

# State Route 269 Arroyo Pasajero Creek Bridge, Huron

CA

Civil Engineering

**Students :** Mattie Boren, Joshua Diebert, Andrew Fox E.I.T., Scott Greenwood E.I.T., Jacob Kennington E.I.T., Gerard Liwanag, Jeremy Rentch E.I.T., Pushwinder Singh, Bret Watson E.I.T

**Advisors:** Dr. Jesus Larralde, Dr. Lubo Liu, Dr. Fayzul Pasha, Dr. Lalita Oka, Dr. Fariborz Tehrani

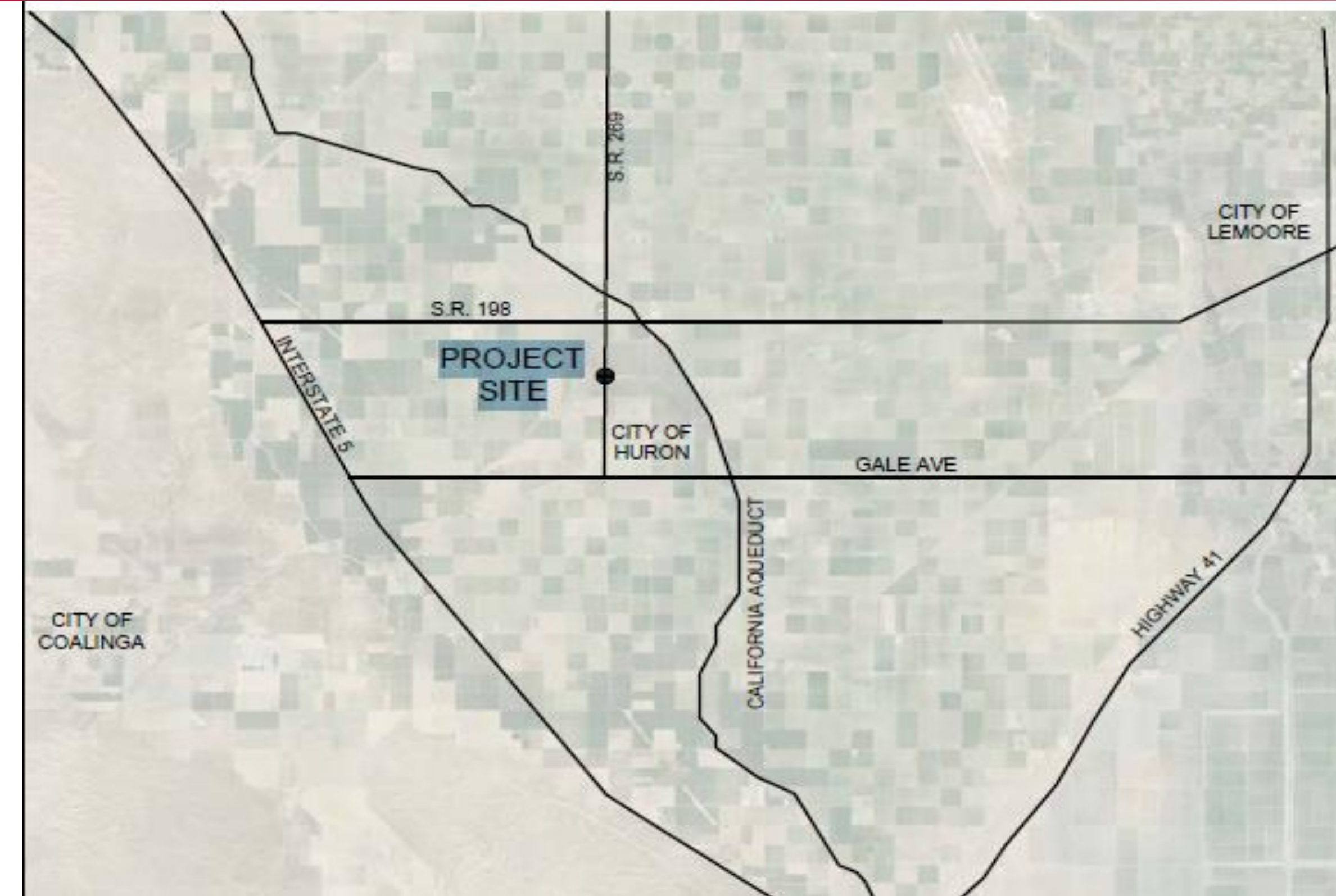
# FRESNO STATE

Lyles College of Engineering

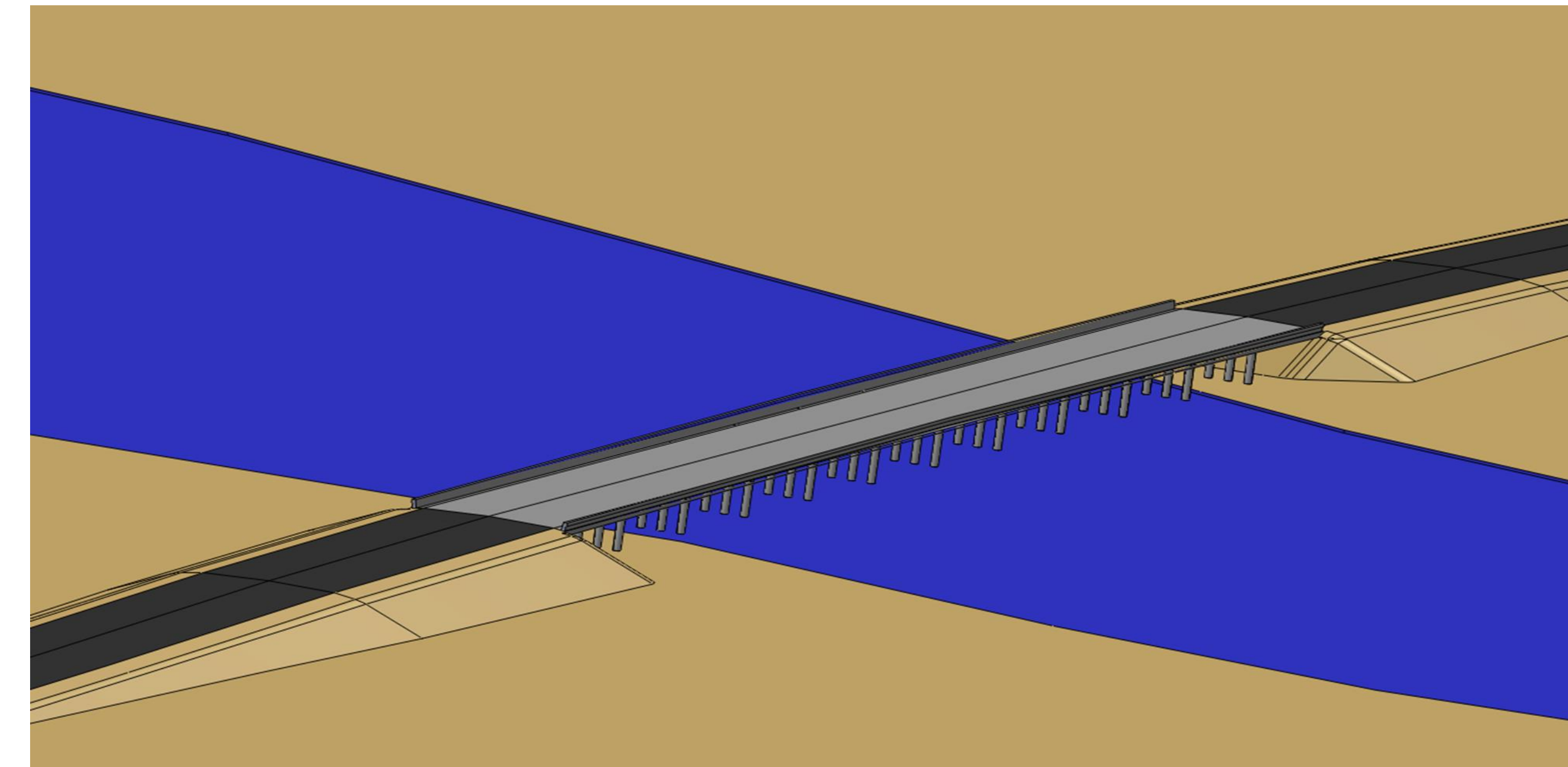
## Abstract

Huron California, a city in west Fresno County, suffers from seasonal flooding across its only outward bound route, State Route 269. This highway sporadically becomes flooded by the Arroyo Pasajero Creek during periodic storm events which cause the road to become inoperable. This obstruction causes negative effects in both terms of safety and economics for the surrounding community. The aim of this project is to eliminate the flooding issue by designing a two lane bridge over the Arroyo Pasajero Creek along with a reservoir upstream as a secondary precaution. Other features of the project include redesigning 3.2 miles of highway and its corresponding storm water drainage to provide adequate safety.

