

Section 4.0
Transportation Improvement Program Summary

4.0 TRANSPORTATION IMPROVEMENT PROGRAM SUMMARY

Intersection/ Roadway	Improvement Measure	Responsible Party	Schedule for Implementation
Phase B Driveways	<ul style="list-style-type: none"> • Driveways will be a minimum of 24-feet in width and accommodate two-way travel • Exiting vehicles will be under STOP-sign control with illumination provided • Adequate sight lines will be provided and maintained • Centerline markings will consist of a double-yellow line • All signs and markings will conform to the MUTCD 	Proponent	Prior to issuance of First Certificate of Occupancy for Phase B
Route 28/Charge Pond Road	<ul style="list-style-type: none"> • Install traffic signal • Widen Route 28 eastbound to provide a left-turn lane • Install associated signs and pavement markings 	Proponent	Prior to the completion of Phase B
Route 28/Tihonet Road	<ul style="list-style-type: none"> • Install STOP-line on the Tihonet Road southbound approach • Review/upgrade/replace signs and pavement markings • Trim/maintain vegetation 	Proponent	Spring 2011 (Phase A improvement measure)
Route 28/Lou Avenue ¹	<ul style="list-style-type: none"> • Reconstruct Lou Avenue to provide three (3) exiting travel lanes and two (2) entering travel lanes separated by a raised median • Widen Route 28 northwestbound to provide two general-purpose travel lanes • Extend the Route 28 southeastbound left-turn lane • Implement an optimal traffic signal timing, phasing and coordination plan 	Proponent	Prior to issuance of First Certificate of Occupancy for Phase B

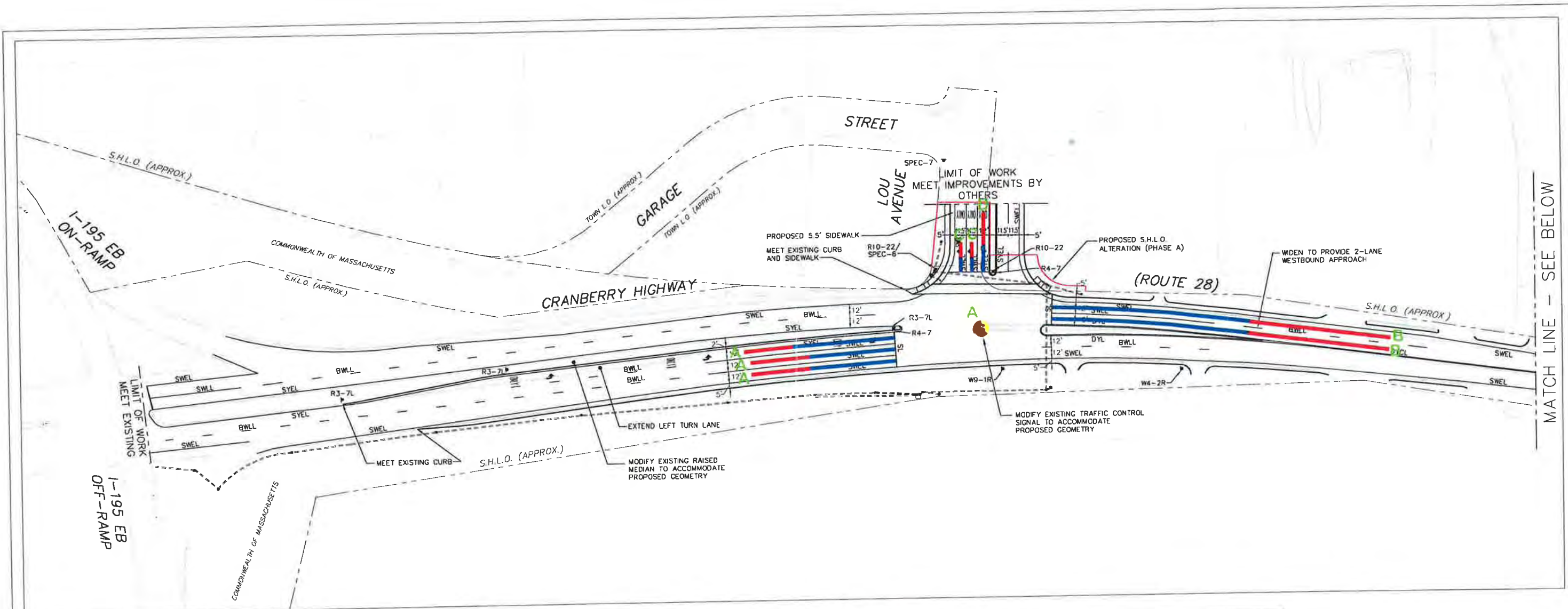
¹The stated improvements are in addition to those that are to be completed as a part of Phase A and which are expected to be substantially complete in the Spring of 2011.

Transportation Improvement Program Summary (Continued)

Intersection/ Roadway	Improvement Measure	Responsible Party	Schedule for Implementation
Route 28/I-195 Eastbound Ramps	<ul style="list-style-type: none"> • Implement an optimal traffic signal timing, phasing and coordination plan 	Proponent	Prior to issuance of First Certificate of Occupancy for Phase B
Route 28/I-195 Westbound Ramps	<ul style="list-style-type: none"> • Implement an optimal traffic signal timing, phasing and coordination plan 	Proponent	Prior to issuance of First Certificate of Occupancy for Phase B
Route 28/Wareham Crossing/Kendrick Road	<ul style="list-style-type: none"> • Implement an optimal traffic signal timing, phasing and coordination plan 	Proponent	Prior to issuance of First Certificate of Occupancy for Phase B
Route 28/Tobey Road/Tow Road	<ul style="list-style-type: none"> • Implement an optimal traffic signal timing, phasing and coordination plan 	Proponent	Prior to issuance of First Certificate of Occupancy for Phase B
Route 28/Charlotte Furnace Road	<ul style="list-style-type: none"> • Install traffic signal • Install associated signs and pavement markings 	Proponent	Prior to the completion of Phase B
Cranberry Road/Federal Road	<ul style="list-style-type: none"> • Review/upgrade/replace signs and pavement markings • Trim/maintain vegetation 	Proponent	Prior to issuance of First Certificate of Occupancy for Phase B
Route 58/I-495 Southbound Ramps	<ul style="list-style-type: none"> • Monitor traffic volumes and operating conditions 	Proponent	As each subsequent development phase is advanced

Transportation Improvement Program Summary (Continued)

Intersection/ Roadway	Improvement Measure	Responsible Party	Schedule for Implementation
Route 58/I-495 Northbound Ramps	<ul style="list-style-type: none"> • Monitor traffic volumes and operating conditions 	Proponent	As each subsequent development phase is advanced
Route 28/Route 58/County Road	<ul style="list-style-type: none"> • Implement an optimal traffic signal timing and phasing plan 	Proponent	Prior to issuance of First Certificate of Occupancy for Phase B
Transportation Demand Management Program	<ul style="list-style-type: none"> • Implement a comprehensive Transportation Demand Management Program for the Project inclusive of the following major elements: <ul style="list-style-type: none"> - Pedestrian improvements including sidewalks, crosswalks, lighting, wheelchair ramps, traffic signal timing/phasing, and sign and pavement marking installation - Bicycle accommodations consisting of bicycle rack installation, roadway/intersection construction to include bicycle accommodations, and sign and pavement marking installation - Assignment of a transportation coordinator - On-site amenities such as microwaves and refrigerators for employees and an ATM machine - Car/vanpool matching and parking - ZipCar accommodations - Funding of GATRA bus service and installation of bus stops within project - Encouragement of tenants to provide public transportation subsidies and implement flextime schedules 	Proponent	Initial implementation as a part of Phase A and continuing thereafter



MATCH LINE - SEE BELOW

SIGN LEGEND		
R3-7L	LEFT LANE MUST TURN LEFT	SPEC-6
R4-7	RIGHT TURN ONLY	SPEC-7
W4-2R	LANE NARROWS	
W9-1R	RIGHT LANE ENDS	

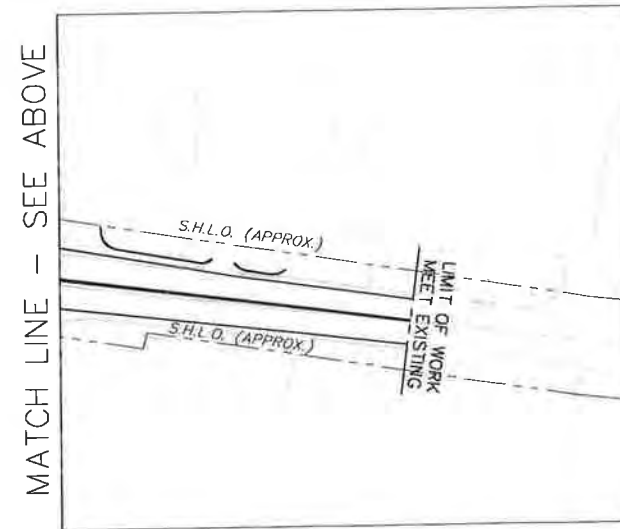
STRIPING LEGEND	
DYCL	DOUBLE YELLOW CENTER LINE
DYL	DOUBLE YELLOW LINE
SWEL	SOLID WHITE EDGE LINE
SYEL	SOLID YELLOW EDGE LINE
SWLL	SOLID WHITE LANE LINE
SWGL	SOLID WHITE GORE LINE
SL	STOP LINE

Legend:

- █ 50th Percentile Queue
- █ 95th Percentile Queue
- X Level-of-Service



NOTES: 1. THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION.
 2. BASE PLAN INFORMATION OBTAINED FROM MASS G.I.S., MASSHIGHWAY LAYOUT PLANS AND FIELD MEASUREMENTS BY VAI.



