El Cajon Autoturn Simulations

Using AASHTO 2011 (US) Design Vehicles



Design Condition:

Right turn onto El Cajon Boulevard from a side street with full 7' bulb outs on both the side street and El Cajon Boulevard.

Design Vehicle:

Bus-40, Coach Bus Length: 40.50 feet Wheelbase: 25.30 feet

Summary:

The Coach Bus is unable to make a right turn without crossing over into the left lane of eastbound traffic.



Right turn onto El Cajon Boulevard from a side street with full 7' bulb outs on both the side street and El Cajon Boulevard.

Design Vehicle:

SU-30, Medium Truck Length: 30 feet Wheelbase: 20 feet

Summary:

The Medium Truck is unable to make a right turn without crossing over into the left lane of eastbound traffic.



Right turn onto El Cajon Boulevard from a side street with full 7' bulb outs on both the side street and El Cajon Boulevard.

Design Vehicle:

P, Large Car Length: 19 feet Wheelbase: 11 feet

Summary:

The Large Car is able to navigate the full bulb out without crossing into the left lane on east bound traffic.



Right turn onto a side street from El Cajon Boulevard with full 7' bulb outs on both the side street and El Cajon Boulevard.

Design Vehicle:

Bus-40, Coach Bus Length: 40.50 feet Wheelbase: 25.30 feet

Summary:

The Coach Bus is unable to navigate the full bulb out without crossing into the opposing north bound lanes.



Right turn onto a side street from El Cajon Boulevard with full 7' bulb outs on both the side street and El Cajon Boulevard.

Design Vehicle:

SU-30, Medium Truck Length: 30 feet Wheelbase: 20 feet

Summary:

The Medium Truck is unable to navigate the full bulb out without crossing into the opposing north bound lanes.



Right turn onto a side street from El Cajon Boulevard with full 7' bulb outs on both the side street and El Cajon Boulevard.

Design Vehicle:

P, Large Car Length: 19 feet Wheelbase: 11 feet

Summary:

The Large Car can make a right turn and stay within the limits of the south bound side street lanes.



Right turn onto a side street from El Cajon Boulevard under existing conditions without any bulb outs.

Design Vehicle:

Bus-40, Coach Bus Length: 40.50 feet Wheelbase: 25.30 feet

Summary:

The Coach Bus is unable to navigate the existing curb return radii without crossing over into opposing northbound side street traffic.



Right turn onto a side street from El Cajon Boulevard under existing conditions without any bulb outs.

Design Vehicle:

SU-30, Medium Truck Length: 30 feet Wheelbase: 20 feet

Summary:

The Medium Truck is unable to navigate the existing curb return radii without crossing over into opposing northbound side street traffic.



Right turn onto a side street from El Cajon Boulevard under existing conditions without any bulb outs.

Design Vehicle:

P, Large Car Length: 19 feet Wheelbase: 11 feet

Summary:

The Large Car can make a right turn and stay within the limits of the south bound side street lanes.



Right turn onto a side street from El Cajon Boulevard with full 7' bulb outs on the side street only.

Design Vehicle:

Bus-40, Coach Bus Length: 40.50 feet Wheelbase: 25.30 feet

Summary:

The Coach Bus is unable to navigate the bulb out without crossing into the opposing north bound lanes.



Right turn onto a side street from El Cajon Boulevard with full 7' bulb outs on the side street only.

Design Vehicle:

SU-30, Medium Truck Length: 30 feet Wheelbase: 20 feet

Summary:

The Medium Truck is unable to navigate the bulb out without crossing into the opposing north bound lanes.



Right turn onto a side street from El Cajon Boulevard with full 7' bulb outs on the side street only.

Design Vehicle:

P, Large Car Length: 19 feet Wheelbase: 11 feet

Summary:

The Large Car can make a right turn and stay within the limits of the south bound side street lanes.