

Notice of Section 401 Application Reception

File Number: 302022-03

Project Name: Barranca Channel Repair Project

Date Application Posted: 3/08/2022

Received: 3/03/2022

Project City: Irvine

Project County: Orange

Applicant Organization: Orange County Public Works

Applicant Name: James Volz

Waterboard Staff: TBA

Brief Description of Project:

Project Description: The purpose of the project is to provide protection to the earthen channel banks and prevent bank washouts that could undermine adjacent commercial buildings.

Project Activities: The channel banks which will require riprap, there will be 941 linear feet of new riprap on both sides of the channel between the railroad bridge and McGaw Avenue. There will be total of 554 and 119 linear feet of new riprap on the left side of the channel (looking upstream) in the reach between McGaw Avenue and Alton Parkway. The right side of the channel between McGaw Avenue and Alton Parkway is already fully riprap lined. This riprap will be removed and replaced. There will be 1790 linear feet of new riprap on both sides of the channel between Alton Parkway and Barranca Parkway. The first task of construction will be for the large excavator to excavate the toe and the earthen slopes into benches and then backfill and compact the slope and prepare it to receive the riprap. The contractor will work in about 20-ft to 40-ft sections of existing channel bank. After the slope has been established, the contractor will place filter fabric on the slope and into the toe excavation and then place a 6-inch thick layer of gravel base consisting of approximately $\frac{3}{4}$ -inch angular rock. Then the contractor will surgically place large angular riprap, about two feet thick, and lock the riprap in place with the bucket of the excavator. The riprap will be at 1-ft vertical to 1.5-ft horizontal slope, replicating the as-built channel slope. There is not expected to be any export of soil due to the erosion that has occurred. Approximately 11,000 cubic yards of clean soil, 26,000 square yards of filter fabric, 4,000 cubic yards of gravel base and 12,000 cubic yards of riprap will be placed. Dump trucks will deliver the rock riprap and drop it on the maintenance road for pickup by the excavator.