



AGENDA

**TOWN OF NAGS HEAD BOARD OF COMMISSIONERS
NAGS HEAD MUNICIPAL COMPLEX - BOARD ROOM
WEDNESDAY, SEPTEMBER 4, 2024, 9:00 A.M.**

A. CALL TO ORDER / MOMENT OF SILENCE / PLEDGE OF ALLEGIANCE

B. ADOPTION OF AGENDA

C. RECOGNITION

1. Recognition

FIVE YEARS – Fire Engineer Brandon Stallings – August 5, 2019

FIVE YEARS – Sanitation Equipment Operator II John McDowell – August 19, 2019

TEN YEARS – Tax Collector Linda Bittner – August 25, 2014

PRESENTATION – Outer Banks Visitors Bureau “The Outer Banks Promise”

PROCLAMATION – Septic Smart Week – September 16 - 20, 2024

PROCLAMATION – National Night Out – October 1, 2024

PROCLAMATION – Diaper Need Awareness Week – September 23 - 29, 2024

Documents:

[9 C RECOG SUMMARY.PDF](#)

[9 C RECOG SEPTIC SMART PROC.PDF](#)

[9 C RECOG NATIONAL NIGHT OUT PROC.PDF](#)

[9 C RECOG CYP DIAPER NEED PROC.PDF](#)

D. PUBLIC COMMENT

E. CONSENT AGENDA

1. Consideration Of Budget Amendment #3 To FY 24/25 Budget

Documents:

[9 E1 BUD AMEND TO FY 24-25 SUMMARY.PDF](#)

[9 E1 BUD AMEND TO FY 24-25 WORKSHEET.PDF](#)

2. Consideration Of Tax Adjustment Report

- FY 24/25 TAX ADJUSTMENT REPORT (New Year and Year-to-date)

Documents:

[9 E2 TAX ADJ REPORT SUMMARY.PDF](#)

[9 E2 TAX ADJ REPORT MSD NEW YEAR.PDF](#)

[9 E2 TAX ADJ REPORT TOWN-WIDE NEW YEAR.PDF](#)

[9 E2 TAX ADJ MSD REPORT.PDF](#)

3. Approval Of Minutes

Documents:

[9 E3 MINUTES SUMMARY.PDF](#)
[9 E3 MINUTES AUG 7 2024 BOC MINS.PDF](#)

4. Consideration Of Policy For Neighborhoods To Request Traffic Calming Devices
- presented at Aug 7th Board meeting

Documents:

[9 E4 TRAFFIC CALMING POLICY SUMMARY.PDF](#)
[9 E4 TRAFFIC CALMING POLICY - FINAL.PDF](#)

5. Request For Public Hearing To Consider A Map Amendment Request
submitted by Chris Greening of Coastal Bluewater Capital, LLC, as authorized by
property owner Mazzi, LLC
to rezone the property located at 0 W. Satterfield Landing Road, Lot 2a-1r of the
Charles Sineath Subdivision,
(Parcel # 005618002) from C-3, Commercial Services to C-2, General Commercial.
This is the vacant property
west of TW's Bait and Tackle.

Documents:

[9 E5 RPH ZONING MAP AMEND SUMMARY.PDF](#)

F. PUBLIC HEARINGS

**G. REPORTS AND RECOMMENDATIONS FROM THE PLANNING BOARD AND THE
PLANNING AND DEVELOPMENT DIRECTOR**

1. Update From Planning Director

Documents:

[9 G1 PLANNING DIRECTOR SUMMARY.PDF](#)
[9 G1 PLANNING DIRECTOR REPORT.PDF](#)

H. OLD BUSINESS TABLED FROM PREVIOUS MEETINGS

1. From July 3rd Board Meeting - Results Of Board Requested
Vanasse Hangen Brustlin, Inc. (VHB) traffic study at the intersection of Lakeside St
and Hwy 158

Documents:

[9 H1 TRAFFIC STUDY INN AT WHALEBONE SUMMARY.PDF](#)
[9 H1 TRAFFIC STUDY INN AT WHALEBONE.PDF](#)

I. NEW BUSINESS

1. Committee Reports

Documents:

[9 I1 COMMITTEE REPORTS SUMMARY.PDF](#)

2. Consideration Of Resolution In Support Of AEC Protections For Jockey's Ridge State Park

Documents:

[9 I2 SUPPORT AEC FOR JRSP SUMMARY.PDF](#)

[9 I2 SUPPORT AEC FOR JRSP RES.PDF](#)

J. ITEMS REFERRED TO AND PRESENTATIONS FROM TOWN ATTORNEY

K. ITEMS REFERRED TO AND PRESENTATIONS FROM TOWN MANAGER

1. Update On Construction Of The Public Services Facility

Documents:

[9 K1 TM PUBLIC SVCS UPDATE SUMMARY.PDF](#)

L. BOARD OF COMMISSIONERS AGENDA

M. MAYOR'S AGENDA

1. Recognition Of Ten Years Of Service - Town Manager Andy Garman

Documents:

[9 M1 MAYOR RECOG SUMMARY.PDF](#)

N. CLOSED SESSIONS

1. Request For Closed Session To Confer With The Board
re: matters related to attorney/client privilege and to preserve that privilege, pursuant to GS 143-318.11(a)(3)
and to discuss possible acquisition of real property located at 4222 S Croatan Highway pursuant to GS 143-318.11(a)(5)

Documents:

[9 N1 CS REQUEST SUMMARY.PDF](#)

O. OTHER BUSINESS

P. ADJOURNMENT

**5401 S. Croatan Hwy, Nags Head, NC 27959
252-441-5508**



Agenda Item Summary Sheet

Item No: C
Meeting Date: September 4, 2024

Item Title: Recognition

Item Summary:

Recognition at the September 4th Board of Commissioners meeting includes the following:

FIVE YEARS – Fire Engineer Brandon Stallings – August 5, 2019

FIVE YEARS – Sanitation Equipment Operator II John McDowell – August 19, 2019

TEN YEARS – Tax Collector Linda Bittner – August 25, 2014

PRESENTATION – Outer Banks Visitors Bureau “The Outer Banks Promise”

PROCLAMATION – Septic Smart Week – September 16 - 20, 2024

PROCLAMATION – National Night Out – October 1, 2024

PROCLAMATION – Diaper Need Awareness Week – September 23 – 29, 2024

Number of Attachments: 3

Specific Action Requested:

Provided for Board recognition.

Submitted By: Administration

Date: August 30, 2024

Finance Officer Comment:

N/A

Signature: Amy Miller

Date: August 30, 2024

Town Attorney Comment:

N/A

Signature: John Leidy

Date: August 30, 2024

Town Manager Comment and/or Recommendation:

Congratulations to those with Years of Service!

Signature: Andy Garman

Date: August 30, 2024



PROCLAMATION
Septic Smart Week
September 16 – 20, 2024

WHEREAS, proper septic system use and routine care are vital to protecting public health and preserving our highly valued groundwater and surface waters; AND

WHEREAS, proper septic system maintenance will preserve the function, performance, and longevity of systems thereby avoiding costly repairs that can result from neglect; AND

WHEREAS, nearly 85 percent of homes and most businesses in the Town of Nags Head rely on septic systems to treat wastewater; AND

WHEREAS, the Todd D. Krafft Septic Health program established by the Town of Nags Head provides education to its property owners about the need for proper septic system use and routine maintenance; AND

WHEREAS, the Todd D. Krafft Septic Health program encourages proper maintenance by offering free inspections of conventional septic systems and a \$150 water bill credit each time the system tank is pumped; AND

WHEREAS, if a conventional system is found in need of repair or replacement, the town offers low interest loans to assist in replacing all or a portion of the septic system; AND

WHEREAS, residents and the environment of the Town of Nags Head benefit from properly designed, installed, operated, and maintained septic systems.

NOW THEREFORE BE IT RESOLVED, that the Town of Nags Head Board of Commissioners does hereby proclaim the week of September 16 - 20, 2024 as **Septic Smart Week** in the Town of Nags Head and urges all citizens to join us in this special observance by considering what they can do to properly maintain their septic system.

This the 4th day of September 2024.

Ben Cahoon, Mayor
Town of Nags Head

ATTEST:

Carolyn F. Morris, Town Clerk



**A PROCLAMATION
National Night Out
October 1, 2024**

WHEREAS, the National Association of Town Watch (NATW) is sponsoring a unique, nationwide crime, drug and violence prevention program called "National Night Out" which is celebrated by communities in August and in early October; AND

WHEREAS, the Town of Nags Head, the Nags Head Community Watch Association, and the Nags Head Police Department are celebrating National Night Out on Tuesday, October 1st, 2024; AND

WHEREAS, the Annual National Night Out provides a unique opportunity for the Town of Nags Head to join forces with thousands of other communities across the country in promoting cooperative, police-community crime prevention efforts; AND

WHEREAS, the Nags Head Community Watch Association plays a vital role in assisting the Nags Head Police Department through joint crime, drug and violence prevention efforts in the Town of Nags Head and is supporting "National Night Out 2024" locally; AND

WHEREAS, it is essential that all citizens of the Town of Nags Head be aware of the importance of crime programs and the impact that their participation can have on reducing crime, drug and violence in the Town of Nags Head; AND

WHEREAS, police-community partnerships, neighborhood safety, awareness and cooperation are important themes of the "National Night Out" program.

THEREFORE, I do hereby call upon all citizens of the Town of Nags Head to join the Nags Head Community Watch Association, the Town of Nags Head Police Department, and the National Association of Town Watch in supporting the **41st Annual National Night Out** on October 1st, 2024.

FURTHER, Let it be resolved that I, Ben Cahoon, do hereby proclaim Tuesday, October 1st, 2024 as "National Night Out" in the Town of Nags Head, Dare County, North Carolina.

Adopted this the 4th day of September 2024.

Benjamin Cahoon, Mayor
Town of Nags Head

ATTEST

Carolyn F. Morris, Town Clerk



A PROCLAMATION
Diaper Need Awareness Week
September 23 - 29, 2024

WHEREAS, diaper need, the condition of not having a sufficient supply of clean diapers to keep babies and toddlers clean, dry, and healthy, can adversely affect the health and well-being of babies, toddlers, and their families; and

WHEREAS, the latest study from the National Diaper Bank Network reports that one in two families struggles with diaper need, an increase from previous studies done in 2010 and 2017; and

WHEREAS, purchasing enough diapers to keep a baby or toddler clean, dry, and healthy can consume 14 percent of a low-wage family's post-tax income, making it difficult to obtain a sufficient supply; and

WHEREAS, a daily or weekly supply of diapers is generally an eligibility requirement for babies and toddlers to participate in child care programs and quality early-education programs; and

WHEREAS, without enough diapers, babies and toddlers risk infections and health problems that may require medical attention, and may prevent parents from attending work or school, thereby hurting the family's economic prospects and well-being; and

WHEREAS, the Nags Head community recognizes that diaper need is a public health issue, and addressing diaper need can lead to economic opportunity for our families and community and improved health for children, thus ensuring all children and families have access to the basic necessities required to thrive and reach their full potential; and

WHEREAS, the Town of Nags Head is proud to be home to trusted community-based organizations including Children & Youth Partnership for Dare County, that recognize the importance of diapers in ensuring health and providing economic stability for families and thus distribute diapers to families through various channels.

WE, THE TOWN OF NAGS HEAD, do hereby proclaim the week of September 23 through September 29, 2024 as **DIAPER NEED AWARENESS WEEK**.

We thank Children & Youth Partnership, their staff and donors for their service through CYP's Diaper Bank, and encourage the citizens of our community to support CYP's Diaper Bank to help ensure that all Dare County children and families have what they need to thrive.

This the 4th day of September 2024.

Ben Cahoon, Mayor

ATTEST:

Carolyn F. Morris, Town Clerk



Agenda Item Summary Sheet

Item No: **E-1**
Meeting Date: **September 4, 2024**

Item Title: Consideration of Budget Amendment #3 to FY 24/25 Budget

Item Summary:

Attached please find Budget Amendment #3 to the FY 24/25 Budget which is provided for Board review and approval at the September 4th Board of Commissioners meeting. Budget Amendment #3 is in accordance with the FY 24/25 Budget Ordinance, adopted at the June 5, 2024 meeting.

Number of Attachments: 1

Specific Action Requested:

Request Board approval of attached Budget Amendment #3.

Submitted By: Administrative Services

Date: August 30, 2024

Finance Officer Comment:

Request Board approval of attached Budget Amendment #3.

Signature: Amy Miller

Date: August 30, 2024

Town Attorney Comment:

N/A

Signature: John Leidy

Date: August 30, 2024

Town Manager Comment and/or Recommendation:

I concur with staff's request.

Signature: Andy Garman

Date: August 30, 2024



**BUDGET AMENDMENT REQUEST
FY 2024-2025**

**BUDGET AMENDMENT NO. 3
Amendment 3.1**
USE OF FUNDS

SOURCE OF FUNDS

CODE	ACCOUNT	AMOUNT		CODE	ACCOUNT	AMOUNT
10-473011	General Fund Revenues Contributions Fire/Rescue	3,000.00		730-543400	General Fund Fire Expenditures Other Supplies	500.00
				792-543300	General Fund Ocean Rescue Expenditures Supplies	2,500.00
TOTAL CHARGES		\$ 3,000.00		TOTAL CREDITS		\$ 3,000.00

JUSTIFICATION

Donations received for rescue dummies and fire prevention supplies

ADMINISTRATIVE SERVICES 8/27/2024
RECOMMENDED BY _____ DATE

APPROVED BY BOC: _____ DATE

POSTED TO GENERAL LEDGER:

INITIALS _____



**BUDGET AMENDMENT REQUEST
FY 2024-2025**

**BUDGET AMENDMENT NO. 3
Amendment 3.2
USE OF FUNDS**

SOURCE OF FUNDS

CODE	ACCOUNT	AMOUNT		CODE	ACCOUNT	AMOUNT
61-430001	Water Fund Revenues Intergovernmental Grants	197,917.00		61-499100	Water Fund Revenues Appropriated Net Position	197,917.00
TOTAL CHARGES		\$ 197,917.00		TOTAL CREDITS		\$ 197,917.00

JUSTIFICATION

Rebudget grant revenue-water fund Asset Inventory and Assessment grant (NCDEQ/DWI).

ADMINISTRATIVE SERVICES
RECOMMENDED BY _____ DATE 8/27/2024

APPROVED BY BOC: _____ DATE _____

POSTED TO GENERAL LEDGER:

INITIALS _____



Agenda Item Summary Sheet

Item No: **E-2**
Meeting Date: **September 4, 2024**

Item Title: Consideration of Tax Adjustment Reports

Item Summary:

Attached please find the FY 24/25 New Year Tax Adjustment Reports for both the MSD and the Town-wide taxes.

Also attached please find the list of adjustments to the 2024 Tax Levy (per information received from Dare County) for the monthly Property and MSD valuations.

These reports are submitted for your approval at the September 4th Board of Commissioners meeting.

Number of Attachments: 4

Specific Action Requested:

Tax reports provided for Board review and approval.

Submitted By: Linda Bittner, Tax Collector

Date: August 30, 2024

Finance Officer Comment:

No unbudgeted fiscal impact.

Signature: Amy Miller

Date: August 30, 2024

Town Attorney Comment:

N/A

Signature: John Leidy

Date: August 30, 2024

Town Manager Comment and/or Recommendation:

I concur with staff.

Signature: Andy Garman

Date: August 30, 2024

Town of Nags Head, North Carolina
ANALYSIS OF CURRENT 2023-2024 MSD TAX LEVY
2024 Tax Levy As of August 12, 2024 - NEW YEAR REPORT

	BEACH NOURISHMENT DISTRICT			MSD Excluding Registered Motor Vehicles	Registered Motor Vehicles
	MSD Valuation	Rate	Total Levy		
Original MSD Levy:					
MSD Beach Nourishment at Current 2024 Dist 1 Rate	581,289,973	0.00143	831,244.89	831,244.89	
MSD Beach Nourishment at current 2024 Dist 2 Rate	475,161,197	0.00143	679,480.79	679,480.79	
MSD Beach Nourishment at Current 2024 Dist 3 Rate	1,059,343,513	0.00005	52,968.57	52,968.57	
MSD Beach Nourishment at Current 2024 Dist 4 Rate	667,823,999	0.00010	66,782.28	66,782.28	
MSD Beach Nourishment at Current 2024 Dist 6 Rate	376,372,688	0.00005	18,819.49	18,819.49	
Registered Motor Vehicles at Current 2024 Dist 1 Rate	0	0.00143	0.00		0.00
Registered Motor Vehicles at Current 2024 Dist 2 Rate	0	0.00143	0.00		0.00
Registered Motor Vehicles at Current 2024 Dist 3 Rate	0	0.00005	0.00		0.00
Registered Motor Vehicles at Current 2024 Dist 4 Rate	0	0.00010	0.00		0.00
Registered Motor Vehicles at Current 2024 Dist 5 Rate	0	0.00000	0.00		0.00
Registered Motor Vehicles at Current 2024 Dist 6 Rate	0	0.00005	0.00		0.00
Registered Motor Vehicles at 2023 Dist 1 Rate	0	0.00143	0.00		0.00
Registered Motor Vehicles at 2023 Dist 2 Rate	0	0.00143	0.00		0.00
Registered Motor Vehicles at 2023 Dist 3 Rate	0	0.00005	0.00		0.00
Registered Motor Vehicles at 2023 Dist 4 Rate	0	0.00010	0.00		0.00
Registered Motor Vehicles at 2023 Dist 6 Rate	0	0.00005	0.00		0.00
Registered Motor Vehicles at 2022 rate	0	0.00143	0.00		0.00
Penalties			0.00		
Total	3,159,991,370		1,649,296.02	1,649,296.02	0.00
Discoveries & Adjustments:					
Current year discoveries & adjustments	0		0.00	0.00	
			0.00	0.00	
Total	0		0.00	0.00	
Releases & Adjustments:					
DMV Current year valuation adjustments	0		0.00	0.00	0.00
DMV Current year tax releases	0		0.00	0.00	0.00
Real/Personal Current year releases & adjustments	0		0.00	0.00	
Total	0		0.00	0.00	0.00
Write-offs (under \$1.00) or Adjustments:			0.00	0.00	
Total MSD Valuation	3,159,991,370				
Net levy		1,649,296.02		1,649,296.02	0.00
TOTAL UNCOLLECTED MSD AS OF 08/12/24:		(1,649,296.02)		(1,649,296.02)	0.00
CURRENT YEAR MSD COLLECTED:		0.00		0.00	0.00
CURRENT MSD COLLECTION PERCENTAGE:		0.000%		0.000%	0.000%

Town of Nags Head, North Carolina
ANALYSIS OF CURRENT 2023-2024 TOWN WIDE TAX LEVY
2024 Tax Levy As of August 12, 2024 - NEW YEAR REPORT

	Town-Wide Tax			Total Levy	
	Property Valuation	Rate	Total Levy	Property Excluding Registered Motor Vehicles	Registered Motor Vehicles
Original levy:					
Property taxed at current 2024 rate	3,071,851,717	0.003300	10,137,252.77	10,137,252.77	
Registered Motor Vehicles at current 2024 rate	0	0.003300	0.00		0.00
Registered Motor Vehicles at 2023 year's rate	0	0.003300	0.00		0.00
Registered Motor Vehicles at 2022 year's rate	0	0.002875	0.00		0.00
Penalties			8,387.61	8,387.61	
Total	3,071,851,717		10,145,640.38	10,145,640.38	0.00
Discoveries & Adjustments:					
Current year discoveries & adjustments tax	0		0.00	0.00	
Town wide beach nourishment tax			0.00	0.00	
Corporate Utilities discoveries & tax	0		0.00	0.00	
Corporate Utilities beach nourishment tax			0.00	0.00	
Penalty Discoveries			0.00	0.00	
Total	0.00		0.00	0.00	
Releases & Adjustments:					
Current year releases & adjustments	0		0.00	0.00	0.00
Town wide beach nourishment			0.00	0.00	
Penalty Releases			0.00	0.00	
Total	0		0.00	0.00	0.00
Write-offs (under \$1.00) or Adjustments:			0.00	0.00	
Total Property Valuation	3,071,851,717				
Net levy		10,145,640.38		10,145,640.38	0.00
Uncollected Taxes & Penalties		(9,377,543.61)		(9,377,543.61)	0.00
Uncollected Town Wide Beach Nourishment		(768,096.77)		(768,096.77)	0.00
TOTAL UNCOLLECTED TAXES AS OF 08/12/24:		(10,145,640.38)		(10,145,640.38)	0.00
CURRENT YEAR TAXES COLLECTED:		(0.00)		(0.00)	0.00
CURRENT LEVY COLLECTION PERCENTAGE:		0.000%		0.000%	0.000%

Town of Nags Head, North Carolina
ANALYSIS OF CURRENT 2023-2024 MSD TAX LEVY
2024 Tax Levy As of August 27, 2024 for Sept. 4, 2024 BOC Meeting

	BEACH NOURISHMENT DISTRICT			MSD Excluding Registered Motor Vehicles	Registered Motor Vehicles
	MSD Valuation	Rate	Total Levy		
Original MSD Levy:					
MSD Beach Nourishment at Current 2024 Dist 1 Rate	581,289,973	0.00143	831,244.89	831,244.89	
MSD Beach Nourishment at current 2024 Dist 2 Rate	475,161,197	0.00143	679,480.79	679,480.79	
MSD Beach Nourishment at Current 2024 Dist 3 Rate	1,059,343,513	0.00005	52,968.57	52,968.57	
MSD Beach Nourishment at Current 2024 Dist 4 Rate	667,823,999	0.00010	66,782.28	66,782.28	
MSD Beach Nourishment at Current 2024 Dist 6 Rate	376,372,688	0.00005	18,819.49	18,819.49	
Registered Motor Vehicles at Current 2024 Dist 1 Rate	63,608	0.00143	90.96		90.96
Registered Motor Vehicles at Current 2024 Dist 2 Rate	70,175	0.00143	100.35		100.35
Registered Motor Vehicles at Current 2024 Dist 3 Rate	193,400	0.00005	9.67		9.67
Registered Motor Vehicles at Current 2024 Dist 4 Rate	141,700	0.00010	14.17		14.17
Registered Motor Vehicles at Current 2024 Dist 5 Rate	0	0.00000	0.00		0.00
Registered Motor Vehicles at Current 2024 Dist 6 Rate	54,200	0.00005	2.71		2.71
Registered Motor Vehicles at 2023 Dist 1 Rate	39,358	0.00143	56.28		56.28
Registered Motor Vehicles at 2023 Dist 2 Rate	275,305	0.00143	393.72		393.72
Registered Motor Vehicles at 2023 Dist 3 Rate	408,856	0.00005	20.44		20.44
Registered Motor Vehicles at 2023 Dist 4 Rate	471,213	0.00010	47.12		47.12
Registered Motor Vehicles at 2023 Dist 6 Rate	258,160	0.00005	12.96		12.96
Registered Motor Vehicles at 2022 rate	0	0.00143	0.00		0.00
Penalties			0.00		
Total	3,161,967,345		1,650,044.40	1,649,296.02	748.38
Discoveries & Adjustments:					
Current year discoveries & adjustments	0		0.00	0.00	
			0.00	0.00	
Total	0		0.00	0.00	
Releases & Adjustments:					
DMV Current year valuation adjustments	0		0.00	0.00	0.00
DMV Current year tax releases	0		0.00	0.00	0.00
Real/Personal Current year releases & adjustments	0		(3.80)	(3.80)	
Total	0		(3.80)	(3.80)	0.00
Write-offs (under \$1.00) or Adjustments:			0.00	0.00	
Total MSD Valuation	3,161,967,345				
Net levy		1,650,040.60		1,649,292.22	748.38
TOTAL UNCOLLECTED MSD AS OF 08/27/24:		(1,389,078.94)		(1,389,078.94)	0.00
CURRENT YEAR MSD COLLECTED:		260,961.66		260,213.28	748.38
CURRENT MSD COLLECTION PERCENTAGE:		15.815%		15.777%	0.000%

Town of Nags Head, North Carolina
ANALYSIS OF CURRENT 2023-2024 TOWN WIDE TAX LEVY
2024 Tax Levy As of August 27, 2024 for Sept. 4, 2024 BOC Meeting

	Town-Wide Tax			Total Levy	
	Property Valuation	Rate	Total Levy	Property Excluding Registered Motor Vehicles	Registered Motor Vehicles
Original levy:					
Property taxed at current 2024 rate	3,071,851,717	0.003300	10,137,252.77	10,137,252.77	
Registered Motor Vehicles at current 2024 rate	1,110,669	0.003300	3,526.99		3,526.99
Registered Motor Vehicles at 2023 year's rate	4,659,624	0.003300	15,376.76		15,376.76
Registered Motor Vehicles at 2022 year's rate	(20,981)	0.002875	(60.32)		(60.32)
Penalties			8,387.61	8,387.61	
Total	3,077,601,029		10,164,483.81	10,145,640.38	18,843.43
Discoveries & Adjustments:					
Current year discoveries & adjustments tax	0		0.00	0.00	
Town wide beach nourishment tax			0.00	0.00	
Corporate Utilities discoveries & tax	0		0.00	0.00	
Corporate Utilities beach nourishment tax			0.00	0.00	
Penalty Discoveries			0.00	0.00	
Total	0.00		0.00	0.00	
Releases & Adjustments:					
Current year releases & adjustments	0		(125.50)	0.00	(125.50)
Town wide beach nourishment			0.00	0.00	
Penalty Releases			0.00	0.00	
Total	0		(125.50)	0.00	(125.50)
Write-offs (under \$1.00) or Adjustments:			0.00	0.00	
Total Property Valuation	3,077,601,029				
Net levy		10,164,358.31		10,145,640.38	18,717.93
Uncollected Taxes & Penalties		(7,957,083.92)		(7,957,083.92)	0.00
Uncollected Town Wide Beach Nourishment		(651,728.13)		(651,728.13)	0.00
TOTAL UNCOLLECTED TAXES AS OF 08/27/24:		(8,608,812.05)		(8,608,812.05)	0.00
CURRENT YEAR TAXES COLLECTED:		1,555,546.26		1,536,828.33	18,717.93
CURRENT LEVY COLLECTION PERCENTAGE:		15.304%		15.148%	0.000%



Agenda Item Summary Sheet

Item No: **E-3**
Meeting Date: **September 4, 2024**

Item Title: Approval of minutes from Board of Commissioners meetings/workshops

Item Summary:

Attached for Board review and approval are the following DRAFT Board of Commissioners meeting minutes:

August 7, 2024, Regular Board of Commissioners meeting

Number of Attachments: 1

Specific Action Requested:

Provided for Board review and approval.

Submitted By: Carolyn F. Morris, Town Clerk

Date: August 30, 2024

Finance Officer Comment:

No unbudgeted costs associated with this agenda item.

Signature: Amy Miller

Date: August 30, 2024

Town Attorney Comment:

N/A

Signature: John Leidy

Date: August 30, 2024

Town Manager Comment and/or Recommendation:

N/A

Signature: Andy Garman

Date: August 30, 2024



***DRAFT* MINUTES**
TOWN OF NAGS HEAD
BOARD OF COMMISSIONERS
REGULAR MEETING
WEDNESDAY, AUGUST 7, 2024

The Nags Head Board of Commissioners met at the Board Room located at 5401 S Croatan Highway, Nags Head, North Carolina on Wednesday, August 7, 2024 at 9:00 a.m. for a Regular Meeting.

Board members Present: Mayor Ben Cahoon; Mayor Pro Tem Michael Siers; Comr. Kevin Brinkley; Comr. Bob Sanders; and Comr. Megan Lambert

Board members Absent: None

Others present: Town Manager Andy Garman; Attorney John Leidy; Amy Miller; Kelly Wyatt; David Ryan; Perry Hale; Randy Wells; Nancy Carawan; Joe Costello; Brittany Phillips; Roberta Thuman; Elizabeth Moran; Jimmy Pierce; Dee Johnson; Phil Wolfe; Trever Tilley; James Phillips; Ocean Rescue staff Hage, Lenz, Federline, Gilbertson, and Dew; Ocean Rescue Supervisor Chad Motz; Colleen Hogan; Amy Klauser; Barbara Bell; Molly Harrison; Ralph Buxton; Sandy Sanderson; Clay White and family; Troy, Robin, Sascha, and Tucker Tilley; David Phillips, Allie Morgan, Harper Phillips; John Kenny; and Town Clerk Carolyn F. Morris

CALL TO ORDER

Mayor Cahoon called the meeting to order at 9 a.m. A moment of silence was followed by the Pledge of Allegiance.

ADOPTION OF AGENDA

MOTION: Mayor Pro Tem Siers made a motion to approve the August 7th agenda as presented. The motion was seconded by Comr. Brinkley which passed unanimously.

RECOGNITION

NEW EMPLOYEE – Police Chief Hale introduced Administrative Specialist Elizabeth Moran who was welcomed by the Board to Town employment.

TEN YEARS – Police Chief Hale introduced Sr. Police Officer/Animal Control Officer Jimmy Pierce who was recognized by the Board for 10 years of service.

TWENTY YEARS – Police Chief Hale introduced Systems Administrator Dee Johnson who was recognized by the Board for 20 years of service.

PROCLAMATION - Support of the 150th Anniversary of the Establishment of the U.S. Life Saving Service in North Carolina

Mr. Ralph Buxton presented a power point summarizing the history of the US Life Saving Service in North Carolina and in the Outer Banks. His presentation is attached to and made a part of these minutes as shown in Addendum "A".

Mayor Cahoon read the proclamation in support of the 150th anniversary of the establishment of the US Life Saving Service in North Carolina as follows:

"WHEREAS, during the late 1700s and early 1800s, an increase in maritime trade resulted in the greater possibility of near-shore shipwrecks occurring along the East Coast of the United States; AND

'WHEREAS, at that time, large sections of the Eastern Seaboard were sparsely populated, leaving sailors with little hope of being rescued should their ship begin to sink—and a very small chance of survival if they made it to shore due to the isolated nature of the beaches; AND

'WHEREAS, in 1848 the foundation for the future United States Life-Saving Service was laid when the United States government provided a New Jersey congressman with funding to provide life-saving services in this state; AND

'WHEREAS, increasing maritime activity subsequently resulted in a greater loss of lives and vessels along the Eastern Seaboard, and dramatic events involving these losses demonstrated the need for a formal life-saving service to be established; AND

'WHEREAS, on April 20, 1871, the U.S. Congress appropriated \$200,000 in funding for life-saving purposes, and that same year, a network of existing volunteer life-saving stations along the East Coast were formally organized as a separate agency of the U.S. Department of Treasury, resulting in the official establishment of the United States Life-Saving Service; AND

'WHEREAS, by 1874, funds were appropriated to begin building seven life-saving stations along the coast of North Carolina, the first of which to be completed was the Chicamacomico Life-Saving Station in Rodanthe, which was commissioned on December 4, 1874; AND

'WHEREAS, construction of all seven life-saving stations—Chicamacomico, Jones Hill, Caffey's Inlet, Kitty Hawk, Nags Head, Oregon Inlet and Little Kinnakeet—was completed by October 1874; AND

'WHEREAS, a series of additional stations continued to be constructed from the North Carolina/Virginia state line to northern border of South Carolina, eventually totaling 29 stations that were located an average of six miles apart from one another; AND

'WHEREAS, over the course of its 44 years in operation before it was merged with the Revenue Cutter Service and became the United States Coast Guard, the United States Life-Saving Service responded to 28,121 vessels—and of the 178,741 lives that were in peril at sea, crew members successfully saved a record number of 177,286 lives; AND

'WHEREAS, we note that October 2024 is the 150th anniversary of the arrival of the United States Live-Saving Service to the coast of North Carolina; AND

'WHEREAS, we reflect upon the rich heritage of the men and women of Nags Head and Dare County who sacrificed comfort and risked their own personal safety to save the lives of strangers in danger at sea; AND

'WHEREAS, we acknowledge the tireless work that continues to preserve the heritage, stories, and legacies of the United States Life-Saving Service in North Carolina, ensuring that the heroism of these men is never forgotten.

'WE, THE TOWN OF NAGS HEAD BOARD OF COMMISSIONERS, do hereby recognize and celebrate the 150th anniversary of the Chicamacomico Life-Saving Station in Rodanthe and also proclaim October 2024 as "Life-Saving Service Commemoration Month" in Nags Head in honor of those who so bravely served in the United States Life-Saving Service along our shoreline."

MOTION: Comr. Brinkley made a motion to approve the proclamation in support of the 150th Anniversary of the establishment of the US Life Saving Service in North Carolina as presented. The motion was seconded by Mayor Pro Tem Siers which passed unanimously.

PRESENTATION OF LIFESAVING AWARDS:

- Fire Captain Phil Wolfe, Lt. Trever Tilley, Engineer James Phillips
- Ocean Rescue Staff Hage, Lenz, Federline, Gilbertson, and Dew

Fire Chief Randy Wells described the response shown by the Town's dedicated team on June 9, 2024 near the Hollowell Street Beach Access when Mr. Clay White suffered cardiac arrest; lifeguards began working on Mr. White, followed by Fire Dept and paramedics. These combined efforts saved Mr. White's life and he eventually made a full recovery.

Mr. White and his wife expressed their appreciation to all of the staff who saved his life; Mr. White said he feels truly blessed and Mrs. White expressed her appreciation for those involved to include the good Samaritan bystanders; she referred to all of them as "earth angels". She stated that everyone was in the right place at the right time and because of everyone's respect for their job and their extensive training, it was a positive outcome.

Ocean Rescue Captain Chad Motz presented lifesaving awards to lifeguards Hage, Lenz, Federline, Gilbertson and Dew; Fire Chief Randy Wells presented lifesaving awards to Fire Captain Wolfe, Lt Tilley, and Engineer Phillips.

On behalf of the Board, Mayor Cahoon thanked the lifeguards, fire staff, and everyone involved.

PUBLIC COMMENT

Town Attorney John Leidy opened Public Comment at 9:42 a.m.

Colleen Hogan; Kingfisher Street; she would appreciate the Town designating as much No Parking as possible; Lakeside is very chaotic and the No Parking will help especially when the hotel is built.

Molly Harrison; Lakeside Street; she appreciates the Board considering this issue further; the parking modifications suggested will be a good band aid right now but for the future, after the hotel is built, No Parking zones may need to be extended as people will be looking for more areas to park further on Lakeside Street and on Bobwhite; Old Street is a flood zone which causes many to move to Lakeside for parking.

There being no one else present who wished to speak, Attorney Leidy concluded Public Comment at 9:45 a.m.

CONSENT AGENDA

The Consent Agenda consisted of the following items:

Consideration of Budget Amendment #2 to FY 24/25 Budget

Consideration of Tax Documents

- FY 23/24 Year End Tax Adjustment Reports
- FY 23/24 Year End Tax Settlement Report

Approval of minutes

Consideration of resolution to declare surplus/disposition of old water meters

Consideration of addition to Fee Schedule re: EV Charger payment fee

Consideration of modification to Personnel Policy to incorporate Inclement Weather Policy

Sand Relocation and Dune Management Cost Share Program

- Continuation of year three of a three-year program
- Consideration of amendment to Beach Nourishment Maintenance Capital Project Ordinance

Request for Public Hearing to consider various text amendments to the Unified Development Ordinance (UDO) as it pertains to the use of multi-family dwelling developments

Request for Public Hearing to consider a text amendment to the Unified Development Ordinance submitted by Anlauf Engineering, PLLC on behalf of Ark Church, to modify the definition of "Religious Complex" to include an additional single-family residence for church staff, in addition to the existing allowance for an onsite parsonage

Request for Public Hearing to consider various amendments to the Unified Development Ordinance as it pertains to dormitory use in the SED-80, Special Environmental District

MOTION: Mayor Pro Tem Siers made a motion to approve the Consent Agenda as presented. The motion was seconded by Comr. Brinkley which passed unanimously.

Budget Amendment #2, as approved, is attached to and made a part of these minutes as shown in Addendum "B".

The tax documents to include the FY 23/24 Year End Tax Adjustment Reports and the Year End Tax Settlement Report, as approved, are attached to and made a part of these minutes as shown in Addendum "C".

The minutes of the July 3rd Board meeting, as approved, are on file in the Town Clerk's Office.

The Resolution to declare surplus/disposition of old water meters, as adopted, read in part as follows:

"WHEREAS, The Board of Commissioners of the Town of Nags Head, North Carolina desires to declare surplus and dispose of certain Town-owned property; AND

'WHEREAS, The following described Town owned property is hereby declared to be surplus to the needs of the Town of Nags Head:

ITEM NAME	ASSET #	DESCRIPTION	REASON FOR SURPLUS
Water Meters	N/A	Estimated 6000 - 3/4" 1",1.5",2",3",4",6" water meters	Town-wide manual water meters and meter box lids have been replaced by new AMI smart meters
Water Meter box lids	N/A	Estimated 5000 water meter box lids	

WHEREAS, NCGS 160A-266(a-c) allows the Town to dispose of real or personal property belonging to the Town, subject to limitations and according to procedures prescribed therein; AND

WHEREAS, NCGS 160A-266(d) allows the Town to discard any personal property that: (i) is determined to have no value; (ii) remains unsold or unclaimed after the Town has exhausted efforts to sell the property using any applicable procedure under this Article; or (iii) poses a potential threat to the public health or safety; AND

WHEREAS, the referenced statute does not require the Town to publish notice of the intent to declare or discard surplus property that has no value.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Commissioners of the Town of Nags Head declares the real and personal property as surplus and authorizes the following:

The Town Manager or his designee is hereby authorized to dispose of the listed items by any legal means allowable to include: (1) Private negotiation and sale; (2) Advertisement for sealed bids; (3) Negotiated offer, advertisement, and upset bid; (4) Public auction; (5) Exchange; (6) Donation to non-profit organization, (7) Internet on-line offering, or (8) Destroying."

The Fee Schedule summary sheet detailing the modification, as approved, read in part as follows:

Request approval of listed modification to the Consolidated Fee Schedule:

Electric Vehicle Charging Fee 0.16 per kilowatt hour

This fee is to recuperate the energy costs associated with the use of electric vehicle chargers on Town-owned properties. Electric bills across various town owned buildings were reviewed during the month of June. The cost per kilowatt hour varied depending on the location with the highest cost being at just below 0.15 per kilowatt hour. Therefore, we would suggest charging 0.16 per kilowatt hour to allow the Town to recuperate what the Town is paying in electricity plus the 4% surcharge the EvoCharge deducts from each transaction. EvoCharge will also charge an additional credit card processing fee of 3.9% + 0.30 cents per transaction. The cost per kilowatt hour and additional fees can be added and customized at any time on the EvoCharge portal. EvoCharge utilizes Stripe to maintain all customer credit card information and payment processing.

A copy of the affected page from the Fee Schedule is attached."

The modification to the Personnel Policy, as detailed in the agenda summary sheet, as approved, read in part as follows:

Staff recommends replacing the current "Storm Related Compensation Leave" policy located in the Personnel Policy, Article VII, Section 21 which briefly states, "The Board of Commissioners or town manager may, at their

discretion, award straight time to employees that work during storm related events granted by the town manager or mandatory evacuations declared by the Mayor of the Town of Nags Head.”

