



Walsh Property Community Planning Committee (WPCPC)

Remote Meeting: May 31, 2023 | 6:00 – 8:00 PM

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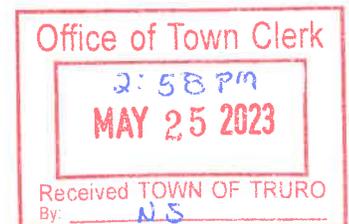
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MEETING AGENDA

1. Welcome and Roll Call
2. Review and Approve April 19, 2023 Meeting Minutes
3. Public Comment – (5 min.)
4. Town Staff Updates – (10 min.)
5. Roles and Responsibilities – (10 min.)
6. Cape Cod Commission Transportation Analysis – (30 min.)
7. Discussion of Revised Concept Plan – (30 min.)
8. Update on Ongoing Development Outreach – (5 min.)
9. Outline of Master plan report – (5 min.)
10. Discussion and Consensus on Public Outreach Plan – (10 min.)
11. Discussion and Consensus on Work Plan – (10 min.)
12. Recap Meeting Points, Agreements, and Action Items – (5 min.)
13. Review Next Meeting Agenda – (5 min.)
14. Public Comment – (5 min.)
15. Other Business
16. Adjourn



If you are unable to attend the meeting, please contact Liz Sturdy at: esturdy@truro-ma.gov

Walsh Property Community Planning Committee (WPCPC)

Meeting Minutes

April 19, 2023 | 6:00 p.m.

Members Present

Co-Chairs Eileen Breslin and Ken Oxtoby; Members Russ Braun, Morgan Clark, Fred Gaechter, Betty Gallo, Jane Lea, Todd Schwebel, Paul Wisotzky, Steve Wynne, Jeff Fischer, Raphael Richter

Members Absent

Member Christine Markowski, Violet Bosworth

Also Present

Consultants (Carole Ridley, Sharon Rooney, Allie Koch, Gordon Leedy), Bill Israel, Darrin Tangeman, Emily Beebe, Jarrod Cabral, Nick Robertson, Sophie-Mann-Shafir

Welcome, Roll Call and Agenda Review

Co-chair Oxtoby read the remote meeting access instructions.

Co-chair Breslin read the roll call and committee members present identified themselves.

Co-chair Breslin led discussion of the minutes of March 29, 2023. Motion to approve meeting minutes as written by Member Wisotzky, seconded by Member Gallo. Unanimously approved.

Tonight's agenda was reviewed.

Public Comment

None.

Town Staff Updates

Town Manager Darrin Tangeman: There's been a lot of questions and Barb Carboni notified the Chairs that the Town did not get the DLTA grant to extend consultant services. This was confirmed today with CCC. Jarrod Cabral provided an update on the water tower and municipal facility updates. Consultant finished cost analysis in January for the DPW facility. The cost analysis will provide a detailed breakdown of all the options available for select site options. No specific location has been selected for the DPW to date. The analysis will be available May 1, and all financial options are being reviewed by the Town's finance department. The DPW will have two open houses, one May 10th, one on May 23rd (Select Board meeting dates, too). 1:30-4:30, and DPW will be on Select Board agenda for May 10th. The cost analysis update will be presented on the 10th, and after that meeting, they will determine how quickly to make a decision on the location and details. There needs to be feedback on timing and direction.

Water Storage Tank: On the mapping, the highest elevation is on the Town of Provincetown parcel that abuts the Walsh Property. Horsley Witten has recommended this location. The final tank location and infrastructure would need to be adjusted during the final housing design phase. Notably, the Town and consultants are still in planning phases and no location selection or design details are final. The Town met with Horsley Witten to do a cost analysis of the Walsh site that they noted, as well as 340 Route 6, the property that abuts the safety facility. They recommend going to the Provincetown parcel that abuts the Walsh and North Union wellfield property. Tank could hold from 9.3 million up to 11.7 million gallons. A cost analysis and numbers will be calculated and analyzed for each potential property. Member Braun inquired on the siting of the water tank. The siting does not seem to affect our basic areas planned for development. Member Braun's questions regard 1) visual, and 2) organization of development. Would it be a cylindrical tank? Mr. Cabral responded the drainage/overflow for the tank can be incorporated into stormwater infrastructure on the Walsh property. These details could be fine-tuned once the location of the water tank is determined.

Member Fischer confirmed if there is a 500-foot exclusion zone/buffer zone within the zone/water tank area. Mr. Cabral responded, Zone 1 - 100 ft radius, Zone 2 is 400 ft radius. Member Fischer noted these locations could include the hiking

and walking trails proposed for Walsh site. Additionally, in his experience as a hydrologist, 65 gallons per person seems very low. 250-300 gallons per day per household is what Jeff has seen. Jarrod Cabral will confirm. Confirmation was provided that the tank would actually be a Provincetown property. If this site is not actually located on the Walsh Property, it likely won't impact development, unless there is some access point that will be needed. The 100 and 400 ft radius for the recommended siting will determine the location of hiking trails on Walsh and other resources. They are looking at access through Andrew Way and Leeward Passage, and Quail Ridge as potential access points. According to Jarrod Cabral, access via the private roads is being reconsidered generally. Member Clark is glad to see options were proposed with higher capacity water storage tanks and hopes it's a given we can address PFAS and other concerns in the future. Member Wisotzky confirmed that the WPCPC does not have to worry about water tower development in area A. Mr. Cabral confirmed this is correct. As we move forward within the next month, more information and clarity will be provided and will be included on the Select Board agenda (May 10th and 23rd meetings).

Revised Workplan

September to October timeframe is targeted to bring the LCP and future master plan to Town Meeting. There's an initial draft master plan concept, and today and upcoming meetings will target reaching consensus related to water tower siting. May goals include review of CCC traffic analysis, review draft master plan and draft report, reaching consensus outreach plan for draft master plan. June: Launch public comment on a draft of the master plan to get feedback (not for Town Meeting) This will also have the benefit of visual survey feedback. This will give the community an opportunity to give feedback and understand what's going on. This will be considered and incorporated into the plan as appropriate. This is a packed schedule that allows for about a month of public comment, time to review and incorporate feedback, and time to revise the report for Town Meeting. Member Gallo inquired if/when the WPCPC will begin discussions with development interests. Ms. Ridley commented that this is in progress and outreach to development interests will be initiated soon. Member Wisotzky commented this sounds like a great, ambitious plan. When the plan is developed, will the WPCPC still be able to continue to tweak the plan before Town Meeting? Ms. Ridley noted this can be discussed and incorporated into the workplan. Member Braun applauded the aggressive timeline. This is an aggressive but workable timeline.

Visual Survey

The packet includes a revised survey using public feedback and member feedback. Katy Ward will support survey launch on Engage Truro. Member Braun likes the depiction of more local examples of style, however, it doesn't include overall neighborhood density. These townhouses could be farther apart, closer together, etc. Density needs to be addressed. Member Breslin noted that a lot of people don't understand density. Member Gallo inquired if it would be helpful to show a scaled footprint of the area on the lot. The style options alone don't represent the reality of how this community and neighborhood will look. Member Wisotzky inquired if there could be a preference selection question on density options. What would it look like with 6 units per acre, and what is even possible? The survey is trying to educate while also collecting feedback. Ms. Rooney and the consultants will incorporate some changes to allow for the distinction between portions of the survey for education of density and portions for data collection. Member Wynne noted he thought that the survey draft was actually clear, noting that density was defined with examples and it seemed clear that the slides of style types could be incorporated into these density options. Member Fischer thought the survey was great overall, and questioned getting too specific on the style and form. On Page 19, Member Fischer noted the L shaped area with the school which showed ball courts should be removed from the visual survey.

Member Braun called attention to what the housing concepts look like on paper, versus what they would actually look like on the ground. 12 units per acre versus 7 units is quite different. That might not be what Truro is looking for, but maybe it is. Just looking at style is not necessarily indicating what people will be seeing on the ground. The presentation of style could confuse people. Mr. Leedy agreed generally with comments. There's a perception issue; perceived open space is a big part of mitigating density. In developing this plan, it will be critical to see open space in places as people transit through the community, and have it be a part of their surroundings. Mr. Leedy reviewed the revised concept plan with 224 units, with a mixture of flat over flat and townhouse units with a fairly tight, small footprint with a single family component as well. It is far denser than any development in Town, but the scale of the buildings should not overwhelm people. This is driven by land available to develop (Area A). Other factors such as septic disposal will be limiting. Member Clark expressed concern with Mr. Leedy's comments. Mr. Leedy cautioned that in order to develop up to 10 units per acre, it will require significant earthwork with 30-40 feet of grade change. Ms. Rooney noted upcoming discussion on

conceptual planning. To wrap up, the committee is seeking a better visual representation of what the development would look like on the ground.

Draft Master Plan and Outreach

Ms. Ridley noted a possible 1) kickoff event: This could be an opportunity to describe how the WPCPC got to this point, what progress has been made. Perhaps this could be similar to the hands-on event in December. 2) Neighbor meetings: Ensure people who are closest to the site have an opportunity to weigh in. 3) Media kit to provide a variety of information, EngageTruro, utilize town tools, TruroTalks, or speaker's bureau - have talking points to provide to each committee member to share with folks at small settings or gatherings with consistent information and messaging. 4) Public displays at Town Hall, post office, heavy traffic locations. 5) Meeting with town boards and committees. 6) Brochure that gets mailed to town, mailing to households in Truro, perhaps just town meeting voters, and or part time residents.

Member Clark agrees this covers many different ways to reach people. Some non-year-rounders will be around for outreach. The most interaction will be tabling, weekend dump location, tabling at the package store. Believes there should be parameters so that the information is standardized. In addition, information collection should be standardized. Former consultants did not have a way to collect and track information. Other ideas from members included the summer concert series event in the summer, give a postcard to fill out a survey, reach members in town at local community events. Member Wynne noted that neighborhood meetings could be promoted at the kickoff meeting. Members were in general agreement that there should be some tangible deliverable that comes from these outreach events. Here are the questions being asked, and here are responses. There seems to be consensus that outreach should be completed for residents and part timers. Member Fischer noted a poster with a QR code at heavy traffic locations, at the beach, stores, etc. Members would be willing to table locations around town.

