

Road and Street Standard Exception Request



ROAD EXCEPTION REQUEST CARDEY RESIDENCE 1100 MCCORMICK LANE, NAPA COUNTY, CA APN 050-270-009

This is a request to the Napa County Planning, Building & Environmental Services (PBES) - Engineering & Conservation Division to grant an exception from the Napa County Road and Street Standards (R&SS) revised on September 26, 2017 (Resolution 2017-156) for a driveway reconstruction for an existing residence located at 1100 McCormick Lane, Napa, CA 94558.

Project Description

The project proposes the reconstruction and relocation of a portion of an existing driveway that was compromised as a result of a slope failure on APN(s) 050-270-009 and 050-270-010 and to provide access to an existing residence located on a 14.95± acre parcel (APN 050-270-009). APN 050-270-009 is currently developed with an existing single family residence, swimming pool and driveway.

The existing residential driveway as well as the proposed driveway reconstruction conditions is illustrated on the associated Cardey Residence Driveway Improvement Plan prepared by Bartelt Engineering.

Existing & Proposed Driveway Conditions

The existing driveway from McCormick Lane currently serves both the existing residence on APN 050-270-009 and provides secondary access to APN 050-207-010.

The proposed driveway reconstruction from McCormick Lane to the existing residence is approximately 0.1 miles (550± feet) long with a width varying between 10 feet wide to 20 feet wide at the proposed turnout. The proposed driveway includes a minimum shoulder width of two (2) feet. The proposed driveway reconstruction section is proposed with slopes that vary from 3.9% to 19.5% longitudinally along the centerline of the driveway.

The proposed modifications to the existing compromised driveway include the removal of the damaged road sections, excavation and compaction of a portion of the slope failure area that falls within the proposed driveway location and the placement of a minimum of three (3) inches of Hot Mix Asphalt (HMA) over nine (9) inches of Class 2 Aggregate Base to meet minimum structural section requirements per the Napa County R&SS. The following items are presented to the Napa County Engineering Manager for consideration to grant an exception to the Napa County R&SS standards.

Exception Request and Justification

The goal of this request is to obtain approval to reconstruct the existing residential driveway serving the existing residence despite the fact that portions of the driveway do



not meet the standard longitudinal slope and minimal horizontal inside radius criteria outlined in the Napa County R&SS. The Napa County R&SS allow for such exceptions when the following summarized criteria are met:

(1) The exception will preserve unique features of the natural environment which includes, but is not limited to, natural water courses, steep slopes, geological features, heritage oak trees, or other trees of least six feet in diameter at breast height and found by the decision-maker to be of significant importance, but does not include human altered environmental features such as vineyards and ornamental or decorative landscaping, or artificial features such as, rock walls, fences or the like; The exception is necessary to accommodate physical site limitations such as grade differentials; and/or The exception is necessary to accommodate other limiting factors such as recorded historical sites or legal constraints.

The areas that are relevant to this exception request include a natural water course as well as areas with moderate to steep slopes with significant grade differentials that contain mature plantings of trees. Repairing the portion of the compromised driveway that falls within the hillside slope failure would be impossible without significant disturbance to the slopes above and below the road and without removal of a significant amount of the existing native vegetation and potential impact on the Browns Valley Creek water course.

Periodic horizontal and vertical trimming of roadside vegetation and tree limbs will allow for adequate passage for passenger and emergency vehicles.

(2) The exception allows a situation that provides the same overall practical effect as the standard does in providing defensible space and does not adversely affect the life, safety and welfare of the public or the persons coming to the property.

The proposed driveway improvements have been designed to provide the same overall effect as the Napa County R&SS and include a proposed vehicle turnout at Sta 12+50.

The following narrative describes the proposed driveway conditions and improvements. Refer to the proposed driveway plan prepared by Bartelt Engineering for station locations.

Request for an Exception to the Road Slope Standards

The proposed residential driveway (Sta 10+00 to Sta 16+50) includes areas where the proposed slope exceeds the maximum allowable slope of 16% per the R&SS. An exception is requested to allow the proposed slope to exceed the maximum requirements between the following stations in order to preserve natural vegetation and work within the boundaries of the parcel.

Sta 10+50 to Sta 14+00 (350 feet)

The proposed slope in this section is 19.5%. The proposed driveway is constrained on both sides throughout this section by neighboring properties. This limits the area available for longitudinal expansion of the road and reduction in longitudinal slope.



The property line located on the westerly side of the proposed driveway alignment and is less than 20 feet from the proposed residential driveway (near Sta 12+50 to Sta 13+50) with an elevation 7.5 feet above the proposed driveway centerline with a number of existing trees aligned along the property boundary.

Removing additional material in this section of the proposed residential driveway to reduce the longitudinal slope may negatively impact the neighboring parcel. Additionally, the topographic contours run perpendicular to the proposed residential driveway which makes it difficult for cut slopes to daylight to existing conditions in this area.

Sta 14+50 to Sta 15+75 (125 feet)

The proposed slope in this section is 19%. Longitudinal slopes in this section of the proposed residential driveway closely resembles the existing road conditions with minor cuts and fills being added to provide a 10 foot wide travel lane and four (4) feet of drivable shoulder.

Request for an Exception to the Minimum Horizontal Inside Radius Standards

The proposed residential driveway (Sta 0+00 to Sta 33+00) includes an area where the proposed horizontal inside radius is less than the required 50 foot radius per the R&SS.

Sta 15+50 to Sta 16+10 (60 feet)

In order to conform to the existing driveway and preserve the existing surrounding features in this section, which includes mature trees and significant grade differential both above and below this portion of the existing residential driveway, the proposed driveway will transition from a width of 10 feet with two (2) foot shoulders to 13 feet wide with two (2) foot shoulders at Sta 15+65 to 19 feet wide with two (2) foot shoulders near Sta 15+85 and back to 13 feet with two (2) foot shoulders near Sta 16+00. The proposed residential driveway transitions back to 10 feet wide with two (2) foot shoulders near Sta 16+10.

Further widening of the road is not proposed in this area in order to preserve the surrounding environment by limiting the earthwork that would be required to structurally support a conforming horizontal inside radius.

Summary

For the reasons discussed herein, the Applicant respectfully requests an exception from the maximum road slope and minimum horizontal inside radius set forth by the Napa County Road and Street Standards revised on September 26, 2017 (Resolution 2017-156). It is Bartelt Engineering's recommendation that a road exception for the segments of roadway described above results in an acceptable alternative, relative to the environmental impact of reducing the slope and increasing the horizontal inside radius of the proposed residential driveway.