‘Instead, staff recommends implementing an Inclement Weather policy (attached) to provide more guidance for inclement weather and office closure circumstances. Please refer to the attached memo for additional information.”

The memo detailing the changes to the Sand Relocation and Dune Management Cost Share Program, as approved, read in part as follows:

“To better assist oceanfront property owners with overall dune management, staff recommend funding the cost share program to include dune vegetation, sand fence installation, and ocean sand relocation activities in the upcoming season.

‘As a point of reference, the Town processed the below number of sand relocation permits the past four years:

- FY 20-21, 155 sand relocation permits
- FY 21-22, 190 sand relocation permits
- FY 22-23, 266 sand relocation permits
- FY 23-24, 280 sand relocation permits

‘Dune vegetation stabilization is required for sand relocation reimbursement, with a cap of \$3,500. If sand is not being moved, \$1,000 is the cap for plants and fencing, which does include labor and materials. Currently the application interval for planting and sand fence installation is every year, and the application interval for the sand relocation is once every three years. FY 24-25 is the third year of the three-year cycle for the sand relocation reimbursement program.

<i>Activity</i>	<i>FY 21-22</i>	<i>FY 22-23</i>	<i>FY 23-24</i>	<i>FY 24-25</i>	Application Interval	Application Dates
Planting	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	Every Year	Oct. 1 - June 30
Sand Fence Installation	<i>Yes (Mid-Way)</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	Every Year	Oct. 1 - June 30
Sand Relocation	<i>No</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	Once Every Three Years	Nov. 15 – April 15
Max. Funding Amount per Parcel	<i>\$1,000</i>	<i>\$3,500</i>	<i>\$3,500</i>	<i>\$3,500</i>		
Total Program Funding	<i>\$20,000</i>	<i>\$320,000</i>	<i>\$400,000</i>	<i>\$400,000</i>		
Total Amount Disbursed	<i>\$9,931</i>	<i>\$217,152</i>	<i>\$419,000</i>	<i>N/A</i>		
Total Amount Allocated	<i>N/A</i>	<i>\$102,848</i>	<i>\$319,876</i>	<i>N/A</i>		

‘OBX Better Beaches

Staff has previously recommended allocating \$15,000 to OBX Better Beaches for the purpose of installing dune vegetation. OBX Better Beaches did not request or utilize any portion of this allocation the past season. For the FY 24-25 season, staff recommends that the requested \$400,000 funding include the reimbursements as well as any requests from OBX Better Beaches, not to exceed \$15,000.

'A budget ordinance is included for your approval of this request. Staff will be available to answer any questions.'

The Request for Public Hearing concerning multi-family housing, as approved, read in part as follows:

'At their June 18, 2024 meeting, staff presented the Planning Board with a draft multi-family housing ordinance developed by the Multi-Family Ordinance Working Group. This presentation included a comparison between the working group's ordinance and the previously recommended ordinance by the Planning Board. Following questions primarily related to overall density and parking, staff provided additional updates at the Planning Board's July 16, 2024 meeting.

'This item will be presented again at the Planning Board's August 20, 2024 meeting, with the expectation of receiving a recommendation to the Board of Commissioners. Therefore, staff requests that the Board of Commissioners schedule a public hearing for this proposed amendment at their September 4, 2024 meeting.'

The Request for Public Hearing concerning definition of "Religious Complex", as approved, read in part as follows:

'Joseph Anlauf, P.E. of Anlauf Engineering, PLLC has submitted a text amendment request on behalf of the Ark Church. If adopted, the text amendment would modify the definition of "Religious Complex" to allow for the construction of a single-family dwelling onsite for church staff, in addition to the already permitted parsonage. The applicant notes in the application that the amendment is designed to allow religious complexes the ability to include additional affordable housing options for church staff and their families. More affordable housing options will allow the church to attract and retain additional much needed church staff.

Planning Staff and Planning Board Recommendation

Staff believes that permitting religious complexes to build a single-family dwelling onsite for church staff can offer significant benefits to the church, its staff, and the community, provided all zoning and building regulations are met. Onsite residences could enhance community engagement, ensure staff availability for church-related events and activities and provide a constant presence to respond to any emergencies involving the church. Planning staff finds the proposed text amendment to be consistent with the 2022 Comprehensive Land Use Plan and recommend adoption of the amendment as presented.

'At their July 16, 2024 meeting, the Planning Board voted unanimously to recommend adoption of the text amendment as presented. While not part of the motion, several Planning Board members did inquire about expanding this request to include two-family/duplex options.'

The Request for Public Hearing concerning dormitory use in the SED-80 District, as approved, read in part as follows:

'In response to ongoing discussions regarding workforce housing availability within the County, the Town of Nags Head is actively exploring the potential construction of at least two residential duplexes. These structures would primarily serve as housing for the town's lifeguards. The proposed site for this workforce housing is Town-owned property located at 425 W. Health Center Drive, formerly the Outer Banks Medical Center and now the Community Care Clinic. Specifically, the town is considering construction in the area of the old helipad, which is no longer in use. This property is zoned SED-80, Special Environmental District.

'At their June 18, 2024, meeting, planning staff requested that the Planning Board consider initiating a text amendment. This amendment would allow dormitory use within the SED-80 zoning designation, not only when affiliated with an existing nursing home facility, but also for the purpose of housing the town workforce.

'Planning Board Recommendation

At their July 16, 2024, meeting the Planning Board voted unanimously to recommend adoption of the text amendment as presented."

REPORTS AND RECOMMENDATIONS FROM THE PLANNING BOARD AND THE PLANNING AND DEVELOPMENT DIRECTOR

Update from Planning Director

Planning Director Kelly Wyatt presented the monthly report from the Planning and Development Dept which read in part as follows:

"This memo provides an overview of selected Planning and Development Department activities, projects, and initiatives. If requested, Staff will be prepared to discuss any of this information in detail at the Board of Commissioners meeting on August 7th, 2024.

'Monthly Activity Report

Attached for the Board's review is the Planning and Development Monthly Report for June 2024. In addition to permitting, inspections, code enforcement, and Todd D. Krafft Septic Health Initiative activities, Staff was involved in the following meetings or activities of note during the month of July:

Tuesday, July 2nd – Technical Review Committee Meeting

Wednesday, July 3rd - Board of Commissioners Meeting

Wednesday, July 10th – Committee for Art and Culture Meeting

Thursday, July 11th – Board of Adjustment Meeting (no hearings)

Tuesday, July 16th – Planning Board Meeting

Wednesday, July 17th – Board of Commissioners mid-month meeting

Thursday, July 25th – Septic Health Advisory Committee Meeting

Dowdy Park Farmers Market – Thursday, July 4th, 11th, 18th & 25th

Dowdy Park Summer Concert Series – Wednesday, July 3rd, 10th, 17th, 24th, and 31st

'Planning Board - Pending Applications and Discussions

The Planning Board's most recent meeting was held on Tuesday, July 16, 2024. The following items were heard:

'Consideration of a text amendment to the Unified Development Ordinance submitted by Anlauf Engineering, PLLC on behalf of Ark Church, to modify the definition of "Religious Complex" to include an additional single-family residence for church staff, in addition to existing allowance for an onsite parsonage. The Planning voted unanimously to recommend adoption of this text amendment as proposed. This item is on the Board of Commissioners Consent Agenda on August 7th with request for the Public Hearing to be held on September 4th, 2024.

'Consideration of various amendments to the Unified Development Ordinance as it pertains to the use of multi-family dwelling developments. The Planning Board discussed this item at length and requested that staff return with additional information at their August 20th meeting. This item is on the Board of Commissioners Consent Agenda on August 7th with request for the Public Hearing to be held on September 4th, 2024.

'Consideration of amendments to the Unified Development Ordinance as it pertains to the dormitory use in the SED-80, Special Environmental District. The Planning Board voted unanimously to recommend adoption of the

amendment as presented. This item is on the Board of Commissioners Consent Agenda on August 7th with request for the Public Hearing to be held on September 4th, 2024.

Staff provided the Planning Board with the same presentation given to the Board of Commissioners at their July 3rd meeting on Accessory Dwelling Units (ADU's) and existing within the Town.

The Planning Board's next meeting is scheduled for Tuesday, August 20th, 2024. Currently, the agenda is expected to include consideration various amendments to the UDO related to the use of multi-family dwelling developments and a map amendment request submitted by Chris Greening to rezone the property located 0 Satterfield Landing (Parcel # 005618002) from C-3, Commercial Services to C-2, General Commercial.

Board of Adjustment – Recent and Pending Applications
There were no items for the Board of Adjustments consideration in July 2024.

Additional Updates
DWMP/Septic Health Advisory Committee – The Septic Health Advisory Committee met on Thursday, July 25th and received an update on the number of inspections, pump out credits and loans processed during FY 23-24.

The committee also discussed upcoming data collection and mapping initiatives to further the recommendations of the Decentralized Wastewater Management Plan. Additionally, recent water quality advisories for E. Abalone Street and E. Curlew Street were discussed. Environmental Planner Conner Twiddy will present a year-to-date review of the Todd D. Krafft Septic Health Initiative and committee's work at the Board of Commissioners meeting on August 7th, 2024.

Estuarine Shoreline Management Plan – The Town was awarded a grant of \$500,000 under the N.C. Resilient Coastal Communities Program to assist in completing the engineering and design work for the Villa Dunes and Soundside Road estuarine marsh restoration and marsh stabilization projects. It will be November before we know about the NC Land and Water Fund Grant that was applied for to assist with the Harvey Site/OBVB site. Additionally, staff are researching using a combination of Community Conservation Assistance Program (CCAP) funds and Coastal Federation cost share funds for a shoreline stabilization along the causeway.

Electric Vehicle Action Plan – LoWire Technologies has completed the installation of two Level II EV chargers at Town Hall. Shoshin is scheduled to install an outside access point for the charging stations. Once we finalize payment and the station management interface, these units will be available for public use. A DEQ representative will conduct an onsite inspection to ensure all grant requirements for reimbursement have been met.

Sand Relocation and Dune Management Cost Share Program – Staff are requesting an allocation of \$400,000 for the Sand Relocation and Dune Management Cost Share Program for FY 24-25. This request is listed as Item E-7 on the Board of Commissioners agenda for the August 7th Meeting.

Public Beach and Coastal Waterfront Access Grant Program – Staff will be completing and filing the final application for the improvements to the June Street Beach Access prior to the submission deadline of Friday, August 2nd.

Permitting Update 3rd & 4th Quarter – See below the total number of permits accepted and the average turnaround time. These numbers do not include trade permits.

2024	Total Permits	Avg Turnaround/days
January	77	2.4
February	73	2.5

March	74	2.5
April	73	3.0
May	48	2.2
June	40	2.3

'Dowdy Park Events/Farmers Market/Holiday Markets/Art & Culture – For the month of August, the Town will be hosting the following events and activities:

'Yoga on the Lawn, Tuesday mornings 7:30 – 8:30am all month long.
 Fitness Fridays, Friday mornings 7:30 – 8:15am through August 16th.
 Summer Concert Series, Wednesday evenings 6:30 – 8:00pm.
 The Bar Cats Duo on August 7th
 Haze & Dacey on August 14th
 Intangible Catz on August 21st
 Dowdy Park Farmers Markets, Thursdays 9am – 1pm: August 1st, 8th, & 15th. August 15th will be the last market of the summer season. Outer Banks Hospitals "Eat the Rainbow" campaign has been very successful this season.

'Family Fun Night, Tuesday, August 6th at 4pm – 7pm. Storytelling with Liza Yowel begins at 5:30pm. Tuesday, August 20th is Back to School Night with music by Nature Out Loud. Corolla Wild Horse Fund with Riptide to be rescheduled, previously cancelled due to heat.
 Movie at Dowdy Park, Friday, August 2nd

'Upcoming Meetings and Other Dates

Tuesday, August 6th – Technical Review Committee Meeting
 Wednesday, August 7th - Board of Commissioners Meeting
 Wednesday, August 7th – Outer Banks Hazard Mitigation Joint Committee Meeting (1pm)
 Thursday, August 8th – Board of Adjustment (no hearings scheduled)
 August 10th – August 14th – Planner Chris Trembly attend Certified Zoning Official Conference
 Wednesday, August 14th – Committee for Art and Culture Meeting
 Tuesday, August 20th – Planning Board Meeting
 Wednesday, August 21st – Board of Commissioners mid-month meeting
 Wednesday, August 28th – CRS Cycle Verification Visit
 Dowdy Park Farmers Market – Thursday, August 1st, 8th, and final market on 15th
 Dowdy Park Summer Concert Series – Wednesday, Aug 7th, 14th, and 21st"

Mayor Cahoon asked Ms. Kelly for an update, for the benefit of the citizens, on the Dune Management and Cost Share Program that the Town handles. Ms. Kelly stated that the Town has gone from 155 sand relocations to 280 sand relocation permits making it a very successful program. Director Kelly summarized the program which requested additional money in this year's budget due to the interest in the program. The program includes sand fencing, sprigging – up to \$3,500 for both programs on a 3-year cycle and up to \$1,000 for sprigging only. She expressed her appreciation to the Board for their continuing support of the program.

Year-end overview/update on the Todd D Krafft Septic Health Initiative

The agenda summary sheet read in part as follows:

"The Todd D. Krafft Septic Health Initiative had a productive Fiscal Year 23-24. Notable activities include:

- Completion of 117 septic tank inspections by staff and contractors, Kevin Carver and David Swinney.
- Issuance of 121 water credits/rebates for tank pumping.
- Processing of 9 Septic Loans for repair or replacement due to failure or damage.
- Numerous outreach activities, including participation in Dowdy Park Markets and providing updates as part of the Town's annual CRS Mailer. Informational clings have also been distributed to rental companies.
- Installation of 15 groundwater monitoring loggers and 2 water quality monitoring loggers throughout the town.
- Purchase of four (4) additional water quality monitoring loggers for installation in Fall 2024.
- Acquisition of GPS unit to geo-locate existing and new septic tanks within the town.
- Moving forward with long-range data collection and mapping effort educate on septic upkeep and maintenance, including creating an interactive town map with details such as tank age, type, last inspection and findings, pumping history, and credits used, as well as incorporating Hydromet Cloud data on groundwater levels and nitrate readings from new monitoring loggers.
- Adoption of a text amendment to the UDO prohibiting parking on septic system areas.
- Ongoing quarterly Septic Health Advisory Committee Meetings which have provided valuable input, discussion, and guidance as we continue to implement the recommendations of the DWMP. Two new members were appointed: Rob Crawford and Gary Ferguson.
- Environmental Planner Conner Twiddy has been involved in educational opportunities with ECU and CSI and has provided interviews with NC Health News Magazine and Scientific American. Conner also attended the Onsite Wastewater Operator class and will be taking the certification exam in September 2024."

Environmental Planner Conner Twiddy and Dep Planning Director Joe Costello reviewed with Board members a power point presentation summarizing the Septic Health Initiative Program and the long range data collection and mapping efforts. Dep Director Costello explained that the high-end GPS collector to be used with the art collector app which provides exact location data - and with the water quality logger - they will eventually have all septic health data, location, age of pump, etc. to populate as a map layer.

Mr. Twiddy continued with a status of the Septic Health Advisory Committee. He thanked Comr. Brinkley and others for their help with the committee and for all their help with the program. Mayor Cahoon thanked Mr. Twiddy for all his work and his interest in the program.

OLD BUSINESS/ITEMS TABLED FROM PREVIOUS MEETINGS

From July 3rd Board meeting – Roanoke Shores Subdivision

- Consideration of Traffic Control Map amendments

Police Chief Perry Hale summarized his memo which read in part as follows:

"At the June BOC meeting, it was requested by the Board to implement No Parking and No Thru Traffic on W. Lakeside St. due to concerns from residents regarding parking in the right-of-way, impacts to visibility created by parked vehicles, and concerns over the future hotel in this neighborhood. While it was requested by the Board to make the entire street No Parking and No Thru Traffic, it would be my recommendation to have only portions of this street marked as No Parking. This recommendation comes after inspecting the area and learning that several of the properties (111- 207) on the southside have steep driveways and limited room for parking on their property if they were designated as No Parking. Additionally, there would be little benefit from the no parking designation in this particular area. Based on these observations, I have included two options for the board to consider.

1. "No Parking Between Signs" the entire length of the street on both the north and south sides of W. Lakeside St.
2. "No Parking Between Signs" from the intersection of US 158 to the property line of 111 W. Lakeside St. on the southside of the roadway. For the northside, "No Parking Between Signs" from US 158 to the intersection of Bobwhite Ave.

'We will place a "No Thru Traffic" sign within 200 feet of the intersection of US 158 as a visual deterrent being this is a public street. I will be available at the Board meeting to answer any questions.'

Comr. Sanders questioned No Parking on the side streets; Chief Hale recommended No Parking on Lakeside only at this time and to bring back amendments as needed.

Comr. Brinkley pointed out that the No Thru Street designation was not enforceable.

Mayor Pro Tem Siers asked about a No Exit Onto Lakeside from the gas station designation. Police Chief Hale said that he will look into this but felt that it would not be enforceable.

MOTION: Comr. Brinkley made a motion to adopt the ordinance amending the Traffic Control Map, Option #2 which designates "No Parking Between Signs – Tow Away Zone" on Lakeside as recommended by Police Chief Hale. The motion was seconded by Mayor Pro Tem Siers.

Comr. Brinkley stated that the Board can always amend the Traffic Control Map later as needed; this designation is what was recommended by the Police Chief.

CONTINUATION OF MOTION: The motion passed unanimously.

Town Manager Garman stated that he, Mayor Cahoon, and Engineer Ryan have reviewed the flood issues in this neighborhood and Engineer Ryan will include this area for future examination.

From June 5th Board meeting – Consideration of policy for neighborhoods to request traffic calming devices

The agenda summary sheet for this item read in part as follows:

'At the June 5, 2024 Board of Commissioners meeting, staff presented a summary of items for consideration in the development of a traffic calming policy. Guidance was provided to staff by the Board on the process and elements to be incorporated into a policy document.

'Staff has prepared a traffic calming policy to include a process flowchart and an application which can be utilized to process these types of requests.

'The policy allows requests to be reviewed based on traditional traffic engineering criteria and alternatively based on neighborhood support. The traffic calming process also combines past practices with strategies that have been successfully employed by other North Carolina communities

'Town staff will provide a brief overview summarizing the policy along with the process and will be available for questions. A copy of the traffic calming policy, process flowchart and application are included for reference.

'Staff Recommendation:

Staff recommends the Board of Commissioners adopt the Traffic Calming Policy.'

Town Engineer David Ryan presented the proposed policy; he pointed out that the process begins with an application being submitted to the Town Clerk. He reviewed the proposed policy.

Mayor Cahoon said that the radar signs have been placed in some locations, such as Old Nags Head Cove. Engineer Ryan agreed and said that the signs have improved compliance in Old Nags Head Cove, Soundside Road, and at Whalebone Junction with Soundside Road having the largest success with compliance.

Comr. Lambert indicated the huge need for this process and Board members agreed.

Comr. Brinkley thanked Engineer Ryan for his work on the policy and questioned if the policy could utilize an online poll instead of a formal neighborhood meeting. Engineer Ryan agreed as that would be sufficient for providing some documentation for community outreach.

It was Board consensus that in lieu of going through this process, radar signage can be requested for main streets where there are problems as a general practice, as this has seen some degree of success; in addition, staff is to move the permanent installation of the radar speed device to Tier 2.

NEW BUSINESS

Committee Reports

Comr. Lambert – Government Access Channel/Current TV Committee met on July 24th – the LPDI grant application was submitted and approved; Current TV wants to host a film festival where local films/films highlighting the Outer Banks would be shown.

Comr. Brinkley – Septic Health Advisory Committee update has been provided by Planning Director Wyatt.

Comr. Sanders – He thanked Planning Director Wyatt for the Estuarine Access Shoreline Committee update.

Consideration of resolutions authorizing Fall 2024 Fishing Tournaments

- Nags Head Surf Fishing Club; Fraternal Order of Eagles; Outer Banks Association of Realtors

MOTION: Mayor Cahoon made a motion to adopt the three (3) resolutions authorizing Fall 2024 Fishing Tournaments for the Nags Head Surf Fishing Club, the Fraternal Order of Eagles, and the Outer Banks Association of Realtors as presented. The motion was seconded by Mayor Pro Tem Siers which passed unanimously.

The resolutions, as adopted, read in part as follows:

Nags Head Surf Fishing Club

“WHEREAS, the Nags Head Surf Fishing Club is sponsoring its annual Nags Head Surf Fishing Club Tournament October 9 - 11, 2024; AND

‘WHEREAS, in accordance with Section 8-83 (b)(3) of the Nags Head Code of Ordinances, the Nags Head Surf Fishing Club submitted a request on July 18, 2024, for the Town of Nags Head to issue short-term beach driving permits to the Nags Head Surf Fishing Club to be distributed to participants in its annual Fishing Tournament.

‘NOW, THEREFORE BE IT RESOLVED by the Town of Nags Head Board of Commissioners that the Town of Nags Head is pleased to offer its assistance for the Nags Head Surf Fishing Club Tournament again this year.

'BE IT FURTHER RESOLVED as follows: The Town Clerk is authorized to issue up to three (3) short-term beach driving permits to each six (6) member team in the Nags Head Surf Fishing Club to be distributed to the 80 teams participating in its annual Nags Head Surf Fishing Club Tournament. Judges will be scouting stations on Tuesday, October 8, 2024. The tournament is to be held Wednesday, Thursday, and Friday, October 9, 10, and 11, 2024. An additional 25 permits are authorized to be issued to tournament judges/officials – for a total of 265 permits. These special permits will only be valid for this three-day period. Only three (3) vehicles per team are allowed on the beach at any time during the tournament.

'The Nags Head Surf Fishing Club is responsible for the distribution of all short-term beach driving permits for the 2024 Nags Head Surf Fishing Club Tournament. No individual short-term permits for the tournament will be issued by Staff.

'The name of the team to whom a permit is issued shall appear on each permit.

'A pamphlet (to be provided by the Town) on Regulations Governing Beach Vehicular Traffic in the Town of Nags Head shall be supplied with each permit distributed by Nags Head Surf Fishing Club.

'Each permit shall be displayed on the inside front windshield on the passenger side of the vehicle, even if a normal Nags Head Beach Driving Permit is already displayed.

'All beach driving permits MUST always be in the possession of the team. The permits are not transferable.

'The Town of Nags Head Beach Driving Ordinance is to be strictly enforced by the Nags Head Police Dept.

'Should the weather or high tide call for the closure of the beach or a section of the beach, the Town Manager will close the beach."

Fraternal Order of Eagles

"WHEREAS, the Fraternal Order of Eagles (FOE), Aerie #4506, is sponsoring its annual Charity Surf Fishing Tournament October 26, 2024; AND

'WHEREAS, in accordance with Section 8-83 (b)(3) of the Nags Head Code of Ordinances, the Fraternal Order of Eagles, Aerie #4506, submitted a request on July 12, 2024, for the Town of Nags Head to issue short-term beach driving permits to the Fraternal Order of Eagles, Aerie #4506, to be distributed to participants in its annual Fishing Tournament.

'NOW, THEREFORE BE IT RESOLVED by the Town of Nags Head Board of Commissioners that the Town of Nags Head is pleased to offer its assistance for the Fraternal Order of Eagles, Aerie #4506, Charity Surf Fishing Tournament this year.

'BE IT FURTHER RESOLVED as follows: The Town Clerk is authorized to issue up to three (3) short-term beach driving permits to each six (6) member team in the FOE Tournament to be distributed to the teams participating in its annual Surf Fishing Tournament. The tournament is to be held on Saturday, October 26, 2024. Tournament officials are requesting a total of 32 short-term permits which includes 2 permits for judges. These special permits will only be valid for Saturday, October 26, 2024. Only three (3) vehicles per team are allowed on the beach at any time during the tournament.

'The Fraternal Order of Eagles, Aerie #4506, is responsible for the distribution of all short-term beach driving permits for the 2024 FOE Charity Surf Fishing Tournament. No individual short-term permits for the tournament will be issued by Staff.

'The name of the team to whom a permit is issued shall appear on each permit.

'A pamphlet (to be provided by the Town) on Regulations Governing Beach Vehicular Traffic in the Town of Nags Head shall be supplied with each permit distributed by the Fraternal Order of Eagles, Aerie #4506.

'Each permit shall be displayed on the inside front windshield on the passenger side of the vehicle, even if a normal Nags Head Beach Driving Permit is already displayed.

'All beach driving permits MUST always be in the possession of the team. The permits are not transferable.

'The Town of Nags Head Beach Driving Ordinance is to be strictly enforced by the Nags Head Police Dept.

'Should the weather or high tide call for the closure of the beach or a section of the beach, the Town Manager will close the beach."

Outer Banks Association of Realtors

"WHEREAS, the Outer Banks Association of Realtors (OBAR) is sponsoring its annual Charity Surf Fishing Tournament October 4, 2024; AND

'WHEREAS, in accordance with Section 8-83 (b)(3) of the Nags Head Code of Ordinances, the Outer Banks Association of Realtors submitted a request on July 15, 2024, for the Town of Nags Head to issue short-term beach driving permits to the Outer Banks Association of Realtors to be distributed to participants in its annual Fishing Tournament.

'NOW, THEREFORE BE IT RESOLVED by the Town of Nags Head Board of Commissioners that the Town of Nags Head is pleased to offer its assistance for the OBAR Charity Surf Fishing Tournament this year.

'BE IT FURTHER RESOLVED as follows: The Town Clerk is authorized to issue up to three (3) short-term beach driving permits to each six (6) member team in the OBAR Tournament to be distributed to the 40 teams participating in its annual OBAR Charity Surf Fishing Tournament. The tournament is to be held on Friday, October 4, 2024. An additional five (5) permits are authorized to be issued to tournament judges/officials – Tournament officials are requesting a total of 90 short-term permits. These special permits will only be valid for Friday, October 4, 2024. Only three (3) vehicles per team are allowed on the beach at any time during the tournament.

'The Outer Banks Association of Realtors is responsible for the distribution of all short-term beach driving permits for the 2024 OBAR Charity Surf Fishing Tournament. No individual short-term permits for the tournament will be issued by Staff.

'The name of the team to whom a permit is issued shall appear on each permit.

'A pamphlet (to be provided by the Town) on Regulations Governing Beach Vehicular Traffic in the Town of Nags Head shall be supplied with each permit distributed by the Outer Banks Association of Realtors.

'Each permit shall be displayed on the inside front windshield on the passenger side of the vehicle, even if a normal Nags Head Beach Driving Permit is already displayed.

'All beach driving permits MUST always be in the possession of the team. The permits are not transferable.

'The Town of Nags Head Beach Driving Ordinance is to be strictly enforced by the Nags Head Police Dept.

'Should the weather or high tide call for the closure of the beach or a section of the beach, the Town Manager will close the beach.'

Consideration of ordinance regulating certain fishing practices designed to attract sharks from May 1st through Oct 31st

Police Chief Hale summarized his memo concerning fishing practices to attract sharks which read in part as follows:

"It is my recommendation to add a section under the Town's Code of Ordinances, Chapter 8, (Beaches and Waterways), that would cover shark fishing or attraction of sharks during our peak season. This ordinance would regulate any person from fishing in the town limits, whether from the shoreline or an erected pier, to target sharks. This would not prevent regular fishing practices that are currently done from these locations, except to those who bait or lure sharks adjacent to the waters of town.

'It is requested this ordinance be added to Ch. 8 Article I. – In General, as a misdemeanor or civil offense. If adopted this would be listed as Sec. 8-10, which is reserved for future changes.

'I have drafted the language below for your review.

'Ordinance Language: Baiting or Attracting Sharks Prohibited

(a) No person fishing from a pier or the shore within the town limits shall bait or cause to be used any bait which attracts sharks of any type to the shores or piers. This section shall not prevent regular and normal fishing now done on piers and shores of the town, except to the extent it affects the baiting and luring of sharks to the waters of the town.

(b) This prohibition shall be in effect beginning 9:00 am to 5:00 pm from May 1 through October 31.

'I will be available at the August BOC meeting for any questions the Board may have.'

MOTION: Comr. Sanders made a motion to adopt the ordinance regulating certain fishing practices designed to attract sharks from May 1st through October 31st as presented. The motion was seconded by Mayor Pro Tem Siers which passed unanimously.

The ordinance, as adopted, is attached to and made a part of these minutes as shown in Addendum "D".

ITEMS REFERRED TO AND PRESENTATIONS FROM TOWN MANAGER

Update on kite discussion from July 3rd Board meeting

Town Manager Garman stated that he reached out to the Dare County Manager to see if kites flying on the oceanfront had caused an issue with helicopters. He said that Manager Outten indicated that according to the Dare EMS Director it has not been an issue, due mainly to the elevation they usually fly and that they also do not usually fly along the oceanfront. Manager Garman has discussed this issue with Public Information Officer Roberta Thuman and some social media guidelines will be provided.

Town Manager Garman also noted that he spoke to John Harris of Kitty Hawk Kites about adding a notation in his kite pamphlets about not adding additional string to kites when purchased.

Presentation – Oakley-Collier on Town Master Plan – Time Specific 11:00 a.m.

Town Manager Andy Garman introduced Oakley-Collier participants: Principals Tim Oakley and Ann Collier; and Designer Amanda Rider, who were attending via the Zoom Platform due to the uncertainty of Tropical Storm Debby.

Tim Oakley presented and discussed with Board members a power point presentation of a very draft Master Plan for the Town – his slides are attached to and made a part of these minutes as shown in Addendum “E”.

Town Manager Garman emphasized that staff needs to review, program everything out and make sure adequate space is provided.

Mayor Cahoon said that the Master Plan presented today is very draft and the Board and staff are to further review the Plan and provide comments.

Update on construction of the Public Services Facility

- Consideration of Change Order and associated Capital Project Ordinance Amendments

Town Engineer David Ryan provided an update on the Public Services Facility Construction; the focus is on the largest building on the site - the combined Fleet Maintenance and Sanitation Building. He pointed out that several live oaks were able to be saved and create a nice entranceway at this location. The Equipment Building continues to be worked on - the combined building is expected to be completed within the next two weeks to include installation of the septic system. There is a mid September completion date for the Equipment Building. Board members thanked Engineer Ryan for his update.

- Change Order and two (2) associated Capital Project Ordinance amendments
 - Capital Project and a Water Fund ordinance amendments

MOTION: Comr. Brinkley made a motion to approve the Public Services Facility Change Order #6 as presented. The motion was seconded by Mayor Pro Tem Siers which passed unanimously.

The Public Services Facility Change Order #6, as approved, is attached to and made a part of these minutes as shown in Addendum “F”.

MOTION: Comr. Brinkley made a motion to adopt the Capital Project Ordinance for the Public Works Complex (Amendment #4) as presented. The motion was seconded by Mayor Pro Tem Siers which passed unanimously.

MOTION: Mayor Pro Tem Siers made a motion to adopt the Water Fund Ordinance for the Water Capital Project for Approved Water CIP Projects (Amendment #2) as presented. The motion was seconded by Comr. Brinkley which passed unanimously.

The two Capital Project Ordinances are attached to and made a part of these minutes as shown in Addendum “G”.

BOARD OF COMMISSIONERS AGENDA

Comr. Megan Lambert – Discussion of hotel parking standards

Comr. Lambert expressed her concern re: parking requirements vs parking needs at hotels which are often different; she would like to have staff review this issue to bring back for discussion.

Mayor Pro Tem Siers questioned the current opportunities in the Town for hotels; Ms. Wyatt stated that available land would allow it in the C-2 district and Hotel Overlay District. Comr. Lambert said she is also concerned about redevelopment.

Mayor Cahoon felt that the Town should be careful of any new standards as existing hotels are already under a lot of regulations and if they want to remodel/improve, we don't want to put a lot of pressure on them.

It was Board consensus to direct staff to look at hotel parking standards with consideration of existing properties and with consultation with the industry – and further to also include restaurant parking standards.

MAYOR'S AGENDA

Mayor Cahoon - Discussion of Fall 2024 Retreat

It was Board consensus to schedule a one-day Board Retreat on Friday, October 18, 2024. Mayor Cahoon asked Board members to provide any topics of interest for discussion to Town Manager Garman.

CLOSED SESSION

MOTION: Comr. Brinkley made a motion to enter Closed Session to confer with the Board re: matters related to attorney/client privilege to include a CRC variance at Juncos St Beach Access; Use of Town site at 105 W Seachase Drive, and to preserve that privilege, pursuant to GS 143-318.11(a)(3) and to discuss the possible acquisition of real property located at 4222 S Croatan Highway pursuant to GS 143-318.11(a)(5). The motion was seconded by Mayor Pro Tem Siers which passed unanimously. The time was 12:01 p.m.

OPEN SESSION

The Board re-entered Open Session at 12:38 p.m. Attorney Leidy reported that during Closed Session the Board did confer with the Town Attorney and did give instructions to the Town Attorney and the Town Manager.

Resolutions authorizing the sale of 105 W Seachase Drive and the Town's portion of Soundside Event Site

MOTION: Mayor Pro Tem Siers made a motion to adopt the resolution to authorize the sale of real property pursuant to NCGS 160A-274 re: the Town selling its undivided interest in the Soundside Event site to the Dare County Tourism Board/Dare County. The motion was seconded by Comr. Brinkley which passed unanimously.

MOTION: Comr. Brinkley made a motion to adopt the resolution to authorize the sale of real property pursuant to NCGS 160A-274 re: 105 W Seachase Drive. The motion was seconded by Mayor Pro Tem Siers which passed unanimously.

The resolutions, as adopted, read in part as follows:

105 W Seachase Drive

“WHEREAS, North Carolina General Statutes §160A-274 authorizes the Town of Nags Head to sell real property to another governmental unit upon such terms and conditions as it deems wise, with or without consideration; and

‘WHEREAS, The Town of Nags Head is the owner of property located at 105 W. Seachase Drive, Nags Head, NC, Tax Parcel # 031038001 (the “Seachase Drive Property”); and

‘WHEREAS, the County of Dare, North Carolina, a body politic and corporate (“Dare County”), is a governmental unit for purposes of North Carolina General Statutes §160A-274; and

‘WHEREAS, The Town of Nags Head desires to sell the Seachase Drive Property to Dare County on the terms and conditions set forth on the Offer to Purchase and Contract, a copy of which being attached to this Resolution (the “Seachase Drive Agreement”), for \$1,700,000.00; and

‘WHEREAS, the Dare County desires to purchase the Seachase Drive Property from the Town of Nags Head pursuant to the terms of the Seachase Drive Agreement; and

‘WHEREAS, the Town of Nags Head is also the owner of the following properties: (1) a 17.949% undivided interest in Lot 1, Forbes Commercial Lots, with a property address of 6906 S. Croatan Highway, Nags Head, NC, Dare County Tax Parcel # 012422000; (2) a 17.949% undivided interest in Lot 2, Forbes Commercial Lots, with a property address of 6900 S. Croatan Highway, Nags Head, NC, Dare County Tax Parcel # 012422001, and (3) a 34.783% undivided interest in Lot 3, Forbes Commercial Lots, with a property address of 6800 S. Croatan Highway, Nags Head, NC, Dare County Tax Parcel # 008854000 (collectively, the “Event Site Property”); and

‘WHEREAS, the Dare County Tourism Board, a North Carolina public authority created by the North Carolina General Assembly, which is a governmental unit for purposes of North Carolina General Statutes §160A-274, is the owner of the remaining undivided interests in the Event Site Property not presently owned by the Town of Nags Head; and

‘WHEREAS, the Town of Nags Head desires to sell all of its undivided interests in the Event Site Property to the Dare County Tourism Board on the terms and conditions set forth in an Agreement for Purchase and Sale of Land (the “Event Site Agreement”), for \$2,336,107.00, to be paid in various installments in exchange for deeds from the Town of Nags Head between 2024 and 2034, all as set forth in the Event Site Agreement; and

‘WHEREAS, the Dare County Tourism Board desires to purchase the Event Site Property from the Town of Nags Head pursuant to the terms of the Event Site Agreement; and

‘WHEREAS, the Board of Commissioners of Dare County must approve the Dare County Tourism Board’s expenditure of funds to purchase the Event Site property from the Town of Nags Head (the “County Expenditure Approval”); and

‘WHEREAS, the Town of Nags Head Board of Commissioners desires to confirm that the County Expenditure Approval has occurred before the closing of the sale of the Seachase Drive Property to Dare County.

‘NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners for the Town of Nags Head as follows:

1. The Town of Nags Head hereby agrees to sell the Seachase Property to Dare County for the sum of \$1,700,000.00, on the terms set forth in the Seachase Drive Agreement.

2. The Town of Nags Head hereby approves the terms and provisions of the Seachase Drive Agreement.
3. The closing of the Town of Nags Head's sale of the Seachase Property to Dare County is contingent on the occurrence of the County Expenditure Approval.
4. The Mayor or his designee and the Town Clerk are hereby authorized to execute a Deed and all necessary documents on behalf of the Town in order to convey the Seachase Property to Dare County pursuant to the Seachase Agreement."

Soundside Event Site

"WHEREAS, North Carolina General Statutes §160A-274 authorizes the Town of Nags Head to sell real property to another governmental unit upon such terms and conditions as it deems wise, with or without consideration; and

'WHEREAS, The Town of Nags Head is the owner of the following properties: (1) a 17.949% undivided interest in Lot 1, Forbes Commercial Lots, with a property address of 6906 S. Croatan Highway, Nags Head, NC, Dare County Tax Parcel # 012422000; (2) a 17.949% undivided interest in Lot 2, Forbes Commercial Lots, with a property address of 6900 S. Croatan Highway, Nags Head, NC, Dare County Tax Parcel # 012422001, and (3) a 34.783% undivided interest in Lot 3, Forbes Commercial Lots, with a property address of 6800 S. Croatan Highway, Nags Head, NC, Dare County Tax Parcel # 008854000 (collectively, the "Property"); and

'WHEREAS, the Dare County Tourism Board, a North Carolina public authority created by the North Carolina General Assembly, which is a governmental unit for purposes of North Carolina General Statutes §160A-274, is the owner of the remaining undivided interests in the Property not presently owned by the Town of Nags Head; and

'WHEREAS, The Town of Nags Head desires to sell all of its undivided interests in the Property to the Dare County Tourism Board on the terms and conditions set forth on the Agreement for Purchase and Sale of Land, a copy of which being attached to this Resolution (the "Agreement"), for \$2,336,107.00, to be paid in various installments in exchange for deeds from the Town of Nags Head between 2024 and 2034, all as set forth in the Agreement; and

'WHEREAS, the Dare County Tourism Board desires to purchase the Property from the Town of Nags Head pursuant to the terms of the Agreement.

'NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners for the Town of Nags Head as follows:

1. The Town of Nags Head hereby agrees to sell the Property described above to the Dare County Tourism Board for the sum of \$2,336,107.00, payable to the Town in installments as set forth in the Agreement.
2. The Town of Nags Head hereby approves the terms and provisions of the Agreement.
3. The Mayor or his designee and the Town Clerk are hereby authorized to execute Deeds and all necessary documents on behalf of the Town from time to time over the term of the Agreement in order to convey the Property to the Dare County Tourism Board pursuant to the installment schedule set forth in the Agreement."