Revised Draft Concept Plan

Ms. Rooney noted that trip generation estimates were submitted to CCC. Mr. Leedy described the revised concept plan with 10,000 sf of commercial space with a variety of uses - daycare, commercial kitchen, etc. These are single floor buildings. Pick up and drop off locations are incorporated. Surrounding this are live/work units - 950sf, 2 floor units. Living unit up above and down below (15). Then, an area of town houses mixed with flats. 2 floor units that would be 900sf flats, and 1100-1200 sf 2 story townhouses. Further into the site in a loop are single family units 1200sf, 1600sf with one or 2 car garage. These are configured so that you could design the units to have window walls towards the sun. They could have outdoor space that could use the adjacent wall as a fence, if you will. Concept 1, above, uses most of the developable, flatter areas of Area A. There is quite a bit of topo on the site. Some of these single families would have a walkout basement which would add livable sf in the home. This would provide parking for 1.5-2 spaces per unit. Also included is the space for athletic fields on the 7 acre carve out. Although it looks fairly dense from above, the actual aspect of the layout includes quite a bit of open space, with inclusion of play spaces, etc. for residents of the community. The inclusion of additional flats could increase capacity to 250 units. Of note, the sewage disposal issues have not been assessed with this revised concept. Member Richter felt that the concept should meet the 260 number agreed to by the committee. The 10,000sf commercial building could include residences above that, and live work units could be integrated into other areas of the development. 40 additional units could be included in this plan. Member Wisotzky's recollection noted it's a matter of system capacity for sewage disposal. Questioned if there's a way to use topography to WPCPC's advantage. Is there a way to have townhouse buildings so that they can have 3 units? The visual survey has options with 3 stories. Density is both vertical and horizontal.

Member Clark agrees. Inquired on egress options. Commented on concerns of traffic patterns. Is there is possibility of including another accessway? Mr. Leedy included one previous concept map that incorporated other access/egress points. There was an area carved out as potential recreation land. There is potentially a way to revise this concept. The CCC numbers will provide issues on access/egress on site. Member Clark wants to expand, not bottleneck. Also inquired on 40,000sf of commercial space. The committee had previously agreed to 30-40,000sf. The consultants will take revisions and incorporate changes. Member Lea noted need for elevators for elderly and in need, this could support 2 stories/additional density. Member Fischer noted some housing units could have higher density, there's more things that could be done here. Open spaces for hiking, playgrounds, etc. should be shared as well or incorporated into plans. Member Oxtoby didn't realize the number was 224. Reminded the WPCPC that this is for discussion purposes only. This

is generally what it could look like, but is not definite in any way. Member Breslin encouraged committee members to share additional feedback via email.

Preparation for next meeting

Committee will await additional feedback from Jarrod Cabral. Additional discussions on 3 access points for the water tower will continue as well. Outreach plan comments will be reviewed and incorporated for consensus at next meeting. More to come on concept plans and visual survey revisions.

Public Comment

None.

Adjourn

A motion to adjourn meeting made by Member Wisotzky, seconded by Member Gallo. All in favor. Adjourned at 8:00pm.

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CAPE COD
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May 25, 2023

Darrin Tangeman
Truro Town Manager
P.O. Box 2030
Truro, MA 02666

RE: Cape Cod Commission Staff Walsh Property Redevelopment Preliminary Transportation Analysis

Dear Mr. Tangeman,

At your request, Cape Cod Commission staff ("Commission staff") have conducted a high-level review of the transportation considerations of the potential redevelopment of the Walsh Property. This memorandum summarizes Commission staff's analysis and findings to date. This information will be presented to the Walsh Property Community Planning Committee (WPCPC) at their meeting on May 31, 2023.

Commission staff's comments herein are based on the information currently available, and the comments are more generalized than would be provided should the project be reviewed by the Cape Cod Commission as a Development of Review Impact (DRI). Should the project undergo DRI review, Commission staff comments reserves the ability to revise opinion based on the latest information available at the time of review.

Background

As identified in materials on the WPCPC website, the project involves design consideration for the redevelopment of parcels of the 69 acres of land that is primarily woodland with seven wood-framed seasonal dwellings, outbuildings, and paved driveways. Potential uses of the project site include housing, recreation, open space, town facilities and/or infrastructure. Development scenarios utilized for preliminary transportation analysis purposes were provided by Tighe & Bond, a consultant working with the WPCPC, in May 2023.

For the purposes of this preliminary transportation analysis, the study area includes Route 6 from Castle Road, north to Bayside Hills Road/Andrew Way as well as the intersections with Castle Road, Whitmanville Road, Cabral Farm Road, Great Hollow Road/Walsh Way, Scrub Oak Way (Truro Central School driveway) and Bayside Hills Road/Andrew Way.

Existing Conditions

Existing Transportation Infrastructure – The study area includes Route 6 from Castle Road, north to Bayside Hills Road/Andrew Way and its intersections with Castle Road, Whitmanville Road, Cabral Farm Road, Great Hollow Road/Walsh Way, Scrub Oak Way (Truro Center School driveway) and Bayside Hills Road/Andrew Way. The proposed redevelopment site area is located to the east of Route 6. Through this area, Route 6 is classified as principal arterial with a posted speed limit of 45 miles per hour (mph). All intersections in the study area function as two-way stop control (TWSC), where the side streets are stop controlled and the main street (Route 6) is free flowing.

On Route 6 in this area, there is one lane in either direction as well as a designated, unprotected bike lane in either direction. There are sidewalks on the western side of Route 6, starting at Truro Center School and ending at the Truro Police Department driveway to the north of the study area. There is a pedestrian crossing across Route 6 to the immediate north of the Truro Center School driveway.

The CCRTA also operates in the project area. The CCRTA operates fixed and flag down service through this region, there are two stops on Route 6 within the study area, one at Whitmanville Road and one at the Truro Central Village Plaza. Intercity bus routes run through the study area with the nearest marked stop at Salty Market in North Truro.

Planned Projects – There are two Massachusetts Department of Transportation (MassDOT) projects planned within the study area:

- Provincetown-Truro-Wellfleet Resurfacing and Related Work (project number 612032). According to the MassDOT project page: “Work on this project will include resurfacing Route 6. No significant expansion of bike/ped facilities. Segment can be advanced as a pavement preservation focused endeavor due to limited priority or demand for expansion of existing multimodal facilities. If needed, accessible ped ramp should be provided at existing sidewalk infrastructure. Existing sidewalks should be repaired if necessary and cross-sectional distribution should be investigated through pavement marking changes for crosswalks, bicycle accommodations.” This project is in the preliminary design phase with construction funding programmed in Federal Fiscal Year (FFY) 2026.
- Truro-Wellfleet Shared Use Path (project number 612540). According to the MassDOT project page: “The proposed scope will fill some segments of the primary, or “spine” route, that will ultimately extend the Cape Cod Rail Trail from its current terminus in South Wellfleet to Provincetown. In coordination with the secondary routes, it will connect bicyclists and pedestrians to community destinations and link together popular bicycle routes and trails in the region. The network balances an efficient and direct route through the region with a wider range of travel experiences through scenic and natural areas that characterize the Outer Cape towns.” This project preliminary design phase with construction funding identified at this point.

Additionally, the following MassDOT projects are identified outside of the study area but in the Outer Cape region:

- Wellfleet- Intersection Improvements & Related Work at Route 6 and Main Street (#607397, funded in FFY 2023)
- Wellfleet- Pavement Preservation and Related Work on Route 6 (#609098, funded in 2023)
- Provincetown- Corridor and Related Work on Shank Painter Road from Route 6 to Bradford Street (#608744, funded in FFY 2025)
- Wellfleet- Intersection Improvements on Route 6 at School Street and Lawrence Road (#613144, currently unfunded)
- Provincetown- Truro- Route 6 Modernization from Shank Painter Road to Shore Road (#613289, currently unfunded)

Crash Data – Crash data was obtained by Commission staff based on MassDOT standards for the last five years for the study area intersections. The crash analysis revealed that the intersections in the study area are not generally considered high crash locations all an average of less than three crashes per year, multiple injury crashes were observed at the intersections of Route 6 at Castle Road, Whitmanville Road, and Scrub Oak Way (Truro Central School driveway).

Table 1: Summary of Crashes

Intersection	Number of Crashes (2018-2022)	Crash Rate (avg. per year)
Route 6 @ Castle Road	5	1
Route 6 @ Whitmanville Road	9	1.8
Route 6 @ Cabral Farm Road	0	0
Route 6 @ Great Hollow Road/Walsh Way	1	0.2
Route 6 @ Scrub Oak Way/Truro Center School Driveway	5	1
Route 6 @ Bayside Hills Road/Andrew Way	1	0.2

For future analyses, it is suggested that a more detailed review of crash reports for the intersections with Castle Road, Whitmanville Road, and Scrub Oak Way (Truro Central School driveway) be conducted to identify any potential existing safety issues.

Sight Distance - A field review of the available sight distances was conducted for the proposed site driveway. Near the proposed driveway, vehicle travel on Route 6 was measured using ATR data and an average 85th percentile speed of 52.5 mph was identified.

The AASHTO publication, *A Policy on Geometric Design*, 2011 Edition, defines minimum and desirable sight distances at intersections. The minimum sight distance is based on the required stopping sight distance (SSD) for vehicles traveling along the main road. Using the average 85th percentile speed of 52.5 mph, a conservative design speed of 55 mph was used to check the sight distance requirements.

Table 2: Sight Distance

Driveway	Movement	Speed (mph)	SSD Required (ft) ¹	SSD Measured (ft)	Meets SSD Requirements
Prop. Driveway @ Walsh Property	Right (North)	55	495	500+	Yes
	Left (South)	55	495	500+	Yes

¹ Based on AAHSTO requirements for stopping sight distance

Available sight distance exceeds the recommended minimum values.

Traffic Counts - At the time when this request was received, the Commission did not have recent traffic data available in the project area. Daily traffic volumes were collected on Route 6 north of Castle Road between Monday, February 13, 2023 and Friday February 17, 2023. Copies of this traffic count are included in the appendix.

Table 3: Vehicle Traffic Volume Summary

	ADT ¹	K ²	85% Speed ³	Weekday Morning Peak Hour Volume (8 AM to 9 AM)	Weekday Afternoon Peak Hour Volume (4 PM to 5 PM)
Route 6 @ N of Castle Road					
Northbound	3,192	10.9	53 mph	348	238
Southbound	<u>3,509</u>	10.8	52 mph	<u>261</u>	<u>379</u>
Total	6,701			609	617

Note:

¹ Average Daily Traffic (ADT)

² K factor (percentage of ADT during the peak hour)

³ 85th percentile speed (miles per hour)

In addition to the radar unit, manual turning movement count (TMC) were conducted during the AM and PM peak intervals at the Truro Center School driveway on Monday, February 13, 2023 and

Thursday, February 16, 2023. These TMCs are also attached as copies in the appendix. The radar data and the resulting TMCs were then used to help generate a capacity analysis for the requested locations and scenarios.

Understanding the differing traffic characteristics that occur during the summer months, Commission staff calculated an adjustment factor to estimate summer traffic conditions. Summer conditions were estimated based on data from the nearest available traffic counting where summer and off-season conditions have been observed. The data that was used to estimate an adjustment factor came from radar deployments from February 14 to 16, 2022 and July 12 to 14, 2022 on Route 6 at the Wellfleet/Truro town line. Comparing February to July during the morning and afternoon peak period, the traffic volumes were found to increase by a factor of 2 in the morning peak period and by a factor of 2.5 in the afternoon. The data from these radar counts in 2022 at the Wellfleet/Truro town line are provided in the appendix.

