



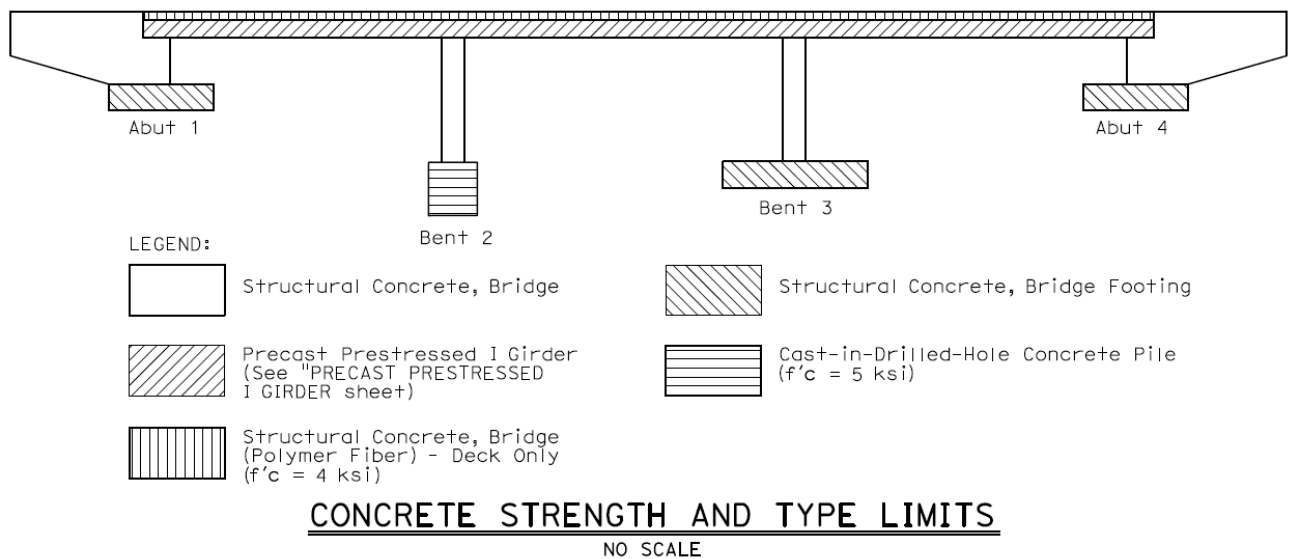
Bridge Design Details 9.8 January 2023

Concrete Strength and Type Limits

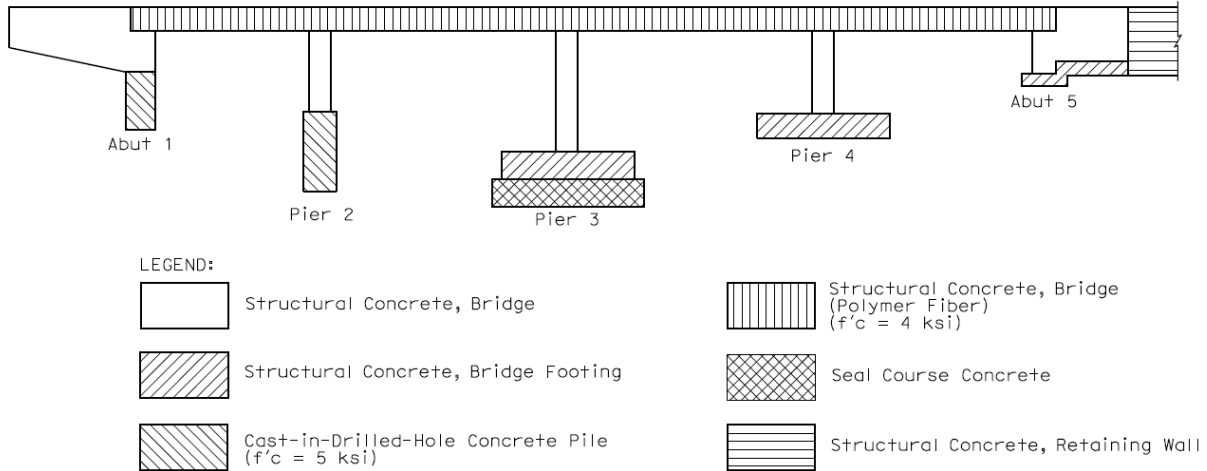
The plans and/or specifications must clearly define the pay limits for all concrete. The *Standard Specifications* state that all concrete not otherwise designated by strength on the plans will be paid for as STRUCTURAL CONCRETE, BRIDGE; likewise, the limits for all high strength concrete must be shown on the plans. These limits can be shown by the use of a CONCRETE STRENGTH AND TYPE LIMITS diagram, or by providing the information directly on the detail drawings of the various elements.

