

Traffic and Parking Peer Review Summary

Village at Cricket Lane

**55 (Rear) Pearson Drive
Newbury, Massachusetts**

Prepared For: Town of Newbury Zoning Board of Appeals

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Cricket Lane Regional Context

Cricket Lane
★ **Site**



What was done?

- Review TEPP LLC Traffic Assessment Memo & Circulation features of Chapter 40B Comprehensive Permit Application for proposed 24 single 3-4 bedroom family units on a cul-de-sac
- Visit site/neighborhood on 4/7/2020
- Coordinate with TEPP LLC/Site Engineer/Newbury Fire Chief on questions
- Review Town and neighbor comments pertaining to traffic, parking, and site circulation
- Prepare and submit traffic/circulation/parking peer review findings letter (4/21/2020)
- Attend a virtual hearing to present findings (9/17/2020)

Cricket Lane Neighborhood Context

★ SITE

I-95

Exit 55

Pearson Drive
Loop Rd

Pearson Drive

Orchard St

Central St

Base map source: MassGIS

Projected Cricket Lane Traffic Generation*

Comparison of Rates 7th vs. 10th ITE Trip Generation Rates & Unlikely “what if” scenarios

TA Weekday 24 homes			Weekday 24 homes			Weekday 61 & 110 residents			Weekday 48 & 60 vehicles		
<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>
141	142	283	113	114	227	81	81	162	152	153	305
						146	146	292	191	191	382
TA AM Street Peak 24 homes			AM Street Peak 24 homes			AM Street Peak 61 & 110 residents			AM Street Peak 48 & 60 vehicles		
<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>
7	20	27	4	14	18	4	9	13	7	17	24
						7	16	23	9	21	30
TA PM Street Peak 24 homes			PM Street Peak 24 homes			PM Street Peak 61 & 110 residents			PM Street Peak 48 & 60 vehicles		
<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>
18	11	29	15	9	24	11	6	17	22	11	33
						20	11	31	27	14	41
TA Saturday Daily 24 homes			Saturday Daily 24 homes			Saturday Daily 61 & 110 residents			Saturday Daily 48 & 60 vehicles		
<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>
143	135	269	114	115	229	75	76	151	141	142	283
						136	137	273	176	177	353
TA Saturday Site Peak Hour 24 homes			Saturday Site Peak Hour 24 homes			Saturday Site Peak Hour 61 & 110 residents			Saturday Site Peak Hour 48 & 60 vehicles		
<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>
16	14	30	12	10	22	8	8	16	20	18	38
						16	14	30	26	22	48

Finding: TA has reasonable & acceptable trip generation estimates

Estimated Pearson Drive Traffic Generation at Orchard Street Without and With Cricket Lane Development

ITE Weekday 64 homes			ITE Weekday Projected w/88 homes		
<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>
302	302	604	415	416	831
AM Street Peak 64 homes (Actual 10/12/17 measurement)			AM Street Peak Projected w/88 homes (TA Projected)		
<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>
11	36	47	16	49	65
12	33	45	19	53	72
PM Street Peak 64 homes (Actual 10/12/17 measurement)			PM Street Peak Projected w/88 homes (TA Projected)		
<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>
40	23	63	55	32	87
25	13	38	43	24	67
Saturday Daily 64 homes			Saturday Daily Projected w/88 homes		
<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>
305	306	611	420	420	840
Saturday Site Peak Hour 64 homes			Saturday Site Peak Hour Projected w/88 homes		
<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>
32	28	60	44	38	82

To summarize, Cricket Lane *on average* increases Pearson Rd traffic roughly 1 car every 5 minutes each day; 1 car every 2 minutes during peak hours

Sight Line Findings (1 of 2)

- ◎ Sight line measurements – 490' to the southeast and 265' to the southwest --at the proposed Cricket Lane with Pearson Drive intersection. These measurements, as presented in the TA are reasonable and adequate for conditions based on observations.



Finding: TA sight line findings are acceptable.

Sight Line Findings (2 of 2)

- ⦿ Sight line measurements presented in the TA report -- 700' to the north and 690' to the south for the Orchard Street at Pearson Drive intersection -- are reasonable and adequate for conditions based on observations.
- ⦿ Note: As an existing off-site intersection, even if deficient, it is not the responsibility of the Applicant to address its sight lines. The Applicant is responsible for design features of new intersections it creates.



