Tasks / Submittals / File Documentation](#)
- 12.5.9 [References](#)
- 12.5.10 [Regulatory References](#)  
[Plan Submittals Checklist](#)

### 12.5.1 Introduction

This chapter outlines the actions required for plan review, submittal, and approval. The purpose of these reviews is to ensure that the plans have been developed in accordance with the **Plan Design** section of this Guide and meet applicable federal and state design guidelines. **VDOT's reviews will focus only on the completeness, comprehensiveness, constructability and biddability of the plans and must not be considered a quality control review.** The LPA and its responsible charge engineer are fully responsible and liable for the adequacy and accuracy of the project design.

Generally, plans should be reviewed by VDOT prior to the Public Hearing, prior to Right of Way Acquisition, and prior to Advertisement, or at approximately the 30 percent, 60 percent, and 90 percent plan development stages. The scope and complexity of the project will determine VDOT's oversight activities (see [Chapter 13](#)) and the actual number of reviews and milestone meetings will vary. Three is the typical number of plan reviews; however, there may be fewer, or more, as project complexity and project risk necessitates. The LPA Project Manager and the VDOT Project Coordinator will, together, make the final determination regarding the number of reviews and milestone meetings during project scoping.

### 12.5.2 Applicability

- Applicable on all projects utilizing federal funds, projects developed to qualify for federal aid, and state funded projects on the VDOT maintained system.

<b><i>Plan Submittals</i></b>		
<i>Federal-aid</i>	<i>State-aid / VDOT Maintained</i>	<i>State-aid / LPA Maintained</i>
X	X	N/A

## **12.5.3 Sealing and Signing Requirements / Title Sheet Signatures**

### **12.5.3.1 Sealing and Signing Plans**

LPA's are required to meet [Virginia Department of Professional and Occupational Regulation \(DPOR\)](#) requirements for the sealing and signing of plans by a Professional Engineer, Landscape Architect or Land Surveyor licensed to practice in the Commonwealth of Virginia. For reference, VDOT has internal process documents which outline the requirements for sealing and signing plans and documents for VDOT administered projects in [IIM-LD-243.10](#).

When submitting for final approvals of federal phase authorizations for Right-of-Way and Advertisement, the title sheet must also be signed by the appropriate responsible officials, in accordance with local government procedures. However, at a minimum, the Director of Public Works or other locality department director with the most direct supervision over the project must sign the title sheet. The local government signatures certify that the plans are complete, constructible, and biddable (ready for contract advertisement), that the necessary right-of-way has been addressed and accounted for, and that adequate funding has been identified to complete the project. The LPA is also certifying, by the signatures, that the plans were prepared by staff or consultants that exercised the appropriate standard of care and followed accepted standards, procedures, policies, methods of practice, etc., that are consistent with the engineering and design of plans for such work.

### **12.5.3.2 Title Sheet Signatures**

VDOT has an internal process which outlines the requirement for title sheet signature for VDOT administered projects as referenced in [IIM-LD-204](#). VDOT has prepared signature blocks for Title sheets for locally administered Federal-aid, State-aid, and Design-Build / PPTA Projects. Links to samples for each of these are located in section [12.2.5.1](#), Local Governments must utilize these digital versions. Title sheets can be downloaded through VDOT's CADD Manual web site at: [http://www.virginiadot.org/business/locdes/vdot\\_cadd\\_manual.asp](http://www.virginiadot.org/business/locdes/vdot_cadd_manual.asp)

Federal-aid, and Design Build title sheets must be signed by the Locality and VDOT; while State-aid title sheets require only locality signatures.

#### 12.5.4 Plan Reviews



At the project milestones requiring reviews by VDOT as mentioned in Section 12.5.1, the LPA Project Manager will submit a copy of the roadway and bridge plans in **single page** PDF format to the VDOT Project Coordinator **to be placed in Falcon and linked to iPM.**

#### 12.5.5 Location and/or Design Approval

Location and/or Design Approval shall be obtained in accordance with VDOT's [Public Involvement Manual, Location and/or Design Approval Process Flow Chart \(pages 42 & 43 of 89\)](#).

#### 12.5.6 Right of Way Plan Approval

Prior to Right of Way acquisition, the LPA Project Manager will submit a right of way plan package, which includes a current estimate, to the VDOT Project Coordinator to be processed for approval. The submittal will include the Right of Way data sheet, Right of Way plan sheets and the original Project Title Sheet for Right of Way Authorization signed by the person of responsible charge from the locality. By its signature, the LPA is certifying that the plans are complete and accurate for the acquisition of right of way and the relocation of utilities.

The LPA Project Manager will also submit the [PM130](#) and the Right of Way and Utilities Plan Review Checklist ([RW-301](#)) to the VDOT Project Coordinator with the submittal. Detailed discussion of the Right of Way Plan approval and authorization process can be found in [Chapter 16](#).

**It is imperative that the LPA NOT incur any land acquisition or utility relocation expenses until federal authorization and VDOT Notice to Proceed with acquisitions are approved, as costs incurred prior to federal authorization SHALL NOT be reimbursed and will be the responsibility of the locality. Please note, if the locality incurs any such expenses prior to federal authorization, they risk loss of federal participation on the project.**

VDOT has internal process documents which outline the submission and review process for Right of Way Plans for VDOT administered projects. LPAs may utilize these as a reference.

