7/02/14

Field Data Form: Road-Stream Crossing Inventory

Coordinator _____ **Crossing ID#** _____

Stream/River: _____ **Road:** _____ **Town:** _____

Flow condition: ☐ **Unusually low**   ☐ **Typical low-flow**   ☐ **Average flow**   ☐ **Higher than average**

GPS Coordinates (lat/long):

☐ Decimal degrees   N___ ___ . ___ ___ ___ ___ ___   W___ ___ . ___ ___ ___ ___ ___

OR   ☐ Degrees, minutes, seconds   North: D _____ M _____ S _____

West: D _____ M _____ S _____

Date:_____   **Location:** _____**Observer:** _____

Photo IDs: _____

Road/Railway Characteristics

Road surface: ☐ Paved   ☐ Unpaved   ☐ Railroad

Road type: ☐ 1-Lane road   ☐ 2-Lane road   ☐ Multilane road   ☐ Divided highway   ☐ Railroad

Comments _____

_____

Crossing/Stream Characteristics *(during generally low-flow conditions)*

Crossing type: ☐ Ford   ☐ Bridge   ☐ Open bottom arch   ☐ Single culvert   ☐ Multiple culverts (# _____)

☐ Removed   ☐ No crossing   ☐ Buried stream

Condition of crossing: ☐ New   ☐ Excellent   ☐ Fair   ☐ Poor

Does the stream at the crossing support fish?   ☐ Yes   ☐ Not likely   ☐ Don't know

Is the stream flowing?   ☐ Yes   ☐ No

Crossing span: ☐ Severe constriction   ☐ Mild constriction   ☐ Spans bank to bank   ☐ Spans channel & banks

Tailwater Scour pool: ☐ None   ☐ Small (wider or deeper than stream)   ☐ Large (width or depth 2X stream)

Crossing alignment matches stream?   ☐ Yes (flow aligned)   ☐ No (skewed)

Comments _____

_____

Culvert/Bridge Cell Characteristics *(Culvert/cell #1; use page 3 for additional culverts or cells)*

Structure embedded?   ☐ Not embedded   ☐ Partially embedded   ☐ Fully embedded   ☐ No Bottom

Structure substrate: ☐ None (smooth)   ☐ None (rough/corrugated)   ☐ Inappropriate   ☐ Contrasting   ☐ Comparable

Internal features   ☐ None   ☐ Slip lined   ☐ Baffles/Sills   ☐ Weir(s)   ☐ Support structures

Physical Barriers to fish and wildlife passage: ☐ Severe   ☐ Moderate   ☐ Minor   ☐ None

Describe any barriers: _____

Is there a clear line of sight through the structure?   ☐ Yes   ☐ No

Does the structure provide dry passage suitable for use by terrestrial wildlife?   ☐ Yes   ☐ No

If yes, what is the maximum structure height in the portion that offers dry passage? _____Feet
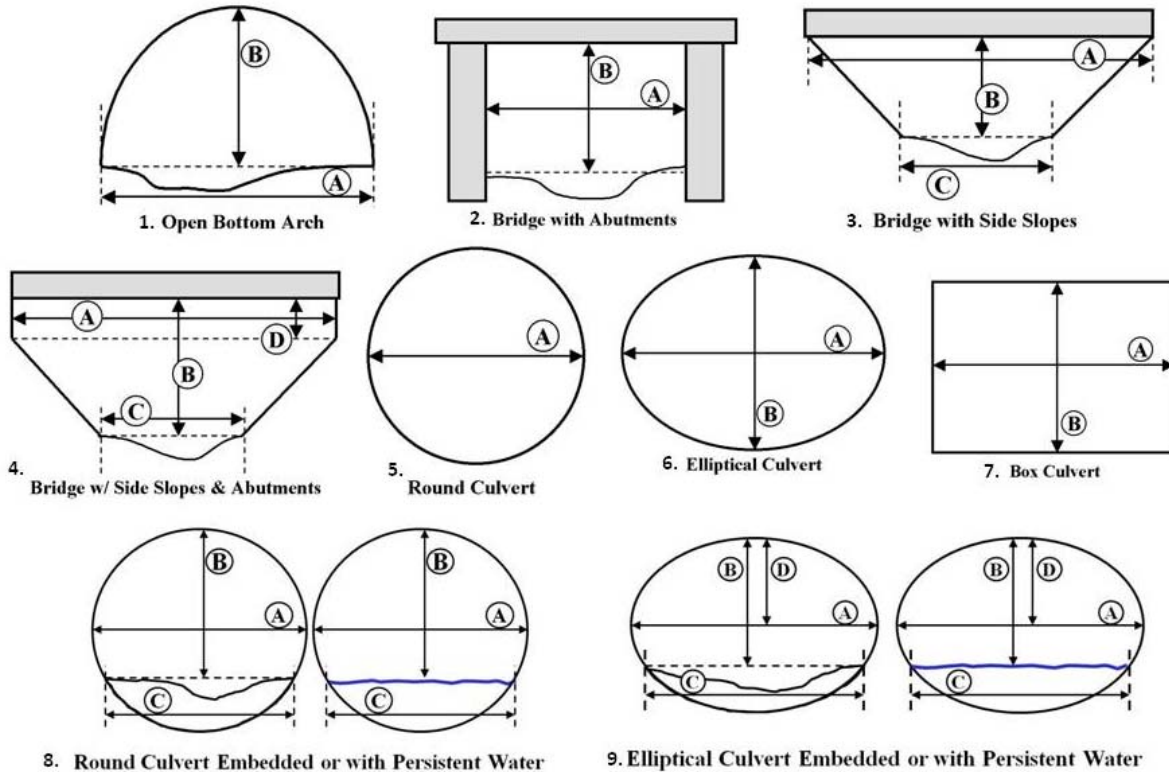
Comments _____

_____

For the following questions use as a reference a portion of the natural stream channel that is outside the influence of the crossing structure and not otherwise altered.

