TOWN OF BRISTOL, RHODE ISLAND

PLANNING BOARD MEETING

Amended Planning Board Meeting Agenda*
Thursday, March 13, 2025 at 7:00 PM
Bristol Town Hall, 10 Court Street, Bristol, RI 02809

A. Pledge of Allegiance

B. Approval of Minutes - February 13, 2025

C. Old Business

C1. (Continued) Report on the Economic Analysis of Selected Housing Strategies, Affordable Housing Trust & Recommendations

***Board to request a Joint Workshop with the Town Council to review the draft Housing Element of the Comprehensive Plan update and also to invite the local State Representatives to discuss pending draft Land Use Laws.

C2. (Continued from February) Preliminary Plan Phase review for Major Land Development proposal to construct a new Mt. Hope High School, including new tennis courts and athletic fields, at 199 Chestnut Street and to demolish the existing high school building. Owner: Town of Bristol / Applicant: Bristol Warren Regional School District/Lisa Pecora, Perkins Eastman, applicant representative. Zoned: Public Institutional. Assessor's Plat 117 Lots 3-7.

Applicant has agreed that the public hearing on the Preliminary Plan shall remain open until receipt of the necessary permits from the RIDEM.

The applicant has requested a further continuance to the April 10th,2025 meeting.

D. New Business

D1. Fair Wind Properties Pre-Application Conference Comprehensive Permit at 206 Bayview Avenue. Proposal to construct 17 new residential units in 3 buildings in addition to the existing 3-family dwelling on the property for a total of 20 units. Owner: Fair Wind Properties, LLC Zoned: R-10 Assessor's Plat 47 Lot 3.

D2. Comfort Inn & Suites Pre-Application Submission at Gooding Avenue to construct an 80-room hotel. Property on south side of Gooding Avenue approximately 50 feet east of the intersection of Gooding Avenue and Broadcommon Road, near utility pole #218. Owner: D & M Boca Development, LLC Zoned: GB. Assessor's Plat 111 Lot 1.

E. Adjournment

Date Posted: February 27, 2025

Posted By: mbw

Town of Bristol, Rhode Island

Department of Community Development

10 Court Street
Bristol, RI 02809
bristolri.gov
401-253-7000

February 20, 2025

TO: Planning Board

FROM: Diane M. Williamson, Director

RE: Report on the Economic Analysis of Selected Housing Strategies
Affordable Housing Trust Fund Memo and Recommendations

The above documents are provided by the consultants working on the update to the Housing Element of the Comprehensive Plan for your review.

As you recall, the memorandum and recommendations on the Affordable Housing Trust Fund was requested to provide guidance on the Fee In Lieu funding that will be received from the Robin Rug/Bristol Yarn Mill redevelopment. The consultant analyzed the possibility of using this funding to incentivize ADU's'; however, that analysis did not support the use for ADU incentives and it is recommended that instead this funding be set aside in a Trust to be used for potential public / private partnerships with larger projects such as re-use of the Almeida Apartments or Guiteras School. (See page 6 of Memorandum) If the Planning Board is in support of this recommendation from the consultant, it is requested that the Planning Board provide a recommendation to the Town Council on this.

The Economic Analysis is provided as report with recommendations following a fiscal assessment of each of the different housing strategies. This report will be supplemental information for the Housing Element Update to the Comprehensive Plan.

Town of Bristol, Rhode Island

Department of Community Development

10 Court Street
Bristol, RI 02809
bristolri.gov
401-253-7000

March 10, 2025

TO: Planning Board

FROM: Diane M. Williamson, Director

RE: Request Joint Workshop with Town Council and State Representatives

The above item request has been added to your agenda. It is recommended that a joint workshop be scheduled with the Town Council to review the Draft Housing Element of the Comprehensive Plan as well as the proposed State Land Use Laws with the State Representatives. In preparation for this meeting, I can provide my comments on the draft Land Use Laws.

camoin associates

Memo

DATE: February 13, 2025

TO: Diane M. Williamson, AICP, CFM, Director of Community Development, Town of Bristol, RI

FROM: Camoin Associates

RE: **Analysis of In-Lieu of Fees and an Affordable Housing Trust Fund**

Introduction

In 2022, the Bristol Town Council approved plans to redevelop the Robin Rug mill into new housing. The plan included the developer of the project paying the Town of Bristol $520,000 in in-lieu-of fees to opt out of 13 affordable apartments in exchange for zoning allowances.

Camoin Associates has been retained to analyze and recommend disbursement strategies of the in-lieu fund that would result in new affordable rentals in Bristol.

The process started with Camoin Associates providing fifteen affordable housing strategies for consideration. Town officials recommended five from that list that seemed best suited for Bristol. Camoin Associates presented those five strategies with case studies to the Bristol Planning Board for feedback. The strategy of incentivizing accessory dwelling unit (ADU) construction for affordable rents got the highest interest from the Planning Board.

Objective

This memo will provide a financial and economic analysis of the feasibility of applying funds in lieu of rent to incentivize ADUs for affordable rents, followed by a summary and recommendations.

Incentivizing Accessory Dwelling Units (ADUs) for Affordable Rents

An Accessory Dwelling Unit (ADU) is an apartment added to a single-family house either internally (such as with a suite of rooms), as an addition, or as an ancillary structure (such as a converted garage or in a "pool house" style). Historically, these units were made for family members, such as aging parents or adult children, priced out of the housing market.

Because ADUs piggyback on the main house's land, taxes, mortgage, and sometimes walls, and because many owners have a sympathetic relationship with the tenants, these units are frequently rented out affordably.

Estimating ADU Construction Costs

The basis of our financial feasibility calculations is predicated on the estimated construction costs of an ADU. While multiple ADU building "kits" are advertised online for low prices, we know of no successful kits permitted as occupied ADUs. Building officials suspect those economical kits may not meet building codes or lack essential attributes like adequate insulation or plumbing amenities.

Therefore, this analysis has applied custom-build costs to assess the feasibility of ADUs meeting housing needs. We have applied a construction cost of $375 per square foot based on two private-sector sources in New England.

We acknowledge and encourage that any of the financial feasibility models depicted on the following pages may substitute different construction costs if attainable cheaper.

The first source for our construction cost estimates comes from homebuilder Jonah Richard in Vermont. On November 17, 2024, Richard published that among five recently completed ADU additions, a mix of standalone construction and property retrofits, the prices varied between $250,000 and $350,000. For our study, we will use the middle of that range, $300,000, to estimate costs.

Similarly, the ADU-specialty homebuilder Backyard ADUs, operating in Maine, New Hampshire, and Massachusetts, priced its 810-square-foot model in late 2024 between $276,000 and $306,000. This reinforces our $300,000 pricing estimate.

Calculating Monthly Payments

The first step to identifying whether ADUs could support affordable rents in Bristol is calculating a monthly payment from financing construction.

Key Components:

- **Construction Costs.** Based on a review of the construction of similar structures in New England, the estimated "all-in" cost for a new 800-square-foot, free-standing backyard ADU is **$300,000**.
- **Downpayment.** If financed by a 30-year mortgage, a borrower might need to put down 20%, or $60,000. The monthly recapture rate of that downpayment (at no return) over 30 years is **$167** per month.
- **Loan Payment.** At a mortgage rate of 7%, the monthly payment to leverage $240,000 is **$1,597**.
- **Total Monthly Payment.** The monthly recapture needed to break even on the construction loan plus the downpayment is **$1,764**.

Calculating Additional Monthly Costs

In addition to monthly construction loan payments, an owner will incur several other expenses when adding an ADU to their property. The new construction will trigger increased tax assessment value, need to be insured on the homeowner's policy, and absorb some utility costs when occupied (at a minimum, sewer and water fees).

For modeling purposes, we estimate additional taxes to be **$1,000** per year, increased insurance to be an additional **$1,000** per year, and monthly sewer and water fees to be about **$100** per month. When broken down to a monthly payment of $266, we round up to **$275** to be conservative.

When the $275 in additional monthly expenses are added to the monthly construction costs, the cost to own a new ADU is $2,039 per month in the first year.

Note: The owner of an ADU rental unit will also pay income taxes on rent, but asset depreciation, interest deductions, and business expense deductions on annual tax filings may cancel out most of the taxes on new income.

Examining Bristol Rental Rates

The next task is to examine Bristol's rent prices to see if they can cover the cost of constructing a new ADU.

For this task, we will look at three metrics for determining median rent in the town.

1. The first is Fair Market Rent, as calculated by the US Department of Housing & Urban Development (HUD). HUD publishes "Fair Market Rent" for every market in the US (to protect taxpayers from price gouging on housing vouchers).

   Fair Market Rent is for "standard-condition" rentals that recently turned over and accounts for all utility costs. It is in the fortieth percentile of rents; that is, it is fourth out of ten (4:10) among the most expensive rents in town (tenth being the most expensive). For 2025, HUD calculates the Fair Market Rent for a one-bedroom apartment in Bristol to be **$1,319**.

2. Our second source, the American Community Survey (ACS), places Bristol's median rent at $1,276 from the 5-year average between 2018-2022. In 2024 dollars, that is **$1,376**.
3. If you multiplied HUD's Fair Market Rent for Bristol by one and a quarter (1.25) to approximate the fiftieth percentile of rents (or fifth most expensive rent out of ten), rent would be **$1,649** per month.

None of these estimated rental rates will cover the cost of the ADU.

Examining Affordable ADUs

In this section, we examine the financial feasibility of three models designed to promote the construction of affordable rental units as accessory dwelling units (ADUs). Each model investigates the use of an affordable housing trust fund. All models assume that the Town will impose a 30-year covenant on each ADU, which will set a limit on rent to ensure it remains affordable for every assisted unit.

Model #1: Downpayment Assistance

This model examines how housing trust fund dollars could defray the cost of a loan downpayment, which would reduce the monthly expense of a new-construction ADU.

If the Town of Bristol were to dispense its affordable housing trust fund with 13 grants of $40,000 to defray the cost of a construction loan downpayment, it would reduce the monthly downpayment recapture rate to **$56**. This, plus the mortgage payment, amounts to $1,653 – a few dollars over one-and-a-quarter (1.25) times HUD's Fair Market Rent. When adding $275 of additional owner's expenses, *it puts the costs of an ADU out of reach of median rents.*

DOWNPAYMENT REDUCTION GRANT		
20% Downpayment on $300K Loan	$	60,000
Downpayment Reduction Grant	$	(40,000)
Owner's Downpayment to Recapture	$	20,000
Monthly Downpayment Recapture	$	56

AFTER-GRANT COST RECAPTURE		
Downpayment Recapture	$	56
Monthly Loan Payment	$	1,597
Additional Monthly Costs	$	275
Total Monthly Costs	$	1,928
1.25x HUD Fair Market Rent	$	1,649
Monthly Loss Year 1	$	279
Annual Loss Year 1	$	3,348

Model #2: Interest Rate Reductions

An alternative approach for dispensing the affordable housing trust fund would be to use it to purchase "points" to buy down the interest rate for owners taking out a mortgage to build an ADU. If interest rates were at 7% and the Town of Bristol paid for four points, that could lower the mortgage interest rate to 6% and cost the Town a $9,600 grant for each $240,000 loan. If the Town took this approach, the fund could buy points on over 54 loans. (It is worth noting that there may not be 54 applicants to the program in the first few years.)

That lower interest rate of 6% would reduce the monthly payment to $1,439, and when combined with the owner's downpayment recapture, it brings the monthly repayment to $1,606. When adding the additional owner's expenses of $275, it increases the monthly costs to **$1,881**. With 1.25x Fair Market at $1,649, *it still does not cover the costs.*

INTEREST RATE REDUCTION GRANT		
Loan Payment at 7% Interest	$	1,597
Loan Payment at 6% Interest	$	1,439
Monthly Difference	**$**	**158**

Model #3: A Revolving Loan Fund

If the Town wanted to consider using the affordable housing trust fund as a revolving loan fund to construct new ADUs, the fund could simultaneously support **two $240,000 loans**. With two 30-year loans in repayment, it would take **15 years** before enough principal was paid back to issue a new loan, and by that time, construction costs may have risen. *In 15 years, the Town would have financed **three** affordable ADUs with its affordable housing trust fund*.

A Note About Interest Rates

In the various models examined, the financing did not succeed due to the current high interest rates. However, in the next couple of years, interest rates may drop to around 5% in the free market. If this occurs, many of these Accessory Dwelling Units (ADUs) could be built without the need for loans or grant assistance.

Should interest rates fall to 5%, the Town might consider using affordable housing trust funds to provide down payment assistance for construction loans or to buy points on a private construction loan. This support would be offered in exchange for 30-year rent-cap covenants. However, if interest rates decrease and ADUs can be constructed without assistance, owners would not be prohibited from charging rents that may be unaffordable for the local workforce.

A Note About Construction Costs

Our current estimate for the cost of building a standalone ADU (Accessory Dwelling Unit) is approximately $300,000. However, there are situations where the cost could be lower. For example, if the property owner chooses to handle the construction themselves, or if the property allows for a less expensive retrofit instead of a completely new build. It's important to note that we have not identified any instances of an ADU kit being successfully permitted. If construction costs were to decrease to around $200,000 or even as low as $150,000, it would significantly simplify the process of determining affordable rent.

Conclusion

Summary

In examining the financial feasibility of applying the negotiated in-lieu of fees toward the subsidy of new affordable rentals in the form of ADU construction grants or loans, we found that no subsidy model – either of loans or grants – could reduce costs enough to support affordable rents at this time. The barriers are interest rates that are slightly too high and new-build construction costs.

Recommendations

Given that the economics of borrowing and construction are not conducive to successful affordable housing subsidies for ADUs at this point in time, the Town of Bristol should hold off on expending its negotiated in-lieu-of fees fund until a higher-impact opportunity arises. The Town of Bristol should convert its in-lieu-of fees into an affordable housing trust fund and put the money in an interest-bearing account.

It may be when lending and homebuilding costs are more amenable, the Town can then draw down the trust fund for subsidy programs that result in affordable housing. Another option is for the Town to use the trust funds to participate in a public-private partnership with a Low-Income Housing Tax Credit (LIHTC) developer and apply the trust funds to the capital stack (financing) of the project, where the net result will be more affordable units in Bristol than the trust funds could have leveraged alone. Repurposing existing buildings as Low-Income Housing Tax Credit projects is more feasible than raw construction in built-up towns like Bristol, and opportunities for a successful project may be found in the Almeida Apartments or former Guiteras School, among others.

ECONOMIC ANALYSIS OF SELECTED HOUSING STRATEGIES

Town of Bristol, RI

FEBRUARY 2025

camoin associates

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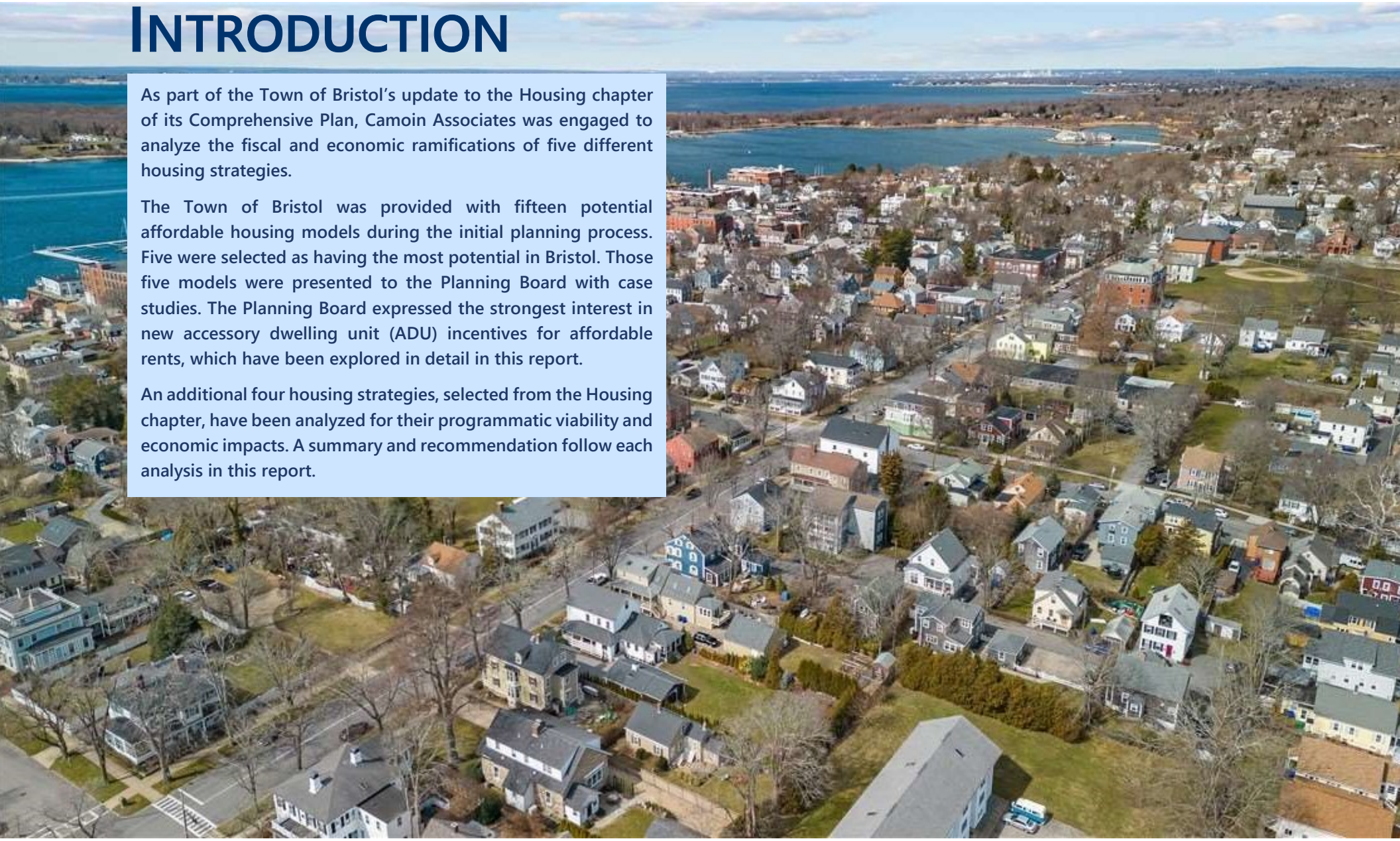
INTRODUCTION



As part of the Town of Bristol's update to the Housing chapter of its Comprehensive Plan, Camoin Associates was engaged to analyze the fiscal and economic ramifications of five different housing strategies.

The Town of Bristol was provided with fifteen potential affordable housing models during the initial planning process. Five were selected as having the most potential in Bristol. Those five models were presented to the Planning Board with case studies. The Planning Board expressed the strongest interest in new accessory dwelling unit (ADU) incentives for affordable rents, which have been explored in detail in this report.

An additional four housing strategies, selected from the Housing chapter, have been analyzed for their programmatic viability and economic impacts. A summary and recommendation follow each analysis in this report.

Strategies Explored

1 Accessory Dwelling Units.

What are some pathways to financing new ADUs that can support affordable rents?

2 Short-Term Rentals.

What are the economic ramifications of restricting short-term rentals?

3 Allowing More Density.

What impacts do duplexes have on single-family houses?

4 Senior Housing.

What is the need for, and opportunity for, affordable housing for seniors in Bristol?

5 Housing Land Trusts.

What goes in to running a housing land trust, and could the Town operate one in Bristol?

1

Accessory Dwelling Units

Introduction

An Accessory Dwelling Unit (ADU) is an apartment added to a single-family house either internally (such as with a suite of rooms), as an addition, or as an ancillary structure (such as a converted garage or in a "pool house" style). Historically, these units were made for family members, such as aging parents or adult children priced out of the housing market.

Because ADUs piggyback on the main house's land, taxes, mortgage, and sometimes walls, and because many owners have a sympathetic relationship with the tenants, these units are frequently rented out affordably.

Problem Statement

Even when zoning and building codes will allow for the construction of a new ADU, building costs have made it prohibitively expensive – especially if the owners intended on renting the ADU affordably.

In looking at the construction costs, a modest 800-square-foot (20 ft x 40 ft) backyard ADU might cost $300 per square foot to construct (online sources estimate between $200-$400/sf), and that does not include the cost of the concrete pad or tying in new utility lines like sewer, water, and electric. It also does not include permits and fees.

With these challenges, how can ADUs be constructed for affordable rents?

Objective

In the following section, we will examine the costs to develop and own an ADU, potential incentives to make financing an ADU feasible, and how those costs could be borne by affordable rents.

PART I
CALCULATING COSTS & RENTS

1. Estimating Construction Costs

The basis of our financial feasibility calculations is predicated on estimated construction costs of an ADU. While multiple ADU building "kits" are advertised online for low prices, we know of no successful kits permitted as occupied ADUs. Building officials suspect that those economical kits may not meet building codes or lack essential attributes like adequate insulation or plumbing amenities.

Therefore, this analysis has applied custom-build costs to assess the feasibility of ADUs meeting housing needs. We have applied a construction cost of $375 per square foot based on two private-sector sources in New England.

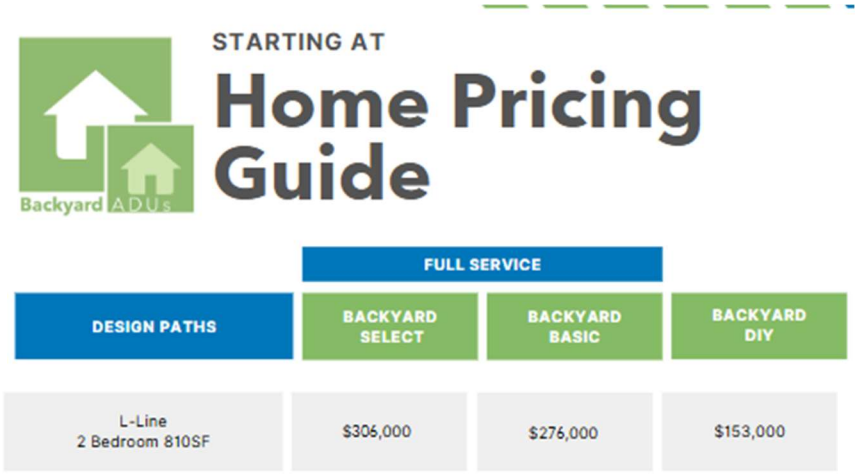
We acknowledge and encourage that any of the financial feasibility models depicted on the following pages may substitute different construction costs if attainable cheaper.

The first source for our construction cost estimates comes from homebuilder Jonah Richard in Vermont, who published on November 17, 2024:

> Of the six ADUs, two were new builds, and four were renovations of existing space. Only one of those renovations offered real cost savings by avoiding structural, roofing, and utility work. For that 550sf studio, we kept it just under $100k. The rest? Between $250k and $350k.

Taking the middle of that cost range, we arrive at $300,000 for new construction.

Similarly, the ADU-specialty homebuilder Backyard ADUs, operating in Maine, New Hampshire, and Massachusetts, prices its 810 square-foot model near $300,000 as well.



2. Calculating Monthly Payments

The first step to identifying whether ADUs could support affordable rents in Bristol is to calculate a monthly payment from financing construction.

KEY COMPONENTS:

- **Construction Costs.** Based on a review of the construction of similar structures in New England, the estimated "all-in" cost for a new, 800-square-foot, free-standing backyard ADU is **$300,000**.
- **Downpayment.** If financed by a 30-year mortgage, a borrower might need to put down 20%, or $60,000. The monthly recapture rate of that downpayment (at no return) over 30 years is **$167** per month.
- **Loan Payment.** At a mortgage rate of 7%, the monthly payment to leverage $240,000 is **$1,597**.
- **Total Monthly Payment.** The monthly recapture rate needed to break even on construction costs is **$1,764**.

INPUT	COST
800 sq ft x $300/ sq ft	$ 240,000
Foundation, utilities, fees	$ 60,000
Total project cost	**$ 300,000**

LOAN CALCULATIONS	
30-Year Loan Amount	$ 300,000
20% Downpayment	$ 60,000
Principal at 7% Interest	$ 240,000
Monthly Payment	**$ 1,597**

MONTHLY RECAPTURE COST OVER 30 YEARS	
Downpayment Monthly Recapture	$ 167
Monthly Loan Payment	$ 1,597
Total Monthly Recapture Cost	**$ 1,764**

3. Calculating Additional Costs

In addition to construction costs, an owner will incur several other expenses when adding an ADU to their property. The new construction will trigger some increased tax assessment value, need to be insured on the homeowner's policy, and absorb some utility costs when occupied (at a minimum, sewer and water fees).

