CONSTRUCTABILITY REVIEW PROCESS

PRE-CONSTRUCTION

SCOPING CONSTRUCTABILITY REVIEW

THE PROJECT MANAGER DISTRIBUTES THE SCOPE WORKSHEETS TO THE PROJECT TEAM MEMBERS FOR THEIR INPUT ON ISSUES THAT MIGHT AFFECT THE SCOPE OF THE PROJECT. WHEN THE WORKSHEETS ARE COMPLETED AND RETURNED TO THE PROJECT MANAGER, THE INFORMATION IS ASSEMBLED FOR SCOPE DEVELOPMENT.

SCOPING REVIEW ITEMS

- R/W MAPS
- TRAFFIC COUNTS
- ACCIDENT HISTORY
- SOIL BARINGS
- BRIDGE CONES
- PAVEMENT CONES

- ♦ BRIDGE MANAGEMENT SYSTEM
- ♦ OLD CONSTRUCTION PLANS
- ♦ AS BUILT PLANS
- ♦ BRIDGE INSPECTION REPORT
- ♦ EXISTING GEOTECHNICAL INFORMATION
- SUFFICIENCY RATING
- ♦ PAVEMENT MANAGEMENT SYSTEM

THE PROJECT'S PURPOSE AND NEED STATEMENT MUST BE CLEAR AND DEFINITIVE TO DEVELOP A SCOPE THAT IS COMPATIBLE WITH PRACTICAL DESIGN.

IT SHOULD BALANCE SAFETY, ECONOMICS, MOBILITY, ENVIRONMENTAL, AND COMMUNITY.

THE PURPOSE OF THE PROJECT SCOPING WORKSHEETS IS TO PROVIDE FUNCTIONAL GROUPS WITH A TOOL TO INVESTIGATE AND RECORD POTENTIAL ITEMS THAT COULD BE INCLUDED IN THE SCOPE OF THE PROJECT.

DISTRIBUTION OF SCOPING WORKSHEETS

SCOPING WORKSHEETS ARE TO BE COMPLETED BY FUNCTIONAL GROUPS RESPONSIBLE FOR EACH AREA. BELOW IS A RECOMMENDATION FOR DISTRIBUTION OF EACH OF THE ATTACHED SCOPING WORKSHEETS.

WORKSHEET	TITLE	NAME	DATE COMPLETED
PROJECT MANAGER SCOPING WORKSHEET	PROJECT MANAGER		
BUSINESS IMPACT ASSESSMENT SCOPING WORKSHEET	PROJECT MANAGER		
PLANNING SECTION SCOPING WORKSHEET	PLANNING DIRECTOR		
REAL ESTATE SCOPING WORKSHEET	REAL ESTATE PM		
SURVEYS SCOPING WORKSHEET	PRINCIPAL SURVEYOR		
ENVIRONMENTAL DOCUMENTATION SCOOPING WORKSHEET	ENVIRONMENTAL DIRECTOR		
BRIDGE SCOPING WORKSHEET	BRIDGE ENGINEER		
CONSTRUCTION SCOPING WORKSHEET	DISTRICT AREA ENGINEER		
DESIGN SCOPING WORKSHEET	Design Engineer		
HYDRAULICS SCOPING WORKSHEET	Hydraulic Engineer		
MAINTENANCE SCOPING WORKSHEET	Area Maintenance Engineer		
PAVING SCOPING WORKSHEET	PAVING ENGINEER		
TRAFFIC SCOPING WORKSHEET	DISTRICT TRAFFIC ENGINEER		

IN GENERAL, THE SCOPING WORKSHEETS SHOULD BE SENT TO THE PERSON THAT OVERSEES EACH FUNCTIONAL AREA (PRINCIPAL ENGINEER OR ABOVE). IN MANY DISTRICTS, MULTIPLE WORKSHEETS MAY BE SENT TO ONE PERSON, SINCE THEY MAY OVERSEE MORE THAN ONE FUNCTIONAL AREA. DISTRICT SHOULD COMPLETE THE ABOVE TABLE WITH THE NAME OF THE PERSON THAT WILL RECEIVE EACH WORKSHEET SO THAT IT IS DONE CONSISTENTLY ACROSS THE DISTRICT. THE PERSON THAT COMPLETES EACH WORKSHEET SHOULD FILL IN THE "DATE COMPLETED" BOX WHEN IT IS FINISHED.