For future analyses, it is suggested that additional traffic data is collected during the summer months.

Capacity Analysis (Existing) – As requested by the Town, a capacity analysis was conducted for the existing intersection of Route 6 at Scrub Oak Way/Truro Center School driveway. Using the data collected from the TMCs, and summer adjustment factors described previously, Commission staff analyzed the existing conditions for Route 6 @ Scrub Oak Way/Truro Center School driveway using industry standard software, Synchro 11.

A series of metrics are provided that describe the intersection operations. Level of Service (LOS) is essentially a letter-grade assigned to a vehicle movement based on the level of traffic congestion and delay. LOS A represents uncongested conditions with very little delay. LOS C or D indicates busy but acceptable conditions. LOS E/F indicates more significant delays but does not necessarily mean that that intersection presents safety issues. It is also important to note that LOS A is not an reasonable or appropriate goal for most locations, it simply means that near free-flow traffic operations is anticipated. Delay represents the average number of seconds the motorists will wait to make the indicated movement. Finally, V/C is the volume to capacity ratio. A V/C ratio less than 1 indicated there is sufficient capacity to process the vehicle demand. A V/C ratio over 1 indicated that the vehicle demand is anticipated to exceed the estimated capacity of the intersection. This analysis tends to be conservative (high) in estimated congestion that will be experienced. More refined analysis approach, such as gap studies, can be useful in understand locations where it is unclear if operations will be acceptable.

Table 4: Existing Capacity Analysis Summary

Time of Year	Intersection	Movement	Existing Conditions						
			Morning Peak			Afternoon Peak			
			LOS ¹	Delay ²	V/C ³	LOS ¹	Delay ²	V/C ³	
Offseason (February)	Route 6 @ Scrub Oak	WB	LR	C	15.0	0.23	B	13	0.08
	Way/Truro	NB	TR	A	-	-	A	-	-
	Center School	SB	LT	A	8.6	0.02	A	7.8	0.0
Offseason (February)	Route 6 @ Walsh	WB	-	-	-	-	-	-	-
	Property	NB	T	A	0	-	A	0	-
	Driveway	SB	T	A	0	-	A	0	-
Summer Season (July)	Route 6 @ Scrub Oak	WB	LR	-	-	-	-	-	-
	Way/Truro	NB	TR	A	0	-	A	0	-
	Center School	SB	LT	A	0	-	A	0	-
Summer Season (July)	Route 6 @ Walsh	WB	-	-	-	-	-	-	-
	Property	NB	T	A	0	-	A	0	-
	Driveway	SB	T	A	0	-	A	0	-

¹ Level-of-Service, ² Average vehicle delay in seconds, ³ Volume to capacity ratio

Project Analysis

Trip Generation - Trip generation estimates were prepared in accordance with Institute of Transportation Engineers (ITE) standards for the appropriate land use codes (LUC) of multifamily housing (low rise) (LUC 220), daycare center (LUC 565), general office building (LUC 710) based on the number of dwelling units and proposed square footages, as appropriate. Based on May 2023 concept plan provided by Tighe & Bond the multifamily housing (low rise) will consist of 260 units, the daycare center will be approximately 5,000 sf and the general office building will be approximately 27,000 sf. Site-generated trip data is provided in the appendix. In the following table, the total site-generated trips for residential, commercial, and combined for the weekday daily, weekday morning peak hour, and the weekday evening peak hour are shown in the following table.

Table 5: Estimated Site-Generated Trips

Time Period	(A) Residential Trips (260 units) ^{1,2}	(B) Commercial Trips (32,000 sf commercial) _{1,3}	(C=A+B) Total Site-Generated Trips
Weekday Daily	1752	531	2,273
Weekday Morning Peak Hour	104	96	200
Weekday Evening Peak Hour	133	95	228

Note:

¹ Based on May 2023 concept plan with Land Use Codes (LUC), from the Institute of Transportation Engineers, Trip Generation, 11th Edition, identified by Tighe & Bond

² Assumes 260 units of LUC 220 [Multifamily Housing (Low Rise)]

³ Assumes 5,000 sf of LUC 565 [Daycare Center], and 27,000 sf of LUC 710 [General Office Building]

It is worth noting that roughly half of the anticipated site-generated trips come from commercial uses. Should less intense (from a trip generation perspective) commercial uses were assumed the trip generation estimates would be lower.

Capacity Analysis (Future) – In order to understand the potential impacts of adding new trips to area roadways, an analysis of future roadway operations was conducted. An analysis year of 2030 was selected, consistent with industry standards that look out seven years for many permitting processes. A “No Build” and a “Build” scenario are presented for comparison purposes. The No Build scenario grows existing traffic volumes by 0.5 percent per year, consistent with background growth that has been observed in the region. The Build scenario includes the same background growth and adds the new site-generated trips.

For the purposes of this analysis, it was assumed that all site-generated trips would enter and exit the property driveway with 75% of trips heading to/from destination to the south by way of Route 6 and 25% heading to/from destination to destinations to the north by way of Route 6. It was conservatively assumed that all trips would be made by personal automobile and that there was no internal trip capture (trips that begin and end of site). With internal trip capture or trips by public transit, as a pedestrian, or as a cyclist, the overall impacts on the roadway network would be lessen.

Additionally, without any detailed designs available at this point in time, it was assumed that the property driveway would be a single lane entering and a single lane exiting. If separate left and right turns lanes were provided existing the property driveway, operation would improve. There are however safety implications of this configuration that would need to be evaluated.

Both offseason, based on the February count data, and summer season, based on adjustment factors described previously, were analyses and the results are presented in the following tables.

Table 6: Future No Build Capacity Analysis Summary

Time of Year	Intersection	Movement	Existing Conditions						
			Morning Peak			Afternoon Peak			
			LOS ¹	Delay ²	V/C ³	LOS ¹	Delay ²	V/C ³	
Offseason (February)	Route 6 @ Scrub Oak	WB	LR	C	15.4	0.24	B	13.3	0.08
	Way/Truro Center	NB	TR	A	-	-	A	0	-
	School	SB	LT	A	8.6	0.02	A	7.8	0.0
Offseason (February)	Route 6 @ Walsh	WB	-	-	-	-	-	-	-
	Property	NB	T	A	0	-	A	0	-
	Driveway	SB	T	A	0	-	A	0	-
Summer Season (July)	Route 6 @ Scrub Oak	WB	LR	-	-	-	-	-	-
	Way/Truro Center	NB	TR	A	0	-	A	0	-
	School	SB	LT	A	0	-	A	0	-
Summer Season (July)	Route 6 @ Walsh	WB	-	-	-	-	-	-	-
	Property	NB	T	A	0	-	A	0	-
	Driveway	SB	T	A	0	-	A	0	-

¹Level-of-Service, ² Average vehicle delay in seconds, ³ Volume to capacity ratio

Table 7: Future Build Capacity Analysis Summary

Time of Year	Intersection	Movement	Future Build Conditions						
			Morning Peak			Afternoon Peak			
			LOS ¹	Delay ²	V/C ³	LOS ¹	Delay ²	V/C ³	
Offseason (February)	Route 6 @ Scrub Oak	WB	LR	C	15.4	0.24	B	13.3	0.08
	Way/Truro Center	NB	TR	A	-	-	A	-	-
	School	SB	LT	A	8.6	0.02	A	7.8	0.0
Offseason (February)	Route 6 @ Walsh	WB	LR	C	17.3	0.29	F	18.1	0.31
	Property	NB	TR	A	-	-	A	0.0	-
	Driveway	SB	LT	A	8.4	0.02	A	8.1	0.03
Summer Season (July)	Route 6 @ Scrub Oak	WB	LR	-	-	-	-	-	-
	Way/Truro Center	NB	TR	A	0	-	A	0	-
	School	SB	LT	A	0	-	A	0	-
Summer Season (July)	Route 6 @ Walsh	WB	LR	E	43	0.58	F	196.8	1.12
	Property	NB	TR	A	-	-	A	-	-
	Driveway	SB	LT	A	9.6	0.03	A	9.3	0.04

¹ Level-of-Service, ² Average vehicle delay in seconds, ³ Volume to capacity ratio

Overall, the most significant delay is anticipated to be experienced during the afternoon peak hour conditions in the summer months. Further analysis, including a gap study, would be helpful in better understanding the operational characteristics of this potential driveway location. To be most useful, a gap study would need to be conducted under summer traffic conditions.

Recommendations

This memorandum summarizes Commission staff's analysis and findings to date based on currently available data and information. It is suggested that a more detailed traffic analysis would be appropriate once a develop scenario. The traffic study should follow industry standards with the inclusion of additional summer data collection, of a gap study of Route 6 under summer conditions, and an analysis of crash reports for Route 6 at Castle Road, Whitmanville Road, and Scrub Oak Way (Truro Central School driveway).

In looking at potential sight designs, it is recommended that various treatments be analyzed for the driveway connection to Route 6. While it is highly unlikely that a traffic signal warrant would be met based on the current develop scenario, it may be worth conducting to answer questions that are likely to arise. An analysis of different lane configurations and/or consideration of a roundabout could also be considered.

With any redevelopment scenario, the Town should continue to work with MassDOT on improvements to Route 6 to better accommodate pedestrians, bicyclists, and transit users.

At the May 31, 2023 WPCPC meeting I would be happy to expand upon these recommendations and answer any questions the committee may have.

Overall, the most significant delay is anticipated to be experienced during the afternoon peak hour conditions in the summer months. Further analysis, including a gap study, would be helpful in better understanding the operational characteristics of this potential driveway location. To be most useful, a gap study would need to be conducted under summer traffic conditions.

Recommendations

This memorandum summarizes Commission staff's analysis and findings to date based on currently available data and information. Commission staff further offer the following suggestions:

- A more detailed traffic study would be appropriate once a redevelopment scenario (or potential scenarios) is/are decided upon. The traffic study should follow industry standards, but should specifically include:
 - Summer traffic data collection,
 - A gap study of Route 6 under summer conditions, and
 - An analysis of crash reports for Route 6 at Castle Road, Whitmanville Road, and Scrub Oak Way (Truro Central School driveway).
- In looking at potential sight designs, it is recommended that various treatments be analyzed for the driveway connection to Route 6. While it is unlikely that a traffic signal warrant would be met based on the current redevelopment scenario, it may be worth conducting to answer questions that are likely to arise. An analysis of different lane configurations exiting the site and/or analysis of a roundabout could also be considered.
- With any redevelopment scenario, the town should continue to work with MassDOT on improvements to Route 6 to better accommodate pedestrians, bicyclists, and transit users.

At the May 31, 2023 WPCPC meeting I would be happy to expand upon these recommendations and answer any questions the committee may have.