For modeling purposes, we estimate additional taxes to be **$1,000** per year, increased insurance to be an additional **$1,000** per year, and monthly sewer and water fees to be about **$100** per month. When broken down to a monthly payment of $266, we round up to **$275** to be conservative.

> Note: The owner of an ADU rental unit will also pay income taxes on rent, but the asset depreciation and business expense deductions on annual tax filings should cancel out these taxes on new income.

When the $275 in additional monthly expenses is added to the monthly construction costs, we arrive at **$2,039** per month in the first year to own a new ADU.

ADDITIONAL COST CALCULATIONS	MONTHLY COST	
Increased Property Taxes	$	83
Additional Homeowners Insurance	$	83
Some Utilies like Water/Sewer	$	100
Monthly Subtotal	$	267
Rounded Monthly Cost Estimate	**$**	**275**
Monthly Loan Payment	$	1,597
Monthly Downpayment Recapture	$	167
Total Monthly Owner's Expenses	**$**	**2,039**

4. Examining Bristol Rental Rates

The next task is to examine what rent prices are in Bristol to see if they can support the cost to construct a new ADU.

For this task, we will look at three metrics for determining median rent in the town.

The first is Fair Market Rent, as calculated by the US Department of Housing & Urban Development (HUD). HUD publishes "Fair Market Rent" for every market in the US (to protect taxpayers from price gouging on housing vouchers).

Fair Market Rent is for "standard-condition" rentals that recently turned over and accounts for all utility costs. It is in the 40th percentile of rents; that is, it is fourth out of ten (4:10) among the most expensive rents in town (tenth being the most expensive). For 2025, HUD calculates the Fair Market Rent for a one-bedroom apartment in Bristol to be **$1,319**.

Our second source, the American Community Survey (ACS), places Bristol's median rent at $1,276 from the 5-year average between 2018-2022. In 2024 dollars, that is **$1,376** .

If you multiplied HUD's Fair Market Rent for Bristol by one and a quarter (1.25) to approximate the fiftieth percentile of rents (or fifth most expensive rent out of ten), rent would be **$1,649** per month.

None of these estimated rental rates will cover the cost of the ADU.

RENTAL RATES		
HUD Fair Market Rent	$	1,319
ACS Median Rent (2024 $)	$	1,376
HUD Fair Market X 1.25	$	1,649
Monthly Loan/Recapture Cost	$	1,764
Monthly Loan + Expenses Cost	$	2,039

PART II
EXAMINING AFFORDABLE ADUs

In this section, we look at the financial feasibility of four models to encourage the construction of affordable rentals as accessory dwelling units. The first three models explore the use of an affordable housing trust fund.

Affordable Models Examined		
1	GRANT	Downpayment Assistance
2	GRANT	Interest Rate Reduction
3	LOAN	Revolving Loan Fund
4	LOAN	Bond for Loans

1. Downpayment Assistance

This model examines how housing trust fund dollars could defray the cost of a loan downpayment, which would reduce the monthly expense of a new-construction ADU.

If the Town of Bristol were to dispense its affordable housing trust fund with 13 grants of $40,000 to defray the cost of a construction loan downpayment, it would reduce the monthly downpayment recapture rate to **$56**. This, plus the mortgage payment, amounts to $1,653 – a few dollars over 1.25 times Fair Market Rent. When adding $275 of additional owner's expenses, *it still puts the costs of an ADU out of reach of median rents.*

DOWNPAYMENT REDUCTION GRANT		
20% Downpayment on $300K Loan	$	60,000
Downpayment Reduction Grant	$	(40,000)
Owner's Downpayment to Recapture	$	20,000
Monthly Downpayment Recapture	**$**	**56**

AFTER-GRANT COST RECAPTURE		
Downpayment Recapture	$	56
Monthly Loan Payment	$	1,597
Additional Monthly Costs	$	275
Total Monthly Costs	$	1,928
1.25x HUD Fair Market Rent	$	1,649
Monthly Loss Year 1	**$**	**279**
Annual Loss Year 1	**$**	**3,348**

2. Interest Rate Reductions

An alternative approach for dispensing the affordable housing trust fund would be to use it to purchase "points", buying down the interest rate for owners taking out a mortgage to build an ADU. If interest rates were at 7% and the Town of Bristol paid for four points, that could lower the mortgage interest rate to 6% and cost the Town a $9,600 grant for each $240,000 loan. If the Town took this approach, the fund could buy points on over **54 loans**.

That lower interest rate of 6% would reduce the monthly payment to $1,439, and when combined with the owner's downpayment recapture, it brings the monthly repayment to $1,606. When adding the additional owner's expenses of $275, it increases the monthly costs to **$1,881**. With 1.25x Fair Market at $1,649, *it still does not cover the costs*.

It is worth noting that there may not be 54 applicants to the program in the first few years.

INTEREST RATE REDUCTION GRANT		
Loan Payment at 7% Interest	$	1,597
Loan Payment at 6% Interest	$	1,439
Monthly Difference	**$**	**158**

REDUCED INTEREST RATE FINANCES		
Monthly Loan Payment	$	1,439
Downpayment Recapture	$	167
Additional Monthly Costs	$	275
Total Monthly Costs	$	1,881
1.25x HUD Fair Market Rent	$	1,649
Monthly Loss Year 1	$	232
Annual Loss Year 1	$	2,784

A Revolving Loan Fund

If the Town wanted to consider using the affordable housing trust fund as a revolving loan fund to construct new ADUs, the fund could simultaneously support **two $240,000 loans**. With two 30-year loans in repayment, it would take **15 years** before enough principal was paid back to issue a new loan, and by that time, construction costs may have risen. *In 15 years, the Town would have financed **three** affordable ADUs with the affordable housing trust fund.*

4. Bonding for a Loan Fund

Another option might be for the Town of Bristol to bond for an ADU loan fund. The Town might borrow $5,000,000 to loan out to twenty new ADU construction projects. The Town may be able to bond at 4% interest and make twenty $240,000 construction loans at 5% interest to borrowers.

A 5% construction loan would make the monthly payment $1,288, and when the downpayment recapture of $167 is added, it comes to **$1,455** per month needed to pay back an ADU construction loan. If the owner charged 1.25x Fair Market at $1,649, that allows for almost $200 per month to cover incidental costs of increased taxes, insurance, and some utilities.

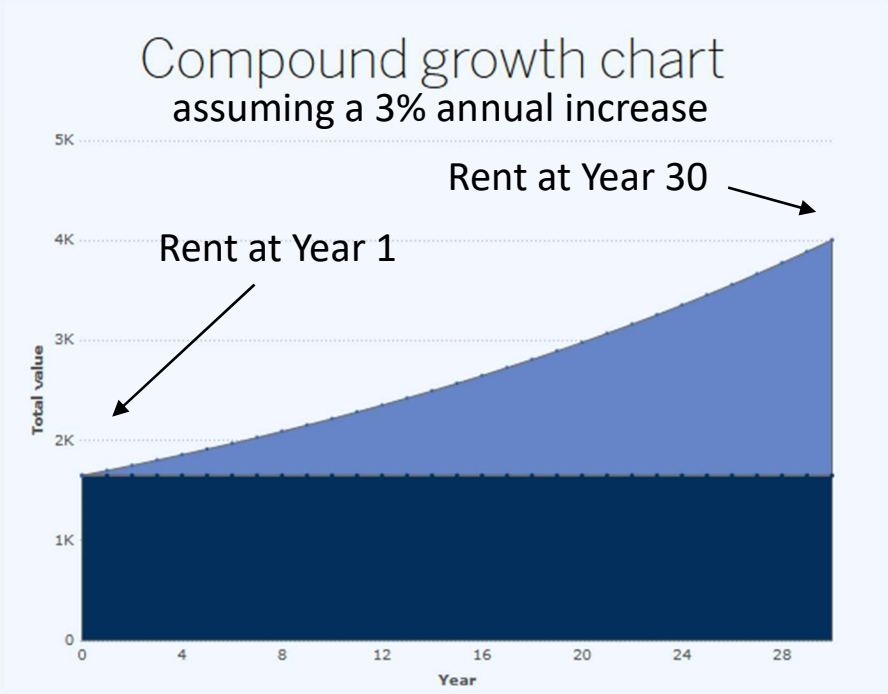
While this comes very close to breaking even, the monthly payback amount is fixed for 30 years, while 1.25x Fair Market rates should rise with the rate of inflation. For example, if Fair Market Rent rose by 3% each year with inflation, after ten years, 1.25x Fair Market would be $2,216 – while the monthly repayment amount would remain the same. After ten years, there would be $761 per month for the owner to cover incidentals and profits.

(Continued)

MONTHLY LOAN PAYMENTS		
Monthly Loan Payment at 7% Interest	$	1,597
Monthly Town Loan Payment at 5% Interest	$	1,288
Monthly Difference	$	309

BONDED LOANS FINANCES		
Monthly Town Loan Payment at 5% Interest	$	1,288
Monthly Downpayment Recapture	$	167
Additional Monthly Costs	$	275
Total Monthly Costs	$	1,730
1.25x HUD Fair Market Rent	$	1,649
Monthly Loss Year 1	**$**	**81**
Annual Loss Year 1	**$**	**972**

In the early years, the ADU would come close to breaking even, but in later years, **there would be notable profit** – even with the price capped at 1.25% Fair Market Rent. This is in addition to owners' tax benefits like asset depreciation (the cost of the ADU) and loan interest deductions.



ANNUAL ANTICIPATED RENT INCREASES (3%)							
1.25x HUD Fair Market Rent			**Monthly Expenses**		**Difference**		**Annual**
Year 1	$	1,649	$	1,730	$ (81)	$	(972)
Year 2	$	1,698	$	1,730	$ (32)	$	(384)
Year 3	$	1,749	$	1,730	$ 19	$	228
Year 30*	$	4,003	$	1,968	**$ 2,035**	**$**	**24,420**

*Additional Monthly Costs would go up by some factor

PART III
AFFORDABILITY CHECK

WHO CAN AFFORD MEDIAN RENT?

In order to settle upon a rental price that could support the cost of construction, we have relied on multiplying HUD's Fair Market Rent by one-and-a-quarter (1.25) to arrive at approximately the fiftieth percentile of area market rents. This calculation equals a monthly rent of $1,649, *but is that affordable to Bristol renters?*

According to the US Census, Median Household Income for Renters, adjusted for 2024 dollars, is $62,088. HUD sets a cost-burden standard where a household cannot responsibly afford housing if they spend more than 30% of their income on housing costs. At 30% of $62,088, $18,626 is available for annual housing costs (including utilities), or $1,552 per month. This means that the renter household earning a median income *cannot* responsibly afford a rent of $1,649 by almost $100 per month.

However, HUD estimated 2024 Median Renter Income for a single household in the Providence-Fall River region to be $78,680, which would allow for a monthly housing budget of $1,967 – well above our 1.25x HUD Fair Market Rent. *There will be renters in the market who can responsibly afford these prices.*

If the Town bonds, what about the Housing Trust Funds?

If the Town of Bristol were to pursue the bond-funded loans in the last example, the Town might consider using the housing trust funds for downpayment assistance to select borrowers. This assistance should not be the whole amount but a large portion of it (perhaps $40,000 of a $60,000 loan downpayment). The Town might dispense 13 grants outright, or it could loan the funds subordinate to their bond loan, or the Town might place a lien on the ADU equal to the downpayment assistance so the Town will get the money back if the property ever sells.

A grant from the fund would justify a 30-year covenant on the new apartment to cap the rent at an affordable rate. Thirteen grants and covenants would equal the number of affordable apartments waived in the development that paid the in-lieu-of fees.

FINAL NOTES FOR CONSIDERATION

Covenants

In all models previously explored in this section, the Town of Bristol should place a 30-year covenant on each ADU that the Town assisted to cap the maximum rent at 1.25x HUD's Fair Market Rent.

Interest Rates

In several of the models explored, the finances did not work because current interest rates were too high. In the next couple of years, interest rates may return closer to 5% on the free market. If that happens, many of these ADUs could be constructed without loan or grant assistance.

If interest rates were to drop to 5%, the Town might focus on the use of affordable housing trust funds to provide construction loan downpayment assistance or to buy points on a private construction loan – both in exchange for 30-year rent-cap covenants. (If interest rates fall and ADUs can be constructed without assistance, then nothing precludes owners from charging rents that are out of reach for the local workforce to afford.)

Construction Costs

While our best, real-world construction cost estimate is $300,000 for a standalone ADU, there may be scenarios where the cost is less. Maybe the property owner does the construction work themselves. Maybe the property allows for a less costly retrofit rather than a standalone stick-build. (Again, we have not found any examples of an ADU kit being successfully permitted.) If the real-world costs of construction drop to $200,000 or as low as $150,000, then the path to affordable rent is much easier to ascertain.

SUMMARY

At current interest rates of around 7% and with building costs so high, none of the loan or grant incentive models examined for affordable-rent ADUs were able to bridge the gap between construction costs and affordable rents. The one exception is the Town of Bristol bonding for a lower-interest construction loan fund, which would produce a profitable ADU rental at affordable rents after two initial years of minor losses. The bonding model even has a built-in return for the Town to cover administrative costs. However, the political will to bond for private affordable-rent construction loans may not be present.

RECOMMENDATION

If the Town decides not to bond for a construction loan fund, the Town should instead invest its accrued in-lieu-of fees in a housing trust fund. Once interest rates drop to around 5%, the housing trust fund might be used for bridge loans, downpayment assistance, or interest-point reductions in exchange for affordable rents. Alternatively, the housing trust fund could support a larger affordable housing project by being part of its capital stack (i.e., its multiple sources of funding).

2

Short-Term Rentals

Introduction

As a historic, ocean-front community with a successful private university, the Town of Bristol has a strong market for short-term rentals. Short-term rentals are defined as apartments or houses which are rented for less than 30 days at a time. Most short-term rentals are advertised on platforms such as AirBnB and Vbro.

Objective

In this section, we will look at the economic impacts of short-term rental visitors and compare the effects of workforce displacement on the local economy.

Problem Statement

Even after furnishings, booking fees, and high turnover expenses such as cleaning and bedding-washing, short-term rentals command significantly higher profits than traditional long-term rentals. Short-term rentals are more likely to host visitors with disposable income.

However, short-term rentals come at an opportunity cost for residential housing – both in terms of homes that are displaced from the market and apartments. When permanent residents are excluded from the housing market, the local hiring pool may diminish, straining businesses.

Are short-term rentals a net benefit or a detractor to the local economy?

PART I
SHORT-TERM RENTAL VISITORS

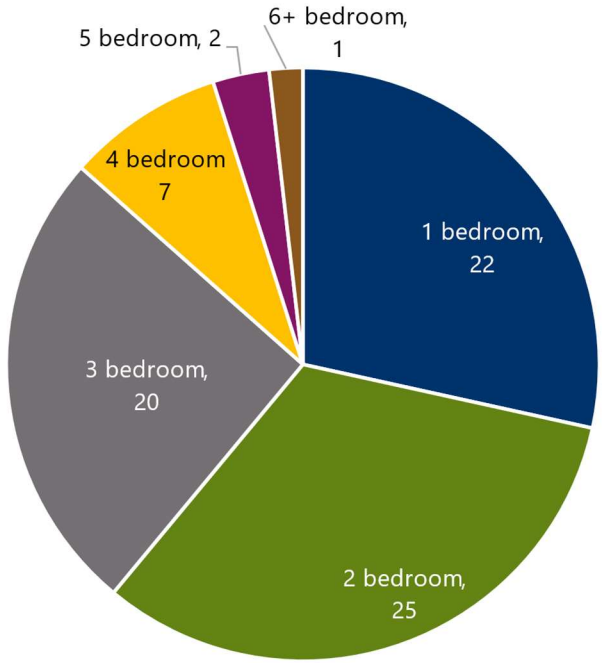
1. Measuring the Short-Term Rental Market

Over a twelve (12) month period ending in September 2024, the Town of Bristol's short-term rental market looked like this:

KEY COMPONENTS:

- **Count.** There were 77 different units listed on short-term rental sites in Bristol over 12 months, ending in September 2024.
- **Occupancy.** Over that period, those units were occupied nearly 50% of the time (48.6%).
- **Stay.** The average duration of a visit during that period was 3.6 days.
- **Bedrooms.** The proportions of bedroom count in short-term rental stays in Bristol were: 33% 2-bedrooms; 29% 1-bedroom; 26% 3-bedrooms; and 12% 4-bedrooms or more.

Average Distribution of STR Listings by Bedroom Count in Bristol, 12 months ending Sept. 2024



Source: AirDNA, Camoin Associates

77 Listings

48.6% Occupancy

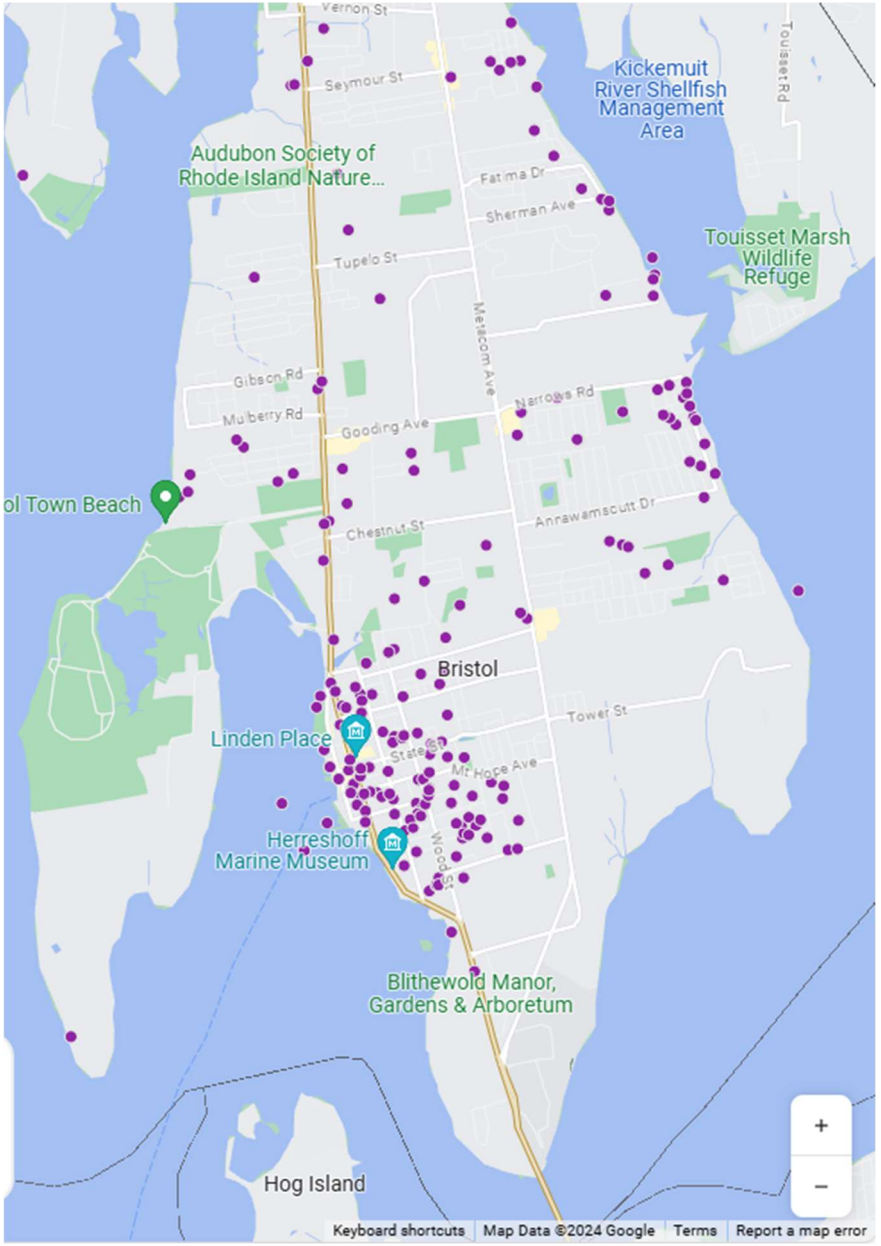
3.6 Days Average STR stay

Source: AirDNA, Camoin Associates

Note: Estimates for Bristol Town are based on data for Bristol County for the 12 months ending Sept 2024

2. Geographic Disbursement

Short-term rentals were largely clustered in the downtown and eastern waterfront neighborhoods.



Summary of Bristol Short-Term Rental Market and New Visitors	
Average full-home listings	72
Average occupancy rate	49%
Est. Total Rental Nights	**12,772**
Average length of stay (nights)	3.55
Est. visitors per booking	2.2
Est. Total STR Visitors	**11,942**

Source: AirDNA, American Community Survey, Camoin Associates

Short-Term Rental Spending Patterns in Bristol	
Total STR visitors	11,942
Est. total spending per visitor	$122
Est. Total Visitor Spending from STR Visitors	**$1,453,205**

Source: Visit Rhode Island 2022 Tourism Impact Analysis, Camoin Associates

Note: Spending excludes any spending on short-term rentals.

Full-Time Household Spending Patterns in Bristol	
Average full-home listings	72
Average spending per full-time household	$36,149
Est. share spent locally	34%
Est. local spending per full-time household	$12,291
Est. Total Spending by Full-Time Households	**$884,928**

Source: AirDNA, 2022 Consumer Expenditures Survey, Lightcast, Camoin Associates

Note: Represents the average spending for a household with Bristol's median household income of $91,382 (2022 American Community Survey)

3. Economic Impact of Short-Term Rental Visitors

Based on short-term rental (STR) data from AirDNA,, approximately **12,000 visitors** are projected to stay at these properties in Bristol each year.

According to a 2022 Visit Rhode Island tourism impact analysis, a visitor spends about $122 per day of their stay – not including the cost of lodging. These short-term visitors are expected to **spend about $1.4 million** throughout Bristol's economy in a given year.

Comparatively, if these units were used to house full-time households, those residents would be estimated to generate about **$900,000** in local spending (not including housing).

In this simple analysis, over the course of twelve months, short-term visitors are expected to spend **over half a million dollars** more in the local economy than permanent residents.

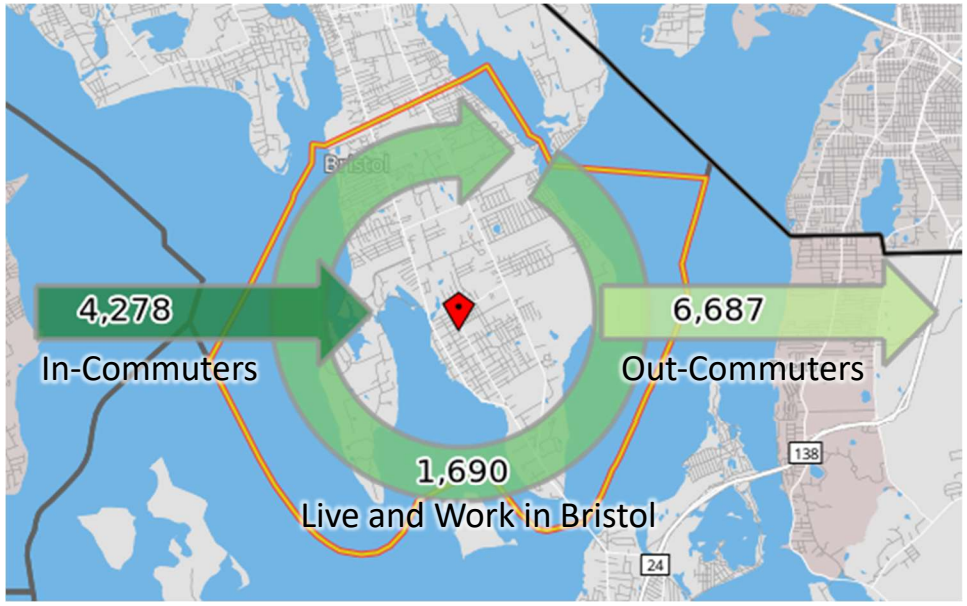
PART II

IMPLICATIONS ON WORKFORCE

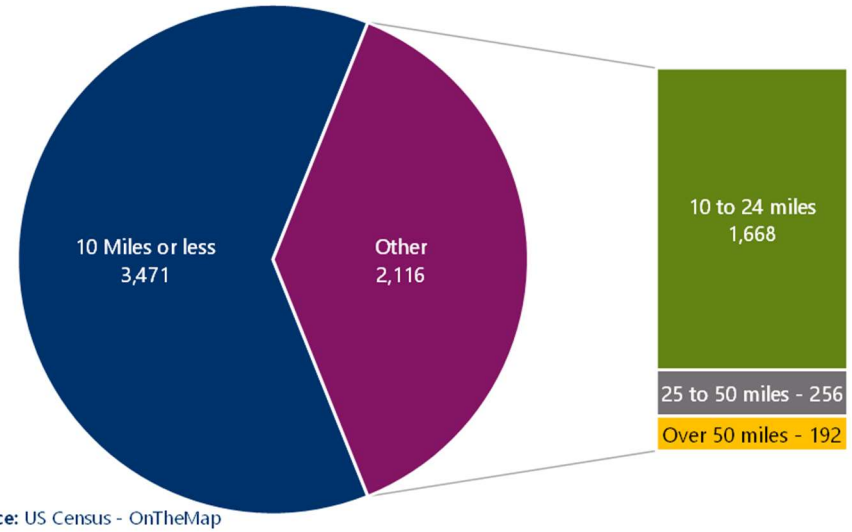
Where are employees coming from?

