

Oceanside 511 Pump Station

The design

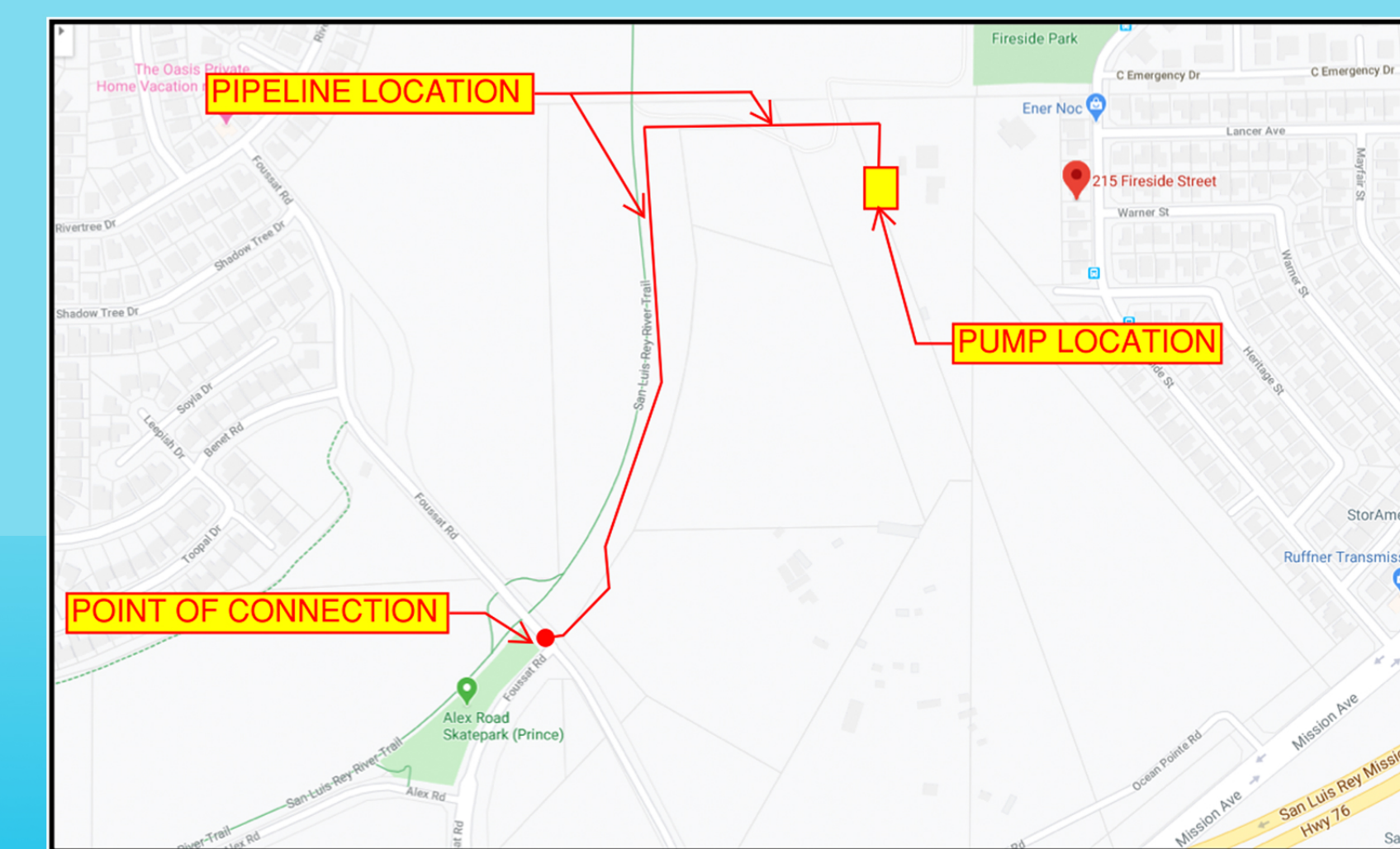
Three 1560 GPM Vertical Turbine Pumps

= Two functional & one standby

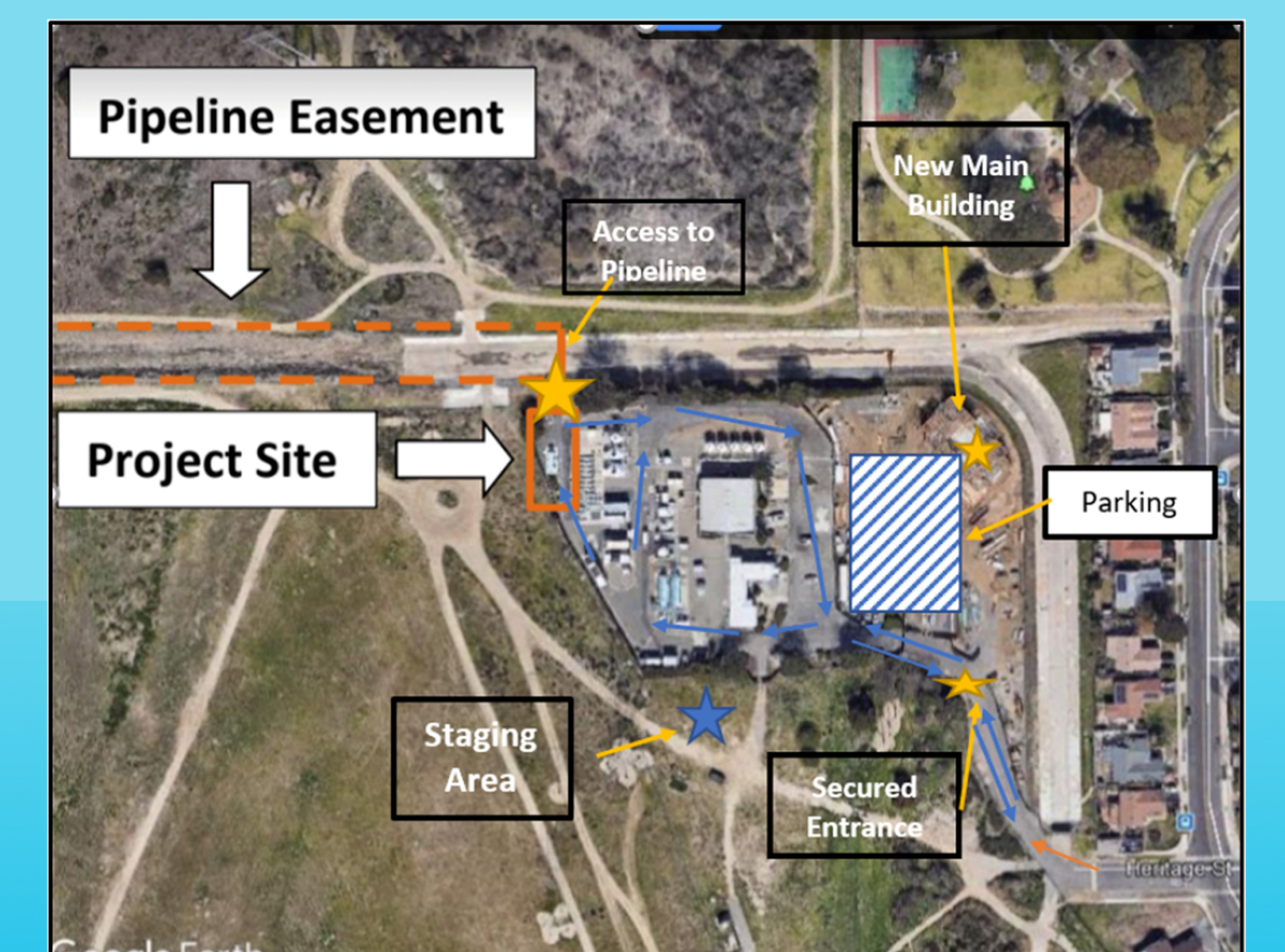
