

RED FLAG SUMMARY

Red Flag Summary Completed: January 2006

Purpose

The purpose of this Red Flag Summary is to identify concerns that could cause revisions to the following:

- Anticipated design and construction scope of work
- Proposed project development schedule
- Estimated project budget
- Potential impacts of the project on the surrounding area

Instructions

A written Red Flag Summary is required for both major and minor projects. A written Red Flag Summary is optional for minimal projects; though red flag issues must still be identified.

A field review is required for all projects. Each specialty area of the Red Flag Summary should be completed by individuals who possess sufficient experience to enable them to correctly identify and evaluate issues arising from the field review.

In the Location/Comments field provide information concerning potential impacts that is brief, but gives enough detail to allow an understanding of the issue(s).

The scope of services document should account for any issues identified in the Red Flag Summary that have the potential to affect scope, schedule, and budget.

A list of resources that may need to be consulted in order to complete this form can be found in the introduction to Appendix H of the Project Development Process Manual.

Red Flag Summary Deliverables

Provide an expanded Study Area Map identifying project design constraints identified through the Red Flag Summary. Tables, photographs or other support material may also be submitted with the Red Flag Summary to illustrate specific problem areas. **(This information is mandatory for Major Projects.)**

General

Project Name (County, Route, Section):		PID:	
Date Red Flag Summary Completed:		Prepared By:	
City, Township or Village Name(s):		Project Manager:	

GENERAL PROJECT PLANNING INFORMATION

Project Description:

Project Limits / General Location:

RED FLAG SUMMARY

Red Flag Summary Completed: January 2006

Problem identified by (indicated document date):

<input type="checkbox"/> District Work Plan	
<input type="checkbox"/> Congestion Study	
<input type="checkbox"/> Safety Study	
<input type="checkbox"/> Major New	
<input type="checkbox"/> MPO TIP	
<input type="checkbox"/> MPO LRP	
<input type="checkbox"/> Access Ohio	
<input type="checkbox"/> Other	

Are there any projects in the area (ODOT, Local, Utility) that might conflict with the project (e.g. a local project on the proposed detour route, a resurfacing project a year after the pavement marking project)?

Yes
 No

Specify:

Are there growth or land use changes in the area surrounding the project that could have an impact on the project scope?

Yes
 No

Specify:

Are there known public involvement issues?

Yes
 No

Specify:

Briefly describe the Purpose and Need (Must be a separate document for Major Projects):

GENERAL EXISTING INFORMATION:

<input type="checkbox"/> Legal Speed	<input style="width: 100%; height: 20px;" type="text"/>
<input type="checkbox"/> Design Speed	<input style="width: 100%; height: 20px;" type="text"/>
<input type="checkbox"/> Traffic Data:	
Opening Year ADT:	<input style="width: 100%; height: 20px;" type="text"/>
Design Year ADT:	<input style="width: 100%; height: 20px;" type="text"/>
Design Hourly Volume:	<input style="width: 100%; height: 20px;" type="text"/>
Directional Distribution:	<input style="width: 100%; height: 20px;" type="text"/>
Trucks (24 Hr. B&C):	<input style="width: 100%; height: 20px;" type="text"/>

(Traffic data does not need to be certified for the Red Flag Summary.)

Functional Classification:

Interstate, Freeway
 Arterial
 Collector
 Local

RED FLAG SUMMARY

Red Flag Summary Completed: January 2006

Locale:

Rural

Urban

National Highway System (NHS):

NHS Routes:

Non-NHS Routes:

Resurfacing, Restoration, and Rehabilitation (3R) Project?

Yes

No

SITE VISIT:

A site visit is required for ALL projects. The site visit shall consist of visual inspection of the entire project area including the ditch lines, cut slopes, stream banks, bridge foundations, pavement, embankment slopes, etc.

Date(s) of Site Visit:

ODOT COUNTY MANAGER CONCERNS:

List any comments / requests from the ODOT County Manager

ACCIDENT DATA:

Briefly summarize accident history. Indicate and design features that should be revised to increase safety

ENVIRONMENTAL ISSUES:

Make a preliminary determination on whether the following resources will be affected by the proposed project. Comments must identify the location of the issue. Comments are required for any Yes or Possible responses.