MOST ITEMS HAVE CHECK BOXES ASSOCIATED WITH THEM IN THE WORKSHEETS. BELOW IS GUIDANCE TO AID IN DETERMINING HOW TO COMPLETE THE CHECKBOXES.

"YES"- THERE IS A KNOWN ISSUE THAT NEEDS TO BE ADDRESSED

"NO"- AS THE PROJECT CURRENTLY STANDS, THE ITEM IS NOT AN ISSUE

"NOT NEEDED" THE TASK IS NOT NEEDED

"MAYBE" THE POTENTIAL FOR AN ISSUE EXISTS, BUT MORE INFORMATION IS NEEDED TO DETERMINE SPECIFICS **"NEED"** THE ITEM IS REQUIRED BECAUSE IT CURRENTLY DOES NOT MEET STANDARDS, IS REQUIRED BY LAW, MUST BE INCLUDED TO ACCOMPLISH PURPOSE OF THE PROJECT, ETC...

"WANT" THE ITEM IS NOT REQUIRED, BUT IT WOULD BE IDEAL TO ADDRESS AS PART OF THE PROJECT **"NOT"** THE ITEM SIS NOT APPLICABLE TO THIS PROJECT

THE LIST OF ITEMS IN THE WORKSHEETS IS NOT AN EXHAUSTIVE LIST, BUR MERELY GUIDANCE TO HELP FUNCTIONAL GROUPS SCOPE INDIVIDUAL PROJECTS. DISTRICTS SHOULD FEEL FREE TO MAKE CHANGES TO THE SCOPING WORKSHEETS AS THEY SEE FIT.

PROJECT MANAGER SCOPING WORKSHEET

THE PURPOSE OF THIS FORM IS TO RECORD NOTES ON ISSUES THAT MAY AFFECT THE SCOPE OF THE PROJECT.

PROJECT MANAGERS SHOULD UTILIZE THE PRINCIPLES OF PRACTICAL DESIGN SOLUTIONS (OPEN ROADS) BY INCLUDING A FULL RANGE OF STAKEHOLDERS WITH TRANSPORTATION OFFICIALS IN THE SCOPING PHASE IN ORDER TO CLEARLY DEFINE THE PROJECT PURPOSE AND DEVELOP CONSENSUS ON THE SCOPE BEFORE PROCEEDING. THUS, POTENTIAL STAKEHOLDERS SHOULD BE CONTACTED FOR INPUT INTO THE SCOPE OF THE PROJECT.

ITEM	YES	Not Needed	IF YES, DESCRIBE (OR SEE BELOW)
COORDINATION ON PRACTICAL DESIGN SOLUTIONS WITH OPEN ROADS			
PUBLIC INFORMATION PLAN			
COORDINATION WITH CITY, COUNTY, TOWNSHIPS			
COORDINATION WITH OTHER EXTERNAL AND LIKELY STAKEHOLDER GROUPS			
COORDINATION WITH FHWA			
COORDINATION WITH PERMITTING AGENCIES			
COORDINATION WITH UTILITIES			
COORDINATION WITH RAILWAY OFFICE			
COORDINATION WITH AERONAUTICS OFFICE			
COORDINATION WITH CO ROAD DESIGN OFFICE			
COORDINATION WITH REAL ESTATE OFFICE			
Coordination with Bridge Office			
COORDINATION ON BUSINESS IMPACTS (SEE SCOPING WORKSHEET)			