The majority of Bristol residents commute out of town for employment – more than the total number of jobs offered in Bristol. Bristol businesses are reliant on commuters to fill positions in town. Less than 30% of local jobs are held by residents, and if short-term rentals displace more housing, that percentage could decline, furthering Bristol's economy's dependency on commuters.

- Bristol has a mismatch of those who live in the town vs. those who work in the town, with **56% more workers commuting out** of the town than in.
- This employment economy is sustainable for those 5,139 employees who travel **less than 30 minutes** to their jobs in Bristol.
- However, those remaining commuters into Bristol for work with commutes over half an hour – **448** – are most at risk of changing employment to something closer to their out-of-town residence.
- Short-term rentals could compete for housing options for those 448 employees who are commuting longer distances to get to Bristol jobs.



Number of Workers Employed in Bristol by Commute Distance - 2021



Source: US Census - OnTheMap

SUMMARY

Bristol's short-term visitors spend considerable sums in the local economy while staying in town. Meanwhile, Bristol's employment market is functioning.

RECOMMENDATION

The current number of short-term rentals in Bristol – 77 – appears to be a workable amount without disrupting residential housing markets or hiring pools.

However, short-term rental counts can multiply quickly, and the Town should monitor the number of listings in the future.

Most towns control the total number of short-term rentals by requiring registration with a fee to pay for monitoring for non-compliance, then capping the number of short-term rental licenses with a lottery system when licenses become available for new users.

Usually, properties with a homestead exemption are exempt from the short-term rental cap because those short-term rentals are not displacing workforce housing at owner-occupied properties (though the exemption should be limited to the owner's personal unit). Exempting homestead exemption properties from the cap also allows homeowners to make money with their properties to help defray property taxes.

3

Allowing More Density

Introduction

One way to increase the supply of housing is to increase density allowances. There are many considerations to take into account when examining new density allowances: (1) How do the different housing types affect assessments? (2) How will the private market respond? And (3) How compatible are the housing types?

Objective

In this section, we will look at the stability of single-family home values in proximity to multifamily properties.

Problem Statement

In a town with few buildable sites for new construction, one of the few ways to increase housing supply is to allow for more density, specifically more housing units per lot.

This can be a controversial topic on streets that are predominately characterized by single-family houses.

One major concern raised in this discussion is whether proximity to a multifamily property lowers the sales value of a single-family house. Another question that arises is whether multifamily houses can be visually compatible with single-family houses on the block.

How do real estate markets perform with multifamily housing situated close to single-family dwellings?

PART I
COMPARING MULTIFAMILY AND SINGLE-FAMILY VALUES

1. Sales and Valuations Comparisons

The Town of Bristol's Assessment Office provided several comparable sales over 12 months of single-family houses, two-family houses, and multi-unit properties to examine how each housing type performs on the market.

Interestingly, the analysis showed that the more units in the building, the lower the price per square foot upon sale. Single-family houses cost the most and are assessed the most per square foot.

Type	Average Sales Price	Average Price / sf
Single-Family	$ 523,900	$ 413
Two-Family	$ 546,131	$ 266
Multiunit	$ 748,000	$ 227

SINGLE-FAMILY VALUATIONS

Address	Units	Total Value	Price / sf	Sale Price	Price / sf
32 Rock St	1	$ 364,600	$ 325	$ 535,000	$ 477
6 Central St	1	$ 476,800	$ 351	$ 630,000	$ 464
1191 Hope St	1	$ 330,000	$ 265	$ 575,000	$ 463
44 Greenway Dr	1	$ 311,300	$ 237	$ 441,000	$ 336
93 Perry St	1	$ 291,800	$ 215	$ 438,500	$ 323
Averages		**$ 354,900**	**$ 279**	**$ 523,900**	**$ 413**

Note: All properties sold within 12 months since November 2023.
Source: Town of Bristol, RI Assessment Office

TWO-FAMILY VALUATIONS

Address	Units	Total Value	Price / sf	Sale Price	Price / sf
52 Constitution St	2	$ 522,200	$ 304	$ 790,000	$ 461
87 Perry St	2	$ 455,400	$ 142	N/A	N/A
32 Pearse Ave	2	$ 296,900	$ 120	$ 558,000	$ 226
1013 Hope St	2	$ 577,100	$ 287	$ 400,000	$ 199
5 Lang Ave	2	$ 378,500	$ 155	$ 436,523	$ 179
Averages		**$ 446,020**	**$ 202**	**$ 546,131**	**$ 266**

MULTIUNIT VALUATIONS

Address	Units	Total Value	Price / sf	Sale Price	Price / sf
485 Metacom Ave	3	$ 451,200	$ 156	$ 660,000	$ 228
143 Bay View Ave	4	$ 423,500	$ 137	$ 799,000	$ 258
5 Wilson St	6	$ 434,400	$ 108	$ 785,000	$ 195
Averages		**$ 436,367**	**$ 134**	**$ 748,000**	**$ 227**

2. Value Performance in Proximity

In this section, we will look at how single-family houses' values are estimated when they are located on the same street as a multiunit property.

HOPEWORTH AVE.

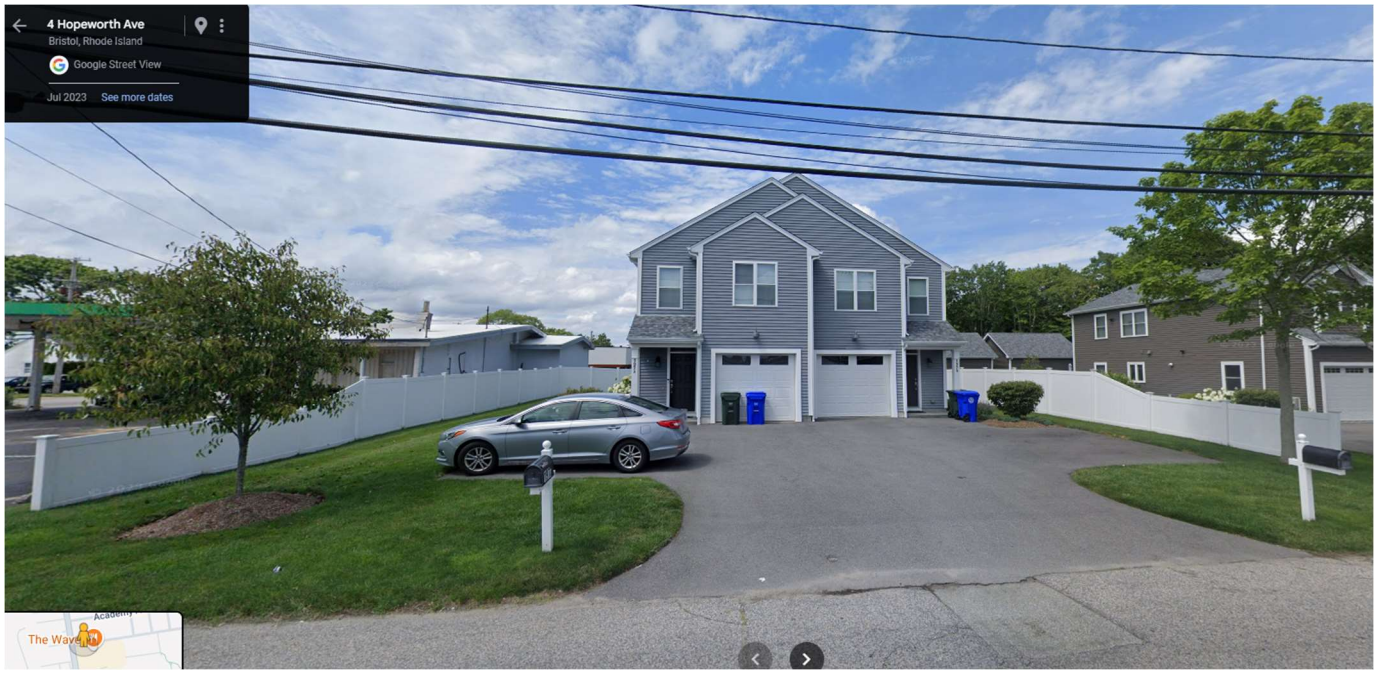
Using the national home-values website Zillow.com, home values are estimated on the map on the right for single-family houses that share a street with two duplexes (indicated by stars). The single-family houses on Hopeworth Avenue hold some of the highest estimated sales values in the vicinity.

There may be nuances that affect the values of each estimated home price, but being located next-door to a duplex is not a significant factor.

Street Views of Hopeworth Ave. Duplexes

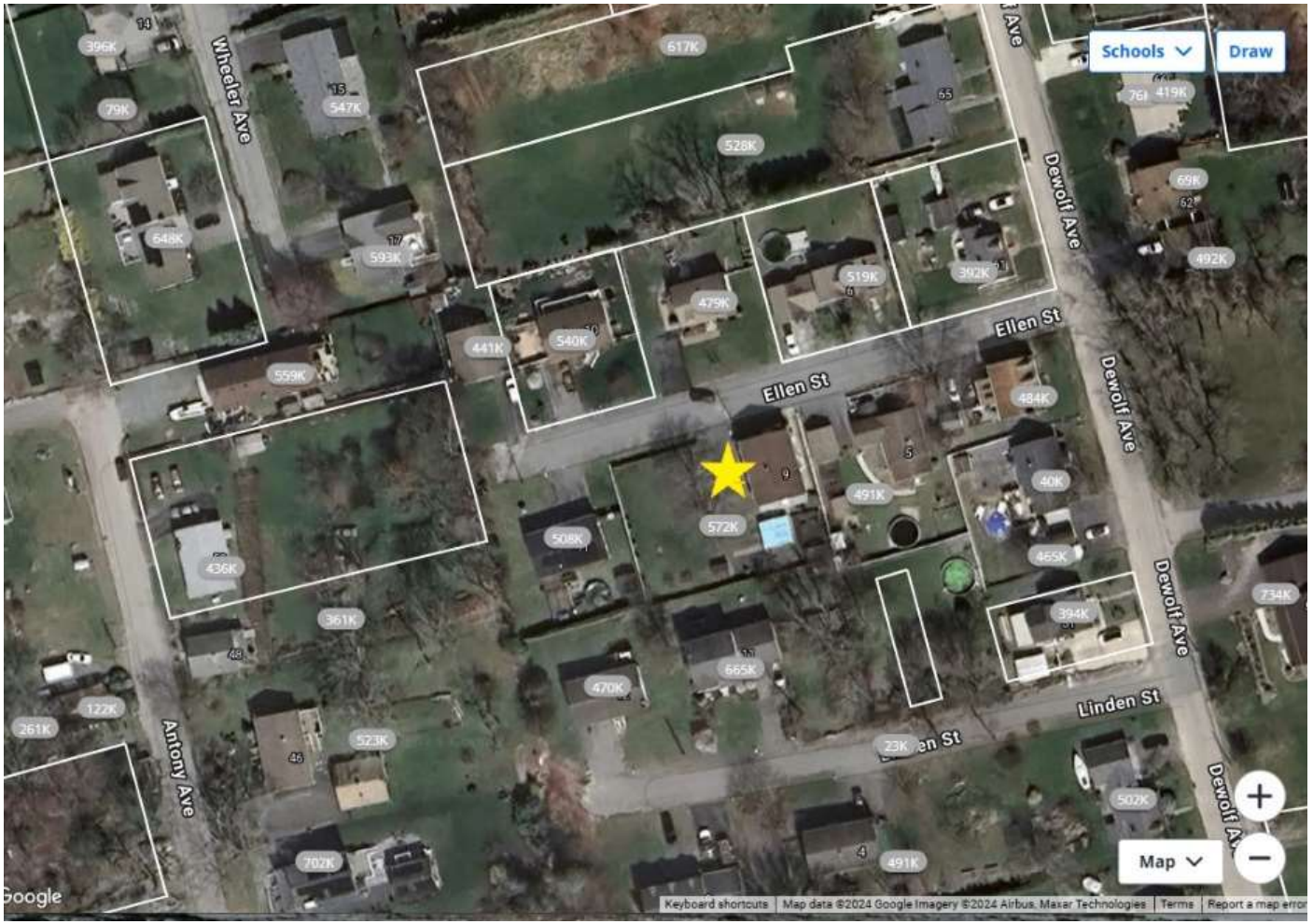
When reviewing these images, one Bristol Planning Board member remarked that she did not object so much to the number of units in these duplexes but rather their configuration with the two garage doors projecting prominently on the front of the house.

Discussion ensued about how the form of the building mattered more than the unit count when considering compatibility on a single-family street.



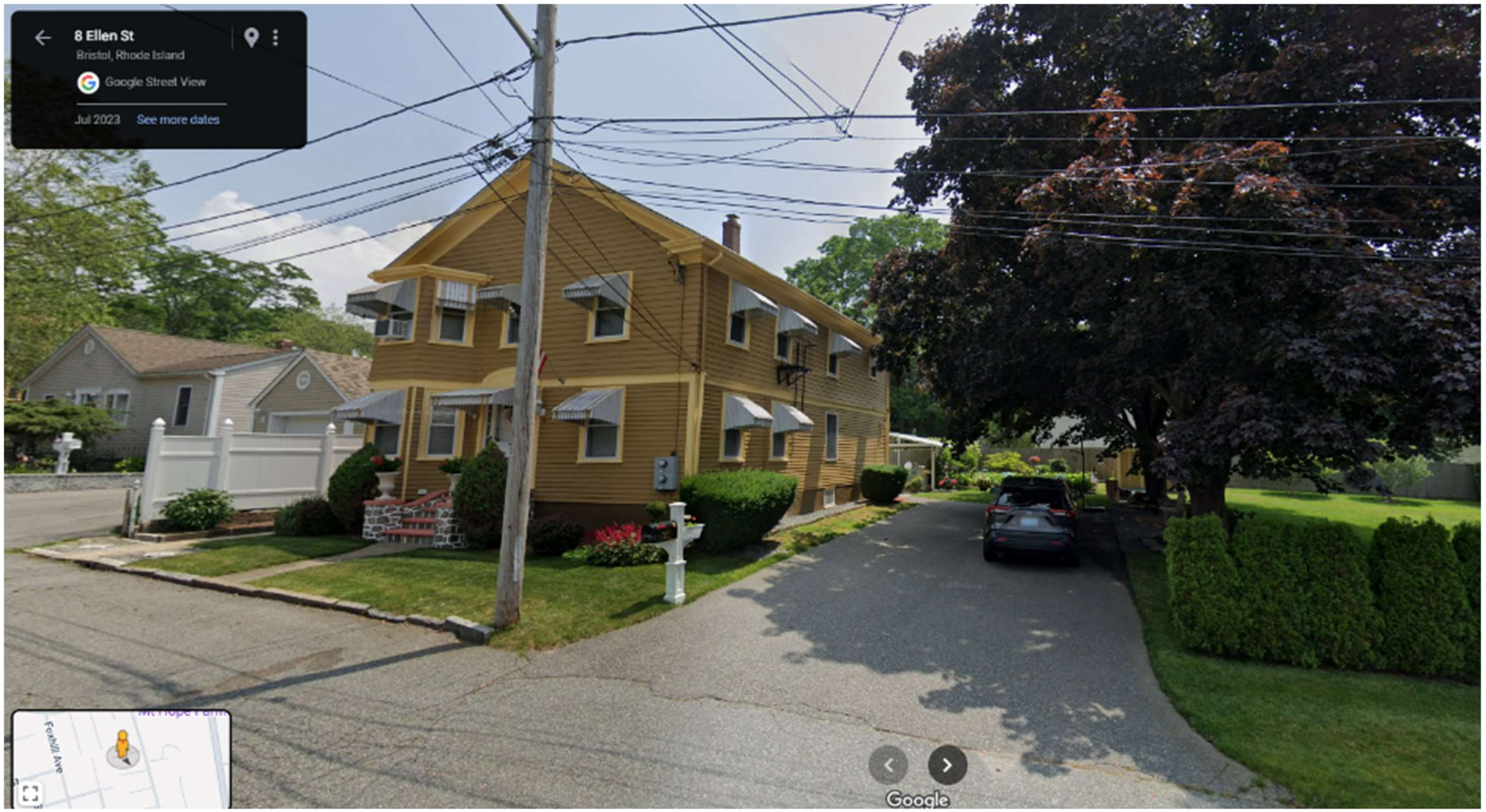
ELLEN STREET

This second example, taken from Zillow.com, shows the estimated value of an older two-family (starred on the map) amid an otherwise single-family street on the outskirts of downtown. All of the home-price estimates on Ellen Street are comparable to the surrounding single-family houses shown.



Street View of Ellen Street
Two-Family

What is distinct about this two-family home is the traditional gable-ended house form with a central front door and no garage.



PART II
PERSPECTIVE OF A REAL ESTATE AGENT

Local experienced real estate agent Chris Woodard at Keller Williams provided his observations of how multiunit developments within single-family neighborhoods affect the market.

- **Multiunits do not negatively impact the values of single-family homes** in historic mixed-use neighborhoods because (1) buyers already accept that mixed-use development is the norm, and (2) inventory is currently so low that choosiness is not an option.

- Duplexes on comparable-sized lots to single-family houses have the potential for **double the vehicle storage** (for example, if each duplex unit had three cars, there could be six cars parked on the equivalent of a single-family lot).

- Bristol is a college town, and multiunit houses come with the **potential of student rentals**.

- Accessory Dwelling Units **(ADUs) do not elicit the same concerns** as duplexes in single-family neighborhoods because ADUs are intentionally subordinate in size and placement to the primary house. ADU rentals are more likely to be managed by the homeowner on site. ADUs are also supported by State law.

SUMMARY

There is no evidence that two-unit dwellings diminish the values of single-family homes nearby. However, thoughtful consideration about the form of the two-unit building and its vehicle storage for compatibility among its neighbors is key.

RECOMMENDATION

The Town of Bristol should allow two-unit buildings in predominately single-family neighborhoods but mandate housing forms and features that reflect abutting residences.

4

Senior Housing

Introduction

As Baby Boomers enter their retirement years, their housing needs change. A portion of those seniors are renters on a fixed income. During America's housing crisis, rents experienced upward pressure after the pandemic. These senior renters have few options when rental increases outpace their limited incomes.

Objective

In this section, we will examine the demographic data of older adults in Bristol, their affordable housing needs, and the factors that determine how senior housing developments are decided.

Problem Statement

Senior renters on a fixed income have few options to turn to when rents increase faster than their incomes.

One affordable housing option for seniors is a development using Low-Income Housing Tax Credits, or LIHTC.

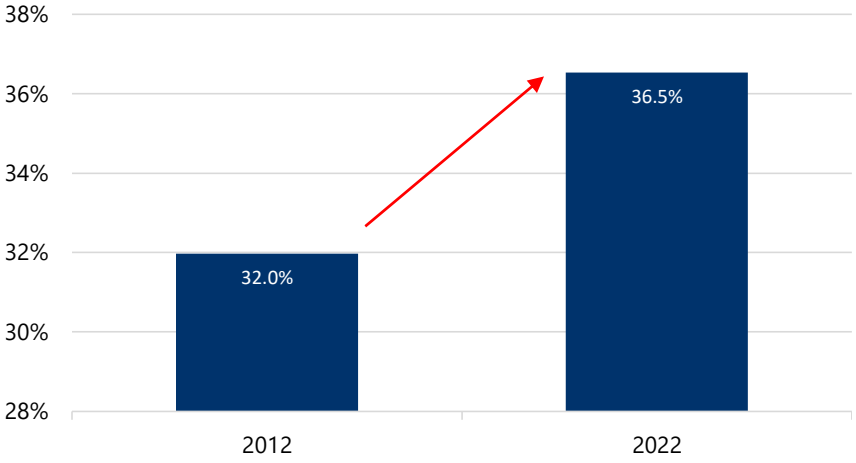
LIHTC funding is competitive and projects are challenging to orchestrate. What are some opportunities and barriers to building LIHTC housing for seniors in Bristol?

PART I
THE NEED

Across the country, Baby Boomers are aging and retiring in the midst of a housing crisis. While Baby Boomer homeowners may benefit from home price spikes in the last decade, senior renters, by comparison, are locked into high-market rates with fixed incomes.

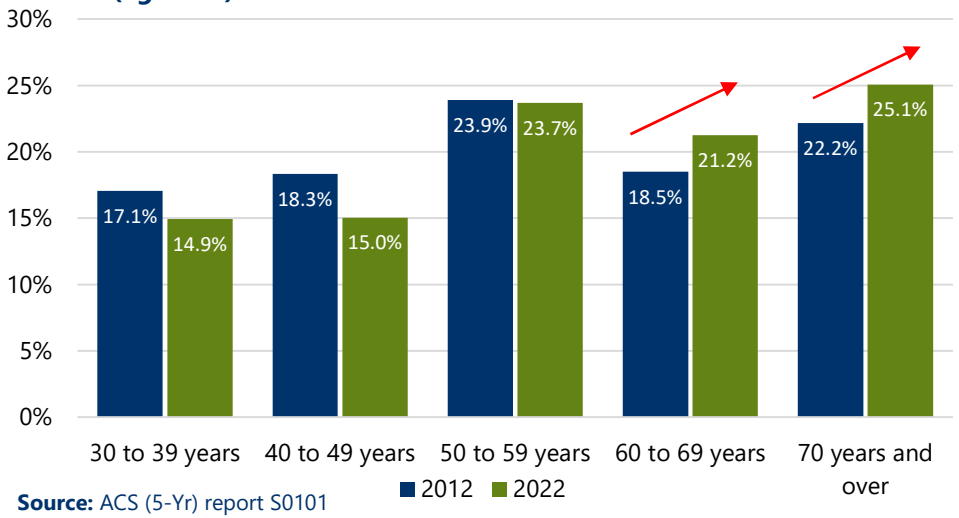
In the decade between 2012 and 2022, Bristol's population of 55 years and older grew 4.5 percentage points, or 14%. In the same decade, the proportion of 30-somethings, 40-somethings, and 50-somethings declined, while the proportion of 60-somethings and over 70 increased.

Adults Age 55+ in Bristol - Percent of Total



Source: ACS (5-Yr) report S0101

Adults (age 30+) in Bristol



Source: ACS (5-Yr) report S0101

Senior Renters' Cost Burden

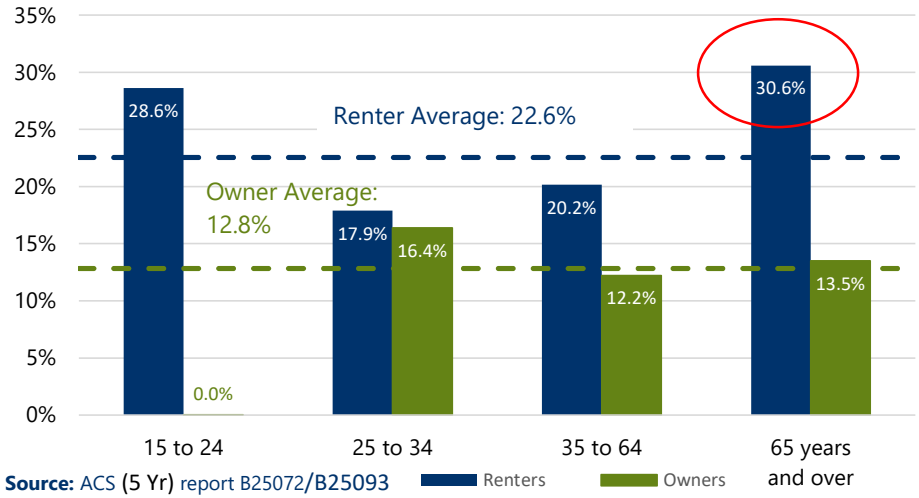
Older adults renting in Bristol are the most housing cost-burdened in the town.