Involvement:	Resource/Feature	Location/Comments
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible	Parkland, nature preserves and wildlife areas (Name)	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible	Cemetery (Name)	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible	Scenic River (Name)	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible	Public Facilities (Name)	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible	Threatened and Endangered Species and/or habitat (e.g., Indiana bat trees, etc.)	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible	Existing cat tails (Location)	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible	Existing wet areas (Location)	

RED FLAG SUMMARY

Red Flag Summary Completed: January 2006

<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	Streams, rivers and watercourses (Use Designation)	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	Historic Building(s) (Location)	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	Historic Bridge(s) (Location)	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	Farmland (Location)	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	Air Quality non-attainment area or concerns (ozone particulate or air toxics)	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	Landfill(s), Superfund Site(s) and/or evidence of hazardous materials (Location)	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	Known Archaeological Sites	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	Total Maximum Daily Load (TMDL) Streams	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	ODOT MS4 Phase 2 Regulated Areas	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	Sensitive environmental justice areas	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	Federal Emergency Management Agency (FEMA) floodplains	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	Lake Erie Costal Management Area	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	Sole Source Aquifers (Location)	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	Wellhead Protection Areas (Specify)	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	Does it appear that noise abatement will be an issue for the project?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No	Other Environmental Issues	

GEOMETRIC ISSUES:

Use the design speed, design functional classification and available traffic data to make a preliminary determination as to the geometric standards for the project. Compare these requirements to accident data and impacts if deviations are being considered

Design Exception Required?	Design Feature	Preliminary Comments Regarding Justification
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Lane Width (including curve widening)
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Graded Shoulder Width
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Bridge Width
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Structural Capacity

RED FLAG SUMMARY

Red Flag Summary Completed: January 2006

<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Horizontal Alignment (including Excessive Deflections, Degree of Curve, Lack of Spirals, Transition/Taper Rates and Intersection Angles)	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Vertical Alignment (including grade breaks)	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Grades	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Stopping Sight Distance	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Pavement Cross Slopes	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Superelevation (Maximum rate, transition, position)	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Horizontal Clearance	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Vertical Clearance	

GEOMETRIC ISSUES:

Indicate if the following geometric issues are present or should be considered during project development. Consider work on the mainline as well as any side roads or service roads. Provide additional comments as needed.

		Design Issue	Comments
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Does the existing horizontal alignment need to be modified?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Does the existing vertical alignment need to be modified?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Does stopping sight distance need to be increased?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Does intersection sight distance need to be increased?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Are there geometric issues that may affect traffic safety (including Full or Half-Clover Leaf Interchange, Slip Ramps, Weave Areas, and short acceleration/deceleration lanes). Describe.	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any hazards in the clear zone? Specify treatment.	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Does existing guardrail need to be replaced (e.g., too low, poor condition)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Is the area for guardrail anchor assemblies insufficient? (E-98 or B-98)? Consider proper grading around anchor assembly.	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Does the number of turn lanes or through lanes need to be increased?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Are changes to access control required?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any drive locations that will require special attention during design (e.g., very steep grades, high volume commercial drives, drives close to bridges or intersections)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Are new mailbox turnouts required?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible	<input type="checkbox"/> No <input type="checkbox"/> N/A	Is there any evidence of accidents due to substandard vertical clearance on overpass structures?	

RED FLAG SUMMARY

Red Flag Summary Completed: January 2006

<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will an interchange be added or modified?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Do the existing intersection radius returns need to be modified to accommodate larger truck turning movements?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Does grading need to be upgraded? To what criteria (e.g., clear zone, safety, standard)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any other geometric issues? Describe	

GEOTECHNICAL ISSUES:

Based on the information compiled during this study indicate whether or not the following geotechnical issues are present or should be further considered during project development. Provide additional comments as needed.