ADJOURNMENT

MOTION: Comr. Brinkley made a motion to adjourn. The motion was seconded by Mayor Pro Tem Siers which passed unanimously. The time was 12:41 p.m.

Carolyn F. Morris, Town Clerk

Date Approved: _____

Mayor: _____
Benjamin Cahoon



Agenda Item Summary Sheet

Item No: **E-4**
Meeting Date: **September 4, 2024**

Item Title: Consideration of final Traffic Calming Policy

Item Summary:

At the August 7th Board of Commissioners meeting, the Traffic Calming Policy was presented by Town Engineer David Ryan. After discussion, it was Board consensus to remove permanent installation of the radar speed device from Tier 3 and include both temporary and permanent installation of the radar speed device to Tier 2.

Attached please find the final policy with the Board's comments incorporated.

Number of Attachments: 1

Specific Action Requested:

Policy provided for Board review and final approval.

Submitted By: Town Engineer David Ryan

Date: August 30, 2024

Finance Officer Comment:

N/A

Signature: Amy Miller

Date: August 30, 2024

Town Attorney Comment:

N/A

Signature: John Leidy

Date: August 30, 2024

Town Manager Comment and/or Recommendation:

Staff will prepare recommendations to place radar speed limit signs in neighborhoods throughout Town as part of the FY 2025/26 budget process.

Signature: Andy Garman

Date: August 30, 2024

Traffic Calming Measures Policy

Purpose:

To outline a process by which the Town of Nags Head to address requests related to transportation safety concerns on town-maintained streets. The guidelines in this policy will assist Town staff in determining an appropriate course of action in evaluating and providing sensible and programmatic responses to each request and recommend certain actions to the Board of Commissioners for consideration of implementation.

The policy's goal is to prioritize and implement police enforcement, traffic calming, and pedestrian measures based upon safety, applicability, budget, efficacy, and partnerships.

Applicability:

The process outlined in this policy is for the consideration and implementation of traffic calming measures for all Town of Nags Head public streets. This excludes S Croatan Hwy. (US Hwy 158) and S. Virginia Dare Trail (NC 12) which are managed through the North Carolina Department of Transportation.

Procedure:

Citizens or neighborhood associations, may submit a Request for Traffic Calming form to the Town Manager via regular mail at P.O. Box 99, Nags Head, NC 27959 or to townclerks@nagsheadnc.gov

The Traffic Calming Measure Request Form shall be completed by the applicant indicating the specific location and summary of the traffic concern. If the request is located within a neighborhood having a homeowners or property owners association, the name of the association should be indicated in conjunction with the name of a board representative supporting the request.

All applications shall require a minimum of (5) five neighborhood residents with contact information who are in support of the request. All sections of the application shall be filled completely and the signature of applicant/contact person affixed to the form.

Once a request is received, staff will initiate a traffic assessment to review such factors as speed, volume, street length, street grades, accident history, sidewalks and other factors. Speed and volume data will be collected via the police radar trailer or a temporary installation of a radar speed limit sign. The data collection period shall be for a minimum of a 2-week period up to a 30-day period.

If the request meets traffic-related criteria noted later in this policy under **Traffic Assessment**, the request moves to the next step. If the basic minimum criteria listed above is not met, a letter will be sent to the "point of contact" explaining why the location will not be considered for further evaluation. The letter will also include an option for an alternate path via a neighborhood support option. The criteria for a neighborhood support option will require a formalized petition that meets a minimum threshold of 70% of all households within the area of influence in support of the traffic calming treatment.

If the applicant does not meet the neighborhood support petition requirements, the application will not be considered for further evaluation.

If the traffic requirements nor the neighborhood support criteria is met, a letter will be forwarded to the “point of contact” summarizing the findings with an explanation of how the traffic related criteria or the neighborhood support threshold was not met. Staff may recommend Tier 1 and/or Tier 2 traffic calming measures may be recommended to mitigate the issue.

If the process proceeds forward, an engineering report will prepared utilizing the site specific data collection. A report will be generated detailing the issue, area of influence, results of the data collection along with maps, photographs and other pertinent information. A concept will be prepared with a recommendation for the implementation of a Tier 3 traffic calming measure. If it is determined the conditions warrant the addition of traffic calming measures, the application will proceed to the next step.

This information will be shared and reviewed with the lead contact person and/or the community committee that has filed the request. It is then the responsibility of the citizen’s committee to plan and conduct a neighborhood meeting to review the concept plan for the proposed enhancements, inform other residents about the use of traffic calming devices, and document additional input.

All Tier 3 recommendations proceeding via the neighborhood support option require at least (1) neighborhood meeting and documentation indicating support for the proposed concept of at least 70% of all households within the area of influence in favor of the proposed traffic calming treatment.

If the applicant does not gain support from a minimum of 70% of the households within the area of influence, the application will not be considered for further evaluation.

Tier 3 traffic calming measures will be implemented as funds become available and at the discretion of the Board of Commissioners. Improvement projects may be included as a line item in the Capital Improvement Plan for the next fiscal year (July 1-June 30) and are subject to approval by the Board of Commissioners.

Multiple requests for traffic calming in the same area within a 36-month period will not be evaluated without sufficient cause. Sufficient cause is determined at the discretion of the Town Manager, Police Chief or Town Engineer.

Timelines for traffic assessments may vary depending how many requests are in the queue. Applications and requests will be reviewed based upon the order they are received.

Traffic Assessment:

The Town Manager, with the assistance of the Police Chief, Town Engineer, Fire Chief, and Public Services Director or their designated representatives will review the location(s) identified in the application. A preliminary review shall be performed for those requests with a primary concern related to speeding. Both traffic volume and speed shall be analyzed for a period which closely represents peak traffic periods, to the maximum extent feasible. Eligibility shall be based on meeting the requirements of Part (A) and may include items noted in Part (B) below:

Part (A) required data review

Speed- 85th percentile speed exceeds posted speed limit by greater than or equal to **6 mph**

Volume- Minimum average of 200 vehicles per day (vpd)

Length- Street segment lengths considered for traffic calming applications should not be more than 1 mile in length but greater than 300 ft in length. Street segment length less than 300 ft in length or less than 10 residential direct driveway connections are not eligible for traffic calming.

Grades- Street grade shall be less than 8%

And any one or more of the following

Part (B) Supplemental data review

Accidents- Two (2) or more speed-related crashes within a three (3) year period

Pathways- The presence of pedestrian generators and facilities, sidewalks, crosswalks, etc.

Other factors- The presence of other roadside factors, public safety concerns, and area conditions that could be mitigated by a traffic calming device.

Speed and volume data will be collected via the police radar trailer or a temporary installation of a radar speed limit sign. The collection period shall be for a minimum of a 2-week period up to a 30-day period.

Traffic Engineering Study:

The next step in the process consists of review of the collected vehicular data, street geometric review, pedestrian activity observations, historical data review, and characterization of the area of influence. The Town Engineer or his/her designee will conduct field observations/site visits and collect any supplemental data as necessary to perform a warrant analysis. Once the following information is collected, an initial recommendation will be determined by the Town Manager.

- Geometric Features of the roadway (lane width, shoulder width, sight distance, vertical curves, and sidewalks)
- Traffic volume data and verification of street classification
- Speed data to determine the 85th percentile speed and extent of speeding violations should they exist
- Accident data for the past 3 years through the Nags Head Police Department
- Observation of pedestrian and bicycle activity
- Other pertinent information as deemed necessary

The data collection relies on data driven decisions and observations by standard transportation analysis methods. All requests will be confirmed and prioritized using measured traffic data. Requests that are received but not supported by traffic data will be prioritized by the actual measured data and not by anecdotal reports.

A Traffic Engineering Study Summary documenting the study results shall include the

following information

- 1) A complete description of the study area with applicable maps, photos, and extent of study area.
- 2) Identifying the area of influence which includes properties abutting the street under study and properties on intersecting streets within a reasonable distance of the roadway section as determined by staff.
- 3) A description of the problem the neighborhood has requested to address. This shall include field data collected describing the scale of the problem. For example, if speeding is the concern, the study should show data from a completed speed study.
- 4) A description of the proposed traffic calming measures, as applicable, and locations where the neighborhood is requesting to install such traffic calming devices. This shall include any additional signs, pavement markings and other traffic control devices.
- 5) An estimated cost of the proposed traffic calming device, the expected maintenance requirements, and an estimate to remove devices.

Once the applicable data and results have been collected and report prepared, the findings will be reviewed by the Town Manager, Police Chief, Fire Chief, Public Services Director and Town Engineer, or their appointed designees. Once finalized, the point of contact will be notified of these results.

This information will be shared and reviewed with the lead contact person and/or the community party that has filed the request. It is then the responsibility of the citizen's committee to plan and conduct a neighborhood meeting to review the concept plan for the proposed enhancements, inform other residents about the use of traffic calming devices, and document additional input. Town staff will attend the meeting to address questions about the process and summarize the findings.

Traffic Calming Device Guidelines:

Every traffic calming request is unique and shall be evaluated on a case-by-case basis. As such, the outcomes for requests may vary. If the request does not meet the traffic requirements or does not have the neighborhood support, mitigative measures may be recommended.

Mitigative measures are structured in three separate tiers and generally follow a schedule based upon cost of implementation and resultant impact. The following outlines the framework of the tier-based schedule and associative mitigation measures. Town staff will follow the tier-based structure in preparing recommendations for traffic calming requests received.

The Town uses three **Tiers** of traffic calming devices:

Tier 1- Non Physical Traffic Calming Measures (Low Cost, Low Impact)

- Increased enforcement by the Nags Head Police Department
- Neighborhood Awareness Campaign
- Temporary installation of the police radar trailer
- Maintenance of landscaping to improve sight distance

These treatments can be addressed with Town forces or neighborhood engagement without a formal application being filed. This allows work to be done quickly, at low cost, and with minimal impact to area residents.

Neighborhood Awareness Campaign

Because many people exceed the posted speed limit in their own neighborhood, a Neighborhood Awareness Campaign is recommended anytime there is a perceived issue. “Speeders” are not always nonresidents- most are neighbors and friends who are committed to safe, peaceful neighborhoods. Speeding in residential areas is a bad habit and it takes a unified effort to break it. Neighbors should remind neighbors to pay attention to their driving habits and of their mutual responsibility to the residents living in the community.

Several creative methods to reducing traffic problems in neighborhoods can be:

- Hold discussions at scheduled neighborhood meetings
- Hold a “slow down” block party to get people to think about their driving habits
- Placing door hangers and talk to neighbors individually
- Encourage people to ride bicycles or walk to destinations in an effort to reduce motor vehicle volume and speeding

These are just a few examples of ideas for a Neighborhood Awareness Campaign. A successful Neighborhood Awareness Campaign is one where at least 50% of the affected residents are communicated with. Residents shall primarily reside on the street directly associated with the request.

Town staff will not be involved in the Neighborhood Awareness Campaign.

Tier 2- Non-Structural Traffic Calming Measures (Moderate Cost, Low Impact)

- Signage and advance warning device addition/changes
- Add/change pavement markings- Including crosswalks
- Follow-up Neighborhood Awareness Campaign
- Gateways/entryways
- Turn prohibitions
- Colored pavements
- Temporary **or permanent** installation of the radar speed display device (i.e. radar speed limit sign)

After 6 months (minimum) of Tier 2 traffic calming device measures being implemented, follow-up data and analysis may be performed. Data from the Nags Head Police Department

and Town staff monitoring will be used. If the results show the Tier 2 measures are ineffective at controlling the undesired traffic condition, Town staff will examine the potential Tier 3 traffic calming measures.

Tier 3- Structural Traffic Calming Measures (High Cost, High Impact)

- ~~Permanent installation of the radar speed display device (i.e. radar speed limit sign)~~
- Speed cushion installation
- Planted Median Islands
- Chicanes
- Mini Traffic Circles

All Tier 3 treatments require at least (1) neighborhood meeting and documentation indicating support for the proposed concept gaining support. Applications utilizing the neighborhood support approach shall be required to document support from at least 70% of all households within the area of influence in favor of the proposed traffic calming treatment.

Funding for Traffic Calming Projects

The Town of Nags Head has not identified any special funding source for traffic calming projects. Potential funding options available are special assessments, private funding, and operating funds. The Nags Head Board of Commissioners will determine the appropriate funding mechanism for the installation of traffic calming devices on a case by case basis. Town staff will be responsible for determining a funding source for all Tier 1 and 2 devices within the existing budget or the next fiscal year. There is no guarantee that Town funding will be available.

Tier 3 traffic calming measures will be implemented as funds become available and at the discretion of the Board of Commissioners and may be included as a line item in the Capital Improvement Plan (CIP) for the next fiscal year (July 1-June 30) and are subject to approval by the Board of Commissioners.

The Board of Commissioners and/or Town Manager may recommend a cost share be provided by the applicant. If the applicant is unable to raise the required funding amount, the project will not be constructed until funding becomes available.

The Board of Commissioners may also recommend that a traffic calming project utilize 100% private funding. In these instances, the applicant will be responsible for raising 100% of the cost of the applicable design, construction, and materials fees/costs related to the project. If Town staff can perform construction of the traffic calming project, the applicant is only responsible for raising the costs of the materials provided by the Public Services Department. If the applicant is unable to raise the required funding amount, the project will not be constructed until the funds become available.

Installation of traffic calming devices is considered a street improvement and is eligible for special assessment in accordance with North Carolina General Statute 160A-216(1) should the Board of Commissioners recommend private funding.

Traffic Calming Implementation

Once a traffic calming plan has been approved by staff (if no appropriation of funds is necessary), or once the Board of Commissioners has appropriated funding, the project manager shall take the actions necessary to commence the construction process.

The project manager responsible for implementation of the traffic calming plan shall provide updates to the community representative(s) during the construction period.

Once completed, Town staff will monitor the overall effectiveness of the traffic calming devices and make recommendations for adjustment or modification as required.

Multi-Way Stops and Traffic Signals

Multi-Way stops (i.e. stop signs) and traffic signals are traffic control devices and should not be considered a traffic calming device in response to potential speeding concerns. Stop signs serve to assign right-of-way and multi-way stops will only be considered in instances where the Manual on Uniform Traffic Control Devices (MUTCD) warrant analysis indicates that a multi-way stop is appropriate. Requests for Traffic Signals will be forwarded to the North Carolina Department of Transportation (NCDOT) Division Traffic Engineer for review.

Multiple requests for traffic control in the same area within a 36-month period will not be evaluated without sufficient cause. Sufficient cause is determined at the discretion of the Town Manager, Police Chief or Town Engineer or North Carolina Department of Transportation officials.

Approved Signs

Design, application, and placement of traffic control devices shall follow those adopted in the Manual on Uniform Traffic Control Devices (MUTCD).



Agenda Item Summary Sheet

Item No: **E-5**
Meeting Date: **September 4, 2024**

Item Title: Request for Public Hearing for consideration of a zoning map amendment for the property located at 0 W. Satterfield Landing Road (Parcel # 005618002)

Item Summary:

Chris Greening of Coastal Bluewater Capital, LLC has submitted a zoning map amendment request with authorization from the current property owner, Mazzi, LLC. If adopted, this map amendment would rezone Lot 2a-1r of the Charles Sineath Subdivision, Parcel # 005618002 from C-3, Commercial Services to C-2, General Commercial. The intent of the C-3, Commercial Services District, is to provide for higher intensity land uses that are not compatible with other areas of the Town. The C-3 District accommodates utilities, light industrial uses, warehousing, bulk storage, municipal facilities, etc. The 2022 Comprehensive Land Use Plan states that the C-3 standards are to regulate and buffer uses so that their location or activities will not be detrimental to adjacent uses, the environment, and the sources of potable water. The Commercial Services District must be at least 10 acres in size and must have direct access to a US highway or collector street improved to town standards. If adopted, the requested rezoning would reduce the overall acreage of C-3 by 0.8 acres, leaving upwards of 36 acres of C-3 Commercial Services remaining.

The intent of the C-2, General Commercial District, is to provide for the proper grouping and development of commercial facilities to serve the entire community. The C-2 District allows the broadest range of commercial uses. All C-2 districts shall be at least 5 acres in area, the proposed zoning map amendment would result in an increase in the total acreage of C-2 zoning designation.

Staff Recommendation/Planning Board Recommendation

Based upon the evaluation of the intent of each zoning district and goals listed in the 2022 Comprehensive Land Use Plan, staff recommends adoption of the proposed zoning map amendment as presented.

At their August 20, 2024, meeting, the Planning Board voted unanimously to recommend approval of the proposed map amendment as requested.

Number of Attachments: 0

Specific Action Requested:

Schedule the Public Hearing for the Board of Commissioners October 2, 2024 Meeting.

Submitted By: Planning and Development

Date: August 26, 2024

Finance Officer Comment:

N/A

Signature: Amy Miller

Date: August 26, 2024

Town Attorney Comment:

N/A

Signature: John Leidy

Date: August 26, 2024

Town Manager Comment and/or Recommendation:

N/A

Signature: Andy Garman

Date: August 26, 2024



Agenda Item Summary Sheet

Item No: **G-1**
Meeting Date: **September 4, 2024**

Item Title: Update from Planning Director

Item Summary:

Please find attached a monthly update, with attachments, from Planning Director Kelly Wyatt.

Number of Attachments: 1

Specific Action Requested:

Provided for Board information and update.

Submitted By: Planning and Development

Date: August 30, 2024

Finance Officer Comment:

N/A

Signature: Amy Miller

Date: August 30, 2024

Town Attorney Comment:

N/A

Signature: John Leidy

Date: August 30, 2024

Town Manager Comment and/or Recommendation:

I will participate in the discussion as necessary.

Signature: Andy Garman

Date: August 30, 2024



MEMORANDUM

Town of Nags Head

Planning & Development Department

To: Board of Commissioners
Planning Board

From: Kelly Wyatt, Planning Director
Joe Costello, Deputy Planning Director

Date: August 28, 2024

Subject: Planning and Development Director's Report (G-1)

This memo provides an overview of selected Planning and Development Department activities, projects, and initiatives. If requested, Staff will be prepared to discuss any of this information in detail at the Board of Commissioners meeting on September 4th, 2024.

Monthly Activity Report

Attached for the Board's review is the *Planning and Development Monthly Report for July 2024*. In addition to permitting, inspections, code enforcement, and Todd D. Krafft Septic Health Initiative activities, Staff was involved in the following meetings or activities of note during the month of July:

- Tuesday, August 6th – Technical Review Committee Meeting
- Wednesday, August 7th - Board of Commissioners Meeting
- Thursday, August 8th – Board of Adjustment (no hearings scheduled)
- August 10th – August 14th – Planner Chris Trembly attend Certified Zoning Official Conference
- Wednesday, August 14th – Committee for Art and Culture Meeting
- Tuesday, August 20th – Planning Board Meeting
- Wednesday, August 21st – Board of Commissioners mid-month meeting
- Wednesday, August 28th – CRS Cycle Verification Visit
- Wednesday, August 28th – Outer Banks Hazard Mitigation Joint Committee Meeting (1pm)
- Dowdy Park Farmers Market – Thursday, August 1st, 8th, and final market on 15th
- Dowdy Park Summer Concert Series – Wednesday, August 7th, 14th, and 21st

Planning Board - Pending Applications and Discussions

The Planning Board's most recent meeting was held on Tuesday, August 20, 2024. The following items were heard:

- Consideration of a map amendment request submitted by Chris Greening of Coastal Bluewater Capital, LLC as authorized by property owner Mazzi, LLC to rezone the property located at 0 W. Satterfield Landing Road, Lot 2a-1r of the Charles Sineath Subdivision, (Parcel # 005618002) from C-3, Commercial Services to C-2, General Commercial. This is the vacant property west of TW's Bait and Tackel. The Planning Board voted unanimously to recommend approval of the map amendment request as presented. This item is on the Board of Commissioners September 4th Consent Agenda requesting Public Hearing to be held on October 2nd, 2024.

-
- Consideration of various amendments to the Unified Development Ordinance as it pertains to the use of multi-family dwelling developments. The Planning Board discussed this item at length and voted 5 to 1 to recommend adoption of the Multi-Family Working Group’s draft ordinance with several revisions. The Public Hearing for this item is scheduled for the Board of Commissioners September 4th, 2024 meeting.
 - Discussion of minimum required parking standards for hotel use and restaurant use within the Town. Staff will provide the Planning Board with additional requested information at their September 17th meeting.
 - Discussion and update on potential Accessory Dwelling Unit (ADU) ordinance and existing conditions within the town. Planning Board members emphasized the importance of hearing from Nags Head citizens, including both supporters of ADUs and those with concerns, before drafting new language. Staff requested that Planning Board members share any groups, organizations, or individuals who should be personally invited to an upcoming meeting. In addition to receiving public comments at their September 17th meeting, an evening session has been scheduled for Wednesday, September 18th, from 6:00 – 7:00 p.m. in the Board Room for residents unable to attend during work hours. This opportunity for public input has been and will continue to be widely advertised through various channels to encourage community participation.

The Planning Board’s next meeting is scheduled for Tuesday, September 17th, 2024. Currently, the agenda is expected to include consideration of a Special Use/Site Plan review for construction of a duplex for the purpose of Town of Nags Head lifeguard housing at 425 W. Health Center Drive, continued discussion on parking standards for hotel and restaurant uses, and continued discussion with community engagement regarding Accessory Dwelling Units (ADU’s).

Board of Adjustment – Recent and Pending Applications

There were no items for the Board of Adjustments consideration in August 2024.

Additional Updates

- **Estuarine Shoreline Management Plan** – The Town was awarded a grant of \$500,000 under the N.C. Resilient Coastal Communities Program to assist in completing the engineering and design work for the Villa Dunes and Soundside Road estuarine marsh restoration and marsh stabilization projects. It will be November before we know about the NC Land and Water Fund Grant that was applied for to assist with the Harvey Site/OBVB site. Additionally, staff are researching using a combination of Community Conservation Assistance Program (CCAP) funds and Coastal Federation cost share funds for a shoreline stabilization along the causeway.
- **Electric Vehicle Action Plan** – LoWire Technologies has completed the installation of two-Level II EV chargers at Town Hall. Shoshin is scheduled to install an outside access point for the charging stations. Once we finalize payment and the station management interface, these units will be available for public use. A DEQ representative will conduct an onsite inspection to ensure all grant requirements for reimbursement have been met
- **Sand Relocation and Dune Management Cost Share Program** – Following the Board of Commissioners' allocation of \$400,000 for the FY 24-25 Sand Relocation and Dune Management Cost Share Program, staff is currently reviewing and updating educational materials and the sand relocation application. The application period is expected to open on November 1, 2024, for review purposes only. In preparation, staff will host an educational presentation and Q&A session in mid-October for equipment operators, property owners, and other interested parties interested in participating in this season's program.

- **Public Beach and Coastal Waterfront Access Grant Program** – Staff has submitted the final application for the improvements at the June Street Beach Access and anticipates receiving notification regarding the grant award by late September or early October.
- **Dowdy Park Events/Farmers Market/Holiday Markets/Art & Culture** – As summer winds down, so have some of our events. The Dowdy Park Farmers Markets have concluded for the season. The rescheduled evening market was a great success, with strong attendance and positive feedback from vendors on their sales. Family Fun Nights have also wrapped up, and Kids Night was a huge hit. Special thanks to the Nags Head Police and Fire Departments for their participation.

The Summer Concert Series has ended as well, with Event Coordinator Paige Griffin noting that concert attendance significantly increased this season. There was a growing sense of excitement and community, with many familiar faces returning for each event.

While Fitness Fridays have concluded, Tuesday morning Yoga sessions will continue through October 22nd.

Movies in the Park will run over the next several months. The next movie night is scheduled for September 6th, featuring *Twister* starting around 8 p.m. Additional movie nights are planned for October 4th and November 1st.

Event Coordinator Paige Griffin is currently finalizing the Holiday Market application process. Keep an eye on our website and social media for details!



Upcoming Meetings and Other Dates

- Tuesday, September 3rd - Technical Review Committee Meeting
- Wednesday, September 4th - Board of Commissioners Meeting
- Thursday, September 11th – Committee for Art and Culture Meeting
- Thursday, September 12th – Board of Adjustment Meeting (no hearings scheduled)
- Thursday, September 12th – CRS Users Group Meeting
- Tuesday, September 17th – Planning Board Meeting
- Wednesday, September 18th – Board of Commissioners mid-month meeting
- Dowdy Park Movie Night, Friday, September 6th at 8pm – TWISTER

**TOWN OF NAGS HEAD PLANNING AND DEVELOPMENT
MONTHLY REPORT
JULY 2024**

DATE SUBMITTED: August 7, 2024

	Jul-24	Jul-23	Jun-24	2024-2025 FISCAL YTD	2023-2024 FISCAL YTD	FISCAL YEAR INCREASE/ DECREASE
BUILDING PERMITS ISSUED - RESIDENTIAL						
New Single Family	3	0	0	3	0	3
New Single Family, 3000 sf or >	1	0	1	1	0	1
Duplex - New	0	0	0	0	0	0
Sub Total - New Residential	4	0	1	4	0	4
Miscellaneous (Total)	21	31	31	21	31	(10)
<i>Accessory Structure</i>	3	2	3	3	2	1
<i>Addition</i>	0	1	3	0	1	(1)
<i>Demolition</i>	0	0	1	0	0	0
<i>Move</i>	0	0	0	0	0	0
<i>Remodel</i>	5	7	7	5	7	(2)
<i>Repair</i>	13	21	17	13	21	(8)
Total Residential	25	31	32	25	31	(6)
BUILDING PERMITS ISSUED - COMMERCIAL						
Multi-Family - New	0	0	0	0	0	0
Motel/Hotel - New	0	0	0	0	0	0
Business/Govt/Other - New	0	0	0	0	0	0
Subtotal - New Commercial	0	0	0	0	0	0
Miscellaneous (Total)	7	4	2	7	4	3
<i>Accessory Structure</i>	1	2	1	1	2	(1)
<i>Addition</i>	0	0	0	0	0	0
<i>Demolition</i>	0	0	0	0	0	0
<i>Move</i>	0	0	0	0	0	0
<i>Remodel</i>	1	2	0	1	2	(1)
<i>Repair</i>	5	0	1	5	0	5
Total Commercial	7	4	2	7	4	3
Grand Total	32	35	34	32	35	(3)
SUB-CONTRACTOR PERMITS						
Electrical	61	61	67	61	61	0
Gas	2	4	2	2	4	(2)
Mechanical	45	44	55	45	44	1
Plumbing	2	10	7	2	10	(8)
Fire Sprinkler	0	0	1	0	0	0
VALUE						
New Single Family	\$1,634,157	\$0	\$0	\$1,634,157	\$0	\$1,634,157
New Single Family, 3000 sf or >	\$1,000,000	\$0	\$975,000	\$1,000,000	\$0	\$1,000,000
Duplex - New	\$0	\$0	\$0	\$0	\$0	\$0
Misc (Total Residential)	\$791,232	\$1,010,866	\$2,253,969	\$791,232	\$1,010,866	(\$219,634)
Sub Total Residential	\$3,425,389	\$1,010,866	\$3,228,969	\$3,425,389	\$1,010,866	\$2,414,523
Multi-Family - New	\$0	\$0	\$0	\$0	\$0	\$0
Motel/Hotel - New	\$0	\$0	\$0	\$0	\$0	\$0
Business/Govt/Other - New	\$0	\$0	\$0	\$0	\$0	\$0
Misc (Total Commercial)	\$196,537	\$180,200	\$139,303	\$196,537	\$180,200	\$16,337
Sub Total Commercial	\$196,537	\$180,200	\$139,303	\$196,537	\$180,200	\$16,337
Grand Total	\$3,621,926	\$1,191,066	\$3,368,272	\$3,621,926	\$1,191,066	\$2,430,860

**TOWN OF NAGS HEAD PLANNING AND DEVELOPMENT
MONTHLY REPORT
JULY 2024**

DATE SUBMITTED: August 7, 2024

	Jul-24	Jul-23	Jun-24	2024-2025 FISCAL YTD	2023-2024 FISCAL YTD	FISCAL YEAR INCREASE/DECREASE
ZONING						
Zoning Permits	35	44	38	35	44	(9)
Soil & Erosion	5	N/A	4	5	N/A	N/A
Stormwater Plans	1	N/A	4	1	N/A	N/A
CAMA						
CAMA LPO Permits	1	1	3	1	1	0
CAMA LPO Exemptions	1	3	4	1	3	0
Sand Relocations						N/A
CODE COMPLIANCE						
Cases Investigated	42	28	44	42	28	14
Warnings	2	2	3	2	2	0
NOVs Issued	40	26	41	40	26	14
Civil Citations (#)	0	0	0	0	0	0
Civil Citations (\$)	\$0	\$0	\$0	\$0	\$0	\$0
SEPTIC HEALTH						
Tanks inspected	8	17	10	8	17	(9)
Tanks pumped	6	9	9	6	9	(3)
Water quality sites tested	46	20	36	46	20	26
Personnel Hours in Training/School	39	25	34	3	25	(22)


Kelly Wyatt, Planning Director



Agenda Item Summary Sheet

Item No: **H-1**
Meeting Date: **September 4, 2024**

Item Title: From July 3rd Board meeting – Results of Board requested Vanasse Hangen Brustlin, Inc. (VHB) traffic study at the intersection of Lakeside St and Hwy 158

Item Summary:

At the July 3rd Board of Commissioners meeting, the Board reviewed a modification to the site plan for the Whalebone Hotel pertaining to required improvements to W. Lakeside Street. As part of the discussion, the Board expressed concerns about traffic safety at this intersection once the hotel is constructed, not only associated with increased traffic, but also related to pedestrian crossings of US 158 as patrons of the hotel attempt to walk to the beach. The Board expressed a desire to have a signal installed at this intersection. Typically, NCDOT reviews signal requests based on a traffic study, which must demonstrate that certain conditions exist now or in the future that would warrant a signal. A traffic study was completed by the developer initially in 2022. This study showed that the existing and future conditions did not meet the warrants for a signal.

At the July 2024 meeting, the Board requested that the traffic study be updated to reflect current seasonal traffic data. Staff initiated an update to the study with the original traffic engineer, VHB, Inc. This is now complete, and staff will discuss the results with the Board at the upcoming meeting (see attached).

Number of Attachments: 1

Specific Action Requested:

Provided for Board review and discussion.

Submitted By: Administration

Date: August 30, 2024

Finance Officer Comment:

Insufficient information to determine fiscal impact.

Signature: Amy Miller

Date: August 30, 2024

Town Attorney Comment:

I will participate in the discussion as necessary.

Signature: John Leidy

Date: August 30, 2024

Town Manager Comment and/or Recommendation:

I will participate in the discussion.

Signature: Andy Garman

Date: August 30, 2024

Inn at Whalebone Updated TIA

Nags Head, North Carolina

PREPARED FOR

David Ryan
P.O. Box 99
5401 S. Croatan Hwy.
Nags Head, NC 27959
252.441.6221

PREPARED BY



VHB Engineering NC, P.C. (C-3075)
940 Main Campus Drive, Suite 500
Raleigh, NC 27606
919.829.0328

8/29/2024





Executive Summary

A new hotel is planned in the northwest quadrant of the US 158 (S Croatan Highway) at West Lakeside Street intersection in Nags Head, North Carolina (Figure 1). The property can be accessed via West Lakeside Street, and the development will consist of a 90-room hotel. The development is expected to be open in 2026. A traffic impact analysis (TIA) for this development was completed previously and sealed on September 30th, 2022. This report serves as an update to the previously completed TIA using turning movement counts collected in July 2024.

Project Background

Based on the conceptual site plan (Figure 2), access to the development is proposed via two (2) vehicular access points. The following are the proposed access points:

- › Future Access #1, full movement access on West Lakeside Street, approximately 290 feet west of US 158 (S Croatan Highway).
- › Future Access #2, full movement access on West Lakeside Street, approximately 440 feet west of US 158 (S Croatan Highway).

Based on discussions with the Town of Nags Head and the North Carolina Department of Transportation (NCDOT), the following intersections were included in the study area and analyzed for existing and future conditions using the same parameters as the initial TIA, as applicable:

- › West Lakeside Street/East Lakeside Street at US 158 (S Croatan Highway) (unsignalized)
- › East Lakeside Street at NC 12 (S Virginia Dare Trail) (unsignalized)
- › West Lakeside Street at Future Access #1 (unsignalized)

› West Lakeside Street at Future Access #2 (unsignalized)

The following scenarios were analyzed for existing and future conditions to evaluate the impacts that the proposed development may have on the surrounding roadway network:

- › Existing (2024) Conditions
- › No-Build (2026) Conditions
- › Build (2026) Conditions
- › Build (2026) Conditions with Improvements

The Existing (2024) scenario includes typical weekday AM and PM peak hour analysis and typical weekend peak hour analysis based on turning movement count data collected in September 2024. The No-Build (2026) scenario includes existing traffic with a 1.5% annual growth rate applied between the existing year (2024) and the future analysis year (2026). The Build (2026) scenario includes No-Build (2026) volumes with the addition of site trips generated by the full build-out of the proposed development.

Existing (2024) Conditions

Existing analyses were conducted based on current roadway geometrics and intersection turning movement counts collected in July 2024.

Turning movement counts were collected at the existing study area intersections on Wednesday, July 24th, 2024, and Saturday, July 27th, 2024. The Wednesday count collection period was from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM to record weekday AM and PM peak hour traffic conditions. The Saturday count collection period was from 7:00 AM to 6:00 PM to record weekend peak hour traffic conditions. The existing (2024) peak hour turning movements are displayed in Figure 3. Based on historical average annual daily traffic (AADT) data, a growth rate of 1.5% was applied to the existing (2024) counts to calculate the future year (2026) peak hour traffic volumes (Figure 4).

As reported in the Summary Level of Service (LOS) table on page vi, the eastbound approach of NC 12 and East Lakeside Street is expected to operate at an acceptable level of service (LOS D or better) during all existing scenarios. The eastbound approach of US 158 and Lakeside Street is expected to operate at LOS E during the Existing (2024) weekday AM peak hour and LOS F during the other existing peak hours. The westbound approach is expected to operate at LOS F during all existing scenarios.

No-Build (2026) Conditions

An annual growth rate of 1.5% was applied to the existing traffic to account for the normal growth between the base year (2024) and the build year (2026). There were no other planned developments identified within the study area.

As shown on the Summary LOS table on page vi, the eastbound approach of NC 12 and East Lakeside Street is expected to operate at an acceptable level of service (LOS D or better) during all existing scenarios. The eastbound approach of US 158 and Lakeside Street is expected to operate at LOS E during the existing weekday AM peak hour and LOS F during the other

existing peak hours. The westbound approach is expected to operate at LOS F during all existing scenarios.

Trip Generation and Assignment

Trip generation was conducted based on the most appropriate corresponding trip generation codes included in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition* and the suggested method of calculation in the NCDOT's "Rate vs. Equation" Spreadsheet. The proposed development is to consist of a 90-room hotel; ITE Land Use Code (LUC) 310 (Hotel) was used based on the NCDOT guidance.

As a result, the proposed development is projected to generate 552 daily weekday site trips, with 38 trips (21 entering, 17 exiting) occurring in the AM peak hour and 39 trips (20 entering, 19 exiting) occurring in the PM peak hour. The proposed development is projected to generate 728 daily Saturday site trips, with 65 trips (36 entering, 29 exiting) occurring in the peak hour. The generated site trips were distributed in accordance with the existing turning movement counts and land uses.

Build (2026) Conditions

The Build (2026) conditions account for both the No-Build (2026) traffic and the site traffic anticipated to be generated by the proposed development.

As shown on the Summary LOS table on page vi, with the addition of site trips, the NC 12 and East Lakeside Street intersection is expected to continue operating acceptably with minimal delay increases. During the Saturday peak hour, the eastbound and westbound approaches of the US 158 and Lakeside Street intersection is expected degrade from LOS E to LOS F compared to the No-Build Saturday peak hour. During the weekday PM peak hour, the eastbound and westbound approaches of the US 158 and Lakeside Street intersection are expected to operate at LOS E under build conditions. The new driveways operate at LOS A during the weekday AM, weekday PM, and Saturday peak hour with single ingress and egress lanes.

Build (2026) Conditions with Improvements

The Build (2026) conditions with improvements analyze traffic operations with a traffic signal at the intersection of US 158 and Lakeside Street using the Build (2026) peak hour volumes.

As shown in the Summary LOS table on page vi, with the installation of the signal at the intersection of US 158 and Lakeside Street, the intersection is expected to operate at LOS A during both weekday peak hours and the Saturday peak hour. All the approaches of the signalized intersection are expected to operate at LOS C or better during the analyzed peak hours. The analyzed lane geometrics and traffic control with improvements are depicted in Figure ES on page vii.

A traffic signal warrant analysis was completed for the intersection of US 158 & West Lakeside Street/East Lakeside Street following the Manual on Uniform Traffic Control Devices (MUTCD). The volumes were checked against the following MUTCD Warrants:

- Warrant 1, Eight-Hour Vehicular Volume
- Warrant 2, Four-Hour Vehicular Volume
- Warrant 3, Peak-Hour Vehicular Volume

Per the MUTCD, on roadways with speed limits of 40 mph or higher, reduced volume factors (70% Factor) apply to the intersection volumes for Warrants 2 (Four-Hour) and 3 (Peak Hour). Since the speed limit on US 158 is 50 mph, the reduced volume factors (70%) are applied to intersection volumes for Warrants 2 (Four-Hour) and 3 (Peak Hour).

Under build conditions, the intersection meets Warrant 1 (Eight-Hour), Warrant 2 (Four-Hour), and Warrant 3 (Peak-Hour) on Saturday; however, the intersection does not meet the warrants during the weekday.

Findings and Conclusion

As indicated in the traffic operations analyses, the proposed development is projected to moderately impact the traffic operations of Lakeside Street at the intersection with US 158, especially during the Saturday peak hour. The current and projected volumes on Lakeside Street are too low during weekday traffic to warrant a traffic signal; however, all three warrants are met for expected traffic on a Saturday.

Based on observations and communication with residents during the traffic count data collection, drivers generally travel on NC 12 to the nearest signalized intersection when trying to turn left onto US 158. The nearest signalized intersections are at Gull Street, about 3,700 feet south of the Lakeside Street intersection, and Seachase Drive, about 3,100 feet north of the Lakeside Street intersection.

Due to the high traffic on US 158 and associated difficulty turning left from side streets at unsignalized intersections, volumes on SB Lakeside Street at US 158 are likely suppressed when compared to the potential demand. Therefore, the traffic data used for the signal warrant analysis is likely an underestimate of traffic volumes at a signalized intersection.

A new signalized intersection in an interconnected community can streamline left-turns onto a busy street by offering a safe and predictable gap in traffic. This reduces the risks and delays associated with making left-turns from unsignalized intersections, where drivers often struggle to find adequate gaps in traffic. As a result, compared to unsignalized approaches, drivers are more likely to choose the signalized intersection for left turns, making it a more attractive and efficient route. A new traffic signal at the Lakeside Street intersection may offer a convenient midpoint between the nearest existing upstream and downstream signalized intersections.

Considering the surrounding area, including Forbes Candies in the NE quadrant of the intersection, additional shops to the south on Forbes Street, and nearby hotels and condos on NC 12, a traffic signal at Lakeside Street would likely become a desirable alternative to turning left from a nearby unsignalized intersection or traveling on NC 12 to the nearest signalized intersection.

