

**Appendix 12C-1 LD-23 Structure and Bridge Data Sheet**

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COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION  
STRUCTURE AND BRIDGE DATA SHEET

Project \_\_\_\_\_ County \_\_\_\_\_  
Federal Route Base No. \_\_\_\_\_ Situation data for design of bridge on Route \_\_\_\_\_  
Over \_\_\_\_\_  
Plane Coordinates or Latitude and Longitude from Transportation Department County Map \_\_\_\_\_  
Date of Survey: \_\_\_\_\_ Location (Nearest Town, etc.) \_\_\_\_\_

GENERAL INSTRUCTION

Fill out all blanks carefully, giving information on all points. High water data is especially important and should be thoroughly investigated. Comments on any item covered in Survey Instruction Manual which are not covered below should be noted on an attached sheet.

HYDRAULIC SURVEY

1. EXISTING STRUCTURE

Existing structure is any structure at, upstream, or downstream from the proposed site have comparable drainage area.

Date of original construction: \_\_\_\_\_

Was present bridge in place at time of extreme high water? \_\_\_\_\_

Has bridge ever been washed out? \_\_\_\_\_ Date \_\_\_\_\_ Mo. \_\_\_\_\_ Yr. \_\_\_\_\_

Explain what portion of bridge or approaches have been washed out: \_\_\_\_\_

Elevation of maximum high water:

Upstream side of existing structure \_\_\_\_\_

Downstream side of existing structure \_\_\_\_\_

\_\_\_\_\_ Ft. upstream of existing structure \_\_\_\_\_

\_\_\_\_\_ Ft. downstream of existing structure \_\_\_\_\_

At other locations on the flood plain (describe) \_\_\_\_\_

\_\_\_\_\_

Date of maximum high water: \_\_\_\_\_ Mo. \_\_\_\_\_ Yr. \_\_\_\_\_ Source of information \_\_\_\_\_

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2. STREAM FLOW DATA AT PROPOSED SITE

Elevation of maximum high water of this stream at proposed location if different from data for existing site:

\_\_\_\_\_ Ft. on upstream side of Proposed \_\_\_\_\_

\_\_\_\_\_ Ft. on downstream side of proposed \_\_\_\_\_

At other locations on the floodplain (describe) \_\_\_\_\_

Date: \_\_\_\_\_ Mo. \_\_\_\_\_ Yr. \_\_\_\_\_ Source of information \_\_\_\_\_

Elevations of highest backwater caused by another stream \_\_\_\_\_

Date \_\_\_\_\_ Stream name \_\_\_\_\_

Source of information \_\_\_\_\_

Elev. of normal water: \_\_\_\_\_ (Average) Elev. of extreme low water \_\_\_\_\_

Date: \_\_\_\_\_ Mo. \_\_\_\_\_ Yr. \_\_\_\_\_

Source of information \_\_\_\_\_

Velocity of current at high water: \_\_\_\_\_ ft./sec. Velocity of current at normal water \_\_\_\_\_ ft./sec.

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3. SITE CONDITIONS

Amount and character of drift during a freshet or flood: \_\_\_\_\_

Amount and character of ice: \_\_\_\_\_

Do banks or bed show scour? \_\_\_\_\_

Description and location of scour: \_\_\_\_\_

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Bed of stream consists mainly of: mud, silt, clay, sand, gravel, cobbles, boulders, soft solid rock, stratified rock, hard rock, silt sedimentation, deposition of large stones, is this material loose or well compacted: \_\_\_\_\_

Comments on stream ecology and wild life habitat: \_\_\_\_\_

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**4. INFLUENCE & CONTROL OF SITE**

Location and condition of dams upstream or downstream that will affect high water or discharge at this site: \_\_\_\_\_

Location and description of any water-gaging stations in the immediate vicinity: \_\_\_\_\_

Elevation \_\_\_\_\_ on gage corresponds to elev. \_\_\_\_\_ on survey datum.

Extent to which sinkholes affect runoff, etc.: \_\_\_\_\_

Brief description of usage of stream for navigational purposes. By small boats, etc \_\_\_\_\_

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**Railroad Grade Separation Structure Site Data**

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Railroad milepost \_\_\_\_\_ No. of tracks \_\_\_\_\_

Situation data for design of bridge on \_\_\_\_\_ over \_\_\_\_\_

Type of construction: \_\_\_\_\_  
\_\_\_\_\_ New structure  
\_\_\_\_\_ Replacement of existing structure  
\_\_\_\_\_ Remodeling of existing structure  
\_\_\_\_\_ Paralleling existing structure

Owner of existing structure \_\_\_\_\_

Owner of grade crossing to be eliminated \_\_\_\_\_

Date of original construction of any railroad structure being replaced or within approximately 500 feet of the site of a proposed overpass \_\_\_\_\_

Conditions of existing cut slopes, whether stable, eroded, et cetera \_\_\_\_\_  
\_\_\_\_\_ Are ditches open, maintained, et cetera \_\_\_\_\_

**NOTE:** Show cross-section of existing railroad is at right angles to centerline crossing, with all dimensions, on bridge situation plan. This cross-section should extend from top of cut to toe of fill.

**REMARKS**

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