



## SECTION 801

### LIME AND FERTILIZER

**801.1 Description.** This work shall consist of the application of agricultural lime and commercial fertilizer and soil preparation for seeding and sodding on areas shown on the plans or designated by the engineer.

#### **801.2 Material.**

**801.2.1** Material used for soil neutralization, unless otherwise specified, shall be agricultural lime with no less than 90 percent passing the No. 8 sieve containing no less than 65 percent calcium carbonate equivalent.

**801.2.2** Agricultural lime shall be furnished from a source that has been tested and certified in accordance with the Missouri Agricultural Liming Materials Act. The quantity of material required to provide the specified pounds of effective neutralizing material (E.N.M.) per acre shall be determined from the producer or distributor's certification of analysis furnished by the Director of the Missouri Agriculture Experiment Station, Columbia, Missouri in accordance with the Missouri Agricultural Liming Materials Act. The contractor shall provide a copy of this certification to the engineer prior to application. If agricultural lime is furnished as a commercially bagged product, pelletized or otherwise, with a guaranteed product analysis shown on the bag listing the elemental properties and gradation, the E.N.M. shall be provided to the engineer. Material may be accepted on the basis of bag label analysis.

**801.2.3** Fertilizer shall be a standard commercial product which, when applied at the proper rate, will supply the quantity of total nitrogen (N), available phosphoric acid ( $P_2O_5$ ) and soluble potash ( $K_2O$ ), as specified in the contract. Material may be accepted on the basis of bag label analysis or supplier's certification, and shall be in accordance with all applicable Missouri fertilizer laws.

**801.3 Equipment.** Lime and commercial fertilizer shall be applied by mechanical equipment designed for this purpose.

#### **801.4 Construction Requirements.**

**801.4.1** The area to be limed and fertilized will be the area specified within the limits of construction. The area shall have a uniform surface free from rills, washes and depressions, and shall conform to the finished grade and cross section shown on the plans. The soil shall be thoroughly broken up, worked, tilled and loosened to a minimum depth of 2 inches. The seedbed or sodbed shall be prepared by loosening the existing soil on the slope, rather than by the addition of loose soil.

**801.4.2** Lime and fertilizer shall be applied evenly at the rates specified in the contract, and only when the soil is in a tillable condition. After application, the lime and fertilizer shall be thoroughly mixed into the soil to a minimum depth of 2 inches, except when applied hydraulically on slopes steeper than 2:1. Lime and fertilizer shall be applied separately, but may be incorporated into the soil in one operation. Lime and fertilizer shall be applied no more than 48 hours before the seed is sown unless otherwise authorized by the engineer.

**801.5 Method of Measurement.** Measurement of the area that has been limed and fertilized will be made to the nearest 1/10 acre.

**801.6 Basis of Payment.** The accepted quantity of liming and fertilizing will be paid for at the contract unit price. No direct payment will be made for liming and fertilizing areas for which seeding or sodding items are included in the contract.