Recommendations

US 158 & West Lakeside Street/East Lakeside Street

- Consider signaling the intersection.
- If signaling the intersection, restripe the existing TWLTLs on both US 158 approaches to have left-turn lanes with at least 100' of storage.

West Lakeside Street and Future Access #1

- Construct a driveway with single ingress and single egress lane.
- Provide stop-control for the southbound approach.

West Lakeside Street and Future Access #2

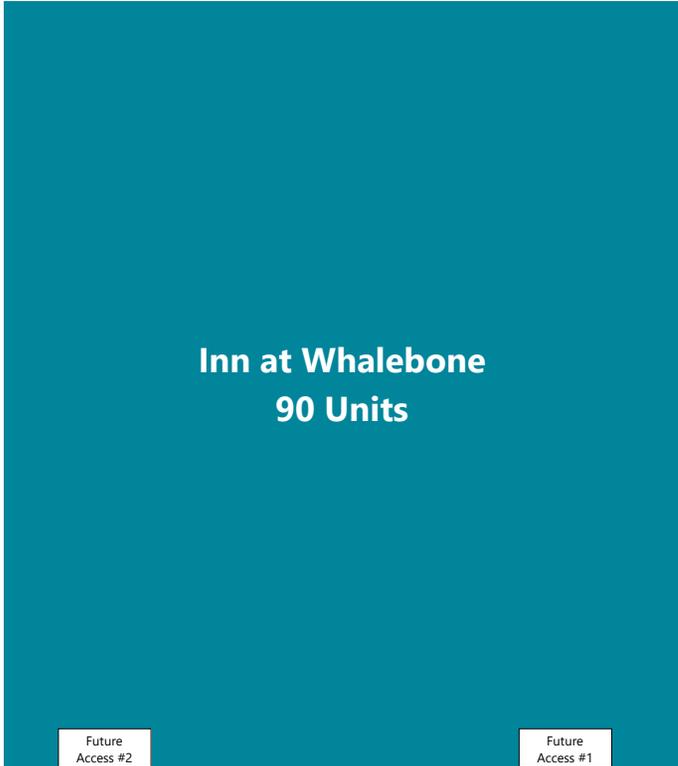
- Construct a driveway with single ingress and single egress lane.
- Provide stop-control for the southbound approach.

The summary of LOS results is shown in Table ES, and the proposed lane geometrics and traffic control following the full buildout of the development are depicted in Figure ES on the following page.

Table ES Summary Level of Service Table

ID	Intersection and Approach	Traffic Control	Existing (2024)			No-Build (2026)			Build (2026)			Build (2026) with Improvements		
			AM	PM	Saturday	AM	PM	Saturday	AM	PM	Saturday	AM	PM	Saturday
1	NC 12 & East Lakeside Street	Unsignalized	-	-	-	-	-	-	-	-	-	-	-	-
	Eastbound		A-9.5	B-10.5	B-13.2	A-9.6	B-10.6	B-13.4	A-9.6	B-10.8	B-13.7	A-9.6	B-10.8	B-13.7
2	US 158 & West Lakeside Street/East Lakeside Street	Signalized	-	-	-	-	-	-	-	-	-	A (4.9)	A (5.3)	A (7.5)
	Eastbound		C-20.1	D-27.9	E-42.5	C-20.7	D-29.5	E-45.8	C-22.3	E-36.8	F-99.7	C-23.4	C-26.1	C-28.4
	Westbound		C-22.1	E-37.3	E-41.2	C-22.8	E-39.1	E-44.4	C-23.6	E-44.8	F-63.6	C-20.3	C-22.8	C-23.1
	Northbound		-	-	-	-	-	-	-	-	-	A-4.3	A-5.0	A-6.3
	Southbound		-	-	-	-	-	-	-	-	-	A-4.3	A-4.6	A-7.4
3	West Lakeside Street & Future Access #1	Unsignalized	-	-	-	-	-	-	-	-	-	-	-	-
	Southbound		-	-	-	-	-	-	A-8.9	A-8.9	A-9.2	A-8.9	A-8.9	A-9.2
4	West Lakeside Street & Future Access #2	Unsignalized	-	-	-	-	-	-	-	-	-	-	-	-
	Southbound		-	-	-	-	-	-	A-8.7	A-8.8	A-9.0	A-8.7	A-8.8	A-9.0

X (XX.X) = Overall intersection LOS (average delay), X-XX = Approach LOS and average delay



LEGEND	
—	Existing Roadway
---	Future Roadway
	Existing Stop-Controlled Approach
	Proposed Stop-Controlled Approach
	Proposed Signalized Intersection
	Existing Lane Geometric
	Proposed Lane Geometric
TWLTU	Two-Way Left-Turn Lane

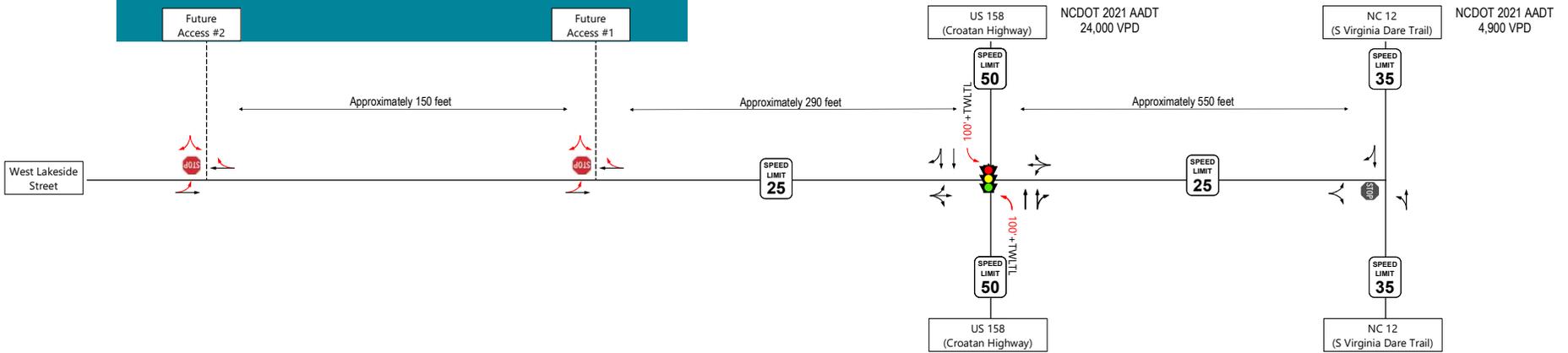


Figure ES
Build (2026) Lane Geometrics and Traffic Control

Inn at Whalebone TIA
Nags Head, NC

Table of Contents

1	Introduction	1
2	Existing (2024) Conditions	5
	Existing Turning Movement Data	5
	Level of Service Criteria.....	8
	Level of Service Analysis	8
3	No-Build (2026) Conditions	11
	Background Growth Calculations.....	11
	Level of Service Analysis	11
4	Build (2026) Conditions	14
	Trip Generation	14
	Trip Assignment.....	15
	Level of Service Analysis	18
5	Build (2026) Conditions with Improvements	21
	Level of Service Analysis	21
	Signal Warrant Analysis	22
6	Findings and Conclusions	24
	Recommendations	25

Appendices

Appendix A: Turning Movement Counts

Appendix B: Intersection Capacity Analysis

List of Tables

Table No.	Description	Page
Table 1	Peak Hour Turning Movement Count Schedule.....	6
Table 2	Level of Service Description for Intersections	8
Table 3	Existing (2024) LOS Results.....	9
Table 4	No-Build (2026) LOS Results	12
Table 5	Trip Generation Rates (Vehicle Trips).....	14
Table 6	Build (2026) LOS Results	18
Table 7	Build (2026) with Improvements LOS Results	22
Table 8	Saturday Signal Warrant Analysis at US 158 & West Lakeside Street/East Lakeside Street.....	22
Table 9	Weekday Signal Warrant Analysis at US 158 & West Lakeside Street/East Lakeside Street.....	23
Table 10	Summary of LOS Results	25

List of Figures

Figure No.	Description	Page
Figure 1	Vicinity Map	3
Figure 2	Site Plan	4
Figure 3	Existing (2024) Lane Configuration and Traffic Control	7
Figure 4	Existing (2024) AM and PM Peak Hour Volumes	10
Figure 5	No-Build (2026) AM and PM Peak Hour Volumes	13
Figure 6	Site Trip Distribution Percentages	16
Figure 7	Site Trips.....	17
Figure 8	Build (2026) AM and PM Peak Hour Volumes	19
Figure 9	Build (2026) Lane Geometrics and Traffic Control.....	20
Figure 10	Build with Improvements (2026) Lane Geometrics and Traffic Control	26



1

Introduction

A new hotel is planned in the northwest quadrant of the US 158 (S Croatan Highway) at West Lakeside Street intersection in Nags Head, North Carolina (Figure 1). The property can be accessed via West Lakeside Street, and the development will consist of a 90-room hotel. The development is expected to be open in 2026. A traffic impact analysis (TIA) for this development was completed previously and sealed on September 30th, 2022. This report serves as an update to the previously completed TIA using turning movement counts collected in July 2024.

VHB Engineering NC, P.C. was retained by the Town of Nags Head to analyze the potential traffic impacts of the proposed development during the summer and to identify any necessary roadway improvements. This TIA summarizes trip generation, distribution, traffic assignment, and traffic analyses for the proposed development.

Based on the conceptual site plan (Figure 2), access to the development is proposed via two (2) vehicular access points. The following are the proposed access points:

- › Future Access #1, full movement access on West Lakeside Street, approximately 290 feet west of US 158 (S Croatan Highway).
- › Future Access #2, full movement access on West Lakeside Street, approximately 440 feet west of US 158 (S Croatan Highway).

Based on discussions with the Town of Nags Head and the North Carolina Department of Transportation (NCDOT), the following intersections were included in the study area and analyzed for existing and future conditions using the same parameters as the initial TIA, as applicable:

- › West Lakeside Street/East Lakeside Street at US 158 (S Croatan Highway) (unsignalized)
- › East Lakeside Street at NC 12 (S Virginia Dare Trail) (unsignalized)
- › West Lakeside Street at Future Access #1 (unsignalized)
- › West Lakeside Street at Future Access #2 (unsignalized)

The following scenarios were analyzed for existing and future conditions to evaluate the impacts that the proposed development may have on the surrounding roadway network:

- › Existing (2024) Conditions
- › No-Build (2026) Conditions
- › Build (2026) Conditions
- › Build with Improvements (2026) Conditions

- Study Intersection
- Proposed Site Access

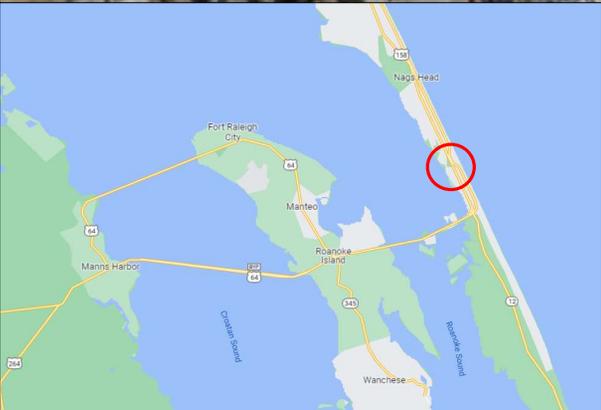
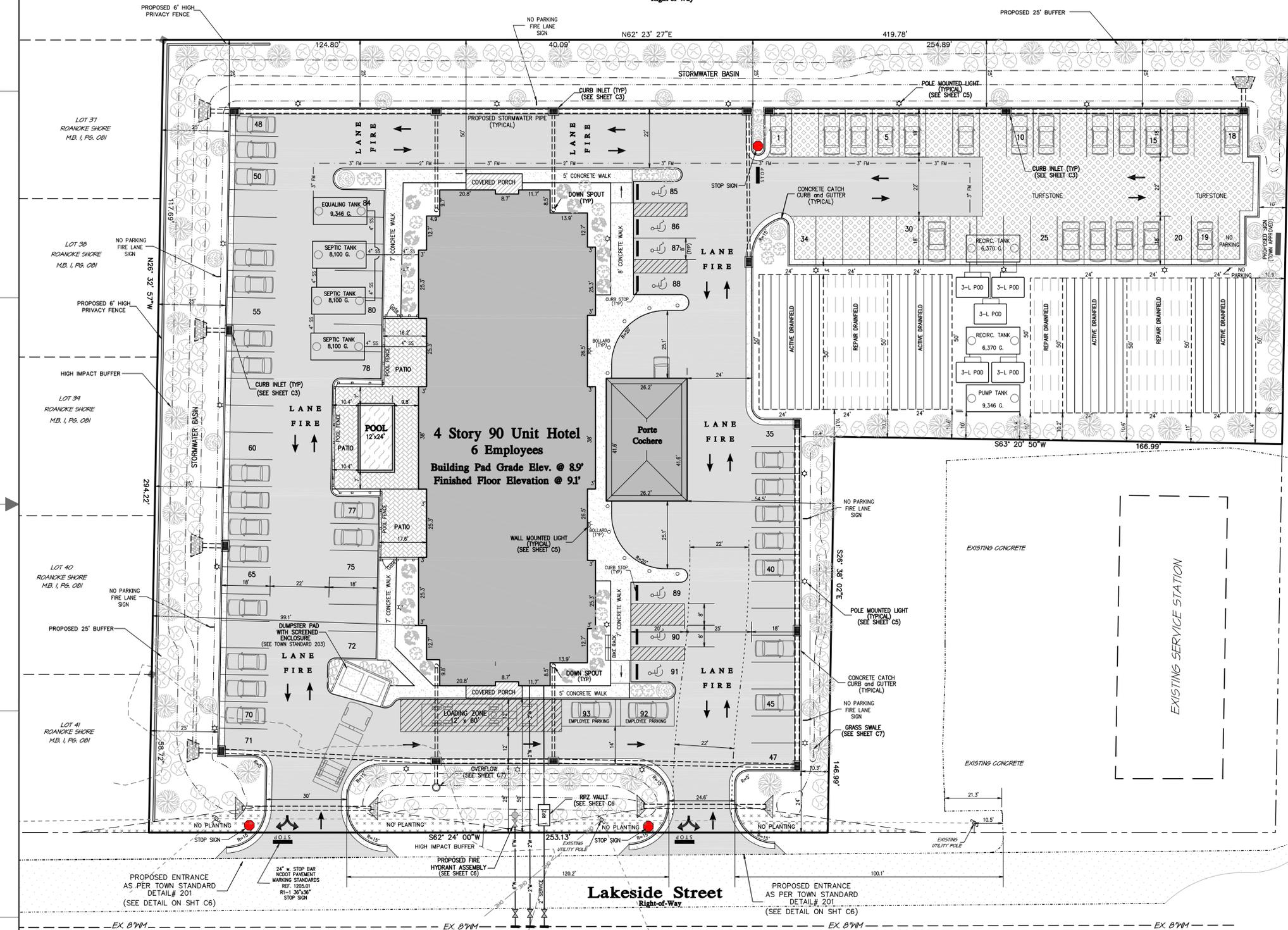


Figure 1
Study Area Map

Inn at Whalebone TIA
Nags Head, NC

CLUBCORP GOLF OF NORTH CAROLINA, LLC
D.B. 1253, PG. 540

Forrest Street
Right-of-Way

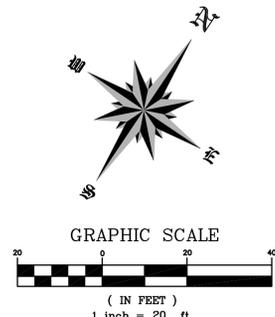


GENERAL NOTES:

- SUBJECT PROPERTY: Lot: 32-36 & Pheasant Ave Nags Head, NC 27959
- STREET ADDRESS: 6632 W Pheasant Ave Nags Head, NC 27959
- PARCEL ID NUMBER: 006891000
- GLOBAL PIN: 080006472501
- RECORDED REFERENCE: DB. 1515 PG. 0048
- TOTAL PARCEL AREA: 99,233 S.F. (2.28 AC.)
- BOUNDARY INFORMATION TAKEN FROM BISSELL PROFESSIONAL GROUP
- LOT COVERAGE:
 - BUILDING and COVERED DECKS - 12,840 SQ. FT.
 - CONCRETE VEHICULAR - 30,746 SQ. FT.
 - CONCRETE WALK/CURB - 6,589 SQ. FT.
 - POOL SURFACE AREA - 288 SQ. FT.
 - TURFSTONE GRID PAVERS - 7,686 S.F. x 0.67 = 5,150 SQ. FT.
 - POOL PAVERS - 1,718 S.F. x 0.67 = 1,151 SQ. FT.
 - TOTAL IMPERVIOUS COVERAGE = 56,764 SQ. FT.
 - PERCENT LOT COVERAGE = 57.20%
 - BUILDING @ 12.94%
 - PARKING @ 36.18%
 - LANDSCAPED @ 28.2%
 - TOTAL PARKING AREA = 38,432 x 20% = 7,686 SQ. FT. (IMPERVIOUS)
 - TOTAL IMPERVIOUS PROVIDED = 7,880 SQ. FT.
- PARKING DATA:
 - 90 UNITS @ 1 SPACE PER UNIT = 90 SPACES
 - 6 EMPLOYEES @ 1 SPACE PER 3 EMPLOYEES = 2 SPACES
 - TOTAL SPACES REQUIRED = 92 SPACES
 - TOTAL SPACES PROVIDED = 93 SPACES

LEGEND:

- PROPOSED VEHICLE CIRCULATION AREA
- PROPOSED TURFSTONE
- PROPOSED BUILDING AREA
- PROPOSED DECKS
- PROPOSED CONCRETE SURFACE
- PROPOSED VEHICLE PARKING AREA
- PROPOSED CURB INLET / CATCH BASIN
- PROPOSED STORMWATER PIPE



Croatan Highway US 158 Bypass

BEFORE YOU DIG!
North Carolina 811
WWW.nc811.ORG

NOTE:
THE DATA GIVEN ON THESE PLANS IS BELIEVED TO BE ACCURATE, BUT THE ACCURACY IS NOT GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL LEVELS, LOCATIONS, TYPES, AND DIMENSIONS OF THE EXISTING UTILITIES PRIOR TO CONSTRUCTION. IF A DISCREPANCY IS FOUND, WORK SHALL CEASE AND THE ENGINEER NOTIFIED. WORK MAY CONTINUE UPON ENGINEER'S NOTICE TO PROCEED.

ENGINEER SEAL
FREDERICK A. HOUSE
Firm Certification# C-1955
COPYRIGHT © 2022

HOUSE ENGINEERING, P.C.
Post Office Box 466 - 6475 N. Croatan Hwy, Suite 201
Kitty Hawk North Carolina 27949
Office# (252) 261-8253 E-Mail: info@houseengineering.net

THIS DOCUMENT IS THE PROPERTY OF HOUSE ENGINEERING, P.C. AND MAY NOT BE USED, MODIFIED OR ADAPTED WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE OWNER. COPIES MAY BE PROVIDED.

APPROVALS	DATE
Drawn: D. NEFF	08/15/22
Checked: R. HOUSE	08/15/22
Engineer: R. HOUSE	08/15/22

REVISIONS		
No.	Date	Description

Site and Utility Plan
For:
The Inn at Whalebone
Location:
6632 West Pheasant Avenue
Parcel in Nags Head
Nags Head Dare County North Carolina

SIZE	PROJECT NUMBER	REV	SHEET NO.
D	226733	-	C2 OF 8

CAD FILENAME: 226733 SCALE: 1" = 20'-0"



2

Existing (2024) Conditions

This section describes the existing roadways in the vicinity of the proposed development. The most recent Average Annual Daily Traffic (AADT) data for the surrounding network of roadway was obtained from the North Carolina Department of Transportation (NCDOT).

US 158 (S Croatan Highway)

- › Within the study area limits, US 158 (S Croatan Highway) is a five-lane divided roadway including a two-way left-turn lane (TWLTL) with a posted speed limit of 50 mph.
- › The land uses along US 158 (S Croatan Highway) are primarily residential and commercial within the study area.
- › The 2021 AADT along US 158 (S Croatan Highway) was 24,000 vehicles per day (vpd).

NC 12 (S Virginia Dare Trail)

- › Within the study area limits, NC 12 (S Virginia Dare Trail) is a two-lane undivided roadway with a posted speed limit of 35 mph.
- › The 2021 AADT along NC 12 (S Virginia Dare Trail) was 4,900 vpd.

Figure 3 provides a schematic diagram of the existing roadways near the proposed development, including the intersection geometrics.

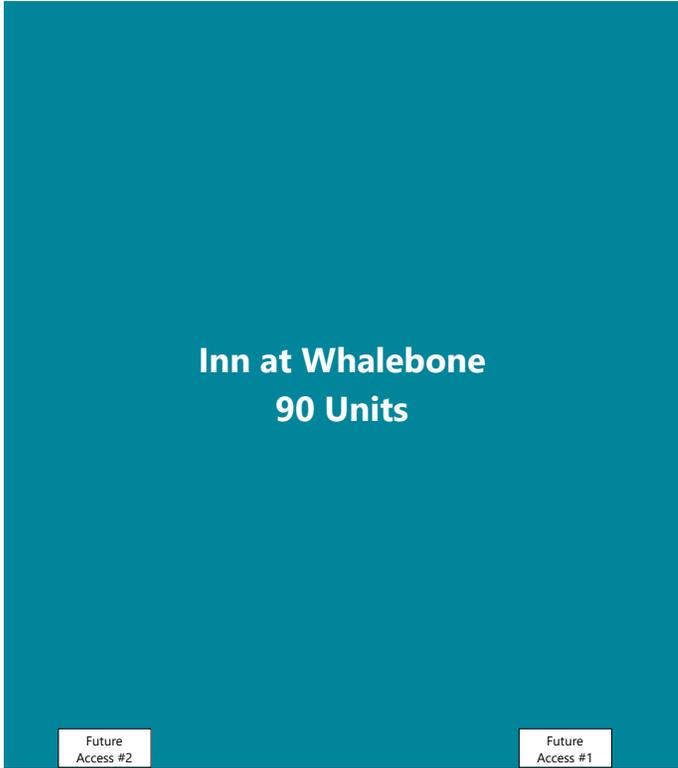
Existing Turning Movement Data

Turning movement counts were collected at the existing study area intersections on Wednesday, July 24th, 2024, and Saturday, July 27th, 2024. The Wednesday count collection period was from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM to record weekday AM and PM peak hour traffic conditions. The Saturday count collection period was from 7:00 AM to

6:00 PM to record weekend peak hour traffic conditions. The existing (2024) peak hour turning movements are displayed in Figure 3. Based on historical AADT data, a growth rate of 1.5% was applied to the existing (2024) counts to calculate the future year (2026) peak hour traffic volumes (Figure 4).

Table 1 Peak Hour Turning Movement Count Schedule

Intersection	Source	Weekday		Weekend	
		Time Period	Data Collection Date	Time Period	Data Collection Date
West Lakeside Street/East Lakeside Street at US 158 (S Croatan Highway)	VHB	7:00 AM - 9:00 AM	Wednesday, July 24, 2024	7:00 AM - 6:00 PM	Saturday, July 27, 2024
East Lakeside Street at NC 12 (S Virginia Dare Trail)		4:00 PM - 6:00 PM			



Inn at Whalebone
90 Units



LEGEND	
—	Existing Roadway
---	Future Roadway
⊙	Existing Stop-Controlled Approach
←	Existing Lane Geometric
TW/LTL	Two-Way Left-Turn Lane

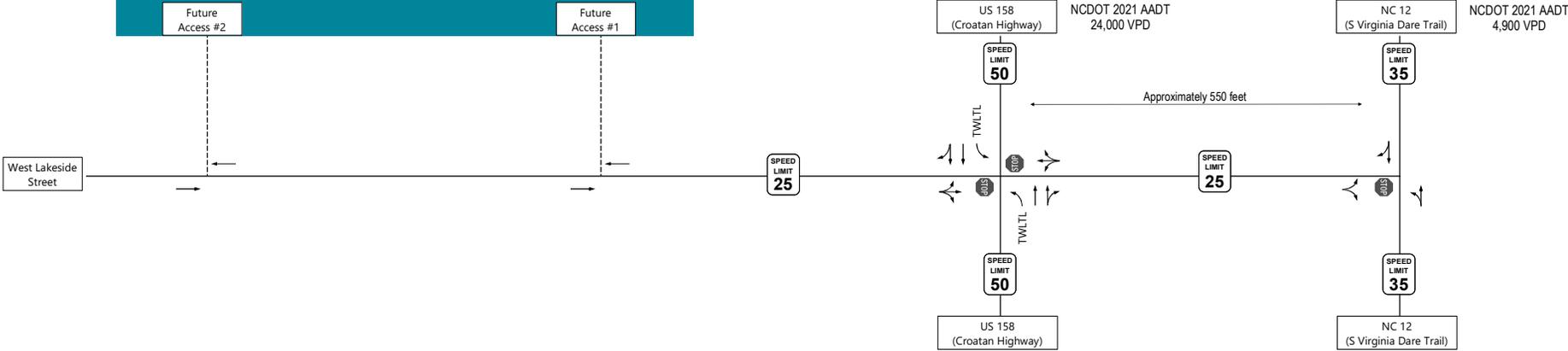


Figure 3
Existing (2024) Lane Geometrics and Traffic Control

Inn at Whalebone TIA
Nags Head, NC



Level of Service Criteria

Peak hour level of service (LOS) measures the adequacy of the intersection geometrics and traffic controls of a particular intersection or approach for the given turning volumes. Levels of service range from A through F, based on the average control delay experienced by vehicles traveling through the intersection during the peak hour. Control delay represents the portion of total delay attributed to traffic control devices (e.g., signals or stop signs). The engineering professional generally accepts LOS D as an acceptable operating condition for signalized intersections in urban areas and LOS C for rural areas.

At unsignalized intersections, LOS E is generally considered acceptable only if the side street encounters the delay. Nevertheless, side streets sometimes function at LOS F during peak traffic periods; however, the traffic volume often does not warrant a traffic signal to assist side street traffic. Table 2 provides a general description of various levels of service categories and delay ranges.

Table 2 Level of Service Description for Intersections

Level of Service	Description	Signalized Intersection	Unsignalized Intersection
A	Little or no delay	<= 10 sec.	<= 10 sec.
B	Short traffic delay	10-20 sec.	10-15 sec.
C	Average traffic delay	20-35 sec.	15-25 sec.
D	Long traffic delay	35-55 sec.	25-35 sec.
E	Very long traffic delay	55-80 sec.	35-50 sec.
F	Unacceptable delay	> 80 sec.	> 50 sec.

Level of Service Analysis

Intersection levels of service analyses were performed for the typical weekday AM and PM peak hour using *Synchro Professional Version 11*. The turning movement volumes analyzed in the Existing (2024) scenario are displayed in Figure 4. A summary of the findings for the Existing (2024) scenario LOS analysis can be found in Table 3 and the full *Synchro* output can be found in Appendix B.

As reported in Table 3, the eastbound approach of NC 12 and East Lakeside Street is expected to operate at an acceptable level of service (LOS D or better) during all existing scenarios. Under Existing (2024) conditions, the eastbound approach of US 158 and Lakeside Street is expected to operate at LOS C during the weekday AM peak hour, LOS D during the weekday PM peak hour, and LOS E during the Saturday peak hour. The westbound approach is expected to operate at LOS C during the weekday AM peak hour, and LOS E during the weekday PM peak hour and Saturday peak hour.

Table 3 Existing (2024) LOS Results

ID	Intersection and Approach	Traffic Control	Existing (2024)		
			AM	PM	Saturday
1	NC 12 & East Lakeside Street	Unsignalized	-	-	-
	Eastbound		A-9.5	B-10.5	B-13.2
2	US 158 & West Lakeside Street/East Lakeside	Unsignalized	-	-	-
	Eastbound		C-20.1	D-27.9	E-42.5
	Westbound		C-22.1	E-37.3	E-41.2

X (XX.X) = Overall intersection LOS (average delay), X-XX = Approach LOS and average delay

LEGEND	
—	Existing Roadway
----	Future Roadway
	Existing Stop-Controlled Approach
←	Turning Movement
XX	Weekday AM Peak Hour Turning Movement
(XX)	Weekday PM Peak Hour Turning Movement
{XX}	Saturday Peak Hour Turning Movement

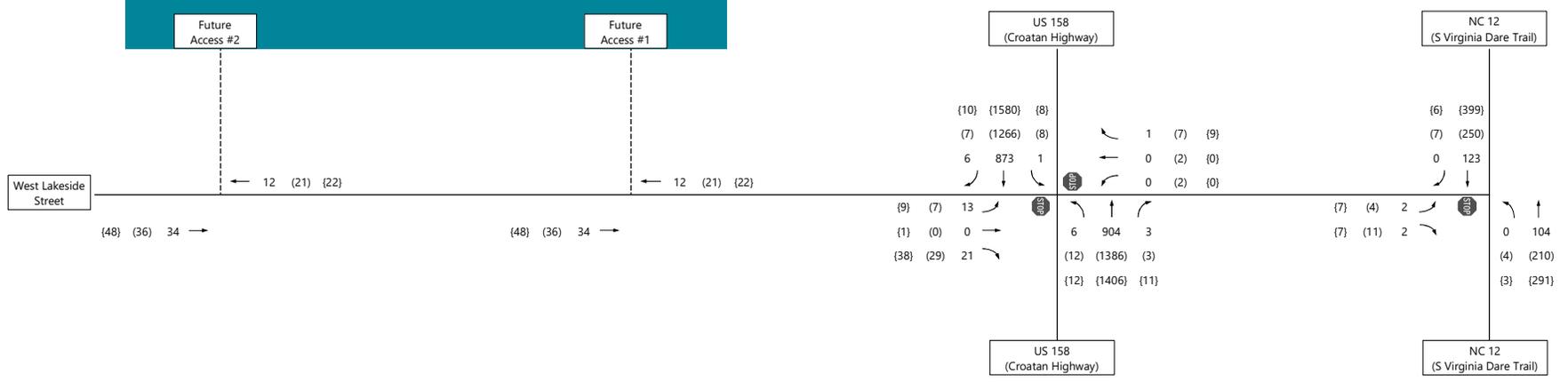
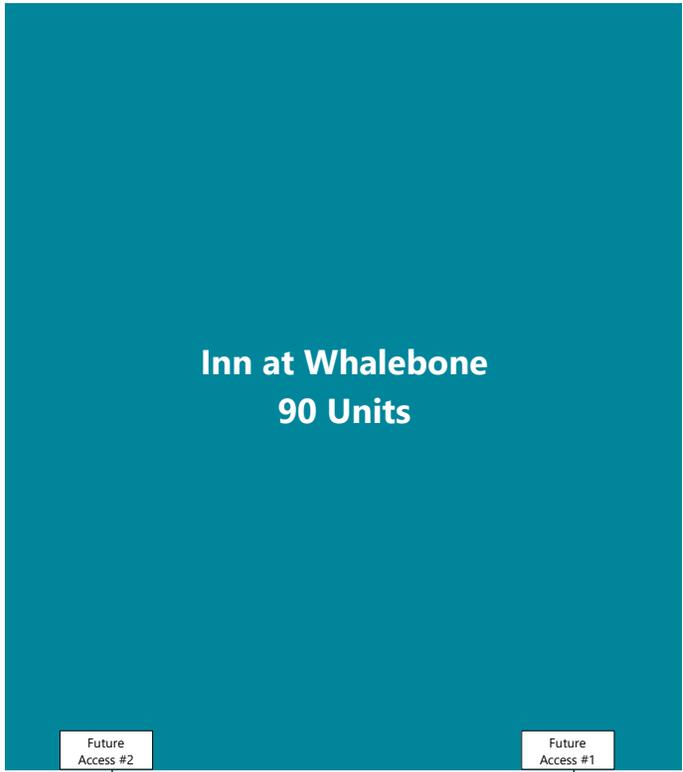


Figure 4
Existing (2024) AM and PM Peak Hour Volumes

Inn at Whalebone TIA
Nags Head, NC



3

No-Build (2026) Conditions

Background Growth Calculations

An annual growth rate of 1.5% was applied to the existing traffic to account for the normal growth between the base year (2024) and the build year (2026). There were no other planned developments identified within the study area.

Level of Service Analysis

Intersection levels of service analyses were performed for the typical weekday AM and PM peak hours using *Synchro Professional Version 11*. A summary of the findings for the No-Build (2026) LOS analysis can be found in Table 4 and the full *Synchro* output can be found in Appendix B.

As reported in Table 4, the eastbound approach of NC 12 and East Lakeside Street is expected to operate at an acceptable level of service (LOS D or better) during all existing scenarios. Under No-Build (2026) conditions, the eastbound approach of US 158 and Lakeside Street is expected to operate at LOS C during the weekday AM peak hour, LOS D during the weekday PM peak hour, and LOS E during the Saturday peak hour. The westbound approach is expected to operate at LOS C during the weekday AM peak hour, and LOS E during the weekday PM peak hour and Saturday peak hour.

Table 4 No-Build (2026) LOS Results

Intersection and Approach	Traffic Control	No-Build (2026)		
		AM	PM	Saturday
NC 12 & East Lakeside Street	Unsignalized	-	-	-
Eastbound		A-9.6	B-10.6	B-13.4
US 158 & West Lakeside Street/East Lakeside	Unsignalized	-	-	-
Eastbound		C-20.7	D-29.5	E-45.8
Westbound		C-22.8	E-39.1	E-44.4

X (XX.X) = Overall intersection LOS (average delay), X-XX = Approach LOS and average delay

LEGEND	
—	Existing Roadway
----	Future Roadway
	Existing Stop-Controlled Approach
←	Turning Movement
XX	Weekday AM Peak Hour Turning Movement
(XX)	Weekday PM Peak Hour Turning Movement
{XX}	Saturday Peak Hour Turning Movement

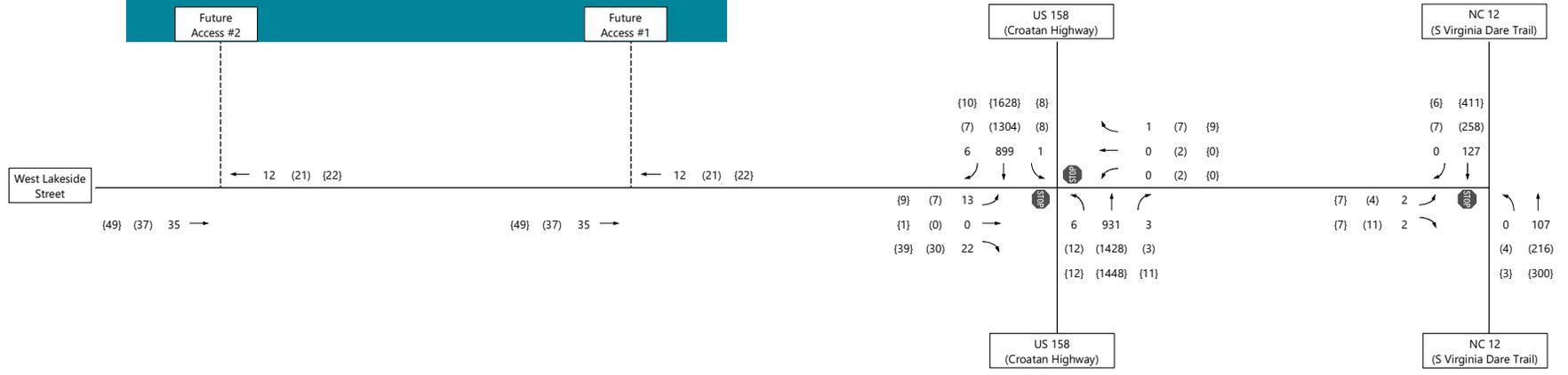
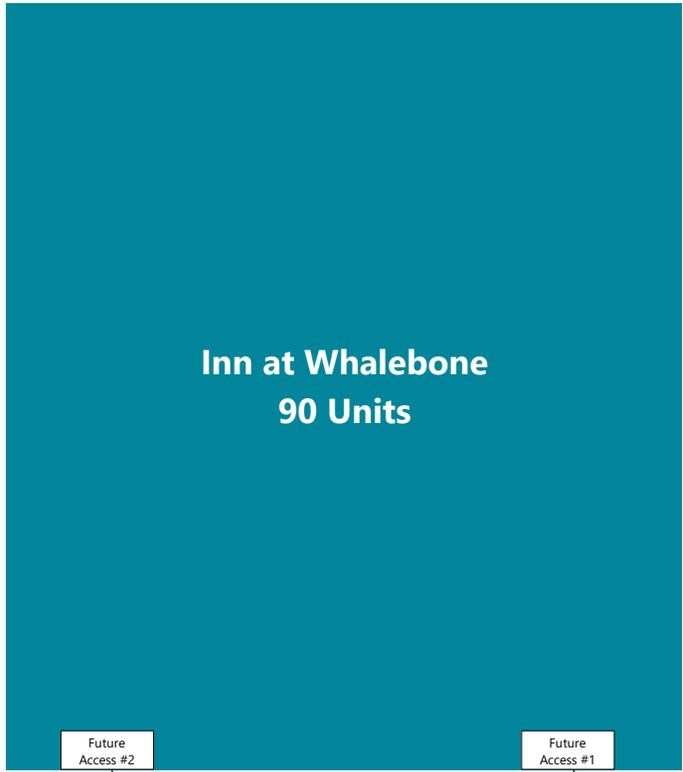


Figure 5
No-Build (2026) AM and PM Peak Hour Volumes

Inn at Whalebone TIA
Nags Head, NC



4

Build (2026) Conditions

Trip Generation

Trip generation was conducted based on the most appropriate corresponding trip generation codes included in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition* and the suggested method of calculation in the NCDOT's "Rate vs. Equation" Spreadsheet. The proposed development is to consist of a 90-room hotel; ITE Land Use Code (LUC) 310 (Hotel) was used based on the NCDOT guidance.

As a result, the proposed development is projected to generate 552 daily weekday site trips, with 38 trips (21 entering, 17 exiting) occurring in the AM peak hour and 39 trips (20 entering, 19 exiting) occurring in the PM peak hour. The proposed development is projected to generate 728 daily Saturday site trips, with 65 trips (36 entering, 29 exiting) occurring in the peak hour. The generated site trips were distributed in accordance with the existing turning movement counts and land uses.

Table 5 summarizes the assumed trip generation for the proposed development for typical weekday AM and PM peak hours.