[http://www.extranet.vdot.state.va.us/locdes/electronic\\_pubs/iim/IIM234.pdf](http://www.extranet.vdot.state.va.us/locdes/electronic_pubs/iim/IIM234.pdf)

*VDOT Responsibilities:*

- *The VDOT Project Coordinator will verify that the LPA has utilized the latest version of the appropriate title sheet. If not, the LPA will be required to submit the correct version.*
- *Circulate the title sheet for signatures (the title sheet can be on paper or mylar) and submit the original signed title sheet to Room 705, CO L&D Plan Library/Room 1005, CO S&B Plan File Room to be filed.*
- *The VDOT Project Coordinator will coordinate the submission of the [PM130](#) and RW-301//[EQ-201](#) forms to the District R/W manager.*
- *The VDOT Project Coordinator will prepare and submit the [LD-368](#) form after review of the LPA's Right-of-Way plans.*
- *Additional discussion on the Environmental approval process is contained in [Chapter 15](#).*
- *Normally it takes a minimum of 30 business days, from receipt of a complete package, to obtain authorization to proceed with Right of Way. When this authorization is issued, the locality will be notified by the VDOT Project Coordinator that it may begin negotiations/acquisition. This authorization will usually occur within the 60-90 day window for VDOT review of the complete package. LPAs*

*are encouraged to submit complete right of way packages as early as practicable to ensure scheduled phase dates are met.*

### **12.5.7 Advertisement Plan Approval Process**

When plans are ready for advertisement for construction, the LPA Project Manager will provide a PS&E submittal package to the VDOT Project Coordinator for construction authorization.

The submittal will include the original Title Sheet for Authorization to Advertise signed by the person of responsible charge from the LPA and signed and sealed by the Responsible Person (Licensed Professional Engineer, Certified Landscape Architect or Licensed Land Surveyor) in accordance with DPOR. By signature, the locality is certifying that the plans were prepared by staff or consultants that exercised the appropriate standard of care and followed accepted standards, policies, procedures, methods of practice, etc., that are consistent with the engineering and design of plans for such work and all plan review comments have been addressed.

**Once the project design has been completed and approved to advertise, the LPA Project Manager shall provide the VDOT Project Coordinator with a CD of the complete plan assembly in single page PDF format to be stored in the VDOT Plan File Library.**

**The LPA must receive an Advertisement Authorization prior to advertisement or the project may become ineligible for reimbursement. A separate Authorization to Award the contract and begin construction is also required and will be provided after bids are received, tabulated and submitted to VDOT as addressed under the Authorization and Award section of this Guide.**

#### *VDOT Responsibilities:*

- *Circulate the title sheet for signatures (the title sheet can be on*

*paper or mylar) and submit the original signed title sheet to Room 705, CO L&D Plan Library/Room 1005, CO S&B Plan File Room to be filed.*

- *The VDOT Project Coordinator will coordinate the submission and provide environmental certifications to the District Environmental Manager for coordination with the FHWA. The VDOT Project Coordinator will also coordinate review of the bid documents as outlined in the Advertisement and Award Chapter ([Ch 12.6](#)).*
- *Additional discussion on the Environmental approval process is contained in [Chapter 15](#).*
- *Normally it takes 30 business days, from receipt of a complete package, to obtain federal authorization to advertise a project. When this authorization is received from FHWA, the LPA will be notified by the VDOT Project Coordinator in writing. This authorization will usually occur within the 60-90 day window for VDOT review of the complete package.*

## 12.5.8 Key Submittals / Requirements

<b>Task/Submittal / File Documentation</b>	<b>Locality Responsibility</b>	<b>VDOT PC Responsibility</b>	<b>Submittal Timing / Recordkeeping Requirements</b>
Plan Reviews	Submit plans for review	Coordinate VDOT Reviews of plans – focused on constructability and bidability	Based on the schedule agreed upon by the Local PM & VDOT PC
Right of Way Plan Approval	Submit <a href="#">PM130</a> , <a href="#">RW-301</a> and RW plans for approval/authorization package to the VDOT PC	Process VDOT reviews and approvals of plans and, prepare and submit <a href="#">LD-368</a> and secure RW authorization	60-90 days before initiation of RW phase
Construction Plan Approval	Submit CN plans for approval/authorization package to the VDOT PC	Process VDOT reviews and approvals of plans and secure CN authorization	60-90 days prior to advertisement

## 12.5.9 References

- Location & Design Instructional & Information Memoranda  
<http://www.virginiadot.org/business/locdes/rd-ii-memoranda-index.asp>
- Location & Design Forms  
<http://vdotforms.vdot.virginia.gov/>  
<http://vdotforms.vdot.virginia.gov/SearchResults.aspx?IngDivisionID=14>
- Environmental Forms  
<http://vdotforms.vdot.virginia.gov/>
- Right of Way Forms  
<http://vdotforms.vdot.virginia.gov/>

## 12.5.10 Regulatory References

- [VDOT/FHWA Virginia Division Stewardship Oversight Agreement, June 2015](#)
- [23 CFR 635](#) Construction and Maintenance
- [23 CFR 771](#) Environmental Impact and Related Procedures
- [23 CFR 771.129 \(c\)](#) Environmental Re-evaluation at Right of Way Authorization
- [23 CFR 645](#) Utility Relocations, Adjustments and Reimbursement
- [DPOR §54.1-400](#) (Sealing & Signing of Plans)

## Chapter 12.5 – Plan Submittals Checklist

These checklists can be found in their entirety in the [VDOT online forms library](#)

