

Hanover Weston – 518 South Avenue – Weston, MA

Chapter 40B Traffic Review: Outstanding Issues



February 17, 2022

Outstanding Issues Impacting Public Safety

- Issues presented in EP letter dated 12/9/2021 and summarized in McGregor, Legere & Stevens letter dated 2/10/2022
- Primary areas of concern:
 - Sight distance
 - Offset Intersections and conflicting turning movements
 - Queueing along South Avenue
 - Impact to operation at South Avenue/Wellesley Street intersection
 - Emergency access
 - Parking

A thorough Sight Distance evaluation has not been provided

- Sight distance calculations should be based on a 45 mph design speed, consistent with methodology originally employed by the Applicant's traffic consultant
- Sight distance analysis should be provided in both directions at both the primary drive and the emergency access drive
- Information provided to date focuses on stopping sight distance (SSD) looking west from the primary drive and ignores intersection sight distance (ISD)
- Presented material interchangeably uses SSD and ISD, which are different criteria with different methodologies
- June 29, 2021 Gillon Associates review letter confirms deficiency of sight distance calculations provided
- Insufficient sight distance impacts public safety, increasing the risk of crashes

Source – Project Library: Gillon Associates Hanover Transportation Comments 6 29 21

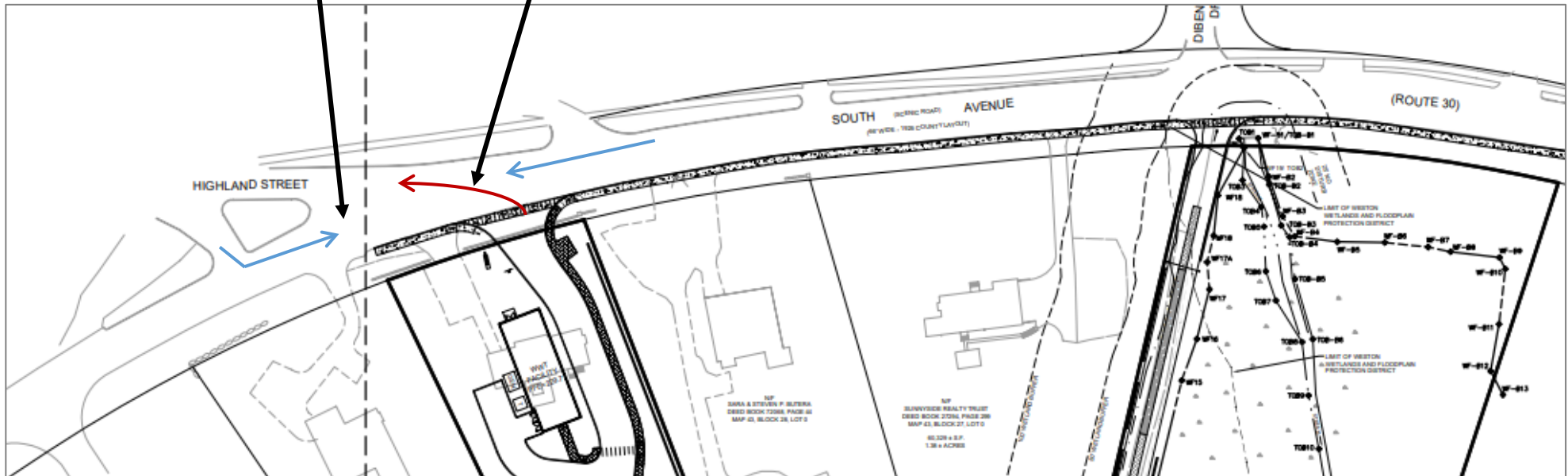
WEST SITE DRIVEWAY – 540 SOUTH AVENUE (MAIN SITE DRIVE)		
	West (Left) of Drive	East (Right) of Drive
Existing Available Distance (Field Measurements)	280 ft	≈ 470 ft
Required SSD	360 ft	360 ft
Minimum ISD	429 ft	495 ft

EAST SITE DRIVEWAY – 518 SOUTH AVENUE (EMERGENCY ACCESS)		
	West (Left) of Drive	East (Right) of Drive
Existing Available Distance (Field Measurements)	≈ 400 ft	≈ 200 ft
Required SSD	360 ft	360 ft
Minimum ISD	429 ft	495 ft

Closely spaced offset intersections create conflicting turning movements

Opposing left hand turns out of Highland Street and out of the site driveway pose unexpected conflicts

- Conflicts will arise between vehicles exiting the site drive to enter Highland Street, and vehicles heading westbound either remaining on South Ave or entering Highland Street.
- In addition, distance between the site driveway and the Highland Street intersection is within functional area of Highland Street intersection, as defined by AASHTO



Queuing along South Avenue

- Existing queueing along South Avenue will be exacerbated by traffic entering and exiting the site
- Congestion along South Avenue increases likelihood of drivers taking chances on unacceptable gaps in traffic, increasing likelihood of crashes
- South Avenue at Wellesley Street currently operates at LOS F, with excessive delay for the Wellesley Street southbound approach in both the weekday morning and weekday evening peak hours
- Indicative of an intersection well over capacity and not able to handle additional traffic volume
- Resultant impacts on queuing and safety along South Avenue

Outstanding issues regarding Emergency Access

- Insufficient sight distance increases the potential for crashes during an emergency
- Turning analysis shows vehicles crossing over the double yellow line, which increases the potential for crashes
- Revised design of emergency access drive to include a drainage swale and rain garden increases likelihood of an emergency vehicle becoming disabled, damaging safety equipment and impeding rescue efforts
- Slope of access road around site must be verified to meet fire safety code
- Design of the emergency access drive presents safety concerns for emergency vehicles and for vehicles on South Avenue

Potentially insufficient Parking supply

- No parking analysis has been provided to verify that a reduction of 60 parking spaces is appropriate for a reduction of 20 units
- Range of parking ratios provided by ITE exceeds proposed parking ratio of 1.63 spaces/unit. ITE data is not specific to proximity to transit and lack of nearby walkable amenities
- No overflow parking is available
- Applicant has not provided a detailed parking management plan identifying resident parking, visitor parking, service vehicle parking, and how electric vehicle stalls will be allocated and managed
- Vehicles that cannot park in allocated spots will block emergency access and the site driveway, posing a safety risk for pedestrians and residents