*Sight line looking northeast from
Pearson Drive to Orchard Street*



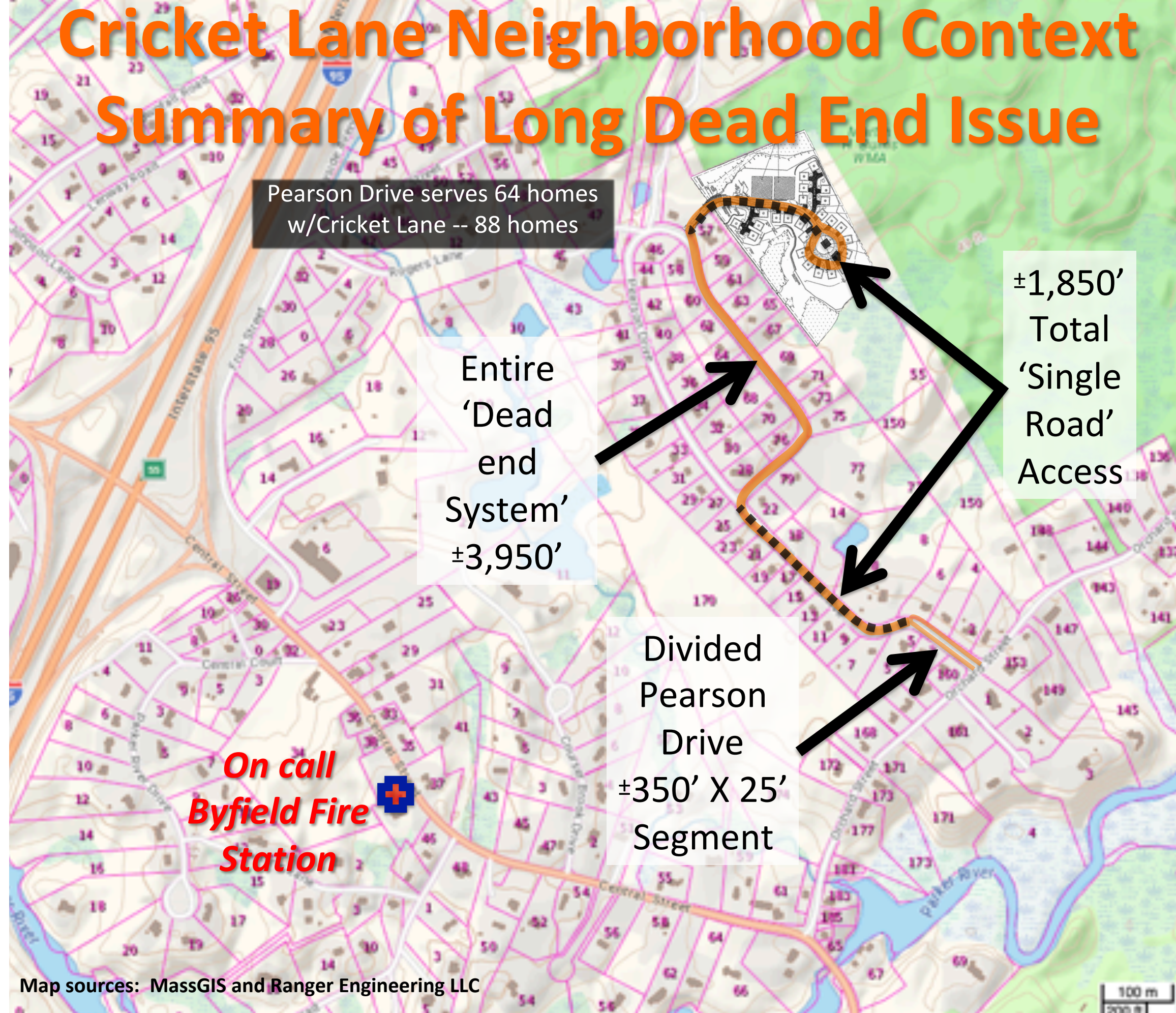
*Sight line looking southwest from
Pearson Drive to Orchard Street*

Finding: TA sight line findings are acceptable.