Water depth matches stream?   □ Yes (comparable)   □ No (deeper)   □ No (shallower)   □ Dry

Water velocity matches stream?   □ Yes (comparable)   □ No (slower)   □ No (faster)   □ Dry

Structure Slope matches stream?   □ Yes (comparable)   □ No (flatter)   □ No (steeper)

1. Open Bottom Arch
2. Bridge with Abutments
3. Bridge with Side Slopes
4. Bridge w/ Side Slopes & Abutments
5. Round Culvert
6. Elliptical Culvert
7. Box Culvert
8. Round Culvert Embedded or with Persistent Water
9. Elliptical Culvert Embedded or with Persistent Water

Length of stream through structure: _____ Feet

Inlet Structure Type (from above):   □ 1.   □ 2.   □ 3.   □ 4.   □ 5.   □ 6.   □ 7.   □ 8.   □ 9.   □ Ford   □ Removed

Inlet Dimensions: A) _____ (ft.) B) _____ (ft.) C) _____ (ft.) D) _____ (ft.)   □ Clogged/Collapsed/Submerged

Inlet Water Depth (max depth inside the structure at the inlet):   _____ Inches   □ Measured   □ Estimated

Inlet Drop   □ None,   or if present ____ Inches   □ Measured   □ Estimated

Outlet Structure Type (from above):   □ 1.   □ 2.   □ 3.   □ 4.   □ 5.   □ 6.   □ 7.   □ 8.   □ 9.   □ Ford   □ Removed

Outlet Dimensions: A) _____ (ft.) B) _____ (ft.) C) _____ (ft.) D) _____ (ft.)   □ Clogged/Collapsed/Submerged

Outlet Water Depth (max depth inside the structure at the outlet):   _____ Inches   □ Measured   □ Estimated

Outlet Drop

    a. Culvert bottom to water surface   □ None,   or if present ____ Inches   □ Measured   □ Estimated

    b. Culvert bottom to stream bed   □ None,   or if present ____ Inches   □ Measured   □ Estimated

    c. With an outlet drop, check one: □ Cascade   □ Freefall   □ Freefall onto cascade   □ No drop

Armored streambed at outlet?   □ Extensive   □ Not extensive   □ None

Comments _____

_____

_____

STRUCTURE WORKSHEET FOR MULTIPLE CULVERT OR BRIDGE CELL CROSSINGS | Crossing ID# _____ |

Note: When inventorying multiple culverts or bridge cells, label left culvert/cell #1 and go in increasing order from left to right from downstream end (outlet) looking upstream.

Culvert or Bridge Cell # _____

Culvert/Bridge Cell Characteristics

Structure embedded? ☐ Not embedded ☐ Partially embedded ☐ Fully embedded ☐ No Bottom

Structure substrate: ☐ None (smooth) ☐ None (rough/corrugated) ☐ Inappropriate ☐ Contrasting ☐ Comparable

Internal features ☐ None ☐ Slip lined ☐ Baffles/Sills ☐ Weir(s) ☐ Support structures

Physical Barriers to fish and wildlife passage: ☐ Severe ☐ Moderate ☐ Minor ☐ None

    Describe any barriers: _____

Is there a clear line of sight through the structure? ☐ Yes ☐ No

Does the structure provide dry passage suitable for use by terrestrial wildlife? ☐ Yes ☐ No

    If yes, what is the maximum structure height in the portion that offers dry passage? _____ Feet

Comments _____

_____

For the following questions use as a reference a portion of the natural stream channel that is outside the influence of the crossing structure and not otherwise altered.

Water depth matches stream? ☐ Yes (comparable) ☐ No (deeper) ☐ No (shallower) ☐ Dry

Water velocity matches stream? ☐ Yes (comparable) ☐ No (slower) ☐ No (faster) ☐ Dry

Structure Slope matches stream? ☐ Yes (comparable) ☐ No (flatter) ☐ No (steeper)

Length of stream through structure: _____ Feet

Inlet Structure Type: ☐ 1. ☐ 2. ☐ 3. ☐ 4. ☐ 5. ☐ 6. ☐ 7. ☐ 8. ☐ 9. ☐ **Ford**

Inlet Dimensions: A) _____(ft.) B) _____ (ft.) C)_____(ft.) D) _____ (ft.) ☐ Submerged

Inlet Water Depth (max depth inside the structure at the inlet): _____ Inches ☐ Measured ☐ Estimated

Inlet Drop ☐ None, or if present _____ Inches ☐ Measured ☐ Estimated

Outlet Structure Type: ☐ 1. ☐ 2. ☐ 3. ☐ 4. ☐ 5. ☐ 6. ☐ 7. ☐ 8. ☐ 9. ☐ **Ford**

Outlet Dimensions: A) _____(ft.) B) _____ (ft.) C)_____(ft.) D) _____ (ft.) ☐ Submerged

Outlet Water Depth (max depth inside the structure at the outlet): _____ Inches ☐ Measured ☐ Estimated

Outlet Drop

    a. Culvert bottom to water surface ☐ None, or if present _____ Inches ☐ Measured ☐ Estimated

    b. Culvert bottom to stream bed ☐ None, or if present _____ Inches ☐ Measured ☐ Estimated

    c. With an outlet drop, check one: ☐ Cascade ☐ Freefall ☐ Freefall onto cascade ☐ No drop

Armored streambed at outlet? ☐ Extensive ☐ Not extensive ☐ None