### CH 12.5 - Plan Submittals

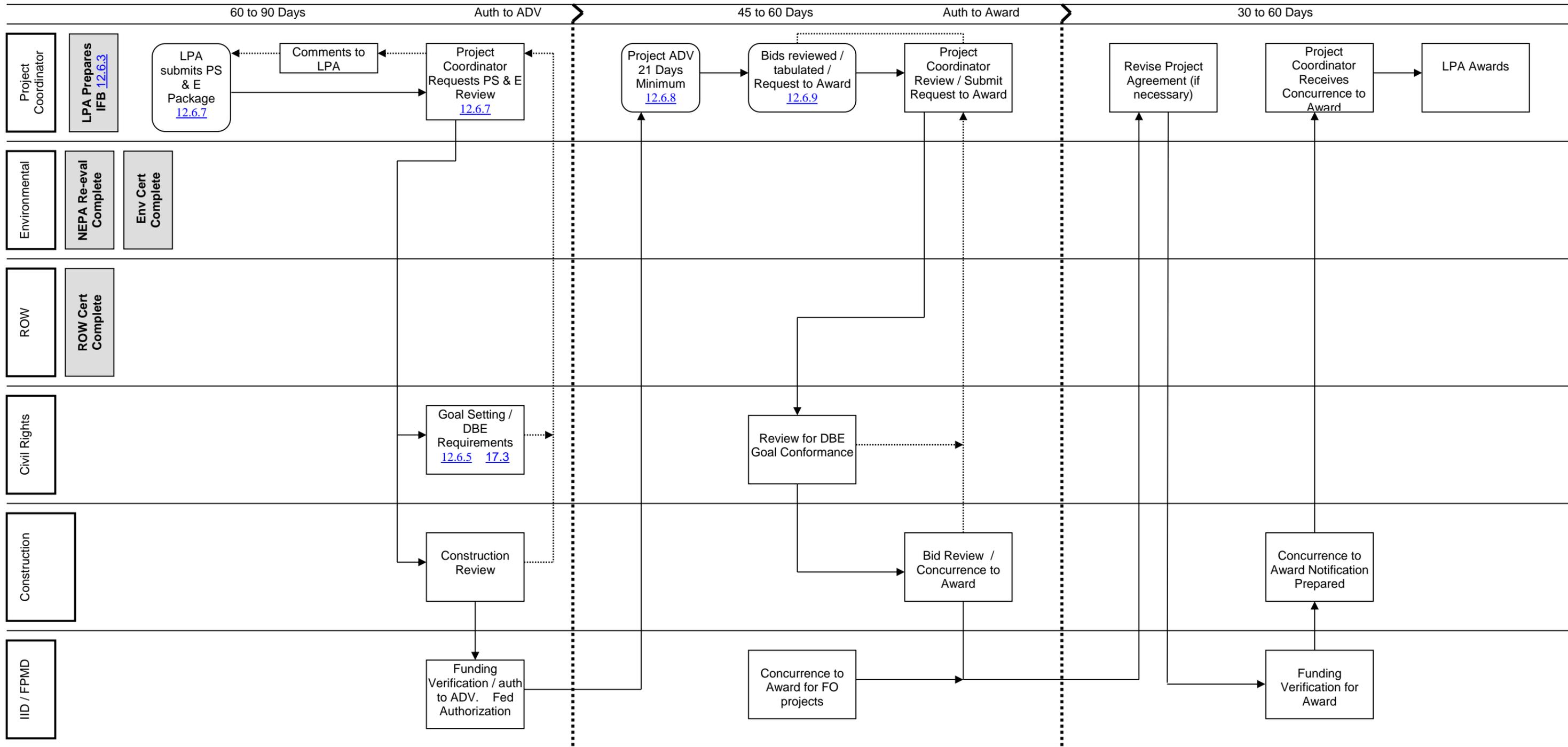
This section outlines the actions necessary for plan review, submittal and approval. The purpose of these reviews is to ensure that the plans have been developed in accordance with the Plan Design section of this Guide and meet applicable federal and state design guidelines. The LPA and its responsible charge engineer are fully responsible and liable for the adequacy and accuracy of the project design.

SUBMIT	COMPL	F	S-V	S-L	T-A	UCI	Requirement	Reference	
								LAP	Other
	<input type="checkbox"/>	X	X	--			30/60/90 percent Plan Submittal <sup>1</sup> (TA projects are reviewed at 50 percent)	12.5.1 12.5.4	
	<input type="checkbox"/>	X	X	--			Title sheets prepared Use VDOT title sheet templates	12.2 12.5.3	Templates in VDOT CADD Cell Library
	<input type="checkbox"/>	X	X	X			Plans & Title Sheets Signed & Sealed	12.5.3	DPOR Regulations
	<input type="checkbox"/>	X	X	--			R/W Plan Review Approval <sup>2</sup>	12.5.6 16	23CFR771.129
	<input type="checkbox"/>	X	X				PM 130		
	<input type="checkbox"/>	X	X				RW 301		
	<input type="checkbox"/>	X	X				EQ201		
	<input type="checkbox"/>	X	--	--			RR Agreement developed if RR property involved		23CFR635.214(b) 635.216(d)
	<input type="checkbox"/>	X	X				Submit PSE package for approval / authorization	12.5.7	

<sup>1</sup> As determined by Project Complexity / Risk

<sup>2</sup> R/W Certification Approval is only required for federal-aid projects and when underlying fee ownership of R/W will be transferred to VDOT. Otherwise R/W Plan Review will be performed only ensure that appropriate R/W is acquired to meet future highway maintenance needs

## 12.6 ADVERTISEMENT AND AWARD



## CHAPTER 12.6 - ADVERTISEMENT AND AWARD

- 12.6.1 [Introduction](#)
- 12.6.2 [Applicability](#)
- 12.6.3 [Development of the IFB](#)
- 12.6.4 [Bid Proposal and Contract Requirements](#)
- 12.6.4.1 [Sole Source and Proprietary Items](#)
- 12.6.5 [Mandatory Federal Aid Provisions](#)
- 12.6.6 [Other Federal aid requirements](#)
- 12.6.7 [Plans Specifications and Estimates Submittal Package](#)
- 12.6.8 [Advertisement](#)
- 12.6.9 [Project Award](#)
- 12.6.9.1 [Bid Opening and Analysis](#)
- 12.6.9.2 [Submittal of the Award Package](#)
- 12.6.9.3 [VDOT Concurrence to Award](#)
- 12.6.6.4 [Construction Dashboard](#)
- 12.6.10 [Local Force Construction](#)
- 12.6.11 [Key Submittals / Requirements](#)
- 12.6.12 [References](#)

### [APPENDICES](#)

[Appendix 12.6-A – Advertisement and Award Submittals Checklist](#)

[Appendix 12.6-B – Locality/VDOT Certification of Documents](#)

[Appendix 12.6-C – Advertisement and Award Checklist](#)

### 12.6.1 Introduction

This chapter outlines the requirements associated with advertisement and award of federal-aid projects. State-aid projects, included in the SYIP or the SSYP, must receive concurrence to award and submit a Project Award Submittal Package to the Project Coordinator prior to contract letting.