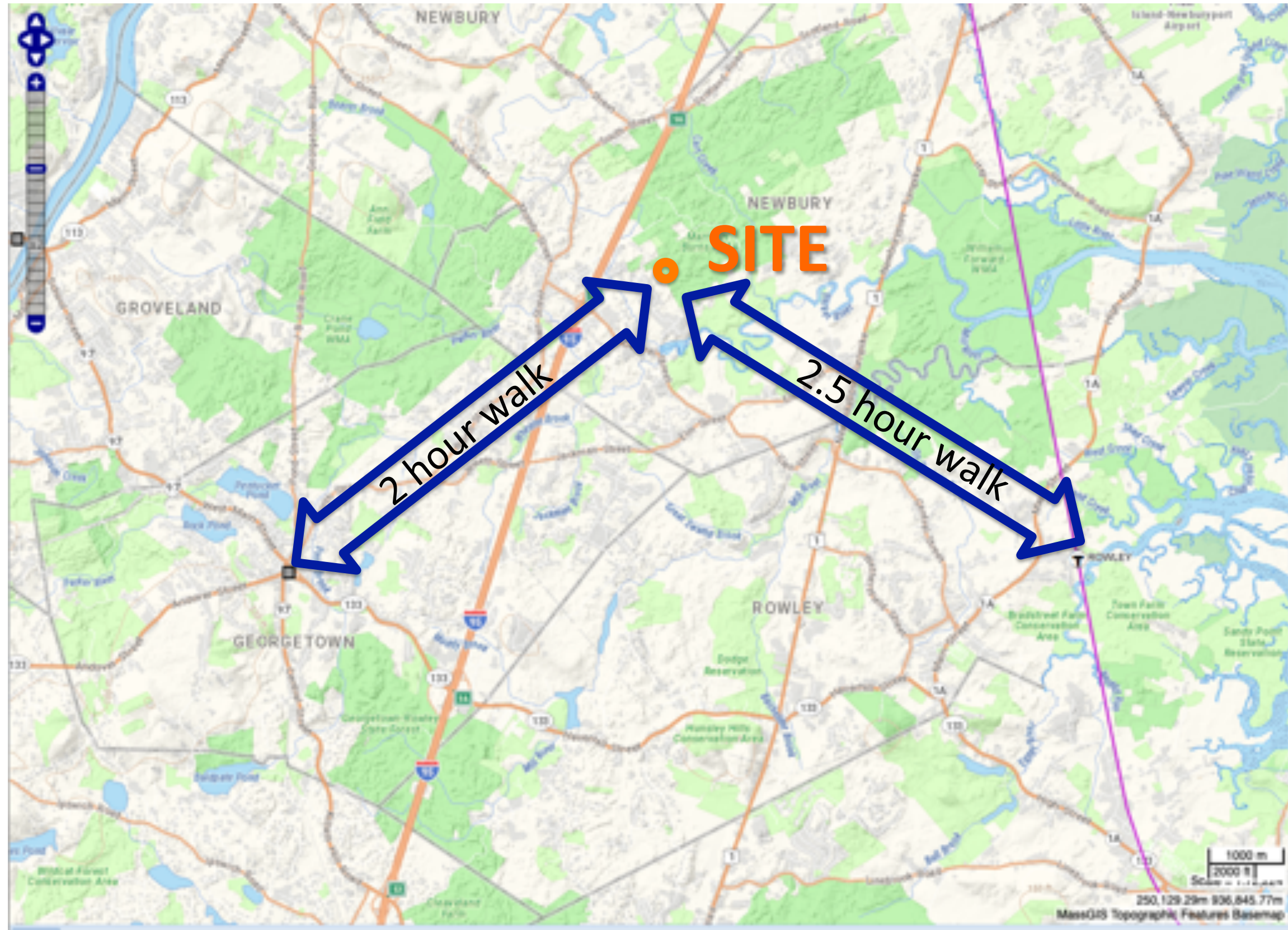
Cricket Lane Neighborhood Context

Summary of Long Dead End Issue

Finding:
Proposed single
access route is
far longer than
cul-de-sac
systems
recommended
in nearly all
Massachusetts
communities.



Nearest Public Transportation Services



Finding: Site not convenient to public transportation

Cricket Lane Site 'Walk Score' Estimate

Walk Score

Walk Score®

Description

70–89

Very Walkable Most errands can be accomplished on foot.