BUSINESS IMPACT ASSESSMENT SCOPING WORKSHEET

TO 'CHECK' IN THE CHECK BOXES, DOUBLE CLICK AND CLICK ON 'CHECKED' IN THE DEFAULT VALUE BOX

	YES	NO	MAYBE	IF YES, DESCRIBE (OR SEE BELOW)
ARE BUSINESS IMPACTS ANTICIPATED?				
IS BUSINESS IMPACTS MITIGATION REQUIRED?				
POTENTIAL BUSINESS IMPACTS				DURATION OF IMPACT (# DAYS)/COMMENTS
Access				
Parking				
VISIBILITY				
INCREASED CONGESTION				
LANE OR STREET CLOSURES				
DETOUR				
RIGHT-OF-WAY ACQUISITION				
Noise				
DUST OR VIBRATION				
SIDEWALKS/TRAILS/ADA FACILITIES				
OTHER				

IF CHECKED "YES" OR "MAYBE", THEN DESCRIBE, IDENTIFY ANY RISKS, AND DOCUMENT RECOMMENDED SCOPE ITEMS:

PLANNING SECTION SCOPING WORKSHEET

THE PURPOSE OF THIS FORM IS TO RECORD NOTES ON ISSUES THAT MAY AFFECT THE SCOPE OF THE PROJECT.

ITEM	YES	No	IF YES, DESCRIBE (OR SEE BELOW)
CITY ISSUES			
COUNTY ISSUES			
TURN BACK ISSUES			
Access Issues			
BUSINESS ISSUES			
DEVELOPER ISSUES			
TRANSIT ISSUES			
FREIGHT ISSUES			
LOAD RESTRICTIONS ISSUES			
RAILROADS ISSUES			
AIRPORTS ISSUES			
BIKE ISSUES			
PEDESTRIAN AND ADA ISSUES			
UTILITY ISSUES			
LAND OWNER ISSUES			

REAL ESTATE LAND ACQUISITION SCOPING WORKSHEET

THE PURPOSE OF THIS FORM IS TO RECORD NOTES ON ISSUES THAT MAY AFFECT THE SCOPE OF THE PROJECT.

EXISTING R/W WIDTH			
POTENTIAL PARCELS			
POTENTIAL BUSINESS IMPACTS			
POTENTIAL RELOCATIONS			
ACCESS ISSUES	Yes	🗌 No	
PLATS NEEDED	Yes	🗌 No	
R/W BUDGET			
ESTIMATED R/W CLEAR DATE			

UTILITIES SECTION SCOPING WORKSHEET

THE PURPOSE OF THIS FORM IS TO RECORD NOTES ON ISSUES THAT MAY AFFECT THE SCOPE OF THE PROJECT.

UTILITIES COST ESTIMATE AND SCHEDULE

LIST EACH ACTIVITY REQUIRED WITH THE ANTICIPATED DURATION TO ACCOMPLISH THE NECESSARY WORK FOR THIS PROJECT, AND PROVIDE ESTIMATED COSTS.

THE PROJECT MANAGER WILL BUILD THE PRELIMINARY SCHEDULE AND ESTIMATE USING THIS INFORMATION.

ACTIVITY DESCRIPTION	ESTIMATED DURATION	ESTIMATED COST
PRELIMINARY ENGINEERING (PRIOR TO R/W & UT NTP)		\$
UTILITY RELOCATION (ENGINEERING AND CONSTRUCTION)		\$
UTILITY STAFF/INSPECTION		\$
	TOTAL ESTIMATED COST	\$

TECHNICAL INFORMATION

SERVICES PROVIDED BY					

ISSUES AFFECTING THE SCOPE OF THE PROJECT				
Ітем	DESCRIPTION			
🗌 GAS				
TELEPHONE (LAND)				