APPENDIX A

TRURO CENTER SCHOOL AM & PM TMC

Cape Cod Commission

3225 Main Street
Barnstable, Mass. 02630

www.capecodcommission.org

File Name : Not Named 1

Site Code : 00003812

Start Date : 2/13/2023

Page No : 1

Groups Printed- Cars - Trucks

Start Time	Route 6 From North					Truro Central School From East					Route 6 From South					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:45 AM	0	31	0	0	31	0	0	0	0	0	0	41	3	0	44	75
Total	0	31	0	0	31	0	0	0	0	0	0	41	3	0	44	75
07:00 AM	1	33	0	0	34	0	0	0	0	0	0	50	0	0	50	84
07:15 AM	1	36	0	0	37	0	0	0	0	0	0	68	2	0	70	107
07:30 AM	3	45	0	0	48	1	0	0	0	1	0	108	7	0	115	164
07:45 AM	11	44	0	0	55	14	0	13	0	27	0	73	18	1	92	174
Total	16	158	0	0	174	15	0	13	0	28	0	299	27	1	327	529
08:00 AM	4	44	1	0	49	11	0	5	0	16	0	73	9	0	82	147
08:15 AM	0	59	0	0	59	1	0	0	0	1	0	73	3	0	76	136
08:30 AM	1	56	0	0	57	0	0	2	0	2	0	81	0	0	81	140
Grand Total	21	348	1	0	370	27	0	20	0	47	0	567	42	1	610	1027
Apprch %	5.7	94.1	0.3	0		57.4	0	42.6	0		0	93	6.9	0.2		
Total %	2	33.9	0.1	0	36	2.6	0	1.9	0	4.6	0	55.2	4.1	0.1	59.4	
Cars	18	309	0	0	327	27	0	16	0	43	0	493	39	1	533	903
% Cars	85.7	88.8	0	0	88.4	100	0	80	0	91.5	0	86.9	92.9	100	87.4	87.9
Trucks	3	39	1	0	43	0	0	4	0	4	0	74	3	0	77	124
% Trucks	14.3	11.2	100	0	11.6	0	0	20	0	8.5	0	13.1	7.1	0	12.6	12.1

Cape Cod Commission

3225 Main Street
Barnstable, Mass. 02630

www.capecodcommission.org

File Name : Not Named 1

Site Code : 00003812

Start Date : 2/13/2023

Page No : 1

Groups Printed- Cars

Start Time	Route 6 From North					Truro Central School From East					Route 6 From South					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:45 AM	0	29	0	0	29	0	0	0	0	0	0	36	3	0	39	68
Total	0	29	0	0	29	0	0	0	0	0	0	36	3	0	39	68
07:00 AM	1	30	0	0	31	0	0	0	0	0	0	45	0	0	45	76
07:15 AM	1	32	0	0	33	0	0	0	0	0	0	64	2	0	66	99
07:30 AM	3	38	0	0	41	1	0	0	0	1	0	101	6	0	107	149
07:45 AM	9	41	0	0	50	14	0	11	0	25	0	63	18	1	82	157
Total	14	141	0	0	155	15	0	11	0	26	0	273	26	1	300	481
08:00 AM	3	40	0	0	43	11	0	4	0	15	0	63	9	0	72	130
08:15 AM	0	55	0	0	55	1	0	0	0	1	0	54	1	0	55	111
08:30 AM	1	44	0	0	45	0	0	1	0	1	0	67	0	0	67	113
Grand Total	18	309	0	0	327	27	0	16	0	43	0	493	39	1	533	903
Apprch %	5.5	94.5	0	0		62.8	0	37.2	0		0	92.5	7.3	0.2		
Total %	2	34.2	0	0	36.2	3	0	1.8	0	4.8	0	54.6	4.3	0.1	59	

Cape Cod Commission

3225 Main Street
Barnstable, Mass. 02630

www.capecodcommission.org

File Name : Not Named 1

Site Code : 00003812

Start Date : 2/13/2023

Page No : 1

Groups Printed- Trucks

Start Time	Route 6 From North					Truro Central School From East					Route 6 From South					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:45 AM	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	7
Total	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	7
07:00 AM	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	8
07:15 AM	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	8
07:30 AM	0	7	0	0	7	0	0	0	0	0	0	7	1	0	8	15
07:45 AM	2	3	0	0	5	0	0	2	0	2	0	10	0	0	10	17
Total	2	17	0	0	19	0	0	2	0	2	0	26	1	0	27	48
08:00 AM	1	4	1	0	6	0	0	1	0	1	0	10	0	0	10	17
08:15 AM	0	4	0	0	4	0	0	0	0	0	0	19	2	0	21	25
08:30 AM	0	12	0	0	12	0	0	1	0	1	0	14	0	0	14	27
Grand Total	3	39	1	0	43	0	0	4	0	4	0	74	3	0	77	124
Apprch %	7	90.7	2.3	0		0	0	100	0		0	96.1	3.9	0		
Total %	2.4	31.5	0.8	0	34.7	0	0	3.2	0	3.2	0	59.7	2.4	0	62.1	

Cape Cod Commission

3225 Main Street
Barnstable, Mass. 02630

www.capecodcommission.org

File Name : 3812_02162023

Site Code : 00003812

Start Date : 2/16/2023

Page No : 1

Groups Printed- Cars - Trucks

Start Time	Route 6 From North					Truro Central School From East					Route 6 From South					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:15 PM	1	73	0	0	74	0	0	0	0	0	0	64	2	0	66	140
02:30 PM	4	73	0	0	77	1	0	1	0	2	0	52	5	0	57	136
02:45 PM	4	90	0	0	94	14	0	9	0	23	0	54	5	0	59	176
Total	9	236	0	0	245	15	0	10	0	25	0	170	12	0	182	452
03:00 PM	0	93	0	0	93	3	0	0	0	3	0	64	2	0	66	162
03:15 PM	1	90	0	0	91	1	0	0	0	1	0	59	0	0	59	151
03:30 PM	0	92	0	0	92	0	0	1	0	1	0	55	1	0	56	149
03:45 PM	5	81	0	0	86	1	0	3	0	4	0	57	5	0	62	152
Total	6	356	0	0	362	5	0	4	0	9	0	235	8	0	243	614
04:00 PM	1	95	0	0	96	8	0	3	0	11	0	54	0	0	54	161
04:15 PM	1	82	0	0	83	7	0	2	0	9	0	68	2	0	70	162
04:30 PM	0	82	0	0	82	0	0	0	0	0	0	68	0	0	68	150
04:45 PM	0	93	0	0	93	0	0	0	0	0	0	41	11	0	52	145
Total	2	352	0	0	354	15	0	5	0	20	0	231	13	0	244	618
05:00 PM	0	66	0	0	66	0	0	1	0	1	0	57	1	0	58	125
Grand Total	17	1010	0	0	1027	35	0	20	0	55	0	693	34	0	727	1809
Apprch %	1.7	98.3	0	0		63.6	0	36.4	0		0	95.3	4.7	0		
Total %	0.9	55.8	0	0	56.8	1.9	0	1.1	0	3	0	38.3	1.9	0	40.2	
Cars	16	935	0	0	951	34	0	19	0	53	0	652	33	0	685	1689
% Cars	94.1	92.6	0	0	92.6	97.1	0	95	0	96.4	0	94.1	97.1	0	94.2	93.4
Trucks	1	75	0	0	76	1	0	1	0	2	0	41	1	0	42	120
% Trucks	5.9	7.4	0	0	7.4	2.9	0	5	0	3.6	0	5.9	2.9	0	5.8	6.6

Cape Cod Commission

3225 Main Street
Barnstable, Mass. 02630

www.capecodcommission.org

File Name : 3812_02162023

Site Code : 00003812

Start Date : 2/16/2023

Page No : 1

Groups Printed- Cars

Start Time	Route 6 From North					Truro Central School From East					Route 6 From South					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:15 PM	0	68	0	0	68	0	0	0	0	0	0	63	2	0	65	133
02:30 PM	4	68	0	0	72	1	0	1	0	2	0	50	5	0	55	129
02:45 PM	4	83	0	0	87	13	0	8	0	21	0	47	5	0	52	160
Total	8	219	0	0	227	14	0	9	0	23	0	160	12	0	172	422
03:00 PM	0	88	0	0	88	3	0	0	0	3	0	63	2	0	65	156
03:15 PM	1	77	0	0	78	1	0	0	0	1	0	50	0	0	50	129
03:30 PM	0	84	0	0	84	0	0	1	0	1	0	47	1	0	48	133
03:45 PM	5	76	0	0	81	1	0	3	0	4	0	53	5	0	58	143
Total	6	325	0	0	331	5	0	4	0	9	0	213	8	0	221	561
04:00 PM	1	89	0	0	90	8	0	3	0	11	0	53	0	0	53	154
04:15 PM	1	79	0	0	80	7	0	2	0	9	0	67	2	0	69	158
04:30 PM	0	75	0	0	75	0	0	0	0	0	0	65	0	0	65	140
04:45 PM	0	89	0	0	89	0	0	0	0	0	0	39	10	0	49	138
Total	2	332	0	0	334	15	0	5	0	20	0	224	12	0	236	590
05:00 PM	0	59	0	0	59	0	0	1	0	1	0	55	1	0	56	116
Grand Total	16	935	0	0	951	34	0	19	0	53	0	652	33	0	685	1689
Apprch %	1.7	98.3	0	0		64.2	0	35.8	0		0	95.2	4.8	0		
Total %	0.9	55.4	0	0	56.3	2	0	1.1	0	3.1	0	38.6	2	0	40.6	

Cape Cod Commission

3225 Main Street
Barnstable, Mass. 02630

www.capecodcommission.org

File Name : 3812_02162023

Site Code : 00003812

Start Date : 2/16/2023

Page No : 1

Groups Printed- Trucks

Start Time	Route 6 From North					Truro Central School From East					Route 6 From South					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:15 PM	1	5	0	0	6	0	0	0	0	0	0	1	0	0	1	7
02:30 PM	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	7
02:45 PM	0	7	0	0	7	1	0	1	0	2	0	7	0	0	7	16
Total	1	17	0	0	18	1	0	1	0	2	0	10	0	0	10	30
03:00 PM	0	5	0	0	5	0	0	0	0	0	0	1	0	0	1	6
03:15 PM	0	13	0	0	13	0	0	0	0	0	0	9	0	0	9	22
03:30 PM	0	8	0	0	8	0	0	0	0	0	0	8	0	0	8	16
03:45 PM	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	9
Total	0	31	0	0	31	0	0	0	0	0	0	22	0	0	22	53
04:00 PM	0	6	0	0	6	0	0	0	0	0	0	1	0	0	1	7
04:15 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	4
04:30 PM	0	7	0	0	7	0	0	0	0	0	0	3	0	0	3	10
04:45 PM	0	4	0	0	4	0	0	0	0	0	0	2	1	0	3	7
Total	0	20	0	0	20	0	0	0	0	0	0	7	1	0	8	28
05:00 PM	0	7	0	0	7	0	0	0	0	0	0	2	0	0	2	9
Grand Total	1	75	0	0	76	1	0	1	0	2	0	41	1	0	42	120
Apprch %	1.3	98.7	0	0		50	0	50	0		0	97.6	2.4	0		
Total %	0.8	62.5	0	0	63.3	0.8	0	0.8	0	1.7	0	34.2	0.8	0	35	