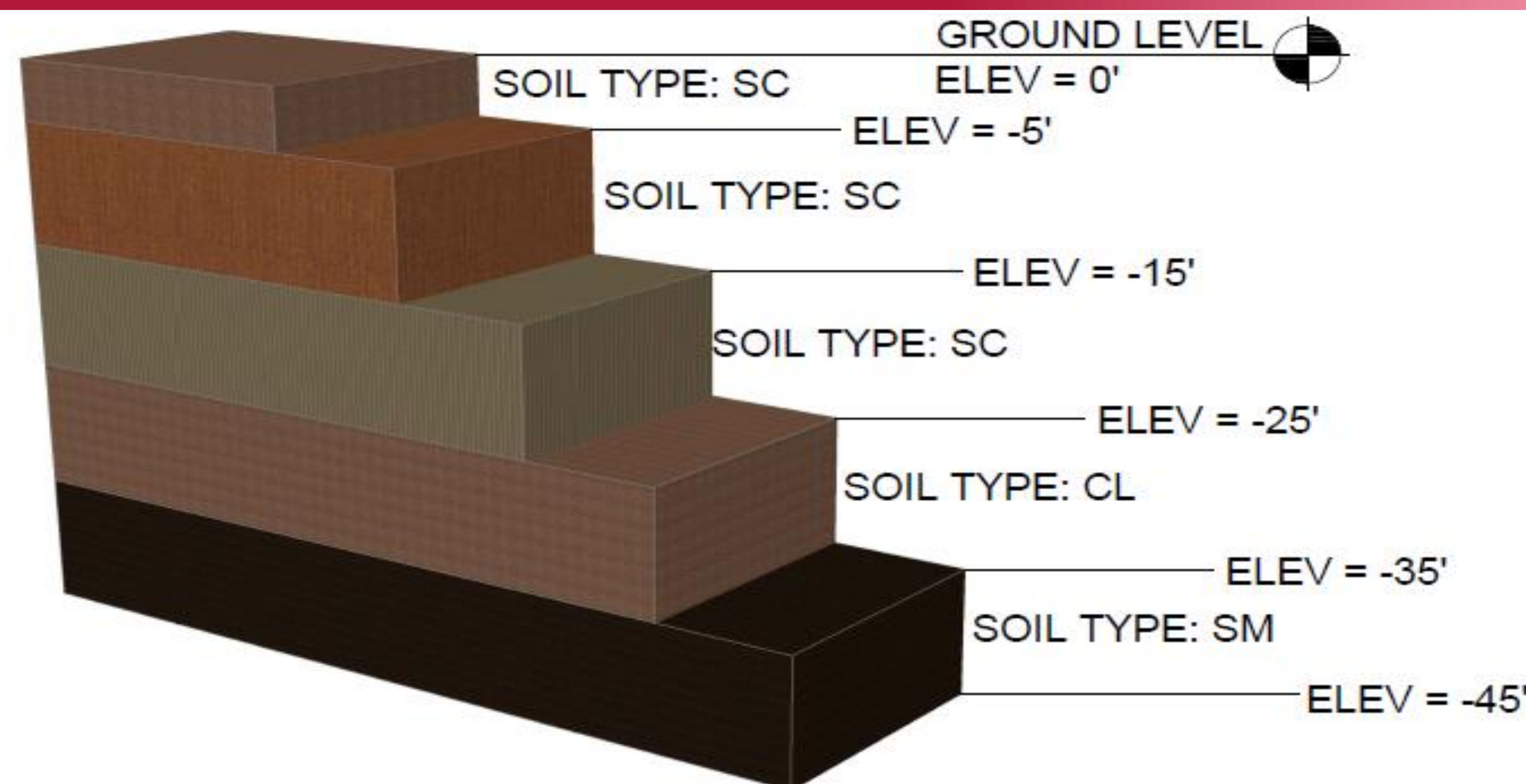
## Site Map



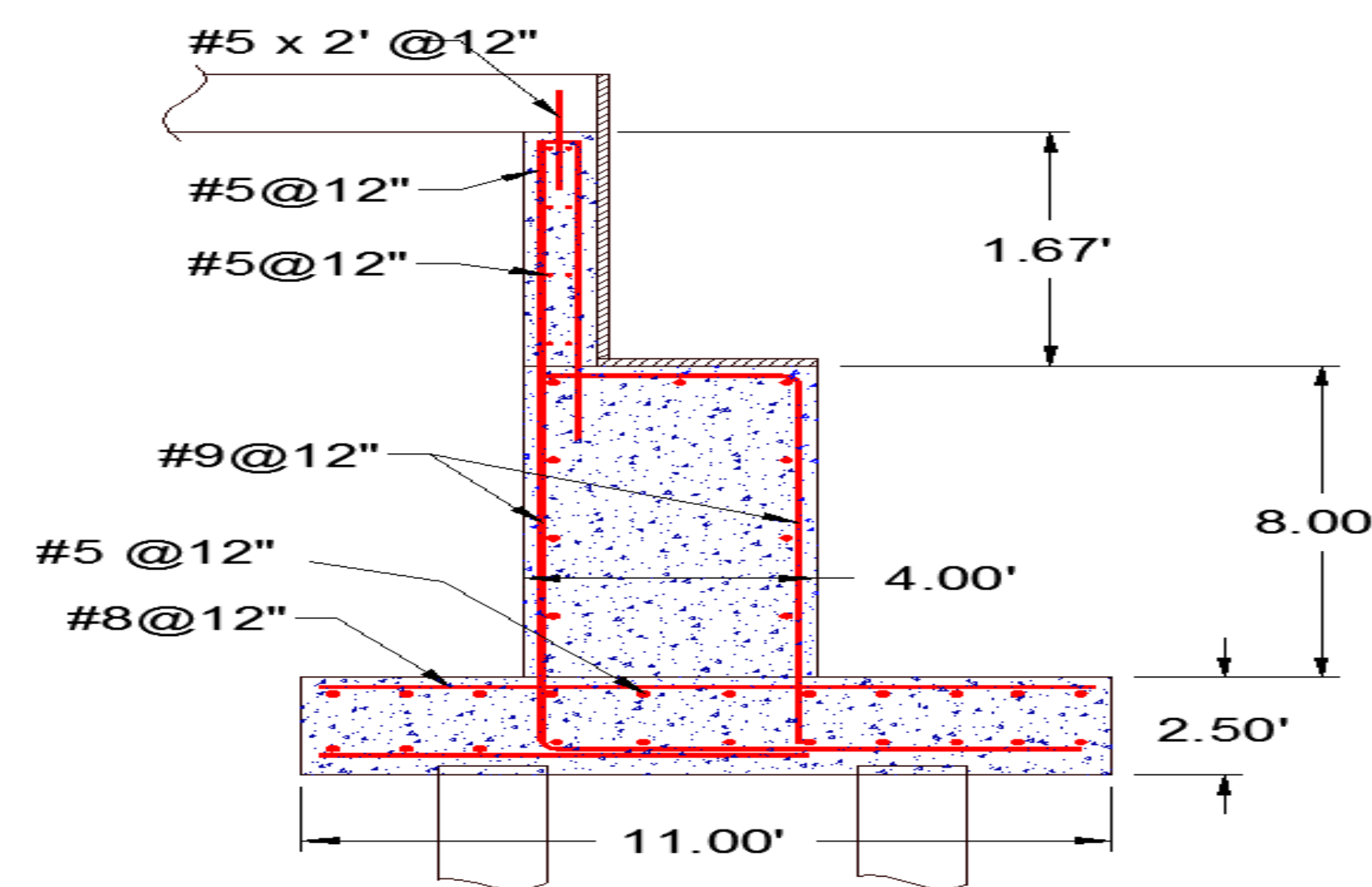