Table 5 Trip Generation Rates (Vehicle Trips)

Total Site Trips ¹													
Land Use Code ²	Land Use	Unit	ADT	AM Peak Hour			PM Peak Hour			ADT	Saturday Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total		Enter	Exit	Total
310	Hotel	90 rooms	552	21	17	38	20	19	39	726	36	29	65

Notes:

1. Total site trips are determined based on the suggested method in the NCDOT Rate vs Equation Spreadsheet
2. Land Use Code and trip generation rates are determined based on *ITE Trip Generation, 11th Edition*

Trip Assignment

The proposed development will have two driveways on West Lakeside Street. The generated site trips were distributed in accordance with the existing traffic patterns and land uses in the vicinity of the study area. The site trip distribution percentages are as follows:

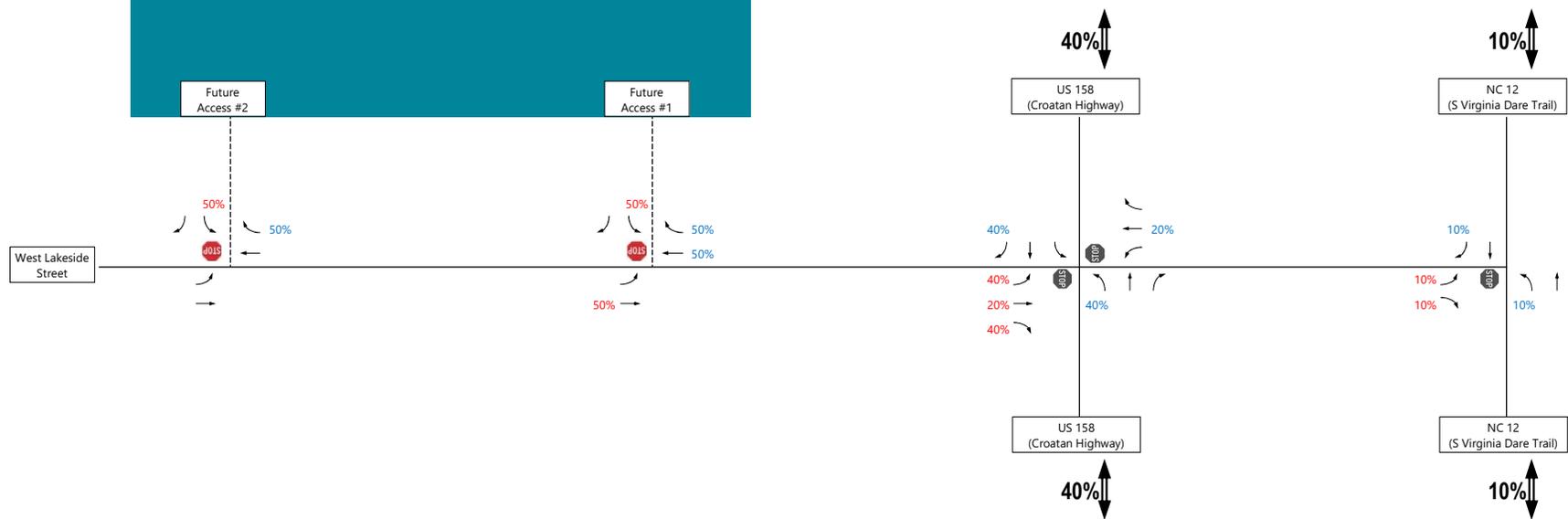
- › US 158 (S Croatan Highway) from/to the north – 40%
- › US 158 (S Croatan Highway) from/to the south – 40%
- › NC 12 (S Virginia Dare Trail) from/to the north – 10%
- › NC 12 (S Virginia Dare Trail) from/to the south – 10%

The site trip distribution referenced above is shown in Figure 6, and the resulting site trips are shown in Figure 7.

**Inn at Whalebone
90 Units**



LEGEND	
—	Existing Roadway
---	Future Roadway
	Existing Stop-Controlled Approach
	Proposed Stop-Controlled Approach
←	Turning Movement
XX%	Entering Trip Distribution Percentage
XX%	Exiting Trip Distribution Percentage



**Figure 6
Peak Hour Site Trip Directional Assignment Percentages**

**Inn at Whalebone TIA
Nags Head, NC**



Inn at Whalebone 90 Units



LEGEND	
—	Existing Roadway
---	Future Roadway
	Existing Stop-Controlled Approach
	Proposed Stop-Controlled Approach
←	Turning Movement
XX	Weekday AM Peak Hour Turning Movement
(XX)	Weekday PM Peak Hour Turning Movement
(XX)	Saturday Peak Hour Turning Movement

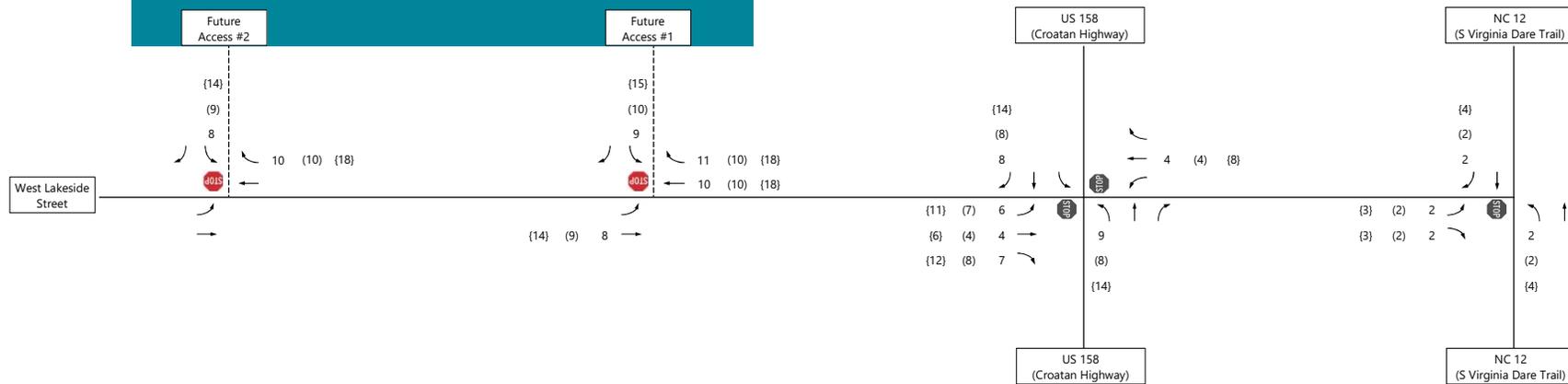


Figure 7
Peak Site Generated Trips

Level of Service Analysis

The Build (2026) conditions account for both the No-Build (2026) traffic and the site-generated trips as described previously. Figure 8 depicts the turning movement volumes used in the Build (2026) scenario analysis, and the Build (2026) lane geometrics and traffic control is shown in Figure 9. Intersection levels of service analyses were performed for the typical weekday AM and PM peak hours using *Synchro Professional Version 11*. Table 6 summarizes the findings of the LOS analysis, and Appendix B contains the full *Synchro* reports of the analyses.

As shown in Table 6, with the addition of site trips, the NC 12 and East Lakeside Street intersection is expected to continue operating acceptably with minimal delay increases. During the Saturday peak hour, the eastbound and westbound approaches of the US 158 and Lakeside Street intersection are expected to degrade from LOS E to LOS F compared to the No-Build Saturday peak hour. The eastbound and westbound approaches of the US 158 and Lakeside Street intersection are expected to continue operating at LOS C during the weekday AM peak hour and operate at LOS E during the weekday PM peak hour. The proposed stop-controlled approaches at both future access driveways will operate at LOS A during the analyzed peak hours.

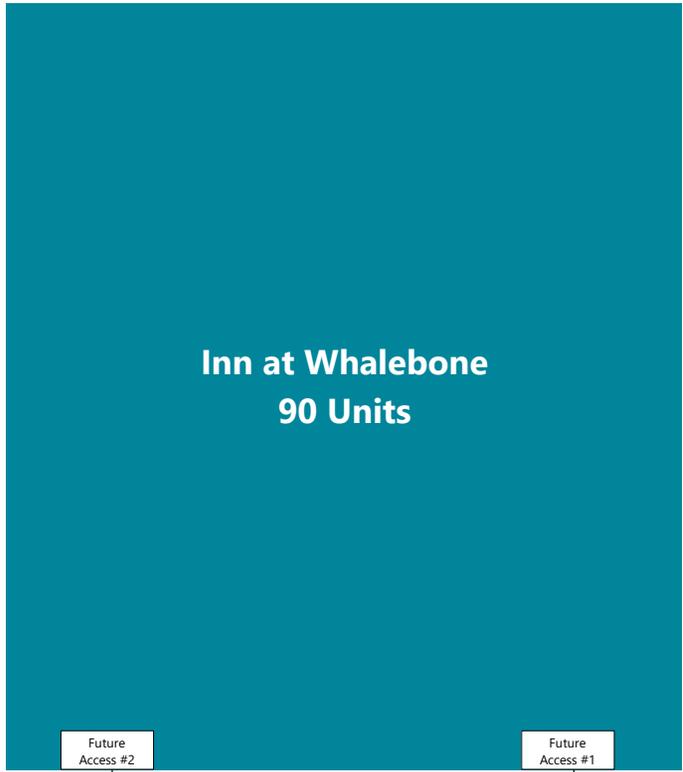
Table 6 Build (2026) LOS Results

ID	Intersection and Approach	Traffic Control	Build (2026)		
			AM	PM	Saturday
1	NC 12 & East Lakeside Street	Unsignalized	-	-	-
	Eastbound		A-9.6	B-10.8	B-13.7
2	US 158 & West Lakeside Street/East Lakeside	Unsignalized	-	-	-
	Eastbound		C-22.3	E-36.8	F-99.7
	Westbound		C-23.6	E-44.8	F-63.6
3	West Lakeside Street & Future Access #1	Unsignalized	-	-	-
	Southbound		A-8.9	A-8.9	A-9.2
4	West Lakeside Street & Future Access #2	Unsignalized	-	-	-
	Southbound		A-8.7	A-8.8	A-9.0

X (XX.X) = Overall intersection LOS (average delay), X-XX = Approach LOS and average delay



LEGEND	
—	Existing Roadway
----	Future Roadway
	Existing Stop-Controlled Approach
	Proposed Stop-Controlled Approach
←	Turning Movement
XX	Weekday AM Peak Hour Turning Movement
(XX)	Weekday PM Peak Hour Turning Movement
{XX}	Saturday Peak Hour Turning Movement



Inn at Whalebone
90 Units

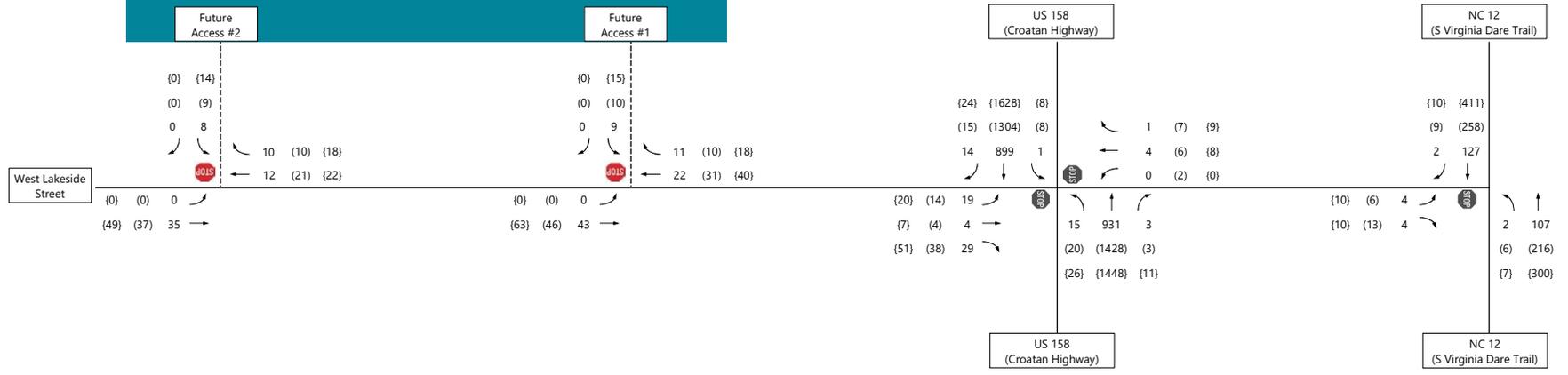
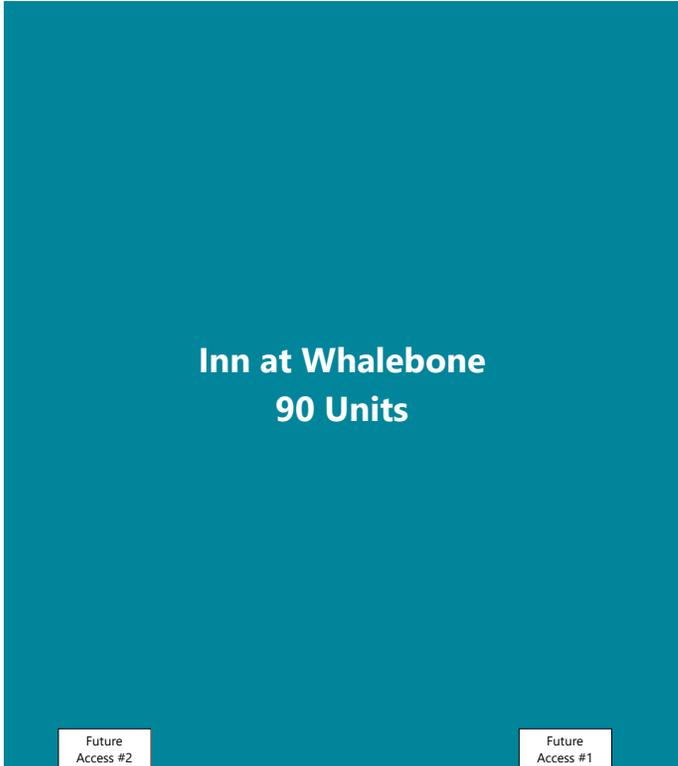


Figure 8
Build (2026) AM and PM Peak Hour Volumes

Inn at Whalebone TIA
Nags Head, NC



Inn at Whalebone
90 Units



LEGEND	
—	Existing Roadway
---	Future Roadway
	Existing Stop-Controlled Approach
	Proposed Stop-Controlled Approach
	Existing Lane Geometric
	Proposed Lane Geometric
TW/LTL	Two-Way Left-Turn Lane

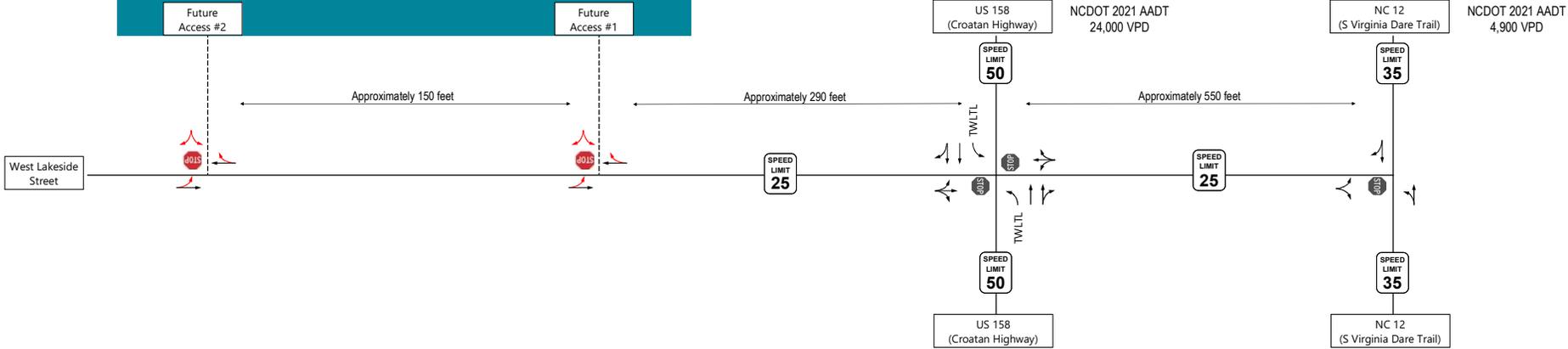


Figure 9
Build (2026) Lane Geometrics and Traffic Control

Inn at Whalebone TIA
Nags Head, NC



5

Build (2026) Conditions with Improvements

Level of Service Analysis

The Build (2026) conditions with improvements analyze traffic operations with a traffic signal at the intersection of US 158 and Lakeside Street using the Build (2026) peak hour volumes (shown previously in Figure 8). Intersection LOS analyses were performed for both weekday peak hours and the Saturday peak hour using *Synchro Professional Version 11*.

Table 7 summarizes the findings of the LOS analysis, and the full Synchro output can be found in Appendix B. The analyzed lane geometrics and traffic control with improvements following the completion of the development are depicted in Figure 10 at the end of the Findings and Recommendations.

With the installation of the signal at the intersection of US 158 and Lakeside Street, the intersection is expected to operate at LOS A during both weekday peak hours and the Saturday peak hour. All the approaches of the signalized intersection are expected to operate at LOS C or better during the analyzed peak hours.

Table 7 Build (2026) with Improvements LOS Results

ID	Intersection and Approach	Traffic Control	Build (2026) with Improvements		
			AM	PM	Saturday
1	NC 12 & East Lakeside Street	Unsignalized	-	-	-
	Eastbound		A-9.6	B-10.8	B-13.7
2	US 158 & West Lakeside Street/East Lakeside Street	Signalized	A (4.9)	A (5.3)	A (7.5)
	Eastbound		C-23.4	C-26.1	C-28.4
	Westbound		C-20.3	C-22.8	C-23.1
	Northbound		A-4.3	A-5.0	A-6.3
	Southbound		A-4.3	A-4.6	A-7.4
3	West Lakeside Street & Future Access #1	Unsignalized	-	-	-
	Southbound		A-8.9	A-8.9	A-9.2
4	West Lakeside Street & Future Access #2	Unsignalized	-	-	-
	Southbound		A-8.7	A-8.8	A-9.0

X (XX.X) = Overall intersection LOS (average delay), X-XX = Approach LOS and average delay

Signal Warrant Analysis

Due to the LOS of the eastbound and westbound approaches at the intersection of US 158 & West Lakeside Street/East Lakeside Street for the Saturday peak hour, a signal was considered as a possible improvement. The results of the warrant analysis are shown in Table 8 for the weekday peak hours, and Table 9 for Saturday.

Table 8 Saturday Signal Warrant Analysis at US 158 & West Lakeside Street/East Lakeside Street

Time Period	Existing (2024)			No-Build (2026)			Build (2026)		
	Meet Warrant?			Meet Warrant?			Meet Warrant?		
	1	2	3	1	2	3	1	2	3
7:00	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET
8:00	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET	NOT MET
9:00	MET	NOT MET	NOT MET	MET	MET	NOT MET	MET	MET	NOT MET
10:00	MET	NOT MET	NOT MET	MET	NOT MET	NOT MET	MET	MET	NOT MET
11:00	MET	NOT MET	NOT MET	MET	NOT MET	NOT MET	MET	MET	NOT MET
12:00	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET	NOT MET
13:00	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET	NOT MET
14:00	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET	NOT MET
15:00	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET	NOT MET
16:00	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET	NOT MET
17:00	MET	NOT MET	NOT MET	MET	NOT MET	NOT MET	MET	MET	MET
# Hours Meeting Warrant:	4	0	0	4	1	0	10	10	1
# Hours Needed:	8	4	1	8	4	1	8	4	1
Meeting Warrant?	No	No	No	No	No	No	Yes	Yes	Yes

Table 9 Weekday Signal Warrant Analysis at US 158 & West Lakeside Street/East Lakeside Street

Time Period	Existing (2024)			No-Build (2026)			Build (2026)		
	Meet Warrant?			Meet Warrant?			Meet Warrant?		
	1	2	3	1	2	3	1	2	3
7:00	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET
8:00	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	NOT MET	NOT MET
16:00	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET	NOT MET
17:00	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	NOT MET	NOT MET
# Hours Meeting Warrant:	0	0	0	0	0	0	3	1	0
# Hours Needed:	8	4	1	8	4	1	8	4	1
Meeting Warrant?	No	No	No	No	No	No	No	No	No

The traffic signal warrant analysis was completed for the intersection of US 158 & West Lakeside Street/East Lakeside Street following the Manual on Uniform Traffic Control Devices (MUTCD). The volumes were checked against the following MUTCD Warrants:

- Warrant 1, Eight-Hour Vehicular Volume
- Warrant 2, Four-Hour Vehicular Volume
- Warrant 3, Peak-Hour Vehicular Volume

Per the MUTCD, on roadways with speed limits of 40 mph or higher, reduced volume factors (70% Factor) apply to the intersection volumes for Warrants 2 (Four-Hour) and 3 (Peak Hour). Since the speed limit on US 158 is 50 mph, the reduced volume factors (70%) are applied to intersection volumes for Warrants 2 (Four-Hour) and 3 (Peak Hour).

As shown in Table 8 on the previous page, under build conditions; the intersection meets Warrant 1 (Eight-Hour), Warrant 2 (Four-Hour), and Warrant 3 (Peak-Hour) on Saturday; however, the intersection does not meet the warrants during the weekday.



6

Findings and Conclusions

As indicated in the traffic operations analyses, the proposed development is projected to moderately impact the traffic operations of Lakeside Street at the intersection with US 158, especially during the Saturday peak hour. The current and projected volumes on Lakeside Street are too low during weekday traffic to warrant a traffic signal; however, all three warrants are met for expected traffic on a Saturday.

Based on observations and communication with residents during the traffic count data collection, drivers generally travel on NC 12 to the nearest signalized intersection when trying to turn left onto US 158. The nearest signalized intersections are at Gull Street, about 3,700 feet south of the Lakeside Street intersection, and Seachase Drive, about 3,100 feet north of the Lakeside Street intersection.

Due to the high traffic on US 158 and associated difficulty turning left from side streets at unsignalized intersections, volumes on SB Lakeside Street at US 158 are likely suppressed when compared to the potential demand. Therefore, the traffic data used for the signal warrant analysis is likely an underestimate of traffic volumes at a signalized intersection.

A new signalized intersection in an interconnected community can streamline left-turns onto a busy street by offering a safe and predictable gap in traffic. This reduces the risks and delays associated with making left-turns from unsignalized intersections, where drivers often struggle to find adequate gaps in traffic. As a result, compared to unsignalized approaches, drivers are more likely to choose the signalized intersection for left turns, making it a more attractive and efficient route. A new traffic signal at the Lakeside Street intersection may offer a convenient midpoint between the nearest existing upstream and downstream signalized intersections.

Considering the surrounding area, including Forbes Candies in the NE quadrant of the intersection, additional shops to the south on Forbes Street, and nearby hotels and condos on NC 12, a traffic signal at Lakeside Street would likely become a desirable alternative to turning left from a nearby unsignalized intersection or traveling on NC 12 to the nearest signalized intersection.

Recommendations

US 158 & West Lakeside Street/East Lakeside Street

- Consider signaling the intersection.
- If signaling the intersection, restripe the existing TWLTLs on both US 158 approaches to have left-turn lanes with at least 100' of storage.

West Lakeside Street and Future Access #1

- Construct a driveway with single ingress and single egress lane.
- Provide stop-control for the southbound approach.

West Lakeside Street and Future Access #2

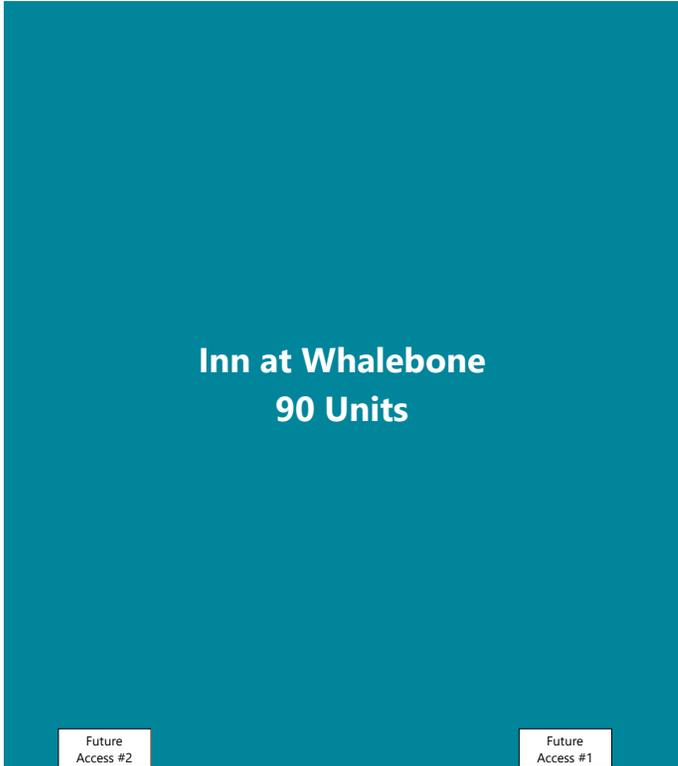
- Construct a driveway with single ingress and single egress lane.
- Provide stop-control for the southbound approach.

The summary of LOS results is shown in Table 10, and the proposed lane geometrics and traffic control following the full buildout of the development are depicted in Figure 10.

Table 10 Summary of LOS Results

ID	Intersection and Approach	Traffic Control	Existing (2024)			No-Build (2026)			Build (2026)			Build (2026) with Improvements		
			AM	PM	Saturday	AM	PM	Saturday	AM	PM	Saturday	AM	PM	Saturday
1	NC 12 & East Lakeside Street	Unsignalized	-	-	-	-	-	-	-	-	-	-	-	-
	Eastbound		A-9.5	B-10.5	B-13.2	A-9.6	B-10.6	B-13.4	A-9.6	B-10.8	B-13.7	A-9.6	B-10.8	B-13.7
2	US 158 & West Lakeside Street/East Lakeside Street	Signalized	-	-	-	-	-	-	-	-	-	A (4.9)	A (5.3)	A (7.5)
	Eastbound		C-20.1	D-27.9	E-42.5	C-20.7	D-29.5	E-45.8	C-22.3	E-36.8	F-99.7	C-23.4	C-26.1	C-28.4
	Westbound		C-22.1	E-37.3	E-41.2	C-22.8	E-39.1	E-44.4	C-23.6	E-44.8	F-63.6	C-20.3	C-22.8	C-23.1
	Northbound		-	-	-	-	-	-	-	-	-	A-4.3	A-5.0	A-6.3
	Southbound		-	-	-	-	-	-	-	-	-	A-4.3	A-4.6	A-7.4
3	West Lakeside Street & Future Access #1	Unsignalized	-	-	-	-	-	-	-	-	-	-	-	-
	Southbound		-	-	-	-	-	-	A-8.9	A-8.9	A-9.2	A-8.9	A-8.9	A-9.2
4	West Lakeside Street & Future Access #2	Unsignalized	-	-	-	-	-	-	-	-	-	-	-	-
	Southbound		-	-	-	-	-	-	A-8.7	A-8.8	A-9.0	A-8.7	A-8.8	A-9.0

X (XX.X) = Overall intersection LOS (average delay), X-XX = Approach LOS and average delay



**Inn at Whalebone
90 Units**



LEGEND	
—	Existing Roadway
---	Future Roadway
	Existing Stop-Controlled Approach
	Proposed Stop-Controlled Approach
	Proposed Signalized Intersection
	Existing Lane Geometric
	Proposed Lane Geometric
TWLTU	Two-Way Left-Turn Lane

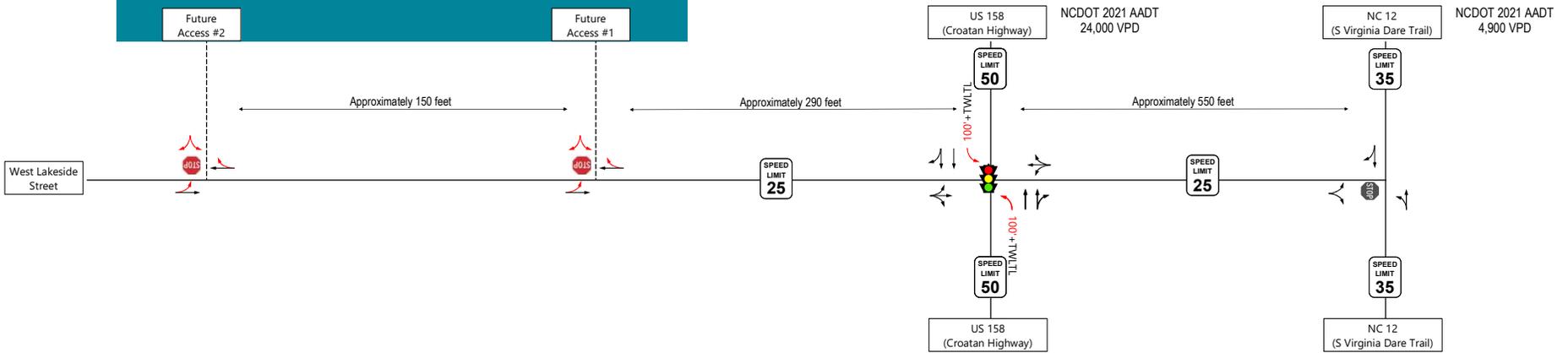


Figure 10
Build (2026) Lane Geometrics and Traffic Control with Improvements

Inn at Whalebone TIA
Nags Head, NC

Appendices

A

Turning Movement Counts



Vanasse Hangen Brustlin, Inc.
Venture 1
940 Main Campus Drive, Suite 500
Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: NC 12 (Virginia Dare Tr) @ Lakeside St
 Site Code:
 Start Date: 07/24/2024
 Page No: 1

Turning Movement Data

Start Time	NC 12 (Virginia Dare Trail) Southbound						Private Drive Westbound						NC 12 (Virginia Dare Trail) Northbound						E. Lakeside Street Eastbound						Int. Total	
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total		
	7:00 AM	0	8	0	0	0	8	0	0	0	0	7	0	0	10	0	0	0	0	10	0	0	1	0		0
7:15 AM	0	21	0	0	0	21	0	0	0	0	11	0	0	14	0	0	0	0	14	0	0	0	0	0	0	35
7:30 AM	0	17	0	0	1	17	0	0	1	0	13	1	1	16	0	0	0	0	17	0	0	4	0	0	4	39
7:45 AM	1	37	0	0	1	38	1	0	0	0	15	1	0	17	0	0	0	0	17	1	0	0	0	1	1	57
Hourly Total	1	83	0	0	2	84	1	0	1	0	46	2	1	57	0	0	0	0	58	1	0	5	0	1	6	150
8:00 AM	0	27	0	0	0	27	0	0	0	0	11	0	0	16	0	0	0	0	16	0	0	1	0	0	1	44
8:15 AM	0	20	0	0	0	20	0	0	0	0	12	0	0	25	0	0	0	0	25	0	0	0	0	0	0	45
8:30 AM	0	45	0	0	0	45	0	0	0	0	15	0	0	32	0	0	0	0	32	1	0	0	0	0	1	78
8:45 AM	0	31	0	0	0	31	0	0	0	0	15	0	0	31	0	0	0	0	31	1	0	1	0	0	2	64
Hourly Total	0	123	0	0	0	123	0	0	0	0	53	0	0	104	0	0	0	0	104	2	0	2	0	0	4	231
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	68	1	0	6	69	0	0	0	0	6	0	0	56	0	0	0	0	56	0	0	4	0	0	4	129
4:15 PM	0	45	2	0	0	47	0	0	0	0	1	0	0	56	0	0	0	0	56	2	0	2	0	0	4	107
4:30 PM	0	61	1	0	0	62	0	0	0	0	10	0	1	36	0	0	0	0	37	1	0	1	0	0	2	101
4:45 PM	0	49	1	0	0	50	0	0	0	0	2	0	3	37	0	0	0	0	40	3	0	2	0	0	5	95
Hourly Total	0	223	5	0	6	228	0	0	0	0	19	0	4	185	0	0	0	0	189	6	0	9	0	0	15	432
5:00 PM	0	62	1	0	0	63	0	0	0	0	1	0	3	62	0	0	0	0	65	0	0	5	0	0	5	133
5:15 PM	0	75	2	0	0	77	0	0	0	0	12	0	1	68	1	0	0	0	70	1	0	1	0	0	2	149
5:30 PM	0	62	2	0	0	64	0	0	0	0	0	0	0	40	0	0	0	0	40	1	0	1	0	0	2	106
5:45 PM	0	51	2	0	0	53	0	0	0	0	2	0	0	39	0	0	0	0	39	2	0	4	0	0	6	98
Hourly Total	0	250	7	0	0	257	0	0	0	0	15	0	4	209	1	0	0	0	214	4	0	11	0	0	15	486
Grand Total	1	679	12	0	8	692	1	0	1	0	133	2	9	555	1	0	0	0	565	13	0	27	0	1	40	1299
Approach %	0.1	98.1	1.7	0.0	-	-	50.0	0.0	50.0	0.0	-	-	1.6	98.2	0.2	0.0	-	-	32.5	0.0	67.5	0.0	-	-	-	
Total %	0.1	52.3	0.9	0.0	-	53.3	0.1	0.0	0.1	0.0	-	0.2	0.7	42.7	0.1	0.0	-	43.5	1.0	0.0	2.1	0.0	-	3.1	-	
Lights	1	658	12	0	-	671	1	0	1	0	-	2	9	520	1	0	-	530	13	0	24	0	-	37	1240	
% Lights	100.0	96.9	100.0	-	-	97.0	100.0	-	100.0	-	-	100.0	100.0	93.7	100.0	-	-	93.8	100.0	-	88.9	-	-	92.5	95.5	
Mediums	0	15	0	0	-	15	0	0	0	0	-	0	0	21	0	0	-	21	0	0	0	0	-	0	36	
% Mediums	0.0	2.2	0.0	-	-	2.2	0.0	-	0.0	-	-	0.0	0.0	3.8	0.0	-	-	3.7	0.0	-	0.0	-	-	0.0	2.8	
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	2	0	0	-	2	0	0	0	0	-	0	2	
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.4	0.0	-	-	0.4	0.0	-	0.0	-	-	0.0	0.2	
Bicycles on Road	0	6	0	0	-	6	0	0	0	0	-	0	0	12	0	0	-	12	0	0	3	0	-	3	21	
% Bicycles on Road	0.0	0.9	0.0	-	-	0.9	0.0	-	0.0	-	-	0.0	0.0	2.2	0.0	-	-	2.1	0.0	-	11.1	-	-	7.5	1.6	
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	23	-	-	-	-	-	-	0	-	-	-	-	-	0	-	-	
% Bicycles on Crosswalk	-	-	-	-	0.0	-	-	-	-	17.3	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	
Pedestrians	-	-	-	-	8	-	-	-	-	110	-	-	-	-	-	-	0	-	-	-	-	-	1	-	-	
% Pedestrians	-	-	-	-	100.0	-	-	-	-	82.7	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	



Vanasse Hangen Brustlin, Inc.
Venture 1
940 Main Campus Drive, Suite 500
Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: NC 12 (Virginia Dare Tr) @ Lakeside St
 Site Code:
 Start Date: 07/24/2024
 Page No: 5

Turning Movement Peak Hour Data (5:00 PM)

Start Time	NC 12 (Virginia Dare Trail)						Private Drive						NC 12 (Virginia Dare Trail)						E. Lakeside Street						Int. Total
	Southbound						Westbound						Northbound						Eastbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
5:00 PM	0	62	1	0	0	63	0	0	0	0	1	0	3	62	0	0	0	65	0	0	5	0	0	5	133
5:15 PM	0	75	2	0	0	77	0	0	0	0	12	0	1	68	1	0	0	70	1	0	1	0	0	2	149
5:30 PM	0	62	2	0	0	64	0	0	0	0	0	0	0	40	0	0	0	40	1	0	1	0	0	2	106
5:45 PM	0	51	2	0	0	53	0	0	0	0	2	0	0	39	0	0	0	39	2	0	4	0	0	6	98
Total	0	250	7	0	0	257	0	0	0	0	15	0	4	209	1	0	0	214	4	0	11	0	0	15	486
Approach %	0.0	97.3	2.7	0.0	-	-	0.0	0.0	0.0	0.0	-	-	1.9	97.7	0.5	0.0	-	-	26.7	0.0	73.3	0.0	-	-	-
Total %	0.0	51.4	1.4	0.0	-	52.9	0.0	0.0	0.0	0.0	-	0.0	0.8	43.0	0.2	0.0	-	44.0	0.8	0.0	2.3	0.0	-	3.1	-
PHF	0.000	0.833	0.875	0.000	-	0.834	0.000	0.000	0.000	0.000	-	0.000	0.333	0.768	0.250	0.000	-	0.764	0.500	0.000	0.550	0.000	-	0.625	0.815
Lights	0	247	7	0	-	254	0	0	0	0	-	0	4	202	1	0	-	207	4	0	11	0	-	15	476
% Lights	-	98.8	100.0	-	-	98.8	-	-	-	-	-	-	100.0	96.7	100.0	-	-	96.7	100.0	-	100.0	-	-	100.0	97.9
Mediums	0	3	0	0	-	3	0	0	0	0	-	0	0	7	0	0	-	7	0	0	0	0	-	0	10
% Mediums	-	1.2	0.0	-	-	1.2	-	-	-	-	-	-	0.0	3.3	0.0	-	-	3.3	0.0	-	0.0	-	-	0.0	2.1
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	-	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	13.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	13	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	86.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Vanasse Hangen Brustlin, Inc.
Venture 1
940 Main Campus Drive, Suite 500
Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: NC 12 (Virginia Dare Tr) @ Lakeside St
 Site Code:
 Start Date: 07/27/2024
 Page No: 1