Cape Cod Commission

3225 Main Street
Barnstable, Mass. 02630

www.capecodcommission.org

File Name : 3812_02162023

Site Code : 00003812

Start Date : 2/16/2023

Page No : 1

Groups Printed- Bikes

Start Time	Route 6 From North					Truro Central School From East					Route 6 From South					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
*** BREAK ***																
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		
Total %																

APPENDIX B

ROUTE 6 N OF CASTLE ROAD RADAR DATA

20765	Truro	Rt 6 N of Castle Rd									
NB											
Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Week Day Avg	Weekend Avg	Week Day 85% Avg Speed	
	2/13/2023	2/14/2023	2/15/2023	2/16/2023	2/17/2023	2/18/2023	2/19/2023				
0 - 1	5	9	5	4	7			6	0	54.9	
1 - 2	1	2	3	4	4			3	0	50.4	
2 - 3	1	3	3	6	5			4	0	58.6	
3 - 4	8	4	4	4	3			5	0	55.2	
4 - 5	6	6	9	10	10			8	0	48.7	
5 - 6	24	28	28	23	25			26	0	53.8	
6 - 7	86	102	92	101	108			98	0	53.2	
7 - 8	263	338	311	318	259			298	0	52.2	
8 - 9	311	334	331	348	344			334	0	51.7	
9 - 10	237	296	233	258	250			255	0	52.4	
10 - 11	240	258	255	255	214			244	0	51.9	
11 - 12	234	269	238	229	275			249	0	51.7	
12 - 13	217	261	233	286	274			254	0	51.8	
13 - 14	214	245	197	269	238			233	0	52.6	
14 - 15	197	244	202	225	246			223	0	52.5	
15 - 16	260	231	238	234	260			245	0	52.4	
16 - 17	191	199	200	238	201			206	0	52.2	
17 - 18	152	181	193	205	173			181	0	52	
18 - 19	91	106	108	143	138			117	0	52.3	
19 - 20	58	61	68	84	89			72	0	53.2	
20 - 21	42	50	31	54	54			46	0	53	
21 - 22	25	47	43	42	48			41	0	51.4	
22 - 23	22	30	19	31	58			32	0	52.6	
23 - 24	5	13	12	19	25			15	0	53.5	
Totals	2890	3317	3056	3390	3308	0	0	3192			
% of Total	18.10%	20.80%	19.10%	21.20%	20.70%	0%	0%				
85th Percentile Speed (MPH):										53.0	

20765	Truro	Rt 6 N of Castle Rd									
SB											
Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Week Day Avg	Weekend Avg	Week Day 85% Avg Speed	
	2/13/2023	2/14/2023	2/15/2023	2/16/2023	2/17/2023	2/18/2023	2/19/2023				
0 - 1	8	3	6	2	2			4	0	51.6	
1 - 2	10	3	2	4	8			5	0	52.2	
2 - 3	3	2	3	4	2			3	0	51.8	
3 - 4	2	5	9	8	8			6	0	55.4	
4 - 5	9	7	6	6	7			7	0	53.4	
5 - 6	17	24	20	14	21			19	0	53.9	
6 - 7	74	69	63	77	66			70	0	52.7	
7 - 8	174	185	218	166	152			179	0	51.8	
8 - 9	246	261	218	239	231			239	0	51.1	
9 - 10	183	231	222	235	242			223	0	51.8	
10 - 11	237	301	241	245	267			258	0	51.4	
11 - 12	209	258	264	281	331			269	0	51.8	
12 - 13	283	292	289	273	291			286	0	51.8	
13 - 14	285	297	265	302	278			285	0	52	
14 - 15	271	314	270	336	294			297	0	51.5	
15 - 16	379	393	347	384	371			375	0	52.2	
16 - 17	367	379	379	366	282			355	0	51.4	
17 - 18	255	265	246	280	221			253	0	51.3	
18 - 19	113	143	138	144	118			131	0	52.1	
19 - 20	77	75	76	77	108			83	0	52.3	
20 - 21	48	62	74	96	45			65	0	51.8	
21 - 22	35	47	49	61	48			48	0	52.4	
22 - 23	22	30	20	31	48			30	0	51.7	
23 - 24	14	23	17	13	32			20	0	55.3	
Totals	3321	3669	3442	3644	3473	0	0	3510			
% of Total	18.90%	20.90%	19.60%	20.80%	19.80%	0%	0%				
85th Percentile Speed (MPH):										52.0	

APPENDIX C

ROUTE 6 @ WELLFLEET/TRURO TOWN LINE RADAR DATA (FEBRUARY & JULY)

20679	Wellfleet	Rt 6 @ Well/Trur TL										
NB												
Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Week Day Avg	Weekend Avg	Week Day 85% Avg Speed		
	2/14/2022	2/15/2022	2/16/2022	2/17/2022	2/18/2022	2/19/2022	2/20/2022					
0 - 1	6	7	10					8	0	49.6		
1 - 2	7	3	6					5	0	52		
2 - 3	0	5	2					2	0	37.3		
3 - 4	5	4	4					4	0	52.8		
4 - 5	7	5	8					7	0	56		
5 - 6	19	27	18					21	0	50.3		
6 - 7	71	118	139					109	0	52.1		
7 - 8	166	283	303					251	0	51.2		
8 - 9	230	333						282	0	50.6		
9 - 10	214	248						231	0	51		
10 - 11	202	229						216	0	51.8		
11 - 12	167	177						172	0	53.6		
12 - 13	163	223						193	0	53.2		
13 - 14	143	200						172	0	54.1		
14 - 15	171	197						184	0	52.8		
15 - 16	198	217						208	0	53.1		
16 - 17	174	188						181	0	53.7		
17 - 18	152	161						157	0	51.9		
18 - 19	93	89						91	0	52.8		
19 - 20	59	63						61	0	53.9		
20 - 21	48	55						52	0	53.1		
21 - 22	47	32						40	0	53.2		
22 - 23	38	36						37	0	54.4		
23 - 24	11	23						17	0	54.8		
Totals	2391	2923	787	0	0	0	0	2698				
% of Total	39.20%	47.90%	12.90%	0%	0%	0%	0%					
85th Percentile Speed (MPH):										54.0		

20679	Wellfleet	Rt 6 @ Well/Trur TL										
SB												
Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Week Day Avg	Weekend Avg	Week Day 85% Avg Speed		
	2/14/2022	2/15/2022	2/16/2022	2/17/2022	2/18/2022	2/19/2022	2/20/2022					
0 - 1	6	3	5					5	0	50		
1 - 2	4	4	6					5	0	44.7		
2 - 3	6	3	6					5	0	48.2		
3 - 4	7	11	5					8	0	48.7		
4 - 5	10	12	5					9	0	50.7		
5 - 6	20	26	20					22	0	51.1		
6 - 7	44	69	60					58	0	51.6		
7 - 8	94	158	168					140	0	51.3		
8 - 9	132	213						173	0	50.6		
9 - 10	186	197						192	0	50.8		
10 - 11	221	268						245	0	51.3		
11 - 12	198	229						214	0	52.2		
12 - 13	200	236						218	0	51.9		
13 - 14	222	248						235	0	52.8		
14 - 15	225	281						253	0	52.3		
15 - 16	306	337						322	0	51.8		
16 - 17	261	355						308	0	52.3		
17 - 18	212	244						228	0	52		
18 - 19	116	97						107	0	51.5		
19 - 20	74	54						64	0	52.7		
20 - 21	48	45						47	0	52		
21 - 22	28	16						22	0	54		
22 - 23	27	15						21	0	51.5		
23 - 24	13	9						11	0	58.5		
Totals	2660	3130	452	0	0	0	0	2907				
% of Total	42.60%	50.10%	7.20%	0%	0%	0%	0%					
85th Percentile Speed (MPH):										53.0		

20679	Wellfleet	Rt 6 @ Well/Trur TL										
NB												
	Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Week Day Avg	Weekend Avg	Week Day 85% Avg Speed	
		7/11/2022	7/12/2022	7/13/2022	7/14/2022	7/15/2022	7/16/2022	7/17/2022				
	0 - 1			39	45				42	0	52	
	1 - 2			18	16				17	0	52	
	2 - 3			12	8				10	0	59.5	
	3 - 4			16	15				16	0	56.5	
	4 - 5			30	25				28	0	55.5	
	5 - 6			59	62				61	0	54.2	
	6 - 7			164	163				164	0	53.6	
	7 - 8			417	402				410	0	51.9	
	8 - 9			587	544				566	0	50.3	
	9 - 10			573	686				630	0	49	
	10 - 11		757	664					711	0	49	
	11 - 12		772	834					803	0	48.8	
	12 - 13		741	726					734	0	49.5	
	13 - 14		743	648					696	0	49.3	
	14 - 15		659	614					637	0	49.7	
	15 - 16		636	545					591	0	50.2	
	16 - 17		500	477					489	0	50.8	
	17 - 18		474	543					509	0	50.1	
	18 - 19		350	463					407	0	50.8	
	19 - 20		254	330					292	0	51.3	
	20 - 21		247	286					267	0	49.7	
	21 - 22		149	199					174	0	50.1	
	22 - 23		109	120					115	0	51.9	
	23 - 24		47	58					53	0	52	
	Totals	0	6780	8422	2598	0	0	0	8413			
	% of Total	0%	38.10%	47.30%	14.60%	0%	0%	0%				
85th Percentile Speed (MPH):											51.0	
20679	Wellfleet	Rt 6 @ Well/Trur TL										
SB												
	Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Week Day Avg	Weekend Avg	Week Day 85% Avg Speed	
		7/11/2022	7/12/2022	7/13/2022	7/14/2022	7/15/2022	7/16/2022	7/17/2022				
	0 - 1			24	38				31	0	54	
	1 - 2			28	19				24	0	52.5	
	2 - 3			11	14				13	0	55	
	3 - 4			29	11				20	0	57.4	
	4 - 5			19	21				20	0	52	
	5 - 6			63	47				55	0	53.1	
	6 - 7			114	123				119	0	53.2	
	7 - 8			250	236				243	0	51	
	8 - 9			371	330				351	0	50.8	
	9 - 10			432	409				421	0	49	
	10 - 11		456	476					466	0	49	
	11 - 12		474	469					472	0	49.2	
	12 - 13		549	494					522	0	49.2	
	13 - 14		604	532					568	0	49.2	
	14 - 15		707	609					658	0	49	
	15 - 16		810	734					772	0	49.1	
	16 - 17		851	789					820	0	49.1	
	17 - 18		718	712					715	0	48.8	
	18 - 19		528	510					519	0	48.9	
	19 - 20		441	422					432	0	49.7	
	20 - 21		319	412					366	0	46.9	
	21 - 22		296	512					404	0	47.9	
	22 - 23		164	200					182	0	49.6	
	23 - 24		107	128					118	0	51.1	
	Totals	0	7281	8340	1699	0	0	0	8306			
	% of Total	0%	42%	48.20%	9.80%	0%	0%	0%				
85th Percentile Speed (MPH):											50.0	