## Bridge Design



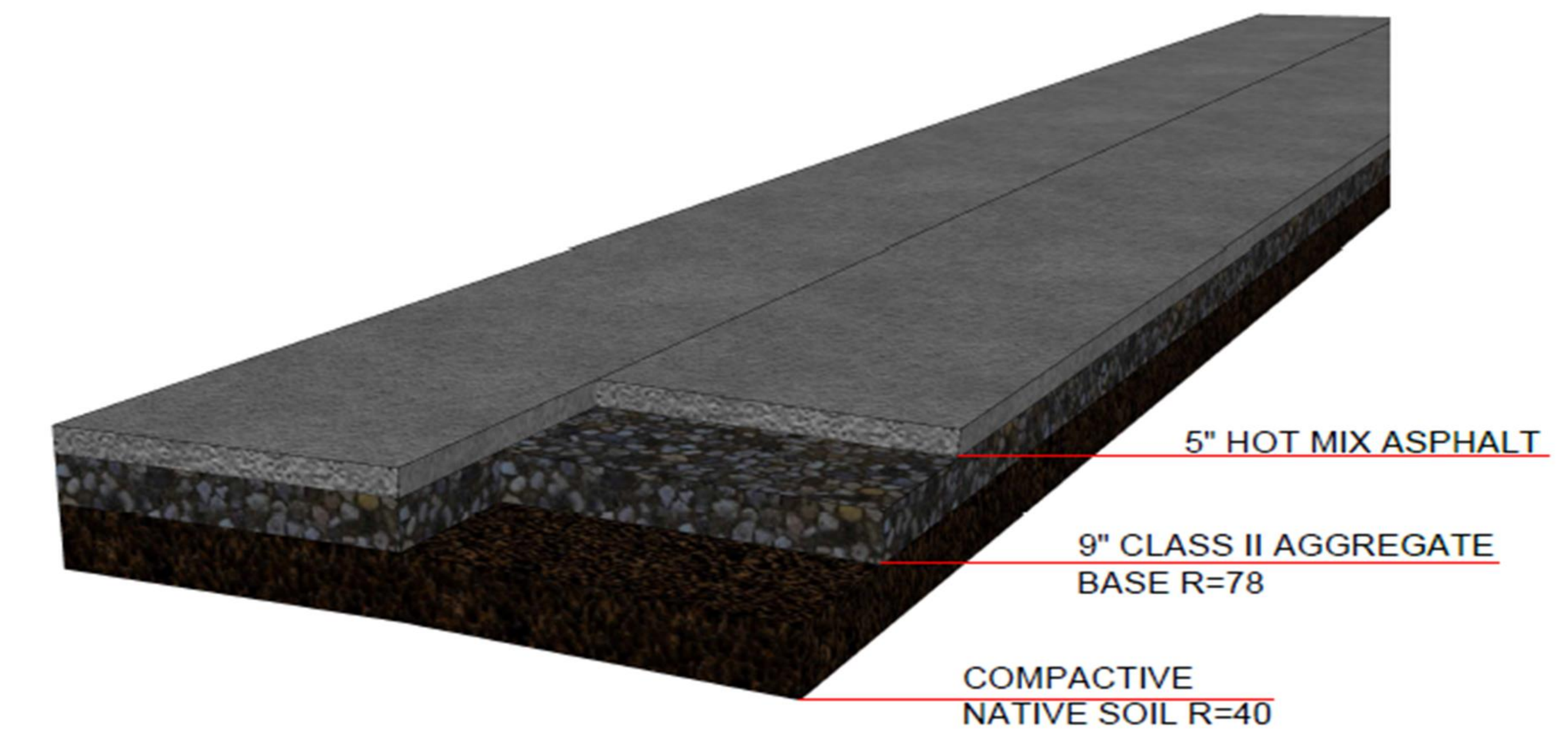
## Soil Profile