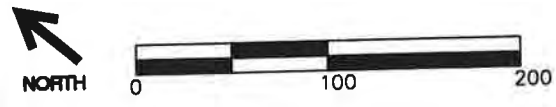
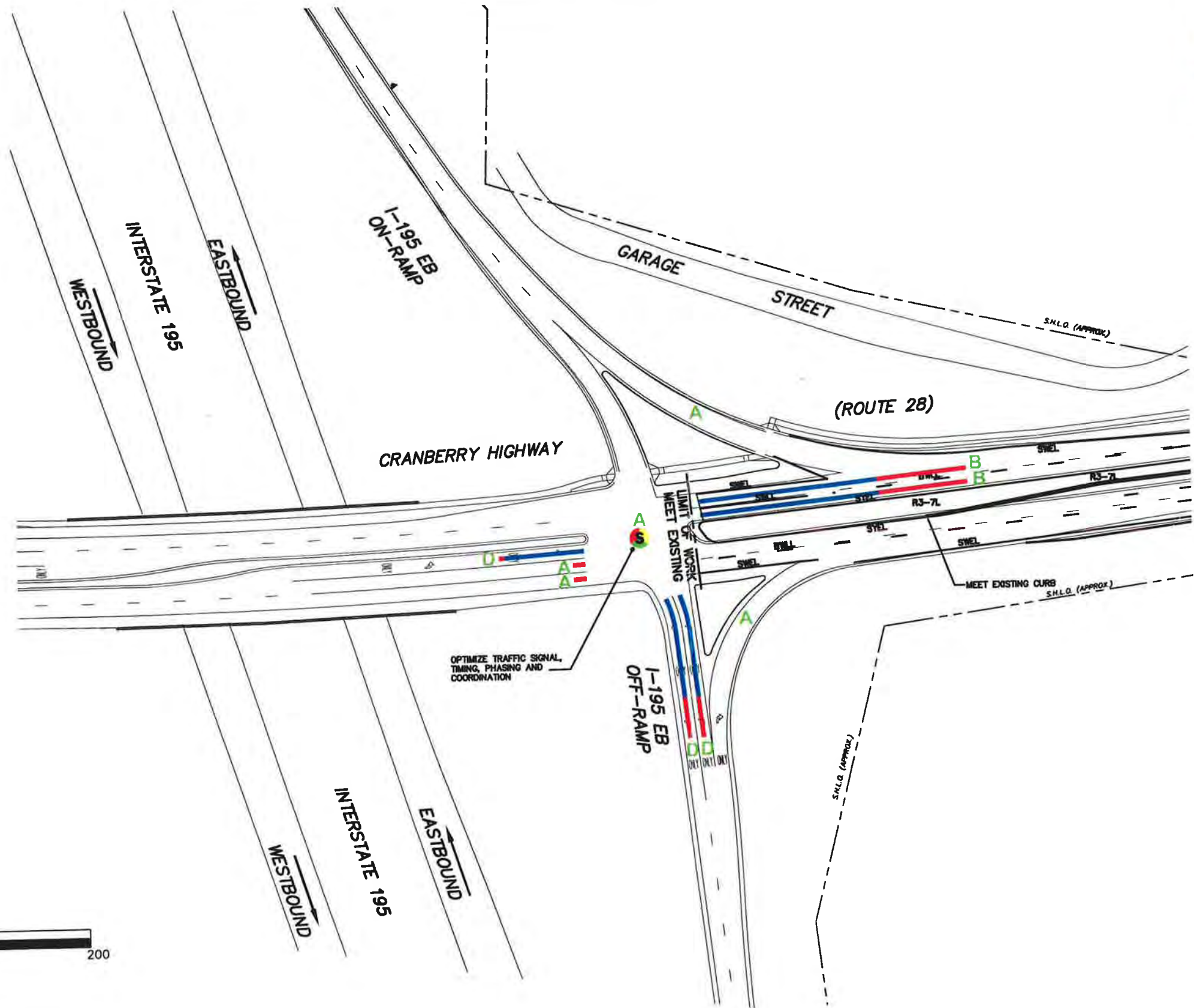
MATCH LINE - SEE ABOVE

2015 Build with Mitigation
 Weekday Morning Peak Hour
 Level-of-Service and
 Vehicle Queue Length Summary
 Figure 1

ADM Tihonet
 Mixed Use Development
 Wareham, Carver and
 Plymouth Massachusetts

Legend:

- █ 50th Percentile Queue
- █ 95th Percentile Queue
- X Level-of-Service



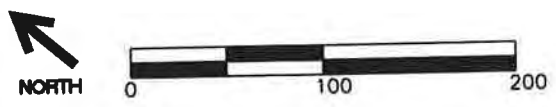
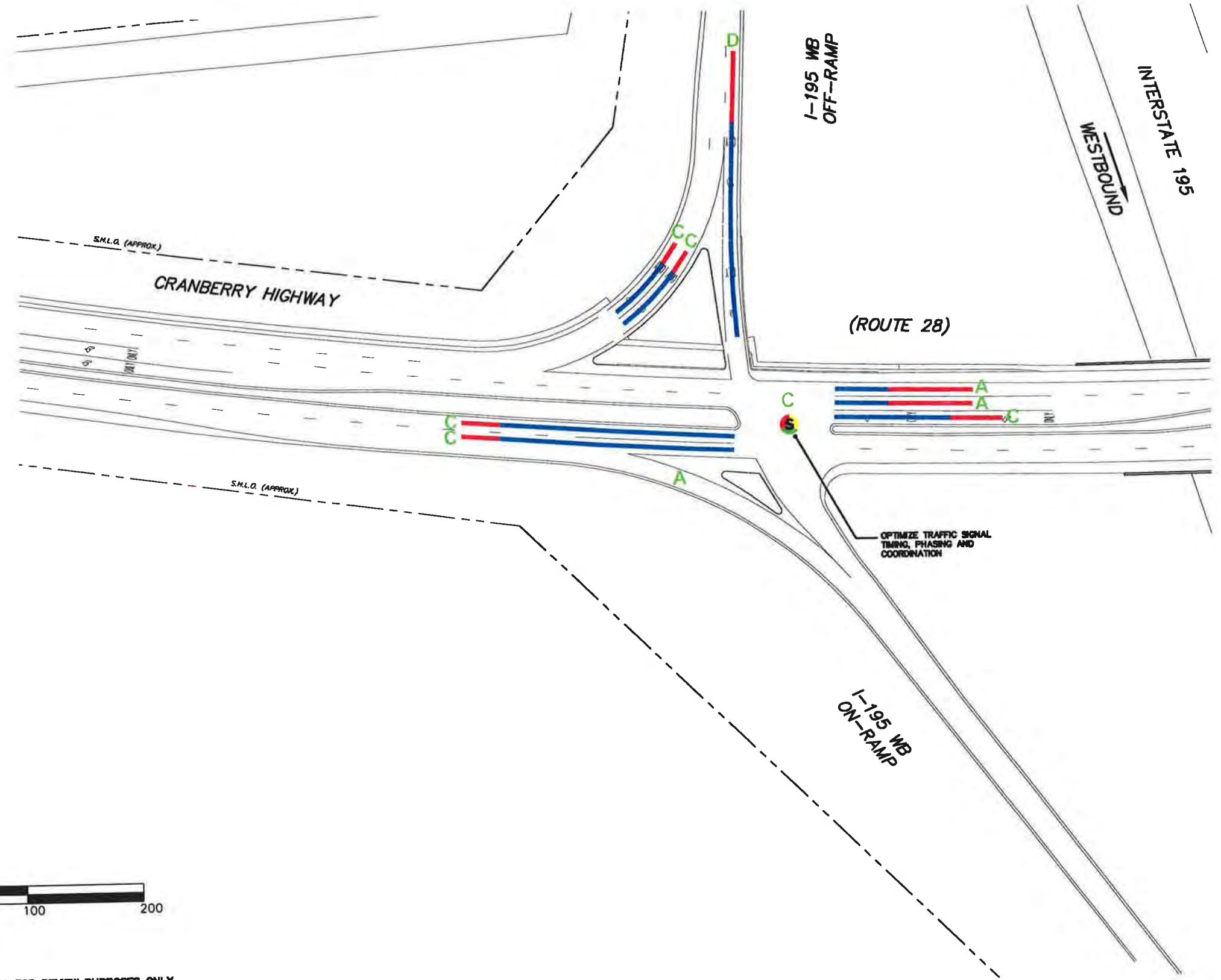
ADM Tihonet
Mixed Use Development
Wareham, Carver and
Plymouth Massachusetts

2015 Build with Mitigation
Weekday Morning Peak Hour
Level-of-Service and
Vehicle Queue Length Summary
Figure 2

R:\5054\Phase B DEIR\5054en5.dwg 1/3/2011 11:32:37 AM EST

Legend:

- █ 50th Percentile Queue
- █ 95th Percentile Queue
- X Level-of-Service



- NOTES:**
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 2. BASE PLAN INFORMATION OBTAINED FROM MASS G.I.S., MASSHIGHWAY LAYOUT PLANS AND FIELD MEASUREMENTS BY VAL.

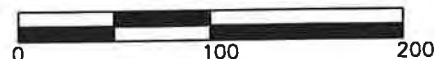
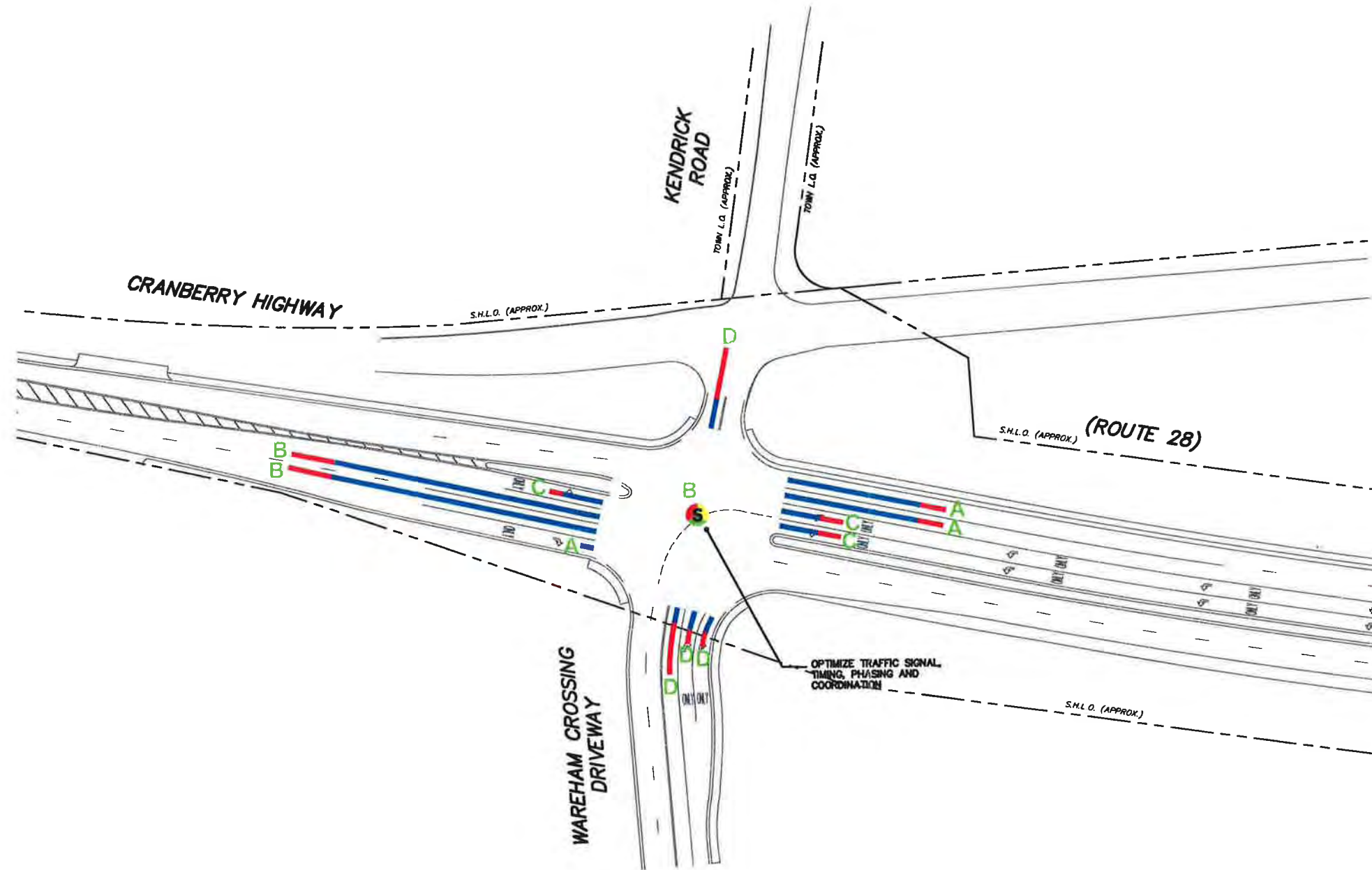
ADM Tihonet
Mixed Use Development
Wareham, Carver and
Plymouth Massachusetts