The US Department of Housing and Urban Development (HUD) defines housing **cost burden** as spending more than 30% of one's pre-tax income on housing costs.

It is particularly onerous for retirees who might live on a fixed income, do not have real estate to sell, and no longer work.

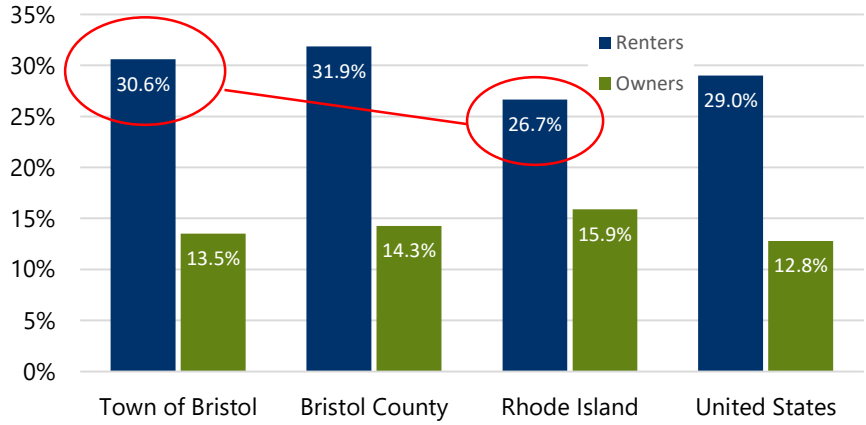
Nearly a third of senior renter households in Bristol are cost-burdened – about 15% more in Bristol than the statewide average.

Cost Burdened Households by Age Cohort in Bristol - 2022



Source: ACS (5 Yr) report B25072/B25093

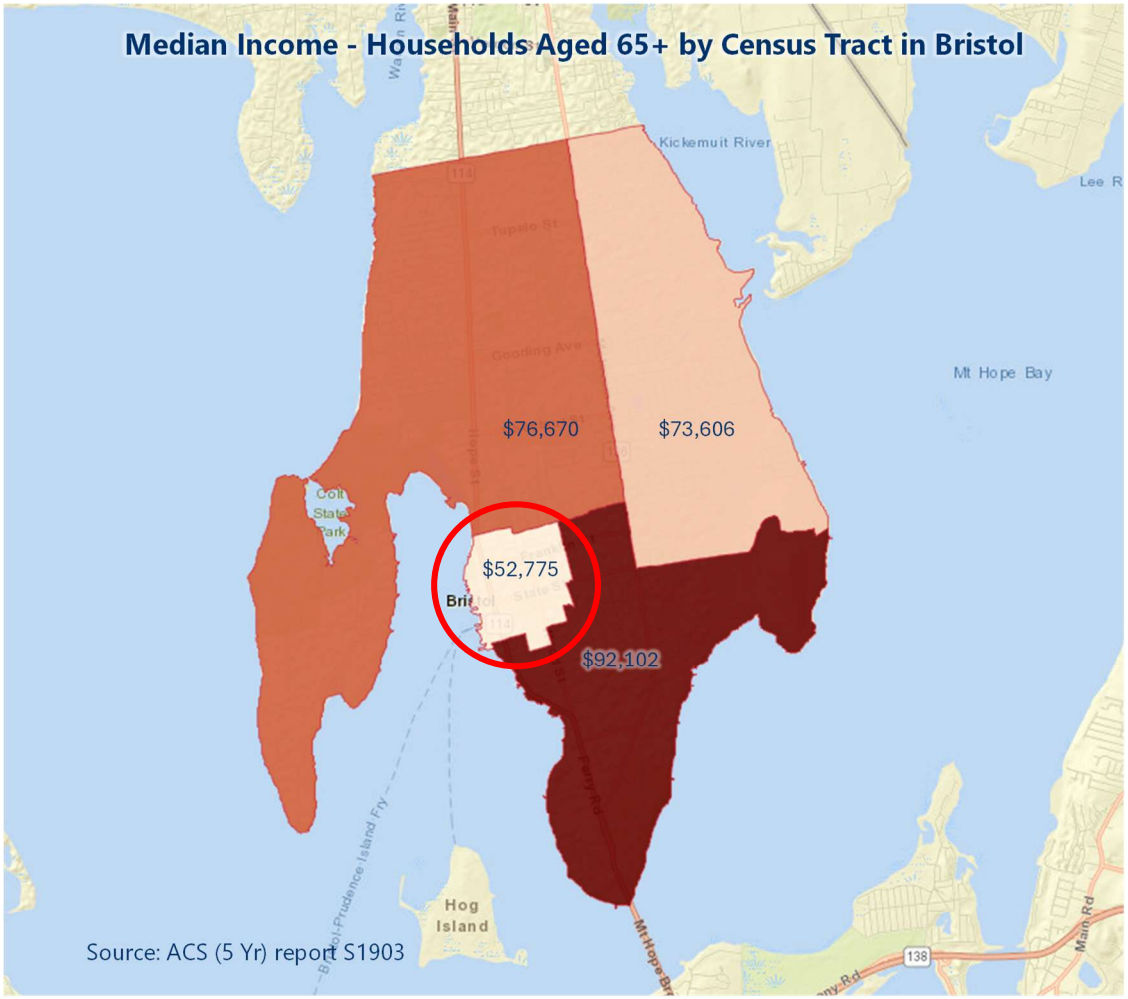
Cost Burdened Seniors (Age 65+) - 2022



Source: ACS (5 Yr) report B25072/B25093

Where is the Need?

Senior household incomes are lowest in Bristol's downtown neighborhood. At these incomes, many senior renter households in the Bristol's downtown would qualify for affordable housing programs.



Part II
How Low-Income Housing Tax Credit (LIHTC) Programs Work

Who would Qualify for Affordable Housing?

For older adult households in Bristol's downtown neighborhood with a median income of $52,775, two-person households would qualify as under 60% of Area Median Income. This bracket is a typical income qualification for affordable housing programs.

Providence--Fall River, RI-MA HMFA 2024
MUNCIPALITIES: Barrington, Bristol, Burrillville, Central Falls, Charlestown, Coventry, Cranston, Cumberland, East Greenwich, East Providence, Exeter, Foster, Glocester, Jamestown, Johnston, Lincoln, Little Compton, Narragansett, North Kingstown, North Providence, North Smithfield, Pawtucket, Providence, Richmond, Scituate, Smithfield, South Kingstown, Tiverton, Warren, Warwick, West Greenwich, West Warwick, Woonsocket

	1 person	2 person	3 person	4 person	5 person	6 person	7 person	8 person
30%	$23,600	$27,000	$30,350	$33,700	$36,580	$41,960	$47,340	$52,720
50%	$39,350	$45,000	$50,600	$56,200	$60,700	$65,200	$69,700	$74,200
60%	$47,220	$54,000	$60,720	$67,440	$72,840	$78,240	$83,640	$89,040
80%	$62,950	$71,950	$80,950	$89,900	$97,100	$104,300	$111,500	$118,700
100%	$78,680	$89,920	$101,160	$112,400	$121,400	$130,400	$139,400	$148,350
115%	$90,510	$103,500	$116,380	$129,260	$139,610	$149,960	$160,310	$170,660
120%	$94,440	$108,000	$121,440	$134,880	$145,680	$156,480	$167,280	$178,080

Source: RI Housing. *Note: the highlighted cell was indicated by RI Housing as a standard benchmark for comparison.*

How LIHTC are Awarded in Rhode Island

INTERVIEW WITH ANNE BERMAN, DIRECTOR OF REAL ESTATE DEVELOPMENT AT RI HOUSING, ON NOVEMBER 18, 2024.

The small state of Rhode Island is a "minimum receiver" of federal Low-Income Housing Tax Credits (LIHTC) because of its population size, amounting to a Qualified Allocation Plan (QAP) of $3,455,000 in credits to assign for fiscal year 2025.

This annual allocation can only fund about three projects across the state each year. Up to fifteen applicants submit requests for credits from RI Housing at each round, equaling a 5:1 ratio of submission to allocation. At this rate, it can take developers three to five years of funding rounds to receive credits.

The most successful LIHTC applications will leverage the most points in their proposals: points for efficient budgeting, the most units per credits, serving the lowest income tenants, mixed-income projects, and comp plan targets like walkability and public transit access.

RI Housing is aware of a bias against family housing because of school census implications. Constructing more bedrooms per apartment is also more costly and therefore avoided by developers. For these two reasons, RI Housing provides 6 points for projects that include multi-bedroom apartments for families.

How LIHTC Projects are Scored

Point Allocation Summary

25 points	TDC
20 points	LIHTC Efficiency
5 points	Leverages rental and operating subsidy such as: HUD's Rental Assistance Demonstration program, Section 811 program, Federal or State Rental Assistance program.
10 points	Leverages hard debt or other competitive resources such as FHLB funding, Federal and State Historic credits or similar
6 points	The provision of 3+ bedroom units
25 points	Serves very low-income, homeless and/or special needs persons
3 points	Rhode Island Construction Firms
2 points	Inclusion of MBE/WBE in the development team
8 points	Fully permitted development
33 points	Alignment with CCD goals
10 points	Located in a community with less than 10% affordable homes
3 points	Addresses vacant, foreclosed and blighted properties
3 points	Energy Star & Tier II
2 points	Electrification
3 points	Passive Housing
3 points	Renewable Energy
3 points	Preservation of Greenfields

Total 164 points

NOTES

- "TDC" means Total Development Cost per residential unit.
- "LIHTC Efficiency" is the dollar value of credits per unit.
- "Alignment with CCD goals" are Comprehensive Community Development targets, which include measures such as walkability and the use of public transit.

Part III
Opportunities and Barriers to Constructing LIHTC Housing

INTERVIEW WITH DIANE MEDEROS, EXECUTIVE DIRECTOR OF EAST BAY COMMUNITY DEVELOPMENT CORP., ON NOVEMBER 19, 2024.

- The **price of land is prohibitively high**, so opportunities are limited. Donated land, partnerships offered for affordable housing by landowners ("We own this property; will you come and build affordable housing here?"), and repurposing properties are the most likely prospects for new projects.

- **Projects need a critical mass of units** to be financially feasible. Maximum lot coverages, height limits, or unit constraints can kill otherwise viable projects. This developer is hoping the RI General Assembly will allow certain density by right for affordable housing.

- The developer cited numerous examples of **public resistance to projects**, including Penny Lane in Warren where opposition came *after* the project was approved by local officials. Facilitating public conversations early in the process with visuals to illustrate the project is a successful strategy to assuage resistance.

Every development project requires **multiple funding sources**, called a "capital stack". Affordable housing is no different. Many funders want to see the diversity of funding committed to a project. Towns can participate with Tax Increment Financing (TIF) and Community Development Block Grants (CDBG).

Top Challenges to Affordable Housing Development

1. **Available land**
2. **Zoning too stringent**
3. **Public resistance to affordable housing**
4. **Funding**

SUMMARY

Seniors are the fastest growing age group in Bristol and almost a third of senior renters are cost-burdened – higher than both the state and national average. Seniors in Bristol, especially living in the downtown area, would be eligible for low-income housing tax credit (LIHTC) housing. LIHTC developers need partners like towns to help provide project sites and/or participate in the capital stack by providing tax-increment financing (TIF) or other financial assistance.

RECOMMENDATION

Bristol should participate in a public-private partnership with a LIHTC developer to bring a senior housing project to fruition in town. That could look like donating municipal land or an unused building to a developer to convert to LIHTC housing. It could also mean providing tax-increment financing (TIF) to the development. It might mean using housing trust funds to assist in the development's financing.

In addition to any assets the Town may provide the development, offering the political and diplomatic support to assist the developer through the public process can be a tremendous boost to a project.

5

Housing Land Trusts

Introduction

Housing land trusts are gaining in interest across the country as a means to create more permanently affordable housing without tax credits or subsidies.

Problem Statement

If the Town of Bristol considered engaging this model for price-affordable housing options, would it be more effective to create a new local entity or to contract with an established land trust?

Objective

In this section, we will examine the demographic data of older adults in Bristol, their affordable housing needs, and the factors that determine how senior housing developments are decided.

What is a Housing Land Trust?

A housing land trust is a mission-based, private organization that leases land to residents who own houses on the land. The land trust charges a nominal fee for the land lease, thus taking the cost of land acquisition out of the financial equation for homeownership.

A resident may buy or build any structure allowable by zoning on the leased land and privately own it. In return for nominal land-lease rates, the resident signs a covenant that allows the land trust to restrict the resale of the house on the land to income-qualified buyers.

In this way, the land lease model is a financially accessible entry point into homeownership, but it limits the amount of equity a homeowner can access after years of appreciation when they go to sell.

What Goes into a Housing Land Trust?

ORGANIZATIONAL COMPONENTS

Full-Time Director. Duties include:

- Education, outreach, and fielding inquiries
- Monitoring, mediating issues, and enforcing covenants
- Overseeing administration and reporting to a board of directors
- Executing opportunities (e.g., offers of donated land) and protecting assets
- Optional: advocacy efforts to attract more funding and effective policies

Note: Like a real estate agent, a land trust director needs to be on call at all times when an emergency or opportunity comes up.

Administration and Accounting. Duties include:

- Invoicing monthly land lease fees
- Reconciling payments
- Preparing monthly financial statements and reports
- Payroll and filing taxes

Operating Expenses

- Office equipment and supplies, subscriptions and fees, and some travel
- Upfront legal documents template preparation (like contracts)
- Contingency plan (line of credit?) if the organization gets sued or needs to sue
- Access to capital to buy back properties that are foreclosed or go to auction

How is a Local Land Trust Funded?

- Land-lease fees are nominal and do not produce much revenue.
- Some operational expenses can be shared by a sponsoring organization, such as bookkeeping and office expenses.
- A director might be funded by consulting in a related and flexible field, like real estate.
- Some land trusts with large holdings might have for-profit investments, like rental properties, to pay for staffing costs.
- Grants for nonprofits are sometimes available, but they are often inconsistent (offered for a few years only) or inadequately awarded (each applicant receives a small proportion of their request), and grants can rarely cover operational expenses.

WHAT MIGHT A LOCAL PROGRAM COST THE TOWN OF BRISTOL?

A land trust director would need real estate and legal acumen to understand finances and contracting. A salary for this mission-based work might be $70,000, plus employment taxes and health insurance, totaling close to $100,000 in employment costs.

Perhaps a sympathetic department or organization could cover the payroll processing, admin, and bookkeeping activities. Some startup funds would also be needed to create contracts, etc.

How would an Existing Organization serve Bristol?

The Community Housing Land Trust (CHLT) of Rhode Island is a statewide entity allied with the Housing Network of Rhode Island (the two organizations share some resources).

CHLT acquires new land to lease by donation, not purchase. The donor must pay the closing costs to transfer the property. Otherwise, there are no costs to a donating entity to have CHLT operate in their vicinity. CHLT is large enough to support dedicated staff. The organization has all of the relevant legal documents on file, and the staff is experienced in the more complicated situations that can arise (foreclosures, auctions, delinquency, storm damage, etc.). CHLT is also building a capital fund to act on rights-of-first-refusal written into their rental agreements.

CONSIDERATIONS REGARDING LOCAL VERSUS AN ESTABLISHED STATEWIDE ORGANIZATION

The biggest consideration is **scale**. A land trust needs someone "at the ready" to respond to donation offers or emergencies such as foreclosure or auction. To support this capacity at the local level would mean paying a dedicated person for a small number of properties, proportionately. Since the statewide organization is established with an existing business model, it would not cost the Town of Bristol anything to have CHLT operate in Bristol.

SUMMARY

There is increasing interest nationwide in using land leases to preserve the affordability of homeownership. A land-lease community land trust can borrow many administrative functions from a complementary organization or department, but the director of such a program needs a sophisticated skillset and should be on-call most of the time to respond to emergencies or opportunities. The land-lease model does not generally generate enough funds to pay for a director, so the director's salary must come from other sources and other revenue-generating activities.

RECOMMENDATION

The Town of Bristol may decide it would like to administer a land-lease program in-house with existing personnel or departmental support. Given the small number of transactions likely to occur in town, this may be feasible.

However, the missed opportunity of not collaborating with a larger, regional or statewide entity is accessing their expertise, experience, dedicated staff, funding resources, and any contingency funding they may have accrued. There is efficiency in volume that a regional or statewide land trust can achieve that a small mission-area like Bristol will not likely meet. Inviting an experienced, larger land trust to operate in Bristol is the most economical approach.

camoin associates

Celebrating Our 25th Anniversary

Town of Bristol, Rhode Island

Department of Community Development

10 Court Street
Bristol, RI 02809
bristolri.gov
401-253-7000

March 5, 2025

TO: Planning Board

FROM: Diane M. Williamson, Director

RE: Staff Report – 206 Bayview Preapplication Conference
Fair Winds Comprehensive Permit

The following is provided in order to further explain the process and provide some additional clarity to the materials submitted for the Pre-Application Conference on the above project. In further review of the submission and the Planning Board's Subdivision and Development Regulations, I also provide some additional guidance and recommendations for the Board's consideration.

1. The previous Technical Review Committee Pre-Application meeting notes were submitted to give the Board context on the prior project reviews. At the most recent TRC meeting, in December of 2024, it was agreed that the applicant should present the Pre-Application to the Planning Board in light of the fact that the new State Law doesn't provide for a Master Plan phase. The application will be Comprehensive Permit application under the new State Law. Per this new law, there will be two phases of review – Preliminary and Final –with a public hearing on Preliminary.
2. A pre-application conference is non-binding and there is no vote of the Planning Board taken at a pre-application meeting. All pre-application discussions are intended for the guidance of the applicant and shall not be considered approval or disapproval of a project or its elements.
3. The subject property is zoned R-10 and per the new State Law, the density bonus for a Comprehensive Permit application is based on a by-right plan excluding wetlands, wetland buffers, area devoted to infrastructure necessary for development and easements or rights of way of record. For projects connected to public water and sewer, demonstrated through written confirmation from each respective service provider the following density bonuses are provided:
    a. For 25% low and moderate income housing, the density bonus shall be 5 units per acre;

b. For 50% low and moderate income housing, the density bonus shall be 9 units per acre; and,

c. For 100% low and moderate income housing, the density bonus shall be 12 units per acre.

4. This applicant is proposing 25% low and moderate income housing which would allow the 5 units per acre as the density bonus. The calculation for the density bonus needs to be determined by the amount of land excluding area devoted to infrastructure necessary for the development; namely the roads and drainage and that are per the yield plan is 1.16 acres which would equal a bonus of 5.8 units rounded down to 5 plus the 5 by-right would total 10 units. The property has an existing 3 family dwelling and the applicant is proposing 17 new units. According to the calculations with the density bonus, 15 units would be permitted. The 17 new units with the 3 existing would equal 20 units.
5. The applicant's narrative provides a draft list of waivers and variances needed The provision for a reduced lot frontage noted in the narrative, is not applicable since that is in the Inclusionary Zoning section of the ordinance which was rescinded.
6. The application will require a monitoring agreement and a deed restriction. As these are rental units, they will need to be rented at 80% of Area Median Income.
7. The Zoning per the State Law requires only 1 parking space per dwelling unit for off-street parking up to an including 2 bedrooms. This proposal has mostly 3 bedroom units; and, each unit also will have a 2 car garage.
8. The Zoning per the State Law also has no floor area limits and the bedroom count can't be limited to any less than 3 bedrooms.
9. This proposal is located in the Tanyard Brook Watershed which requires that the drainage provided for stormwater volume as well as Rate. Any increase in stormwater volume up to and including the 10-year storm event shall be retained and recharged on site.
10. Per the multi-family standards of the Zoning for Townhouses (Section 28-282) each unit shall have 400 square feet of open space reasonably secluded from view and there shall be not more than 4 contiguous townhouses shall be built in a row with the same or approximately the same front line. There is a parking area located to the north of unit 15 – it is noted in 28-282 that no parking area shall be located within 15 of any wall of a principal building along with are located windows less than 10 feet off the ground. If these standards are not able to be met, the applicant may need to ask for variances of these in addition to those noted in the narrative.
11. In accordance with Section 28-282, the applicant will need to submit a plan for rubbish removal and it is noted that the Planning Board generally makes it a condition of approval for private trash and recycling service with no town service to be provided for this or snow removal.
12. The Town of Bristol owns the property abutting this land on the east. It was acquired with the intention of having available land for a future police station and there is no schedule for when this would be built. A police station is a 24/7 essential service for the Town that is also a very active use.

Town of Bristol, Rhode Island

Department of Community Development

10 Court Street
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February 20, 2025

TO: Planning Board

FROM: Diane M. Williamson, Administrative Officer

RE: Pre-Application Conference for Fair Wind Village Comprehensive Permit

The above application is before you for a Pre Application Conference. The TRC has had a few previous concept review meetings and their meeting notes are attached. It is noted the applicant has done several iterations of the concept plans and building designs in response to previous TRC comments.

The State Law on Comprehensive Permit application was revised and the Town's Zoning was recently updated per that State Law. Of note, there is no longer a Master Plan step for Comprehensive Permit Applications, the first phase is Preliminary Review. Also, the density bonus is now a calculation based on a by-right yield plan.

At the most recent TRC meeting, it was agreed that the Planning Board should review a Concept Plan with a Pre-Application Conference and provide comments on same.

APPLICATION FORM AND SUBMISSION CHECKLIST FOR PREAPPLICATION CONFERENCE AND CONCEPT REVIEW

Preapplication Conference - An initial meeting between developers and the Town which affords developers the opportunity to present their proposals informally and to receive comments and directions from the Town and other agencies.

Concept Plan - A drawing with accompanying information showing the basic elements of a proposed land development plan or subdivision as used for pre-application meeting and early discussions, and classification of the project within the approval process.

The following completed application form and Items A, B, and C from the attached checklist shall be submitted to the Administrative Officer for a meeting with the Technical Review Committee (TRC).

Date of Submission 11/20/24 TRC Meeting Date 12/3/24

APPLICATION FORM

1. Name, address, and telephone number of the property owner: Fair Wind Properties LLC, P.O. Box 333, 401-263-6372

2. Name, address and telephone number of the applicant (If different from owner, a written, notarized confirmation from the property owner authorizing the applicant to make this submission shall also be submitted):_____

3. Assessor's plat and lot number(s): _____

4. Zoning district(s), including any special Town or State overlay districts (i.e. Historic District, CRMC Jurisdiction, etc.): R-10

5. Area of the parcel: 2.2 Acres

6. Proposed number of buildable lots, dwellings or other proposed improvements: 17 Additional Units + Office above Garage.

7. Name and owner of existing streets or rights-of-way adjacent to the parcel:

A list showing the names and addresses of all abutting and adjacent property owners shall be attached to this application.

Signature of Owner/Applicant  Date 11/20/24

Notarized:

Subscribed and sworn to before me this _____day of_____, 20___.

_____
NOTARY PUBLIC

206 Bayview Development Narrative

Planning Board Members,

Fair Wind Properties LLC is planning a development located at 206 Bayview Ave. The property currently has a three family multi dwelling along with a 5 car garage and various other small shed like buildings on site. Please see the current layout shown on the site plan attached.

The only structures to remain on site will be the current 3 family building and the 5 car garage. This project has seen many iterations from its original concept and has had changes made based on previous TRC recommendations.

We are proposing to add 17 new town house style apartments with 2 car garages. The current 5 car garage will be receiving a second floor addition to accommodate a property management office above the 5 car garage. The garage bays will be used for storage/property management equipment.

During the TRC process we have collaborated with Bristol Fire, BCWA, Bristol Sewer, and others to make sure we have a viable project. Principe engineering has also completed a site study and calculated our site drainage requirements to comply with the town's storm water mitigation requirements.

Here are the major differences from what we originally proposed versus what we have now. The changes are based on previous TRC meetings and the discussions we have had with Jim Houle (Real estate appraiser and consultant) and TRC Members. We are looking at mostly 3 bedroom units on this plan vs 3 and 4 bedroom units. We have also reduced the building sizes reducing our overall building footprint.

