

### **261.8.2.2 Detailed Structural Analysis**

When a detailed structural analysis is required, evaluate the capacity of the structure in accordance with the [Structures Manual, Volume 3, Section 18.12](#). Report the Demand/Capacity (D/C) ratios, Stress Ratios (SRs), and Combined Force Interactions (CFIs). If all D/C ratios, SRs, and CFIs are less than or equal to 1.10, the existing structure may remain without processing a Design Variation or Design Exception. The DSDE must review the detailed structural analysis and provide final direction to either allow the existing structure to remain, strengthen the existing structure, or replace the structure. For projects not in a typical design-bid-build or design-build contract (e.g., permit, push-button, safety), consult the District Traffic Operations Engineer (DTOE) instead of the DSDE. Obtain concurrence from the DSME. The DSME must document the DSDEs or DTOEs decision in BrM.

Contact the DSDE for guidance on a detailed structural analysis for existing ancillary structures without plans, shop drawings, foundation depths, or design calculations.

### **261.8.3 Existing Ancillary Structures to be Relocated**

Perform a Condition Evaluation and detailed structural analysis for all ancillary structures to be relocated.

### **261.8.4 Ancillary Structures Report**

Produce an Ancillary Structures Report including the following:

- Listing of ancillary structures within the project limits including the proposed disposition (e.g., remain in place, relocated, replaced, removed)
- Condition Evaluation (if required)
- Justification for when a detailed structural analysis is not required
- Detailed structural analysis (if required)
- Documentation of any required remedial actions
- Other items as specified by the District

Submit the Ancillary Structures Report to the DSDE and the DSME. The Ancillary Structures Report will be stored in PSEE.