2015 Build with Mitigation
Weekday Morning Peak Hour
Level-of-Service and
Vehicle Queue Length Summary
Figure 3

R:\5054\Phase B DEIR\5054cn5.dwg 1/3/2011 11:32:37 AM EST

Legend:

- █ 50th Percentile Queue
- █ 95th Percentile Queue
- X Level-of-Service



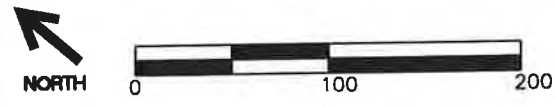
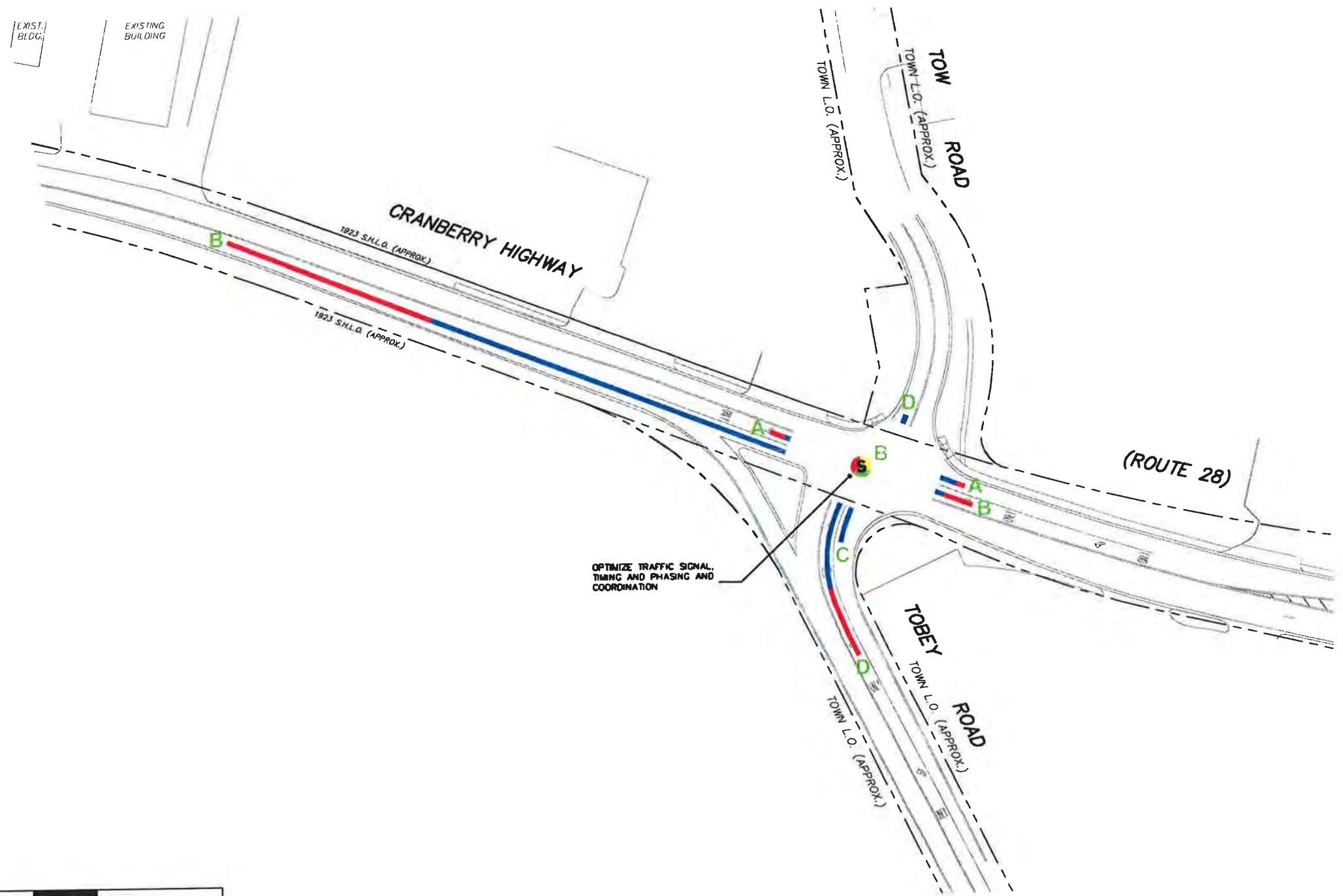
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Mixed Use Development
Wareham, Carver and
Plymouth Massachusetts

2015 Build with Mitigation
Weekday Morning Peak Hour
Level-of-Service and
Vehicle Queue Length Summary
Figure 4

Legend:

- 50th Percentile Queue
- 95th Percentile Queue
- X Level-of-Service

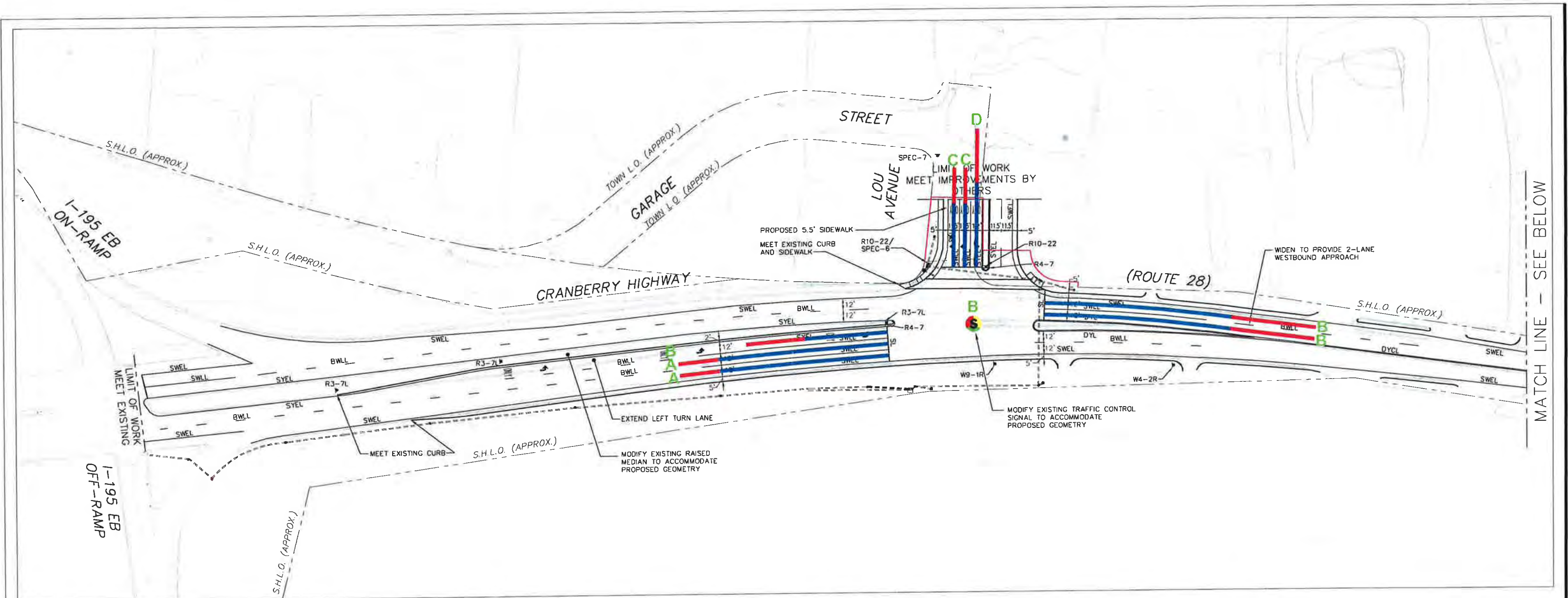


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ADM Tihonet
Mixed Use Development
Wareham, Carver and
Plymouth Massachusetts

2015 Build with Mitigation
Weekday Morning Peak Hour
Level-of-Service and
Vehicle Queue Length Summary
Figure 5

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MATCH LINE - SEE BELOW

SIGN LEGEND		
R3-7L	LEFT LANE MUST TURN LEFT	SPEC-6
R4-7	RIGHT TURN	SPEC-7
W4-2R	LANE NARROWS	
W9-1R	RIGHT LANE ENDS	

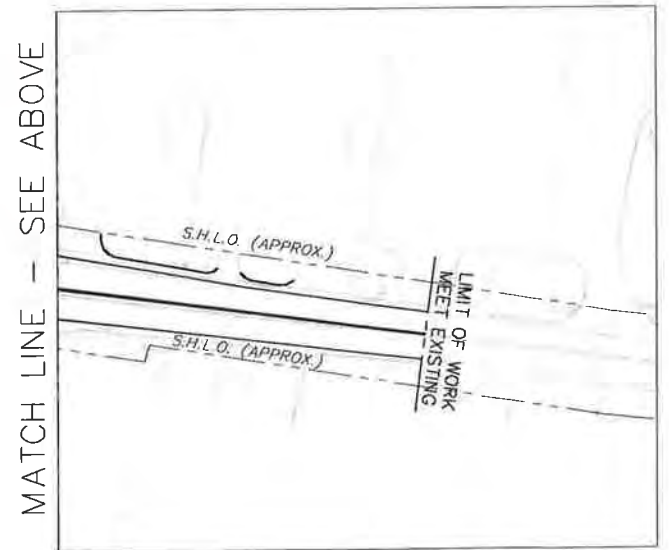
STRIPING LEGEND	
DYCL	DOUBLE YELLOW CENTER LINE
DYL	DOUBLE YELLOW LINE
SWEL	SOLID WHITE EDGE LINE
SYEL	SOLID YELLOW EDGE LINE
SWLL	SOLID WHITE LANE LINE
SWGL	SOLID WHITE GORE LINE
SL	STOP LINE

Legend:

█ 50th Percentile Queue

█ 95th Percentile Queue

X Level-of-Service



MATCH LINE - SEE ABOVE



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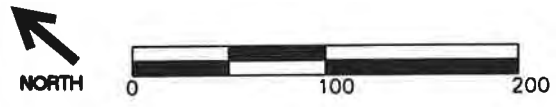
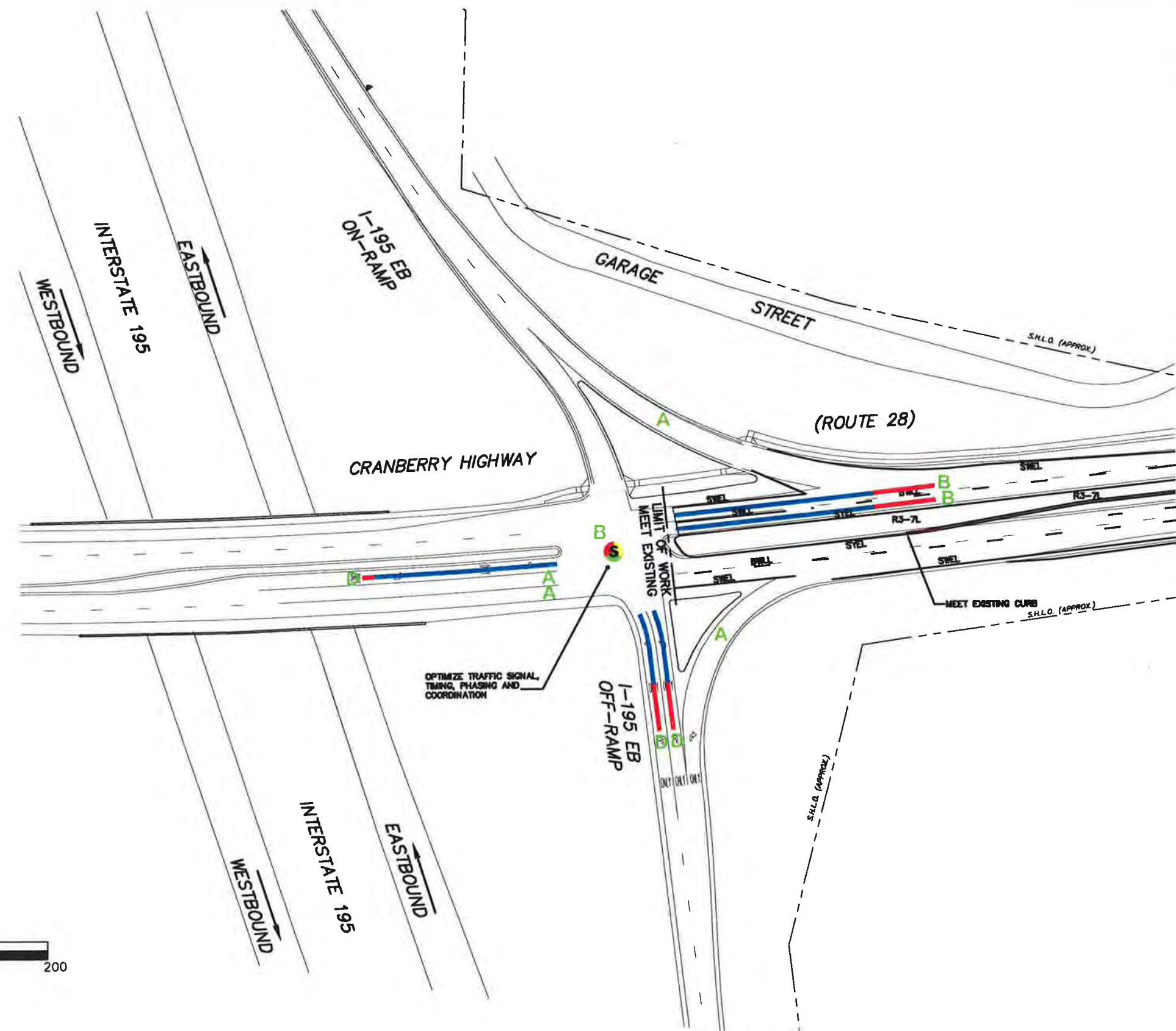
2015 Build with Mitigation
 Weekday Evening Peak Hour
 Level-of-Service and
 Vehicle Queue Length Summary
 Figure 6

ADM Tihonet
 Mixed Use Development
 Wareham, Carver and
 Plymouth Massachusetts

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Legend:

- 50th Percentile Queue
- 95th Percentile Queue
- X Level-of-Service



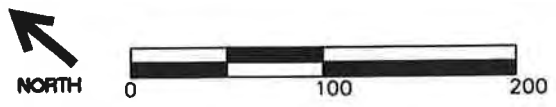
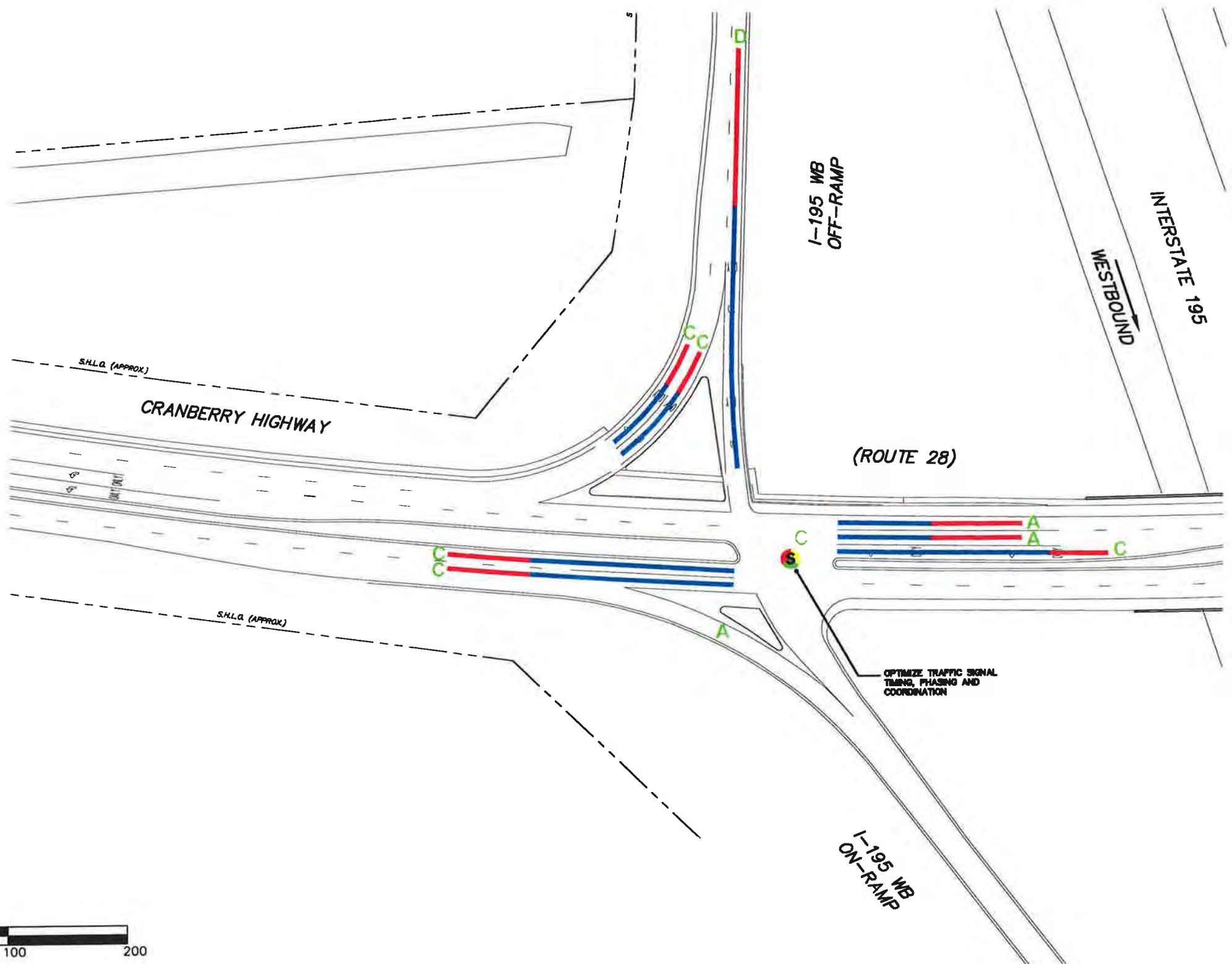
ADM Tihonet
Mixed Use Development
Wareham, Carver and
Plymouth Massachusetts

2015 Build with Mitigation
Weekday Evening Peak Hour
Level-of-Service and
Vehicle Queue Length Summary
Figure 7

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Legend:

- 50th Percentile Queue
- 95th Percentile Queue
- X Level-of-Service



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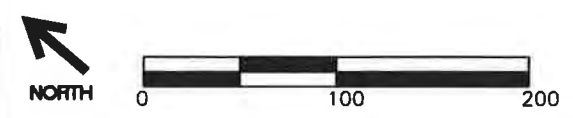
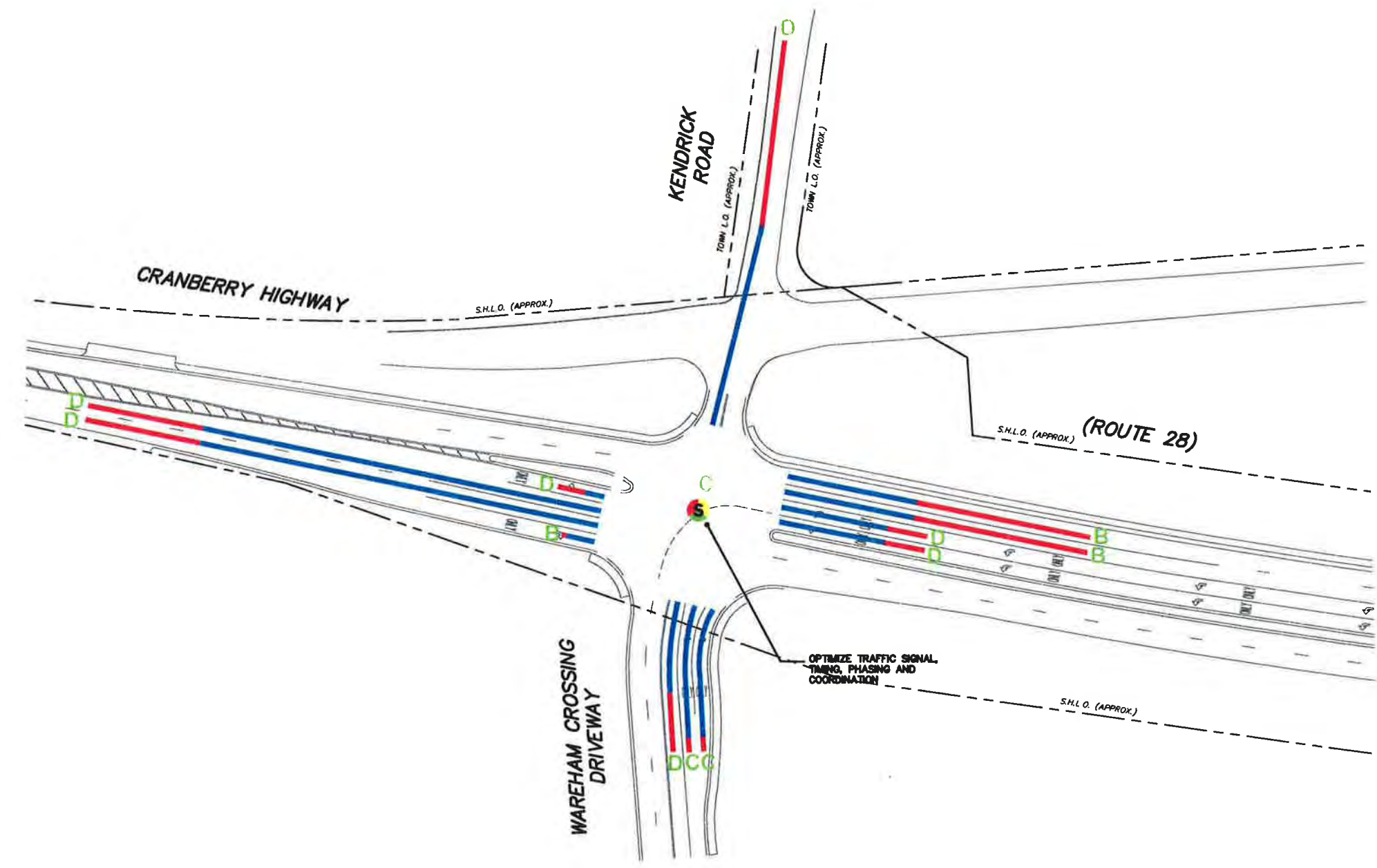
ADM Tihonet
Mixed Use Development
Wareham, Carver and
Plymouth Massachusetts