2544 LF of 18-in Ductile Iron Pipe

= Connects pump station to point of connection

Canopy structure over pump station

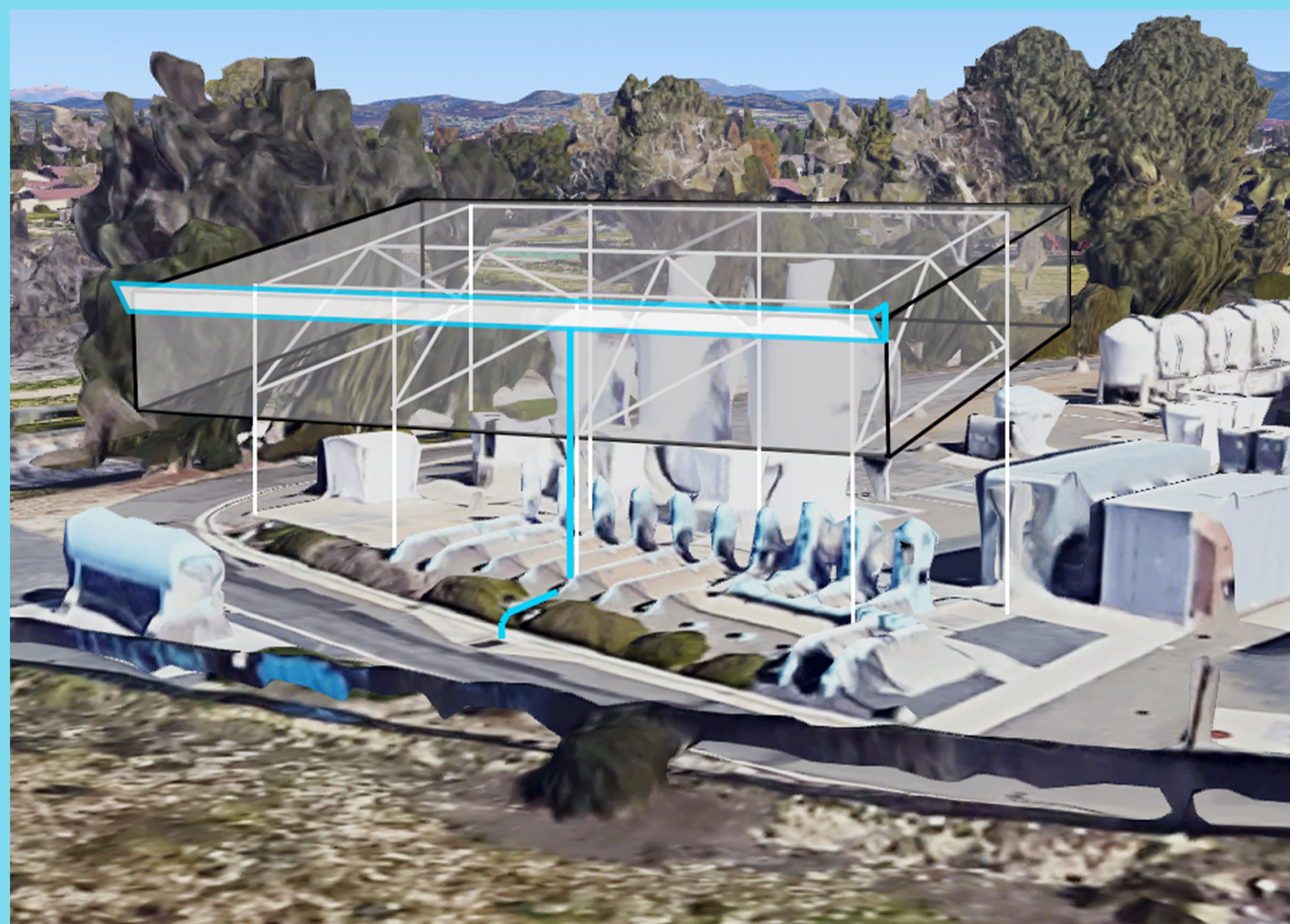


Vicinity Map



Site Map

Project Exhibits



The Team



From Left to Right:

Peter Caggiano - Construction Engineer

Jasmin Kazak - Water Engineer

Hanadi Jarrar - Water Engineer

James Valdez (Project Manager) - Traffic, C.M.