Turning Movement Data

Start Time	NC 12 (Virginia Dare Trail) Southbound						Private Drive Westbound						NC 12 (Virginia Dare Trail) Northbound						E. Lakeside Street Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
	7:00 AM	0	10	0	0	0	10	0	0	0	0	4	0	0	8	0	1	0	9	0	0	0	0	0	
7:15 AM	0	16	0	0	0	16	0	0	0	0	5	0	3	25	0	0	0	28	1	0	2	0	0	3	47
7:30 AM	0	22	0	0	0	22	0	0	0	0	12	0	0	21	0	0	0	21	0	0	1	0	0	1	44
7:45 AM	0	20	1	0	0	21	0	0	0	0	2	0	2	18	0	0	0	20	1	0	1	0	0	2	43
Hourly Total	0	68	1	0	0	69	0	0	0	0	23	0	5	72	0	1	0	78	2	0	4	0	0	6	153
8:00 AM	0	33	1	0	0	34	0	0	0	0	14	0	4	19	0	0	0	23	0	0	0	0	0	0	57
8:15 AM	0	35	0	0	0	35	0	1	0	0	7	1	0	27	0	0	0	27	0	0	0	0	0	0	63
8:30 AM	0	37	0	0	0	37	0	1	1	0	16	2	1	33	0	0	0	34	0	0	1	0	0	1	74
8:45 AM	0	35	1	0	6	36	0	0	0	0	12	0	0	34	0	0	0	34	0	0	1	0	0	1	71
Hourly Total	0	140	2	0	6	142	0	2	1	0	49	3	5	113	0	0	0	118	0	0	2	0	0	2	265
9:00 AM	1	49	0	0	0	50	1	0	0	0	5	1	1	38	0	0	0	39	1	0	3	0	0	4	94
9:15 AM	0	54	1	0	4	55	0	0	0	0	3	0	1	35	0	0	0	36	0	0	4	0	0	4	95
9:30 AM	0	50	4	0	0	54	0	0	0	0	5	0	3	51	1	0	0	55	0	0	3	0	0	3	112
9:45 AM	0	64	1	0	0	65	0	0	0	0	7	0	2	46	0	0	0	48	1	0	2	0	0	3	116
Hourly Total	1	217	6	0	4	224	1	0	0	0	20	1	7	170	1	0	0	178	2	0	12	0	0	14	417
10:00 AM	0	64	1	0	0	65	0	1	2	0	6	3	1	58	1	0	0	60	1	0	2	0	0	3	131
10:15 AM	0	72	0	0	0	72	0	0	0	0	9	0	1	61	0	0	0	62	2	0	2	0	0	4	138
10:30 AM	1	78	0	0	0	79	0	0	0	0	13	0	0	54	0	0	0	54	0	0	4	0	0	4	137
10:45 AM	0	78	1	0	0	79	0	0	0	0	3	0	1	57	0	0	0	58	1	0	2	0	0	3	140
Hourly Total	1	292	2	0	0	295	0	1	2	0	31	3	3	230	1	0	0	234	4	0	10	0	0	14	546
11:00 AM	0	99	0	0	0	99	0	0	1	0	4	1	2	65	0	0	0	67	3	0	2	0	0	5	172
11:15 AM	1	81	1	0	0	83	0	0	0	0	2	0	0	49	0	0	0	49	1	0	1	0	0	2	134
11:30 AM	0	84	1	0	0	85	0	0	0	0	8	0	2	47	0	0	0	49	2	0	2	0	0	4	138
11:45 AM	0	85	0	0	0	85	0	0	0	0	5	0	0	51	0	0	0	51	2	0	1	0	0	3	139
Hourly Total	1	349	2	0	0	352	0	0	1	0	19	1	4	212	0	0	0	216	8	0	6	0	0	14	583
12:00 PM	0	79	3	0	0	82	1	1	0	0	2	2	0	63	0	0	0	63	3	0	1	0	0	4	151
12:15 PM	0	77	1	0	0	78	0	0	0	0	4	0	1	85	0	0	0	86	2	0	3	0	0	5	169
12:30 PM	0	87	2	0	0	89	0	0	0	0	1	0	1	72	0	0	0	73	2	0	5	0	0	7	169
12:45 PM	0	85	0	0	0	85	0	0	0	0	0	0	1	55	0	0	0	56	2	0	5	0	0	7	148
Hourly Total	0	328	6	0	0	334	1	1	0	0	7	2	3	275	0	0	0	278	9	0	14	0	0	23	637
1:00 PM	0	100	0	1	0	101	0	0	0	0	3	0	0	61	0	0	0	61	1	0	0	0	0	1	163
1:15 PM	0	82	3	0	0	85	0	0	0	0	10	0	1	79	0	0	0	80	3	0	2	0	0	5	170
1:30 PM	1	130	2	1	0	134	0	0	0	0	2	0	1	68	0	0	0	69	1	0	3	0	0	4	207
1:45 PM	0	84	1	0	0	85	0	0	0	0	7	0	1	82	1	0	0	84	2	0	2	0	0	4	173
Hourly Total	1	396	6	2	0	405	0	0	0	0	22	0	3	290	1	0	0	294	7	0	7	0	0	14	713
2:00 PM	0	78	1	0	5	79	0	0	1	0	3	1	1	64	0	0	0	65	3	0	2	0	0	5	150
2:15 PM	1	80	2	0	0	83	0	0	1	0	4	1	1	69	0	0	0	70	2	1	6	0	0	9	163
2:30 PM	0	90	3	0	0	93	0	0	0	0	6	0	0	72	0	0	0	72	6	0	4	0	0	10	175
2:45 PM	0	92	4	0	0	96	0	0	0	0	4	0	0	56	0	0	0	56	1	0	2	0	0	3	155
Hourly Total	1	340	10	0	5	351	0	0	2	0	17	2	2	261	0	0	0	263	12	1	14	0	0	27	643
3:00 PM	0	75	3	0	0	78	0	0	0	0	4	0	1	74	0	0	0	75	3	0	3	0	0	6	159
3:15 PM	1	68	1	0	0	70	0	0	0	0	6	0	2	98	0	0	0	100	0	0	3	0	0	3	173
3:30 PM	1	97	1	0	0	99	0	0	0	0	3	0	3	67	0	0	2	70	1	0	0	0	0	1	170
3:45 PM	0	88	3	0	0	91	0	0	0	0	10	0	1	65	0	0	0	66	0	0	7	0	0	7	164
Hourly Total	2	328	8	0	0	338	0	0	0	0	23	0	7	304	0	0	2	311	4	0	13	0	0	17	666
4:00 PM	0	90	1	0	0	91	0	0	0	0	4	0	1	53	0	0	0	54	3	0	1	0	0	4	149
4:15 PM	1	74	1	0	0	76	0	0	0	0	3	0	3	56	0	0	0	59	0	0	5	0	0	5	140
4:30 PM	0	72	0	0	0	72	1	0	0	0	1	1	3	61	0	0	0	64	3	0	1	0	0	4	141
4:45 PM	0	66	1	0	0	67	0	0	1	0	2	1	1	66	0	0	0	67	1	0	2	0	0	3	138
Hourly Total	1	302	3	0	0	306	1	0	1	0	10	2	8	236	0	0	0	244	7	0	9	0	0	16	568
5:00 PM	0	81	1	0	5	82	0	0	0	0	1	0	3	62	0	0	0	65	2	0	3	0	0	5	152
5:15 PM	0	60	1	0	0	61	0	0	0	0	8	0	1	52	0	0	0	53	2	0	2	0	0	4	118
5:30 PM	0	74	1	0	1	75	0	1	0	0	6	1	1	63	0	0	0	64	4	0	3	0	0	7	147
5:45 PM	0	75	0	0	0	75	0	0	0	0	11	0	2	65	0	0	0	67	0	0	1	0	0	1	143
Hourly Total	0	290	3	0	6	293	0	1	0	0	26	1	7	242	0	0	0	249	8	0	9	0	0	17	560
Grand Total	8	3050	49	2	21	3109	3	5	7	0	247	15	54	2405	3	1	2	2463	63	1	100	0	0	164	5751
Approach %	0.3	98.1	1.6	0.1	-	-	20.0	33.3	46.7	0.0	-	-	2.2	97.6	0.1	0.0	-	-	38.4	0.6	61.0	0.0	-	-	-
Total %	0.1	53.0	0.9	0.0	-	54.1	0.1	0.1	0.1	0.0	-	0.3	0.9	41.8	0.1	0.0	-	42.8	1.1	0.0	1.7	0.0	-	2.9	-
Lights	8	3004	45	2	-	3059	3	5	7	0	-	15	53	2362	3	1	-	2419	62	1	100	0	-	163	5656
% Lights	100.0	98.5	91.8	100.0	-	98.4	100.0	100.0	100.0	-	-	100.0	98.1	98.2	100.0	100.0	-	98.2	98.4	100.0	100.0	-	-	99.4	98.3



Vanasse Hangen Brustlin, Inc.
Venture 1
940 Main Campus Drive, Suite 500
Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: NC 12 (Virginia Dare Tr) @ Lakeside St
 Site Code:
 Start Date: 07/27/2024
 Page No: 4

Turning Movement Peak Hour Data (10:15 AM)

Start Time	NC 12 (Virginia Dare Trail) Southbound						Private Drive Westbound						NC 12 (Virginia Dare Trail) Northbound						E. Lakeside Street Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
10:15 AM	0	72	0	0	0	72	0	0	0	0	9	0	1	61	0	0	0	62	2	0	2	0	0	4	138
10:30 AM	1	78	0	0	0	79	0	0	0	0	13	0	0	54	0	0	0	54	0	0	4	0	0	4	137
10:45 AM	0	78	1	0	0	79	0	0	0	0	3	0	1	57	0	0	0	58	1	0	2	0	0	3	140
11:00 AM	0	99	0	0	0	99	0	0	1	0	4	1	2	65	0	0	0	67	3	0	2	0	0	5	172
Total	1	327	1	0	0	329	0	0	1	0	29	1	4	237	0	0	0	241	6	0	10	0	0	16	587
Approach %	0.3	99.4	0.3	0.0	-	-	0.0	0.0	100.0	0.0	-	-	1.7	98.3	0.0	0.0	-	-	37.5	0.0	62.5	0.0	-	-	-
Total %	0.2	55.7	0.2	0.0	-	56.0	0.0	0.0	0.2	0.0	-	0.2	0.7	40.4	0.0	0.0	-	41.1	1.0	0.0	1.7	0.0	-	2.7	-
PHF	0.250	0.826	0.250	0.000	-	0.831	0.000	0.000	0.250	0.000	-	0.250	0.500	0.912	0.000	0.000	-	0.899	0.500	0.000	0.625	0.000	-	0.800	0.853
Lights	1	321	1	0	-	323	0	0	1	0	-	1	4	230	0	0	-	234	6	0	10	0	-	16	574
% Lights	100.0	98.2	100.0	-	-	98.2	-	-	100.0	-	-	100.0	100.0	97.0	-	-	-	97.1	100.0	-	100.0	-	-	100.0	97.8
Mediums	0	5	0	0	-	5	0	0	0	0	-	0	0	6	0	0	-	6	0	0	0	0	-	0	11
% Mediums	0.0	1.5	0.0	-	-	1.5	-	-	0.0	-	-	0.0	0.0	2.5	-	-	-	2.5	0.0	-	0.0	-	-	0.0	1.9
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	1
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	-	-	0.0	-	-	0.0	0.0	0.4	-	-	-	0.4	0.0	-	0.0	-	-	0.0	0.2
Bicycles on Road	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.3	0.0	-	-	0.3	-	-	0.0	-	-	0.0	0.0	0.0	-	-	-	0.0	0.0	-	0.0	-	-	0.0	0.2
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	13	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	44.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	16	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	55.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Vanasse Hangen Brustlin, Inc.
Venture 1
940 Main Campus Drive, Suite 500
Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: US 158 (Croatan Hwy) @ Lakeside St
 Site Code:
 Start Date: 07/24/2024
 Page No: 1

Turning Movement Data

Start Time	US 158 (Croatan Highway)						E. Lakeside Street						US 158 (Croatan Highway)						W. Lakeside Street						Int. Total
	Southbound						Westbound						Northbound						Eastbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:00 AM	1	121	0	0	0	122	0	0	0	0	0	0	2	131	0	0	0	133	3	0	3	0	0	6	261
7:15 AM	0	128	3	0	0	131	0	0	0	0	0	0	0	158	0	0	0	158	3	0	0	0	0	3	292
7:30 AM	3	160	2	0	0	165	0	0	1	0	0	1	0	211	1	0	0	212	3	0	7	0	0	10	388
7:45 AM	1	233	1	0	0	235	0	0	1	0	0	1	2	222	1	0	0	225	1	0	5	0	0	6	467
Hourly Total	5	642	6	0	0	653	0	0	2	0	0	2	4	722	2	0	0	728	10	0	15	0	0	25	1408
8:00 AM	0	203	1	0	0	204	0	0	0	0	0	0	1	229	1	0	0	231	1	0	6	0	1	7	442
8:15 AM	0	224	1	0	0	225	0	0	0	0	0	0	3	226	0	0	0	229	3	0	4	0	0	7	461
8:30 AM	0	213	3	0	0	216	0	0	0	0	0	0	0	227	1	0	0	228	8	0	6	0	0	14	458
8:45 AM	1	196	1	0	0	198	1	0	0	0	0	1	2	229	0	0	0	231	6	1	4	0	0	11	441
Hourly Total	1	836	6	0	0	843	1	0	0	0	0	1	6	911	2	0	0	919	18	1	20	0	1	39	1802
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	3	277	1	0	0	281	0	1	4	0	0	5	4	359	3	0	0	366	5	0	15	0	2	20	672
4:15 PM	4	328	1	0	0	333	1	0	1	0	0	2	2	331	1	1	0	335	5	0	9	0	0	14	684
4:30 PM	2	287	3	0	0	292	1	0	0	0	0	1	2	317	0	0	0	319	1	0	9	0	0	10	622
4:45 PM	1	343	0	0	0	344	1	2	0	0	0	3	4	334	0	0	0	338	0	0	8	0	0	8	693
Hourly Total	10	1235	5	0	0	1250	3	3	5	0	0	11	12	1341	4	1	0	1358	11	0	41	0	2	52	2671
5:00 PM	4	293	2	0	0	299	1	0	6	0	2	7	2	365	0	0	0	367	5	0	6	0	0	11	684
5:15 PM	2	315	2	0	0	319	0	0	1	0	0	1	4	346	3	0	0	353	1	0	7	0	0	8	681
5:30 PM	1	315	3	0	0	319	0	0	0	0	0	0	2	341	0	0	0	343	1	0	8	0	1	9	671
5:45 PM	7	289	0	0	0	296	2	0	3	0	0	5	2	287	3	0	0	292	0	1	7	0	0	8	601
Hourly Total	14	1212	7	0	0	1233	3	0	10	0	2	13	10	1339	6	0	0	1355	7	1	28	0	1	36	2637
Grand Total	30	3925	24	0	0	3979	7	3	17	0	2	27	32	4313	14	1	0	4360	46	2	104	0	4	152	8518
Approach %	0.8	98.6	0.6	0.0	-	-	25.9	11.1	63.0	0.0	-	-	0.7	98.9	0.3	0.0	-	-	30.3	1.3	68.4	0.0	-	-	-
Total %	0.4	46.1	0.3	0.0	-	46.7	0.1	0.0	0.2	0.0	-	0.3	0.4	50.6	0.2	0.0	-	51.2	0.5	0.0	1.2	0.0	-	1.8	-
Lights	27	3831	23	0	-	3881	7	3	17	0	-	27	32	4230	14	1	-	4277	44	2	99	0	-	145	8330
% Lights	90.0	97.6	95.8	-	-	97.5	100.0	100.0	100.0	-	-	100.0	100.0	98.1	100.0	100.0	-	98.1	95.7	100.0	95.2	-	-	95.4	97.8
Mediums	0	73	1	0	-	74	0	0	0	0	-	0	0	65	0	0	-	65	1	0	4	0	-	5	144
% Mediums	0.0	1.9	4.2	-	-	1.9	0.0	0.0	0.0	-	-	0.0	0.0	1.5	0.0	0.0	-	1.5	2.2	0.0	3.8	-	-	3.3	1.7
Articulated Trucks	0	20	0	0	-	20	0	0	0	0	-	0	0	18	0	0	-	18	1	0	1	0	-	2	40
% Articulated Trucks	0.0	0.5	0.0	-	-	0.5	0.0	0.0	0.0	-	-	0.0	0.0	0.4	0.0	0.0	-	0.4	2.2	0.0	1.0	-	-	1.3	0.5
Bicycles on Road	3	1	0	0	-	4	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	4
% Bicycles on Road	10.0	0.0	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	4	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-



Vanasse Hangen Brustlin, Inc.
 Venture 1
 940 Main Campus Drive, Suite 500
 Raleigh, North Carolina, United States 27606
 919.829.0328 cmurden@vhb.com

Count Name: US 158 (Croatan Hwy) @ Lakeside St
 Site Code:
 Start Date: 07/24/2024
 Page No: 3

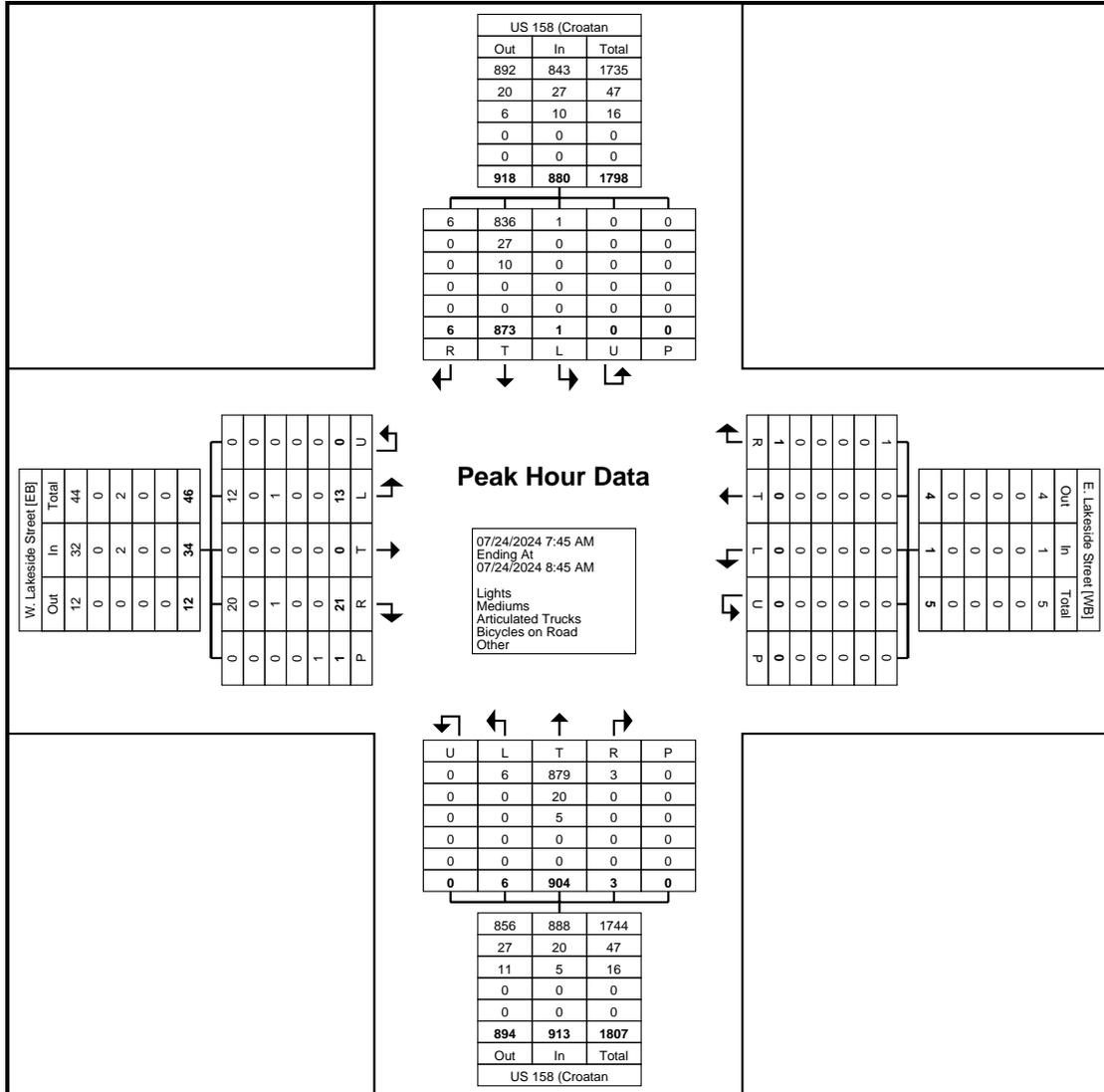
Turning Movement Peak Hour Data (7:45 AM)

Start Time	US 158 (Croatan Highway)						E. Lakeside Street						US 158 (Croatan Highway)						W. Lakeside Street						Int. Total
	Southbound						Westbound						Northbound						Eastbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:45 AM	1	233	1	0	0	235	0	0	1	0	0	1	2	222	1	0	0	225	1	0	5	0	0	6	467
8:00 AM	0	203	1	0	0	204	0	0	0	0	0	0	1	229	1	0	0	231	1	0	6	0	1	7	442
8:15 AM	0	224	1	0	0	225	0	0	0	0	0	0	3	226	0	0	0	229	3	0	4	0	0	7	461
8:30 AM	0	213	3	0	0	216	0	0	0	0	0	0	0	227	1	0	0	228	8	0	6	0	0	14	458
Total	1	873	6	0	0	880	0	0	1	0	0	1	6	904	3	0	0	913	13	0	21	0	1	34	1828
Approach %	0.1	99.2	0.7	0.0	-	-	0.0	0.0	100.0	0.0	-	-	0.7	99.0	0.3	0.0	-	-	38.2	0.0	61.8	0.0	-	-	-
Total %	0.1	47.8	0.3	0.0	-	48.1	0.0	0.0	0.1	0.0	-	0.1	0.3	49.5	0.2	0.0	-	49.9	0.7	0.0	1.1	0.0	-	1.9	-
PHF	0.250	0.937	0.500	0.000	-	0.936	0.000	0.000	0.250	0.000	-	0.250	0.500	0.987	0.750	0.000	-	0.988	0.406	0.000	0.875	0.000	-	0.607	0.979
Lights	1	836	6	0	-	843	0	0	1	0	-	1	6	879	3	0	-	888	12	0	20	0	-	32	1764
% Lights	100.0	95.8	100.0	-	-	95.8	-	-	100.0	-	-	100.0	100.0	97.2	100.0	-	-	97.3	92.3	-	95.2	-	-	94.1	96.5
Mediums	0	27	0	0	-	27	0	0	0	0	-	0	0	20	0	0	-	20	0	0	0	0	-	0	47
% Mediums	0.0	3.1	0.0	-	-	3.1	-	-	0.0	-	-	0.0	0.0	2.2	0.0	-	-	2.2	0.0	-	0.0	-	-	0.0	2.6
Articulated Trucks	0	10	0	0	-	10	0	0	0	0	-	0	0	5	0	0	-	5	1	0	1	0	-	2	17
% Articulated Trucks	0.0	1.1	0.0	-	-	1.1	-	-	0.0	-	-	0.0	0.0	0.6	0.0	-	-	0.5	7.7	-	4.8	-	-	5.9	0.9
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	-	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-



Vanasse Hangen Brustlin, Inc.
Venture 1
940 Main Campus Drive, Suite 500
Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: US 158 (Croatan Hwy) @ Lakeside St
 Site Code:
 Start Date: 07/24/2024
 Page No: 4



Turning Movement Peak Hour Data Plot (7:45 AM)



Vanasse Hangen Brustlin, Inc.
Venture 1
940 Main Campus Drive, Suite 500
Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: US 158 (Croatan Hwy) @ Lakeside St
 Site Code:
 Start Date: 07/24/2024
 Page No: 5

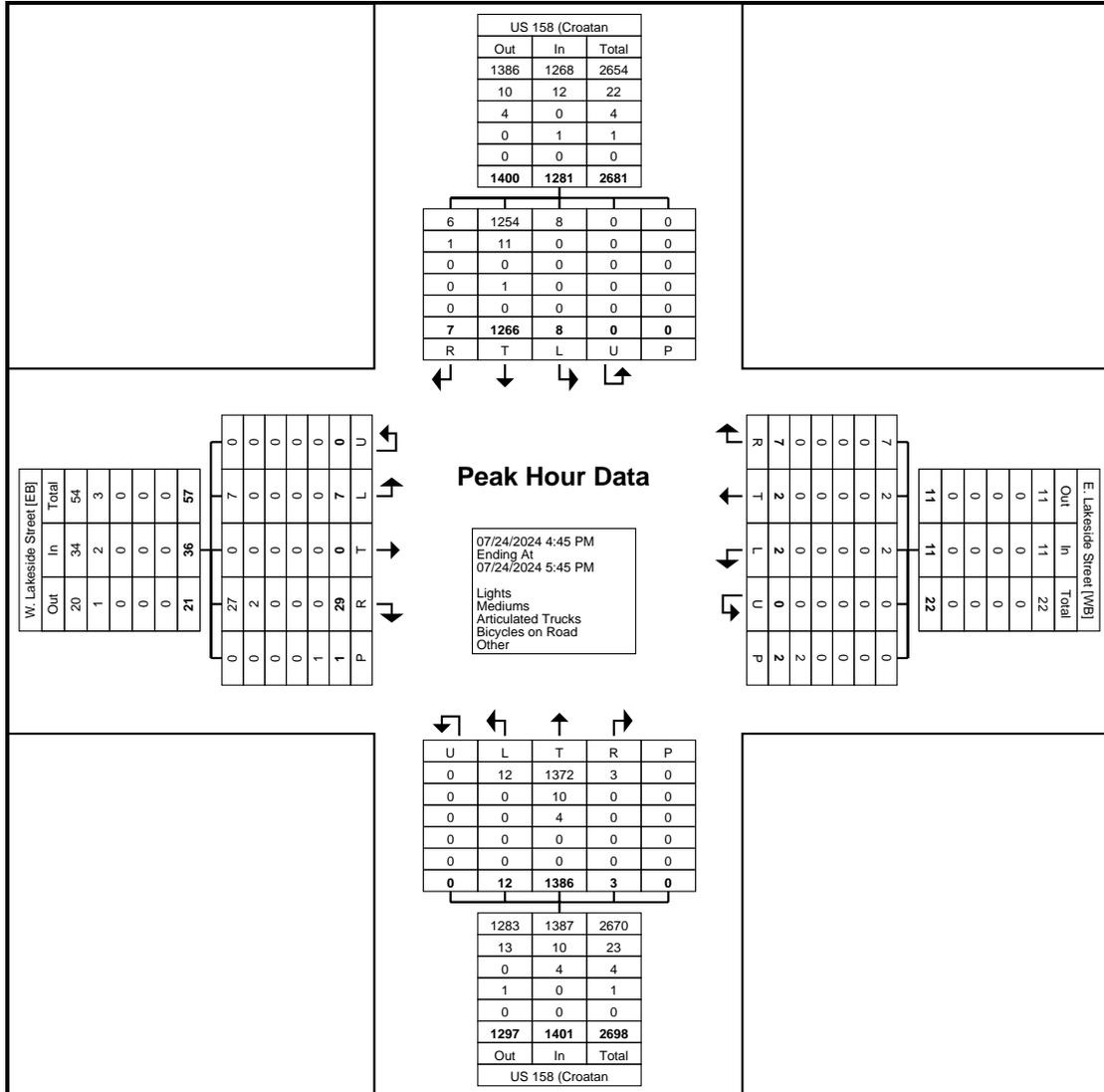
Turning Movement Peak Hour Data (4:45 PM)

Start Time	US 158 (Croatan Highway)						E. Lakeside Street						US 158 (Croatan Highway)						W. Lakeside Street						Int. Total
	Southbound						Westbound						Northbound						Eastbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
4:45 PM	1	343	0	0	0	344	1	2	0	0	0	3	4	334	0	0	0	338	0	0	8	0	0	8	693
5:00 PM	4	293	2	0	0	299	1	0	6	0	2	7	2	365	0	0	0	367	5	0	6	0	0	11	684
5:15 PM	2	315	2	0	0	319	0	0	1	0	0	1	4	346	3	0	0	353	1	0	7	0	0	8	681
5:30 PM	1	315	3	0	0	319	0	0	0	0	0	0	2	341	0	0	0	343	1	0	8	0	1	9	671
Total	8	1266	7	0	0	1281	2	2	7	0	2	11	12	1386	3	0	0	1401	7	0	29	0	1	36	2729
Approach %	0.6	98.8	0.5	0.0	-	-	18.2	18.2	63.6	0.0	-	-	0.9	98.9	0.2	0.0	-	-	19.4	0.0	80.6	0.0	-	-	-
Total %	0.3	46.4	0.3	0.0	-	46.9	0.1	0.1	0.3	0.0	-	0.4	0.4	50.8	0.1	0.0	-	51.3	0.3	0.0	1.1	0.0	-	1.3	-
PHF	0.500	0.923	0.583	0.000	-	0.931	0.500	0.250	0.292	0.000	-	0.393	0.750	0.949	0.250	0.000	-	0.954	0.350	0.000	0.906	0.000	-	0.818	0.984
Lights	8	1254	6	0	-	1268	2	2	7	0	-	11	12	1372	3	0	-	1387	7	0	27	0	-	34	2700
% Lights	100.0	99.1	85.7	-	-	99.0	100.0	100.0	100.0	-	-	100.0	100.0	99.0	100.0	-	-	99.0	100.0	-	93.1	-	-	94.4	98.9
Mediums	0	11	1	0	-	12	0	0	0	0	-	0	0	10	0	0	-	10	0	0	2	0	-	2	24
% Mediums	0.0	0.9	14.3	-	-	0.9	0.0	0.0	0.0	-	-	0.0	0.0	0.7	0.0	-	-	0.7	0.0	-	6.9	-	-	5.6	0.9
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	4	0	0	-	4	0	0	0	0	-	0	4
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.3	0.0	-	-	0.3	0.0	-	0.0	-	-	0.0	0.1
Bicycles on Road	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.1	0.0	-	-	0.1	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-



Vanasse Hangen Brustlin, Inc.
Venture 1
940 Main Campus Drive, Suite 500
Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: US 158 (Croatan Hwy) @ Lakeside St
 Site Code:
 Start Date: 07/24/2024
 Page No: 6



Turning Movement Peak Hour Data Plot (4:45 PM)



Vanasse Hangen Brustlin, Inc.
Venture 1
940 Main Campus Drive, Suite 500
Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: US 158 (Croatan Hwy) @ Lakeside St
 Site Code:
 Start Date: 07/27/2024
 Page No: 1

Turning Movement Data

Start Time	US 158 (Croatan Highway)						E. Lakeside Street						US 158 (Croatan Highway)						W. Lakeside Street						Int. Total
	Southbound						Westbound						Northbound						Eastbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:00 AM	1	94	0	0	0	95	0	0	1	0	0	1	2	240	0	0	0	242	5	0	4	0	0	9	347
7:15 AM	1	167	1	0	0	169	0	2	0	0	0	2	3	257	0	0	0	260	3	1	2	0	0	6	437
7:30 AM	0	168	0	0	0	168	0	0	2	0	0	2	1	233	1	0	0	235	1	1	5	0	0	7	412
7:45 AM	1	182	0	0	0	183	0	1	2	0	0	3	2	296	1	0	0	299	2	0	4	0	0	6	491
Hourly Total	3	611	1	0	0	615	0	3	5	0	0	8	8	1026	2	0	0	1036	11	2	15	0	0	28	1687
8:00 AM	0	202	2	0	0	204	0	0	5	0	0	5	0	268	0	0	0	268	1	0	5	0	0	6	483
8:15 AM	0	197	0	0	0	197	0	0	1	0	0	1	2	312	0	0	1	314	3	0	8	0	0	11	523
8:30 AM	2	204	0	0	0	206	1	0	3	0	0	4	2	289	2	0	0	293	2	0	8	0	0	10	513
8:45 AM	0	243	0	0	0	243	2	0	0	0	0	2	1	277	1	0	1	279	1	0	13	0	0	14	538
Hourly Total	2	846	2	0	0	850	3	0	9	0	0	12	5	1146	3	0	2	1154	7	0	34	0	0	41	2057
9:00 AM	4	247	1	0	0	252	0	0	0	0	0	0	1	284	1	0	0	286	2	1	6	0	0	9	547
9:15 AM	1	348	0	0	0	349	0	0	2	0	0	2	0	336	2	0	0	338	4	0	13	0	1	17	706
9:30 AM	3	325	0	0	0	328	2	0	4	0	0	6	8	332	3	1	0	344	3	0	17	0	1	20	698
9:45 AM	2	369	1	0	0	372	2	0	4	0	0	6	4	366	3	0	0	373	2	0	12	0	0	14	765
Hourly Total	10	1289	2	0	0	1301	4	0	10	0	0	14	13	1318	9	1	0	1341	11	1	48	0	2	60	2716
10:00 AM	5	375	0	0	0	380	1	0	5	0	0	6	1	334	5	0	0	340	2	0	15	0	0	17	743
10:15 AM	4	343	2	0	0	349	2	0	3	0	0	5	2	351	6	0	0	359	3	0	14	0	0	17	730
10:30 AM	2	353	1	0	0	356	1	0	3	0	0	4	5	330	1	0	0	336	5	0	5	0	2	10	706
10:45 AM	2	406	2	0	0	410	0	0	4	0	0	4	5	350	1	1	0	357	1	0	14	0	0	15	786
Hourly Total	13	1477	5	0	0	1495	4	0	15	0	0	19	13	1365	13	1	0	1392	11	0	48	0	2	59	2965
11:00 AM	3	361	0	0	0	364	0	0	0	0	0	0	1	384	3	0	0	388	3	0	21	0	0	24	776
11:15 AM	1	392	0	0	0	393	1	0	2	0	0	3	6	360	2	0	0	368	1	0	7	0	0	8	772
11:30 AM	0	372	0	0	0	372	0	0	2	0	0	2	1	322	1	0	0	324	5	0	12	0	3	17	715
11:45 AM	0	351	1	0	0	352	0	0	0	0	0	0	2	414	2	0	0	418	1	0	8	0	1	9	779
Hourly Total	4	1476	1	0	0	1481	1	0	4	0	0	5	10	1480	8	0	0	1498	10	0	48	0	4	58	3042
12:00 PM	3	381	1	0	0	385	0	0	2	0	0	2	3	413	3	0	0	419	1	0	11	0	0	12	818
12:15 PM	3	362	2	0	0	367	0	0	2	0	0	2	3	340	3	0	0	346	2	0	12	0	0	14	729
12:30 PM	4	367	2	0	0	373	1	1	1	0	0	3	4	313	4	0	0	321	5	0	6	0	0	11	708
12:45 PM	4	378	2	0	0	384	0	0	2	0	0	2	0	358	4	0	0	362	1	0	14	0	1	15	763
Hourly Total	14	1488	7	0	0	1509	1	1	7	0	0	9	10	1424	14	0	0	1448	9	0	43	0	1	52	3018
1:00 PM	1	356	2	1	0	360	0	0	1	0	0	1	8	343	5	0	0	356	1	0	13	0	0	14	731
1:15 PM	2	350	3	0	0	355	1	0	5	0	0	6	0	317	1	0	0	318	2	0	11	0	0	13	692
1:30 PM	6	392	2	0	0	400	0	0	3	1	0	4	3	284	0	0	0	287	0	0	14	0	1	14	705
1:45 PM	0	404	0	0	0	404	2	1	0	0	0	3	2	376	4	0	0	382	0	0	9	0	1	9	798
Hourly Total	9	1502	7	1	0	1519	3	1	9	1	0	14	13	1320	10	0	0	1343	3	0	47	0	2	50	2926
2:00 PM	7	346	2	0	0	355	1	1	1	0	0	3	4	326	3	0	0	333	2	1	8	0	0	11	702
2:15 PM	5	340	2	0	0	347	0	0	3	0	0	3	4	322	5	0	0	331	0	1	10	0	0	11	692
2:30 PM	4	399	1	0	0	404	1	0	3	0	0	4	4	297	3	0	0	304	1	1	8	0	1	10	722
2:45 PM	1	412	2	0	0	415	0	0	3	0	0	3	4	311	0	0	0	315	2	0	12	0	0	14	747
Hourly Total	17	1497	7	0	0	1521	2	1	10	0	0	13	16	1256	11	0	0	1283	5	3	38	0	1	46	2863
3:00 PM	5	348	0	0	0	353	0	0	2	0	0	2	3	294	0	0	0	297	5	0	9	0	0	14	666
3:15 PM	3	343	2	0	0	348	0	0	5	0	0	5	2	352	2	0	0	356	1	1	8	0	3	10	719
3:30 PM	1	397	1	0	0	399	0	0	4	0	0	4	1	299	2	0	0	302	3	0	13	0	1	16	721
3:45 PM	4	402	2	0	0	408	1	0	2	0	0	3	2	321	0	0	0	323	2	0	8	0	1	10	744
Hourly Total	13	1490	5	0	0	1508	1	0	13	0	0	14	8	1266	4	0	0	1278	11	1	38	0	5	50	2850
4:00 PM	2	378	3	0	0	383	0	0	2	0	0	2	0	346	1	0	0	347	2	1	10	0	1	13	745
4:15 PM	1	395	4	0	0	400	0	0	2	0	0	2	5	330	5	0	0	340	1	0	6	0	0	7	749
4:30 PM	2	426	0	0	0	428	0	0	3	0	0	3	4	373	1	0	0	378	5	0	12	0	0	17	826
4:45 PM	3	381	3	0	0	387	0	0	2	0	0	2	3	357	4	0	0	364	1	0	10	0	0	11	764
Hourly Total	8	1580	10	0	0	1598	0	0	9	0	0	9	12	1406	11	0	0	1429	9	1	38	0	1	48	3084
5:00 PM	3	417	0	0	0	420	1	0	6	0	0	7	3	285	4	0	0	292	3	0	15	0	0	18	737
5:15 PM	3	390	3	0	0	396	1	0	1	0	0	2	2	307	3	0	0	312	3	0	9	0	3	12	722
5:30 PM	4	398	1	0	0	403	2	0	1	0	0	3	2	380	1	0	0	383	2	0	12	0	0	14	803
5:45 PM	0	416	2	0	0	418	0	0	2	0	0	2	1	296	2	0	0	299	1	0	9	0	0	10	729
Hourly Total	10	1621	6	0	0	1637	4	0	10	0	0	14	8	1268	10	0	0	1286	9	0	45	0	3	54	2991
Grand Total	103	14877	53	1	0	15034	23	6	101	1	0	131	116	14275	95	2	2	14488	96	8	442	0	21	546	30199
Approach %	0.7	99.0	0.4	0.0	-	-	17.6	4.6	77.1	0.8	-	-	0.8	98.5	0.7	0.0	-	-	17.6	1.5	81.0	0.0	-	-	-
Total %	0.3	49.3	0.2	0.0	-	49.8	0.1	0.0	0.3	0.0	-	0.4	0.4	47.3	0.3	0.0	-	48.0	0.3	0.0	1.5	0.0	-	1.8	-
Lights	103	14758	52	1	-	14914	23	6	98	1	-	128	114	14149	94	2	-	14359	94	8	436	0	-	538	29939
% Lights	100.0	99.2	98.1	100.0	-	99.2	100.0	100.0	97.0	100.0	-	97.7	98.3	99.1	98.9	100.0	-	99.1	97.9	100.0	98.6	-	-	98.5	99.1

Mediums	0	101	1	0	-	102	0	0	3	0	-	3	2	98	1	0	-	101	1	0	6	0	-	7	213
% Mediums	0.0	0.7	1.9	0.0	-	0.7	0.0	0.0	3.0	0.0	-	2.3	1.7	0.7	1.1	0.0	-	0.7	1.0	0.0	1.4	-	-	1.3	0.7
Articulated Trucks	0	18	0	0	-	18	0	0	0	0	-	0	0	25	0	0	-	25	1	0	0	0	-	1	44
% Articulated Trucks	0.0	0.1	0.0	0.0	-	0.1	0.0	0.0	0.0	0.0	-	0.0	0.0	0.2	0.0	0.0	-	0.2	1.0	0.0	0.0	-	-	0.2	0.1
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	3	0	0	-	3	0	0	0	0	-	0	3
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	20	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	95.2	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	4.8	-	-



Vanasse Hangen Brustlin, Inc.
Venture 1
940 Main Campus Drive, Suite 500
Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: US 158 (Croatan Hwy) @ Lakeside St
 Site Code:
 Start Date: 07/27/2024
 Page No: 4

Turning Movement Peak Hour Data (10:45 AM)