	Design Issue	Comments
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is there evidence of soil drainage problems (e.g., wet or pumping subgrade, standing water, the presence of seeps, wetlands, swamps, bogs)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is the groundwater table anticipated to be affected by construction?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is there evidence of any embankment or foundation problems (e.g., differential settlement, sag, foundation failures, slope failures, scours, evidence of channel migrations)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is there evidence of any slope instability (soil or rock)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is there evidence of unsuitable materials (e.g., presence of debris or man-made fills or waste pits containing these materials, indications from old soil borings)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is there evidence of rock strata (e.g., presence of exposed bedrock, rock on the old borings)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is there evidence of active, reclaimed or abandoned surface mines?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is there information pertaining to the existence of underground mines?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is there Acid Mine Drainage present within the study area?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Does an undercut or subgrade stabilization appear to be needed?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Should the Office of Geotechnical Engineering be contacted to evaluate the project site?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Were there any significant items found during plan and specification review? Specify.	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are There any other geotechnical issues? Specify.	

RED FLAG SUMMARY

Red Flag Summary Completed: January 2006

PAVEMENT ISSUES:

Indicate if the following pavement issues are present or should be considered during project development. Side road and service road work should be considered in this assessment. Provide additional comments as needed.

	Design Issue	Comments
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are pavement cores needed to determine the existing pavement buildup and/or condition?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is the proposed pavement buildup unknown? (For pavement preservation projects, pavement treatment, including pavement type & thickness should be specified in the design scope of services)	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Do dynaflect tests indicate the existing pavement is in poor condition?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Does the proposed pavement buildup need to be approved by the Pavement Selection Committee?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are joint repairs needed?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are pressure relief joints needed?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are pavement repairs needed?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Does the maintenance of traffic scheme require additional permanent or temporary pavement?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Does curb need to be replaced due to deteriorated condition or lack of curb reveal?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Does sidewalk need to be replaced or installed?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are new curb ramps needed?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Do truncated domes need to be installed?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is there any work on side roads, service roads or ramps?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any special drive treatments or preferences (e.g., concrete for all drive aprons, curved aprons, etc.)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Has the site received repeated resurfacings in recent years?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Does pavement deterioration appear to be caused by drainage or geotechnical problems?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any other pavement issues? Specify.	

RED FLAG SUMMARY

Red Flag Summary Completed: January 2006

STRUCTURAL ISSUES:

Indicate if the following structure issues are present or should be considered during project development. Provide additional comments as needed. Provide a separate table for each structure.

Structure:	Design Issue	Comments
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Is it impossible for the structure to be replaced with a prefabricated box culvert or 3-sided box?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Does the bridge (including foundation) violate current design live loading?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Was the existing structure not built according to plan?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Is deck coring needed?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Is the deck delaminated? <i>Specify.</i>	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Is non-destructive testing needed to determine the amount of delamination?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Is the bridge deck in poor condition? <i>Specify location and level of deterioration.</i>	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Does a deck condition survey (see Bridge Design Manual) need to be performed?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Are there areas to be patched or repaired on the deck?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Is the bridge a poor candidate for an overlay? <i>Specify type of overlay if know.</i>	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Does the bridge rail violate current standards?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Is a fatigue analysis required?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Should all fatigue prone details be retrofitted or replaced? <i>Specify.</i>	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Is the abutment (including backwall, beam seats, breastwall, wingwall, etc.) in poor condition? <i>Specify location and level of deterioration.</i>	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Is there any evidence of substructure movement (e.g., settlement, rotation)?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Are the piers in poor condition? <i>Specify location and level of deterioration.</i>	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Is there any evidence of existing beam deterioration/section loss, strands exposed, shear joints leaking or longitudinal cracks?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Are the bearings in poor condition?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Is elimination of the deck joint impossible? What modifications are necessary?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Are new approach slabs needed?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Is it impossible for the hinges to be removed to make the members continuous?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Possible <input type="checkbox"/> N/A	Is the bridge on a curve, skew or superelevation transition?	