We will also be going from 23 units to 20 units total. This will round out the ratio for affordable units and is needed to make the numbers work.

The unit design offers an open concept on the first floor. This results in a more spacious atmosphere. The ground floor will include a front to back 2 car garage and also incorporates in-unit laundry. The units are a desirable townhouse style, side by side units, making them more attractive than the traditional stacked multi family living. This does take up a larger footprint on the site and is more costly, but is healthier for the renter. In previous research, I read that stacked living led to a lot more noise and

disturbances between tenants. Less disturbances among tenants allows for a healthier environment for all.

Please see below for a comparison of what was previously proposed

	Current Units	Original Design	New Design	Difference from Original Design
Total 4 bedroom Units	1	11	1	-10
Total 3 Bedroom Units	2	12	19	+6
Total 2 Bedroom Units	0	0	0	0
Total Units:	3	23	20	-3
Total Beds:	10	80	58	-22
Total Baths:	5	65	56	-9

Highlights of changes to the design

- 5 out of the 20 units (25%)will be affordable units. These units will be allocated in the new units proposed.
    - 5 - 3 bedroom units
- Adding 3 new buildings instead of 5 and reducing the overall footprint of the units has led to reducing the overall building lot coverage from 23.1% to 16.2% (Reduction of 6.9%) the maximum building coverage for the zone is 25%.
- Reducing the overall building footprint of the entire project by 6,420sq ft. This amounts to eliminating approximately 2 full buildings of the original building footprint from the site plan (previous TRC meetings asked to have 2 buildings removed)
- Going from 80 bedrooms total including the current 3 family to 58 bedrooms including the current 3 family (reduction of 22). Again this reduction in bedroom count is equivalent to eliminating the 2 buildings that was requested at a previous TRC meeting.
- We will also reduce the bathroom count by 9.

Density Study

Principe Engineering created a yield map to accurately calculate the density of this site (See attached yield map). Based on removing all existing buildings and turning the site into a residential development they were able to successfully show 5 lots. Based on the towns density bonus for comprehensive permits along with providing 25% low to moderate units we are eligible for an increased density of 5 extra units per acre plus the 5 lots currently shown on the yield map. The site is 2.1270 acres, therefore we are allowed an additional 10.635 units. This brings the total units on the site to 15.635 units.

Draft Variances/Waivers

- A variance is requested from Zoning Ordinance Article IV Dimensional Regulations Sec. 28-111 Table B requiring 80’ of lot frontage. 72.50’ of existing frontage provided. 64 feet is permitted after application of the 20% reduction provided for under the Low- and Moderate-Income Housing Incentive Section 28-370 (d)(2).
- Distance between multifamily buildings on same lot: Minimum 25 feet between multifamily buildings in the same row. 10 feet provided.
- A variance is requested from Zoning Ordinance Permitted Uses, Section 28-3 and Section 28-82. This R-10 zone is intended for high density residential areas comprised of single household and two-household structures within a minimum density of 10,000 square feet per dwelling unit where public sewer and/or public water are provided. Multihousehold dwelling units are not allowed. The site has public sewer and public water. Multi-household dwelling units are proposed.
- Variances are requested from Zoning Ordinance Section 28-252 General Requirements for parking as follows: Parking spaces are required to be 10’x18’. The proposed spaces are 9’x18’. The required aisle width is 24’. The proposed aisle width is 20’.
- The yield map study allows for a total of 15.635 units in total. 20 units are being provided on this plan. 17 units to be newly constructed.

Town of Bristol, Rhode Island

Department of Community Development

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TECHNICAL REVIEW COMMITTEE MEETING

The meeting was held on **Tuesday, December 3, 2024** at 11:00 am
at 235 High Street, 1st Floor Conference Room, Department of Community Development
The Technical Review Committee (TRC) held a meeting for the purpose of review of the application for **206 Bayview Avenue**

Present for the Town of Bristol:
Diane Williamson, Director of Community Development & TRC member
Edward M. Tanner, Zoning Officer/Principal Planner & TRC member
Steve Katz, Planning Board member & TRC member
Chief Kevin Lynch, Bristol Police Department
Captain Roman Wozny, Bristol Police Department
Robert Ferguson, Bristol Fire Department
Jose DaSilva, Superintendent, Water Pollution Control
Michael Crawford, BCWA
Colin O'Hara, BCWA

Present for the Applicant:
Danial Ferreira, Applicant
Vanessa Ferreira, Applicant

Agenda: Concept Review / Pre-Application for a Comprehensive Permit – Proposal for a comprehensive permit for construction of 17 new residential dwelling units in three buildings (2 buildings with 6 units and 1 building with 5 units) in addition to the 3 existing units for a total of 20 units. Property located at **206 Bayview Avenue**. Assessor's Plat 47, Lot 3. Owners: Fair Wind Properties, LLC. Zoned: R-10

The applicants presented a proposal from original concept plan with five buildings and 23 units total. The revised and current plan shows 3 buildings and 20 units total with the bedroom count reduced by approximately 22.

The units will be rentals, mostly three bedroom units as well as 1-4 bedroom units. There will be two garage parking spaces per unit although the plans only show 1 parking space per unit. They will be designed in a town house style.

There is an existing three family house on the property as well as a five stall garage that will be renovated with office space above for property management and site equipment storage.

Drainage will be revised and should work out better. There is 16% lot coverage by structures which will help with drainage. Drainage will be handled on site.

There will be school bus shelter on Bayview Avenue in front of the property.

Parking layout will be revised. The fire department will need a turn around and no parking on the hammerhead. Fire department is ok with 24' driveway and aisle width as long as 20' minimum, it will be ok. Hammerhead turnaround at the end of the parking lot needs to be designed to allow for turnaround of apparatus. Townhouse units (which are considered single family) will require smoke & CO2 detectors. There will be a two hour fire separation between each of the units. Fire hydrant is existing on Bayview Avenue and meets distance requirements. No fire alarm system is required. The fire department will provide a letter at the time of the Planning Board application.

The police chief reviewed concerns about lot to the east that be developed in the future for expanded or new police station. He wants the understanding that any approval have be made aware that at some point the site will be developed for public safety use which is a 24/7 operation. There may also be a need for an easement for the lot to the south to have access to Bayview Avenue in future development. They are informed of the town plans which is still in the infancy state.

The previous discussion regarding BCWA was for an extension of the water main. Applicant is not proposing an extension of water main. Fire department service from existing hydrant to the west. May need to run a model of water use. 2" pressure line in the street which they are looking to tap into. They will evaluate capacity with the BCWA engineer and applicant engineer. BCWA will want one water meter at property line. Applicant's engineer has run flow calculations.

The Planning Board will need confirmation that H20 and sewer can service the project at the time of the application.

The sewer department has a force main from development which will discharge to a manhole and connect to the sewer line at existing three family house. There was discussion about the line currently connecting the existing house to the west. They will need separate lines and run a new line to the street. The neighbor will take care of their own connection. Applicant has had camera inspection of the existing line. There was discussion about other suggestions for maintenance.

The process with the Planning Board was reviewed including the comprehensive permit process with recent changes to the state law. There was also a review of the density bonus with 25% affordable. It is based upon a yield map. We will need the applicant to submit a hypothetical yield map showing 'by right' density. Bonus is based upon that which will show minimum permitted density and yield. They would appear before the Planning Board in January with a concept review showing 'by right' plan. A density analysis at the pre-application will also be presented to the Planning Board.

The applicant had a traffic study conducted with 23 units. A real estate financial impact analysis by Jim Houle. Also supports development both will be submitted with Planning Board application.

Reviewed the site design with the TRC:

- Hammerhead at the end of parking of parking for the fire turnaround.

- May reduce the parking spaces and add a 2nd car space inside the garage.
- Three bedroom units with approximately 1,500 sq ft of living space each.
- One existing four bedroom unit is in upper floor of existing house.
- Green space and basketball hoop at turn around.
- Five affordable units total will be 2, 2, 1 in new buildings.
- Letter of eligibility from RI Housing.
- The monitoring agent will be East Bay CDC.
- Preliminary plan submittal checklist is in Zoning requirements after next concept review (section 28-364).
- Reviewed H2O supply & availability. Will be reviewed by BCWA and Pare Corporation as their consultants.

There will be a concept review with the Planning Board in either January or February 2025 with new and revised plans with parking revisions.

Meeting adjourned at 12:30pm.
Notes by Ed Tanner

TECHNICAL REVIEW COMMITTEE MEETING NOTES

OCTOBER 27, 2022

5:30 P.M.

FIRST FLOOR CONFERENCE ROOM

DEPARTMENT OF COMMUNITY DEVELOPMENT

235 HIGH STREET, BRISTOL, RI

The Technical Review Committee met for a concept review/pre-application meeting on the comprehensive permit proposal for 206 Bayview Avenue.

Present:

Technical Review Committee Members:
Diane M. Williamson, Administrative Officer
Stephen Katz, Planning Board Duty Member
Bob Sykes, Pare Engineering, Review Engineer

Owner/Applicant:

Danial Ferreira, Fairwind Properties, owner/applicant
Nathan Chofay, Principe Engineering, design engineer
Scott Spear, Applicant's attorney

The applicant presented an overview of the project which included 20 new dwelling units in addition to the 3 existing dwelling units in the existing building. The proposal would include 5 affordable housing units (25%) which would be rental at 80% AMI. The applicant's intended these units to be for professionals, graduate students, and families. A fire hydrant would be required and the Bristol County Water Authority was requiring an upgrade to the water service which the applicant would do.

Mr. Sykes, the Review Engineer noted that his early comments had been responded to by the designing engineer. However, he had concern about the grading for the drainage which went into the neighboring properties. He also had concerns about the drainage from off site and the shallow depths to bedrock. The drainage design would require an operation and maintenance plan for the owner to maintain the drainage including the pervious paving. It was noted that the design of the units did not include basements.

The applicant indicated there was room on the sight for plowing snow which would go to the south side were the drainage is. Ms. Williamson questioned the drainage location on the south side with all the drainage concentrated in one area rather than spread out along the development in several different areas. The concentrated location could cause impacts to the abutters.

Ms. Williamson also noted that there is only one play indicated being a 12x24 space, there is no buffer against the manufacturing and there is no land for any landscaping. The applicant noted that there was

an additional space which was 24x24 in the southeast corner near the manufacturing zone and that there was area behind the buildings which could be used for outdoor space. However, it was also noted that this area was very limited with steep grades. The applicant stated that he would also put portable basketball hoops in the parking area for recreation area.

The total number of parking spaces was discussed. It was noted that there are 60 parking spaces on the site with surface parking and one-car garages; 46 parking spaces are required.

The TRC discussed the density proposal and the concern about the overdevelopment of the site. The consensus was that the proposal was too dense and that two of the buildings (8 units) should be eliminated so that there are 12 new dwellings for a total of 15 units with the 3 existing. This is more in line with the density based on the inclusionary zoning requirements. With the reduced density, the total affordable housing units would be 4.

The TRC also discussed the floor plan of the proposed new dwellings which have 3 or 4 bedrooms and a relatively small living area that appears about the size of the one-car garage. There was discussion that the garage would be needed for storage since the units don't have basements. There was further discussion that perhaps some of the garages could be eliminated in the 4-bedroom units for a cost savings.

The applicant stated that he will take a solid look at reducing the density. He was hopeful that by reducing the density he would be able to eliminate the pervious pavement and maybe the need for a hydrant and an upgraded water service.

The TRC members agreed that the BCWA needs to sign off on the water service and the Planning Board will require an approval from that agency. The applicant indicated his engineer had done a study to show that the water was adequate; however, the TRC members want approval from the BCWA which the Planning Board will also want. The Fire Chief also needs to be consulted regarding the need for a hydrant and fire suppression systems.

The applicant was reminded that this is concept plan and the TRC provides input to the Planning Board; however, the TRC recommendations are not binding on the Planning Board and with the benefit of the public hearing process, the Planning Board may require even less density.

The applicant will review the proposal based on the TRC meeting and consider some options.

Meeting ended at 6:30 p.m.

Notes by Diane M. Williamson

Town of Bristol, Rhode Island

Department of Community Development

235 High Street
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TECHNICAL REVIEW COMMITTEE MEETING
206 BAYVIEW AVENUE
APPLICANT: FAIRWIND PROPERTIES, LLC
CONCEPT REVIEW

The Technical Review Committee held a meeting for Concept Review of the proposed plan for property located at 206 Bayview Avenue (plat 47, lot 3).

The meeting was held on **June 28, 2022** at 6:00 p.m. in the conference room at 235 High Street.

Attending:
Diane Williamson - Administrative Officer
Edward Tanner – Zoning Officer
Steve Katz – Planning Board Duty Member
Sue Rabideau – Bristol County Water Authority (BCWA)
Jose DaSilva – Bristol Water Pollution

Danial Ferreira – Applicant
Karen Beck – Principe Engineering
Nathan Chofay - Principe Engineering
Atty. Scott Spear – Blish & Cavanagh

- Second Concept Review for this application. Previous meeting was in November 2021.
- 2.2-acre lot on Bayview Ave. R-10 Zone.
- Existing 3 family dwelling to remain. Existing garage to remain.
- Topography grades to the rear (south) end of the site
- Five residential buildings proposed with four units in each building for a total of 23 units including the existing house.
- Soil test pits will be performed to aid in design of drainage / stormwater management
- Existing utilities that service the property include Town sewer (force main into site), BCWA water, and natural gas
- Applicant would be requesting a waiver for size of parking spaces at nine feet wide instead of the required 10 feet wide. Proposal may also need a waiver from setback
- This application is for a Comprehensive Permit for affordable housing. 25% of units will be affordable. One unit within in each building.
- Units will all be rentals. 3-4 bedrooms per unit. 2.5 baths in new units.
- Existing three-family building has been upgraded and modernized.
- New buildings will be townhouse style with separate entrances and a garage for each.
- Buildings will be slab on grade. No basements would be proposed.
- Existing garage structure would remain and be used as storage for owner and tenants of the property.

- BCWA has concerns about water pressure and volume at this location. Two water mains are located in Bayview Avenue: one with only 15 PSI; and the other line is a high pressure main but only a 2-inch diameter line. Will not be able to tap in a fire hydrant. Applicant will submit water service design info. May use booster pumps. Applicant may be required to pay for BCWA's consulting engineer to run a water service analysis for this proposal. Water pressure is a concern. There is a high pressure, high-capacity water main located in Metacom Avenue that may be tied into. Applicant need to bring a new water main down into site from Metacom Avenue.

- Stormwater Management is proposed as a bio-retention area along the west side of property. May need to design other stormwater mitigation. Design will depend on site soil conditions and engineering analysis. The applicant will provide more information as design progresses. Stormwater management and drainage will likely dictate much of the overall site design.

- Traffic analysis will be required. Applicant has hired an engineer for traffic analysis on Bayview Avenue and the intersection with Metacom Avenue. The driveway intersection with Roger Williams University housing directly across Bayview Avenue is also a concern.

- Wastewater department submitted a letter with comments. TRC discussed that letter. There are issues with the existing sewer manhole and main line in Bayview Avenue. Will need to evaluate the existing line. Applicant may need to install a new manhole at the proposed street lateral in Bayview Avenue for ease of maintenance.

- As a Comprehensive Permit development, there is a minimum 25% affordable housing requirement. Rhode Island Housing application has been submitted and is under review now.

- TRC discussed buffer requirement. Existing trees along edge of property are proposed to remain. May need to look at planting more.

- All utilities on property will be underground.

- There is a minimum open space requirement of 400 square feet for each residential unit. Some open green space for families to utilize. Outdoor patios will be installed for each unit. There is no playground currently proposed due to liability issues.

TRC discussed additional items that will need to be considered:

- Will need a trash and recycling plan
- Plans will need to show any walkways for pedestrians. Sidewalks within the development
- RIPDES permit will be required from RIDEM for a development of this size
- Fiscal impact statement is required for a residential development with 20 or more units
- Variances may be required for parking lot aisle widths, striping, etc.; as well as for multi-family dwellings in R-10 Zone, lot frontage, more than one principal residential structure on a lot, and distance of only five feet between the proposed driveway and neighboring lot to the west.
- School bus stop may be added to front of property
- Curb cut permit will be required for widening of the driveway

- Proposed density of the site at 23 residential units was discussed. Need to evaluate impacts to the area of families vs. students in the rental units. Applicant would prefer families over college students and will design the development towards that demographic.

- Next Steps: up to Applicant to return when ready to file a formal application.

Meeting adjourned at 7:00 p.m.
Notes by Ed Tanner

Town of Bristol, Rhode Island

Department of Community Development

10 Court Street
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February 20, 2025

TO: Planning Board

FROM: Diane M. Williamson, Administrative Officer

RE: Pre-Application Conference for Hotel Gooding Avenue

The above application is before you for a Pre Application Conference. The TRC has had previous concept review meetings and their meeting notes are attached. It is noted that the application has already received a RIDEM Wetlands Permit which is provided for the Board's information.

The process for review of the formal application, in accordance with the recent State Law, is as a Major Land Development. This process has 3 phases of review – Master Plan, Preliminary and Final, with a public hearing at the Master Plan Phase.

Town of Bristol, Rhode Island

Department of Community Development

10 Court Street
Bristol, RI 02809
bristolri.gov
401-253-7000

March 10, 2025

TO: Planning Board

FROM: Diane M. Williamson, Director

RE: Supplemental Memo on Gooding Hotel – Comfort Inn and Suites Pre-application Conference

To further clarify Section 6.6 in the Subdivision and Development Review Regulations, as noted in my previous memo, the Planning Board can require a full Environmental Impact Statement. This requisite would come at the preliminary phase of the application. A full copy of that Section is provided for your information.

It is also recommended that the Planning Board schedule a site visit upon receipt of the Master Plan application and request that the applicant stake out the building envelope location the site.

(3) Failure to protect existing improvements and/or properly repair such improvements should damage occur during construction of the subdivision or development project;

(4) Failure to clean debris from the site and adjacent areas upon completion of construction within the subdivision or development project; or

(5) Failure to complete required improvements to the land within the time prescribed or within any extension granted by the Board.

E. Authority of Board to Take Action

Upon notification of default by the Administrative Officer, the Board shall notify the applicant and order the applicant to show cause why the Board should not take action against the guarantee. If the Board in its sole discretion determines that the default has not been cured within the time set by the Board, then the Board shall withdraw or cash in that portion of the security necessary to correct the deficiencies for which the applicant is deemed to be in default, and the Board shall cause the required improvements to be completed in a satisfactory manner. In the event of a default posing an immediate danger to health, safety or welfare of the Town or its residents, the Administrative Officer shall act immediately to remove or abate such danger, and the Board may seek reimbursement through the guarantee.

F. Partial Release of Performance Guarantee

When an applicant, who has posted a performance guarantee in the amount of all of the required improvements, has completed all improvements except 1) the surface course of pavement; 2) landscaping; 3) lighting; 4) as-built record plan; and, 5) if applicable septic systems; then, the applicant may request a 50% release in the performance guarantee. Said release will only be considered if the following conditions are met: A) all improvements that have been completed have been inspected by and approved by the Planning Board Engineer; B) all invoices of the Planning Board for the project are reimbursed by the applicant; and, C) the remainder of the improvements must be completed with 12 months from the date that the Board approves the release of the 50%. For phased projects, no release shall be considered for any phase until all public improvements are completed for all phases or until the application has completed all but the above list of improvements for all phases. A maintenance guarantee in accordance with this section shall also apply.

6.6 IMPACT STATEMENTS

In certain instances, an impact statement shall be required, at the expense of the applicant. Where an impact statement is required, the applicant may chose the person or company to prepare such statement subject to the prior approval of the Board. Where the Board is given discretion to require an impact statement, it shall only be done pursuant to a vote of the Board with findings setting forth the need for such statement. Such impact statements shall include, but are not limited to, the following:

A. Environmental

In accordance with R.I.G.L. 45-23-60(3), in order to make a positive finding that there will be no significant negative environmental impacts, the Planning Board may require that an environmental impact statement be prepared by the applicant of any subdivision or development project. Any application for a Major or Minor residential subdivision, a nonresidential subdivision, or a Major Land Development shall include a narrative describing the proposed project's major elements, potential significant impacts on the surrounding neighborhood and/or community and the means by which these identified impacts shall be mitigated by the project design or otherwise.

(1) The planning board shall have the authority to require the applicant to prepare an Environmental Impact Study (EIS) to assess the potential short and long term effects of the proposed subdivision or land development project under any of the following conditions:

a. If all or part of the property that is the subject of the application includes land identified by any or all of following agencies; the Bristol planning board, the Bristol conservation commission, the Rhode Island Natural Heritage Program, the Rhode Island Historic Preservation and Heritage Commission, the Nature Conservancy, the RI Department of Environmental Management, the U.S. Geological Survey, the U.S. Environmental Protection Agency, as unique natural areas or areas of critical and/or environmental concern; or

b. The planning board finds that there is reasonable expectation that the proposed subdivision or land development project may have a negative environmental impact on natural systems located on the property or adjacent to the property that is the subject of the application or upon nearby properties or natural systems.

(2) The board shall make findings of fact in writing and shall identify the environmental resources found to be potentially threatened. The board's findings shall be made a part of the record of the application

(3) An EIS required under this section shall be prepared by a qualified professional(s) and shall include research and documentation describing and assessing short and long-term cumulative environmental impacts, which may include but not be limited to impacts upon:

(a) Freshwater wetlands;
(b) Flooding and drainage;
(c) Noise and air quality;
(d) Solid waste generation;
(e) Historic/archaeologic areas;
(f) Traffic/road capacity;
(g) Hydric soils;
(h) Forests and agricultural lands;
(i) Unique vegetation, significant trees, and important scenic or designed landscapes;
(j) Natural heritage sites;
(k) Wildlife and wildlife habitat;

(l) Groundwater quality and quantity;
(m) Surface water quality, streams and rivers; and
(n) coastal resources and features.

(4) If an EIS is required, the applicant shall be so informed at the preliminary stage for a minor subdivision, or the master plan stage for a major subdivision or major land development and shall be advised as to the specific issues that the EIS must address.

(5) For any subdivision or land development project for which an EIS is required, the board shall have the authority to impose conditions on approval, including but not limited to off-site improvements, that, based on the findings and analysis of the EIS, are reasonably necessary to minimize adverse impacts that the development may have on the natural environment.

(6) All Environmental Impact Studies shall be referred to the conservation commission and other appropriate town boards, commissions, or other local, state or federal, agencies for their review and comment prior to planning board approval of the preliminary plan.

(7) The planning board may waive the requirement for an EIS if the development plans include LID Site Design strategies and innovative stormwater management techniques including total site impervious cover be 10 percent or less and total site disturbance of 20 percent or less.

(8) If in the opinion of the planning board, impacts identified in the EIS cannot be adequately mitigated so as to achieve compliance with each of the requirements specified in section 8.6, the planning board shall have the authority to deny approval of the proposed development design.

B. Fiscal

In accordance with R.I.G.L. 45-23-60(1), a fiscal impact statement, detailing the estimated cost of providing services to the proposed development and the estimated revenue to be derived from taxes and other fees, shall be required of all major land development projects and of all major subdivisions of twenty (20) lots or more. A fiscal impact statement may be required of any DPR applicant, in accordance with the parameters set forth herein.

6.7 APPROVAL AND ACCEPTANCE OF PUBLIC IMPROVEMENTS

Approval of a plat by the Planning Board shall be deemed the acceptance by the public of any street or other open space offered therein for dedication. Notwithstanding the acceptance of any land, street, or facility offered for dedication, such acceptance shall not impose any duty or responsibility upon the Town of Bristol to maintain or improve any dedicated streets, areas, or facilities until the Town Council shall have specifically authorized maintenance or improvement under procedures established by State Law or Town Ordinance governing public expenditures for such purposes. The above shall be stated on

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MEMORANDUM

TO: **Diane Williamson, Director of Community Development**
Edward M. Tanner, Principal Planner

FROM: **Amy H. Goins, Esq., Assistant Town Solicitor**
Andrew M. Teitz, Esq., AICP, Assistant Town Solicitor

DATE: **December 19, 2024**

SUBJECT: **Proposed Hotel on Gooding Ave – Review Process**

At your request, we are providing this memo to provide our advice on the proper land use review and approval process for the proposed hotel on Gooding Avenue. It is our understanding that the applicant is preparing to submit a development application to the Town, having received a wetlands alteration permit from DEM. We've reviewed the site plan submitted to DEM in connection with the wetlands permit application. It indicates that the proposed hotel will contain 80 rooms in one two-story building with a footprint of roughly 15,200 square feet.