Start Time	US 158 (Croatan Highway)						E. Lakeside Street						US 158 (Croatan Highway)						W. Lakeside Street						Int. Total
	Southbound						Westbound						Northbound						Eastbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
10:45 AM	2	406	2	0	0	410	0	0	4	0	0	4	5	350	1	1	0	357	1	0	14	0	0	15	786
11:00 AM	3	361	0	0	0	364	0	0	0	0	0	0	1	384	3	0	0	388	3	0	21	0	0	24	776
11:15 AM	1	392	0	0	0	393	1	0	2	0	0	3	6	360	2	0	0	368	1	0	7	0	0	8	772
11:30 AM	0	372	0	0	0	372	0	0	2	0	0	2	1	322	1	0	0	324	5	0	12	0	3	17	715
Total	6	1531	2	0	0	1539	1	0	8	0	0	9	13	1416	7	1	0	1437	10	0	54	0	3	64	3049
Approach %	0.4	99.5	0.1	0.0	-	-	11.1	0.0	88.9	0.0	-	-	0.9	98.5	0.5	0.1	-	-	15.6	0.0	84.4	0.0	-	-	-
Total %	0.2	50.2	0.1	0.0	-	50.5	0.0	0.0	0.3	0.0	-	0.3	0.4	46.4	0.2	0.0	-	47.1	0.3	0.0	1.8	0.0	-	2.1	-
PHF	0.500	0.943	0.250	0.000	-	0.938	0.250	0.000	0.500	0.000	-	0.563	0.542	0.922	0.583	0.250	-	0.926	0.500	0.000	0.643	0.000	-	0.667	0.970
Lights	6	1521	2	0	-	1529	1	0	8	0	-	9	13	1399	6	1	-	1419	10	0	54	0	-	64	3021
% Lights	100.0	99.3	100.0	-	-	99.4	100.0	-	100.0	-	-	100.0	100.0	98.8	85.7	100.0	-	98.7	100.0	-	100.0	-	-	100.0	99.1
Mediums	0	9	0	0	-	9	0	0	0	0	-	0	0	12	1	0	-	13	0	0	0	0	-	0	22
% Mediums	0.0	0.6	0.0	-	-	0.6	0.0	-	0.0	-	-	0.0	0.0	0.8	14.3	0.0	-	0.9	0.0	-	0.0	-	-	0.0	0.7
Articulated Trucks	0	1	0	0	-	1	0	0	0	0	-	0	0	5	0	0	-	5	0	0	0	0	-	0	6
% Articulated Trucks	0.0	0.1	0.0	-	-	0.1	0.0	-	0.0	-	-	0.0	0.0	0.4	0.0	0.0	-	0.3	0.0	-	0.0	-	-	0.0	0.2
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-



Vanasse Hangen Brustlin, Inc.
Venture 1
940 Main Campus Drive, Suite 500
Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: US 158 (Croatan Hwy) @ Lakeside St
 Site Code:
 Start Date: 07/27/2024
 Page No: 6

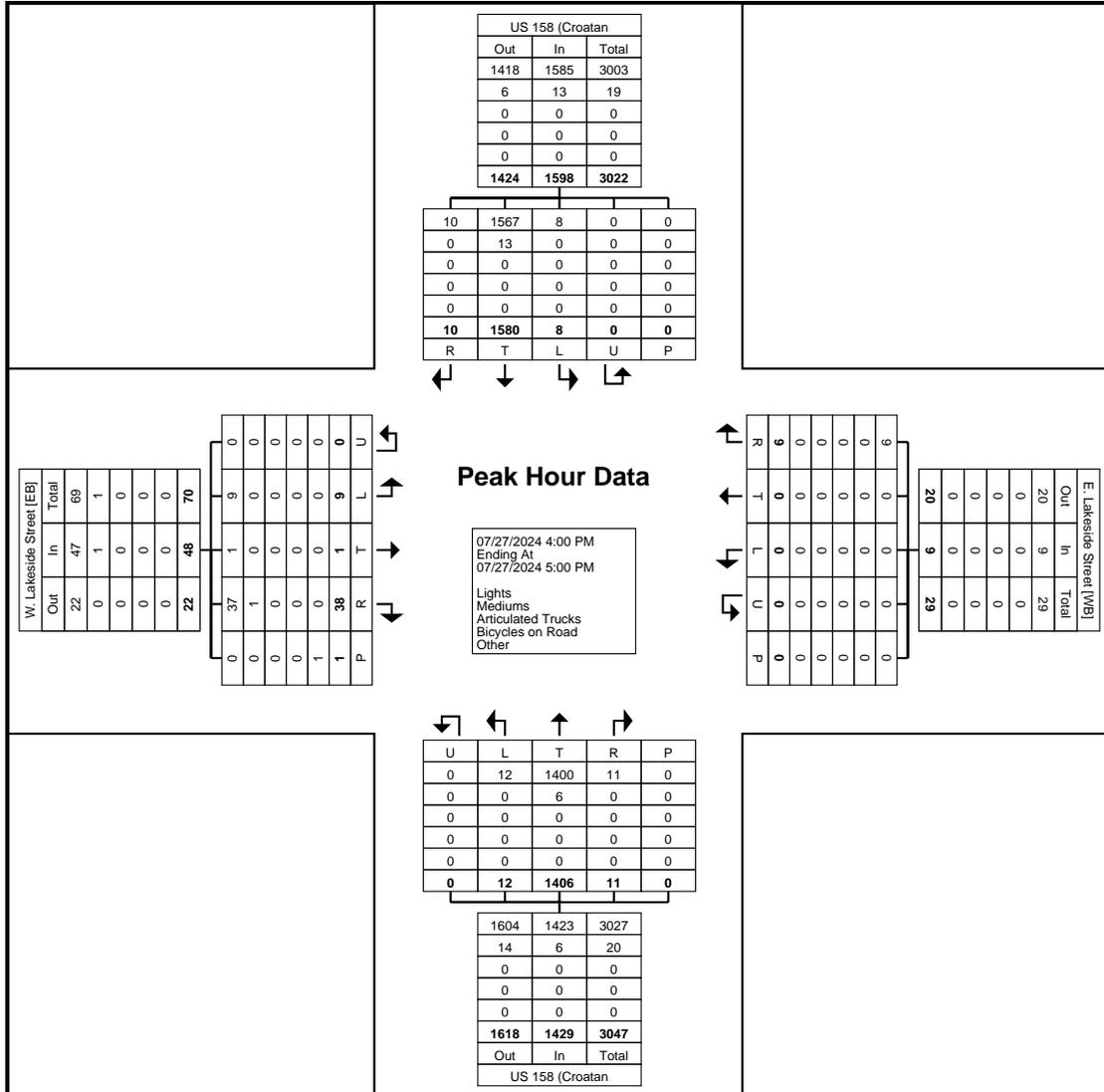
Turning Movement Peak Hour Data (4:00 PM)

Start Time	US 158 (Croatan Highway)						E. Lakeside Street						US 158 (Croatan Highway)						W. Lakeside Street						Int. Total
	Southbound						Westbound						Northbound						Eastbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
4:00 PM	2	378	3	0	0	383	0	0	2	0	0	2	0	346	1	0	0	347	2	1	10	0	1	13	745
4:15 PM	1	395	4	0	0	400	0	0	2	0	0	2	5	330	5	0	0	340	1	0	6	0	0	7	749
4:30 PM	2	426	0	0	0	428	0	0	3	0	0	3	4	373	1	0	0	378	5	0	12	0	0	17	826
4:45 PM	3	381	3	0	0	387	0	0	2	0	0	2	3	357	4	0	0	364	1	0	10	0	0	11	764
Total	8	1580	10	0	0	1598	0	0	9	0	0	9	12	1406	11	0	0	1429	9	1	38	0	1	48	3084
Approach %	0.5	98.9	0.6	0.0	-	-	0.0	0.0	100.0	0.0	-	-	0.8	98.4	0.8	0.0	-	-	18.8	2.1	79.2	0.0	-	-	-
Total %	0.3	51.2	0.3	0.0	-	51.8	0.0	0.0	0.3	0.0	-	0.3	0.4	45.6	0.4	0.0	-	46.3	0.3	0.0	1.2	0.0	-	1.6	-
PHF	0.667	0.927	0.625	0.000	-	0.933	0.000	0.000	0.750	0.000	-	0.750	0.600	0.942	0.550	0.000	-	0.945	0.450	0.250	0.792	0.000	-	0.706	0.933
Lights	8	1567	10	0	-	1585	0	0	9	0	-	9	12	1400	11	0	-	1423	9	1	37	0	-	47	3064
% Lights	100.0	99.2	100.0	-	-	99.2	-	-	100.0	-	-	100.0	100.0	99.6	100.0	-	-	99.6	100.0	100.0	97.4	-	-	97.9	99.4
Mediums	0	13	0	0	-	13	0	0	0	0	-	0	0	6	0	0	-	6	0	0	1	0	-	1	20
% Mediums	0.0	0.8	0.0	-	-	0.8	-	-	0.0	-	-	0.0	0.0	0.4	0.0	-	-	0.4	0.0	0.0	2.6	-	-	2.1	0.6
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Articulated Trucks	0.0	0.0	0.0	-	-	0.0	-	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	0.0	-	-	0.0	-	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-



Vanasse Hangen Brustlin, Inc.
Venture 1
 940 Main Campus Drive, Suite 500
 Raleigh, North Carolina, United States 27606
 919.829.0328 cmurden@vhb.com

Count Name: US 158 (Croatan Hwy) @ Lakeside St
 Site Code:
 Start Date: 07/27/2024
 Page No: 7



Turning Movement Peak Hour Data Plot (4:00 PM)

B

Intersection Capacity Analysis

Inn at Whalebone TIA
 1: NC 12 & East Lakeside Street

Existing (2024) - Weekday AM Peak Hour
 Lanes, Volumes, Timings



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	4	4	4	104	123	4
Future Volume (vph)	4	4	4	104	123	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.932			0.996		
Flt Protected	0.976			0.998		
Satd. Flow (prot)	1694	0	0	1759	1787	0
Flt Permitted	0.976			0.998		
Satd. Flow (perm)	1694	0	0	1759	1787	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	548			1151	1199	
Travel Time (s)	14.9			22.4	23.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	8%	6%	2%
Adj. Flow (vph)	4	4	4	116	137	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	0	0	120	141	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	18.7%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	4	4	4	104	123	4
Future Vol, veh/h	4	4	4	104	123	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	8	6	2
Mvmt Flow	4	4	4	116	137	4

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	263	139	141	0	0
Stage 1	139	-	-	-	-
Stage 2	124	-	-	-	-
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	726	909	1442	-	-
Stage 1	888	-	-	-	-
Stage 2	902	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	724	909	1442	-	-
Mov Cap-2 Maneuver	724	-	-	-	-
Stage 1	885	-	-	-	-
Stage 2	902	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1442	-	806	-	-
HCM Lane V/C Ratio	0.003	-	0.011	-	-
HCM Control Delay (s)	7.5	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	4	21	4	4	4	6	904	4	4	873	6
Future Volume (vph)	13	4	21	4	4	4	6	904	4	4	873	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.924			0.955			0.999			0.999	
Flt Protected		0.983			0.984		0.950			0.950		
Satd. Flow (prot)	0	1632	0	0	1750	0	1770	3501	0	1770	3468	0
Flt Permitted		0.983			0.984		0.950			0.950		
Satd. Flow (perm)	0	1632	0	0	1750	0	1770	3501	0	1770	3468	0
Link Speed (mph)		25			25			50			50	
Link Distance (ft)		290			548			1172			1116	
Travel Time (s)		7.9			14.9			16.0			15.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	8%	2%	5%	2%	2%	2%	2%	3%	2%	2%	4%	2%
Adj. Flow (vph)	14	4	23	4	4	4	7	1004	4	4	970	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	41	0	0	12	0	7	1008	0	4	977	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	35.1%
Analysis Period (min)	15
	ICU Level of Service A

Inn at Whalebone TIA
 2: US 158 & West Lakeside Street/East Lakeside Street

Existing (2024) - Weekday AM Peak Hour
 HCM 6th TWSC

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	13	4	21	4	4	4	6	904	4	4	873	6
Future Vol, veh/h	13	4	21	4	4	4	6	904	4	4	873	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	8	2	5	2	2	2	2	3	2	2	4	2
Mvmt Flow	14	4	23	4	4	4	7	1004	4	4	970	7

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1500	2004	489	1515	2005	504	977	0	0	1008	0	0
Stage 1	982	982	-	1020	1020	-	-	-	-	-	-	-
Stage 2	518	1022	-	495	985	-	-	-	-	-	-	-
Critical Hdwy	7.66	6.54	7	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.66	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.66	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.58	4.02	3.35	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	80	59	517	82	59	513	702	-	-	683	-	-
Stage 1	256	325	-	253	312	-	-	-	-	-	-	-
Stage 2	494	312	-	525	324	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	77	58	517	76	58	513	702	-	-	683	-	-
Mov Cap-2 Maneuver	182	170	-	181	169	-	-	-	-	-	-	-
Stage 1	253	323	-	250	309	-	-	-	-	-	-	-
Stage 2	478	309	-	492	322	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	20.1		22.1		0.1		0	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	702	-	-	280	224	683	-	-
HCM Lane V/C Ratio	0.009	-	-	0.151	0.06	0.007	-	-
HCM Control Delay (s)	10.2	-	-	20.1	22.1	10.3	-	-
HCM Lane LOS	B	-	-	C	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.2	0	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	4	11	4	210	250	7
Future Volume (vph)	4	11	4	210	250	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.899				0.996	
Flt Protected	0.988			0.999		
Satd. Flow (prot)	1655	0	0	1843	1855	0
Flt Permitted	0.988			0.999		
Satd. Flow (perm)	1655	0	0	1843	1855	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	548			1151	1199	
Travel Time (s)	14.9			22.4	23.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%
Adj. Flow (vph)	4	12	4	233	278	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	0	237	286	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	24.3%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	4	11	4	210	250	7
Future Vol, veh/h	4	11	4	210	250	7
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	3	2	2
Mvmt Flow	4	12	4	233	278	8

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	523	282	286	0	-	0
Stage 1	282	-	-	-	-	-
Stage 2	241	-	-	-	-	-
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	514	757	1276	-	-	-
Stage 1	766	-	-	-	-	-
Stage 2	799	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	512	757	1276	-	-	-
Mov Cap-2 Maneuver	512	-	-	-	-	-
Stage 1	763	-	-	-	-	-
Stage 2	799	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1276	-	671	-	-
HCM Lane V/C Ratio	0.003	-	0.025	-	-
HCM Control Delay (s)	7.8	0	10.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	4	29	4	4	7	12	1386	4	8	1266	7
Future Volume (vph)	7	4	29	4	4	7	12	1386	4	8	1266	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.902			0.932							0.999
Flt Protected		0.991			0.988		0.950			0.950		
Satd. Flow (prot)	0	1608	0	0	1715	0	1770	3539	0	1770	3533	0
Flt Permitted		0.991			0.988		0.950			0.950		
Satd. Flow (perm)	0	1608	0	0	1715	0	1770	3539	0	1770	3533	0
Link Speed (mph)		25			25			50			50	
Link Distance (ft)		290			548			1172			1116	
Travel Time (s)		7.9			14.9			16.0			15.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	7%	2%	2%	2%	2%	2%	2%	2%	2%	14%
Adj. Flow (vph)	8	4	32	4	4	8	13	1540	4	9	1407	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	44	0	0	16	0	13	1544	0	9	1415	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	48.4%
ICU Level of Service	A
Analysis Period (min)	15

Inn at Whalebone TIA
 2: US 158 & West Lakeside Street/East Lakeside Street

Existing (2024) - Weekday PM Peak Hour
 HCM 6th TWSC

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	7	4	29	4	4	7	12	1386	4	8	1266	7
Future Vol, veh/h	7	4	29	4	4	7	12	1386	4	8	1266	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	7	2	2	2	2	2	2	2	2	14
Mvmt Flow	8	4	32	4	4	8	13	1540	4	9	1407	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2227	2999	708	2292	3001	772	1415	0	0	1544	0	0
Stage 1	1429	1429	-	1568	1568	-	-	-	-	-	-	-
Stage 2	798	1570	-	724	1433	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	7.04	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.37	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	24	13	366	21	13	342	478	-	-	426	-	-
Stage 1	142	199	-	116	170	-	-	-	-	-	-	-
Stage 2	346	170	-	383	198	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	22	12	366	18	12	342	478	-	-	426	-	-
Mov Cap-2 Maneuver	96	85	-	82	84	-	-	-	-	-	-	-
Stage 1	138	195	-	113	165	-	-	-	-	-	-	-
Stage 2	320	165	-	334	194	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	27.9		37.3		0.1		0.1	
HCM LOS	D		E					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	478	-	-	201	128	426	-	-
HCM Lane V/C Ratio	0.028	-	-	0.221	0.13	0.021	-	-
HCM Control Delay (s)	12.7	-	-	27.9	37.3	13.6	-	-
HCM Lane LOS	B	-	-	D	E	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.8	0.4	0.1	-	-

Inn at Whalebone TIA
 1: NC 12 & East Lakeside Street

Existing (2024) - Saturday Peak Hour
 Lanes, Volumes, Timings



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	7	7	4	291	399	6
Future Volume (vph)	7	7	4	291	399	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.932			0.998		
Flt Protected	0.976			0.999		
Satd. Flow (prot)	1694	0	0	1861	1859	0
Flt Permitted	0.976			0.999		
Satd. Flow (perm)	1694	0	0	1861	1859	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	548			1151	1199	
Travel Time (s)	14.9			22.4	23.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	8	8	4	323	443	7
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	0	327	450	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	31.4%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	7	7	4	291	399	6
Future Vol, veh/h	7	7	4	291	399	6
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	8	4	323	443	7

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	778	447	450	0	-	0
Stage 1	447	-	-	-	-	-
Stage 2	331	-	-	-	-	-
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	365	612	1110	-	-	-
Stage 1	644	-	-	-	-	-
Stage 2	728	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	364	612	1110	-	-	-
Mov Cap-2 Maneuver	364	-	-	-	-	-
Stage 1	641	-	-	-	-	-
Stage 2	728	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.2	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1110	-	456	-	-
HCM Lane V/C Ratio	0.004	-	0.034	-	-
HCM Control Delay (s)	8.3	0	13.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Inn at Whalebone TIA
 2: US 158 & West Lakeside Street/East Lakeside Street

Existing (2024) - Saturday Peak Hour
 Lanes, Volumes, Timings

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	4	38	4	4	9	12	1406	11	8	1580	10
Future Volume (vph)	9	4	38	4	4	9	12	1406	11	8	1580	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.899			0.925			0.999			0.999	
Flt Protected		0.991			0.989		0.950			0.950		
Satd. Flow (prot)	0	1647	0	0	1704	0	1770	3536	0	1770	3536	0
Flt Permitted		0.991			0.989		0.950			0.950		
Satd. Flow (perm)	0	1647	0	0	1704	0	1770	3536	0	1770	3536	0
Link Speed (mph)		25			25			50			50	
Link Distance (ft)		290			548			1172			1116	
Travel Time (s)		7.9			14.9			16.0			15.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	10	4	42	4	4	10	13	1562	12	9	1756	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	56	0	0	18	0	13	1574	0	9	1767	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	54.4%
Analysis Period (min)	15
	ICU Level of Service A

Inn at Whalebone TIA
 2: US 158 & West Lakeside Street/East Lakeside Street

Existing (2024) - Saturday Peak Hour
 HCM 6th TWSC

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	9	4	38	4	4	9	12	1406	11	8	1580	10
Future Vol, veh/h	9	4	38	4	4	9	12	1406	11	8	1580	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	4	42	4	4	10	13	1562	12	9	1756	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2589	3380	884	2492	3379	787	1767	0	0	1574	0	0
Stage 1	1780	1780	-	1594	1594	-	-	-	-	-	-	-
Stage 2	809	1600	-	898	1785	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.96	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.33	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	12	7	287	15	7	334	349	-	-	415	-	-
Stage 1	85	133	-	112	165	-	-	-	-	-	-	-
Stage 2	340	164	-	301	133	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	11	7	287	12	7	334	349	-	-	415	-	-
Mov Cap-2 Maneuver	62	67	-	72	65	-	-	-	-	-	-	-
Stage 1	82	130	-	108	159	-	-	-	-	-	-	-
Stage 2	309	158	-	243	130	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	42.5		41.2		0.1		0.1	
HCM LOS	E		E					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	349	-	-	151	118	415	-	-
HCM Lane V/C Ratio	0.038	-	-	0.375	0.16	0.021	-	-
HCM Control Delay (s)	15.7	-	-	42.5	41.2	13.9	-	-
HCM Lane LOS	C	-	-	E	E	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.6	0.5	0.1	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	4	4	4	107	127	4
Future Volume (vph)	4	4	4	107	127	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.932				0.996	
Flt Protected	0.976			0.998		
Satd. Flow (prot)	1694	0	0	1759	1787	0
Flt Permitted	0.976			0.998		
Satd. Flow (perm)	1694	0	0	1759	1787	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	548			1076	1002	
Travel Time (s)	14.9			21.0	19.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	8%	6%	2%
Adj. Flow (vph)	4	4	4	119	141	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	0	0	123	145	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	18.9%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	4	4	4	107	127	4
Future Vol, veh/h	4	4	4	107	127	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	8	6	2
Mvmt Flow	4	4	4	119	141	4

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	270	143	145	0	0
Stage 1	143	-	-	-	-
Stage 2	127	-	-	-	-
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	719	905	1437	-	-
Stage 1	884	-	-	-	-
Stage 2	899	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	717	905	1437	-	-
Mov Cap-2 Maneuver	717	-	-	-	-
Stage 1	881	-	-	-	-
Stage 2	899	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1437	-	800	-	-
HCM Lane V/C Ratio	0.003	-	0.011	-	-
HCM Control Delay (s)	7.5	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Inn at Whalebone TIA
 2: US 158 & West Lakeside Street/East Lakeside Street

No-Build (2026) - Weekday AM Peak Hour
 Lanes, Volumes, Timings

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	4	22	4	4	4	6	931	4	4	899	6
Future Volume (vph)	13	4	22	4	4	4	6	931	4	4	899	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.923			0.955			0.999			0.999	
Flt Protected		0.984			0.984		0.950			0.950		
Satd. Flow (prot)	0	1632	0	0	1750	0	1770	3501	0	1770	3468	0
Flt Permitted		0.984			0.984		0.950			0.950		
Satd. Flow (perm)	0	1632	0	0	1750	0	1770	3501	0	1770	3468	0
Link Speed (mph)		25			25			50			50	
Link Distance (ft)		290			548			1031			1222	
Travel Time (s)		7.9			14.9			14.1			16.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	8%	2%	5%	2%	2%	2%	2%	3%	2%	2%	4%	2%
Adj. Flow (vph)	14	4	24	4	4	4	7	1034	4	4	999	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	42	0	0	12	0	7	1038	0	4	1006	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	35.9%
Analysis Period (min)	15
	ICU Level of Service A

Inn at Whalebone TIA
 2: US 158 & West Lakeside Street/East Lakeside Street

No-Build (2026) - Weekday AM Peak Hour
 HCM 6th TWSC

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	13	4	22	4	4	4	6	931	4	4	899	6
Future Vol, veh/h	13	4	22	4	4	4	6	931	4	4	899	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	8	2	5	2	2	2	2	3	2	2	4	2
Mvmt Flow	14	4	24	4	4	4	7	1034	4	4	999	7

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1544	2063	503	1560	2064	519	1006	0	0	1038	0	0
Stage 1	1011	1011	-	1050	1050	-	-	-	-	-	-	-
Stage 2	533	1052	-	510	1014	-	-	-	-	-	-	-
Critical Hdwy	7.66	6.54	7	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.66	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.66	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.58	4.02	3.35	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	74	54	506	76	54	502	684	-	-	665	-	-
Stage 1	246	315	-	243	302	-	-	-	-	-	-	-
Stage 2	483	302	-	514	314	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	71	53	506	70	53	502	684	-	-	665	-	-
Mov Cap-2 Maneuver	174	163	-	173	162	-	-	-	-	-	-	-
Stage 1	244	313	-	241	299	-	-	-	-	-	-	-
Stage 2	467	299	-	479	312	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	20.7		22.8		0.1		0	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	684	-	-	273	215	665	-	-
HCM Lane V/C Ratio	0.01	-	-	0.159	0.062	0.007	-	-
HCM Control Delay (s)	10.3	-	-	20.7	22.8	10.4	-	-
HCM Lane LOS	B	-	-	C	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.2	0	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	4	11	4	216	258	7
Future Volume (vph)	4	11	4	216	258	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.899				0.996	
Flt Protected	0.988			0.999		
Satd. Flow (prot)	1655	0	0	1843	1855	0
Flt Permitted	0.988			0.999		
Satd. Flow (perm)	1655	0	0	1843	1855	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	548			1076	1002	
Travel Time (s)	14.9			21.0	19.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%
Adj. Flow (vph)	4	12	4	240	287	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	0	244	295	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	24.6%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	4	11	4	216	258	7
Future Vol, veh/h	4	11	4	216	258	7
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	3	2	2
Mvmt Flow	4	12	4	240	287	8

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	539	291	295	0	-	0
Stage 1	291	-	-	-	-	-
Stage 2	248	-	-	-	-	-
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	503	748	1266	-	-	-
Stage 1	759	-	-	-	-	-
Stage 2	793	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	501	748	1266	-	-	-
Mov Cap-2 Maneuver	501	-	-	-	-	-
Stage 1	756	-	-	-	-	-
Stage 2	793	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.6	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1266	-	661	-	-
HCM Lane V/C Ratio	0.004	-	0.025	-	-
HCM Control Delay (s)	7.9	0	10.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	4	30	4	4	7	12	1428	4	8	1304	7
Future Volume (vph)	7	4	30	4	4	7	12	1428	4	8	1304	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.901			0.932							0.999
Flt Protected		0.991			0.988		0.950			0.950		
Satd. Flow (prot)	0	1606	0	0	1715	0	1770	3539	0	1770	3533	0
Flt Permitted		0.991			0.988		0.950			0.950		
Satd. Flow (perm)	0	1606	0	0	1715	0	1770	3539	0	1770	3533	0
Link Speed (mph)		25			25			50			50	
Link Distance (ft)		290			548			1031			1222	
Travel Time (s)		7.9			14.9			14.1			16.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	7%	2%	2%	2%	2%	2%	2%	2%	2%	14%
Adj. Flow (vph)	8	4	33	4	4	8	13	1587	4	9	1449	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	45	0	0	16	0	13	1591	0	9	1457	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	49.6%
ICU Level of Service	A
Analysis Period (min)	15

Inn at Whalebone TIA
 2: US 158 & West Lakeside Street/East Lakeside Street

No-Build (2026) - Weekday PM Peak Hour
 HCM 6th TWSC

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	7	4	30	4	4	7	12	1428	4	8	1304	7
Future Vol, veh/h	7	4	30	4	4	7	12	1428	4	8	1304	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	7	2	2	2	2	2	2	2	2	14
Mvmt Flow	8	4	33	4	4	8	13	1587	4	9	1449	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2293	3088	729	2360	3090	796	1457	0	0	1591	0	0
Stage 1	1471	1471	-	1615	1615	-	-	-	-	-	-	-
Stage 2	822	1617	-	745	1475	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	7.04	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.37	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	21	12	354	19	12	330	460	-	-	408	-	-
Stage 1	133	190	-	108	161	-	-	-	-	-	-	-
Stage 2	334	161	-	372	189	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	19	11	354	16	11	330	460	-	-	408	-	-
Mov Cap-2 Maneuver	89	80	-	77	80	-	-	-	-	-	-	-
Stage 1	129	186	-	105	156	-	-	-	-	-	-	-
Stage 2	308	156	-	322	185	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB		
HCM Control Delay, s	29.5		39.1		0.1		0.1		
HCM LOS	D		E						

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	460	-	-	192	122	408	-	-
HCM Lane V/C Ratio	0.029	-	-	0.237	0.137	0.022	-	-
HCM Control Delay (s)	13.1	-	-	29.5	39.1	14	-	-
HCM Lane LOS	B	-	-	D	E	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.9	0.5	0.1	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	7	7	4	300	411	6
Future Volume (vph)	7	7	4	300	411	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.932				0.998	
Flt Protected	0.976			0.999		
Satd. Flow (prot)	1694	0	0	1861	1859	0
Flt Permitted	0.976			0.999		
Satd. Flow (perm)	1694	0	0	1861	1859	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	548			1076	1002	
Travel Time (s)	14.9			21.0	19.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	8	8	4	333	457	7
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	0	337	464	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	32.0%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	7	7	4	300	411	6
Future Vol, veh/h	7	7	4	300	411	6
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	8	4	333	457	7

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	802	461	464	0	-	0
Stage 1	461	-	-	-	-	-
Stage 2	341	-	-	-	-	-
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	353	600	1097	-	-	-
Stage 1	635	-	-	-	-	-
Stage 2	720	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	352	600	1097	-	-	-
Mov Cap-2 Maneuver	352	-	-	-	-	-
Stage 1	632	-	-	-	-	-
Stage 2	720	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1097	-	444	-	-
HCM Lane V/C Ratio	0.004	-	0.035	-	-
HCM Control Delay (s)	8.3	0	13.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Inn at Whalebone TIA
 2: US 158 & West Lakeside Street/East Lakeside Street

No-Build (2026) - Saturday Peak Hour
 Lanes, Volumes, Timings

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	4	39	4	4	9	12	1448	11	8	1628	10
Future Volume (vph)	9	4	39	4	4	9	12	1448	11	8	1628	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.898			0.925			0.999			0.999	
Flt Protected		0.991			0.989		0.950			0.950		
Satd. Flow (prot)	0	1646	0	0	1704	0	1770	3536	0	1770	3536	0
Flt Permitted		0.991			0.989		0.950			0.950		
Satd. Flow (perm)	0	1646	0	0	1704	0	1770	3536	0	1770	3536	0
Link Speed (mph)		25			25			50			50	
Link Distance (ft)		290			548			1031			1222	
Travel Time (s)		7.9			14.9			14.1			16.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	10	4	43	4	4	10	13	1609	12	9	1809	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	0	0	18	0	13	1621	0	9	1820	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	55.8%
ICU Level of Service	B
Analysis Period (min)	15

Inn at Whalebone TIA
 2: US 158 & West Lakeside Street/East Lakeside Street

No-Build (2026) - Saturday Peak Hour
 HCM 6th TWSC

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	9	4	39	4	4	9	12	1448	11	8	1628	10
Future Vol, veh/h	9	4	39	4	4	9	12	1448	11	8	1628	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	4	43	4	4	10	13	1609	12	9	1809	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2666	3480	910	2566	3479	811	1820	0	0	1621	0	0
Stage 1	1833	1833	-	1641	1641	-	-	-	-	-	-	-
Stage 2	833	1647	-	925	1838	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.96	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.33	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	11	6	275	13	6	322	333	-	-	398	-	-
Stage 1	79	125	-	104	156	-	-	-	-	-	-	-
Stage 2	329	155	-	290	125	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	10	6	275	10	6	322	333	-	-	398	-	-
Mov Cap-2 Maneuver	58	62	-	66	60	-	-	-	-	-	-	-
Stage 1	76	122	-	100	150	-	-	-	-	-	-	-
Stage 2	297	149	-	230	122	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	45.8		44.4		0.1		0.1	
HCM LOS	E		E					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	333	-	-	144	110	398	-	-
HCM Lane V/C Ratio	0.04	-	-	0.401	0.172	0.022	-	-
HCM Control Delay (s)	16.3	-	-	45.8	44.4	14.3	-	-
HCM Lane LOS	C	-	-	E	E	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.7	0.6	0.1	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	4	4	4	107	127	4
Future Volume (vph)	4	4	4	107	127	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.932				0.996	
Flt Protected	0.976			0.998		
Satd. Flow (prot)	1694	0	0	1759	1787	0
Flt Permitted	0.976			0.998		
Satd. Flow (perm)	1694	0	0	1759	1787	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	548			1119	1224	
Travel Time (s)	14.9			21.8	23.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	8%	6%	2%
Adj. Flow (vph)	4	4	4	119	141	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	0	0	123	145	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	18.9%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	4	4	4	107	127	4
Future Vol, veh/h	4	4	4	107	127	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	8	6	2
Mvmt Flow	4	4	4	119	141	4

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	270	143	145	0	0
Stage 1	143	-	-	-	-
Stage 2	127	-	-	-	-
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	719	905	1437	-	-
Stage 1	884	-	-	-	-
Stage 2	899	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	717	905	1437	-	-
Mov Cap-2 Maneuver	717	-	-	-	-
Stage 1	881	-	-	-	-
Stage 2	899	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1437	-	800	-	-
HCM Lane V/C Ratio	0.003	-	0.011	-	-
HCM Control Delay (s)	7.5	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Inn at Whalebone TIA
 2: US 158 & West Lakeside Street/East Lakeside Street

Build (2026) - Weekday AM Peak Hour
 Lanes, Volumes, Timings

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	4	29	4	4	4	15	931	4	4	899	14
Future Volume (vph)	19	4	29	4	4	4	15	931	4	4	899	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.924			0.955			0.999			0.998	
Flt Protected		0.982			0.984		0.950			0.950		
Satd. Flow (prot)	0	1628	0	0	1750	0	1770	3501	0	1770	3465	0
Flt Permitted		0.982			0.984		0.950			0.950		
Satd. Flow (perm)	0	1628	0	0	1750	0	1770	3501	0	1770	3465	0
Link Speed (mph)		25			25			50			50	
Link Distance (ft)		290			548			1151			1090	
Travel Time (s)		7.9			14.9			15.7			14.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	8%	2%	5%	2%	2%	2%	2%	3%	2%	2%	4%	2%
Adj. Flow (vph)	21	4	32	4	4	4	17	1034	4	4	999	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	0	0	12	0	17	1038	0	4	1015	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	36.7%
Analysis Period (min)	15
	ICU Level of Service A

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	19	4	29	4	4	4	15	931	4	4	899	14
Future Vol, veh/h	19	4	29	4	4	4	15	931	4	4	899	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	8	2	5	2	2	2	2	3	2	2	4	2
Mvmt Flow	21	4	32	4	4	4	17	1034	4	4	999	16

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1568	2087	508	1580	2093	519	1015	0	0	1038	0	0
Stage 1	1015	1015	-	1070	1070	-	-	-	-	-	-	-
Stage 2	553	1072	-	510	1023	-	-	-	-	-	-	-
Critical Hdwy	7.66	6.54	7	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.66	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.66	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.58	4.02	3.35	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	71	52	502	73	52	502	679	-	-	665	-	-
Stage 1	244	314	-	236	296	-	-	-	-	-	-	-
Stage 2	470	295	-	514	311	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	67	50	502	65	50	502	679	-	-	665	-	-
Mov Cap-2 Maneuver	168	158	-	165	155	-	-	-	-	-	-	-
Stage 1	238	312	-	230	289	-	-	-	-	-	-	-
Stage 2	447	288	-	471	309	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	22.3		23.6		0.2		0	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	679	-	-	265	207	665	-	-
HCM Lane V/C Ratio	0.025	-	-	0.218	0.064	0.007	-	-
HCM Control Delay (s)	10.4	-	-	22.3	23.6	10.4	-	-
HCM Lane LOS	B	-	-	C	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.8	0.2	0	-	-

Inn at Whalebone TIA
 3: West Lakeside Street & Future Access #1

Build (2026) - Weekday AM Peak Hour
 Lanes, Volumes, Timings



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	43	22	11	9	4
Future Volume (vph)	4	43	22	11	9	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.955		0.961	
Flt Protected		0.996			0.966	
Satd. Flow (prot)	0	1855	1779	0	1729	0
Flt Permitted		0.996			0.966	
Satd. Flow (perm)	0	1855	1779	0	1729	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		150	290		1082	
Travel Time (s)		4.1	7.9		29.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	4	48	24	12	10	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	52	36	0	14	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	15.6% ICU Level of Service A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	4	43	22	11	9	4
Future Vol, veh/h	4	43	22	11	9	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	48	24	12	10	4

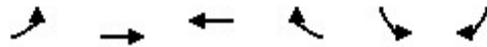
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	36	0	-	0	86 30
Stage 1	-	-	-	-	30 -
Stage 2	-	-	-	-	56 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1575	-	-	-	915 1044
Stage 1	-	-	-	-	993 -
Stage 2	-	-	-	-	967 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1575	-	-	-	912 1044
Mov Cap-2 Maneuver	-	-	-	-	912 -
Stage 1	-	-	-	-	990 -
Stage 2	-	-	-	-	967 -

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1575	-	-	-	949
HCM Lane V/C Ratio	0.003	-	-	-	0.015
HCM Control Delay (s)	7.3	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Inn at Whalebone TIA
 4: West Lakeside Street & Future Access #2

Build (2026) - Weekday AM Peak Hour
 Lanes, Volumes, Timings



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (vph)	4	35	12	10	8	4
Future Volume (vph)	4	35	12	10	8	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.938		0.958	
Flt Protected		0.995			0.967	
Satd. Flow (prot)	0	1853	1747	0	1726	0
Flt Permitted		0.995			0.967	
Satd. Flow (perm)	0	1853	1747	0	1726	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		1014	150		1156	
Travel Time (s)		27.7	4.1		31.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	4	39	13	11	9	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	43	24	0	13	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	15.2%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	4	35	12	10	8	4
Future Vol, veh/h	4	35	12	10	8	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	39	13	11	9	4

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	24	0	-	0	66 19
Stage 1	-	-	-	-	19 -
Stage 2	-	-	-	-	47 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1591	-	-	-	939 1059
Stage 1	-	-	-	-	1004 -
Stage 2	-	-	-	-	975 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1591	-	-	-	936 1059
Mov Cap-2 Maneuver	-	-	-	-	936 -
Stage 1	-	-	-	-	1001 -
Stage 2	-	-	-	-	975 -

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1591	-	-	-	974
HCM Lane V/C Ratio	0.003	-	-	-	0.014
HCM Control Delay (s)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	6	13	6	216	258	9
Future Volume (vph)	6	13	6	216	258	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.910				0.995	
Flt Protected	0.984			0.999		
Satd. Flow (prot)	1668	0	0	1843	1853	0
Flt Permitted	0.984			0.999		
Satd. Flow (perm)	1668	0	0	1843	1853	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	548			1119	1224	
Travel Time (s)	14.9			21.8	23.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%
Adj. Flow (vph)	7	14	7	240	287	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	21	0	0	247	297	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	26.2%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	13	6	216	258	9
Future Vol, veh/h	6	13	6	216	258	9
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	3	2	2
Mvmt Flow	7	14	7	240	287	10

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	546	292	297	0	0
Stage 1	292	-	-	-	-
Stage 2	254	-	-	-	-
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	499	747	1264	-	-
Stage 1	758	-	-	-	-
Stage 2	788	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	496	747	1264	-	-
Mov Cap-2 Maneuver	496	-	-	-	-
Stage 1	753	-	-	-	-
Stage 2	788	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1264	-	644	-	-
HCM Lane V/C Ratio	0.005	-	0.033	-	-
HCM Control Delay (s)	7.9	0	10.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Inn at Whalebone TIA
 2: US 158 & West Lakeside Street/East Lakeside Street