50–69

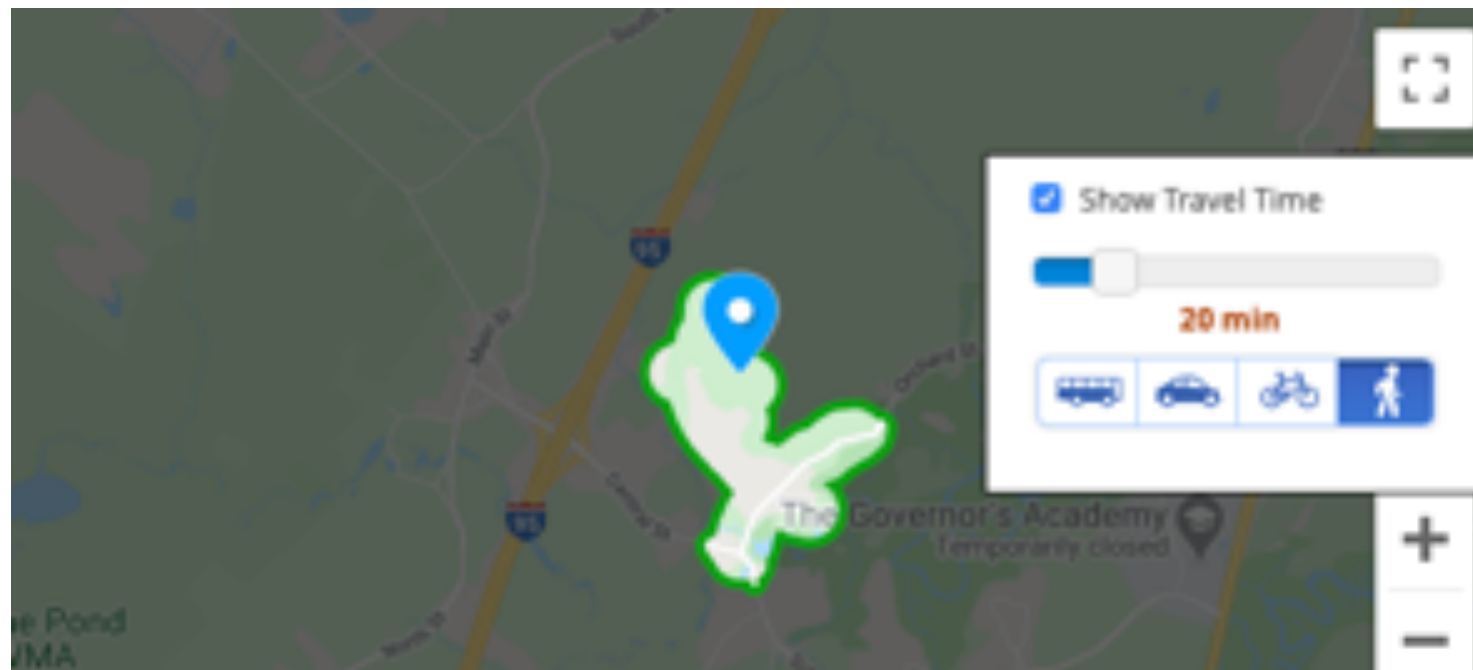
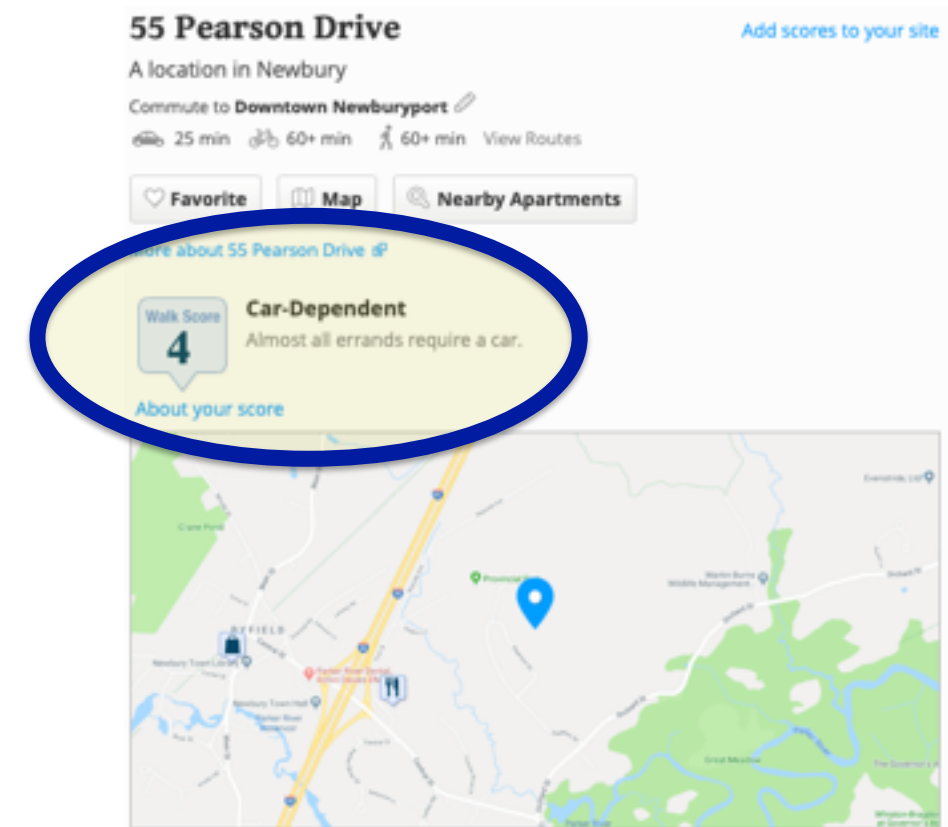
Somewhat Walkable Some errands can be accomplished on foot.

