ARTICLE 2

Project Initiation Document Design Scoping Index

General Guidance

1. The Design Scoping Index (index) can serve as discussion document to help the design units analyze the highway system and identify geometric design issues that should be addressed during the project initiation phase.
2. The index can serve to facilitate discussions with other functional units to identify project issues and stakeholder input needed to properly scope the project.
3. The index can serve to facilitate discussions with Headquarter Liaisons to identify potential fatal flaws of non-standard design features.

The Design Scoping Index is used in conjunction with the scoping checklists from other functional units to determine feasibility of the project alternatives. When filling out the index, use some type of notation to indicate if information on the index is based on assumptions. Project information is dynamic and the information in this index should be revised and dated throughout the project initiation process. As the project progresses, information should be verified, updated, and possibly addressed in a risk analysis.

To aid in engineering decision regarding the development of geometric plans, refer to the "*Highway Design Manual*" and DIB 78 Design Checklist.

PROJECT INITIATION DOCUMENT DESIGN SCOPING INDEX

Attach the project location map to index to show the location of all design improvements.

Today's Date:	
Status (Initial, Update):	

General Information:

District:	County:	Route:	Post Mile	EA

Project Manager		Phone #	
Task Manager		Phone #	
Project Engineer		Phone #	
Design Functional Manager		Phone #	

General Project Descriptions:	

Project Need:	
Project Purpose:	

Item	Considerations	Yes/No/Specific	Comments (summarize pertinent information. assumptions, reference location of detailed information, and name of person who will provide information).
1. Project Setting (refer to Planning Scoping Checklist)	Rural, Suburban or Urban?		
	Current Land Uses: (e.g., industrial, light industry, commercial, agricultural residential etc.)		
	Adjacent Land Uses:		
	Existing Landscaping:		
	Designated or eligible scenic highway		

The following pages are to be used for each alternative provided that the scope is significantly different. If a route has been adopted as a freeway, a decision must be made as to whether or not the project will address improvements to the existing traversable highway or move to construction of a freeway facility.

Item	Considerations		Yes/No/Specific	Comments (summarize pertinent information, assumptions and reference location of detailed information):
Design Concept and Route Matters	1.	Design Concept?		
		Freeway/Expressway/ Conventional Highway		
		Mixed highway and transit		
		Mixed highway and rail		
		Main Street/Complete Street		
		Other		
	2.	Existing Route Adoption Date		
	3.	New Route Adoption Proposed?		
	4.	Existing Freeway Agreement Date		
	5	New Freeway Agreement Proposed?		
	6.	Public Road Connection Proposed?		
Design Criteria	1.	Design speed for highway facilities within the project limit		
		mi/hr?		
	2.	Design Period: (10 yr/15 yr/20yr)		
		Construction Year		
		Design Year		
	3.	Design Capacity - Level of Service to be maintained over the design period:		
		Mainline		
		Ramp		
		Local Street		
		Weaving Sections		
	4.	Design Vehicle Selection		
		STAA		
		California		
		Bus		

Proposed Roadbed and Structure Widths

Forecasted Average Daily Traffic volumes	_____
Percent truck volume	_____%

	Roadbed Width			Structure Width		
State Highway	Existing	Proposed	Standard	Existing	Proposed	Standard
Lane widths/#						
Left Shoulder						
Right Shoulder						
Median Width						
Bikeway/Buffer						
Sidewalk						
Planting strip						
Parking						
Local Streets						
Lane widths/#						
Left Shoulder						
Right Shoulder						
Median Width						
Bikeway/Buffer						
Sidewalk						
Planting strip						
Parking						

Item	Considerations		Yes/No/Specific	Comments (summarize pertinent information, assumptions and reference location of detailed information):
Roadway Design Scoping	1. Mainline Operations	Main lane highway widening?		
		Existing pavement to be rehabilitated with Asphalt Concrete/Rubberized AC/PCC?		
		Widen existing facility from lanes to lanes.		
		Local street structures to span lanes.		
		Curb extensions		
		Shoulder improvements		
		Bikeway		
		Pedestrian refuge islands		
		Sidewalk (New/replace/widen/gap closure)		
		Right of Way acquisition required for lanes.		
		Identify Potential Relinquishments and vacations.		