RED FLAG SUMMARY

Red Flag Summary Completed: January 2006

<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is there any evidence that the bridge does not meet hydraulic capacity?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there existing sidewalks on or adjacent to the bridge?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will the structure work require any special maintenance of traffic (e.g., closing of roadway for erection of beams, maintenance of waterway traffic, location of cut line, etc.)? <i>Specify.</i>	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is there any erosion in the existing channel?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is the foundation exposed to scour?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will there be more than 25' of channel relocation?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Do no opportunities exist to construct the bridge faster (e.g., precast walls, segmental construction)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Does the bridge need to accommodate future additional roadway lanes or railroad tracks?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will temporary shoring be required next to the railroad?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any problems with existing retaining walls?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any other structures issues? Specify	

HYDRAULIC ISSUES:

Indicate if the following drainage issues are present or should be considered during project development. Side road and service road work should be considered in this assessment. Provide additional comments as needed.

	Design Issue	Comments
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Based on visual evidence (height of debris, erosion or other markings left from high water) and approximate drainage areas, does the existing drainage system (culverts, storm sewers and/or ditches) appear to be inappropriately sized and not functioning properly? Describe deficiencies.	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is there evidence of alignment or flow velocity problems (e.g., scour, bank erosions, silting) at culvert entrances or exits?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there sinkholes or other deterioration in the pavement that would indicate separations in the existing pipes?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No	Is ditch clean-out required?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Should guardrail over culverts be eliminated with clear zone grading?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Should the existing culverts be replaced?	

RED FLAG SUMMARY

Red Flag Summary Completed: January 2006

<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Should the existing culverts be extended?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will a new alignment concentrate flow (in culverts) that is currently overland flow?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will the maximum height of cover (100') be exceeded for any culvert?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will bankfull design be used for any culverts?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Does the existing drainage system have an odor that might indicate that it includes septic connections?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is the exposed curb height in existing gutters inadequate to contain flow (include height of proposed resurfacing)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Do the existing inlets or catch basins need to be raised to meet proposed grade?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Does the project affect a wetland or waterway (e.g., stream, river, jurisdictional ditch)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is the existing and/or proposed channel alignment incompatible with the existing/proposed structure?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will channel relocation be required?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will Municipal Separate Storm Sewer System (MS4) requirements apply?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will post construction flow requirements be required?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is there evidence of existing field tiles?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are underdrain outlets not functioning properly?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will a new storm sewer outfall be required?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Does the drainage work warrant any special maintenance of traffic considerations?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any other hydraulic issues? Describe.	

TRAFFIC CONTROL ISSUES:

Indicate if the following traffic control (signals, signing, pavement markings, etc.) issues are present or should be considered during project development. Provide additional comments as needed.

	Design Issue	Comments
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Do the existing signs need to be replaced due to poor condition?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any obvious deviations from requirements of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is a particular type of pavement marking desired (e.g. paint, epoxy, thermoplastic)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will pavement planing affect loop detectors?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will pavement widening affect pole locations?	

RED FLAG SUMMARY

Red Flag Summary Completed: January 2006

<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will resurfacing effect signal height?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Does it appear that any traffic control items will fall outside the existing right of way limits (e.g., large signs, strain poles)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any accidents that can be related to existing signal deficiencies (e.g., timing, lack of turn lanes)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Do turn lane lengths appear to have insufficient storage capacity?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Does the controller need to be upgraded?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Do proprietary materials need to be specified?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Should signs or signal installations be supplemented with lighting?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are any TODS signs present?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	If traffic control at an intersection is being changed from stop control to signalization, does the stop condition road need to be upgraded to accommodate faster traffic?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any other traffic control issues? Specify.	

MAINTENANCE OF TRAFFIC ISSUES

Briefly describe the maintenance of traffic and any constraints. A list of considerations has been provided below.

Maintenance of Traffic Considerations	
<ul style="list-style-type: none"> • Limits on traffic detour (including local alternate detours) due to load limits, limits, bridge width restrictions, shoulder condition, emergency vehicle impact impact • Temporary pavement requirements • Speed limit during construction • Pedestrian Traffic • Additional width at culverts • Drive Access • Stopping Sight Distance • Construction Access 	<ul style="list-style-type: none"> • Permitted lane closures • Cross-Overs • Short duration road closures • Right of Way acquisition • Temporary structure requirements • Additional signal heads (drives and/or side roads) • Construction timeframe issues • Innovative contracting • Maintaining railroad traffic • Turn movement restrictions

MAINTENANCE OF TRAFFIC ISSUES

Maintenance of Traffic Description

RED FLAG SUMMARY

Red Flag Summary Completed: January 2006

RIGHT OF WAY / SURVEY ISSUES:

Indicate if right of way or survey issues are present or should be considered during project development. Provide additional comments as needed.

