

Design – Roadway

The road designer shall establish the preliminary line and grade for anticipated road improvements. Horizontal baselines, vertical profiles and typical sections shall be developed for the mainline and all connecting/intersecting roadways. Mainline and connection geometrics are to be developed in order to establish the grading limits, right of way limits, environmental impacts and the potential impacts to utilities.

Potential Offerors may use the preliminary alignment established by VDOT, or they may consider a new alignment consistent with VDOT and AASHTO standards. The RFP should describe any restrictions on horizontal/vertical deviations and what ramifications there may be with regard to the Environmental document and Right of Way requirements if they choose to deviate from the alignment shown in the preliminary plans. Proposed alignment changes will only be allowed if approved by VDOT.

Preliminary cross sections shall be developed in order to establish construction and right-of-way limits, preliminary costs, determine drainage patterns and develop a general concept for the Transportation Management Plan (TMP). Preliminary cross sections shall be used to determine right of way requirements and anticipated earthwork quantities to assist in the development of the PCES and detailed estimate.

Design – Structure and Bridge (S&B)

The PM-D needs to coordinate with the Structure & Bridge Design Manager and Central Office Structure and Bridge POC with regard to the geometrics of the roadway and for the structural requirements of the project. Preliminary bridge plans shall be provided for the purpose of developing the Major Items detailed estimate.

Design – Drainage

The hydraulics designer shall establish the preliminary ditch, culvert, and storm sewer design for anticipated road improvements. Potential stream relocation, restoration, or enhancements shall be identified. The preliminary layout provides necessary information to assess the impacts to utilities, proposed drainage patterns, tie-ins, right of way and or temporary/permanent easement needs, environmental permits, and estimate preparation.

Pipe and inlet/manhole sizing and detailed pipe profiles are not developed during the preliminary design. The Design-Builder shall be responsible for detailed drainage design and computations.