



City of Oceanside 511 Pump Station Design-Build



The Pipeline

The existing pipeline will be completely removed in exchange for a new 18" pipeline that will be able to maintain the new pump station capacity.

The new pipeline is designed according to specifications provided by the City of Oceanside, with extensive consideration for interacting underground and nearby utilities. It will be 2,600 ft long and connect the 511 Pump Station to the existing network.

We Are AMET Construction

Amet means "environment" in Latin, and it is our top priority in the field. We take care of the Earth and all its living creatures, while getting the job done in the most practical and economical manner possible. We are AMET Construction.



EIR

AMET Construction prioritizes, to our best extent, the environment and its inhabitants.

Two areas have been identified as having minimal impact to the pipeline alignment, however pose no detrimental effect. Construction measures will be taken and these areas will be roped off to ensure at least 100 feet of buffer zone.

Stormwater & Erosion Control

In order to protect the environment during construction, storm water BMP's must be put in place. During construction, a silt fence will be placed along a small man-made channel that leads to storm drains into the San Luis Rey River. Around these storm drains, rings of sandbags will be placed, preventing additional pollutants running off into the storm water system.



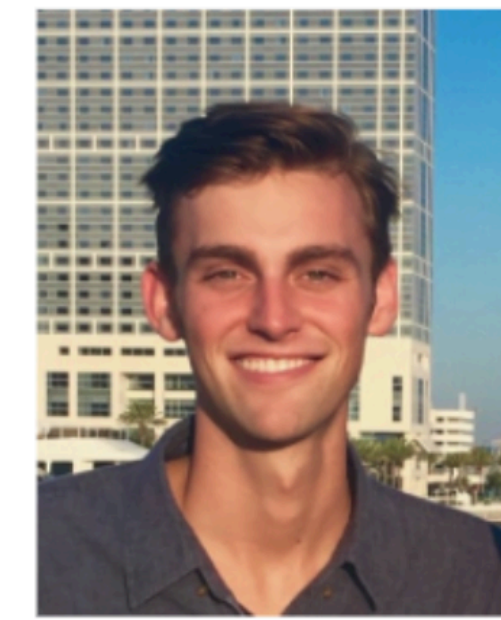
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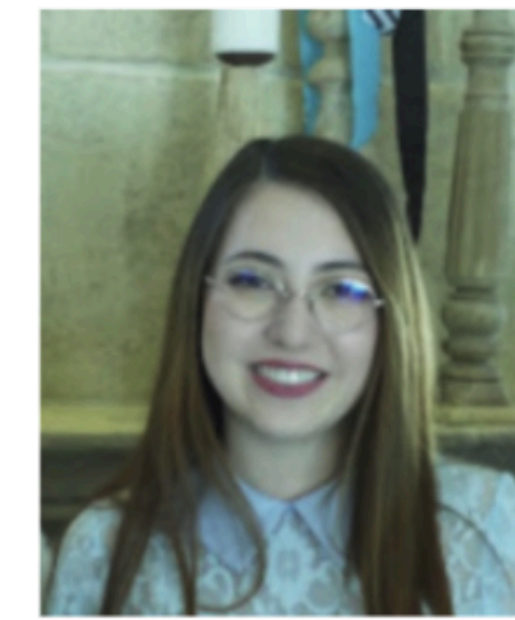
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Geotechnical Assessment

In order to minimize corrosion, groundwater infiltration, and impacts from seismic activity, the Geotechnical study has recommended measures such as dewatering the site prior to excavation and during construction to take into account presence of shallow groundwater and the presence of sandy and silty soils. Materials such as cement over reinforced steel will be used to avoid soil corrosion, and imported soil will be tested for corrosion. Likewise, the requirements of the governing jurisdictions and practices of the Structural Engineers Association of California should be considered in the design of the pump station to account for potential impacts from seismic activity.

Construction

AMET Construction abides by OSHA regulation laws. June 18th we will break ground for the proposed pump station. A month after completion of the pile excavation for the vertical pump we will begin excavation for the 18" ductile iron pipeline. Having enough space to work will be a benefit to our team. The exported material will not be a challenge to store and there will not be a need to import material for the excavation. We will have one of our own rock crushers to re-use the material we excavate in order to save money for our client. To make our job more efficient we will be using two excavators to lay pipe and excavate at the same time.

The Pump

AMET Construction recommends the 14 BXM Vertical Turbine. Capable of delivering 1,562 GPM and 1300 feet of head, the two pumps in series will deliver the anticipated flow of 4.5 MGD and meets the pipeline requirements. Using only 630 hp with over 80% efficiency, this pumps environmental and economic impact is minimal compared to others.