	Design Issue	Comments
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will there be any work beyond the existing right of way limits?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will major real estate relocation acquisition be involved?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will relocation of residences be involved?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will relocation of businesses be involved?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will the project cause relocation of parties that might be eligible for relocation assistance? If so, list the estimated number of residential and non-residential relocations?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will the project require modifying the access control to any properties? If so, list the estimated number and type of properties affected.	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any objects within the existing right of way limits that may be considered an encroachment?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will it be difficult or impossible to determine the number of involved property owners? If not how many are involved?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will temporary parcels be needed (e.g., for drive work)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will right of way need to be acquired for an agency other than ODOT (e.g., county, city)? <i>Specify.</i>	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will additional right of way be needed for utility relocations?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will right of way need to be acquired for storm sewer outfalls?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Do property owners need to be contacted for the locations of underground items such as leach fields, septic systems or field tiles that might be affected by the proposed take?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any mineral rights considerations?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any specific property owner concerns? If so, list property owners and concerns.	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are work agreements prohibited for any reason?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are the centerline of right of way and centerline of construction different?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will right of way be acquired for wetland or stream mitigation?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any other right of way or survey issues? <i>Specify.</i>	

RED FLAG SUMMARY

Red Flag Summary Completed: January 2006

UTILITY ISSUES:

Indicate if the following utility issues are present or should be considered during project development. Provide additional comments as needed.

	Design Issue	Comments
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Do existing utilities need to be relocated? If so, please identify.	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is it impossible to minimize utility conflicts? (e.g., by careful placement of storm sewer and underdrains)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Would the project benefit from subsurface utility engineering (SUE)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there existing utilities on an existing structure that need to be relocated?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any specific utility requirements or concerns? Specify.	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is additional right of way needed to accommodate utility relocations?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there water or sanitary lines that will be relocated as part of the ODOT contract?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any other utility issues? Specify	

MISCELLANEOUS ISSUES:

Indicate if the following issues are present or should be considered during project development. Provide additional comments as needed

	Design Issue	Comments
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will any of the construction activity take place over, under, or near railroad property?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Could material with long lead times for delivery have an impact on the construction schedule (e.g., strain poles, large box culverts, steel beams, etc.)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will a value engineering study be required due to project cost (total cost greater than \$20 million) or project complexity?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will warranties be used?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there aesthetic concerns? Specify.	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any concerns relating to noise walls?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there no areas available within the existing right of way for portable plants or waste and borrow sites?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there specific concerns related to pedestrian or bicycle access?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Any concerns related to landscaping?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any concerns related to existing or proposed lighting (e.g., light trespass, river navigation, airway clearance)?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Are there any other concerns? Specify.	

RED FLAG SUMMARY

Red Flag Summary Completed: January 2006

PERMIT ISSUES:

Indicate if the following permit issues are present or should be considered during project development. Provide additional comments as needed.

	Design Issue	Comments
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will an individual Corps of Engineers/ Environmental Protection Agency 404/401 permit be required?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Does it appear that the project can be constructed under a nationwide 404/401 permit? If so, which permit and what specific requirements apply?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Will a Coast Guard permit be required?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is review by a local public agency or project sponsor required? <i>Specify.</i>	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is Airway/Highway clearance analysis required?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is State Historic Preservation Office (SHPO) coordination for work involving historic bridges or historic properties required?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is coordination with ODNR for work involving State Scenic Rivers, State Wildlife Areas or State Recreational Areas required?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Is coordination with any other agency required (see Location and Design Manual Volume 3)	

SCOPE, SCHEDULE AND BUDGET CONSIDERATIONS:

Based on the responses to the red flag questions, do any of the following need to be modified?

	Design Issue	Comments
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Conceptual scope?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Work limits?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Probable environmental document type?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Major / minor / minimal classification?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Schedule?	
<input type="checkbox"/> Yes <input type="checkbox"/> Possible <input type="checkbox"/> No <input type="checkbox"/> N/A	Budget?	