Jake Brown - Construction Engineer

Abdulrahman Harami - Geotechnical Engineer



Traffic Control Map

Project Cost Breakdown

Predicted Project Cost - \$3,507,595

Sitework - \$981,400

Environmental Erosion Control - \$27,000

Mechanical Materials - \$875,700

Electrical - \$490,000

Labor Costs: 30%

Construction Markup: 10%

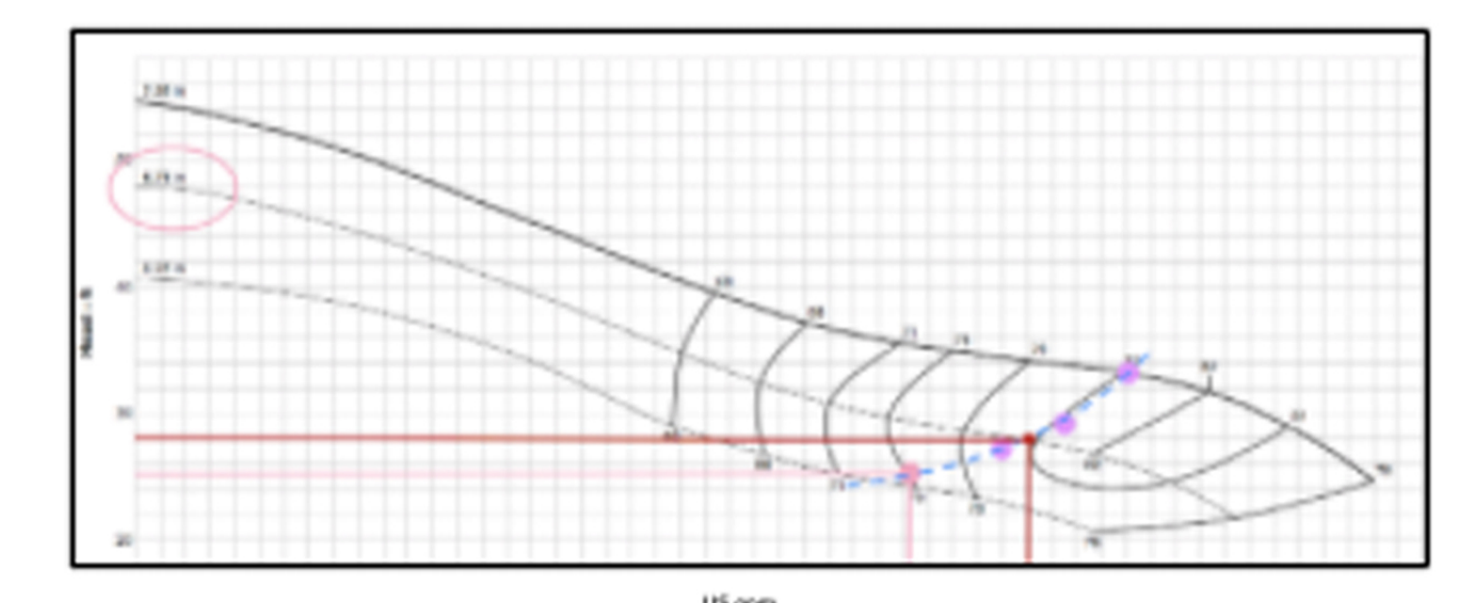
Contingency: 10%

Insurance: 1.25%

Bernoulli's Equation

$$\frac{P_1}{\gamma} + z_1 + \frac{v_1^2}{2g} + h_A - h_R - h_L = \frac{P_2}{\gamma} + z_2 + \frac{v_2^2}{2g}$$

Pump Curve



Hydraulics