

City of Fremont, CA

A National Leader in Protected Intersection Implementation

13 protected intersections built since 2019 and 8 more in progress

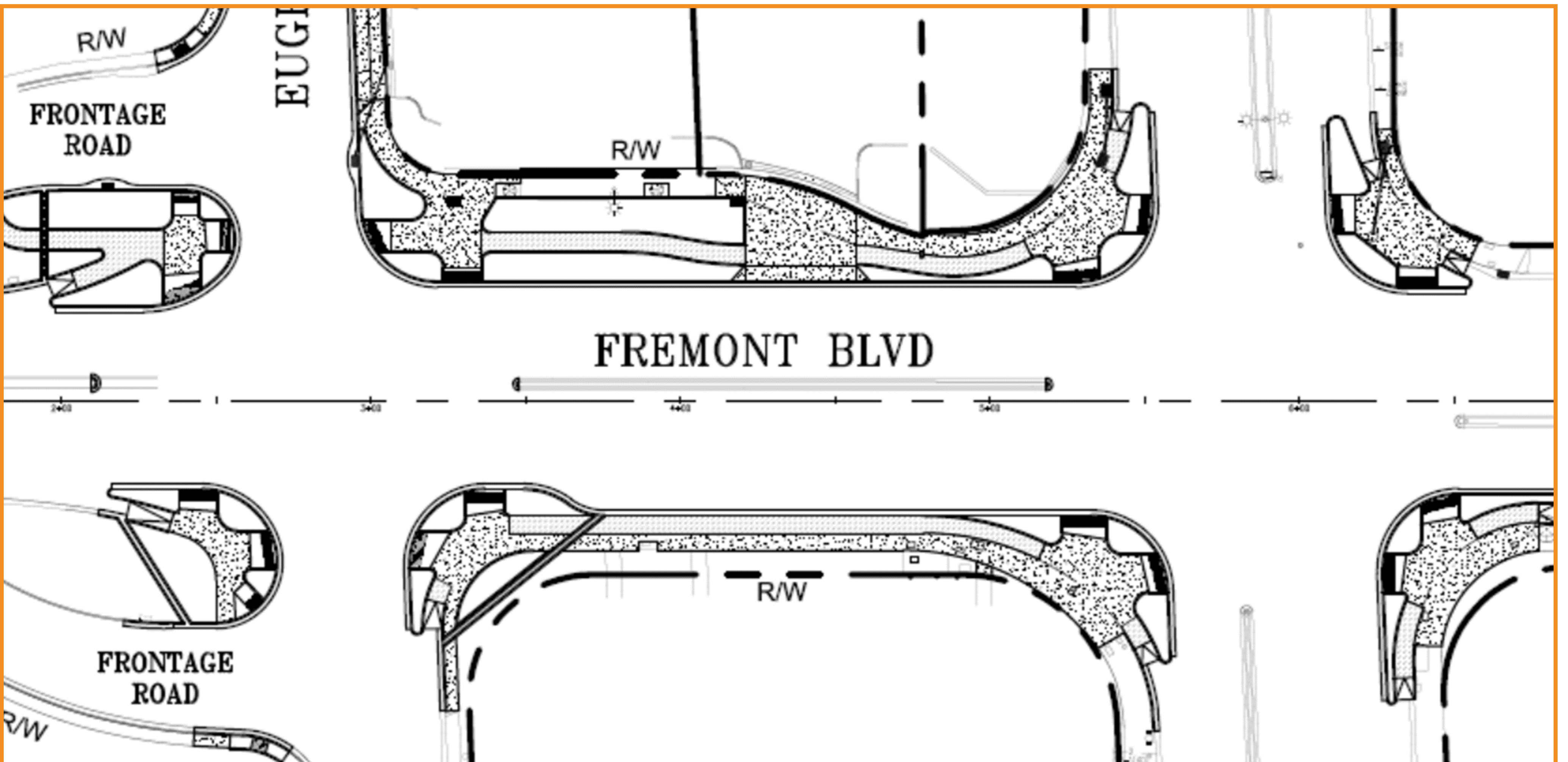
» The Evolution of Protected Intersection Design



The first generation protected intersections closely followed nationally recognized design guidance such as the Massachusetts DOT Separated Bike Lane and Planning Guide and national best practices found in Davis, CA; Salt Lake City, UT; and Chicago, IL. The design featured channelizing and "football" islands and pavement-grade bicycle and pedestrian paths.



Lessons learned from operations and maintenance of the first generation protected intersections informed the design changes for the second generation designs. Most importantly, specific feedback and field demonstrations with staff and students from the CA School for the Blind led to raising the pedestrian and bike waiting areas to sidewalk elevation and eliminating the refuge and "football" islands.



Fremont residents were using the separate bike and pedestrian designated paths interchangeably at the protected intersections. There was confusion and complaints about pedestrians and bicyclists being in the wrong waiting areas. Additional signs and markings were installed to clearly communicate to users proper designated paths and waiting areas but did not impact or change user behavior. Ultimately, staff decided to design the latest generation of protected intersections based on user behavior and expectations with shared spaces and waiting areas.