APPENDIX D

SITE TRIP GENERATION

Site Trip Generation

	Residential			Daycare			Office			Total Site		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
Weekday Daily	876	876	1752	119	119	238	147	147	293	1142	1142	2283
Weekday Morning Peak Hour	25	79	104	29	26	55	36	5	41	90	110	200
Weekday Evening Peak Hour	84	49	133	26	30	56	7	32	39	117	111	228

7:30-8:30 AM Peak Hour Volumes AM - February

Trip Distribution - <https://app.powerbigov.us/view?r=eyJrIjoim2I4NmYwZTQtMWMYnCO0ODM4LTkwYzAtMTQwZDI1Zjc0MmU4IiwidCI6Ijg0NDc1MjE3LWl0MjMtNDhkYi1iNzY2LWVkaWVhVhNzRmMSJ9>

Scenario			TRIP GEN (IN)			90 TRIP GEN (OUT)			110
Intersection	Direction	Movement	2023 Existing	Truck %	PHF	Future Volumes	Trip Distribution	Site Trips	2030 Future
			Volume			(0.50% per year, over 7 years)			Build Volumes
Rt 6 at Truro Central school	WB	L	27	0%	0.80	27		0	27
		R	18	17%		18		0	18
	NB	T	327	14%	0.80	339			339
		R	37	8%		37		0	37
	SB	L	18	100%	0.89	18		0	18
	T	192	5%		199			199	
Rt 6 @ Walsh Property Driveway	WB	L			0.80	0	75%	83	83
		R				0	25%	28	28
	NB	T	364	14%	0.80	377			377
		R				0	75%	68	68
	SB	L			0.89	0	25%	23	23
	T	219	5%		227			227	

7:30-8:30 AM Peak Hour Volumes AM - July

Trip Distribution - <https://app.powerbigov.us/view?r=eyJrjoiM2I4NmYwZTQzMWMyNC00ODM4LTkwYzAtMTQwZDI1Zjc0MmU4IiwidCI6Ijg0NDc1MjE3LWl0MjMtNDhkYi1iNzY2LWVkaWVhVhNzRmMSJ9>

Scenario			TRIP GEN (IN)		90 TRIP GEN (OUT)		110		
Intersection	Direction	Movement	2023 Existing Volume	Truck %	PHF	Future Volumes	Trip Distribution	Site Trips	2030 Future Build Volumes
						(0.50% per year, over 7 years)			Volumes
Rt 6 at Truro Central school	WB	L	0	0%	0.80	0		0	0
		R	0	17%		0		0	0
	NB	T	654	14%	0.80	677		0	677
		R	0	8%		0		0	0
	SB	L	0	100%	0.89	0		0	0
	T	384	5%		398			398	
Rt 6 @ Walsh Property Driveway	WB	L			0.80	0	75%	83	83
		R				0	25%	28	28
	NB	T	654	14%	0.80	677		68	677
		R				0	75%	68	68
	SB	L			0.89	0	25%	23	23
	T	384	5%		398			398	

4:00-5:00 PM Peak Hour Volumes PM - July

Trip Distribution - <https://app.powerbigov.us/view?r=eyJrjoiM2I4NmYwZTQtMWMYnCOODM4LTkwYzAtMTQwZDI1Zjc0MmU4IiwidCI6Ijg0NDc1MjE3LWl0MjMtNDhkYi1iNzY2LWVknGJiYmVhNzRmMSJ9>

Scenario			TRIP GEN (IN)		117 TRIP GEN (OUT)		111		2030 Future Build Volumes	
Intersection	Direction	Movement	2023 Existing	Truck %	PHF	Future Volumes	Trip Distribution	Site Trips	2030 Future Build Volumes	
			Volume			(0.50% per year, over 7 years)				
Rt 6 at Truro Central school	WB	L	0	0%	0.80	0		0	0	
		R	0	0%		0		0	0	
	NB	T	578	3%	0.80	598		0	598	
		R	0	8%		0		0	0	
	SB	L	0	0%	0.89	0		0	0	
	T	880	6%		911			911		
Rt 6 @ Walsh Property Driveway	WB	L			0.80	0	75%	83	83	
		R				0	25%	28	28	
	NB	T	578	3%	0.80	598		88	598	
		R				0	75%	88	88	
	SB	L			0.89	0	25%	29	29	
	T	880	6%		911			911		

APPENDIX E

SYNCHRO 11 (EXISTING, FUTURE BUILD, FUTURE NO BUILD)

HCM 2010 TWSC
3: Route 6 & Truro School Driveway

05/18/2023

Intersection						
Int Delay, s/veh	2.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	W	T	T	T	T
Traffic Vol, veh/h	27	18	327	37	18	192
Future Vol, veh/h	27	18	327	37	18	192
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	42	42	80	80	89	89
Heavy Vehicles, %	0	17	14	8	17	9
Mvmt Flow	64	43	409	46	20	216

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	688	432	0	0	455
Stage 1	432	-	-	-	-
Stage 2	256	-	-	-	-
Critical Hdwy	6.4	6.37	-	-	4.27
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.453	-	-	2.353
Pot Cap-1 Maneuver	415	593	-	-	1031
Stage 1	659	-	-	-	-
Stage 2	791	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	406	593	-	-	1031
Mov Cap-2 Maneuver	406	-	-	-	-
Stage 1	659	-	-	-	-
Stage 2	774	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	465	1031
HCM Lane V/C Ratio	-	-	0.23	0.02
HCM Control Delay (s)	-	-	15	8.6
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.9	0.1

HCM 2010 TWSC
6: Route 6 & Walsh Property

05/18/2023

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	364	0	0	219
Future Vol, veh/h	0	0	364	0	0	219
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	396	0	0	238

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	634	396	0	0	396
Stage 1	396	-	-	-	-
Stage 2	238	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	443	653	-	-	1163
Stage 1	680	-	-	-	-
Stage 2	802	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	443	653	-	-	1163
Mov Cap-2 Maneuver	443	-	-	-	-
Stage 1	680	-	-	-	-
Stage 2	802	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1163
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

HCM 2010 TWSC
 3: Route 6 & Truro School Driveway

05/18/2023

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	654	0	0	384
Future Vol, veh/h	0	0	654	0	0	384
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	42	42	80	80	89	89
Heavy Vehicles, %	0	17	14	8	17	9
Mvmt Flow	0	0	818	0	0	431

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1249	818	0	0	818	0
Stage 1	818	-	-	-	-	-
Stage 2	431	-	-	-	-	-
Critical Hdwy	6.4	6.37	-	-	4.27	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.453	-	-	2.353	-
Pot Cap-1 Maneuver	193	354	-	-	749	-
Stage 1	437	-	-	-	-	-
Stage 2	660	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	193	354	-	-	749	-
Mov Cap-2 Maneuver	193	-	-	-	-	-
Stage 1	437	-	-	-	-	-
Stage 2	660	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	749
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

HCM 2010 TWSC
6: Route 6 & Walsh Property

05/18/2023

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	654	0	0	384
Future Vol, veh/h	0	0	654	0	0	384
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	711	0	0	417

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1128	711	0	0	711	0
Stage 1	711	-	-	-	-	-
Stage 2	417	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	226	433	-	-	888	-
Stage 1	487	-	-	-	-	-
Stage 2	665	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	226	433	-	-	888	-
Mov Cap-2 Maneuver	226	-	-	-	-	-
Stage 1	487	-	-	-	-	-
Stage 2	665	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	888
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

HCM 2010 TWSC
3: Route 6 & Truro School Driveway

05/18/2023

Intersection						
Int Delay, s/veh	2.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	27	18	339	37	18	199
Future Vol, veh/h	27	18	339	37	18	199
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	42	42	80	80	89	89
Heavy Vehicles, %	0	17	14	8	17	9
Mvmt Flow	64	43	424	46	20	224

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	711	447	0	0	470
Stage 1	447	-	-	-	-
Stage 2	264	-	-	-	-
Critical Hdwy	6.4	6.37	-	-	4.27
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.453	-	-	2.353
Pot Cap-1 Maneuver	403	581	-	-	1018
Stage 1	649	-	-	-	-
Stage 2	785	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	394	581	-	-	1018
Mov Cap-2 Maneuver	394	-	-	-	-
Stage 1	649	-	-	-	-
Stage 2	768	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.4	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	452	1018
HCM Lane V/C Ratio	-	-	0.237	0.02
HCM Control Delay (s)	-	-	15.4	8.6
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.9	0.1

HCM 2010 TWSC
6: Route 6 & Walsh Property

05/18/2023

Intersection						
Int Delay, s/veh	2.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	83	28	377	68	23	227
Future Vol, veh/h	83	28	377	68	23	227
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	90	30	410	74	25	247

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	744	447	0	0	484
Stage 1	447	-	-	-	-
Stage 2	297	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	382	612	-	-	1079
Stage 1	644	-	-	-	-
Stage 2	754	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	372	612	-	-	1079
Mov Cap-2 Maneuver	372	-	-	-	-
Stage 1	644	-	-	-	-
Stage 2	734	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.3	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	413	1079
HCM Lane V/C Ratio	-	-	0.292	0.023
HCM Control Delay (s)	-	-	17.3	8.4
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1.2	0.1

HCM 2010 TWSC
 3: Route 6 & Truro School Driveway

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Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	677	0	0	398
Future Vol, veh/h	0	0	677	0	0	398
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	42	42	80	80	89	89
Heavy Vehicles, %	0	17	14	8	17	9
Mvmt Flow	0	0	846	0	0	447

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1293	846	0	0	846
Stage 1	846	-	-	-	-
Stage 2	447	-	-	-	-
Critical Hdwy	6.4	6.37	-	-	4.27
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.453	-	-	2.353
Pot Cap-1 Maneuver	181	341	-	-	730
Stage 1	424	-	-	-	-
Stage 2	649	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	181	341	-	-	730
Mov Cap-2 Maneuver	181	-	-	-	-
Stage 1	424	-	-	-	-
Stage 2	649	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	730	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

HCM 2010 TWSC
6: Route 6 & Walsh Property

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Intersection						
Int Delay, s/veh	3.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	83	28	677	68	23	398
Future Vol, veh/h	83	28	677	68	23	398
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	90	30	736	74	25	433