 **It is not acceptable to use contracting methods such as alternate bids, speculative amounts, change orders, etc., as a replacement for complete and thorough design/investigations during project development.**

### 12.6.2 Applicability

- All federal-aid projects and projects developed to qualify for federal-aid.
- \*State-aid projects funded with formula allocations must receive funding verification and authorization from VDOT prior to award. A Project Award submittal package must be submitted to the VDOT Project Coordinator. This package must also include a completed Appendix 5-A Certification Form for State Funded Projects.

<b><i>Advertisement &amp; Award</i></b>		
<i>Federal-aid</i>	<i>State-aid / VDOT Maintained*</i>	<i>State-aid / LPA Maintained*</i>
X		

### 12.6.3 Development of Invitation for Bid / Contract Documents

The LPA is responsible for preparing the bid package which contains the plans, addenda, special provisions, supplemental specifications, and the bid proposal. When using federal-aid, LPAs must comply with [23 CFR 635](#) which describe federal regulations governing construction contracts. Exceptions to these requirements are provided for some off-right of way projects (see [Chapter 5](#) for additional discussion).

#### 12.6.4 Bid Proposal and Contract Requirements:

The bid proposal and contract must contain the following elements:

- Instructions to Bidders
- General Contract Provisions
- Proposal / Agreement forms / Terms of the Contract
- Schedule of Bid Items, Fuel Adjustment, Steel Adjustments, etc.
- Reference to VDOT specifications including any modifications to VDOT specifications or local specifications being used (note: additional time for review of these may be necessary)
- Addenda Sheet(s)
- Subcontractor Solicitations
- Permits and Permit Requirements

LPA's are reminded that Invitations for Bids (IFB's) must **NOT** contain any negotiation clause(s) or any reference to a locality policy that provides for contract negotiation. Bid negotiation is strictly prohibited as set forth in [23 CFR 635.113](#).

##### 12.6.4.1 Sole Source and Proprietary Items:

The use of sole source and proprietary items should be avoided except when there is no other feasible or reasonable alternative. Special approvals are necessary to include these types of items in a contract. There is often confusion on the definition and differences between sole source and proprietary; this is clarified below.

##### • Sole Source Items

A Sole Source Item is any product or service used on a project where the product may be procured from **only one** source, and therefore has no price competition. This is a very rare situation and state procurement regulations require VDOT approval to utilize a sole source item. Federally funded projects require FHWA approval.

## • Proprietary Items

A Proprietary Item is a product, specification or process identified in the plans or specifications as a "brand" or trade name (e.g. 3M, Corten). However, it may also be a product so narrowly specified that only a single manufacturer can meet the specification. Proprietary Items are different from a sole source in that it is a specific product typically available from only one manufacturer; however, it is sold by various vendors.

The detailed procedures, processes and the required documentation for approval for the use of proprietary items is defined in VDOT's Construction Division Instructional and Informational Memorandum, [IIM-CD-2015-01.01](#) as approved on April 6, 2015.

Additional discussion on the use of Sole Source and Proprietary Items can be found in section 3.9.5 of VDOT's Urban Manual. Additional FHWA guidance can be found on the FHWA FAQ page.

### 12.6.5 Mandatory Federal-aid Provisions:

Mandatory federal-aid provisions are listed and can be obtained from VDOT's Web site at: [PDF version](#) / [Word version](#). The [FHWA Form 1273](#) must be included in the contract verbatim. No modifications are allowed. A detailed discussion of all mandatory federal-aid contract provisions can also be found in the [FHWA Contract Administration Core Curriculum Participants Manual and Reference Guide](#).

In addition to those mandatory federal-aid provisions, the LPA must include the following in their construction contracts:

- Language to address any conflict between state or local contract language and federal rules. When conflicts arise, the federal-aid or most conservative approach must be taken. For off-system (off right of way) projects, State procurement laws and regulations may apply (See [Chapter 5](#) for further details).
- Language to address or a reference to a contractor claims process.

- DBE language is also required in all federal-aid contracts. VDOT will review and potentially establish a DBE goal, on all federal-aid projects, with a construction value over \$100,000. The goal will be determined based on available DBEs in the project area and on contract items amenable to the work performed by those DBEs. **NOTE: a SWAM vendor may not necessarily also be a DBE contractor or meet the requirements as a DBE contractor.**
- Mandatory Construction and Civil Rights forms and language that must be included in each federal-aid contract are listed below:
  - [C-104](#) (Bidder Statement)
  - [C-105](#) (Bidder Certification)
  - [C-111](#) (Minimum DBE Requirements)
  - [C-112](#) (Certification of Binding Agreement)
  - [C-48](#) (DBE- Subcontractor/Supplier Solicitation and Utilization)
  - [C-49](#) (DBE- Good Faith Efforts Documentation)

#### 12.6.6 Other federal-aid requirements



**For traditional highway construction federal-aid projects, local governments, with the exception of TA projects and UCI Municipalities, must use VDOT Pre-qualified contractors.**

- Vendors who are, at the time of the bid opening, debarred from federal-aid work, are not eligible for federal-aid projects.
- LPAs may be required to accommodate an OJT program for project. This will be determined by the VDOT Civil Rights Division during DBE goal-setting review.
- For federal-aid projects or for projects that will be maintained by VDOT, the LPA shall submit a materials quality assurance plan (QAP) for review and approval, prior to construction. It is recommended that QAPs be submitted prior to project advertisement to prevent project delays. For additional information refer to [Chapter 13.1.5.3](#).