Item	Considerations		Yes/No/Specific	Comments (summarize pertinent information, assumptions and reference location of detailed information):
		Upgrade existing facility to: Expressway/Freeway/ Controlled Access Highway/ Traversable Highway Standards?		
		Improve Vertical Clearance		
		Adequate Falsework Clearance		
		Traffic calming features		
		Road Diet/Lane Reduction?		
		Bus/Transit Stops?		
		Green Street Features (Trees, Bioretention, Stormwater BMPs, Planting strips)?		
		Other?		
Roadway Design Scoping	2. Ramp/Street Intersection Improvements	New Signals?		
		Modify Existing Signals?		
		Right Turn Lanes		
		Widening for Localized Through lanes?		
		Merging Lanes?		
		Deceleration/Acceleration lanes?		
		Left Turn Lanes?		
		>300 VPH Left Turn (Requires Double Left Turn Lane)		
		Interchange Spacing?		
		Ramps Intersect Local Street < 4% grade?		
		Intersection Spacing?		
		Exit Ramps >1,500 VPH (Requires two lane exit)		
		Single lane ramps exceeding 1000’ widened to Two lanes		
		Curb Ramps?		
		Pedestrian Facilities?		
		Bike/Ped Signals/Phases/Activation?		
		Bikeway Design Features (Protected or Dedicated Intersections, Bike Boxes, 2-stage Turn Boxes)?		
		Curb Extensions?		
		Marked/Enhanced/Raised/Mid block Crosswalks? RRFBs/PHBs?		
		Others?		

Operational Improvements	Truck Climbing Lane	Sustained Grade exceeding 2% and Total Rise Exceeds 50'?		
		Other?		
	Auxiliary Lanes	2000' between Successive On-Ramps?		
		Two lane Exit Ramps have 1300' Auxiliary Lane?		
		Weaving < 2000' between off-ramp and on-ramp?		
		Others?		
Multimodal Operational Improvements		Bikeway improvements?		
		Bus-Only Lanes? Bus-on-shoulder? Transit Signal Priority?		
		Pedestrian improvements?		
		Others?		
Right of Way Access Control	Existing access control extends at least 50 ft beyond end of curb return, radius, or taper?			
	New construction access control extends at least 100' (urban areas) or 300' (rural areas) beyond end of curb returns, radius, or taper?			
	Other?			

Item	Considerations	Yes/No/Specific	Comments (summarize pertinent information, assumptions and reference location of detailed information):
Highway Planting and Irrigation	Clearing and Grubbing?		
	Relocate Existing Irrigation Facilities?		
	Highway Planting and Irrigation (including median and roadside)		
	Highway planting needed to restore or preserve landscape freeway status		
Item	Considerations	Yes/No/Specific	Comments (summarize pertinent information, assumptions and reference location of detailed information):
Roadside Management	-Green Street Features (Trees, Bioretention, Stormwater BMPs, Planting strips)?		
	Landform grading, contour grading, slope rounding, stepped slopes and topsoil/duff reapplication		
	Side slopes/embankment slope/slope paving		
	Visual Assets		
Worker Safety	Off-Freeway Access (gate, access road, and stairways)		
	Maintenance Vehicle Pull-Out		
	Adequate safety working conditions		
	Relocate roadside facilities/features (cabinets, poles, pull boxes and vaults) away from traffic		
	Vegetation control treatments (road edge, guardrails, signs, drainage facilities, miscellaneous pavement narrow areas, treatment under guardrail, etc.)		
	Modernization and clustering of facilities and hardware (removing and replacing other items), gore area pavement		
	Rehabilitate gore area pavement and pavement beyond gore areas (narrow areas to receive paving, remove and replace miscellaneous pavement and curbs,)		
Hydraulics/ Stormwater (Refer to the Stormwater Data Report)	Erosion Control		
	Drainage		
	Slope Design		
	Permanent Stormwater BMPs		
Structures (Refer to Structures Scoping Checklist or APS)	New Bridge?		
	Bridge Rehab?		
	Retaining Wall		
	Pedestrian and Bicyclist Access or Dedicated Under-/Overcrossing?		
	Other		
	On STRAIN list for:		

Other	Class I Bikeway (bicycle path)		