

SECTION 5 STREET FAILED AREA REPAIR

5-1 GENERAL - The Contractor shall remove failed pavement areas where marked to a minimum depth of four (4) inches, or per the Contract Plans and Special Provisions if greater. The exact limits, including depth, shall be subject to adjustment by the Engineer in the field based on actual conditions at the time of removal of the failed area.

Failed areas shall be carefully removed to neat lines by methods necessary to insure that the existing underground utilities areas are not damaged, the subgrade at the depth of planned removal is not damaged, and removal does not occur beyond the planned or approved limits. Any removal beyond planned or approved limits shall be restored as failed area repair at no expense to the City.

Prior to placing asphalt concrete in the failed areas, the subgrade shall be compacted to a minimum relative compaction of 95% per California Test Method No. 216 to a depth of not less than six (6) inches. The subgrade shall be smooth and uniform in depth.

Attention is directed to the possibility that certain streets may have concrete pavement underlying the existing asphalt surfacing, or the asphalt concrete thickness may exceed the four-(4) inch minimum depth of repair. If Contractor's means and method result in the removal and repair to a depth greater than those specified, it shall be considered to be for his convenience. No additional payment shall be made for removal and repair to a depth greater than the four-(4) inch minimum, or to reach the depth as specified in the Special Provisions or as shown on the Contract Plans.

5-2 DISPOSAL OF EXCAVATED MATERIAL - Asphalt concrete and base rock materials removed from failed area repairs may be either:

- 1) Removed from the project limits and disposed of as provided for in Section 6-16 of the General Provisions to the City Standard Specifications, or
- 2) Prepared by means approved by the Engineer to meet the gradation requirements of Class 2 Aggregate Subbase in accordance with Section 7-2.3, "Aggregate Subbase," of these Technical Provisions, and delivered to the City's designated storage site, or reused on the project site as approved by the Engineer.

5-3 TACK COAT - Excavate failed areas shall have the edges thoroughly coated, by spraying or hand application, with a RS-1 emulsified asphalt tack coat prior to placing asphalt, as specified by Section 9-6 of these Technical Provisions.

5-4 PLACING ASPHALT CONCRETE - Asphalt concrete shall be furnished and placed in accordance with Section 9, "Asphalt Concrete," of these Technical Provisions. Unless otherwise specified by the Special Provisions, asphalt concrete of 3/4"-inch maximum sized aggregate shall be used. Asphalt concrete shall be placed in failed areas as soon as possible, but in no event more than twenty-four (24) hours after the removal of the failed areas. Regardless, excavated areas shall be backfilled to match surrounding grades in the same working day during which excavation is performed and prior to opening any roadway to public traffic. Lane closures and traffic control shall remain in full force during the entire duration. Temporary backfill may be acceptable to the Engineer under unforeseen circumstances, but shall be performed at the Contractor's sole expense. Temporary backfill shall consist of an asphalt concrete surface at least two (2) inches thick, or be covered with a steel trench plate held in place with temporary asphalt concrete ramps not less than ten (10) inches long along the edges of the plate on all sides. Any temporary backfill and subsequent re-excavation shall be at Contractor's sole expense.

Asphalt concrete may be placed in failed areas in lifts not to exceed three (3) inches. The finished pavement surface shall be smooth and free of cracks, shoving, displacement, and segregation of coarse and fine materials. Paving shall be to a clean neat joint with existing grade. Paving with evidence of poor workmanship such as rock pockets, ripples, voids, or out of tolerance as defined by Contract Specifications shall be removed.

5-5 TOLERANCES - The asphalt concrete shall be evenly spread upon the subgrade or base to such a depth that, after rolling, it will conform to the adjacent pavement. When a 10-foot straightedge is laid on the finished surface, the surface shall not vary from the edge of the straightedge more than one-eighth inch. The finish surface elevation of the failed area repair shall not exceed the elevation of the adjacent roadway by more than 1/8 inch.

Any area that is not within this tolerance shall be brought to grade immediately following the initial rolling. However, if the paving material has been cooled below the lower limits of the spreading temperatures specified, the surface of the pavement shall be brought to a true grade and cross sectioned by removing the paving material in the area to be repaired by an approved method to provide a minimum laying depth of one inch or new pavement material at the joint line. Repairs shall

not be made to pavement surfaces by feather-edging at the joint. Cost of any corrective work required by the Engineer shall be entirely at the Contractor's expense.

5-6 MEASUREMENT - Failed area repairs shall be measured by the square feet or yard based on the areas designated by the Engineer in the field. Actual repair quantities may vary from those shown on the Bid Schedule. With approval of the Engineer and for the Contractor's convenience, the Contractor may remove and repair pavement beyond the areas marked. Such additional repairs outside-approved limits shall not be included in the area used for payment.

5-7 PAYMENT - The contract unit price for failed area repairs shall be considered as including all labor, equipment, materials, excavation and incidentals, including; disposal, subgrade preparation, tack coating asphalt concrete and removal and repair beyond the area designated by the Engineer, and no additional compensation shall be made therefor.