## 12.6.7 PLANS, SPECIFICATIONS, AND ESTIMATES SUBMITTAL PACKAGE

Prior to the locality's request for federal authorization to advertise, the following items must be completed:

- Right of Way Certification as outlined in [Chapter 16](#) of this Manual is required for federal-aid projects. Local governments certify their compliance with other right of way acquisition requirements for non federal-aid projects.
- Environmental Re-evaluation at PS&E, for federal-aid projects (see [Chapter 15.11](#))
- Environmental Certification, for federal-aid projects. For non federal-aid projects, LPAs will certify their compliance with applicable environmental laws and regulations (see [Chapter 5](#)).

When a federal or state-aid project (see Chapter 5 for exceptions) is ready to be advertised for construction, the project must first receive an advertisement authorization.



**Failure to obtain federal authorization to advertise for construction will jeopardize federal funding to the project. It is important for LPA's to ensure that this authorization has been obtained prior to advertisement. Proceeding with advertisement without federal authorization will jeopardize reimbursement of federal aid.**



To obtain this authorization, the LPA must submit a PS&E Submittal Package to VDOT's Project Coordinator. This submittal package will include the following items:

- (1) [PS & E Submittal Form](#). This [form](#) will state that items #2 through #8, below are being submitted and must be signed by the local official responsible for the project.
- (2) A current engineer's estimate
- (3) Final Invitation for Bid and Contract Documents – 2 sets
- (4) Complete sets of plans
- (5) Signed Title Sheet, containing appropriate VDOT signature blocks (separate VDOT signature blocks are required for Tier 1 and Tier 2 projects).
- (6) [Locality/VDOT Certification of Documents](#). All boxes must be checked except for those items that may not be applicable and have an “N/A” box. By completing this form the LPA is certifying that the items listed on the form (required to obtain Federal Authorization to Advertise the project) have been completed, checked and the Proposal & Plans have been prepared in accordance with the standards and requirements included in the LAP Manual ([Appendix 12.6-B](#)).
- (7) If additional funds are needed than those shown in the SYIP or SSYP, a source needs to be identified and the Project Administration Agreement must be modified.
- (8) Evidence that a willingness to hold a public hearing was posted or evidence of having held a public hearing or that a decision that a willingness was not necessary was made during scoping (See CH 12.4.5).



**If project plans are revised after authorization to advertise was issued, the LPA must re-submit plans for review in accordance with Chapter 12.5. A replacement signed Title Sheet must also be submitted to the VDOT Project Coordinator who will then forward it to the VDOT Plan Coordination section with a request to obtain appropriate signatures.**

*VDOT Responsibilities (reviews or approvals at Central Office apply only to Tier 2 projects)*

- *The VDOT Project Coordinator will conduct an extensive review the locality's PS&E Package submittal, and request any additional*

information from the LPA prior to forwarding to the Central Office Plan Coordination Section.

- Review and include in the PS&E package the [Locality/VDOT Certification of Documents](#) form.
- Complete and sign the VDOT District Certification section of the [Locality/VDOT Certification of Documents](#)
- For all federal oversight and non-federal oversight projects, review and submit the PS&E package and signed [Locality/VDOT Certification of Documents](#). District staff will review the PS&E package and obtain required District Title Sheet signatures prior to submission to Construction Division, for Tier 1 projects. For Tier 2 projects, the Project Coordinator will submit the completed [PS & E](#) Submittal Form and LPA-signed title sheet to the L&D Plan Coordination section with a request to obtain appropriate VDOT Central Office signatures.
- Review and include in the PS&E submittal package the [Locality/VDOT Certification of Documents](#) form.
- The Project Coordinator will submit one copy of the IFB and a full set of plans to the locally administered projects federal submissions officer (Construction Division). For Tier 1 projects, include the LPA and District-signed Title Sheet.
- Submit one copy of the IFB to the District Civil Rights Manager who will review and forward to the Central Office Civil Rights office.
- Construction Division will prepare a cost summary and forward to Federal Program Management Division to obtain federal authorization to award.
  - Comments on the bid documents and the DBE goal will be provided to the Project Coordinator who will forward to the Locality Project Manager to include in the final advertisement documents.
  - The Project Coordinator will notify the LPA Project Manager when Federal Authorization to advertise has been obtained and State funding verification is complete. A copy of the federal agreement will be provided to the local government.

- *Where practical, the Project Coordinator will ensure all documents necessary for advertisement approval are in files and uploaded into iPM, in the Project Documents section.*

Normally it takes 30 business days to obtain federal advertisement authorization after submittal of a complete PS&E Package. The VDOT Project Coordinator will notify the LPA Project Manager, in writing, after receiving the federal authorization.

Prior to advertisement the LPA must incorporate comments provided by the VDOT federal submissions officer (advisory comments, excluded) and must incorporate the DBE Goals provided by the VDOT Civil Rights Division. Should subsequent reviews or audit reveal that required provisions were not included, VDOT may pursue reimbursement of expended funds.

#### State Funded Projects

The LPA must request and receive funding verification prior to advertisement. The VDOT Project Coordinator will notify the LPA Project Manager that funding verification (IID-4) has been received. Funding verification takes 20 business days to complete.

#### *VDOT Responsibilities*

- *The District Planning and Investment Manager verifies and issues the IID-4 for Tier 1 projects and notifies the Project Coordinator. On Tier 2 projects, the District Planning and Investment Manager requests Funding Verification from the Infrastructure Investment Division (IID).*
- *The Infrastructure Investment Division issues the signed IID-4 to the Planning and Investment Manager (Tier 2 projects), who will notify the VDOT Project Coordinator that funds have been verified.*
- *Upon receipt of the signed IID-4, the VDOT Project Coordinator will notify the LPA Project Manager that funding verification has been received and it may proceed with advertising the project.*

## Special State-aid Projects

Projects funded strictly through special funding programs, such as access or revenue sharing funds have previously received CTB authorization and do not require additional Commissioner or CTB authorization to advertise or award. Right of Way Certification is not necessary and the PS&E package is reviewed and approved at the District level.

