

# Woodside Avenue Improvement Project

## Geotechnical

Project Site is Soil Type B  
No major geologic hazards



## Team #1: SoCal Civil Services

Recommended Pavement Sections for a Traffic Index of 7 Utilizing Class 2 Aggregate Base			
Location	Design R-Value	Asphalt Concrete Thickness (in)	Class 2 Aggregate Base Thickness (in)
Station No. 19+00 And 23+75	40	8	9
Station No. 23+75 And 29+50	30	9	9
Station No. 29+50 And 36+15	50	7.5	9

## Construction

<u>Items</u>	<u>Cost</u>
GEOTECHNICAL WORK	
DRAINAGE	
TRAFFIC CONTROL	
STREET IMPROVEMENTS	
STREET WIDENING	
SITE CIVIL	
<b>TOTAL</b>	<b>\$122,000</b>

## Study Area



## Drainage Calculations

- Runoff Coefficient:  $C = 0.9 * (\% \text{ Impervious}) + C P * (1 - \% \text{ Impervious})$  (Runoff Coefficient equation) **C = 0.25**
- Time of Concentration:  $T_c = T_i + T_t$  **Tc = 15.9 min**
- Intensity of Rainfall: P6= adjusted 6 hrs storm rainfall amount  
D= Duration in minutes.  $(T_c) I = 7.44P6D^{-.645}$  **I = 3.49 in/hr**
- Flow Rate:  $Q = CIA$  **Q = 8.14 cfs**

 Project Manager	 Geotechnical Engineer	 Stormwater Engineer
 Site Civil Engineer	 Transportation Engineer	 Traffic Engineer

SoCal Civil Services proposes to provide street improvements along Woodside Avenue. This includes street widening, improving and implementing sidewalks, bike lanes, and adding a two-way left-turn lane.