25–49

Car-Dependent Most errands require a car.

0–24

Car-Dependent Almost all errands require a car.



Walkability Index

Metadata Updated: December 18, 2019

The Walkability Index dataset characterizes every Census 2010 block group in the U.S. based on its relative walkability. Walkability depends upon characteristics of the built environment that influence the likelihood of walking being used as a mode of travel. The Walkability Index is based on the EPA's previous data product, the Smart Location Database (SLD). Block group data from the SLD was the only input into the Walkability Index, and consisted of four variables from the SLD weighted in a formula to create the new Walkability Index. This dataset shares the SLD's block group boundary definitions from Census 2010. The methodology describing the process of creating the Walkability Index can be found in the documents located at <ftp://newftp.epa.gov/EPADataCommons/OP/WalkabilityIndex.zip>. You can also learn more about the Smart Location Database at <https://edg.epa.gov/data/Public/OP/SLD/SmartLocationDB.zip>.

Finding: Highly auto-dependent site. Recreational walking acceptable.

Summary Key Peer Review Findings -1 of 2

Traffic Analysis Findings:

- ⦿ TEPP Traffic Assessment (TA) findings of *typical vehicle* traffic operations and traffic safety are acceptable and reasonable.
- ⦿ This is not a 'high crash' area.
- ⦿ Trip generation, trip distribution, and future travel forecasts pertaining to vehicle traffic are acceptable and reasonable.
- ⦿ The proposed total supply of 48 garaged spaces plus 48 driveway spaces and 8 cut out on-street visitor parking spaces should be more than sufficient to accommodate typical site vehicle ownership and visitor parking demands without overflowing into on-street travel lanes.


Key Peer Review Findings - 2 of 2

Cul-de-sac, Dead ends, and Emergency Access

- ⦿ 527 CMR Board of Fire Prevention regulations apply to Newbury Fire Dept. No guidance on dead end roads. Up to Newbury Fire Dept. on judging its capabilities with the proposed infrastructure.
- ⦿ Pioneer Institute for Public Policy recommends max. dead end system 1,000 feet serving no more than 20 homes, whichever is less. With Cricket Lane, dead end system just under 4,000 feet from Orchard Street. Is a serious drawback inconsistent with Mass guidelines.
- ⦿ While not applicable, NFPA 1141 on Suburban Fire Prevention say up to 100 homes may be served by a single road. In this case 88 homes plus the 64 that already exist would be served.
- ⦿ Backing requirement for emergency vehicle access on the site's proposed two dead ends are still proposed in the latest plan. We concur with Newbury Fire Dept. on its dead end turn around length/width requirements.

Transit Availability and Regional Walkability Assessments in the Application

- ⦿ New residents will be a highly auto-dependent with virtually no scheduled public transit. Disagree with Comprehensive Application that this will be a site benefit.



Thanks
Questions??