2015 Build with Mitigation
Weekday Evening Peak Hour
Level-of-Service and
Vehicle Queue Length Summary
Figure 8

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Legend:

- █ 50th Percentile Queue
- █ 95th Percentile Queue
- X Level-of-Service



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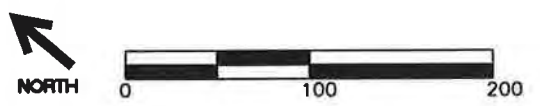
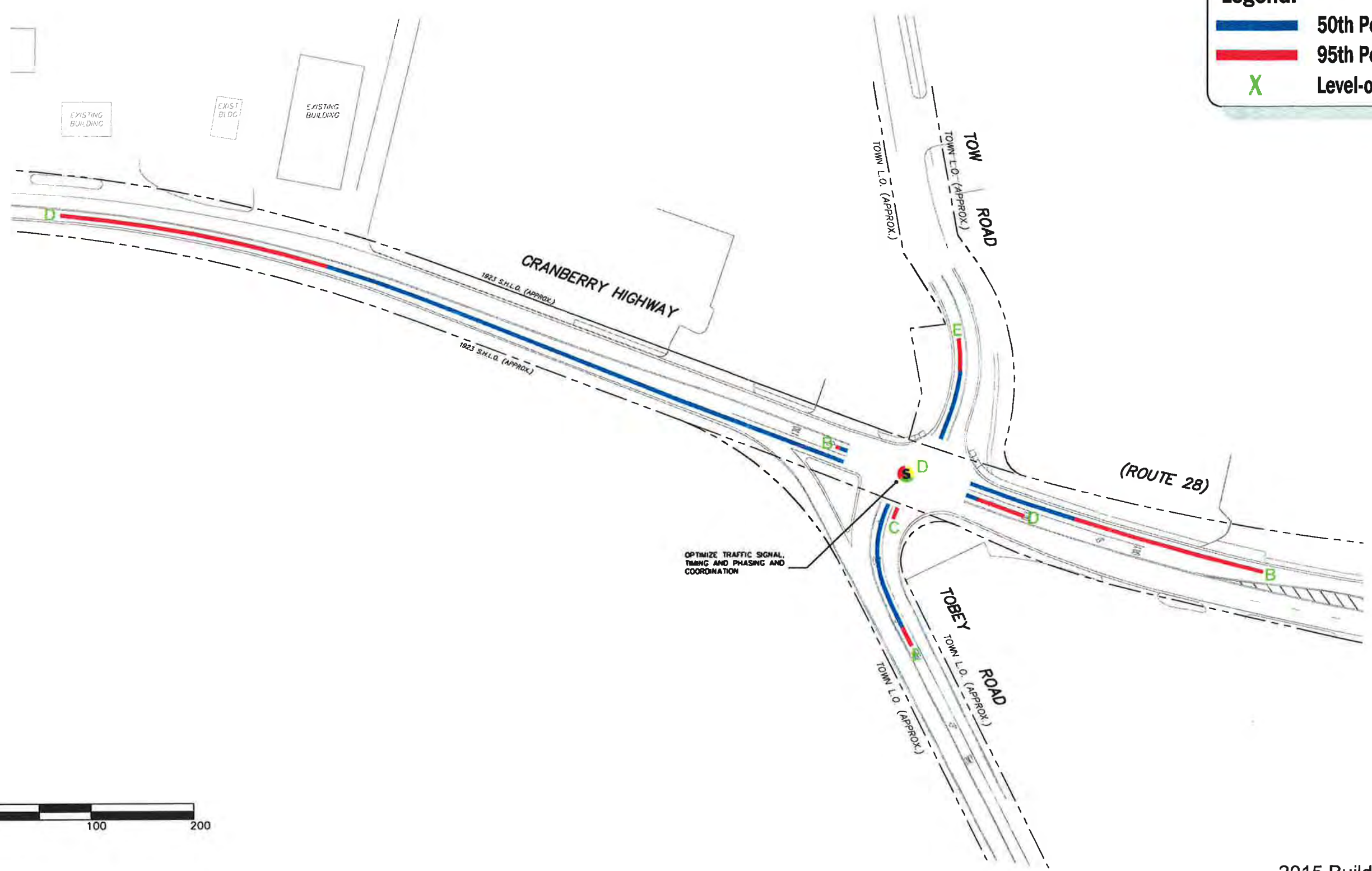
ADM Tihonet
 Mixed Use Development
 Wareham, Carver and
 Plymouth Massachusetts

2015 Build with Mitigation
 Weekday Evening Peak Hour
 Level-of-Service and
 Vehicle Queue Length Summary
 Figure 9

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Legend:

- █ 50th Percentile Queue
- █ 95th Percentile Queue
- X Level-of-Service

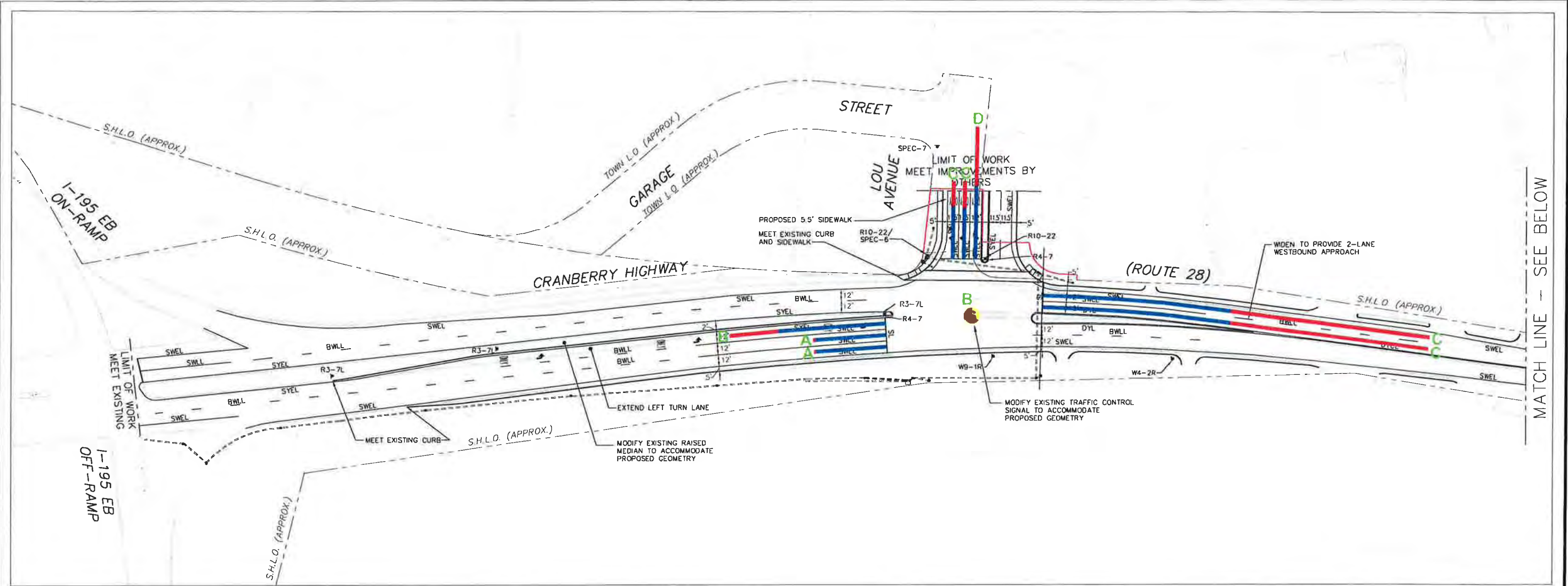


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ADM Tihonet
 Mixed Use Development
 Wareham, Carver and
 Plymouth Massachusetts

2015 Build with Mitigation
 Weekday Evening Peak Hour
 Level-of-Service and
 Vehicle Queue Length Summary
 Figure 10

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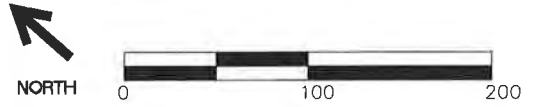
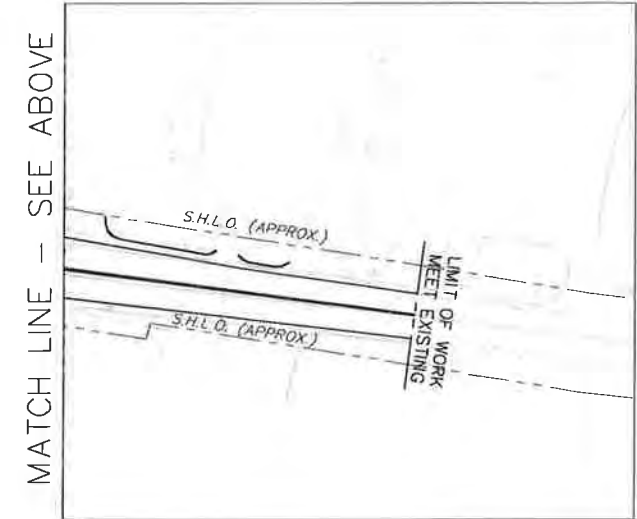
MATCH LINE -- SEE BELOW

SIGN LEGEND			
R3-7L	LEFT LANE MUST TURN LEFT	SPEC-6	ONLY ONLY ONLY
R4-7	RIGHT TURN	SPEC-7	28 EAST, 195 WEST, 195 EAST
W4-2R	LANE NARROWS		
W9-1R	RIGHT LANE ENDS		

STRIPING LEGEND	
DYCL	DOUBLE YELLOW CENTER LINE
DYL	DOUBLE YELLOW LINE
SWEL	SOLID WHITE EDGE LINE
SYEL	SOLID YELLOW EDGE LINE
SWLL	SOLID WHITE LANE LINE
SWGL	SOLID WHITE GORE LINE
SL	STOP LINE

Legend:

- █ 50th Percentile Queue
- █ 95th Percentile Queue
- X Level-of-Service



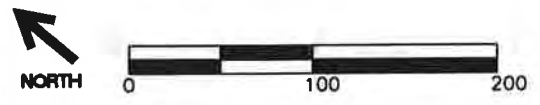
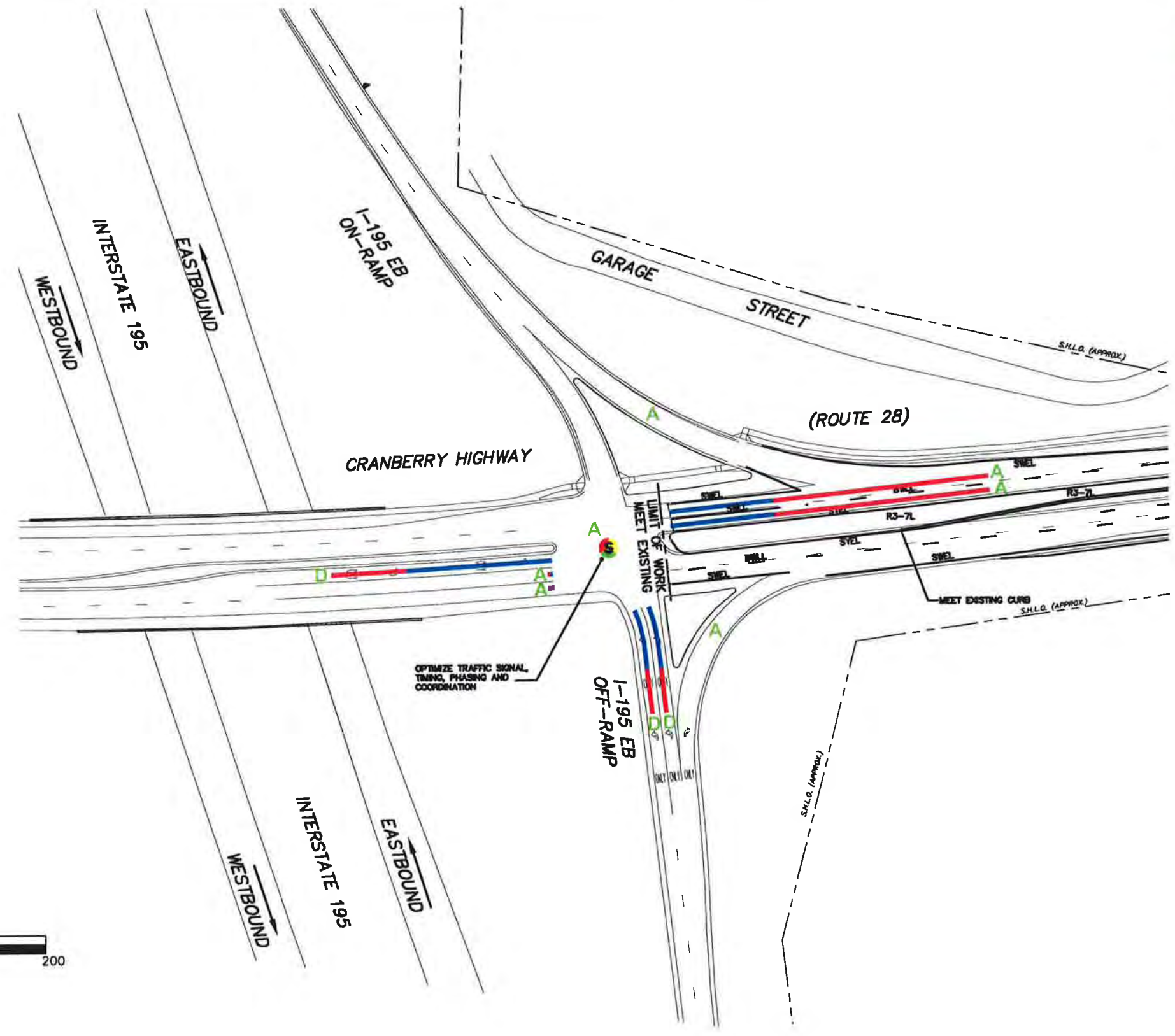
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2015 Build with Mitigation
 Saturday Midday Peak Hour
 Level-of-Service and
 Vehicle Queue Length Summary
 Figure 11

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Legend:

- █ 50th Percentile Queue
- █ 95th Percentile Queue
- X Level-of-Service



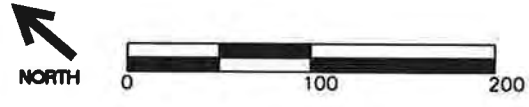
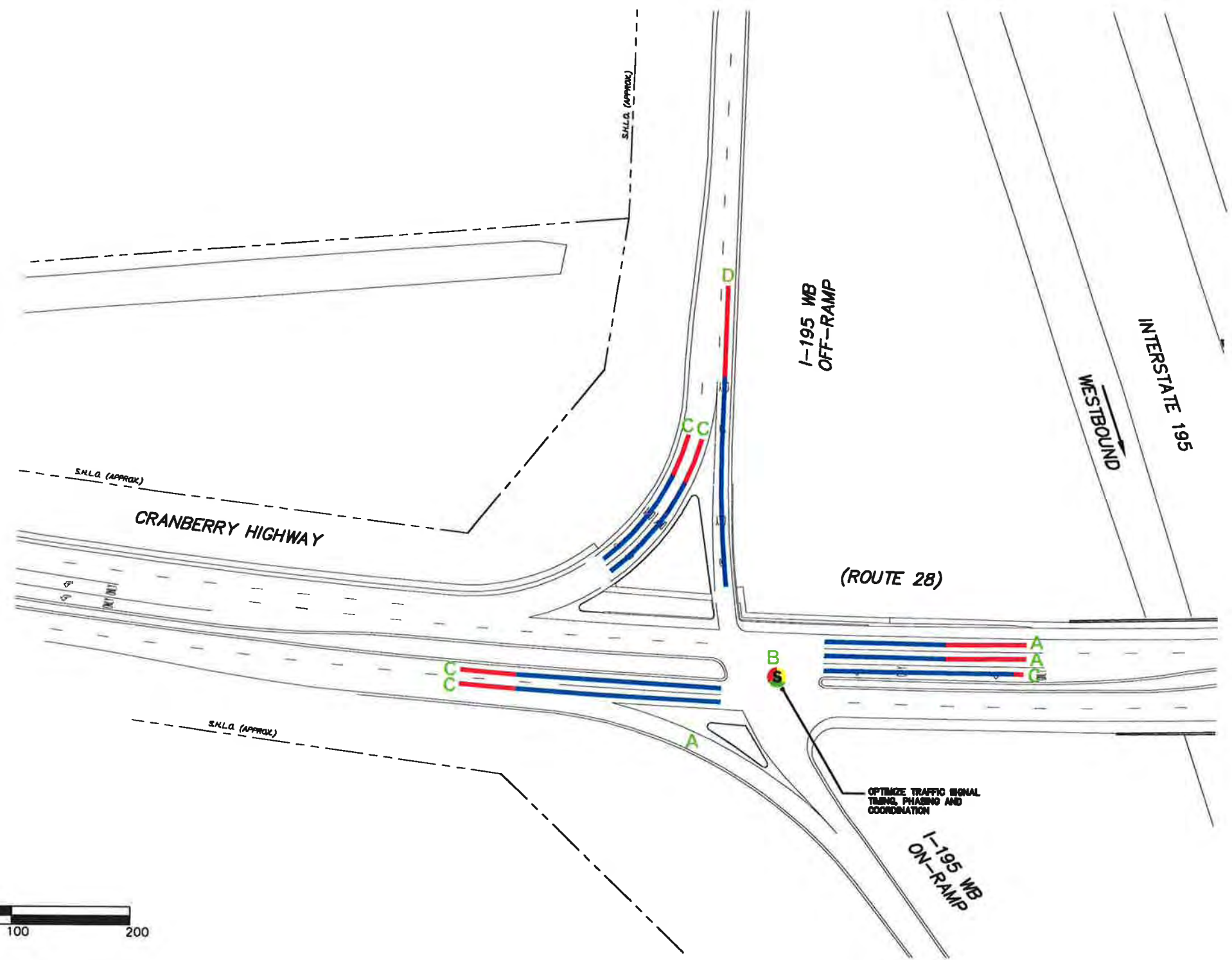
ADM Tihonet
Mixed Use Development
Wareham, Carver and
Plymouth Massachusetts

2015 Build with Mitigation
Saturday Midday Peak Hour
Level-of-Service and
Vehicle Queue Length Summary
Figure 12

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Legend:

- █ 50th Percentile Queue
- █ 95th Percentile Queue
- X Level-of-Service



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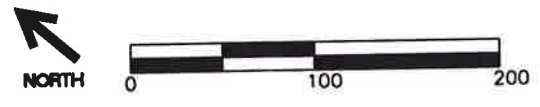
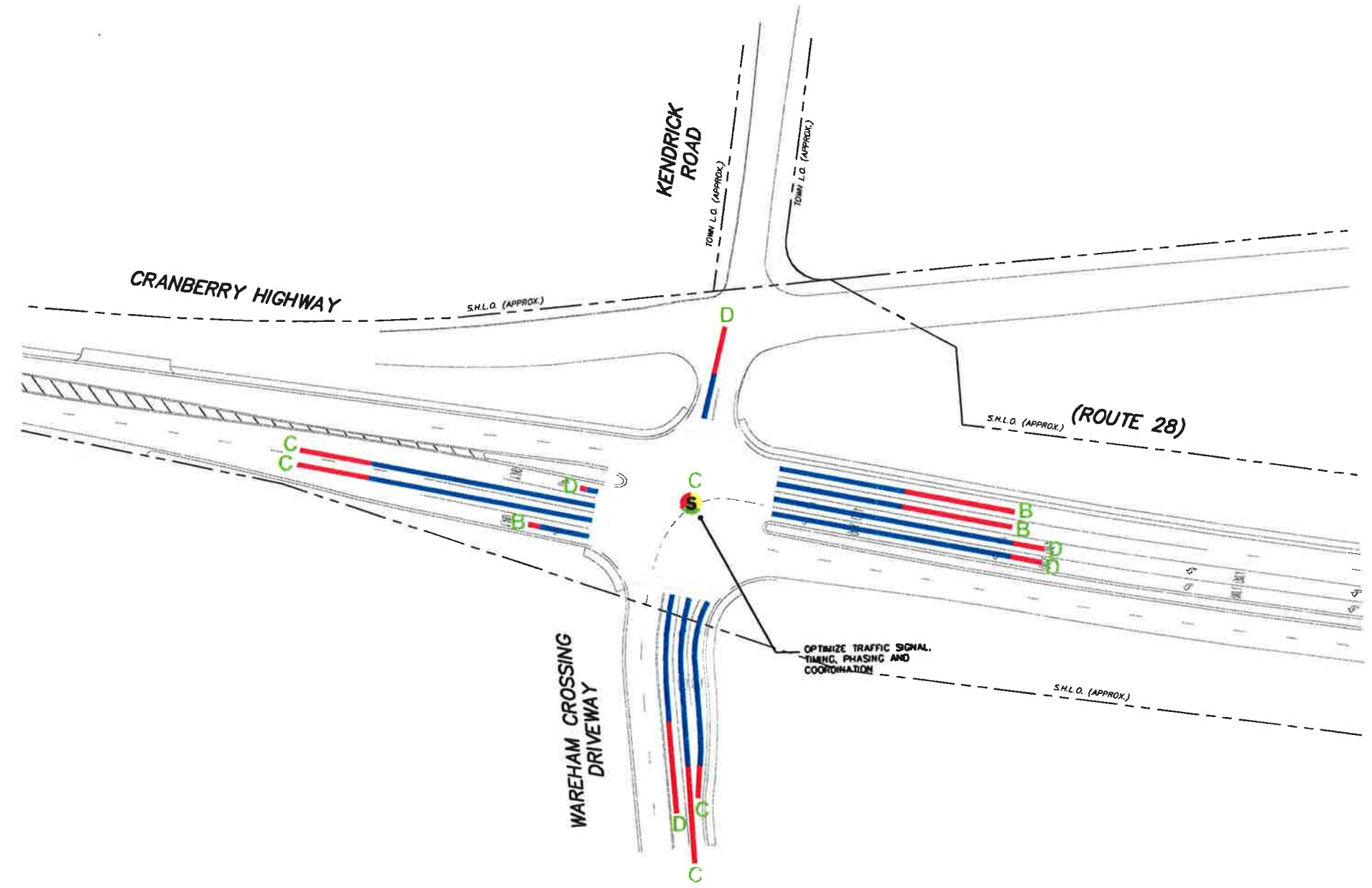
ADM Tihonet
 Mixed Use Development
 Wareham, Carver and
 Plymouth Massachusetts

