

FPHF Applicant Checklist – **Installing or Replacing Structure** in Type S or F Water:

(Letters and numbers [xn] correspond to labels on example plans available on the DNR Website)

Information required for all drawings:

- Legible
- Graphical scale bars [B1]
- Title block for each page to include:
 - Drawing title [B5]
 - Landowner name [B10]
 - Drawing date and revision date [B20,B25]
 - Page number (X of total) [B35]
- Title block for first page to include:
 - Section, Township and Range [B15]
 - Latitude and longitude [B30]

Road Profile (Channel Cross Section):

For All Structures, include the following:

- Horizontal axis labeled with stations (1+00) or consistent intervals (such as 100') [D1]
- Vertical axis labeled with elevations [D5]
- Road grades in percent slope [D10]
- Existing ground surface labeled [D20]
- Location of existing structures [E15]

For Pipes, include the following:

- Pipe cross section with size labeled [E1]
- Dimension lines: Countersink, streambed shape including: pipe bed width, thalweg, and banks [E5]
- Type, gradation, or material source used to restore streambed [E10]

For Bridges, include the following:

- Superstructure (bridge) and substructure (foundation) [F1,F5]
- CBW dimension line [F10]
- Clearance between 100-year flood level and bottom of superstructure [F12]
- Armor: Location, type, size, toe depth, and slope angles labeled in X horizontal: 1 vertical [F20, F25, F30, F35, F40]
- Bottom chord elevations [F60,F65]

Site Plan; including:

- North arrow [A1]
- Channel alignment upstream and downstream 20 x channel bed width (CBW) (min. 150' up and down) [C5]
- Road and stream alignment, including: [C10]
 - Planned changes with proposed road edges matched to existing edges [C20]
 - Station labels at constant intervals (such as 1+00) or at direction changes (such as 2+56) [C25]
- CBW dimensions for bridges [C26]
- Stream flow direction symbol [C30]
- Proposed and existing structures with dimensions [C35]
- Benchmarks and reference points with elevations [C40]
- Road drainage plan (ditch relief culverts, ditch lining, etc.) [C45]

Channel Profile; including:

- Horizontal axis labeled with stations (1+00) or consistent intervals (such as 100') [G1]
- Vertical axis labeled with elevations [G5]
- For pipes: Cut slopes, fill slopes, and rock armor angles labeled in X horizontal: 1 vertical [G10]
- Proposed structure and existing structures [G25, G30]
- Channel profile upstream and downstream 20 x channel bed width (CBW) (min. 150' up and down) [G40]
- Label all channel beds: existing, finished, and expected future regrade [G35,G36,G37]
- Finished and expected channel profiles labeled in percent slope [G45,G50]
- Station and elevation labels referenced to benchmarks for:
 - Finished excavation limits and expected future regraded channel bed limits [G55]
- For Pipes:**
 - Upstream and downstream inverts [G60,G65]
 - Finished road surface [G80]