The LPA Project Manager must notify the VDOT Project Coordinator when the project is advertised, when it is awarded, and the final award amount.

### *VDOT Responsibilities:*

- *The Project Coordinator will enter the advertisement and award dates into the project pool schedule and will update the project estimate.*

## **12.6.8 ADVERTISEMENT**

Federal-aid contracts must be advertised for a minimum of three weeks (21 days) [23 CFR 635.112](#).

State-aid projects may be allowed a shorter time-frame in accordance with the Virginia Public Procurement Act (VPPA).

LPAs must provide notice to the VDOT Project Coordinator that the contract is being advertised and where the public notice and bid documents can be obtained.

## **12.6.9 PROJECT AWARD**

### **12.6.9.1 Bid Opening and Analysis**

The bid opening must be made in a public forum and read aloud. The LPA must record the actual time and date of the bid openings and record any attendees.

The LPA will perform a preliminary evaluation of the bids for responsiveness and errors and determine the apparent low bidder prior to submittal to VDOT for bid review and final authorization. Any determination that a bid is non-responsive must be documented and kept in the project file for a minimum of three years after the financial close-out of the project. The following lists some, but not all, reasons a bid may be deemed unresponsive:

- (1) Failure to sign the bid or the bid is signed by an unauthorized individual;
- (2) Failure to furnish or sign a required bid bond;
- (3) Failure to submit a price for each bid item;
- (4) Failure to commit to DBE goals or demonstrate a good faith effort to do so, if required in the IFB;
- (5) Failure to be prequalified, if required in the IFB;
- (6) The apparent low-bid is excessively over/under the engineer's estimate.

For federal-aid contracts, the LPA Project Manager must consult with the VDOT Project Coordinator and obtain concurrence from VDOT when making a determination that an apparent low-bidder is non-responsive.



**Determination of good faith efforts, when DBE goals have not been met MUST be made in coordination with VDOT's Civil Rights Division.**

If the LPA determines that it will not award the contract to the lowest, responsive bidder, it must contact the VDOT Project Coordinator and provide written justification for the decision. The VDOT Construction Division must concur in the rejection of these bids. If VDOT cannot concur with the LPA's justification, the LPA will not be given authority to award the contract to another bidder on the same contract at the same letting.

The LPAs bid analysis should address these points for the apparent low bid submitted:

- Examine the unit bid prices for reasonable conformance with the Engineer's estimated prices
- Include a thorough evaluation of obvious unit price unbalancing
- Identify extreme variations with the Engineer's Estimate

Reference [23 CFR 635-114](#)(c),(d),(k)

### 12.6.9.2 Project Award Submittal Package



After the LPA makes the determination of the apparent low-bidder, the LPA shall submit to the VDOT Project Coordinator a request for bid review. This request will contain the following:

1. A letter stating that the locality intends to award the contract to the apparent low-bidder, to include:
  - Low bidders name
  - Mailing Address
  - Award amount including any proposed bid additives
  - Name of person (and title) that opened the bids
  - Advertisement date and where and when bids were opened.
2. A copy of the bid analysis including the tabulation of each bidding contractor's prices with the Engineers Estimate. Items that have a significant deviation from the Engineers Estimate in the low bid unit prices are to be highlighted.
3. A detailed explanation if the award is to a bid that is greater than 10% over the engineer's estimate.
4. Required completed DBE Forms ([C111](#), [C112](#), [C48](#), & [C49](#))
5. Proof of required bonds
6. Required contractor certification forms ([C104](#) & [C105](#))



**For any bid proposal and contract that received significant comments during the PS&E Package review, VDOT may request that the LPA submit the final bid proposal and contract for review, to ensure that all mandatory items were included in the contract. VDOT will only review the final bid proposal and contract for those items required to be included.**

VDOT will make an independent evaluation of the bid, examining the unit bid prices for reasonable conformance with the engineer's estimated prices.

VDOT will also review the bidder's conformance with the DBE goals or, if necessary, their documentation of good faith efforts to meet the DBE goal.

### **12.6.9.3 VDOT Final Award Recommendation**

After VDOT determines that the recommendation by the LPA is acceptable, project funding is verified through the VDOT Infrastructure Investment Division. After funding verification the Construction Division will forward to the Project Coordinator the completed "funding distribution sheet."



**Prior to final award the Project Administration Agreement must be amended to adjust for funding expended during the preliminary engineering and right of way phases, for the estimated construction costs and (separation) of funding sources (See Chapter 10 of this Manual).**

#### *VDOT Responsibilities:*

- *The Project Coordinator will accept and review the Project Award Submission Package and forward the entire package **with a recommendation** to Construction Division for Review;*
- *The Project Coordinator will forward to the DCRM, who will review and forward to Central Office Civil Rights Division the following:*
  - *Recommended low bidders Name, Mailing Address and Low*

*Bid Amount and tabulation;*

- *Required completed DBE Forms (C111, C112, C48, & C49)*
- *Construction Division and the Civil Rights Division will notify the Project Coordinator if additional information as necessary. The Project Coordinator will forward the request to the LPA and coordinate obtaining additional information as necessary;*
- *After resolution of any outstanding items, the Construction Division will verify funding through the Infrastructure Investment Division and provide a copy of the funding verification to LAD.*
- *The Project Coordinator will amend the Project Administration Agreement Appendix A to reflect actual expenses incurred during the PE and ROW phases and the construction award amount.*
- *Upon receipt of recommendation to award from Construction Division, the Project Coordinator will notify the LPA Project Manager, in writing that the project may be awarded.*

#### **12.6.9.4 Construction Dashboard**

After the project is awarded, LPAs administering VDOT projects in the Six Year Improvement Program, Secondary Six Year Improvement Program or Urban Program are required to report project progress utilizing VDOT's Dashboard LAP web based tracking module. Information on this program is available on the Local Assistance Division [website](#).

