

MEMORANDUM

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Ref: 1475
Subject: Traffic Peer Review
144 Seekonk Street
Norfolk, Massachusetts
From: Kim Eric Hazarvartian, Ph.D., P.E., PTOE
Principal
Date: January 28, 2020

**INTRODUCTION**

TEPP LLC has reviewed the sight-distance graphics for the Seekonk Street/proposed driveway intersection provided by the applicant during January 2020.

This review is predicated on:

- sight lines being limited to within the Seekonk Street right of way
- Seekonk Street vehicle paths being defined as in the center of the travel lane

The American Association of State Highway and Transportation Officials (AASHTO) sets forth, for a design speed of 40 miles per hour (mph) on the major street:

- stopping sight distance (SSD) of 305 feet (ft) on a near-level grade
- intersection sight distance (ISD) of 445 ft for left turns from minor road stop control
- ISD of 325 ft for left turns from the major road

SSD is important in that it provides for safety.

The American Association of State Highway and Transportation Officials (AASHTO) sets forth a driver-eye setback along the minor road of 14.5 ft from major-road edge of traveled way.

SIGHT LINE ALONG SEEKONK STREET TO AND FROM THE SOUTH

Drivers waiting to exit the proposed driveway will not have a continuous view of vehicles approaching on Seekonk Street northbound.

This is due to a combination of:

- the property corner along the Seekonk Street frontage south of the proposed driveway
- the horizontal curve on Seekonk Street south of the proposed driveway

Vehicles will leave the view at a distance of more than 200 ft and re-enter the view at a distance of less than 100 ft. With a driver-eye setback of 10 ft, vehicles will also leave and re-enter the view.

SIGHT LINE ALONG SEEKONK STREET TO AND FROM THE NORTH

The available sight distance along Seekonk Street to and from the north appears on the order of 250 ft. With a driver-eye setback of 10 ft, the available sight distance appears on the order of 350 ft.

SIGHT LINE FOR LEFT TURNS FROM SEEKONK STREET

The available sight distance appears to be 286 ft.

CONCLUSION

Given the predicating conditions:

- drivers waiting to exit the proposed driveway will not have a continuous view of vehicles approaching on Seekonk Street northbound
- available sight distance along Seekonk Street to and from the north appears on the order of 250 ft or, with a driver-eye setback of 10 ft, on the order of 350 ft
- available sight distance for left turns from Seekonk Street appears to be 286 ft

Available sight distances do not constitute, for a 40 mph design speed:

- SSD of 305 ft for all movements
- ISD of 325 or 445 ft, for applicable movements