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1256	773	0	0	810
Stage 1	773	-	-	-	-
Stage 2	483	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	189	399	-	-	816
Stage 1	455	-	-	-	-
Stage 2	620	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	181	399	-	-	816
Mov Cap-2 Maneuver	181	-	-	-	-
Stage 1	455	-	-	-	-
Stage 2	595	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	43	0	0.5
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	210	816
HCM Lane V/C Ratio	-	-	0.575	0.031
HCM Control Delay (s)	-	-	43	9.6
HCM Lane LOS	-	-	E	A
HCM 95th %tile Q(veh)	-	-	3.2	0.1

HCM 2010 TWSC
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Intersection						
Int Delay, s/veh	2.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	R	T	R	L	T
Traffic Vol, veh/h	27	18	339	37	18	199
Future Vol, veh/h	27	18	339	37	18	199
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	42	42	80	80	89	89
Heavy Vehicles, %	0	17	14	8	17	9
Mvmt Flow	64	43	424	46	20	224

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	711	447	0	0	470
Stage 1	447	-	-	-	-
Stage 2	264	-	-	-	-
Critical Hdwy	6.4	6.37	-	-	4.27
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.453	-	-	2.353
Pot Cap-1 Maneuver	403	581	-	-	1018
Stage 1	649	-	-	-	-
Stage 2	785	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	394	581	-	-	1018
Mov Cap-2 Maneuver	394	-	-	-	-
Stage 1	649	-	-	-	-
Stage 2	768	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.4	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	452	1018
HCM Lane V/C Ratio	-	-	0.237	0.02
HCM Control Delay (s)	-	-	15.4	8.6
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.9	0.1

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	377	0	0	227
Future Vol, veh/h	0	0	377	0	0	227
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	410	0	0	247

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	657	410	0	0	410	0
Stage 1	410	-	-	-	-	-
Stage 2	247	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	430	642	-	-	1149	-
Stage 1	670	-	-	-	-	-
Stage 2	794	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	430	642	-	-	1149	-
Mov Cap-2 Maneuver	430	-	-	-	-	-
Stage 1	670	-	-	-	-	-
Stage 2	794	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1149
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

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Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	677	0	0	398
Future Vol, veh/h	0	0	677	0	0	398
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	42	42	80	80	89	89
Heavy Vehicles, %	0	17	14	8	17	9
Mvmt Flow	0	0	846	0	0	447

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1293	846	0	0	846
Stage 1	846	-	-	-	-
Stage 2	447	-	-	-	-
Critical Hdwy	6.4	6.37	-	-	4.27
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.453	-	-	2.353
Pot Cap-1 Maneuver	181	341	-	-	730
Stage 1	424	-	-	-	-
Stage 2	649	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	181	341	-	-	730
Mov Cap-2 Maneuver	181	-	-	-	-
Stage 1	424	-	-	-	-
Stage 2	649	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	730	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

HCM 2010 TWSC
6: Route 6 & Walsh Property

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Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	677	0	0	398
Future Vol, veh/h	0	0	677	0	0	398
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	736	0	0	433

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1169	736	0	0	736
Stage 1	736	-	-	-	-
Stage 2	433	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	213	419	-	-	870
Stage 1	474	-	-	-	-
Stage 2	654	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	213	419	-	-	870
Mov Cap-2 Maneuver	213	-	-	-	-
Stage 1	474	-	-	-	-
Stage 2	654	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	870	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

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Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	R	T	R	L	T
Traffic Vol, veh/h	15	5	231	13	2	352
Future Vol, veh/h	15	5	231	13	2	352
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	90	90	92	92
Heavy Vehicles, %	0	0	3	8	0	6
Mvmt Flow	30	10	257	14	2	383

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	651	264	0	0	271	0
Stage 1	264	-	-	-	-	-
Stage 2	387	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	436	780	-	-	1304	-
Stage 1	785	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	435	780	-	-	1304	-
Mov Cap-2 Maneuver	435	-	-	-	-	-
Stage 1	785	-	-	-	-	-
Stage 2	690	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	489	1304
HCM Lane V/C Ratio	-	-	0.082	0.002
HCM Control Delay (s)	-	-	13	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0

HCM 2010 TWSC
6: Route 6 & Walsh Property

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Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	244	0	0	367
Future Vol, veh/h	0	0	244	0	0	367
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	265	0	0	399

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	664	265	0	0	265	0
Stage 1	265	-	-	-	-	-
Stage 2	399	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	426	774	-	-	1299	-
Stage 1	779	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	426	774	-	-	1299	-
Mov Cap-2 Maneuver	426	-	-	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	678	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1299
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

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Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	578	0	0	880
Future Vol, veh/h	0	0	578	0	0	880
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	90	90	92	92
Heavy Vehicles, %	0	0	3	8	0	6
Mvmt Flow	0	0	642	0	0	957

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1599	642	0	0	642
Stage 1	642	-	-	-	-
Stage 2	957	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	118	478	-	-	952
Stage 1	528	-	-	-	-
Stage 2	376	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	118	478	-	-	952
Mov Cap-2 Maneuver	118	-	-	-	-
Stage 1	528	-	-	-	-
Stage 2	376	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	952	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

HCM 2010 TWSC
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Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	578	0	0	880
Future Vol, veh/h	0	0	578	0	0	880
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	628	0	0	957

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1585	628	0	0	628
Stage 1	628	-	-	-	-
Stage 2	957	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	119	483	-	-	954
Stage 1	532	-	-	-	-
Stage 2	373	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	119	483	-	-	954
Mov Cap-2 Maneuver	119	-	-	-	-
Stage 1	532	-	-	-	-
Stage 2	373	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	954
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

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Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	5	239	13	2	365
Future Vol, veh/h	15	5	239	13	2	365
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	90	90	92	92
Heavy Vehicles, %	0	0	3	8	0	6
Mvmt Flow	30	10	266	14	2	397

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	674	273	0	0	280
Stage 1	273	-	-	-	-
Stage 2	401	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	423	771	-	-	1294
Stage 1	778	-	-	-	-
Stage 2	681	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	422	771	-	-	1294
Mov Cap-2 Maneuver	422	-	-	-	-
Stage 1	778	-	-	-	-
Stage 2	680	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	476	1294
HCM Lane V/C Ratio	-	-	0.084	0.002
HCM Control Delay (s)	-	-	13.3	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0

Intersection						
Int Delay, s/veh	2.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		T			T
Traffic Vol, veh/h	83	28	253	88	29	380
Future Vol, veh/h	83	28	253	88	29	380
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	2	2	6
Mvmt Flow	90	30	275	96	32	413

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	800	323	0	0	371	0
Stage 1	323	-	-	-	-	-
Stage 2	477	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	354	718	-	-	1188	-
Stage 1	734	-	-	-	-	-
Stage 2	624	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	342	718	-	-	1188	-
Mov Cap-2 Maneuver	342	-	-	-	-	-
Stage 1	734	-	-	-	-	-
Stage 2	602	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.1	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	394	1188
HCM Lane V/C Ratio	-	-	0.306	0.027
HCM Control Delay (s)	-	-	18.1	8.1
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1.3	0.1

HCM 2010 TWSC
 3: Route 6 & Truro School Driveway

05/18/2023

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	598	0	0	911
Future Vol, veh/h	0	0	598	0	0	911
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	90	90	92	92
Heavy Vehicles, %	0	0	3	8	0	6
Mvmt Flow	0	0	664	0	0	990

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1654	664	0	0	664	0
Stage 1	664	-	-	-	-	-
Stage 2	990	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	109	464	-	-	935	-
Stage 1	516	-	-	-	-	-
Stage 2	363	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	109	464	-	-	935	-
Mov Cap-2 Maneuver	109	-	-	-	-	-
Stage 1	516	-	-	-	-	-
Stage 2	363	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	935
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection						
Int Delay, s/veh	12.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		B			A
Traffic Vol, veh/h	83	28	598	88	29	911
Future Vol, veh/h	83	28	598	88	29	911
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	2	2	6
Mvmt Flow	90	30	650	96	32	990

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1752	698	0	0	746	0
Stage 1	698	-	-	-	-	-
Stage 2	1054	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	94	440	-	-	862	-
Stage 1	494	-	-	-	-	-
Stage 2	335	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	~ 86	440	-	-	862	-
Mov Cap-2 Maneuver	~ 86	-	-	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	307	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	196.8	0	0.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	108	862
HCM Lane V/C Ratio	-	-	1.117	0.037
HCM Control Delay (s)	-	-	196.8	9.3
HCM Lane LOS	-	-	F	A
HCM 95th %tile Q(veh)	-	-	7.6	0.1

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 TWSC
3: Route 6 & Truro School Driveway

05/18/2023

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	5	239	13	2	365
Future Vol, veh/h	15	5	239	13	2	365
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	90	90	92	92
Heavy Vehicles, %	0	0	3	8	0	6
Mvmt Flow	30	10	266	14	2	397

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	674	273	0	0	280
Stage 1	273	-	-	-	-
Stage 2	401	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	423	771	-	-	1294
Stage 1	778	-	-	-	-
Stage 2	681	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	422	771	-	-	1294
Mov Cap-2 Maneuver	422	-	-	-	-
Stage 1	778	-	-	-	-
Stage 2	680	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	476	1294
HCM Lane V/C Ratio	-	-	0.084	0.002
HCM Control Delay (s)	-	-	13.3	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	TT		TT			TT
Traffic Vol, veh/h	0	0	253	0	0	380
Future Vol, veh/h	0	0	253	0	0	380
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	275	0	0	413

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	688	275	0	0	275	0
Stage 1	275	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	412	764	-	-	1288	-
Stage 1	771	-	-	-	-	-
Stage 2	668	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	412	764	-	-	1288	-
Mov Cap-2 Maneuver	412	-	-	-	-	-
Stage 1	771	-	-	-	-	-
Stage 2	668	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1288
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

HCM 2010 TWSC
 3: Route 6 & Truro School Driveway

05/18/2023

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	598	0	0	911
Future Vol, veh/h	0	0	598	0	0	911
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	90	90	92	92
Heavy Vehicles, %	0	0	3	8	0	6
Mvmt Flow	0	0	664	0	0	990

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1654	664	0	0	664	0
Stage 1	664	-	-	-	-	-
Stage 2	990	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	109	464	-	-	935	-
Stage 1	516	-	-	-	-	-
Stage 2	363	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	109	464	-	-	935	-
Mov Cap-2 Maneuver	109	-	-	-	-	-
Stage 1	516	-	-	-	-	-
Stage 2	363	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	935
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

HCM 2010 TWSC
6: Route 6 & Walsh Property

05/18/2023

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	598	0	0	911
Future Vol, veh/h	0	0	598	0	0	911
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	650	0	0	990

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1640	650	0	0	650	0
Stage 1	650	-	-	-	-	-
Stage 2	990	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	110	469	-	-	936	-
Stage 1	520	-	-	-	-	-
Stage 2	360	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	110	469	-	-	936	-
Mov Cap-2 Maneuver	110	-	-	-	-	-
Stage 1	520	-	-	-	-	-
Stage 2	360	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	936	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

CAPE COD COMMISSION

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Introduction to Draft Walsh Property Masterplan 5-25-23

The following summary reviews the information and points of consensus reached that are reflected in the current draft masterplan.