It is our understanding that two pre-application meetings were held several years ago for the hotel proposal. These meetings did not confer any vested rights to the project. Green Development v. Town of Exeter, 297 A.3d 931 (R.I. 2023). Therefore, if and when the application is formally submitted, it will be reviewed according to the law, ordinances, and regulations in effect at the time it is certified complete. As you know, the Development Review Act was recently amended, and now contains the following definition for a land development project:

"A project in which one or more lots, tracts, or parcels of land or a portion thereof are developed or redeveloped as a coordinated site for one or more uses, units, or structures, including but not limited to, planned development or cluster development for residential, commercial, institutional, recreational, open space, or mixed uses. The local regulations shall include all requirements, procedures, and standards necessary for proper review and approval of land development projects to ensure consistency with this chapter and the Rhode Island zoning enabling act." RIGL 45-23-32(19) (amendments effective Jun. 25, 2024).

Further, a major land development project is defined as follows:

"A land development project that exceeds the thresholds for a minor land development project as set forth in this section and local ordinance or regulation. The process by which major land development projects are reviewed by the local planning board, commission, technical review committee, or administrative officer is set forth in § 45-23-39." RIGL 45-23-32(19) (amendments effective Jun. 25, 2024).

Finally, one of the categories of projects defined as a "minor land development project" (unless specifically designated by the municipality as subject to development plan review) is as follows:

"Seven thousand five hundred (7,500) gross square feet of floor area of new commercial, manufacturing, or industrial development, or less." RIGL 45-23-32(19) (amendments effective Jun. 25, 2024).

Therefore, it is our opinion that this project requires review and approval as a major land development project. The revised definition for a minor land development project means that municipalities can choose to categorize projects that create up to 7,500 sf of new commercial floor area as a minor land development project or require development plan review for such projects. Either way, new commercial floor area *above* 7,500 sf requires review as a major land development project. Please note that the definition of a land development project does not require that the project involve multiple buildings and/or lots – the definition makes it clear that "one or more" buildings and/or lots can constitute a land development project.

As you know, a major land development project requires a public hearing before the Planning Board at the master plan stage. Zoning relief can be granted through unified development review. Because this project requires land development project review, we cannot also require development plan review. RIGL 45-23-36(b) ("An applicant shall not be required to obtain both land development and development plan review, for the same project.").

Please let us know if you have any further questions.

Natural Resource Services, Inc.

Written Narrative in Support of an
Application to Alter a Freshwater Wetland
for a
Hotel Development
A.P. 111, Lot 1; Gooding Avenue
Bristol, Rhode Island

Prepared for:
D&M Boca Development
92 Faunce Corner Road
North Dartmouth, MA 02747

Prepared by:

Scott P. Rabideau, PWS
Principal Biologist

January 29, 2015
Revised December 22, 2022

P.O. Box 311 Harrisville, RI 02830 401-568-7390

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Introduction

Natural Resource Services, Inc. (NRS) has been retained by Dennis DeGrazia of D&M Boca Development to assist with the preparation and submission of an Application to Alter a Freshwater Wetland (AAFW) to the RI Department of Environmental Management (DEM), Office of Water Resources (OWR). It should be noted that D&M Boca Development has a purchase and sale agreement with the current property owner, KenDan, LLC. As such, KenDan, LLC has signed the application form and is considered the applicant when referenced throughout this report.

The wetlands on the property were field delineated and verified by the DEM, OWR (DEM Application No. 13-0098). All of the wetland edge changes outlined in the Department's verification letter dated June 12, 2014 have been made and are reflected on the development plans submitted with this application. A previous application to construct an almost identical building and parking lot was approved under application 15-0033 but the proposed structure was never built.

This written narrative has been prepared to fulfill the requirements outlined in Section 1.10 of the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (the regulations). NRS has performed the required habitat assessments and is responsible for the preparation of this narrative. The applicant has engaged DiPrete Engineering as the engineering consultant. DiPrete is responsible for the development plan, drainage design and all assessments the regulations require to be performed by a RI licensed professional engineer (PE).

Response to Section 1.10

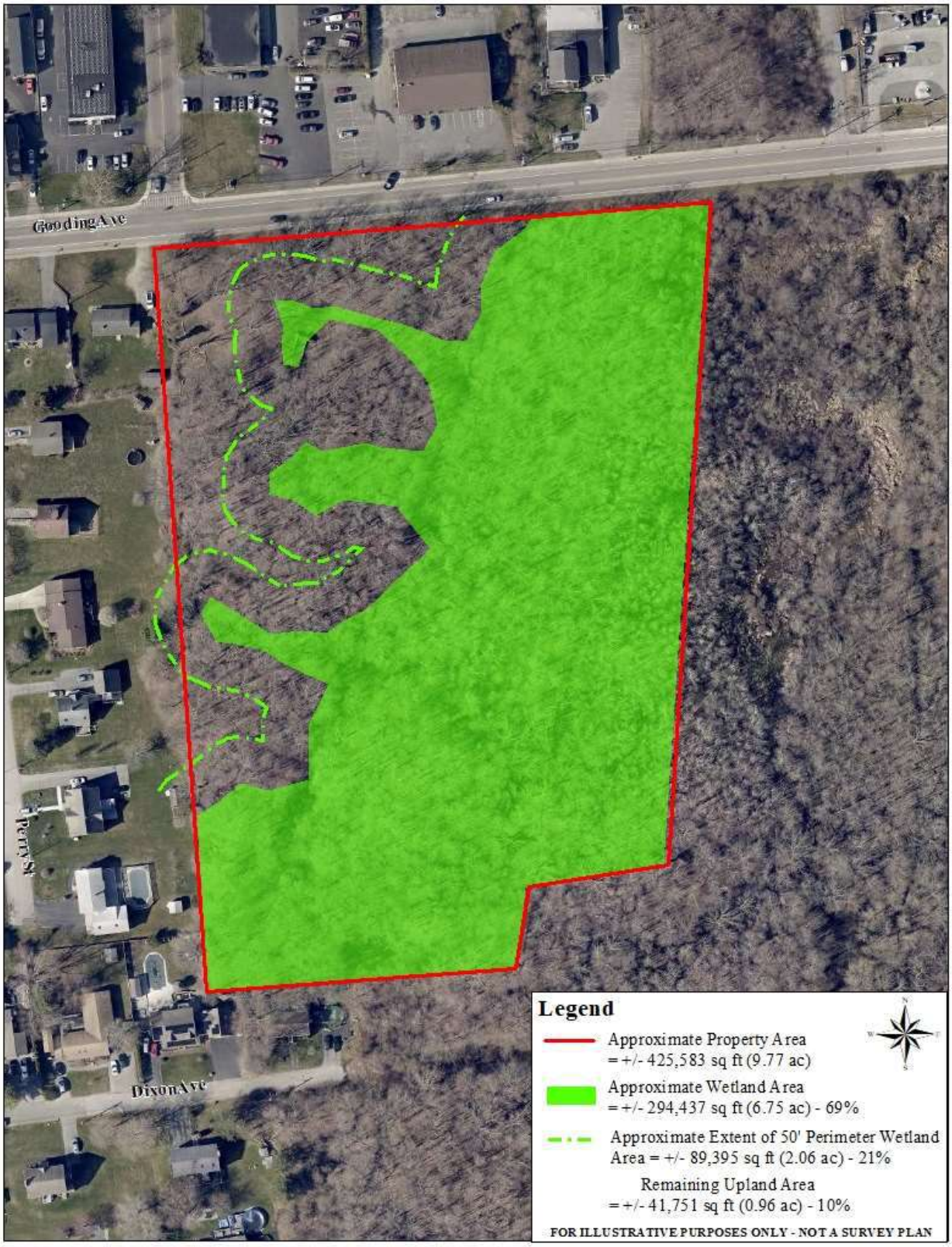
This Section concerns the filing of an Application to Alter a Freshwater Wetland with DEM, OWR. The following responses address each of the pertinent sections of this Rule.

Section 1.10(B)(1): Project Scope

The purpose of this project is to develop an 80 room hotel on A.P. 111, Lot 1, a 9.77 acre parcel situated on the southerly side of Gooding Avenue in the Town of Bristol. It is the applicant's position that the 80 room facility is the minimum size necessary to make the project economically feasible in this location.

The lot is undeveloped and entirely forested. A municipal sewer easement bisects the parcel in its entirety. Figure 1 is a GIS graphic which depicts the verified edge of the freshwater wetland within the boundaries of the property. It has been determined that 69 percent of the lot is swamp (294,437 square feet) and 21 percent of the lot is 50 foot perimeter wetland (89,395 square feet).

Figure 1: Regulated Freshwater Wetlands Present on A.P. 111, Lot 1



The current proposal mirrors the previously permitted development to build a hotel along with associated parking area and stormwater management structures. This facility will be serviced with town water and sewer. The hotel and associated structures will be situated on the northwest most corner of the lot and has been designed to maximize the use of non-jurisdictional upland in their entirety. This design has also made every attempt to avoid, minimize, and mitigate all potential wetland impacts as much as is practicable, including the incorporation of recommendations made by Ronald Gagnon, PE, Chief of the Office of Technical and Customer Assistance as outlined in a letter (September 10, 2014) to Scott Rabideau, PWS as a follow up to a pre-application meeting held on September 3, 2014. Later portions of this report explain these efforts in detail.

In order to achieve the project purpose, it is necessary to alter both swamp and perimeter wetland. The total alterations proposed to each of these regulated wetlands are found in Table 1. Although the development proposed is quite similar to that which was approved in 2015, the proposed alterations reflect a slightly reduced project limit of disturbance (LOD) as reflected in the table below.

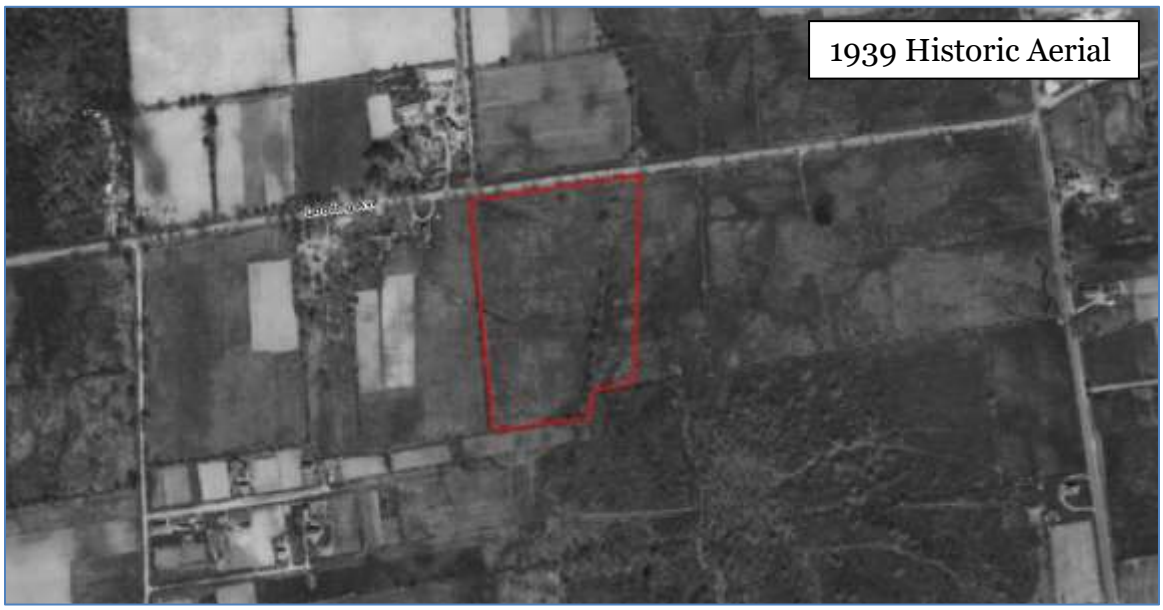
Table 1: Proposed Alterations

Wetland Feature	*Total Proposed Alterations (sq. ft.)*
Swamp	**4,717**
50 foot perimeter wetland	**45,200**

The Rhode Island Soil Survey has the majority of the site mapped as the Stissing soil series. This is a silt loam fine textured soil that is characterized by a high seasonally high water table and is generally indicative of wetlands. NRS field investigations were consistent with the findings of the soil survey, however, areas of soil on the northwest most corner of the lot that are indicative of uplands would be more accurately mapped as a Pittstown soil series.

Land use, as depicted on the map which can be found in Appendix A, derived from the Rhode Island Geographic Information System (RIGIS) Data Distribution System (2020), shows the entirety of the lot mapped as the Deciduous Forest (>80% hardwood). The surrounding area within 150 feet of the property is mapped as Commercial, Medium High Density Residential, Industrial, and Vacant Land to the north and west. The remainder of the surrounding area is mapped as Deciduous Forest (>80 hardwood) to the south and east. The land use map provides justification for the siting of a commercial development along the Gooding Avenue road frontage. The development is consistent with the Town of Bristol's intended use of the property.

A review of historic aerial photographs of the area shows that the entire lot was cleared and used for agricultural purposes in 1939. It appears that the area was left fallow and unaltered after that time. The surrounding area has become more developed over the years including a residential development created in the late 1970s to 1980s. The commercial and industrial uses have also established since the 1980's.



The applicant and D&M Boca will develop the hotel only in the northwest corner of the parcel. A permanent limit of disturbance, once established through DEM permitting, shall be the only active use of the property. A permanent buffer marker shall be placed along the limit of disturbance to demarcate this edge for current and future property owners. The applicant will agree to encumber the remaining land area with a conservation easement to ensure the protection of the swamp and perimeter wetland into the future.

Section 1.10(B)(2): General Provisions

In compliance with Section 1.10(B)(2), all necessary material has been prepared and submitted as part of this application.

The applicant has received a verification of the wetland delineation from the DEM, OWR and is proposing the alteration of 4,717 square feet of federally regulated freshwater wetland. The application qualifies for a self-verification review under the agreement between the DEM and the U.S. Army Corps of Engineers (ACOE).

Section 1.10(B)(4): Avoidance and Minimization Requirements

In accordance with Section 1.10(B)(3) of the Regulations, all AAFW must demonstrate in the form of a written narrative that all probable impacts to freshwater wetlands functions and values have been avoided to the maximum extent possible. The following review criteria have been considered in the applicant's assessment of impact avoidance.

1.10(B)(4)(a) Impact Avoidance:

As currently proposed, this project has achieved a sufficient level of impact avoidance given the existing wetland feature constraints. Due to the configuration of the wetland on the lot, a portion of the work will occur within the swamp and the perimeter wetland. This project has been designed to avoid potential impacts as much as possible. It is the applicant's contention that the current project design clearly illustrates a successful effort to avoid impacts to jurisdictional wetlands, and more importantly wetland functions and values, to the greatest degree practicable and still achieve the project purpose.

a) Whether the primary proposed activity is water-dependent, or whether it requires access to freshwater wetlands as a central element of its primary purpose (e.g., a pier);

This project is neither water-dependent, nor does it require access to freshwater wetlands as a central element of its primary purpose. However, the location and orientation of the onsite wetland resource inhibits the ability to propose this project completely outside of the wetland. In particular, there are multiple fingers of wetland that extend westward upslope. Specifically, the northernmost finger fragments an otherwise large piece of upland. This portion of wetland will have to be filled as a result of this project to create one contiguous piece of upland large enough to support the hotel and parking area.

b) Whether any areas within the same property or other properties owned or controlled by the applicant could be used to achieve the project purpose without altering the natural character of any freshwater wetlands;

There are no alternate areas within the same property that can be used to achieve the project purpose without requiring a greater level of alteration to the freshwater wetlands that occupy this property. The project is proposed to utilize the available upland

that exists in the northwest portion of the lot. There is no other location on this pre-existing lot that would support this project.

c) Whether any other properties reasonably available to, but not currently owned or controlled by, the applicant could be used to achieve the project purpose while avoiding wetland alterations. A property is reasonably available if, in whole or in part, it can be acquired without excessive cost, taking individual circumstances into account, or, in the case of property owned or controlled by the same family, entity, group of affiliated entities, or local, state or federal government, may be obtained without excessive hardship;

No alternate off-site property can be used to accomplish the project goals, and provide a complete or greater level of impact avoidance. The surrounding properties are currently developed with other commercial facilities or residential neighborhoods.

d) Whether alternative designs, layouts or technologies could be used to avoid freshwater wetlands or impacts on functions and values on the subject property or whether the project purpose could be achieved on other property that is reasonably available and would avoid wetlands;

The current project layout was designed to avoid freshwater wetlands as much as possible. No other layouts or technologies could be used that would achieve higher levels of impact avoidance. Although the complete avoidance of wetland impacts cannot be accomplished, the applicant has made every attempt to avoid impacts as much as possible while still achieving the project goals.

e) Whether the applicant has made any attempts (and if so what they were) to avoid alterations to freshwater wetlands by overcoming or removing constraints imposed by zoning, infrastructure, parcel size or the like; and

The alterations to jurisdictional wetlands that are currently proposed are not in part due to zoning constraints. The structures proposed are consistent with land use for this portion of the lot and surrounding area as it is zoned as commercial.

f) Whether feasible alternatives that would not alter the natural character of any freshwater wetlands on the subject property or on property that is reasonably available, if incorporated into the proposed project, would adversely affect public health, safety or the environment.

Not applicable, as no feasible alternatives are available that would achieve the project goals without creating a greater impact to the wetland. Furthermore, the project as currently designed does not pose a significant adverse effect on public health, safety, or the environment.

Section 1.10(B)(4)(b): Impact Minimization

As a complete level of impact avoidance cannot be attained and still achieve the proposed project goals, the applicant has attempted to minimize resulting wetland impacts to the greatest extent practicable. Specifically, the applicant has maximized use of the available upland portions of the lot. In addition, stormwater mitigation systems will be implemented to promote treatment of runoff and groundwater recharge and erosion controls will be implemented to protect areas outside the limit of disturbance.

a) Whether the proposed project is necessary at the proposed scale or whether the scale of the wetland alteration could be reduced and still achieve the project purpose;

The project as currently proposed is the result of multiple designs and reconfigurations to minimize impacts. Any further minimization to the project scale will compromise the project goals and make the project unviable economically. It has been determined that an 80 room hotel is the smallest number of rooms that could be created to maintain an economic benefit to the owner and the Town of Bristol.

b) Whether the proposed project is necessary at the proposed location or whether another location within the site could achieve the project purpose while resulting in less impact to the wetland;

There are no alternate locations available that would allow for a greater level of impact minimization. The majority of the lot is comprised of swamp. The location of the proposed project is situated in the area of the lot with the most available upland. This upland is fragmented by fingers of wetland extending into the upland from the main portion of the wetland situated on the lower remaining portion of the lot. Any other alternative would require a greater level of wetland impact.

c) Whether there are feasible alternative designs, layouts, densities or technologies, that would result in less impact to the wetland while still achieving the project purpose; and

The current project designs, layouts, and technologies that are now proposed will all provide the greatest level of impact minimization possible, while still achieving the intended project goals.

d) Whether reduction in the scale or relocation of the proposed project to minimize impact to the wetland would result in adverse consequences to public health, safety or the environment.

This project will not result in an adverse impact to public health, safety, or the environment. A reduction in the scale or relocation of this project would create an economically unviable project which would result in a termination of the project as a whole. This would also nullify the economic benefits provided to the town by this project.

Section 1.10(B)(4)(c): Mitigating Measures

As part of the overall project design, mitigation measures will be incorporated into this development plan. Such measures will include the installation of proper erosion and sedimentation control measures that will be established along the limits of disturbance associated with this project, as depicted by the accompanying site plan. Once established such measures will remain in place and be monitored on a regular basis until all construction activity has ceased and the surrounding grade has stabilized. Strict utilization of this measure should ensure that neither erosion nor sedimentation potentially occurring during the initial construction process adversely or significantly impacts the overall water quality of the surrounding freshwater wetlands. During construction soil erosion and sedimentation controls will be implemented along all limits of work (Barrett et al. 1995; Knowen 1990).

Additionally, in compliance with the *Rhode Island Stormwater Design and Installation Standards Manual* (RI Department of Environmental Management 2010), multiple best management practices have been proposed to mitigate any impacts that could result from the introduction of new impervious surfaces to this site. This will include the implementation of a stormwater management treatment system designed by DiPrete Engineering. These controls will collect and provide treatment for overland flow from the impervious parking area and roof top and will also promote infiltration of the water.

Furthermore, screening vegetation will be planted along portions of the limit of disturbance as indicated on the plan. This will provide a buffer from noise and aesthetic disturbance to the wetland and wildlife that use the wetland and were designed in accordance with the Wetland BMP Manual (April, 2010).

Section 1.10(B)(5) - Evaluation of Wetland Functions, Values and Impacts

Evaluation Methodology:

Natural Resource Services, Inc. (NRS) performed several inspections and assessments of this property. The initial site visit was conducted on April 17, 2014 for the purpose of delineating the on-site freshwater wetland and documenting site conditions. Follow-up inspections were conducted on December 22nd (8am – 11am) and December 30, 2014 (1pm – 3:30pm) in order to gather additional site data. An additional site visit was done on December 15th 2022 to discern if the current site conditions match those which were previously documented on site.

Habitat assessments are conducted to evaluate the wildlife habitat potential offered by the subject site, and to assist in the preparation and submission of the application package. During its habitat assessment, Natural Resource Services, Inc. (NRS) utilizes direct site inspections, existing data review, and conducts a detailed assessment of existing and potential wildlife usage. This inspection details those species directly observed or indicated through physical evidence (tracks, scat, etc.), or identified by unique signature

traits (call). In addition, those species which could and could not utilize the site, dependent upon features present within the property, are identified.

NRS field delineations consist of the identification and classification of both soil and vegetation. The soils are examined for the presence of hydric condition indicators. The facultative status of vegetation present is determined to further deduce the position of any wetland edge.

USGS Topographic maps are examined for the depiction of blue-lined streams, waterbodies or depressed areas. The Rhode Island Soil Survey is examined for the presence of hydric soils, any perennial waterways, as well as any hydrologic connection to known public water supplies.

Where applicable, FEMA floodplain insurance maps are consulted to determine if the subject property would be affected by any existing 100-year floodplain. Additionally, the DEM Division of Water Resources Water Quality Standards Map is utilized to determine the existing quality of fresh and/or salt waters within the project area. As applicable, the latest State's List of Impaired Waters is consulted. NRS also examines available RIGIS data layers concerning rare species, historic districts, historic aerial photographs, and other pertinent information.

Qualifications:

Natural Resource Services, Inc. personnel involved in the evaluation of the subject property and preparation of this application include:

- Scott P. Rabideau, *PWS/Principal*
- Hannah Chace, *Staff Biologist*

Detailed statements of qualification are included in Appendix C of this narrative, which present all relevant experience.

Freshwater Wetland Characteristics:

This delineation was based on the predominance of hydrophytic vegetation (OBL, FACW, FAC, and FACU) as defined in Appendix 2 of the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act in combination with observed surface hydrology indicators as well as hydric soil indicators as defined in the Field Indicators for Identifying Hydric Soils in New England, Version 3 (2004). The primary indicators observed on the site include *mucky mineral horizon, depleted matrix below a dark surface horizon,* and *redox within a dark surface horizon*. Vegetation within the wetland on site was dominated by a mix of Red Maple, Black Tupelo, Highbush Blueberry and Morrows Honeysuckle. However, the wetland continues eastward and is dominated by a different mix of vegetation with a more flooded hydrologic regime. Vegetation dominating those areas north of the site includes species of willow and thick patches of common reed and other marshy vegetation.