-	HER POTENTIAL ISSUES TO CONSIDER - IF UNCHECKED INDICATES INFORMATION IS NOT AVAILABLE TO DETERMINE AT THIS TIME)
	COORDINATE WITH UTILITY FOR ANY PROJECT SPECIFIC INFORMATION:
	Consider candidacy for Subsurface Utility Engineering (SUE):
	CONSIDER NECESSARY ENVIRONMENTAL CLEARANCES BEYOND ORIGINAL SURVEY SCOPE FOR RELOCATING UTILITIES:
	CONSIDER NECESSARY STAGING WITH OTHER UTILITIES:
- *	CONSIDER PLANNED/FUTURE UTILITY WORK WITHIN THE PROJECT LIMITS:
	CONSIDER POTENTIAL CONFLICTS AT BRIDGES, RETAINING WALLS, PILE DRIVING, CRANE OPERATIONS, ETC
	CONSIDER RELOCATION OF CERTAIN UTILITIES BY THE ROADWAY CONTRACTOR:
	CONSIDER ROADWAY AND BRIDGE DESIGN ALTERNATIVES TO MINIMIZE OR AVOID UTILITY CONFLICTS:
	CONSIDER SEASONAL RESTRICTIONS THE UTILITY MAY HAVE FOR RELOCATING FACILITIES:
	CONSIDER THE IMPACT OF ABRUPT CHANGES IN RIGHT OF WAY:
	CONSIDER THE NEED FOR A SPECIFIC CORRIDOR TO ACCOMMODATE UTILITIES:
	CONSIDER UTILITIES ATTACHED TO BRIDGES:
- *	EVALUATE NEED TO RELOCATE FACILITIES AFTER SOME OF THE ROADWAY CONTRACTOR'S WORK:
- *	EVALUATE SOIL CONDITIONS (I.E. UNDERCUTS NECESSARY):
	EVALUATE WHETHER OR NOT UTILITY CAN/WILL USE COMMON TRENCH/DUCTBANK WITH OTHER UTILITIES:
- *	IDENTIFY POTENTIAL EASEMENTS UTILITY MAY REQUEST INDOT TO ACQUIRE:
*	IDENTIFY POTENTIAL "NATURAL" CONFLICTS SUCH AS HAZARDOUS WASTE SITES, UNDERGROUND STORAGE TANKS, CISTERNS, WELLS, WETLANDS, STRUCTURES AND PONDS:
- *	DENTIFY THE PROJECT'S UTILITY AFFECTED PARCELS:
- *	INVESTIGATE SERVICE CONNECTIONS TO INDOT SIGNALS, REST AREA, ETC.:
	PERFORM FIELD CHECK:
- *	PRIORITIZATION OF PARCEL ACQUISITION SUGGESTED TO REAL ESTATE:
- *	REVIEW PRELIMINARY CROSS SECTIONS IF AVAILABLE TO DETERMINE IMPACTS ON UTILITIES:
	SPECIALTY PERMITS, RAILROAD, WETLANDS NEEDED:

SURVEYS SCOPING WORKSHEET

The purpose of this form is to record notes on existing conditions for Surveys and R/W to determine what will be needed to deliver the project. Maps would be useful.

ITEM	YES	NO	IF YES, DESCRIBE (OR SEE BELOW)
EXISTING PHOTOS			
EXISTING MAPPING			
EXISTING SURVEYS			
AS-BUILTS AVAILABLE			
USE CONSULTANT			

ENVIRONMENTAL DOCUMENTATION SCOPING WORKSHEET

THE PURPOSE OF THIS FORM IS TO RECORD NOTES ON POTENTIAL SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE PROJECT. MAPS ARE VERY USEFUL.

