

SECTION 02680
PATCHING PAVEMENT

02680.01 GENERAL

A. General

Patching pavement shall include, but not necessarily be limited to, the removal of existing pavements with and in reasonably close conformity with the lines, grades, and typical sections shown on the Contract Documents or as directed by the Engineer.

B. Related Work Included Elsewhere

1. Removal of existing pavement; Section 02160.
2. Trench excavation, backfill, and compaction; Section 02250.
3. Subgrade preparation; Section 02610.
4. Bituminous concrete pavements; Section 02641.
5. Plain and reinforced Portland cement concrete pavements; Section 02651.

C. Quality Assurance

1. Quality assurance requirements for subgrade preparation shall be as specified in Section 02250.01 and Section 02610.01.
2. Quality assurance requirements for bituminous concrete pavement shall be as specified in Section 02641.01.
3. Quality assurance requirements for Portland cement concrete pavement shall be as specified in Section 02651.01.

D. Submittals

1. Submittals for aggregate base materials shall be as specified in Section 02621.01.
2. Submittals for bituminous concrete pavement shall be as specified in Section 02641.01.
3. Submittals for Portland cement concrete pavement shall be as specified in Section 02651.01.

02680.02 MATERIALS

A. Materials Furnished by the County

The County will not furnish any materials for patching pavement.

B. Contractor's Options

Not applicable.

C. Detailed Material Requirements

1. Aggregate

Aggregate for pavement base shall meet the gradation requirements for ASTM D 2940, Graded Aggregate Subbase as specified in Section 02621.02.

2. Portland Cement Concrete

Portland cement concrete shall be Mix No. 7 as specified in Section 03310.

3. Bituminous Concrete

Bituminous concrete shall be as specified in Section 02641.02.

02680.03 EXECUTION

A. Preparation

1. The existing pavement that has been designated for removal shall be broken and removed. During the removal, care shall be exercised to leave the undisturbed portion of the existing pavement with neatly trimmed vertical edges. The underlying subgrade shall be trimmed as directed, refilled if necessary, uniformly compacted, and brought to a suitable subgrade to receive the patch.
2. For trench patching, the existing pavement shall be cut back from the edge of the trench in a neat line in accordance with the appropriate Standard Detail.
3. Unless otherwise directed by the Engineer, the removed pavement materials shall be disposed of offsite by the Contractor.

B. Concrete Patches

Portland cement concrete patches shall meet the following requirements:

1. Forms shall be in accordance with the requirements of Section 02651.03, Article C and/or as directed by the Engineer. Forms are to overlap the existing pavement on each side of the patch for a minimum of 1 foot and be securely fastened so as not to move when the concrete is placed.

2. Volumetric batching and continuous mixing will be permitted on this work.
3. When the subgrade is dry, it shall be sprinkled with as much water as can be readily absorbed immediately in advance of placing the concrete. The concrete shall be deposited on the subgrade in such a manner as to require as little handling as possible. The use of rakes to move the concrete is prohibited. Metal chutes shall be used in placing the concrete, and a free fall of more than 3 feet will not be permitted. The concrete shall be consolidated using tampers, spades, and other methods acceptable to the Engineer. It shall be struck off by methods acceptable to the Engineer. Unless otherwise specified, the final surface finish shall be textured using either burlap drag or the broom method. The edges of the patch shall be edged using a 1/4-inch edging tool.
4. Joints shall be constructed to coincide with those in the adjoining pavement and as may be specified in the "Special Provisions". Joints shall be sealed in accordance with Section 02651.03, Article P.
5. The placement of reinforcement shall meet the requirements of Section 02651.03 and 02652.03.
6. Concrete shall be cured in accordance with Section 02651.03, Article M.
7. Concrete shall be protected from traffic and meet the requirements of cold weather concreting in accordance with Section 02651.03.
8. Compressive strength requirements for opening the patches to traffic will be specified in the "Special Provisions".

C. Bituminous Concrete Patches

Bituminous concrete patches shall meet the requirements of Section 02641.03. The spreading, finishing, and compaction methods will be subject to the approval of the Engineer.

02680.04 METHOD OF MEASUREMENT

A. General

Measurement of pavement patches will be made to the standard cutback dimensions shown on the standard Details or as directed by the Engineer. Areas beyond the standard cutback dimensions that require patching due to the Contractor's activities will not be measured for payment.

B. Portland Cement Concrete Pavement Patch

Measurement for Portland cement concrete pavement patch will be made of the finished surface area.

C. Bituminous Concrete Pavement Patch

Measurement for bituminous concrete pavement patch will be made of the weight of bituminous mixture placed. The weight shall be determined as specified in Section 02641.01, Article C, Paragraph 5, Item m.

02680.05 BASIS OF PAYMENT

A. General

1. Payment will be made at the unit prices bid. The prices bid shall include all excavation, backfill, and disposal of surplus materials, trimming existing pavement, subgrade preparation, and furnishing all labor, tools, equipment, and materials necessary to satisfactorily complete the work as shown and specified in strict accordance with the Contract Documents, and accepted by the Engineer.
2. Payment will be made for contingent items when ordered by the Engineer. Payment will be made as specified in Sections 02951, 02952, 02953, 02954, 02955, 02956 and 02957.

B. Portland Cement Concrete Pavement Patch

Payment for Portland cement concrete pavement patch will be made at the price bid per square yard. The price bid shall include furnishing, placing, and removing forms, and all other incidental work necessary to complete the work.

C. Bituminous Concrete Pavement Patch

Payment for bituminous concrete pavement patch will be made at the price bid per ton.

END OF SECTION