Site Conditions

The following factors influence the development potential of the property:

- Variable topography – A steep ravine runs in a NW/SE direction across the property, separating two broad plateaus on the NE and SW of the site, respectively. Nearly 27 acres of the site has grades 10%-15%, 30.7 acres of the site has grades 15%-25%, and 11.5 acres of the site has grades greater than 25%.
- Rare species habitat – Almost all of the property is mapped by the MA Natural Heritage and Endangered Species program as priority habitat for rare species. This requires onsite/offsite mitigation of 2:1 for any portion of mapped habitat that is disturbed by development.
- Public water supply – The Walsh property is entirely within a Zone II water supply protection area and is adjacent to a Zone I public water supply protection area. The Town is proposing to site a new water tower adjacent to the property.

Development Areas

In light of site conditions, the Committee agreed to focus initial planning on the 28-acre SW plateau located closest to Route 6, known as Area A. Planning for the 5-acre NE plateau, known as Area B, is on hold pending the location of a future water supply well. (10/26/22 meeting).

Preferred Community Uses

Following extensive community outreach, including a town-wide survey and multiple public meetings, the Committee identified priority uses for Area A, as described below:

- Housing for Truro residents at different income levels and life stages is the priority use of the site. The Committee decided on a target of 252 units in Area A, consisting of 152 affordable housing units affordable to residents of less than 50% to up to 120% of area median income (approximately 60% of the need identified in the draft Truro Housing Production Plan) plus 100 market rate affordable units. This will require buildings with higher density than is typically found in Truro (2/1/23 meeting).
- Up to 30,000 - 40,000 sf of commercial uses in Area A (3/29/23 meeting), provided this does not displace desired housing units. Commercial uses could include space for community-oriented businesses (e.g. day care, youth center, food pantry kitchen); small scale retail, and live work spaces for trades, artists, or other businesses.
- A multi-use athletic field/community outdoor event space, provided this does not displace desired housing units. Walking trails that are accessible to the public, and other recreation opportunities interspersed in Area A are also desired. (2/1/23 meeting)
- Truro Central School is in need of an additional 7-acres to make it eligible for state building funds. The 7acres shown on the plan could also be the location of the large athletic field/community outdoor event space.

Site Access

The only established site access is via Walsh Way. The entrance to the Truro Central School is a potential secondary access that could be explored. The Town is also exploring the potential for secondary or emergency access via Andrew Way/Leeward Passage and/or Quail Ridge Road. The

Introduction to Draft Walsh Property Masterplan 5-25-23

Cape Cod Commission is developing initial transportation safety assessment based on the proposed breakdown of uses square footage ranges agreed to above.

Water and Wastewater

Denitrifying wastewater treatment will be needed to accommodate the desired density of uses and meet Zone II requirements. Public water supply is available to the site. The proposed new water tower to be located adjacent to the site is intended to ensure necessary water pressure.

Draft Plan

The draft plan shows how desired uses could be positioned on Area A, given site constraints and established site access.

DRAFT



Plan Data

 Commercial/Stacked Flats	52
- 3-Story	
- 32,000 SF Commercial	
- 52 - 900 SF Flats	
 Stacked Flats	84
- 2-Story	
- 950 SF	
 Townhouses	84
- 2-Story	
- 1,250 SF	
 Single Family	40
- 1 1/2 Story	
- 1,600 SF + 1 Car Garage	
Total	260

Notes:
 1. Topography shown is from MassGIS.
 2. Secondary egress/access may be required depending on the rights of the town.

Potential 7-Acre Transfer to School

32,000 SF Commercial
52 Stacked Flats

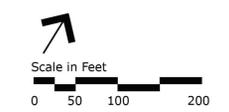
84 Stacked Flats
84 Townhouse

40 Single Family

Conceptual Master Plan
Walsh Property
 Truro, Massachusetts

May 8, 2023

Tighe&Bond
 One University Avenue, Suite 100
 Westwood, MA 02090
 (781) 708-9820



Walsh Property Technical Memorandum

Date

The summary memorandum for the Walsh property will contain recommendations on the following:

Proposed development types and land use(s)

Economic and community impact analysis

Estimated Housing Production

- The estimated number of housing units to be generated by the masterplan will be identified.
- Units (~159) specifically designated to address demand identified in the Housing Production Plan will be described by unit size and income level in proportion to the HPP.
- Recommendations for size/configuration of market rate units (~100) will be developed based on input from interviews with regional housing developers.

Estimated Jobs

- The estimated number of jobs supported by a commercial space on the property (these may not be new jobs in the community).

Municipal Services (fire, police, schools)

- Emergency services considerations will be identified based on discussions with Police and Fire Departments.
- Estimated number of school age children that could live on the property will be identified (these may not be new to the community).

Property Values and Municipal Tax Impact

- Current assessed value of the property.
- Average valuation of comparable units and/or commercial space in Truro or nearby towns based on input from Town Assessor.
- Estimated range of tax levy based on projected development.

Natural Resources

- Potential impacts to priority and estimated habitat as defined by MA Natural Heritage and Endangered Species Program.

Noise

- Identify receptors sensitive to construction noise (school, adjacent residential areas)
- Identify best management practices to limit construction-related noise (work hour limitations, prohibit use of jake brakes, etc.)

Traffic

- Tighe & Bond: trip generation estimates based on proposed land uses
- Cape Cod Commission transportation analysis
 - Conduct safety analysis – crash history
 - Provide traffic counts available from regional or corridor studies prepared by CCC or others.
 - Conduct traffic counts at the intersection of Route 6 at the Great Hollow Way/Truro Central School driveway to complete LOS/Capacity Analysis
 - Prepare LOS/Capacity analysis for existing and future build conditions for the potential access points onto Route 6 (intersection with Scrub Oak Way/Truro Central School driveway and the intersection with Great Hollow Road/Walsh Way).
 - Provide inventory of existing and/or planned alternative transportation modes/facilities in the project area (transit, on and off-road bike paths, etc.)
 - Attendance at up to two (2) public meetings

Water and Wastewater

- Identify Zone I and II to public water supply
- Estimate water consumption based on proposed uses
- Estimate wastewater generation based on proposed uses

Phasing strategy and timeline

Final conceptual plan and rendering

Estimate of probable construction costs for infrastructure associated with master plan

Recommended regulatory approach and/or zoning changes associated with the final master plan

Phasing strategy and timeline

Final conceptual plan(s)

One perspective rendering

Walsh Property Masterplan Public Outreach Roles and Responsibilities
5/15/23

1. Host town-wide Kick-off Presentation and Q&A session – Truro Central School? **T&B/Ridley & Associates**
 2. Neighbors meeting(s) **WPCPC members**
 3. Media briefing (s) **Darrin Tangeman**
 4. Post information on Town website WPCPC page **Katy Ward**
 5. Post information on Engage Truro **Katy Ward**
 6. Truro Talks – include summary, ways to send comments or questions **Katy Ward**
 7. Speakers' bureau – develop a Power Point/talking points for members to use at small scale events: **WPCPC members**
 - Neighborhood association annual meetings
 - Farmer Market table
 - Backyard/living room gatherings
 8. Displays **Tighe & Bond**
 - Display at Truro Library and Community center
 - Display where beach/transfer station stickers are sold
 9. Meet with Town Boards and Committees: Planning Board, Board of Health, LCPC , Fin Com **WPCPC w/Town Staff**
 10. Visual Survey **Tighe & Bond, coordinate w/Katy Ward**
10. Materials:
- Display boards
 - PowerPoint
 - Summary/Fact sheet/Talking points
 - Brochure mailing to households
 - Visual Survey

• Meeting Date	Meeting Prep & Tasks	Outreach Prep & Tasks	Consensus/Understanding
Achieve Consensus on Draft Masterplan			
May 31	<ul style="list-style-type: none"> • Discuss preliminary results of Cape Cod Commission traffic analysis. • Review revised draft conceptual masterplan • Meetings with development interests • Review revised workplan 	<ul style="list-style-type: none"> • Submit outreach plan for draft plan and report 	<ul style="list-style-type: none"> • Consensus on outreach roles for public review of draft conceptual masterplan • Consensus on workplan
June 14 No WPCPC meeting	<ul style="list-style-type: none"> • Meetings with regulators: local boards, Cape Cod Commission, NHESP, etc. • Submit report on developer outreach • Submit draft masterplan and report 	<ul style="list-style-type: none"> • Submit final outreach plan for draft plan and report 	
June 28	<ul style="list-style-type: none"> • Discuss report on developer outreach • Discuss public review of draft masterplan 	<ul style="list-style-type: none"> • Finalize outreach plan for draft masterplan and report 	<ul style="list-style-type: none"> • Consensus on draft conceptual masterplan and report for public comment • Consensus on outreach plan for draft masterplan and report
Public Outreach on Draft Masterplan			
July 26	<ul style="list-style-type: none"> • Meetings with regulators: local boards, Cape Cod Commission, NHESP, etc. • Discuss public comments on draft masterplan • Discuss potential refinements to draft masterplan 	<ul style="list-style-type: none"> • Implement outreach plan – draft masterplan available for public comment July 7 – August 11 	<ul style="list-style-type: none"> •
Recommend Final Masterplan			
Aug 16	<ul style="list-style-type: none"> • Submit final masterplan and summary report including community impact assessment • Discuss public comments on draft masterplan 	<ul style="list-style-type: none"> • Discuss and finalize outreach plan for recommended masterplan and summary report 	<ul style="list-style-type: none"> • Consensus on public outreach for recommended masterplan and report

• Meeting Date	Meeting Prep & Tasks	Outreach Prep & Tasks	Consensus/Understanding
Aug 30	<ul style="list-style-type: none"> Discuss and finalize masterplan and summary report 	<ul style="list-style-type: none"> Implement outreach plan for recommended masterplan and summary report—recommended plan and report available by September 8 	<ul style="list-style-type: none"> Consensus on recommended masterplan and report
Public Outreach for Recommended Masterplan			
Sep 20	<ul style="list-style-type: none"> Meetings with regulators: local boards, Cape Cod Commission, NHESP, etc. Submit draft marketing plan Review comment on recommended masterplan and report Discuss/finalize presentation for Town Meeting 	<ul style="list-style-type: none"> Public outreach occurring 	<ul style="list-style-type: none"> Consensus on presentation for Town Meeting Comments on draft marketing plan
Oct 21 Town Meeting			
By Oct 31	<ul style="list-style-type: none"> Submit final marketing plan 		