2015 Build with Mitigation
 Saturday Midday Peak Hour
 Level-of-Service and
 Vehicle Queue Length Summary
 Figure 13

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Legend:

- █ 50th Percentile Queue
- █ 95th Percentile Queue
- X Level-of-Service



- NOTES:**
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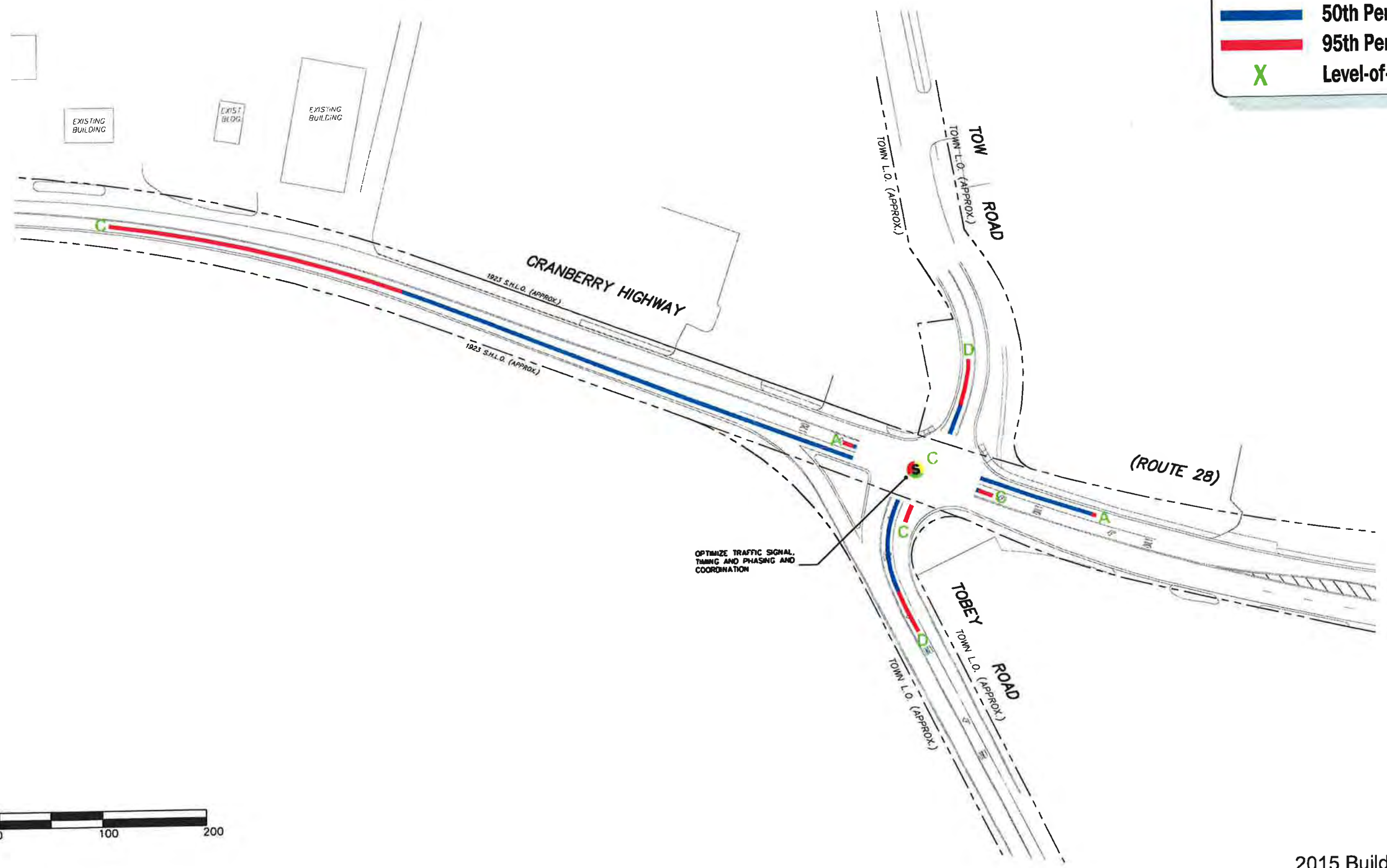
ADM Tihonet
Mixed Use Development
Wareham, Carver and
Plymouth Massachusetts

2015 Build with Mitigation
Saturday Midday Peak Hour
Level-of-Service and
Vehicle Queue Length Summary
Figure 14

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Legend:

- █ 50th Percentile Queue
- █ 95th Percentile Queue
- X Level-of-Service

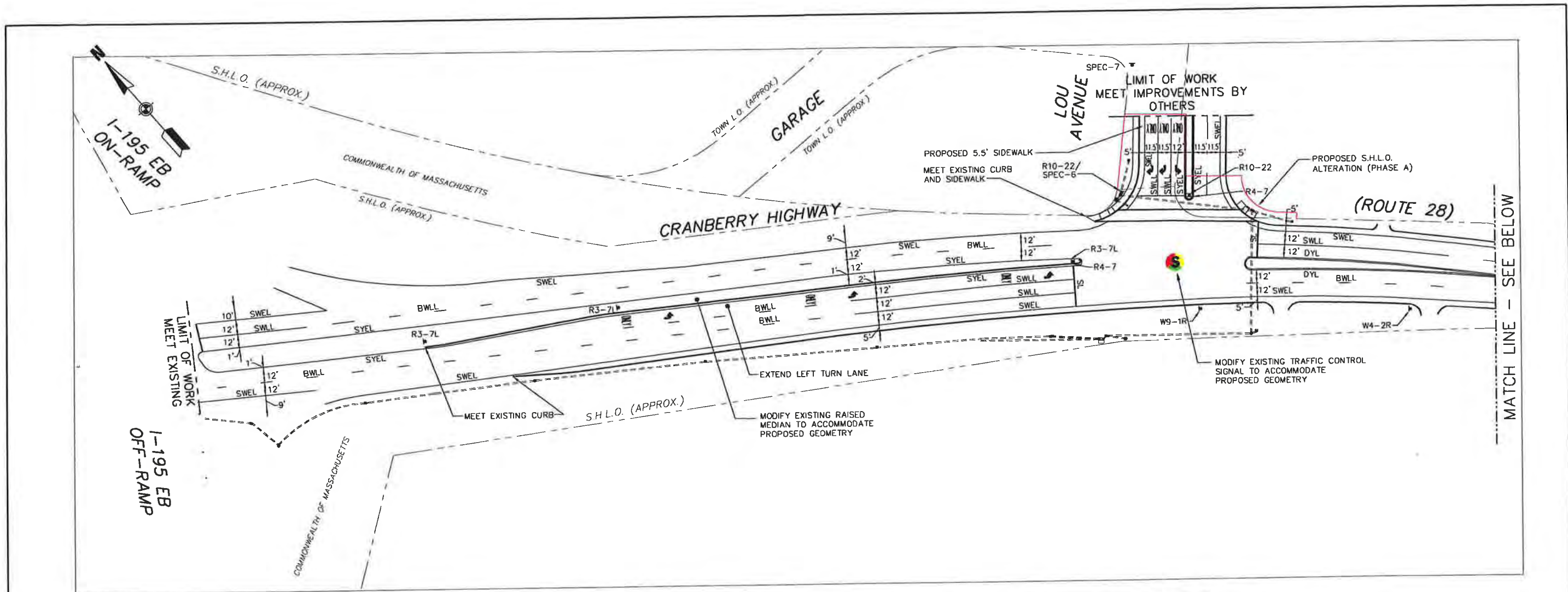


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ADM Tihonet
Mixed Use Development
Wareham, Carver and
Plymouth Massachusetts

2015 Build with Mitigation
Saturday Midday Peak Hour
Level-of-Service and
Vehicle Queue Length Summary
Figure 15

R:\5054\Phase B DEIR\5054cn7.dwg 1/3/2011 11:45:09 AM EST



SIGN LEGEND			
R3-7L	LEFT LANE MUST TURN LEFT	SPEC-6	ONLY ONLY ONLY
R4-7	RIGHT TURN ONLY	SPEC-7	28 EAST 195 WEST 195 EAST 28 WEST
W4-2R	RIGHT LANE ENDS		
W9-1R	RIGHT LANE ENDS		

STRIPING LEGEND	
DYCL	DOUBLE YELLOW CENTER LINE
DYL	DOUBLE YELLOW LINE
SWEL	SOLID WHITE EDGE LINE
SYEL	SOLID YELLOW EDGE LINE
SWLL	SOLID WHITE LANE LINE
SWGL	SOLID WHITE GORE LINE
SL	STOP LINE

