

**STANDARD SPECIFICATIONS FOR  
CONSTRUCTING UTILITY FACILITIES**

**DIVISION III - CONSTRUCTION SPECIFICATIONS**

**SECTION 10  
GENERAL SPECIFICATIONS FOR REMOVING AND REPLACING PAVEMENT**

**10.01 SCOPE**

These specifications form a part of the Contract Documents and shall govern for removing and replacing pavement for sanitary sewers, water mains, sewage pumping stations and gas mains. All Work shall be in accordance with the Alabama Department of Transportation (ALDOT) Standard Specifications for Highway Construction, current edition or the authority having jurisdiction. The Contractor shall confirm with the authority having jurisdiction that the following specifications are the current standards for that authority prior to performing work and abide by their permitting procedures. Centerline stripes or other pavement markings that existed prior to start of construction shall be replaced. No separate payment will be made for striping or marking.

The term "pavement" shall be construed to mean either concrete, bituminous, cobblestones, or brick placed as a wearing surface in streets, driveways, or sidewalks; or placed as slope protection for ditches or drains. Shell surfacing, sand-clay surfacing, gravel surfacing and other such types of surfacing will not be considered paving and will not be paid for as such unless specifically stated otherwise.

The various types of pavement replacement and method of payment shall be as hereinafter specified. The specific types of pavement replacement for each project will be as indicated on the Drawings or as noted in the Proposal.

All Certifications and Reports shall be kept on file.

**10.02 MATERIALS**

Materials of this Section shall be as specified herein.

**10.03 REMOVING AND REPLACING PAVEMENT**

A. Base Course for Flexible Pavement:

Base course shall conform to the Section entitled "Backfilling".

B. Replacement of Flexible Pavement:

As soon as possible, and no later than 30 days, after the trench has been backfilled in accordance with the Section entitled "Backfilling", the following procedures shall be followed:

1. Preparation: Jagged edges of the pavement shall be squared and cut to a neat line with an appropriate saw. The edges of the pavement shall be cut along straight lines parallel to the center of the pavement cut. The trench shall be shaped to receive the permanent base and bituminous wearing surface. As specified herein.
2. Base: The authority having jurisdiction shall determine which type of base material is permissible.

After the pipe trench has been backfilled and compacted in accordance with the Section entitled "Backfilling", bituminous base, 6 inches compacted thickness complying with crushed stone 825-B base in accordance with ALDOT, selected sand, or "Plant Mix Bituminous Base" of the ALDOT Specifications shall then be installed. Base shall be installed the width of trench plus paving cutback of 12 inches beyond the sides of the trench, and shall be compacted to 100 percent maximum density. Base for patch surfacing shall be finished off 1½ inches below the surface of the existing pavement and to the shape of the original pavement. Base for full width street surfacing shall be installed flush with the existing bituminous surface treatment. Care shall be taken to seal the edges of the trench. The trench shall then immediately be prepared for bituminous base wearing surface, and the bituminous base shall be kept clean and maintained until surfacing is applied. In other than State and Baldwin County right-of-way, the patched area shall then be maintained for a period of one to six months. If after a one-month period no settlement problems occur, the Contractor may upon approval of the appropriate agency install the bituminous wearing surface.

3. Bituminous Wearing Surface for Patch Surfacing: If required, the trench shall be leveled and prepared for resurfacing. In State right-of-way, the width of the surface course shall extend 6 inches beyond the edges of the patch seal. A tack coat using SS1 or SS1h emulsified asphalt shall be applied to the full trench width. After proper curing, the trench shall be surfaced full width using 1½ inches of "Bituminous Concrete Wearing Surface Mix 429 A", in accordance with ALDOT Specifications.
4. Bituminous Wearing Surface for Full Width Street Surfacing: If required, the roadway surface shall be leveled and prepared for resurfacing. A tack coat using SS1 or SS1h emulsified asphalt shall be applied to the full roadway width. After proper curing, the entire roadway within the Project limits shall be resurfaced with 1½ inches of "Bituminous Concrete Wearing Surface Mix 429A", in accordance with ALDOT Specifications, latest edition.
5. Certification: Any pavement failure that occurs during the warranty period shall be replaced at the Contractor's expense, including removal and replacing subgrade material if necessary. A letter of certification shall be required from the testing lab, verifying that the materials used meet the above Specifications. A letter of certification to the City of Daphne Public Works Department or the

authority having jurisdiction that installation is in accordance with these Specifications and that records be kept on file for inspection.

6. Testing: All testing procedures and requirements shall be in accordance with ASTM and ALDOT Standard Specifications. Initial testing services shall be paid by the Owner. Should any of the tests fail, the Contractor shall pay for all retesting necessary to prove materials are within specifications.
7. Contract Time: Upon completion of the bituminous base course, where applicable, the contract time will be stopped and will not resume until the placement of the wearing surface is resumed or at the end of six months, whichever occurs first.

C. Replacement of Concrete Pavement:

As soon as possible, and no later than 30 days, after the trench has been compacted in accordance with the Section entitled "Backfilling", the following procedures shall be followed:

1. Preparation: Existing pavement shall be cut back a minimum of 12 inches from the edge of the trench with an appropriate saw. The edges of the pavement shall be sawed along straight lines parallel to the center of the pavement cut. In the event that a crack exists in the pavement within 2 feet to the saw cut, the width of pavement to be removed shall be widened to include the crack in the removal and replacement, and the saw cut shall be made parallel to the centerline of the street behind the crack between existing transverse pavement joints.
2. Temporary Asphalt Patch: The top 2 inches of backfill material shall then be removed and a temporary asphalt patch, (complying with "Bituminous Concrete Wearing Surface" or "Bituminous Concrete Plant Mix, Patching" of the ALDOT Specifications, shall be installed and maintained for a period of one to six months. If after a one-month period no settlement problems occur, the Contractor may upon approval of the appropriate agency install the final concrete patch.
3. Concrete Patch: If required, the trench shall be leveled and prepared for resurfacing. The top 6 inches of material shall be removed from the trench, the subgrade material prepared, and the final concrete patch installed. Concrete used in the patch shall comply with "Portland Cement Concrete Pavement" of the ALDOT Specifications, latest edition. All steel reinforcements shall be spliced according to acceptable standards. Concrete finish shall match the finish of the existing concrete pavement. Note: Concrete patchwork within right-of-way, subject to vehicular traffic, shall have an 8-inch compacted thickness, at 2 to 4-inch lifts, sand-clay base. Cost for this base course shall be included in the cost for the concrete patch.

4. Certification: Any pavement failure that occurs during the warranty period will be replaced by the Contractor at their expense, including removing and replacing subgrade material if necessary. A letter of certification shall be required from the testing lab verifying that the installation and materials used in the patch meet the above Specifications.
5. Testing: Testing laboratory services shall be paid for by the Owner.
6. Contract Time: Upon completion of all of the temporary asphalt patching, the contract time under this Contract shall be stopped and will not resume until the Work resumes for placing of the final concrete pavement, or after the six months waiting period, whichever occurs first.

D. Replacing Concrete Sidewalk, Curb and Gutter, Driveways or Ditch Paving:

1. After the trench has been compacted in accordance with the Section entitled "Backfilling", the following procedure shall be followed:
  - a. Where concrete sidewalks or paved ditches are removed, they shall be replaced with the same type and thickness as that removed including finish. Sidewalks shall be provided with expansion joints, and shall be constructed of 3,000-psi minimum, concrete.

Concrete driveways shall replace the entire disturbed panel (joint to joint) unless written approval from the Owner/Engineer otherwise is received.

**END OF SECTION**