GENERAL NOTES

ITEM SPECIAL - PATCHING CONCRETE STRUCTURE, MISCELLANEOUS: BRIDGE DECK AND BACKWALL

This item shall consist of furnishing the necessary labor, materials and equipment to repair concrete bridge deck and backwalls, including removal of all loose and unsound concrete, surface preparations, bonding coat and mixing, placing and finishing of mortar or concrete patches.

Materials shall conform to the following requirements:

Coarse Aggregate (No. 8)	703.02
Quick Setting Concrete Mortar, Type 2	705.21

The Engineer shall outline the areas to be removed on the bridge deck. The perimeter of all removal area shall be sawed to a depth of two inches (2.0") to produce a vertical or slightly undercut face. Additional saw cuts may be required to facilitate removal. All unsound concrete including all patches other than sound Portland Cement concrete, and all loose and disintegrated concrete shall be removed. The unsound concrete may be removed by chipping or hand dressing. Chipping hammers shall not be heavier than the nominal thirty-five pound class and shall be operated at an angle of less than forty-five degrees (45°) measured from the surface of the bridge deck. Concrete shall be removed in a manner that prevents cutting, elongating or damaging reinforcing steel. Where the bond between the concrete and a primary reinforcing bar has been destroyed, or where more than one half of the periphery of such bar has been exposed, the adjacent concrete shall be removed to a depth that will provide a minimum of one inch (1.0") clearance around the bar except where other reinforcing bars make this impractical. Reinforcement which has become loose shall be adequately supported and tied back into place.

Surface Preparation Cleaning shall closely precede application of the bonding grout and/or the patching material. The surface to be patched and the exposed reinforcing steel shall be thoroughly cleaned by sand-blasting followed by an air blast. It may be necessary to use hand tools to remove scale from the reinforcing steel. The prepared surface shall be dry.

Patches shall be bonded according to the Manufacturer's recommendations.

Patching Material shall be made using quick setting concrete mortar, Type 2, 705.21. The mortar shall be mixed and placed as per Manufacturer's recommendations. Coarse aggregate may be added in accordance with the Manufacturer's instructions.

METHOD OF MEASUREMENT

The quantity shall be the actual area in Square Yards of the exposed surface of patches. Patch areas shall be as follows.

Deck = 2.0" to 6.0" Depth Backwall = 6.0" to 12.0" Depth

BASIS OF PAYMENT

Payment shall be made at the contract price bid for:

Item Special - Patching Concrete Structure, Miscellaneous: Bridge Deck and Backwall = 158.0 square yards