ITEM	YES	NO	MAYBE	IF YES, DESCRIBE (or see below)
TRAILS, PARKS OR OTHER RECREATION AREAS				
WILDLIFE/WATERFOWL REFUGES				
HISTORIC SITES				
EXTENSIVE CULTURAL/HISTORICAL WORK				
BICYCLE ACCOMMODATION				
PEDESTRIAN & ADA ACCOMMODATIONS				
Noise Concerns				
WETLANDS PRESENT				
PUBLIC WATERS				
FLOODPLAIN				
SENSITIVE EROSION AREAS				
KNOWN T&E SPECIES-STATE				
KNOWN T&E SPECIES-FEDERAL				
CONTAMINATED SITE POTENTIAL				
Farmland				
CONSERVATION EASEMENTS				
NAVIGABLE WATER				
AIR QUALITY MAINTENANCE AREA				
VEGETATION & LANDSCAPE CONCERNS				
VISUAL QUALITY CONCERNS				

IF CHECKED "YES" OR "MAYBE", THEN DESCRIBE (TYPE OF DOCUMENT, PERMITS, REVIEWS, ETC) ALSO IDENTIFY ANY RISKS:

BRIDGE SCOPING WORKSHEET

THE PURPOSE OF THIS FORM IS TO RECORD NOTES ON ISSUES THAT MAY AFFECT THE SCOPE OF THE PROJECT.

	ITE		D		RP	NOTES (Quantity/Cost Estimate and Other Comments)
ITEM	NEED	WANT	Νοτ	STRUC. #		
REPLACE BRIDGE						Span Bridge Box Unique Structure
REPLACE BRIDGE DECK						
BRIDGE WIDENING						
BRIDGE RAILING						
BARRIERS FOR SIDEWALK						
Corrosion Protection						
STRUCTURAL REPAIRS						
REPLACE EXP. JOINTS						
Approach Panels						
BRIDGE SLOPE PROTECTION						
ANTI-ICING SYSTEM						
EROSION/SCOUR PROTECTION						
EXISTING BRIDGE CLEARANCES						
OVER WATER						
PAINTING						
UTILITY ACCOMMODATION						
ABUTMENTS						
REMOVALS						

CONSTRUCTION SCOPING WORKSHEET

THE PURPOSE OF THIS FORM IS TO RECORD NOTES ON ISSUES THAT MAY AFFECT THE SCOPE OF THE PROJECT.

ITEM	Ite	EM NEEDE	ED	NOTES (OR SEE BELOW)				
	NEED	WANT	Νοτ	(QUANTITY/COST ESTIMATE AND OTHER COMMENTS)				
DETOUR								
TEMPORARY CONSTRUCTION								
STAGING								
INNOVATIVE CONTRACTING								
LETTING DATE								

DESIGN SCOPING WORKSHEET

THE PURPOSE OF THIS FORM IS TO RECORD NOTES ON ISSUES THAT MAY AFFECT THE SCOPE OF THE PROJECT.

ITEM		M NEEDE		NOTES (OR SEE BELOW)				
	NEED	WANT	Νοτ	(Location, Quantity/Cost Estimate and Other Comments)				
DESIGN EXCEPTION								
CSS DESIGN FLEXIBILITY								
Hor. Curve Correction								
VERT. CURVE CORRECTION								
CROWN CORRECTION								
SUPER CORRECTION								
SIDE SLOPE CORRECTION								
SHLDR SLOPE CORRECTION								
FLATTEN ENTRANCE SLOPES								
SIGHT-LINE OBSTR. CORRECTION								
GUARDRAIL								
CURB & GUTTER								
PED. RAMPS/ACCOMMODATION								
RETAINING WALLS								
MUNICIPAL AGREEMENTS								
RR AGREEMENTS								
UTILITIES RELOCATION								

HYDRAULICS SCOPING WORKSHEET

THE PURPOSE OF THIS FORM IS TO RECORD NOTES ON ISSUES THAT MAY AFFECT THE SCOPE OF THE PROJECT.

