# **LOCATION HYDRAULIC STUDY FORM[[1]](#footnote-1)**

**DIST-CO-RTE:**       **PM/PM:**

**EA/Project No.:**       **Bridge No.:**

**Floodplain Description:**

1. Description of Proposal: Enter description (include any physical barriers i.e. concrete barriers, soundwalls, etc. and design elements to minimize floodplain impacts)

2. Current ADT:       Projected ADT:

3. Hydraulic Data: Base Flood Q100=       CFS
WSE100=       The flood of record, if greater than Q100:
Q=       CFS WSE=
Overtopping flood Q=       CFS WSE=
Are NFIP maps available? [ ]  YES [ ]  NO
Are NFIP studies available? [ ]  YES [ ]  NO

4. Is the highway location alternative within a regulatory floodway? [ ]  YES [ ]  NO

5. Attach map with flood limits outlined showing all buildings or other improvements within the base floodplain.

Potential Q100 backwater damages:

A. Residences? [ ]  YES [ ]  NO

B. Other Bldgs? [ ]  YES [ ]  NO

C. Crops? [ ]  YES [ ]  NO

D. Natural and beneficial floodplain values? [ ]  YES [ ]  NO

6. Type of Traffic:

A. Emergency supply or evacuation route? [ ]  YES [ ]  NO

B. Emergency vehicle access? [ ]  YES [ ]  NO

C. Practicable detour available? [ ]  YES [ ]  NO

D. School bus or mail route? [ ]  YES [ ]  NO

7. Estimated duration of traffic interruption for 100-year event       hours.

8. Estimated value of Q100 flood damages (if any) – moderate risk level.

A. Roadway $

B. Property $

Total $

9. Assessment of Level of Risk [ ]  Low [ ]  Moderate [ ]  High

For High Risk projects, during design phase, additional Design Study Risk Analysis may be necessary to determine design alternative.

PREPARED BY:

|  |  |  |
| --- | --- | --- |
|       |  |       |
| Signature- Dist. Hydraulic Engineer(Item numbers 3,4,5,7,9) |  | Date |

Is there any longitudinal encroachment, significant encroachment, or any support of incompatible Floodplain development? [ ]  YES [ ]  NO

If yes, provide evaluation and discussion of practicability of alternatives in accordance with 23 CFR 650.113.

Information developed to comply with the Federal requirement for the Location Hydraulic Study shall be retained in the project files.

|  |  |  |
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|       |  |       |
| Signature- Dist. Project Engineer(Item numbers 1,2,6,8) |  | Date |

1. Form adapted from Figure 804.7A Technical Information for Location Hydraulic Study located in Chapter 804 of the Highway Design Manual. [↑](#footnote-ref-1)