Build (2026) - Weekday PM Peak Hour
 Lanes, Volumes, Timings

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	4	38	4	6	7	20	1428	4	8	1304	15
Future Volume (vph)	14	4	38	4	6	7	20	1428	4	8	1304	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.909			0.943							0.998
Flt Protected		0.987			0.990		0.950			0.950		
Satd. Flow (prot)	0	1618	0	0	1739	0	1770	3539	0	1770	3527	0
Flt Permitted		0.987			0.990		0.950			0.950		
Satd. Flow (perm)	0	1618	0	0	1739	0	1770	3539	0	1770	3527	0
Link Speed (mph)		25			25			50			50	
Link Distance (ft)		290			548			1151			1090	
Travel Time (s)		7.9			14.9			15.7			14.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	7%	2%	2%	2%	2%	2%	2%	2%	2%	14%
Adj. Flow (vph)	16	4	42	4	7	8	22	1587	4	9	1449	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	62	0	0	19	0	22	1591	0	9	1466	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	50.8%
ICU Level of Service	A
Analysis Period (min)	15

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	14	4	38	4	6	7	20	1428	4	8	1304	15
Future Vol, veh/h	14	4	38	4	6	7	20	1428	4	8	1304	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	7	2	2	2	2	2	2	2	2	14
Mvmt Flow	16	4	42	4	7	8	22	1587	4	9	1449	17

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2317	3111	733	2378	3117	796	1466	0	0	1591	0	0
Stage 1	1476	1476	-	1633	1633	-	-	-	-	-	-	-
Stage 2	841	1635	-	745	1484	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	7.04	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.37	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	20	11	352	18	11	330	456	-	-	408	-	-
Stage 1	132	189	-	105	158	-	-	-	-	-	-	-
Stage 2	326	157	-	372	187	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	17	10	352	14	10	330	456	-	-	408	-	-
Mov Cap-2 Maneuver	86	77	-	73	75	-	-	-	-	-	-	-
Stage 1	126	185	-	100	150	-	-	-	-	-	-	-
Stage 2	289	149	-	312	183	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	36.8		44.8		0.2		0.1	
HCM LOS	E		E					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	456	-	-	174	109	408	-	-
HCM Lane V/C Ratio	0.049	-	-	0.358	0.173	0.022	-	-
HCM Control Delay (s)	13.3	-	-	36.8	44.8	14	-	-
HCM Lane LOS	B	-	-	E	E	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1.5	0.6	0.1	-	-

Inn at Whalebone TIA
 3: West Lakeside Street & Future Access #1

Build (2026) - Weekday PM Peak Hour
 Lanes, Volumes, Timings



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	46	31	10	10	4
Future Volume (vph)	4	46	31	10	10	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.967		0.964	
Flt Protected		0.996			0.965	
Satd. Flow (prot)	0	1855	1801	0	1733	0
Flt Permitted		0.996			0.965	
Satd. Flow (perm)	0	1855	1801	0	1733	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		150	290		1082	
Travel Time (s)		4.1	7.9		29.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	4	51	34	11	11	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	55	45	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	15.7%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	4	46	31	10	10	4
Future Vol, veh/h	4	46	31	10	10	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	51	34	11	11	4

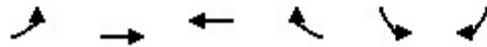
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	45	0	-	0	99
Stage 1	-	-	-	-	40
Stage 2	-	-	-	-	59
Critical Hdwy	4.12	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	2.218	-	-	-	3.518
Pot Cap-1 Maneuver	1563	-	-	-	900
Stage 1	-	-	-	-	982
Stage 2	-	-	-	-	964
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1563	-	-	-	897
Mov Cap-2 Maneuver	-	-	-	-	897
Stage 1	-	-	-	-	979
Stage 2	-	-	-	-	964

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1563	-	-	-	932
HCM Lane V/C Ratio	0.003	-	-	-	0.017
HCM Control Delay (s)	7.3	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Inn at Whalebone TIA
 4: West Lakeside Street & Future Access #2

Build (2026) - Weekday PM Peak Hour
 Lanes, Volumes, Timings



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (vph)	4	37	21	10	9	4
Future Volume (vph)	4	37	21	10	9	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t			0.956		0.961	
Fl _t Protected		0.996			0.966	
Satd. Flow (prot)	0	1855	1781	0	1729	0
Fl _t Permitted		0.996			0.966	
Satd. Flow (perm)	0	1855	1781	0	1729	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		1014	150		1156	
Travel Time (s)		27.7	4.1		31.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	4	41	23	11	10	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	45	34	0	14	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 15.3% ICU Level of Service A

Analysis Period (min) 15

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	4	37	21	10	9	4
Future Vol, veh/h	4	37	21	10	9	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	41	23	11	10	4

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	34	0	-	0	78 29
Stage 1	-	-	-	-	29 -
Stage 2	-	-	-	-	49 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1578	-	-	-	925 1046
Stage 1	-	-	-	-	994 -
Stage 2	-	-	-	-	973 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1578	-	-	-	922 1046
Mov Cap-2 Maneuver	-	-	-	-	922 -
Stage 1	-	-	-	-	991 -
Stage 2	-	-	-	-	973 -

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1578	-	-	-	957
HCM Lane V/C Ratio	0.003	-	-	-	0.015
HCM Control Delay (s)	7.3	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	10	10	7	300	411	10
Future Volume (vph)	10	10	7	300	411	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.932			0.997		
Flt Protected	0.976			0.999		
Satd. Flow (prot)	1694	0	0	1861	1857	0
Flt Permitted	0.976			0.999		
Satd. Flow (perm)	1694	0	0	1861	1857	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	548			1119	1224	
Travel Time (s)	14.9			21.8	23.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	11	8	333	457	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	22	0	0	341	468	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	32.2%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	10	10	7	300	411	10
Future Vol, veh/h	10	10	7	300	411	10
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	11	8	333	457	11

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	812	463	468	0	-	0
Stage 1	463	-	-	-	-	-
Stage 2	349	-	-	-	-	-
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	348	599	1094	-	-	-
Stage 1	634	-	-	-	-	-
Stage 2	714	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	345	599	1094	-	-	-
Mov Cap-2 Maneuver	345	-	-	-	-	-
Stage 1	628	-	-	-	-	-
Stage 2	714	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.7	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1094	-	438	-	-
HCM Lane V/C Ratio	0.007	-	0.051	-	-
HCM Control Delay (s)	8.3	0	13.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Inn at Whalebone TIA
 2: US 158 & West Lakeside Street/East Lakeside Street

Build (2026) - Saturday Peak Hour
 Lanes, Volumes, Timings

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	7	51	4	8	9	26	1448	11	8	1628	24
Future Volume (vph)	20	7	51	4	8	9	26	1448	11	8	1628	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.912			0.941			0.999			0.998	
Flt Protected		0.988			0.991		0.950			0.950		
Satd. Flow (prot)	0	1668	0	0	1737	0	1770	3536	0	1770	3532	0
Flt Permitted		0.988			0.991		0.950			0.950		
Satd. Flow (perm)	0	1668	0	0	1737	0	1770	3536	0	1770	3532	0
Link Speed (mph)		25			25			50			50	
Link Distance (ft)		290			548			1151			1090	
Travel Time (s)		7.9			14.9			15.7			14.9	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	22	8	57	4	9	10	29	1609	12	9	1809	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	87	0	0	23	0	29	1621	0	9	1836	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	59.3%
ICU Level of Service	B
Analysis Period (min)	15

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	20	7	51	4	8	9	26	1448	11	8	1628	24
Future Vol, veh/h	20	7	51	4	8	9	26	1448	11	8	1628	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	8	57	4	9	10	29	1609	12	9	1809	27

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2708	3520	918	2600	3527	811	1836	0	0	1621	0	0
Stage 1	1841	1841	-	1673	1673	-	-	-	-	-	-	-
Stage 2	867	1679	-	927	1854	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.96	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.33	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 10	~ 6	272	12	~ 6	322	328	-	-	398	-	-
Stage 1	78	124	-	99	151	-	-	-	-	-	-	-
Stage 2	314	150	-	289	122	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 8	~ 5	272	8	~ 5	322	328	-	-	398	-	-
Mov Cap-2 Maneuver	53	59	-	58	52	-	-	-	-	-	-	-
Stage 1	71	121	-	90	138	-	-	-	-	-	-	-
Stage 2	259	137	-	209	119	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	99.7	63.6	0.3	0.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	328	-	-	114	84	398	-	-
HCM Lane V/C Ratio	0.088	-	-	0.76	0.278	0.022	-	-
HCM Control Delay (s)	17	-	-	99.7	63.6	14.3	-	-
HCM Lane LOS	C	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	4.2	1	0.1	-	-

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

Inn at Whalebone TIA
 3: West Lakeside Street & Future Access #1

Build (2026) - Saturday Peak Hour
 Lanes, Volumes, Timings



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	63	40	18	15	4
Future Volume (vph)	4	63	40	18	15	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.958		0.974	
Flt Protected		0.997			0.961	
Satd. Flow (prot)	0	1857	1785	0	1744	0
Flt Permitted		0.997			0.961	
Satd. Flow (perm)	0	1857	1785	0	1744	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		150	290		1082	
Travel Time (s)		4.1	7.9		29.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	4	70	44	20	17	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	74	64	0	21	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	16.6% ICU Level of Service A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	4	63	40	18	15	4
Future Vol, veh/h	4	63	40	18	15	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	70	44	20	17	4

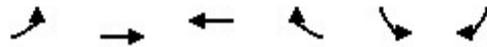
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	64	0	-	0	132 54
Stage 1	-	-	-	-	54 -
Stage 2	-	-	-	-	78 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1538	-	-	-	862 1013
Stage 1	-	-	-	-	969 -
Stage 2	-	-	-	-	945 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1538	-	-	-	859 1013
Mov Cap-2 Maneuver	-	-	-	-	859 -
Stage 1	-	-	-	-	966 -
Stage 2	-	-	-	-	945 -

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1538	-	-	-	887
HCM Lane V/C Ratio	0.003	-	-	-	0.024
HCM Control Delay (s)	7.3	0	-	-	9.2
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Inn at Whalebone TIA
 4: West Lakeside Street & Future Access #2

Build (2026) - Saturday Peak Hour
 Lanes, Volumes, Timings



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (vph)	4	49	22	18	14	4
Future Volume (vph)	4	49	22	18	14	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.939		0.973	
Flt Protected		0.997			0.962	
Satd. Flow (prot)	0	1857	1749	0	1744	0
Flt Permitted		0.997			0.962	
Satd. Flow (perm)	0	1857	1749	0	1744	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		1014	150		1156	
Travel Time (s)		27.7	4.1		31.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	4	54	24	20	16	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	58	44	0	20	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 15.9% ICU Level of Service A

Analysis Period (min) 15

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	4	49	22	18	14	4
Future Vol, veh/h	4	49	22	18	14	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	54	24	20	16	4

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	44	0	-	0	96 34
Stage 1	-	-	-	-	34 -
Stage 2	-	-	-	-	62 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1564	-	-	-	903 1039
Stage 1	-	-	-	-	988 -
Stage 2	-	-	-	-	961 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1564	-	-	-	900 1039
Mov Cap-2 Maneuver	-	-	-	-	900 -
Stage 1	-	-	-	-	985 -
Stage 2	-	-	-	-	961 -

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1564	-	-	-	928
HCM Lane V/C Ratio	0.003	-	-	-	0.022
HCM Control Delay (s)	7.3	0	-	-	9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	4	4	4	107	127	4
Future Volume (vph)	4	4	4	107	127	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.932				0.996	
Flt Protected	0.976			0.998		
Satd. Flow (prot)	1694	0	0	1759	1787	0
Flt Permitted	0.976			0.998		
Satd. Flow (perm)	1694	0	0	1759	1787	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	548			1106	1033	
Travel Time (s)	14.9			21.5	20.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	8%	6%	2%
Adj. Flow (vph)	4	4	4	119	141	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	0	0	123	145	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	18.9%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	4	4	4	107	127	4
Future Vol, veh/h	4	4	4	107	127	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	8	6	2
Mvmt Flow	4	4	4	119	141	4

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	270	143	145	0	0
Stage 1	143	-	-	-	-
Stage 2	127	-	-	-	-
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	719	905	1437	-	-
Stage 1	884	-	-	-	-
Stage 2	899	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	717	905	1437	-	-
Mov Cap-2 Maneuver	717	-	-	-	-
Stage 1	881	-	-	-	-
Stage 2	899	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	0.3	0
HCM LOS	A		

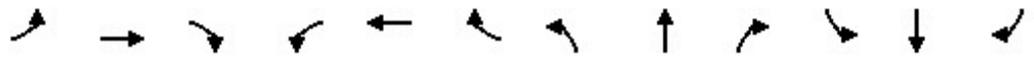
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1437	-	800	-	-
HCM Lane V/C Ratio	0.003	-	0.011	-	-
HCM Control Delay (s)	7.5	0	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Inn at Whalebone TIA

Build (2026) with Improvements - Weekday AM Peak Hour

2: US 158 & West Lakeside Street/East Lakeside Street

Lanes, Volumes, Timings



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕↔		↕	↕↔	
Traffic Volume (vph)	19	4	29	4	4	4	15	931	4	4	899	14
Future Volume (vph)	19	4	29	4	4	4	15	931	4	4	899	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.924			0.955			0.999			0.998	
Flt Protected		0.982			0.984		0.950			0.950		
Satd. Flow (prot)	0	1628	0	0	1750	0	1770	3501	0	1770	3465	0
Flt Permitted		0.874			0.867		0.267			0.259		
Satd. Flow (perm)	0	1449	0	0	1542	0	497	3501	0	482	3465	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			50			50	
Link Distance (ft)		290			548			1057			1026	
Travel Time (s)		7.9			14.9			14.4			14.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	8%	2%	5%	2%	2%	2%	2%	3%	2%	2%	4%	2%
Adj. Flow (vph)	21	4	32	4	4	4	17	1034	4	4	999	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	57	0	0	12	0	17	1038	0	4	1015	0
Turn Type	Perm	NA										
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		14.0	14.0		14.0	14.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		21.0	21.0		21.0	21.0	
Total Split (s)	18.0	18.0		18.0	18.0		42.0	42.0		42.0	42.0	
Total Split (%)	30.0%	30.0%		30.0%	30.0%		70.0%	70.0%		70.0%	70.0%	
Maximum Green (s)	11.0	11.0		11.0	11.0		35.0	35.0		35.0	35.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0			-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Act Effct Green (s)		10.2			10.2		47.4	47.4		47.4	47.4	
Actuated g/C Ratio		0.17			0.17		0.79	0.79		0.79	0.79	
v/c Ratio		0.23			0.05		0.04	0.38		0.01	0.37	
Control Delay		23.4			20.3		4.5	4.3		4.2	4.3	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		23.4			20.3		4.5	4.3		4.2	4.3	
LOS		C			C		A	A		A	A	
Approach Delay		23.4			20.3			4.3			4.3	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		C			C			A			A	
Queue Length 50th (ft)		18			4		2	74		0	72	
Queue Length 95th (ft)		44			15		8	125		3	122	
Internal Link Dist (ft)		210			468			977			946	
Turn Bay Length (ft)							100			100		
Base Capacity (vph)		313			334		392	2766		380	2737	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.18			0.04		0.04	0.38		0.01	0.37	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	60
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	40
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.38
Intersection Signal Delay:	4.9
Intersection LOS:	A
Intersection Capacity Utilization	40.0%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 2: US 158 & West Lakeside Street/East Lakeside Street



Inn at Whalebone TIA
 3: West Lakeside Street & Future Access #1

Build (2026) with Improvements - Weekday AM Peak Hour

Lanes, Volumes, Timings



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Volume (vph)	4	43	22	11	9	4
Future Volume (vph)	4	43	22	11	9	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.955		0.961	
Flt Protected		0.996			0.966	
Satd. Flow (prot)	0	1855	1779	0	1729	0
Flt Permitted		0.996			0.966	
Satd. Flow (perm)	0	1855	1779	0	1729	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		150	290		1088	
Travel Time (s)		4.1	7.9		29.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	4	48	24	12	10	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	52	36	0	14	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	15.6%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	4	43	22	11	9	4
Future Vol, veh/h	4	43	22	11	9	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	48	24	12	10	4

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	36	0	-	0	86 30
Stage 1	-	-	-	-	30 -
Stage 2	-	-	-	-	56 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1575	-	-	-	915 1044
Stage 1	-	-	-	-	993 -
Stage 2	-	-	-	-	967 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1575	-	-	-	912 1044
Mov Cap-2 Maneuver	-	-	-	-	912 -
Stage 1	-	-	-	-	990 -
Stage 2	-	-	-	-	967 -

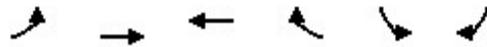
Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1575	-	-	-	949
HCM Lane V/C Ratio	0.003	-	-	-	0.015
HCM Control Delay (s)	7.3	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Inn at Whalebone TIA
4: West Lakeside Street & Future Access #2

Build (2026) with Improvements - Weekday AM Peak Hour

Lanes, Volumes, Timings



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	35	12	10	8	4
Future Volume (vph)	4	35	12	10	8	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.938		0.958	
Flt Protected		0.995			0.967	
Satd. Flow (prot)	0	1853	1747	0	1736	0
Flt Permitted		0.995			0.967	
Satd. Flow (perm)	0	1853	1747	0	1736	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		1076	150		1115	
Travel Time (s)		29.3	4.1		30.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	0%
Adj. Flow (vph)	4	39	13	11	9	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	43	24	0	13	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	15.2%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	4	35	12	10	8	4
Future Vol, veh/h	4	35	12	10	8	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	0
Mvmt Flow	4	39	13	11	9	4

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	24	0	-	0	66
Stage 1	-	-	-	-	19
Stage 2	-	-	-	-	47
Critical Hdwy	4.12	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	2.218	-	-	-	3.518
Pot Cap-1 Maneuver	1591	-	-	-	939
Stage 1	-	-	-	-	1004
Stage 2	-	-	-	-	975
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1591	-	-	-	936
Mov Cap-2 Maneuver	-	-	-	-	936
Stage 1	-	-	-	-	1001
Stage 2	-	-	-	-	975

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1591	-	-	-	975
HCM Lane V/C Ratio	0.003	-	-	-	0.014
HCM Control Delay (s)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	6	13	6	216	258	9
Future Volume (vph)	6	13	6	216	258	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.910				0.995	
Flt Protected	0.984			0.999		
Satd. Flow (prot)	1668	0	0	1843	1853	0
Flt Permitted	0.984			0.999		
Satd. Flow (perm)	1668	0	0	1843	1853	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	548			1106	1033	
Travel Time (s)	14.9			21.5	20.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%
Adj. Flow (vph)	7	14	7	240	287	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	21	0	0	247	297	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	26.2%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	13	6	216	258	9
Future Vol, veh/h	6	13	6	216	258	9
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	3	2	2
Mvmt Flow	7	14	7	240	287	10

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	546	292	297	0	0
Stage 1	292	-	-	-	-
Stage 2	254	-	-	-	-
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	499	747	1264	-	-
Stage 1	758	-	-	-	-
Stage 2	788	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	496	747	1264	-	-
Mov Cap-2 Maneuver	496	-	-	-	-
Stage 1	753	-	-	-	-
Stage 2	788	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1264	-	644	-	-
HCM Lane V/C Ratio	0.005	-	0.033	-	-
HCM Control Delay (s)	7.9	0	10.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Inn at Whalebone TIA

Build (2026) with Improvements - Weekday PM Peak Hour

2: US 158 & West Lakeside Street/East Lakeside Street

Lanes, Volumes, Timings



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕↔		↗	↕↔	
Traffic Volume (vph)	14	4	38	4	6	7	20	1428	4	8	1304	15
Future Volume (vph)	14	4	38	4	6	7	20	1428	4	8	1304	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.909			0.943						0.998	
Flt Protected		0.987			0.990		0.950			0.950		
Satd. Flow (prot)	0	1618	0	0	1739	0	1770	3539	0	1770	3527	0
Flt Permitted		0.906			0.910		0.149			0.124		
Satd. Flow (perm)	0	1485	0	0	1598	0	278	3539	0	231	3527	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			50			50	
Link Distance (ft)		290			548			1057			1026	
Travel Time (s)		7.9			14.9			14.4			14.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	7%	2%	2%	2%	2%	2%	2%	2%	2%	14%
Adj. Flow (vph)	16	4	42	4	7	8	22	1587	4	9	1449	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	62	0	0	19	0	22	1591	0	9	1466	0
Turn Type	Perm	NA										
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		14.0	14.0		14.0	14.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		21.0	21.0		21.0	21.0	
Total Split (s)	14.0	14.0		14.0	14.0		46.0	46.0		46.0	46.0	
Total Split (%)	23.3%	23.3%		23.3%	23.3%		76.7%	76.7%		76.7%	76.7%	
Maximum Green (s)	7.0	7.0		7.0	7.0		39.0	39.0		39.0	39.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0			-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Act Effct Green (s)		9.2			9.2		48.4	48.4		48.4	48.4	
Actuated g/C Ratio		0.15			0.15		0.81	0.81		0.81	0.81	
v/c Ratio		0.27			0.08		0.10	0.56		0.05	0.51	
Control Delay		26.1			22.8		4.5	5.0		4.0	4.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		26.1			22.8		4.5	5.0		4.0	4.6	
LOS		C			C		A	A		A	A	
Approach Delay		26.1			22.8			5.0			4.6	

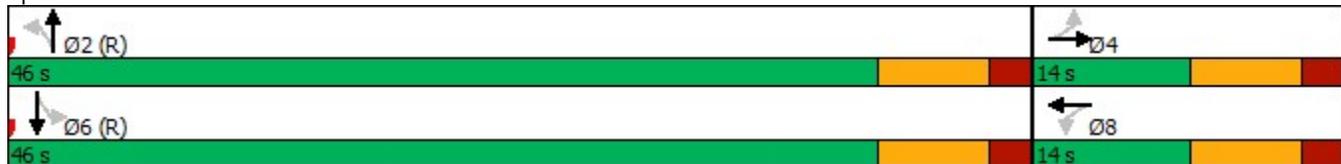


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		C			C			A			A	
Queue Length 50th (ft)		20			6		2	146		1	126	
Queue Length 95th (ft)		51			22		9	193		5	166	
Internal Link Dist (ft)		210			468			977			946	
Turn Bay Length (ft)							100			100		
Base Capacity (vph)		226			243		225	2866		187	2857	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.27			0.08		0.10	0.56		0.05	0.51	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	60
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	45
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.56
Intersection Signal Delay:	5.3
Intersection LOS:	A
Intersection Capacity Utilization	53.8%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 2: US 158 & West Lakeside Street/East Lakeside Street



Inn at Whalebone TIA
 3: West Lakeside Street & Future Access #1

Build (2026) with Improvements - Weekday PM Peak Hour

Lanes, Volumes, Timings



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	46	31	10	10	4
Future Volume (vph)	4	46	31	10	10	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.967		0.964	
Flt Protected		0.996			0.965	
Satd. Flow (prot)	0	1855	1801	0	1742	0
Flt Permitted		0.996			0.965	
Satd. Flow (perm)	0	1855	1801	0	1742	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		150	290		1088	
Travel Time (s)		4.1	7.9		29.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	0%
Adj. Flow (vph)	4	51	34	11	11	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	55	45	0	15	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	15.7%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	4	46	31	10	10	4
Future Vol, veh/h	4	46	31	10	10	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	0
Mvmt Flow	4	51	34	11	11	4

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	45	0	-	0	99
Stage 1	-	-	-	-	40
Stage 2	-	-	-	-	59
Critical Hdwy	4.12	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	2.218	-	-	-	3.518
Pot Cap-1 Maneuver	1563	-	-	-	900
Stage 1	-	-	-	-	982
Stage 2	-	-	-	-	964
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1563	-	-	-	897
Mov Cap-2 Maneuver		-	-	-	897
Stage 1		-	-	-	979
Stage 2		-	-	-	964

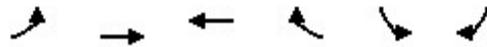
Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1563	-	-	-	933
HCM Lane V/C Ratio	0.003	-	-	-	0.017
HCM Control Delay (s)	7.3	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Inn at Whalebone TIA
4: West Lakeside Street & Future Access #2

Build (2026) with Improvements - Weekday PM Peak Hour

Lanes, Volumes, Timings



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	37	21	10	9	4
Future Volume (vph)	4	37	21	10	9	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t			0.956		0.961	
Fl _t Protected		0.996			0.966	
Satd. Flow (prot)	0	1855	1781	0	1739	0
Fl _t Permitted		0.996			0.966	
Satd. Flow (perm)	0	1855	1781	0	1739	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		1076	150		1115	
Travel Time (s)		29.3	4.1		30.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	0%
Adj. Flow (vph)	4	41	23	11	10	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	45	34	0	14	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	15.3%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	4	37	21	10	9	4
Future Vol, veh/h	4	37	21	10	9	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	0
Mvmt Flow	4	41	23	11	10	4

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	34	0	-	0	78 29
Stage 1	-	-	-	-	29 -
Stage 2	-	-	-	-	49 -
Critical Hdwy	4.12	-	-	-	6.42 6.2
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.3
Pot Cap-1 Maneuver	1578	-	-	-	925 1052
Stage 1	-	-	-	-	994 -
Stage 2	-	-	-	-	973 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1578	-	-	-	922 1052
Mov Cap-2 Maneuver	-	-	-	-	922 -
Stage 1	-	-	-	-	991 -
Stage 2	-	-	-	-	973 -

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1578	-	-	-	958
HCM Lane V/C Ratio	0.003	-	-	-	0.015
HCM Control Delay (s)	7.3	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	10	10	7	300	411	10
Future Volume (vph)	10	10	7	300	411	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.932				0.997	
Flt Protected	0.976			0.999		
Satd. Flow (prot)	1694	0	0	1861	1857	0
Flt Permitted	0.976			0.999		
Satd. Flow (perm)	1694	0	0	1861	1857	0
Link Speed (mph)	25			35	35	
Link Distance (ft)	548			1106	1033	
Travel Time (s)	14.9			21.5	20.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	11	8	333	457	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	22	0	0	341	468	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	32.2%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	10	7	300	411	10
Future Vol, veh/h	10	10	7	300	411	10
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	11	8	333	457	11

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	812	463	468	0	-	0
Stage 1	463	-	-	-	-	-
Stage 2	349	-	-	-	-	-
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	348	599	1094	-	-	-
Stage 1	634	-	-	-	-	-
Stage 2	714	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	345	599	1094	-	-	-
Mov Cap-2 Maneuver	345	-	-	-	-	-
Stage 1	628	-	-	-	-	-
Stage 2	714	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.7	0.2	0
HCM LOS	B		

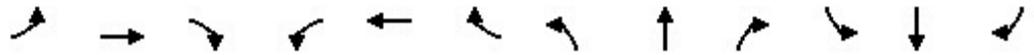
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1094	-	438	-	-
HCM Lane V/C Ratio	0.007	-	0.051	-	-
HCM Control Delay (s)	8.3	0	13.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕↕		↕	↕↕	
Traffic Volume (vph)	20	7	51	4	8	9	26	1448	11	8	1628	24
Future Volume (vph)	20	7	51	4	8	9	26	1448	11	8	1628	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.912			0.941			0.999			0.998	
Flt Protected		0.988			0.991		0.950			0.950		
Satd. Flow (prot)	0	1668	0	0	1737	0	1770	3536	0	1770	3532	0
Flt Permitted		0.906			0.937		0.095			0.114		
Satd. Flow (perm)	0	1529	0	0	1642	0	177	3536	0	212	3532	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			50			50	
Link Distance (ft)		290			548			1057			1026	
Travel Time (s)		7.9			14.9			14.4			14.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	22	8	57	4	9	10	29	1609	12	9	1809	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	87	0	0	23	0	29	1621	0	9	1836	0
Turn Type	Perm	NA										
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		14.0	14.0		14.0	14.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		21.0	21.0		21.0	21.0	
Total Split (s)	14.0	14.0		14.0	14.0		46.0	46.0		46.0	46.0	
Total Split (%)	23.3%	23.3%		23.3%	23.3%		76.7%	76.7%		76.7%	76.7%	
Maximum Green (s)	7.0	7.0		7.0	7.0		39.0	39.0		39.0	39.0	
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		-2.0			-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	
Act Effct Green (s)		9.1			9.1		44.7	44.7		44.7	44.7	
Actuated g/C Ratio		0.15			0.15		0.74	0.74		0.74	0.74	
v/c Ratio		0.38			0.09		0.22	0.61		0.06	0.70	
Control Delay		28.4			23.1		8.6	6.2		4.1	7.5	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		28.4			23.1		8.6	6.2		4.1	7.5	
LOS		C			C		A	A		A	A	
Approach Delay		28.4			23.1			6.3			7.4	

Inn at Whalebone TIA
 2: US 158 & West Lakeside Street/East Lakeside Street

Build (2026) with Improvements - Saturday Peak Hour
 Lanes, Volumes, Timings

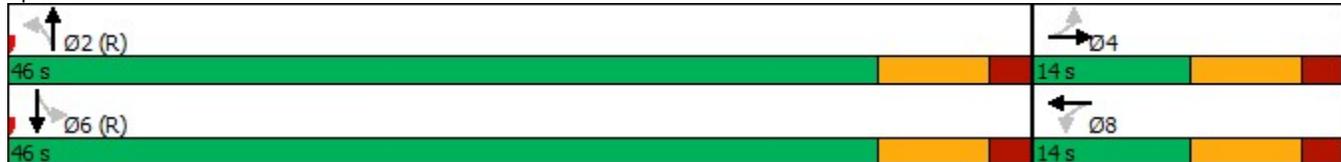


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		C			C			A			A	
Queue Length 50th (ft)		29			7		3	142		1	182	
Queue Length 95th (ft)		66			25		16	200		5	260	
Internal Link Dist (ft)		210			468			977			946	
Turn Bay Length (ft)							100			100		
Base Capacity (vph)		230			248		131	2640		158	2637	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.38			0.09		0.22	0.61		0.06	0.70	

Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	60
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle:	55
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.70
Intersection Signal Delay:	7.5
Intersection LOS:	A
Intersection Capacity Utilization	61.0%
ICU Level of Service	B
Analysis Period (min)	15

Splits and Phases: 2: US 158 & West Lakeside Street/East Lakeside Street



Inn at Whalebone TIA
 3: West Lakeside Street & Future Access #1

Build (2026) with Improvements - Saturday Peak Hour
 Lanes, Volumes, Timings



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	4	63	40	18	15	4
Future Volume (vph)	4	63	40	18	15	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.958		0.974	
Flt Protected		0.997			0.961	
Satd. Flow (prot)	0	1857	1785	0	1750	0
Flt Permitted		0.997			0.961	
Satd. Flow (perm)	0	1857	1785	0	1750	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		150	290		1088	
Travel Time (s)		4.1	7.9		29.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	0%
Adj. Flow (vph)	4	70	44	20	17	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	74	64	0	21	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	16.6%
ICU Level of Service	A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	4	63	40	18	15	4
Future Vol, veh/h	4	63	40	18	15	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	0
Mvmt Flow	4	70	44	20	17	4

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	64	0	-	0	132 54
Stage 1	-	-	-	-	54 -
Stage 2	-	-	-	-	78 -
Critical Hdwy	4.12	-	-	-	6.42 6.2
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.3
Pot Cap-1 Maneuver	1538	-	-	-	862 1019
Stage 1	-	-	-	-	969 -
Stage 2	-	-	-	-	945 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1538	-	-	-	859 1019
Mov Cap-2 Maneuver	-	-	-	-	859 -
Stage 1	-	-	-	-	966 -
Stage 2	-	-	-	-	945 -

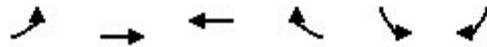
Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1538	-	-	-	888
HCM Lane V/C Ratio	0.003	-	-	-	0.024
HCM Control Delay (s)	7.3	0	-	-	9.2
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Inn at Whalebone TIA
 4: West Lakeside Street & Future Access #2

Build (2026) with Improvements - Saturday Peak Hour

Lanes, Volumes, Timings



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (vph)	4	49	22	18	14	4
Future Volume (vph)	4	49	22	18	14	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t			0.939		0.973	
Fl _t Protected		0.997			0.962	
Satd. Flow (prot)	0	1857	1749	0	1744	0
Fl _t Permitted		0.997			0.962	
Satd. Flow (perm)	0	1857	1749	0	1744	0
Link Speed (mph)		25	25		25	
Link Distance (ft)		1076	150		1115	
Travel Time (s)		29.3	4.1		30.4	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	4	54	24	20	16	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	58	44	0	20	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	15.9%
ICU Level of Service	A
Analysis Period (min)	15

Intersection

Int Delay, s/veh 1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	4	49	22	18	14	4
Future Vol, veh/h	4	49	22	18	14	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	54	24	20	16	4

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	44	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	1564	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1564	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1564	-	-	-	928
HCM Lane V/C Ratio	0.003	-	-	-	0.022
HCM Control Delay (s)	7.3	0	-	-	9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1



www.vhb.com



Agenda Item Summary Sheet

Item No: **I-1**
Meeting Date: **September 4, 2024**

Item Title: Committee Reports

Item Summary:

At the September 4th Board of Commissioners meeting, Board members will provide reports from meetings they have attended on behalf of the Town.

Number of Attachments: 0

Specific Action Requested:

Provided for Board information and update.

Submitted By: Administration

Date: August 30, 2024

Finance Officer Comment:

N/A

Signature: Amy Miller

Date: August 30, 2024

Town Attorney Comment:

N/A

Signature: John Leidy

Date: August 30, 2024

Town Manager Comment and/or Recommendation:

N/A

Signature: Andy Garman

Date: August 30, 2024



Agenda Item Summary Sheet

Item No: **I-2**
Meeting Date: **September 4, 2024**

Item Title: Consideration of resolution in support of AEC protections for Jockey's Ridge State Park (JRSP)

Item Summary:

At the September 4th Board of Commissioners meeting, the attached resolution is submitted for Board consideration in support of the Area of Environmental Concern (AEC) designation for Jockey's Ridge State Park (JRSP).

At its August 2024 meeting, the Coastal Resources Commission (CRC) unanimously voted to begin the process to reinstitute protections for Jockey's Ridge State Park.

The attached resolution supports the CRC action and, if adopted, will be formally entered at the Public Hearing which is scheduled for October 15, 2024 at 1:00 P.M. at the JRSP Community Room in the Visitor's Center located at 300 W Carolista Dr, Nags Head, NC 27959.

Number of Attachments: 1

Specific Action Requested:

Provided for Board review and consideration.

Submitted By: Administration

Date: August 30, 2024

Finance Officer Comment:

No unbudgeted fiscal impact.

Signature: Amy Miller

Date: August 30, 2024

Town Attorney Comment:

N/A

Signature: John Leidy

Date: August 30, 2024

Town Manager Comment and/or Recommendation:

I encourage adoption of the attached resolution.

Signature: Andy Garman

Date: August 30, 2024



**RESOLUTION OF THE TOWN OF NAGS HEAD, NORTH CAROLINA,
IN SUPPORT OF REINSTITUTING AN AREA OF ENVIRONMENTAL CONCERN (AEC)
DESIGNATION FOR JOCKEY'S RIDGE STATE PARK**

WHEREAS, Jockey's Ridge State Park (JRSP) is the most visited State Park in the state of North Carolina and it is the only state park fully within the boundaries of a town – the Town of Nags Head; AND

WHEREAS, the North Carolina Coastal Resources Commission (CRC) protects its beautiful and fragile coastal resources thanks in part to the Coastal Area Management Act and the rules and policies of the CRC; AND

WHEREAS, JRSP is an existing State Park, a nature preserve, and contains unique geological formations as identified by the State Geologist, and therefore meets the criteria of AEC designation as established in G.S. 113A-113; AND

WHEREAS, G.S. 113A-115 states that AECs should not be deleted unless it is found that the conditions upon which the original designation was based have been substantially altered; AND

WHEREAS, at an August 6, 2024 Special Meeting, the North Carolina Coastal Resources Commission (CRC) voted unanimously to begin the process of reinstating Area of Environmental Concern (AEC) protections for JRSP to include a prohibition on removing sand from the Park and restrictions on development immediately adjacent to the Park; AND

WHEREAS, JRSP is an important educational, scientific, and scenic resource that would be jeopardized by uncontrolled or incompatible development; AND

WHEREAS, the preservation of this valuable resource of more than local significance is the objective of this designation; AND

WHEREAS, a Public Hearing regarding the AEC for JRSP is scheduled to be held at the JRSP Community Room in the Park's Visitor's Center, 300 W Carolista Dr, Nags Head, NC 27959, on Tuesday, October 15, 2024, at 1:00 P.M.

NOW, THEREFORE, BE IT RESOLVED THAT THE BOARD OF COMMISSIONERS OF THE TOWN OF NAGS HEAD, NORTH CAROLINA, does hereby formally submit this resolution in support of the re-establishment of Jockey's Ridge State Park as an Area of Environmental Concern and allow it the special protections granted by the designation.

Adopted this 4th day of September 2024.

Benjamin Cahoon, Mayor
Town of Nags Head

ATTEST:

Carolyn F. Morris, Town Clerk



Agenda Item Summary Sheet

Item No: **K-1**
Meeting Date: **September 4, 2024**

Item Title: Town Manager Garman – Update on construction of the Public Services Facility

Item Summary:

At the September 4th Board of Commissioners meeting, Town Manager Andy Garman, along with Town Engineer David Ryan, will present an update on the construction progress of the new Public Services Facility.

Number of Attachments: 0

Specific Action Requested:

Provided for Board information and update.

Submitted By: Administration

Date: August 30, 2024

Finance Officer Comment:

I will respond to questions as necessary.

Signature: Amy Miller

Date: August 30, 2024

Town Attorney Comment:

N/A

Signature: John Leidy

Date: August 30, 2024

Town Manager Comment and/or Recommendation:

Update provided for Board information.

Signature: Andy Garman

Date: August 30, 2024



Agenda Item Summary Sheet

Item No: **M-1**
Meeting Date: **September 4, 2024**

Item Title: Mayor Ben Cahoon – Recognition of Town Manager Garman’s 10 years of service

Item Summary:

At the September 4th Board of Commissioners meeting, Mayor Cahoon will recognize Town Manager Andy Garman’s ten years of service to the town.

Number of Attachments: 0

Specific Action Requested:

Provided for Board recognition.

Submitted By: Administration

Date: August 30, 2024

Finance Officer Comment:

N/A

Signature: Amy Miller

Date: August 30, 2024

Town Attorney Comment:

N/A

Signature: John Leidy

Date: August 30, 2024

Town Manager Comment and/or Recommendation:

N/A

Signature: Andy Garman

Date: August 30, 2024



Agenda Item Summary Sheet

Item No: **N-1**
Meeting Date: **September 4, 2024**

Item Title: Request for Closed Session

Item Summary:

At the September 4th Board of Commissioners meeting, the Board will consider a Closed Session to confer with the Board re: matters related to attorney/client privilege and to preserve that privilege, pursuant to GS 143-318.11(a)(3) and to discuss the possible acquisition of real property located at 4222 S Croatan Highway pursuant to GS 143-318.11(a)(5)

Number of Attachments: 0

Specific Action Requested:

Request for Closed Session.

Submitted By: Administration

Date: August 30, 2024

Finance Officer Comment:

N/A

Signature: Amy Miller

Date: August 30, 2024

Town Attorney Comment:

N/A

Signature: John Leidy

Date: August 30, 2024

Town Manager Comment and/or Recommendation:

Request for Closed Session.

Signature: Andy Garman

Date: August 30, 2024