#### **12.6.10 Local Force Construction**

Section [33.2-234](#) of the Code of Virginia provides that state and or locality employees may be used for construction of projects estimated at \$600,000 or less. In addition the Commissioner of Highways may enter into an agreement with a locality to construct or maintain any roads in the system of state highways provided the locality has obtained a

cost estimate of not more than \$1 million and the locality has received fewer than two bids from private entities to perform such work.



**A “Finding of Cost Effectiveness” shall be submitted to VDOT’s Project Coordinator and subsequently approved by FHWA. The locality must not begin construction work utilizing its own forces until such time as it has received concurrence to do so from the Project Coordinator.**

For non federal-aid projects, all requirements are the same as above, except that the special federal regulations and a “Finding of Cost Effectiveness” are not required for use of a locality’s forces to construct a project. However, if a locality requests authority to perform construction work utilizing its own forces, the request shall be evaluated in the same manner that VDOT evaluates requests to perform work with state forces. This includes the requirement that a cost benefit analysis be prepared which indicates that using locality forces results in lower cost and equal or faster project completion than the competitive bid process. The cost benefit analysis and supporting documentation shall be submitted to VDOT’s Project Coordinator. **The LPA should not begin construction work utilizing its own forces until such time as it has received concurrence to do so from the Project Coordinator.**

### 12.6.11 Key Submittals / Requirements

<i><b>Task/Submittal/File Documentation</b></i>	<i><b>LPA Responsibility</b></i>	<i><b>VDOT P.C. Responsibility</b></i>	<i><b>Submittal Timing/ Recordkeeping Requirements</b></i>
PS&E Submittal Package	Ensure a complete quality submittal	Review for completeness, upload pertinent info in iPM, forward to appropriate VDOT staff	LPA to submit at least 30 business days prior to target advertisement date; VDOT to approve & provide advertisement authorization within 20 business days
Project Award Submittal Package	Ensure DBE goals / good faith effort; package is complete;	Construction and Civil Rights Divisions to review	LPA to submit at least 20 business days prior to target award date
Construction Dashboard	Enter into VDOT	VDOT Construction	Immediately after notice

Information	Construction Dashboard	Project Monitor will ensure projects are in Dashboard at first billing	to proceed;
-------------	------------------------	--	-------------

### 12.6.12 References

- [23 CFR 630, Subpart B Guidelines for Preparation of Plans, Specifications, and Estimates](#)
- [23 CFR 633, Subpart A – Required Contract Provisions – Federal Aid Construction Contracts](#)
- [23 CFR 635](#)
- [Virginia Public Procurement Act](#); Code of Virginia Title 2.2 Chapter 43
- [FHWA Contract Administration Core Curriculum Manual](#)
- [VDOT/FHWA Virginia Division Stewardship Oversight Agreement, June 2015](#)
- FHWA Guidelines on Preparing Engineer’s Estimate, Bid Reviews and Evaluation  
<http://www.fhwa.dot.gov/programadmin/contracts/ta508046.cfm>

### Appendices:

[Appendix 12.6 A](#) - Advertisement and Award Submittals Checklist

[Appendix 12.6 B](#) – Locality/VDOT Certification of Documents Form

[Appendix 12.6 C](#) – Advertisement and Award Checklist

**Appendix 12.6 –A  
Checklist  
Advertisement & Award Submittals for Construction**

## Projects Requiring Authorization to Advertise & Award

### Submittal for Review

The following must be received by VDOT's Project Coordinator 30 business days prior to advertisement.

1. \_\_\_ Bid Documents
2. \_\_\_ Estimate
3. \_\_\_ Complete set of plans

### Submission of Finalized Documents for Projects Requesting Authorization to Advertise

The locality shall ensure that VDOT's Project Coordinator has received the following information for submission to Construction Division **no less than 20 business days** prior to advertisement.

1. \_\_\_ Request for authorization to advertise the project
2. \_\_\_ Current Engineer's Estimate
3. \_\_\_ Copy of the proposal
4. \_\_\_ Locality Certification of Documents (Complete and Sign Appendix 12.6-B)

### Submission of Documents for Projects Requiring Authorization to Award

After receipt of bids the locality shall ensure that VDOT's Project Coordinator has received the following information for it to be submitted to Construction Division **no less than 20 business days** prior to target award date.

1. A letter stating that the locality intends to award the contract to the apparent low-bidder, to include:
  - Low bidders name
  - Mailing Address
  - Award amount including any proposed bid additives
  - Name of person (and title) that opened the bids
  - Advertisement date and where and when bids were opened
2. A copy of the bid analysis including the tabulation of each bidding contractor's prices with the Engineer's Estimate. Items that have a significant deviation from the Engineer's Estimate in the low bid unit prices are to be highlighted.
3. A detailed explanation if the award is to a bid that is greater than 10 percent over the engineer's estimate.
4. Required completed DBE Forms ([C111](#), [C112](#), [C48](#), & [C49](#))
5. Proof of required bonds
6. Required contractor certification forms ([C104](#) & [C105](#))

**•All Federally funded projects require VDOT authorization to award**

## **Appendix 12.6B**

### **Locality/VDOT Certification of Documents**

## (LAP 402A) CERTIFICATION OF DOCUMENTS

(To be completed by LPA Project Manager)