Table 2: Vegetation observed in abundance throughout this wetland:

Common Name	Scientific Name	Vegetative Layer
Red Maple	*Acer rubrum*	Overstory
Black Tupelo	*Nyssa sylvatica*	Overstory
White Oak	*Quercus alba*	Overstory
Green Ash	*Fraxinus pennsylvanica*	Overstory
Highbush Blueberry	*Vaccinium corymbosum*	Understory
*Morrow's Honeysuckle	*Lonicera morrowii*	Understory
Sweet Pepperbush	*Clethra alnifolia*	Understory
Southern Arrowwood	*Viburnum dentatum*	Understory
Spicebush	*Lindera benzoin*	Understory
*Japanese Honeysuckle	*Lonicera japonica*	Vine
Poison Ivy	*Toxicodendron radicans*	Vine
Sensitive Fern	*Onoclea sensibilis*	Herbaceous
Skunk Cabbage	*Symplocarpus foetidus*	Herbaceous
Royal Fern	*Osmunda regalis*	Herbaceous
Sphagnum Moss	*Sphagnum*	Herbaceous

*Indicates an invasive species

The upland on the site is situated on the northwest corner of the lot and is bordered by residential development and Gooding Avenue. This area contains a significant amount of invasive species that were found throughout the area. This area is a mixed hardwood forest with specimens of varying age including few old growth trees. The area has been exposed to nearby development of surrounding roads, commercial, and residential use. During the most recent site visit, portions within the previously approved LOD had been cleared. Portions of the understory within the approved LOD were less vegetated than those upland and wetland areas outside the LOD. However the clearing did not appear to be recent, and occurred as a result of the previous permitting history.

Table 3: Vegetation observed in abundance throughout the upland:

Common Name	Scientific Name	Vegetative Layer
Black Cherry	*Prunus serotina*	Overstory
American Beech	*Fagus grandifolia*	Overstory
Red Maple	*Acer rubrum*	Overstory
Black Birch	*Betula lenta*	Overstory
White Oak	*Quercus alba*	Overstory
*Morrow's Honeysuckle	*Lonicera morrowii*	Understory
*Multifloral Rose	*Rosa multiflora*	Understory
Blackberry	*Rubus L.*	Understory
Sweet Pepperbush	*Clethra alnifolia*	Understory
Southern Arrowwood	*Viburnum dentatum*	Understory
*Oriental Bittersweet	*Celastrus orbiculatus*	Vine
Dewberry	*Rubus flagellaris*	Vine
*Japanese Honeysuckle	*Lonicera japonica*	Vine
Poison Ivy	*Toxicodendron radicans*	Vine
Roundleaf Greenbrier	*Smilax rotundifolia*	Vine
Princess Pine	*Lycopodium obscurum*	Vine

Cinnamon Fern	*Osmundastrum cinnamomeum*	Herbaceous

*Indicates an invasive species

During the latest site visit staff biologist Hannah Chace located four points utilizing a handheld GPS which were obtained to document surrounding conditions during the habitat assessment. Worksheets detailing conditions observed are located in Appendix B.

Wildlife & Wildlife Habitat:

NRS performed three (3) site visits in which a detailed assessment of the property was conducted. The purpose of these assessments was to determine which, if any, wildlife species currently use the available habitat for feeding, breeding, or other related activities. This study details both those wildlife species directly observed, as well as any identified by unique signature traits (signs/ vocalizations). Further evidence of wildlife inhabitation or utilization of the area (tracks, scat, burrows, tree cavities, trails, nests) has also been identified. The direct visual observations of wildlife were limited due to the winter season dates for the field work.

Table 4: Wildlife Indicators: Those species that were directly observed or signs of inhabitance were directly observed during either of the NRS site visits.

Common Name	*Scientific Name*
Blue Jay	*Cyanocitta cristata*
Carolina Wren	*Thryothorus ludovicianus*
Chickadee, Black-capped	*Poecila atricapilla*
Whitetail Deer	*Odocoileus virginianus*
Eastern Gray Squirrel	*Sciurus carolinensis*

The following table (Table 5) is a summary of species that likely use this habitat. This list was developed based on site characteristics, vegetative communities, and observed habitat indicators.

Table 5: Anticipated Wildlife Utilization of Subject Wetland:

Common Name	*Scientific Name*
Common Yellowthroat	*Geothlypis trichas*
Cooper's Hawk	*Accipiter cooperii*
Downy Woodpecker	*Picoides pubescens*
Eastern American Toad	*Bufo americanus americanus*
Eastern Box Turtle	*Terrapene carolina carolina*
Eastern Garter Snake	*Thamnophis sirtalis sirtalis*
Eastern Gray Squirrel	*Sciurus carolinensis*
Eastern Pheobe	*Sayornis phoebe*
Eastern Screech Owl	*Otus asio*
Eastern Wood Peewee	*Contopus virens*
European Starling	*Sturnus vulgaris*
Gray Fox	*Urocyon cinereoargenteus*

Hairy Woodpecker	*Picoides villosus*
Hermit Thrush	*Catharus guttatus*
House Finch	*Carpodacus mexicanus*
House Sparrow	*Passer domesticus*
Mourning Dove	*Zenaida macroura*
Northern Black Racer	*Coluber constrictor constrictor*
Northern Cardinal	*Cardinalis cardinalis*
Northern Flicker	*Colaptes auratus*
Northern Red-backed Salamander	*Plethodon cinereus*
Northern Ringneck Snake	*Diadophis punctatus edwardsii*
Northern Saw-Whet Owl	*Aegolius acadicus*
Ovenbird	*Seiurus aurocapillus*
Purple Finch	*Carpodacus purpureus*
Raccoon	*Procyon lotor*
Redeyed Vireo	*Vireo olivaceus*
Scarlet Tanager	*Piranga olivacea*
Skunk, Striped	*Mephitis mephitis*
Song Sparrow	*Melospiza melodia*
Veery	*Catharus fuscescens*
Virginia Opossum	*Didelphis virginiana*
Warbling Vireo	*Vireo gilvus*
White-breasted Nuthatch	*Sitta carolinensis*
White-footed Mouse	*Peromyscus leucopus*
Yellow Throated Warbler	*Thryothorus ludovicianus*
Yellow Warbler	*Dendroica petechia*

Wetland Values:

The habitat value of this site for most wildlife species is limited by the proximity of adjacent roadways and residential and commercial development. Additionally, the sewer easement has created an edge through the center of this lot, bisecting the lot into an east and west side. The RIGIS data layer does designate this site as potential habitat for rare species. A recent inquiry to DEM revealed the presence of the Northern Leopard Frog, a species of state concern, last identified in 1985. This species was identified near Leila Jean Drive, well off-site to the south of the project location. The wetland area proposed for alteration is not a valuable habitat for this species of concern, nor was this species identified during the assessment site visits.

Photo 1: Depicting cleared sewer easement - 12/15/2022

The west side of the lot, where the project is proposed, is comprised of ruderal forest with an invasive species dominated understory. The west side is also bordered by residential and commercial development and does not contain many high value habitat features. This would preclude use of this site by those species that are sensitive to human inhabitation and related disturbances. There are no stone walls, flowing or standing waterbodies, and woody debris and density of vegetation is limited on this side of the site. The wetland on the western portion of the lot consists of narrow fingers extending into the upland. The hydrology in these wetlands is seasonally saturated and the presence of the wetland is indiscernible to the untrained eye.

The portion of the property to the east of the sewer easement represents the portion of the lot with the highest value. The land slopes down to the east to a large contiguous wetland that ranges from saturated to seasonally flooded with more of an apparent wetland signature. The area is dominated by Red Maple and Black Tupelo and contains a denser understory which provides nesting opportunity and protection for birds. The eastern portion of the lot is contiguous with a large tract of habitat protected by the Town of Bristol which contains swamp/marsh wetland and an intermittent stream (Silver Creek) that is hydrologically connected with Bristol Cove. This area will remain protected through a proposed conservation easement as a result of this project.

Table 6: Differentiation of Habitat Values

West Side of Sewer Easement (proposed to be developed)	East Side of Sewer Easement (to remain unaltered)
Ruderal forest (few mature specimens)	Red Maple/Tupelo dominated swamp

Invasive species dominate understory	Less invasive species, dominated by Arrowwood, High Bush Blueberry, Spicebush, etc.
Surrounded by edges created by sewer easement, residential and commercial development, and Gooding Avenue	Contiguous with larger tract of land preserved by Town of Bristol
Limited habitat features, i.e. no stone walls, no rivers, no open water, no dense understory, no emergent wetland	Greater habitat value including snags, dense understory, riverine habitat, emergent wetland plants, pockets of standing water (includes off-site contiguous land)

Proposed Impacts:

The commercial development of this site will not significantly impact the functions and values of the wetland complex even though the proposed design will require filling a portion of the swamp and alterations to the perimeter wetland. As previously stated, the habitat value of the western section of the swamp is lower than the portion to the east of the sewer easement. The value of the western portion is low due to the anthropogenic disturbances that have historically occurred in and around this area. East of the sewer easement is a larger area of swamp with higher habitat value that extends off-site and is contiguous with conservation land. This area has a higher overall value and will not be altered.

Erosion and sedimentation controls will be implemented throughout all phases of construction to ensure protection of the off-site wetland and perimeter wetland. Additionally, screening vegetation will be planted along a portion of the limit of disturbance as indicated on the accompanying plan consisting of native Northern White Cedar to further protect the swamp and its functions and values.

Recreation and Aesthetics:

The habitat assessment performed by NRS also attempted to identify the existing aesthetic or open space value provided by this site.

Currently, public access to this site is restricted due to the private nature of the property. The mucky nature of soil and dense vegetation within the interior of the wetland further limits access to the wetland for passive recreational pursuits. The greatest value of the wetland from an aesthetic point of view is from casual observance while utilizing nearby areas. This value will not be altered as there will be no significant impact to the biological wetland.

The identified wetland features represent the potential for photography, bird watching, nature study, and limited trapping for the current owner only. This property is not open to the public. The potential for hunting is restricted again by the private nature of the property and by the proximity to residential/commercial properties. Additionally,

the lack of flowing or open waterbodies within the wetland would further restrict its use for fishing, swimming, or canoeing.

No geological or archaeological sites were directly observed or identified within the subject property during the initial inspection. In addition, the RIGIS data layers concerning historic features and conservation areas do not depict any such features as being present or affected by this project.

The commercial development of this site should not result in a reduction of the currently available recreational or aesthetic values.

Flood Protection:

This proposal will not significantly impact the flood protection value of the wetland. The construction of the stormwater management systems will provide treatment, storage and infiltration of stormwater and will be designed in accordance with the RI DEM Rhode Island Design and Installation Standards Manual (December 2010). Furthermore the wetland proposed to be altered resides on a hillslope and therefore does not provide significant flood storage volume but rather channels flow westward toward the lower gradient wetland that does provide flood storage.

Groundwater and Surface Water Supplies:

Protection of groundwater and surface water supplies will be ensured through proper implementation of stormwater management controls. Currently, within the vicinity of the proposed project area, water during rain events either infiltrates or runs off via the finger-like drainage way wetlands down to the larger lower gradient wetland to the east of the sewer easement. This proposal calls for the installation of a stormwater management system designed by DiPrete to promote treatment and infiltration of run-off and will be intended to mitigate the effect of the proposed impervious surface. Furthermore, the development will be serviced with a municipal water supply and therefore a significant impact to the local watershed is not expected.

Water Quality:

There are no open or flowing bodies of water on the site. The nearest waterbody is Silver Creek which is depicted as an intermittent stream on the USGS topographic map. This feature is approximately 500 feet east at its closest point to the limit of disturbance and flows south where it eventually drains into Bristol Harbor. To ensure protection of water quality within the vicinity of the project area stormwater management systems and erosion controls will be implemented in conjunction with this project. In addition the hotel will be serviced with municipal water and sewer lines which reduces the potential for this project to have an adverse effect on surrounding water quality.

Soil Erosion and Sediment Control:

DiPrete has prepared a Soil Erosion and Sedimentation Control Plan in accordance with the RI Pollution Discharge Elimination Systems (RIPDES) standards. This plan details all measures to be implemented during construction. Part of the plan requires soil erosion and sedimentation controls which will be implemented along all limits of work. These will consist of hay bales with silt fence as detailed on the accompanying plan set. Once established, such measures would remain in place and be monitored on a regular basis until all construction activity has ceased and the surrounding grade has stabilized. Strict application of this measure will ensure that neither erosion nor sedimentation potentially occurring during the construction process adversely or significantly impacts the overall water quality of nearby freshwater wetlands (Barrett et al. 1995; Knowen 1990).

Section 1.10(E) – Review Criteria

a) Significant reduction in the overall wildlife production or diversity of a wetland;

As proposed, this project will not pose a significant reduction on the overall wildlife production or diversity of this wetland. The area of perimeter wetland and minimal areas of swamp proposed to be altered do not represent a significantly valuable habitat. The lower gradient portion of the wetland to the east of the sewer easement is of higher value and will remain intact along with its functions and values. Furthermore, the upland perimeter wetland area proposed to be altered is comprised of numerous invasive plant species and is within close proximity to residential, commercial, and industrial development.

b) Significant reduction in the ability of a wetland to satisfy the needs of a particular wildlife species;

This project will also not result in a significant reduction of the wetlands ability to satisfy the needs of a particular wildlife species. The majority of the work, besides the indicated wetland alteration, will occur outside of the biological wetland. Although a greater portion of the perimeter wetland will be altered, there are no species that specifically utilize this area and no other areas of the wetland and perimeter wetland that are proposed to remain unaltered. Furthermore, the area proposed to be altered is comprised of a greater density of invasive species than the area proposed to remain intact. Studies have shown that invasive species can provide a lower food source value than native counterparts (Smith et al., 2007).

c) Significant displacement or extirpation of any wildlife species from a wetland or surrounding areas due to the alteration of the wetland;

This project will also not cause a significant displacement or extirpation of any wildlife species from this wetland. As previously stated this is a substantially large wetland system contiguous with conservation land and extends off-site to the east and south.

The proposed alteration will not significantly reduce the range of any potential species utilizing this area to a degree that would result in the extirpation of any such species. There will be ample habitat space available within the wetland and perimeter wetland after these plans have come to fruition.

d) Any reduction in the ability of the wetland to ensure the long-term viability of any rare animal or rare plant species;

This project will also not reduce the ability of the wetland to ensure long-term viability of any rare animal or plant species. No rare animal or plant species was observed on-site either within the wetland or perimeter wetland. The potential does exist for the occurrence of rare or endangered species within interior portions of the wetland as does with all large swamp wetlands. However, the overall nature of the wetland will not be impacted by this project as proposed. Proper stormwater mitigation systems will be implemented to mitigate potential impacts from the impervious pavement and erosion controls will be implemented to protect the wetland resource. The hotel will be serviced with municipal water and sewer. These will all contribute to the protection of this large wetland system.

e) Any degradation in the natural characteristic(s) of any rare wetland type;

This project will not degrade the natural characteristic of any rare wetland type. The wetland proposed to be altered is a slope seep wetland situated in a drainage way. The wetland associated with this project meets the regulatory definition of a swamp which is not considered a rare wetland type. Furthermore, for the portion of wetland within the lot limits, no observation of any rare species was observed that would give this swamp special consideration.

f) Significant reduction in the suitability of any wetland for use by any resident, migratory, seasonal, transient, facultative, or obligate wildlife species, in either the short- or long-term as a travel corridor; feeding site; resting site; nesting site; escape cover; seasonal breeding or spawning area;

This project as proposed will not result in a significant reduction in the suitability of any wetland for use by any resident, migratory, seasonal, transient, facultative, or obligate wildlife species, in either the short- or long-term as a travel corridor; feeding site; resting site; nesting site; escape cover; seasonal breeding or spawning area. There are large portions of the wetland that will remain unaltered that will still provide habitat that extend off-site to the east and south, portions of which are mapped as conservation land. Screening vegetation will also be planted along the limit of disturbance near the wetland to provide some degree of buffer from noise and light. Once this project plan has been implemented the wetland system will still provide significant value to wildlife species.

g) Any more than a minimal intrusion of, or increase in, less valuable, invasive or exotic plant or animal species in a wetland;

This project will not result in any more than a minimal intrusion of, or increase in, less valuable, invasive or exotic plant or animal species in this wetland. The area of perimeter wetland that will be impacted is already comprised of invasive species. The alteration proposed in this area will result in the removal of these invasive species. The wetland to the east of the sewer easement is dominated by native species, however some invasive species already exist there, likely from original disturbance from the creation of the sewer line and from historic farming practices. The screening vegetation will consist of native species and provide a vegetative border to the limit of disturbance.

h) Significant reduction in the wildlife habitat functions and values of any wetland which could disrupt the management program for any game or non-game wildlife species carried out by state or federal fish, game, or wildlife agencies;

This project will not significantly reduce the wildlife habitat functions and values of this wetland to a degree that would disrupt any management program for any game or non-game wildlife species carried out by state or federal fish, game, or wildlife agencies. There is significant wildlife value for the portion of wetland to the east that is contiguous to the larger wetland that exists off-site. This portion of the wetland will not be altered, only the portions in the northwest corner of the lot with lower value. In addition, the habitat value specific to the area being altered is lower than other portions of the wetland due to the historically disturbed nature of the land, predominance of invasive species, and proximity to anthropogenic disturbances (*e.g.* other commercial/residential buildings and heavily travelled roadways).

i) Significant reduction in overall current or potential ability of a wetland to provide active or passive recreational activities to the public;

This proposal will not result in the significant reduction in overall current or potential ability of a wetland to provide active or passive recreational activities to the public since these potential abilities are already limited in value.

j) Significant disruption of any on-going scientific studies or observations;

This project will not pose a significant disruption of any on-going scientific studies or observations. This project is located on private property for which no permission has been given to conduct scientific research.

k) Elimination of, or severe limitation to traditional human access to, along the bank of, up or down, or through any rivers, streams, ponds, or other freshwater wetlands;

This proposal will not cause the elimination of, or severe limitation to traditional human access to, along the bank of, up or down, or through any rivers, streams, ponds, or

other freshwater wetlands. No such accesses currently exist on this private parcel besides the cleared sewer line easement which will not be altered.

l) Any reduction in water quality functions and values or negative impacts to natural water quality characteristics, either in the short- or long-term, by modifying or changing: water elevations, temperature regimes, volumes, velocity of flow regimes of water; increasing turbidity; decreasing oxygen; causing any form of pollution; or modifying the amount of flow of nutrients so as to negatively impact wetland functions and values;

This project will not result in any reduction in water quality functions and values or negative impacts to natural water quality characteristics, either in the short- or long-term, by modifying or changing: water elevations, temperature regimes, volumes, velocity of flow regimes of water; increasing turbidity; decreasing oxygen; causing any form of pollution; or modifying the amount of flow of nutrients so as to negatively impact wetland functions and values. Proper erosion controls, stormwater mitigation systems, and the use of municipal water and sewer are being proposed in conjunction with this project to ensure the protection of water quality.

m) Any placement of any matter or material beneath surface water elevations or erection of any barriers within any ponds or flowing bodies of water which could cause any hazards to safety;

The project does not propose any placement of any matter or material beneath surface water elevations or erection of any barriers within any ponds or flowing bodies of water.

n) Significant loss of important open space or significant modification of any uncommon geologic or archaeological features;

This project will not cause the significant loss of important open space or significant modification of any uncommon geologic or archaeological features. A review of historic aerial photographs (RIGIS) shows that this area was disturbed for agricultural purposes in 1939 and left fallow after this time. This early successional forest is of the most common forest type in Rhode Island.

o) Significant modification to the natural characteristics of any wetland area of unusually high visual quality;

This project will not result in the significant modification to the natural characteristics of any wetland area of unusually high visual quality. The visual aesthetics of the wetland are not unusually high. The gradient from wetland to upland in the area proposed to be altered would likely be overlooked by an untrained observer.

p) Any decrease in the flood storage capacity of any freshwater wetland which could impair the wetland's ability to protect life or property from flooding or flood flows;

This project will not pose a decrease in the flood storage capacity of this freshwater wetland which could impair the wetland's ability to protect life or property from flooding or flood flows. There will be an increase in the impervious surface on the subject parcel, however the creation of stormwater mitigation systems will mitigate this impact. Furthermore the entire project is outside of the 100 year flood zone as based on FEMA FIRM maps. The wetland proposed to be altered is on a hill slope and therefore directs flow downslope. For this reason the wetland has little to no flood storage capacity. The lower gradient portion of the wetland on the east side of the sewer line does provide substantial storage and will not be altered.

q) Significant reduction of the rate at which flood water is stored by any freshwater wetland during any flood event;

This project will also not result in the significant reduction of the rate at which flood water is stored by this freshwater wetland during any flood event. Currently, within the vicinity of the project area, stormwater either infiltrates or flows downslope to the lower gradient wetland. The wetland proposed to be altered has little to no flood storage capacity.

r) Restriction or significant modification of the path or velocities of flood flows for the 1-year, 10-year, or 100-year frequency, 24-hour, Type III storm events so as to cause harm to life, property, or other functions and values provided by freshwater wetlands;

This project will not cause any restrictions or significant modifications of the path or velocities of flood flows for the 2-year, 10-year, 25-year, or 100-year frequency, 24-hour, Type III storm events so as to cause harm to life, property, or other functions and values provided by this freshwater wetland. The wetland proposed to be altered has little to no flood storage capacity. Runoff emanating from new impervious surface proposed for this project will be directed to a treatment system designed in accordance with the RI Stormwater Design & Implementation Standards Manual. This will protect the water quality of the wetland and promote infiltration of the runoff into the groundwater.

s) Placement of any structure or obstruction within a floodway so as to cause harm to life, property, or other functions and values provided by freshwater wetlands;

The project will not place any structure or obstruction within a floodway so as to cause harm to life, property, or other functions and values provided by the freshwater wetland. There are no streams, rivers, or other floodway channels within the vicinity of the proposed work. Additionally, the entire project area is outside of the 100 year flood zone.

t) Any increase in run-off rates over pre-project levels or any increase in receiving water/wetlands peak flood elevations for the 1-year, 10-year, or 100-year frequency, 24-hour, Type III storm events which could impair the wetland's ability to protect life or property from flooding or flood flows;

This project will not create an increase in run-off rates over pre-project levels or any increase in receiving water/wetlands peak flood elevations for the 2-year, 10-year, 25-year, or 100-year frequency, 24-hour, Type III storm events which could impair the wetland's ability to protect life or property from flooding or flood flows. As stated previously, the wetland proposed to be altered has little to no flood storage capacity due to its situation upon a backslope of a drumlin. Additionally, this proposal calls for the creation of a stormwater treatment system that will be designed to promote treatment and infiltration of run-off and will be intended to mitigate the effect of the proposed impervious surface. Please see the accompanying plan for stormwater mitigation details.

u) Any increase in run-off volumes and discharge rates which could, in any way, exacerbate flooding conditions in flood-prone areas;

This project will not pose an increase in run-off volumes and discharge rates which could, in any way, exacerbate flooding conditions in flood-prone areas for the reasons outlined in sections 16 – 20 of this portion of the report.

v) Significant changes in the quantities and flow rates of surface or groundwater to or from isolated wetlands (e.g., those wetlands without inflow or outflow channels);

This project will not pose significant changes in the quantities and flow rates of surface or groundwater to or from isolated wetlands. The proposed stormwater management plan will promote infiltration into groundwater to maintain a pre-project hydrology. Furthermore, the development will be serviced with municipal water and not create new draw on the local aquifer.

w) Placement of any structural best management practices within wetlands, or proposal to utilize wetlands as a detention or retention facility;

This project will not require the placement of any structural best management practices within wetlands, or proposal to utilize wetlands as a detention or retention facility. The proposed infiltration basin will be constructed within upland.

x) Any more than a short-term decrease in surface water or groundwater elevations within any wetland;

It is not anticipated that this project will result in any more than a short-term decrease in surface water or groundwater elevations within this wetland. The stormwater management plan will promote infiltration of overland flow during rain events and the hotel will be serviced with municipal water so the local aquifer will not be impacted.

y) Non-compliance with the Rhode Island Department of Environmental Management Water Quality Regulations; or

This proposed project will comply with the Rhode Island Department of Environmental Management Water Quality Regulations. The proposed project will not contradict

the standards set forth in these regulations. Stormwater mitigation systems and erosion control measures will be implemented to achieve this goal.

z) Any detrimental modification of the wetland's ability to retain or remove nutrients or act as natural pollution filter.

This project will not pose any detrimental modification of the wetland's ability to retain or remove nutrients or act as natural pollution filter. The majority of the work will occur outside of the wetland. The portion of wetland proposed to be altered is situated in a drainageway which directs flow to the lower gradient portion of the wetland where most of the treatment will occur. This portion of the wetland will not be altered. This project does not represent a significant alteration to the wetland or its ability to retain or remove nutrients or act as a natural pollution filter.

Conclusion

The applicant has proposed the construction of an 80 room hotel along the Gooding Avenue frontage of A.P. 111, Lot 1. The applicant, KenDan, LLC, has had all freshwater wetlands on the 9.77 acre parcel delineated and verified by the DEM, OWR. The lot is bisected with a 12 inch municipal sewerline.

