

SECTION 304

LIME TREATED SUBGRADE AND/OR SUBBASE

304.1 GENERAL

This work shall consist of the treatment of one or more courses of subgrade or subbase material with hydrated lime as indicated on the plans or as specified in the Supplementary Specifications.

304.2 REFERENCES

ASTM

C 207
D 1557

This publication:

SECTION 301

304.3 MATERIALS

Hydrated Lime--Commercial grade hydrated lime shall conform to the requirements of ASTM C 207 or Type N granular quick-lime which is free flowing with a minimum of 94% CaO and 100% passing the No. 4 screen.

304.4 CONSTRUCTION REQUIREMENTS

General--Where designated, the depth of subgrade or subbase shown on the plans shall be treated with amounts of commercial grade hydrated lime as established by the ENGINEER.

304.4.1 The lime may be placed on the subgrade or subbase in either dry form or may be applied as a slurry. The lime or lime slurry shall be thoroughly mixed with the material to be treated as soon as practical. The CONTRACTOR shall handle the processing of lime in such a manner that lime dust will not be hazardous to workmen nor to the public. Initial mixing shall be performed the same day the lime is placed.

304.4.2 After preliminary mixing, the section so treated shall be shaped, lightly compacted, and cured for a period of 1 to 4 days as directed by the ENGINEER. During the curing period, the moisture content of the mixture shall be maintained from 2 to 5 percent above the optimum required for compaction.

304.4.3 Following the curing period, the CONTRACTOR shall again mix the treated material until 100% of the slaking fraction passes the 1 1/2 inch sieve and a minimum of 60% passes the No. 4 sieve using approved road mixers or other approved equipment which is capable of thoroughly mixing and processing the combined materials. Compaction

shall begin immediately after final mixing. Each course of lime treated subgrade and subbase shall be compacted to 90 percent of maximum density, as determined by ASTM D 1557, except that when pavement, curb, gutter, driveways, sidewalks, or other structures are to be placed directly upon the lime treated material, the top 6 inches thereof shall be compacted to 95 percent of maximum density and in accordance with the applicable provisions of Section 301.

304.4.4 When compacting and shaping are complete, the subgrade shall be kept moist until the first layer of base or other surfacing material has been placed, in order to prevent shrinkage cracks.

304.5 MEASUREMENT AND PAYMENT

Measurement for lime treated subgrade and subbase, except for quantity of hydrated lime, will be made on the square yard basis. Measurement to determine area shall be made horizontally. Measurement for hydrated lime will be made on the number of tons (2,000 pounds dry weight) delivered and placed as approved by the ENGINEER. Payment will be as specified in the Bid Proposal.