

City of Longmont Concrete Rating Guide

The purpose of the manual is to prioritize concrete replacement. This system will serve to assist in the evaluation of existing conditions and to provide consistency in the inspection. The actual field conditions may require some adjustment to the guidelines in the determination of the applicable rating.

Definitions:

Stone: An area of concrete which is contained between two or more control joints.

Spalling: Chipping or flaking causing an uneven finish and aggregate exposure

Ponding: An area of concrete which, due to adverse grade, does not allow water to drain causing a pond of water to form.

City of Longmont
Concrete Replacement Rating Guide

Degree of Severity: **One (1)**

The category of concrete will exhibit one or more of the following criteria:

Major failure of the Concrete.

Offsets:

Vertical offset of 1" or greater

Severe spalling and loose material in the traveled way, to such a depth and over a significant area that pedestrian traffic is impeded because the spalled area is unavoidable and is greater than 75% of the surface area

Deep cracking in the traveled surface, where adjacent pieces of concrete have separated by 1" or more

Drainage problems:

Severe depression of 1 1/2" or greater in the center of a 4 foot distance, measured near the curb. This depression allows to pond on the sidewalk and/or spill onto the adjacent asphalt and is causing deterioration of the street. (See Figure 1)

Separation of the pan from the curb and gutter, with a separation of 1" or Greater.

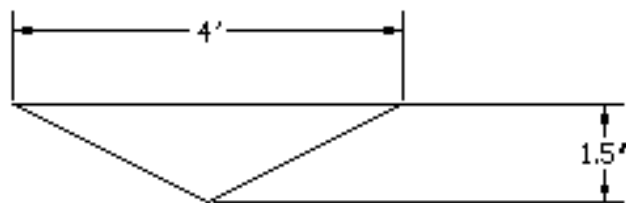


Figure 1

City of Longmont
Concrete Replacement Rating Guide

Degree of Severity: **Two (2)**

The category of concrete will exhibit one or more of the following criteria:

Offsets:

Vertical offset between 3/4" and 1"

Severe Spalling and loose material covering between 50% to 75% of the surface area

Deep cracking in the traveled surface, where adjacent pieces of concrete have separated by 3/4" to 1 "

Drainage problems:

A depression between 3/4" and 1 1/2" in the center of a four foot distance, measured near the curb. Deterioration to asphalt in the street is also evident. (See Figure 1)

Separation of the pan from the curb and gutter, with a separation of 1/2" to 1".

City of Longmont
Concrete Replacement Rating Guide

Degree of Severity: **Three (3)**

The category of concrete will exhibit one or more of the following criteria:

Offsets:

Vertical offset between 1/2" and 3/4"

Spalling and loose material which are not a hazard now, between 25% - 50% of the surface area, but will continue to deteriorate; or spalling on surfaces which are not walked up - i.e. vertical face of curb

Deep cracking in the traveled surface, where adjacent pieces of concrete have separated by 1/2" to 3/4" or any cracking which is extensive, but does not occur in the traveled surface.

Drainage problems:

A depression between 1/2" and 3/4" in the center of a four foot distance, measured near the curb. Little or no deterioration to asphalt in the street. (See Figure 1)

Cracking between pan and curb but no separation is currently evident

City of Longmont
Concrete Replacement Rating Guide

Degree of Severity: **Four (4)**

The category of concrete will exhibit one or more of the following criteria:

Offsets:

Vertical offset less than 1/2"

Spalling has started to occur over a very small area, less than 40% of the surface area

Cracks under 1/2" in width which do not affect pedestrians

Drainage problems:

A minor depression under 1/2" in the center of a four foot distance, measured near the curb. Little or no deterioration to asphalt in the street. (See Figure 1)

City of Longmont
Concrete Replacement Rating Guide

Degree of Severity: **Five (5)**

The category of concrete will exhibit one or more of the following criteria:

Offsets:

Spalling has started to occur over an extremely small area (less than 10%)

Hair line crack with less than 1/16" separation, either horizontal or vertical, with only one crack per stone

Drainage problems:

No ponding or Drainage Problems