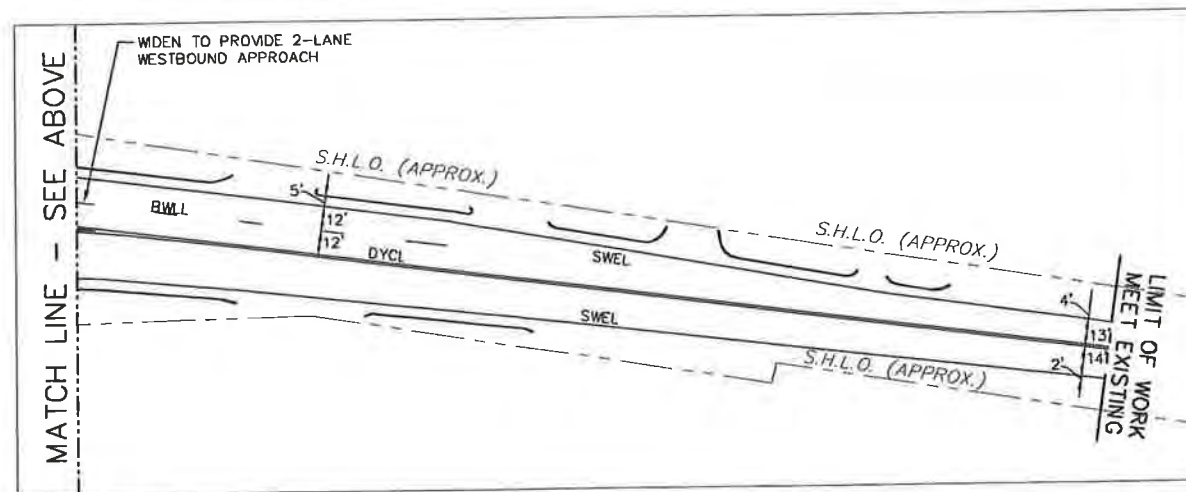


FIGURE 16
 PHASE B
 CONCEPTUAL IMPROVEMENT PLAN
 CRANBERRY HIGHWAY (ROUTE 28)
 AT LOU AVENUE

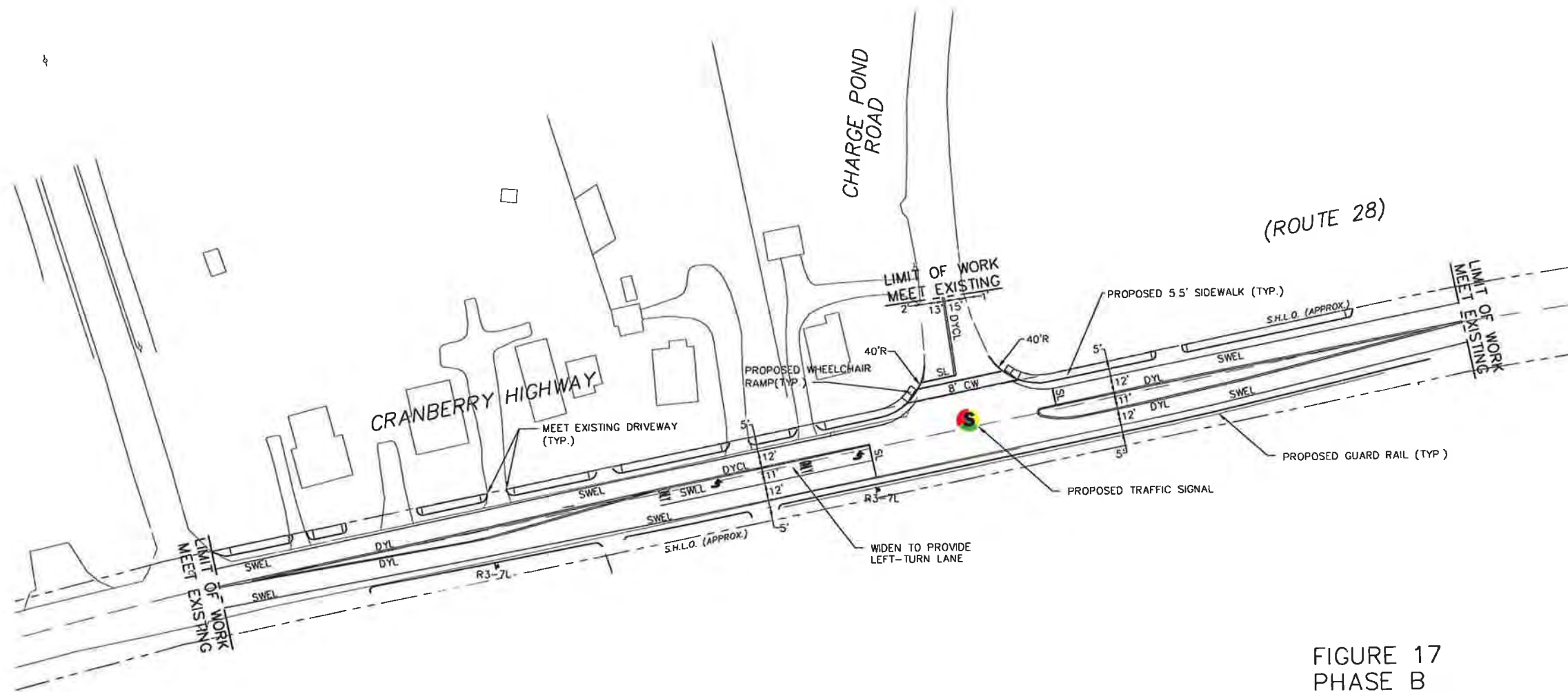
PROJECT:
 ADM TIHONET MIXED-USE DEVELOPMENT
 CARVER/WAREHAM/PLYMOUTH, MASSACHUSETTS

PROPOSER:
 ADM DEVELOPMENT SERVICES, LLC
 WAREHAM, MASSACHUSETTS

NO.	REVISIONS	DATE	DESIGNED BY: BG	DATE: 12/20/10
			DRAWN BY: GRU	SCALE: 1" = 40'
			CHECKED BY: JSD	SHEET: 1 OF 1

- NOTES: 1. THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION.
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Reduced



SIGN LEGEND	
R3-7L	LEFT LANE MUST TURN LEFT

STRIPING LEGEND	
BWLL	BROKEN WHITE LANE LINE
BYLL	BROKEN YELLOW LANE LINE
DYCL	DOUBLE YELLOW CENTER LINE
DYL	DOUBLE YELLOW LINE
SWEL	SOLID WHITE EDGE LINE
SYEL	SOLID YELLOW EDGE LINE
SYLL	SOLID YELLOW LANE LINE
SWLL	SOLID WHITE LANE LINE
SL	STOP LINE
CW	CROSS WALK

Reduced

FIGURE 17
 PHASE B
 CONCEPTUAL IMPROVEMENT PLAN
 CRANBERRY HIGHWAY (ROUTE 28)
 AT CHARGE POND ROAD

- NOTES: 1. THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION.
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PROJECT: ADM TTHONET MIXED-USE DEVELOPMENT CARVER/WAREHAM/PLYMOUTH, MASSACHUSETTS		
PROPOSER: ADM DEVELOPMENT SERVICES, LLC WAREHAM, MASSACHUSETTS		
Vai <i>Vanasse & Associates, Inc.</i>		
<small>10 New England Business Center Drive Suite 214 Andover, MA 01810 Office (978) 474-1800 Fax (978) 888-9308</small>		
DESIGNED BY:	BG	DATE: 01/03/11
DRAWN BY:	GRU	SCALE: 1" = 40'
CHECKED BY:	JSD	SHEET 1 OF 1

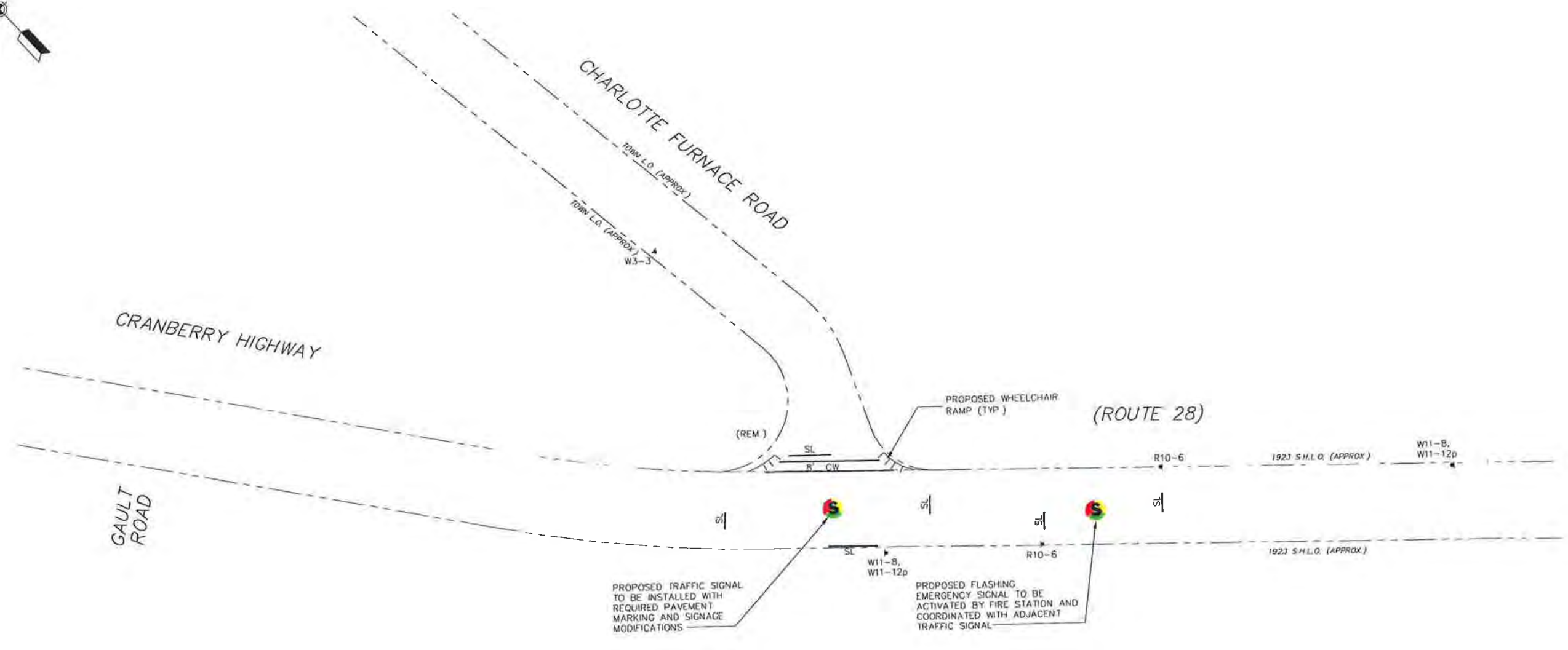


FIGURE 18
 PHASE B
 CONCEPTUAL IMPROVEMENT PLAN
 CRANBERRY HIGHWAY (ROUTE 28)
 AT CHARLOTTE FURNACE ROAD

SIGN LEGEND			
R1-1		W3-3	
R4-1		W11-8	
R10-6		W11-12p	

STRIPING LEGEND	
DYCL	DOUBLE YELLOW CENTER LINE
DYL	DOUBLE YELLOW LINE
SWEL	SOLID WHITE EDGE LINE
SYEL	SOLID YELLOW EDGE LINE
SWLL	SOLID WHITE LANE LINE
SWGL	SOLID WHITE GORE LINE
SL	STOP LINE

- NOTES: 1. THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION.
2. BASE PLAN INFORMATION OBTAINED FROM MASS G.I.S., MASSHIGHWAY LAYOUT PLANS, AND FIELD MEASUREMENTS BY VAI.

PROJECT: ADM TIHONET MIXED-USE DEVELOPMENT CARVER/WAREHAM/PLYMOUTH, MASSACHUSETTS	
PROPOSITOR: ADM DEVELOPMENT SERVICES, LLC WAREHAM, MASSACHUSETTS	
NO.	REVISIONS
	DATE
Vannise & Associates, Inc. <small>10 New England Business Center Drive Suite 315 Andover, MA 01810 Office (978) 474-8900 Fax (978) 680-6208</small>	
DESIGNED BY: BG	DATE: 12/20/10
DRAWN BY: GRU	SCALE: 1" = 40'
CHECKED BY: JSD	SHEET 1 OF 1

Reduced