



Construction Tolerances for Public Improvement Projects

PDS

Engineering Services Division

ES Policy # 1-05

For privately funded projects, to comply with Overland Park Municipal Code public improvements must meet the following construction tolerances:

SUBGRADE - STREET CONSTRUCTION

Rough grading - Areas to be graded shall be cut or filled to within two-tenths foot of approved subgrade elevations.

Fill sections - The fill shall be spread in layers not to exceed eight inches loose. In no instance shall any lift or layer exceed six inches of compacted thickness. Compacted density in the top 18" shall be equal to or greater than 95% of standard proctor density and have a moisture range of MR-3 except as recommended by a qualified testing laboratory and approved by the City Engineer. Moisture Range 3 (MR-3): The moisture content of the soil at the time of compaction shall be uniform and shall not be lower than three percentage points below the optimum moisture content of the soil involved.

Cut Sections - The soil six inches below the finish subgrade line shall be scarified, broken up, and then compacted as specified in OPMC 13.03.180 for fill sections. The depth of compaction in cut sections shall be minimum six inches.

CURB

Each form shall not vary more than one-quarter inch in longitudinal and vertical alignment for each ten foot in length. All joints shall be formed at right angles to the alignment of the curbing. Expansion joints shall be placed at points of curvature, curb returns, curb inlets and at intervals not to exceed 250 feet. Curbing shall have contraction joints formed at 15 feet intervals. Backfilling operations shall not commence prior to the minimum five day curing period or until the concrete attains 75% design strength.

ASPHALTIC CONCRETE

Asphalt concrete mixture discharged from the plant shall not exceed 315 F. Asphalt concrete mixtures having temperatures less than 113 F, when placed in the mechanical spreader will be rejected.

Asphaltic concrete intermediate and surface courses shall not be placed in compacted lifts greater than 3 inches deep. Asphaltic concrete surface course shall not be placed thinner than the dimension shown on the plans.

The asphaltic concrete surface course, upon completion of final rolling, shall be smooth and true to grade and cross-section. When a 12-foot straightedge is laid on the surface parallel with the centerline, the surface shall not vary more than 1/8 inch from the straightedge. When the 12-foot straightedge is laid on the surface transverse to the centerline between the crown and edge of pavement, the surface shall not vary more than 1/4 inch from the straightedge.

RIGHT OF WAY GRADING

The finished grade shall slope from 1/4" per foot minimum to 1/2" per foot maximum above the back of curbs except across public sidewalks where maximum slope shall be 2%.

SIDEWALK

The minimum width of public sidewalks shall be four feet with a five-foot square passing space every 200 feet. The minimum width of public sidewalks along thoroughfare corridors shall be five feet. The minimum allowable thickness for concrete sidewalks shall be four inches.

The grade or slope along the length of the walk shall be as near parallel to the street gradient as practical. The maximum longitudinal slope shall be one inch per foot, except where a variance from street grade has been approved by the City Engineer. The standard cross slope shall be one foot per 50 feet or 2% maximum, and shall not exceed this when crossing drives and shall slope toward the street, except in RE Districts where a ditch section is used. The finish grade of the sidewalk shall be such that the slope of the finish grade between the curb and the sidewalk will not exceed one-half inch per foot and will not be less than one-quarter inch per foot and shall slope toward the street, except in RE Districts where a ditch section is used.

WHEEL CHAIR RAMP

Maximum desirable slope of ramps shall be one inch per foot. Minimum width shall be four feet, except along thoroughfare corridors where the width shall be five feet. The minimum allowable thickness for wheelchair accessible curb ramps shall be six inches. Curb at ramp locations must provide a gradual transition from gutter line to back of curb, not exceeding one inch in height or slopes of greater than one inch per foot. Side slopes of ramps shall not exceed one inch per foot where such side slopes are in the normal path of pedestrians on adjacent portions of sidewalk.

For additional construction specifications, see technical specifications available either at the Engineering Services counter at City Hall or by visiting our web site: www.opkansas.org