Section 02230 - STONE, CONCRETE, AND ASPHALT PAVEMENT REMOVAL AND REPAIR

1. SCOPE. This section covers stone, concrete, and asphalt pavement removal and repair and all associated items. Refer to Standard Details for additional information.

2. COARSE AGGREGATE BASE COURSE. The coarse aggregate base course and its placement shall be according to the NCDOT Standard Specification for Roads and Structures. It is the intent of these specifications that the aggregate meet the gradation formula requirements shown in Column B of Table 520-1. If, however, the average gradation test result for a lot is within the tolerances shown in Column C of Table 520-1, the lot will be considered acceptable. Tolerances outside Column C of Table 520-1 will not be accepted. These specifications supersede the procedures of Sections 520-6 of the NCDOT Standard Specifications for Roads and Structures for gradations with tolerances outside of Column C of Table 520-1.

Coarse aggregate base course shall be used for stone drives and gravel roads shall have a 4-inch minimum compacted thickness, except as is otherwise designated on the plans or as given in written instructions by the Engineer.

All stone shall be provided by a source approved by the NCDOT. The Owner shall be furnished with written certification from quarry that the stone supplier is approved by the NCDOT.

3. PAVEMENT REMOVAL AND REPAIR. Whenever it is necessary to remove pavement to install the pipelines, the pavement shall be cut to true line to 12 inches beyond the top of the trench, by a method acceptable to the Engineer and the pavement removed just prior to the trenching operation.

The Contractor shall backfill all trenches to a point 2 feet 10 inches below the existing pavement. Then, the backfill shall be compacted to 98 percent maximum density at optimum moisture content as determined by ASTM D698 to the base. Then either 10 inches of CABC or 8 inches of black base shall be installed to a point 2 inches below the existing pavement surface. When making the pavement repairs prior to the pipeline passing testing, the base shall be brought flush with existing pavement as a temporary pavement that will be replaced with 2 inches of surface course. It shall be the Contractor's responsibility to maintain all pavement cuts in good order until asphaltic patching is completed.

Once the pipeline in the crossing has passed the appropriate tests, the 2 inches of temporary black base or CABC shall be removed and the Super Pave surface course shall be placed flush with existing pavement to provide a smooth ride across the patch.

Asphaltic patching shall be as follows:

Material	Minimum Thickness
CABC	10 inches
or	
HB Asphalt Base	8 inches
Bituminous Concrete Surface Course (DOT Type I-2)	2 inches

All roads shall be repaired with NCDOT Type Super Pave to flush with the existing surfaces.

The bituminous concrete surface course, Type Super Pave, shall meet the requirements of Sections 645-1 through 645-4 and the HB asphalt base shall meet the requirements of Section 630-1 through 630-4 of the NCDOT Standard Specifications for Roads and Structures. The bituminous concrete surface course shall be provided by a source approved by the NCDOT and Owner shall be furnished with written certification of NCDOT approval.

Prime coats and tack coats shall be applied in accordance with N. C. Department of Transportation Sections 600 and 605, respectively.

All work within the N. C. Department of Transportation rights-of-way shall be done in accordance with NCDOT requirements and specifications and under their direct supervision. It is the Contractor's responsibility to inform NCDOT officials in the district office of their work progress and plans for resurfacing and clean-up. Any work that is not done to the satisfaction of NCDOT officials shall be redone until acceptable at no additional cost to the Owner.

4. CONCRETE PAVEMENT REMOVAL AND REPAIR. The concrete used to restore pavement shall be as specified in the concrete section. The concrete as placed shall conform to the shape, grade, and finish of the existing pavement and will be 1 inch deeper than the original pavement including base, but in no instance less than 6 inches.

5. CONCRETE CURB AND GUTTER REPAIR. Wherever it is necessary to remove existing concrete curb and gutter to install the pipelines, the curb and gutter shall be cut by a method acceptable to the Engineer and the concrete removed. Curb and gutter shall be replaced using metal forms accurately set to lines and grades required for proper drainage to the satisfaction of the Engineer. Curb and gutter section shall match the existing. Concrete shall be 3,000 psi complying with the concrete section.

Curb and gutter repair in the N. C. Department of Transportation rights-of-way shall be done in accordance with NCDOT requirements and under their supervision. Any work that is unsatisfactory to the NCDOT shall be redone at no additional cost to the Owner.

6. STONE FOR MAIL BOX PULL-OFFS. CABC shall be placed at each mail box pull-off at a depth not less than 6 inches and of sufficient length to accommodate vehicular traffic. These areas shall be maintained for the 1 year warranty period.

End of Section