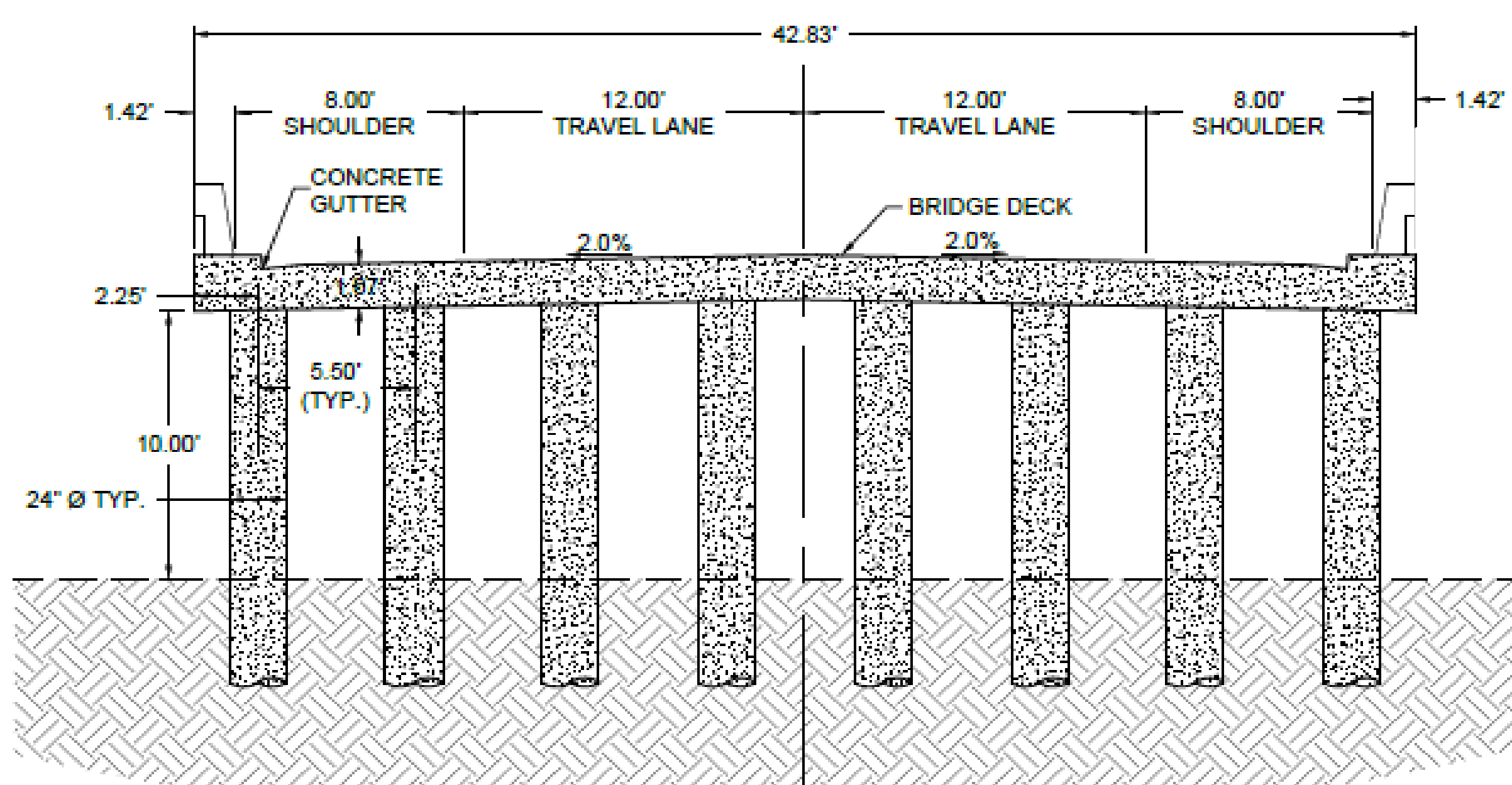
## Bridge Abutments



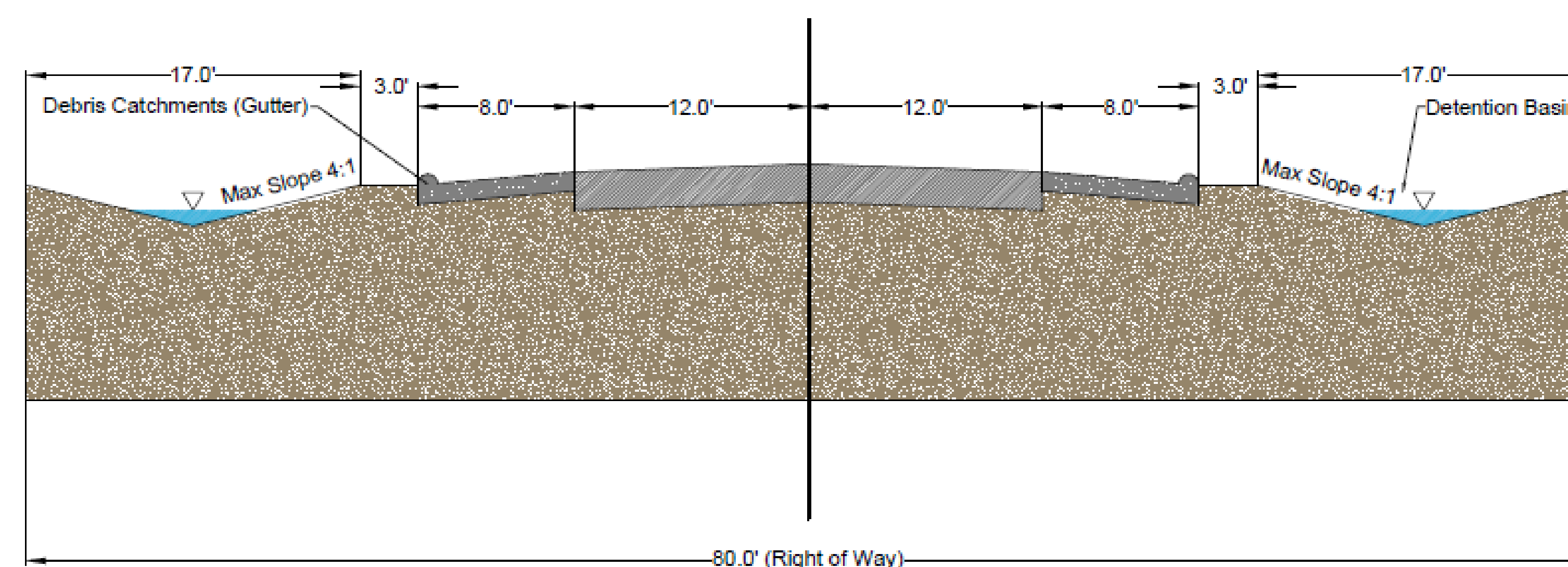
## Bridge Cross Sections



## Bridge Details



## Lateral Detention Basin



## Mentors



Todd Goolkasian, S.E.



Neva Popenoe



John Rowland



Heather E. Bashian, P.E., QSD

Spring 2014