All bents or piers are not required to be shown if they have the same type and strength of concrete. Precast girder limits should be shown on the diagram but reference the detail sheets for strengths and other details. Approach slab concrete limits should not be shown.

To avoid confusion, avoid using cross hatching whenever possible. If necessary, cross hatching may be used to describe seal course or concrete pile concrete limits. Do not show the specific days to which strength should be obtained (e.g., f'_c at 28 days).



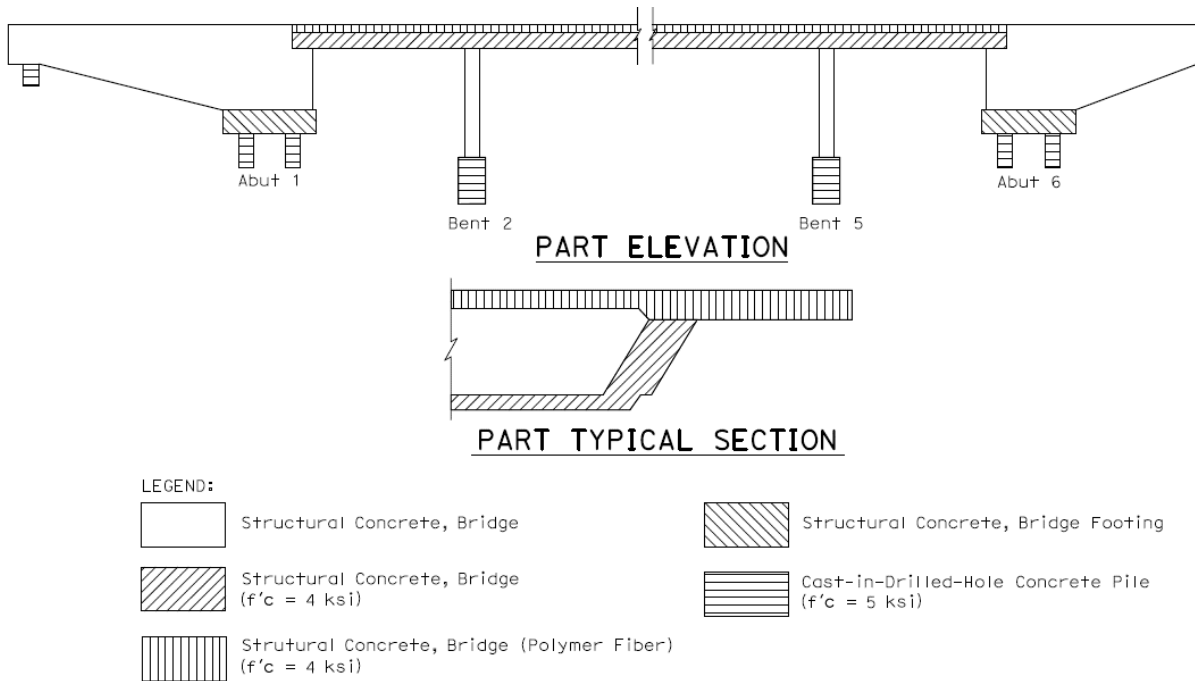
**Figure 9.8.1 Concrete Strength and Type Limits Diagram
Precast Prestressed Girder Bridge**



CONCRETE STRENGTH AND TYPE LIMITS

NO SCALE

Figure 9.8.2 Concrete Strength and Type Limits Diagram Reinforced Concrete Slab Bridge



CONCRETE STRENGTH AND TYPE LIMITS

NO SCALE

Figure 9.8.3 Concrete Strength and Type Limits Diagram Cast-in-Place Prestressed Box Girder Bridge