The site examination form is intended for use at sites where a new or replacement crossing structure is being planned, whether a bridge, low-water crossing, or significant culvert. The form can be used as a checklist to ensure the basic information needed for preliminary site assessment is collected. Although it is simple, a completed form assembles a good amount of site information for structure selection and design. Accurate site surveys, including channel longitudinal profile and cross sections, are also necessary to complete the design.

For simple sites, this information may be adequate for design. Complicated sites will usually require additional field surveys and site investigations.
# HYDRAULIC STRUCTURE
## INITIAL SITE EXAMINATION FORM
(Data Sheet for Fords, Bridges, and Culverts) (Include Site Survey, Longitudinal Profile, and Cross Sections)

**FOREST**

**ROAD (TRAIL) NAME**

**STRUCTURE NAME**

**STREAM NAME**

**STRUCTURE NUMBER**

**SECTION**

**LOCATION**

**TOWNSHIP**

**RANGE**

### A. HYDROLOGIC & HYDRAULIC DATA

1. Show on a 15 minute topographic map

**DRAINAGE AREA**

2. Name of closest gauging station

**DISTANCE: MILES**

3A. Manning's Roughness Coefficient (N)

3B. Average streambed slope

500-FT UPSTREAM: 500-FT DOWNSTREAM:

4. Describe character of stream bed material and stream banks within the 1,000-foot area

### 5A. AMOUNT OF DEBRIS IN CHANNEL

### 5B. TYPE OF DEBRIS

### 6. WATER ELEVATIONS

6A. Date and flow depth at time of survey

6B. Estimated base flow depth occurs

MONTH

6C. Estimated extreme, high water depth (how determined?)

### 6D. CAUSE AND SEASON OF FLOODS

### B. OTHER CHANNEL CHARACTERISTICS

1. Note evidence of instability of banks or scour

2A. Straight channel, or note degree of sinuosity

2B. High flow angle of approach (parallel or impinging?)

3. Channel stability (aggradation, downcutting, lateral channel migration, etc)

4. Channel classification (Rosen, or other)

5. Channel entrenchment (ratio = flood-prone/bankfull width)

6. Upstream/downstream structures affecting site (dams, bridges, etc.)

7. Other site assessment factors

### C. FOUNDATION CONDITIONS

1. Character of surface or local materials

2. Estimated depth to bedrock

2A. Bedrock, type and condition

3. Any special foundation conditions? Investigation needed? Explain

### D. EXISTING STRUCTURE

1. Type of existing structure

1A. Number and length of spans

1B. Type of culvert

1C. Size

2. Waterway opening

FEET WIDE OR SQUARE FEET

2A. Waterway adequate?

[ ] Yes [ ] No

3. Structure affected by

Debris [ ] Ice [ ] Damage [ ] Scour [ ]

4. Does structure construct the natural channel

[ ] Yes [ ] No

5. Condition of existing structure

Appendix B—3
### E. PROPOSED STRUCTURE

1. BRIDGE OR LOW-WATER CROSSING TYPE

   1A. LOADING (JUSTIFY IF OTHER THAN HS 20)

2. WIDTH

   1C. SUBSTRUCTURE OR SPECIAL NEEDS

3. TYPE OF CULVERT

4. CULVERT DESIGN ISSUES?

5. CORROSION OR ABRASION CONCERNS?

6. TYPE OF FILL MATERIAL TO BE USED

### F. MISCELLANEOUS DATA

1. TIME AND DURATION OF CONSTRUCTION SEASON

2. RIPRAP IS AVAILABLE

   YES [ ]

   NO [ ]

   AT MILES

3. DESCRIPTION OF RIPRAP MATERIAL

4. TRAFFIC CONTROL AND SAFETY NEEDS

5. ROADWAY ALIGNMENT AND GRADE (ADEQUATE?)

6. CHANNEL OR STRUCTURE ALIGNMENT CHANGES RECOMMENDED (SHOW ON COPY OF SITE PLAN)

7. ARL DIES OR BANK PROTECTION REQUIRED TO CONTROL FLOW (SHOW ON COPY OF SITE PLAN)

8. DESCRIPTION OF ON-SITE CONSTRUCTION MATERIAL TO BE USED

9. STORAGE AND/OR WASTE AREAS AVAILABLE FOR CONSTRUCTION (LOCATION, SIZE, AND DESCRIPTION)

10. WHAT IS THE MAXIMUM LENGTH OF GIRDERS THAT CAN BE HAULED TO THE SITE?

   FEET

11. METHOD OF CONSTRUCTION

   CONTRACT [ ]

   FORCE ACCOUNT [ ]

   TIMBER PURCHASER [ ]

12. OTHER REMARKS AND SPECIAL RECOMMENDATIONS

### G. FISH AND OTHER WILDLIFE PASSAGE CONSIDERATIONS

1A. IS FISH PASSAGE REQUIRED?

   YES [ ]

   NO [ ]

1B. IF YES, WHAT SPECIES AND LIFE STAGES?

2. IS PASSAGE FOR OTHER SPECIES REQUIRED? (TERRESTRIAL, CRAWLING, SWIMMING)

   YES [ ]

   NO [ ]

   WHICH?

### H. FOREST BIOLOGIST RECOMMENDATIONS

PREPARED BY:

DATE

FOREST ENGINEER REVIEW:

DATE

FIELD SITE SKETCH, LONGITUDINAL PROFILE, AND CROSS-SECTIONS

Adapted From: Form RS-7700-71