STATE PROJECT#: \_\_\_\_\_

FEDERAL PROJECT #: \_\_\_\_\_

UPC: \_\_\_\_\_

- NEPA Document
- Permits (if applicable)  N/A
- Waivers & Design Exceptions (includes criteria)
- Right of Way Certification (includes Railroad & Utilities certifications)
- Agreements (includes Railroad, Utilities and Right of Way)
- Public Hearing/Willingness/Waiver requirements per LAP Manual Ch 12.4 have been met
- Design is in accordance with appropriate Design Criteria or Waiver
- Sequence of Construction/Transportation Management Plan (TMP) (required for roadway projects)  N/A
- Plans / No-Plan Assembly
- Proposal
  - Required Forms
  - Required Federal Provisions & Current Wage Rates
  - Environmental Permits (if applicable)  N/A
  - Project Specific Provisions
- Current Engineer's Estimate including Construction Engineering & Inspection (CEI), Contingency, Local Forces, Contract Requirements, & Railroad Cost for Budget
- Environmental Certification EQ-103 (provided by VDOT)
- PS&E Re-evaluation (provided by VDOT)
- R/W Certificate No. \_\_\_\_\_ Date \_\_\_\_\_ (provided by VDOT)

I certify for the subject project the required items listed above and necessary for federal authorization to advertise have been completed, checked and the Proposal & Plans have been prepared in accordance with the standards and requirements included in the Locally Administered Projects Manual and are attached.

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

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

### VDOT DISTRICT CERTIFICATION

I certify for the subject project the required items listed above and necessary for federal authorization to advertise have been completed, reviewed by District staff, entered into iPM where applicable, and the Proposal & Plans have been prepared in accordance with the standards and requirements included in the Locally Administered Projects Manual and are attached.

\_\_\_\_\_  
VDOT District Project Coordinator

\_\_\_\_\_  
Date

## APPENDIX 12.6C

### Advertisement and Award Checklist

CH 12.6 - Advertisement & Award

This section outlines the requirements associated with advertisement and award of federal-aid and certain state-aid projects. LPA's must follow the outlined procedures in order to ensure that they are fully reimbursed for eligible project costs.

SUBMIT	COMPL	F	S-V	S-L	T-A	UCI	Requirement	Reference LAP	Reference Other
	<input type="checkbox"/>	X	--	--			Submit IFB/Contract for Review	12.6.3	23CFR635
	<input type="checkbox"/>	X	--	--			<a href="#">Mandatory Federal-aid Provisions included in IFB/Contract (incl FHWA1273)</a>	17.3.2	FHWA1273
	<input type="checkbox"/>	X	--	--			Civil Rights Language included in IFB/contract	12.6.5 17.3	
	<input type="checkbox"/>	X	--	--			Review for and inclusion of DBE Goal in IFB/contract	12.6.5 17.4	23CFR635.107
	<input type="checkbox"/>	X	--	--			US DOL Minimum Wage Rates	17.3.7	23CFR635.309(f)
	<input type="checkbox"/>	X	--	--			OJT provisions included if requested by VDOT	17.5	23CFR230.111
	<input type="checkbox"/>	X	--	--			Restrict bidders to VDOT Pre-qualified contractors	12.6.6	
	<input type="checkbox"/>	X	X**	X**			PS&E Submittal Package <sup>1</sup> - include PSE Submittal form	12.6.2 12.6.7	
	<input type="checkbox"/>	X	X	--			Engineer's Estimate with cost summary	12.6.7	
	<input type="checkbox"/>	X	X	--			Complete set of plans	12.6.7	
	<input type="checkbox"/>	X	--	--			Environmental conditions and commitments documented	15.2	23CFR635.309(j)
	<input type="checkbox"/>	X	--	--			Specifications shall include written instructions for constructing the project or reference VDOT's Road and Bridge Specifications		23CFR630.205(b)

	<input type="checkbox"/>	X	X	--		Signed Title Sheet <sup>2</sup>	12.6.7	
	<input type="checkbox"/>	X	--	--		Locality Certification of Documents Completed (Appendix 12-B)	12.6.7	
	<input type="checkbox"/>	X	--	--		Evidence of Public Hearing, notice, or Willingness	12.6.7 12.4.5	
	<input type="checkbox"/>	X	X	--		Receive Construction Advertisement Authorization from VDOT	12.6.7	
	<input type="checkbox"/>	X	X	X		Advertise 21 days & maintain supporting documentation <sup>3</sup>	12.6.8	23CFR635.112 VPPA
	<input type="checkbox"/>	X	X	--		Publicly read bid-opening & maintain supporting documentation	12.6.9	
	<input type="checkbox"/>	X	--	--		Verify that selected contractor is prequalified	12.6.6 12.6.9.1	
	<input type="checkbox"/>	X	--	--		Ensure selected responsible, low-bid contractor is not debarred from federal work	12.6.6	49CFR29
	<input type="checkbox"/>	X	--	--		Unit prices do not vary significantly from engineer's estimate (>25%); bids are not mathematically unbalanced	12.6.9.2	23CFR635.114
	<input type="checkbox"/>	X	--	--		Materials not significantly unbalanced	12.6.9.2	23CFR635.114
	<input type="checkbox"/>	X	X <sup>4</sup>	--		Submit Project Award Submittal Package for Review	12.6.9.2	
	<input type="checkbox"/>	X	X <sup>5</sup>	--		Award recommendation from VDOT	12.6.9.3	

\*\*State-aid projects funded with formula allocations must receive funding verification and authorization from VDOT prior to award. A Project Award submittal package must be submitted to the VDOT Project Coordinator.

<sup>1</sup>PS&E Package is reviewed in Central Office for federal-aid projects; state-aid only are reviewed in District

<sup>2</sup> Title sheet must include VDOT signature blocks for federal-aid projects

<sup>3</sup> State-aid projects may be advertised less than 21 days in accordance with VPPA

<sup>4</sup> State-aid Formula-funded projects; Concurrence for Revenue Sharing and Access Projects is not required; prior authorization through CTB action to allocate the funding

<sup>5</sup> Award recommendation issued by VDOT