ITEM	ITE	M NEEDE	D	STRUC. #	RP	NOTES (OR SEE BELOW) (QUANTITY/COST ESTIMATE AND OTHER COMMENTS)
	NEED	WANT	Νοτ	IF ANY		
MAINLINE CULVERTS						
		_				
TILE						
STORM SEWER						
EROSION REPAIRS						
WATERWAY ANALYSIS						
RISK ASSESSMENT						
SPECIAL STRUCTURES						
WEIRS						
Vortex						
Ponds						

MAINTENANCE SCOPING WORKSHEET

THE PURPOSE OF THIS FORM IS TO RECORD NOTES ON ISSUES THAT MAY AFFECT THE SCOPE OF THE PROJECT.

ITEM	lте	M NEEDE	ED	NOTES (OR SEE BELOW)			
ITEM	NEED	WANT	Νοτ	(Location, Quantity/Cost Estimate and Other Comments)			
STRIPING							
SIGNING							
LIGHTING							
CURB & GUTTER							
LOW GRAVEL SHOULDER CORRECTION							
GUARDRAIL REPAIR							
FENCING							
NOISEWALL							
DRAINAGE REPAIR							
EROSION AREA CORRECTION							
FLOODING AREA CORRECTION							
SNOW TRAP, STORAGE, ICING CORRECTION							
ANTI-ICING SYSTEM							
FROST HEAVE CORRECTION							
Rest Area Work							
LANDSCAPING							
MILLINGS NEEDED							
OTHER SALVAGE ITEMS							

TRAFFIC SCOPING WORKSHEET

THE PURPOSE OF THIS FORM IS TO RECORD NOTES ON ISSUES THAT MAY AFFECT THE SCOPE OF THE PROJECT.

ITEM	ITE	M NEEDE	D	NOTES (OR SEE BELOW)				
	NEED	WANT	Νοτ	(Location, Quantity/Cost Estimate and Other Comments)				
HORIZONTAL CURVE CORRECT								
VERTICAL CURVE CORRECT								
SUPER CORRECTION								
RUMBLE STRIPS – SHOULDER								
RUMBLE STRIPS – CENTERLINE								
GUARD RAIL								
STRIPING								
MEDIAN BARRIER								
Signing								
LIGHTING								
TURN LANES								
INTERSECTION REVISION								
TRAFFIC SIGNALS								
RR CROSSING WORK								
PATH/TRAIL CROSSING WORK								
Access Changes								
SIGNIFICANT PROJECT UNDER FHWA FINAL RULE FOR SAFETY AND MOBILITY IN WORK ZONES?		Yes						
PROPOSED TRAFFIC CONTROL								
ROAD SAFETY REVIEW	ANY SPECIAL CONCERNS:							

PAVING SCOPING WORKSHEET

THE PURPOSE OF THIS FORM IS TO RECORD NOTES ON ISSUES THAT MAY AFFECT THE SCOPE OF THE PROJECT.

										HAVE BORINGS BEEN DONE? YES NO		
PROPOSED FIX							Α	ALTERNATE FIXES				
							1 2					
ITEM ITEM NEEDED								PPRO		NOTES (OR SEE BELOW)		
		NEED		WANT		Νοτ	r F	FROM TO		(QUANTITY/COST ESTIMATE AND OTHER COMMENTS)		
	PAVING									(INCLUDE LANE WIDTH)		
Sno	RECLAMATION											
NIM	PAVEMENT MILLING											
BITUMINOUS	MILLINGS RE-USE											
_												
	PAVING									(INCLUDE LANE WIDTH)		
	JOINT REPAIRS											
Ш	Dowel Bars											
CONCRETE	Planning											
Ũ	MAJOR CPR											
	MINOR CPR											
Щ	BASE REPAIRS											
SUB- SURFACE	GRADING											
Ins	MUCK, GROUNDWATER, ROCK											
SHL . DER	SHOULDER WORK									(INCLUDE LANE WIDTH)		
Ϋ́Ξ												
u S	Edge Drain Video Insp.											
EDGE DRAINS	EDGE DRAIN FLUSHING											
	New Edge Drains											
Сомы	IENTS AND RISK IDENTIFICATION:	-				•		•				