

City of Coronado Public Handout #12

SLOPED DRIVEWAYS

November 3, 2016

Purpose: Relate minimum construction specifications for sloped driveways leading to subterranean parking garages on private property.

Relate requirements for Hydrology Studies necessitated by subterranean parking garages.

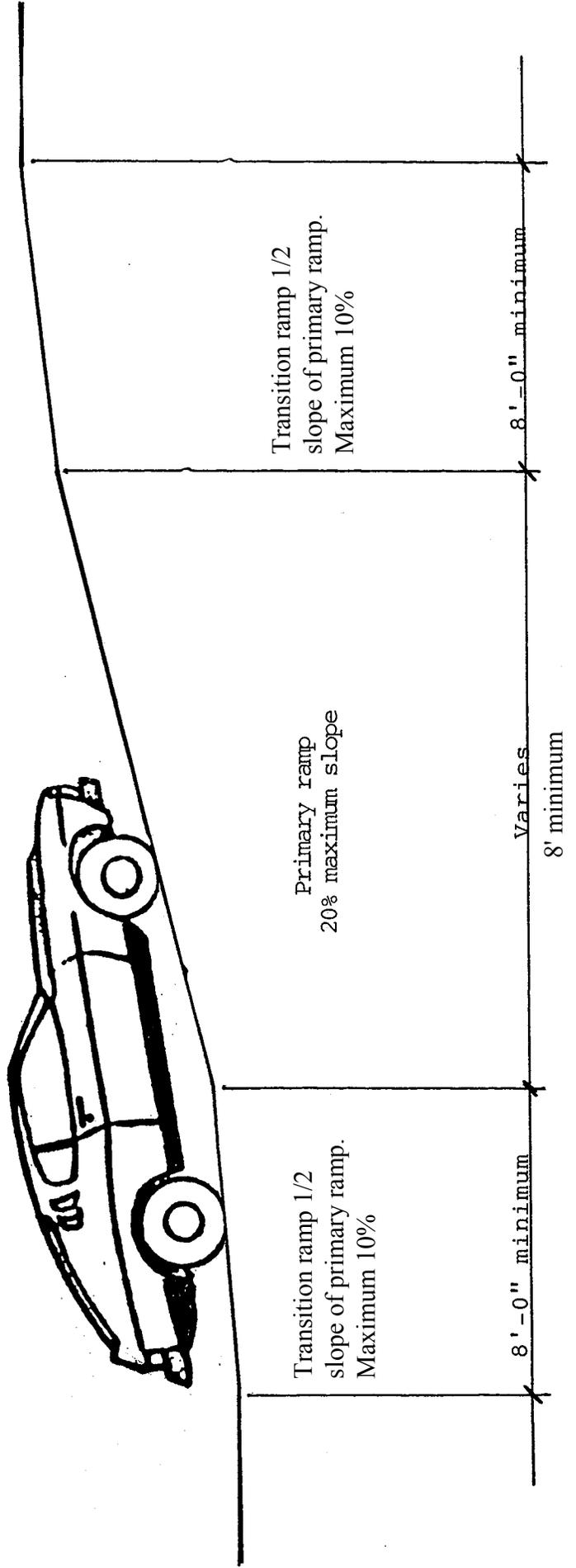
Attachment: City of Coronado Engineering Services letter and sloped driveway diagram

Diagrams: 1. Sloped driveway w/transitions

- Notes:**
1. Primary ramps shall have a 20% maximum slope and a minimum eight foot horizontal run.
 2. Primary ramps over 14% slope shall have a transition ramp of at least eight feet (8'-0") at each end of the primary ramp. The transition ramp shall slope at one-half the degree of the primary ramp.
 3. Ramps with a slope of 14% or greater shall be surfaced with asphalt or concrete with a deep broom finish perpendicular to the direction of travel.
 4. In all cases the design of the driveway shall prevent contact of any portion a vehicle with the ramp.
 5. No required parking shall be allowed on ramps greater than 14%.

DIAGRAM #1 - Sloped driveway w/transitions

- Notes:**
1. Primary ramps shall have a 20% maximum slope and a minimum eight foot horizontal run.
 2. Primary ramps over 14% slope shall have a transition ramp of at least eight feet (8'-0") at each end of the primary ramp. The transition ramp shall slope at one-half the degree of the primary ramp.
 3. Ramps with a slope of 14% or greater shall be surfaced with asphalt or concrete with a deep broom finish perpendicular to the direction of travel.
 4. In all cases the design of the driveway shall prevent contact of any portion a vehicle with the ramp.
 5. No required parking shall be allowed on ramps greater than 14%.



CITY OF CORONADO

ENGINEERING & PROJECT DEVELOPMENT DEPARTMENT

MEMORANDUM

DATE: June 2, 2005

TO: Builders of Subterranean Garages/Cellars

FROM: James F. Benson
Director of Engineering & Project Development

SUBJECT: HYDROLOGY STUDIES

It is the City of Coronado's policy that the proposed construction of subterranean garages/cellars will, as part of the design process, include a hydrology study if the driveway or walkway to the underground garage begins its descent on City property (i.e., directly behind the sidewalk). On most streets in the City, private property begins four feet behind the sidewalk, or sixteen feet from the curb face. It is the City of Coronado's policy that the sidewalk will not be depressed in the area of the driveway crossing. If the descending driveway is wholly contained within private property a hydrology study will not be required. However, a prudent developer will have a study performed to clearly define the level of risk exposure.

The City of Coronado's property slopes up from the top of curb to the private property line at a grade of 2%. In most cases, as discussed above, this is a rise of 0.32 feet. It is intended that the flood waters associated with the 100-year design storm be contained within the public right of way, including the street, gutter and parkway area, until the water can be transported to the storm drain, and finally the ocean outfall. This containment of the 100-year design stormwater is intended to minimize damage to private property.

Alteration of this containment area by sloping a driveway down to an underground garage/cellar within the public right of way may cause extensive damage to private property as a result of flooding. However, depending on the topography of the particular location, a hydrology study may reveal that there is adequate drainage, allowing the descent to private property to begin in the public right of way.

The hydrology study must be performed and stamped by a California Registered Engineer. The study must conform to the County of San Diego Hydrology Manual and be based on the 100-year design storm. If the study shows that flooding will occur during the 100-year design storm, the subterranean garage/cellar cannot be constructed. There will be no exceptions.

Examples of completed studies are available at the Engineering & Project Development Department, 1825 Strand Way, Coronado, CA 92118. Phone: (619) 522-7383