This utility easement segments the wetland into two distinct habitat types. The swamp west of the easement is ruderal forest with an understory dominated by state listed invasive species. The swamp east of the easement has a well-developed Red maple/Tupelo canopy with a native species understory. All wetland impacts are proposed on the west side of the utility easement, minimizing the effect on freshwater wetland functions and values.

The project has been designed by DiPrete Engineering to comply with the RI Stormwater Design and Installation Standards Manual. A Soil Erosion and Sedimentation Control Plan has also been developed by DiPrete in conformance with the revised Soil and Sedimentation Control Handbook. NRS has performed the requisite habitat assessments and prepared the written narrative required by the freshwater wetland regulations for any AAFW.

The project is consistent with local zoning and is supported by the Town of Bristol. It will add to the commercial tax base and still preserve, through a conservation restriction, a significant area of natural habitat. Impacts to freshwater wetland functions and values have been avoided to the maximum extent possible while still achieving the project purpose. Impacts considered unavoidable have been minimized and a series of mitigation measures developed to offset short and long-term effects from the hotel.

The application as presented documents that the development plan does not represent a random, unnecessary or undesirable alteration to freshwater wetlands. The DEM, OWR is in a position to evaluate the application and, after the required public notice, issue a Permit to Alter Freshwater Wetlands.

Literary References

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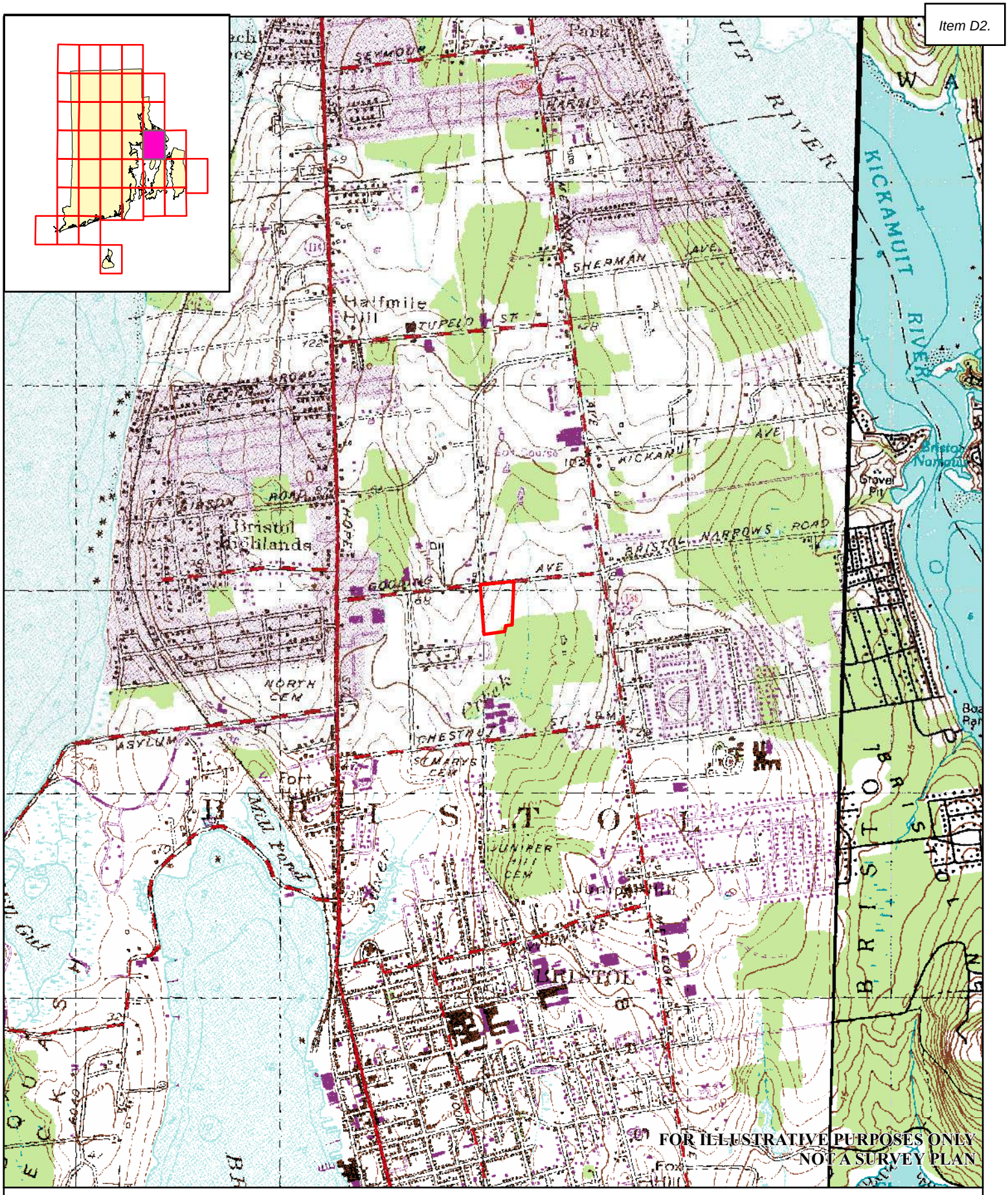
Appendix A

USGS Topographic Map
USDA Soil Survey Map
Landuse Map



USGS Topographic Map
Gooding Ave
A.P. 111 Lot 1

Bristol, RI
Bristol Quad Map

Approximate Site Location

USGS Topographic Series
Contour Interval 10 Feet
National Geodetic Vertical Datum of 1929

0 1,000 2,000 4,000 Feet

RIGIS
Natural Resource Services, Inc.
PO Box 311
180 Tinkham Lane
Harrisville, RI 02830
p: (401) 568-7390

USDA Soil Survey Map
Gooding Ave
A.P. 111 Lot 1

Bristol, RI

Approximate Site Location

0 100 200 400 Feet

Spring 2022 aerial
RI DEM Mapping

Natural Resource Services, Inc.
PO Box 311
180 Tinkham Lane
Harrisville, RI 02830
p: (401) 568-7390

Land Use Map
Gooding Ave
A.P. 111 Lot 1

Bristol, RI

Approximate Site Location

0 100 200 400 Feet

N W E S

Spring 2022 aerial
RI DEM Mapping

RIGIS
Natural Resource Services, Inc.
PO Box 311
180 Tinkham Lane
Harrisville, RI 02830
p: (401) 568-7390

Appendix B

DEM Permit, Application No. 15-0033
Habitat Assessment Graphic
Habitat Assessment Worksheet

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

August 22, 2018

CERTIFIED MAIL

Kendan, LLC
c/o Donovan and Sons, Inc.
613 Aquidneck Avenue
Middletown, RI 02842

Re: Wetland Application No. 15-0033; RIPDES File No. RIR101247; and UIC No. 001650 in reference to the location below:

approximately 220 feet south of Gooding Avenue, approximately 200 feet southeast of the intersection of Gooding Avenue and Broadcommon Road, Assessors Plat 111, Lot 1, in the Town of Bristol, Rhode Island.

"Appendix A"

PERMIT TO ALTER FRESHWATER WETLANDS

Dear Mr. Donovan:

The Department of Environmental Management's ("DEM") Freshwater Wetlands Program ("Program") has reevaluated your Application to Alter a Freshwater Wetland regarding the project proposed at the above referenced property ("subject property"/"site"). This reevaluation is in response to settlement negotiations involving the original decision issued by this Office on March 30, 2016 for Application No. 15-0033 and has been accomplished in accordance with Rule 10.10 of the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act ("Rules"). That decision was contested by you in your appeal to the DEM Administrative Adjudication Division for Environmental Matters (AAD). As a result of your appeal, settlement negotiations were entered to seek resolution of the contested issues and a Consent Agreement has been entered between you and the DEM. This consent agreement was executed by you on August 9, 2018, and by the DEM on August 22, 2018, and is enclosed herein as a matter of record.

As a result of settlement negotiations, the Program has reviewed and evaluated a revised project proposed by you and as described by revised site plans received by the Program on May 14, 2018. The revised site plan is noted as Appendix B in the above-mentioned consent agreement. The Program has determined that the revised project does not represent a random, unnecessary, or undesirable alteration of freshwater wetlands. Therefore, the Program, in response to our evaluation and the fully executed consent agreement, hereby issues this permit to alter freshwater wetlands, subject to all controlling Rules and the Terms and Conditions set forth herein.

Permit Terms and Conditions for Wetland Application No. 15-0033:

1. This letter is the DEM's permit for this project under the R.I. Fresh Water Wetlands Act, Rhode Island General Laws (RIGL) Section 2-1-18 et seq.

2. This permit is specifically limited to the project, site alterations and limits of disturbance as detailed on the site plan submitted with your application and received by the DEM on May 14, 2018. A copy of the site plan stamped approved by the DEM is enclosed. Changes or revisions to the project which would alter freshwater wetlands are not authorized without a permit from the DEM.

3. Where the terms and conditions of the permit conflict with the approved site plan, these terms and conditions shall be deemed to supersede the site plan.

4. You must notify this Program in writing immediately prior to the commencement of site alterations and upon completion of the project.

5. A copy of the stamped approved site plans and a copy of this permit must be kept at the site at all times during site preparation, construction, and final stabilization. Copies of this permit and the stamped approved plans must be made available for review by any DEM representative upon request.

6. Within ten (10) days of the receipt of this permit, you must record this permit in the land evidence records of the Town of Bristol and supply this Program with written documentation obtained from the Town showing this permit was recorded.

7. The effective date of this permit is the date this letter was issued. This permit expires on August 22, 2019 and may be renewed after this date pursuant to Rules 10.07F and 11.02.

8. Any material utilized in this project must be clean and free of matter which could pollute any freshwater wetland.

9. Prior to commencement of site alterations, you shall erect or post a sign resistant to the weather and at least twelve (12) inches wide and eighteen (18) inches long, which boldly Identifies the initials "DEM" and the application number of this permit. This sign must be maintained at the site in a conspicuous location until such time that the project is complete or the DEM issues a Notice of Completion of Work for the project.

10. Temporary erosion and sediment controls detailed or described on the approved site plans shall be properly installed at the site prior to or commensurate with site alterations. Such controls shall be properly maintained, replaced, supplemented, or modified as necessary throughout the life of this project to minimize soil erosion and to prevent sediment from being deposited in any wetlands not subject to disturbance under this permit.

11. Upon permanent stabilization of all disturbed soils, temporary erosion and/or sediment controls consisting of staked hay bales, straw wattles or silt fence must be removed.

12. All plantings of shrubs, trees or other forms of vegetation as shown or detailed on the approved plans, or detailed in this permit, must be installed as soon as possible after completion of final grading; weather and season permitting. You must notify this Program in writing upon completion of the required plantings for a compliance inspection by a Program representative.

13. The planting of trees and/or shrubs proposed between the project and any adjacent freshwater wetland areas, except for necessary replacement, must be allowed to develop naturally without being subjected to mowing or manicuring.

14. Any plantings which fail to survive one full growing season shall be replaced in-kind. Replacement plantings shall be similarly guaranteed for one full growing season.

15. You are obligated to install, utilize and follow all best management practices detailed or described on the approved site plans in the construction of the project to minimize or prevent adverse impacts to any adjacent freshwater wetlands and the functions and values provided by such wetlands.

16. You must provide written certification from a registered land surveyor or registered professional engineer that the stormwater drainage system including any and all basins, piping systems, catch basins, culverts, swales and any other stormwater management control features have been constructed/installed in accordance with the site plans approved by this permit. This written certification must be submitted to this Program within twenty (20) days of its request or upon completion of the project.

17. Artificial lighting authorized by this permit must be directed away from all vegetated wetland areas. Where this is not possible, the use of deflectors to concentrate lighting away from vegetated wetlands must be employed.

18. An environmental consultant, experienced in site assessments and measures necessary to protect sensitive aquatic environments or sensitive ecosystems, must be employed prior to the commencement of site alterations to monitor this project and to ensure compliance with the terms and conditions of this permit. This Program must be notified in writing of the consultant chosen to comply with this condition and must receive monthly written progress reports from the consultant regarding compliance with this permit until such time that the project is complete, or this Program issues a Notice of Completion of Work.

19. Also prior to commencement of any site alterations, permanent buffer zone markers must be installed along the limit of disturbance at the locations indicated in red ink on the approved site plans (sheet 7 of 10) in order to provide permanent reference points on site that are clear to present and future property owners. Acceptable permanent type markers include 4" x 4" pressure treated timber posts, galvanized fence posts with cap, or granite or concrete bounds. Markers must extend a minimum 24" above grade. A permanent-type tag or sign labeled "RIDEM Buffer Zone" must be placed on each marker. A permanent-type fence at least 24" tall placed along the limits of disturbance may be substituted where desired. No alterations of any kind are permitted beyond these markers without first obtaining the necessary permit from this Program.

20. Immediately upon installation of the buffer zone markers, this Program must be contacted to arrange an on-site inspection. Once proper installation has been confirmed by this Program, work may be initiated on the project as herein approved.

21. This Program has made a specific revision to the approved site plans. This revision is clearly marked in red on the approved plans. This project must take place in compliance with this revision. Specifically, nine (9) additional Northern White Cedar trees measuring five feet tall must be installed along the Limit of Disturbance immediately west of wetland flag A21 continuing in a westerly direction eight feet on center to the edge of the Perimeter Wetland. Also, the swamp on the subject property has been appropriately labeled.

Pursuant to the provisions of Rules 7.09 and 11.04, as applicable, any properly recorded and valid permit is automatically transferred to the new owner upon sale of the property.

Additionally, the Program has reviewed this project in accordance with the standards of the RIPDES General Permit for Storm Water Discharge Associated with Construction Activity ("CGP"). Construction Activities which disturb one (1) or more acres of land and where storm water runoff is directed, via a point source, into a separate storm sewer system or into the waters of the State, are required to seek coverage under the Rhode Island Pollutant Discharge Elimination System (RIPDES) storm water permit. Our review has determined that the project has been designed to meet the requirements of the 2013 GP. This determination therefore includes your final authorization to discharge storm water associated with construction activity under the CGP.

For future references and inquiry, your permit authorization number is RIPDES No. **RIR101247**. Both the owner and the contractor retained to undertake the construction activity are required to comply with all terms and conditions of the CGP. This includes maintaining the Soil Erosion and Sediment Control (SESC) Plan, performing the required inspections and maintenance of the selected Best Management Practices (BMPs), and retaining inspection records. Further information on the requirements of the CGP is available at:
http://www.dem.ri.gov/pubs/regs/regs/water/ripdesca.pdf .

Please be aware that the RIDEM's Rules and Regulations Governing the Establishment of Various Fees require that RIPDES CGP permit holders to pay an Annual Fee of $100.00. An invoice will be sent to the owner on record in May/June of each year if the construction was still active as of December 31st of the previous year. The owner will be responsible for the Annual Fee until the construction activity has been completed, the site has been properly stabilized, and a completed Notice of Termination (NOT) has been received by the RIPDES Program. A copy of the NOT can be found attached to the CGP on the web page referenced above.

This application review has also included review of any subsurface disposal of stormwater subject to the RI DEM Underground Injection Control (UIC) Program. This Freshwater Wetlands Permit will also serve as the UIC Program permit for this project, which has been assigned the **UIC file number 001650** for any subsurface disposal of stormwater on the site. The following conditions are specific to this UIC Program Permit:

1) Any alterations or modifications to the disposal system from that approved herein, including permanent closure, must be reviewed and approved by the UIC Program prior to being affected.

2) Any inadvertent or deliberate discharge of waste oil or any other pollutant to the subsurface disposal system requires the immediate notification of the UIC Program.

3) The UIC Program must be provided the name and address of any new property owner in writing within thirty (30) days upon any future transfer of the property.

This Permit also constitutes your authorization from the U.S. Army Corps of Engineers ("Corps") under Section 404 of the Clean Water Act for the work proposed. Your project qualifies as a Pre-Construction Notification ("PCN") activity under the Rhode Island General Permit (General Permit No. NAE-2016-2264), (RI GP). You can view this permit at: "http://www.nae.usace.army.mil/Portals/74/docs/regulatory/StateGeneralPermits/RI/Rhode_Island_General_Permits_2017.pdf. **You are, therefore, not required to file a separate application with the Corps.**

Please note that the General Conditions within the RI GP apply to all activities authorized under the RI GP. Please review them carefully to thoroughly familiarize yourself with their contents. You may wish to discuss all permit conditions with your contractor to ensure that the work can be accomplished in a manner which conforms to all requirements.

You are required to comply with the terms and conditions of this permit and to carry out this project in compliance with the Rules at all times. Failure to do so may result in an enforcement action by this Department and/or subject you to the enforcement provisions of the Corps' regulations.

In permitting the proposed alterations, the DEM assumes no responsibility for damages resulting from faulty design or construction. This permit does not remove your obligation to obtain any local, state, or federal approvals or permits required by ordinance or law and does not relieve you from any duties owed to adjacent landowners with specific reference to any changes in drainage.

If you have any questions regarding this matter, you may contact me or Jane Kelly of my staff at this Office (telephone: 401-222-6820).

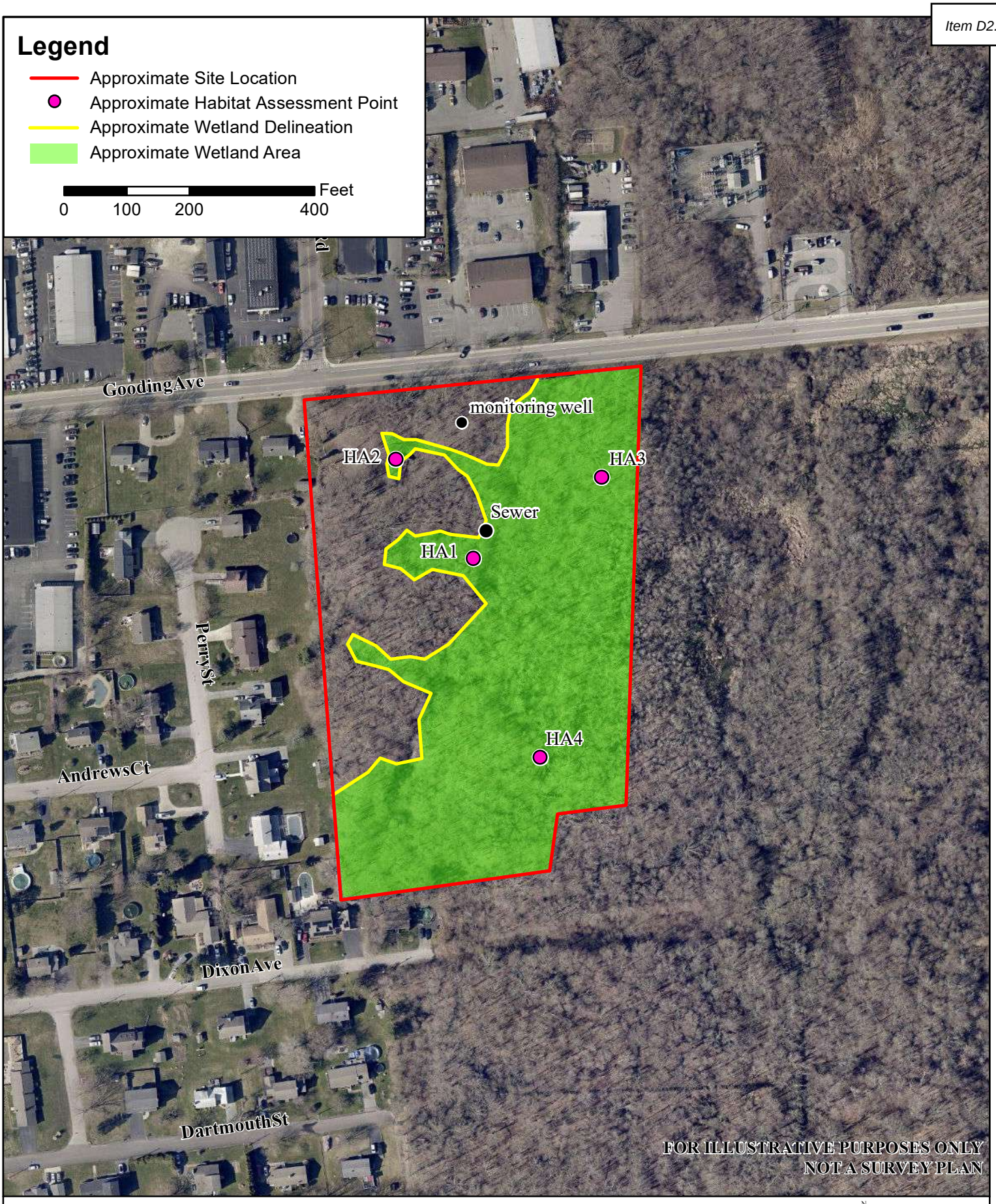
Sincerely,

Martin D. Wencek

Martin D. Wencek, Permitting Supervisor
Office of Water Resources/Permitting Section
Freshwater Wetlands Program
MDW/mdw

Enclosure: Approved Site Plans (Appendix B)
Consent Agreement

xc: David Kerins, Administrative Adjudication Division
Mary Dalton, Clerk, Administrative Adjudication Division
Tricia Quest, Esq., DEM Office of Legal Services
Eric Beck, Chief, DEM Office of Water Resources
Dianne M. Williamson, Community Development Director, Town of Bristol
Richard J. Pimenta, Building Official, Town of Bristol
Taylor Bell, U.S. Army Corps. Of Engineers
Mary Shekarchi, Esq.
Mollie Titus, DiPrete Engineering, Inc.
Scott Rabideau, Natural Resource Services, Inc.



Habitat Assessment
Gooding Ave
A.P. 111 Lot 1

Bristol, RI

Performed by:
Staff biologist Hannah Chace - 12/15/2022
Located using a hand-held Trimble GeoXH

Spring 2022 aerial
RI DEM Mapping

Natural Resource Services, Inc.
PO Box 311
180 Tinkham Lane
Harrisville, RI 02830
p: (401) 568-7390

HABITAT ASSESSMENT WORKSHEET

NRS Project #:___22-263_____
Date: 12/15/2022 Time:_12:00 -2:00 pm Weather: 30°F___Cloud Cover: overcast
Observer:____HC_____

Wetland (HA1 outside impact area)

- At least seven (7) vegetative species listed.
  - Morrows Honeysuckle, Poison Ivy, Black tupelo, Red maple, Multiflora rose, Cinnamon fern, Spicebush
- Evidence of flooding?
  - No evidence of flooding this was along the sloped edge, appears to be seasonally saturated
- In watershed of public drinking water supply?
  - No
- Any evidence of human disturbance present?
  - Yes, there is a sewer easement which cuts this section of swamp from other portions of the swamp. Also somewhat near the roadway and residential areas to the north and east.
- Does the wetland extend off-site/ is it connected to a larger wetland system?
  - The wetland does extend off site to the south and east.
- Flowing waterbodies?
  - None within the project site but Silver Creek, a river, is located directly east of the site within the same wetland complex as those on site.

Wetland (HA2 – Disturbed wetland- B series)

- At least seven (7) vegetative species listed.
  - Sensitive fern, Common reed, Red maple, Poison ivy, Goldenrod, Japanese honeysuckle, tall grass species.
- Evidence of flooding?
  - No, this is also along the sloped edge, difficult to distinguish as wetland, no flooding
- In watershed of public drinking water supply?
  - No
- Any evidence of human disturbance present?
  - Yes, some cutting within the understory appears to have taken place, most likely because of the previous permit as there were also a few erosion controls along the edge of the old limit of disturbance still present.
- Does the wetland extend off-site/ is it connected to a larger wetland system?
  - This portion of wetland labeled the B series connects to the rest of the wetland complex to the south
- Flowing waterbodies?
  - None within the project site but Silver Creek, a river, is located directly east of the site within the same wetland complex as those on site.

Old erosion controls

Windthrown tree within B series

Wetland (HA3 – interior wetland, near roadway)

- At least seven (7) vegetative species listed.
  - Highbush blueberry, Poison ivy, white oak, multiflora rose, red maple, dewberry, Cinnamon fern
- Evidence of flooding?
  - No, appears more likely to have some surface water present but primarily saturated, more wetland microtopography here than to the west
- In watershed of public drinking water supply?
  - No
- Any evidence of human disturbance present?
  - Can still hear and see the roadway
- Does the wetland extend off-site/ is it connected to a larger wetland system?
  - The wetland does extend off site to the south and east.
- Flowing waterbodies?
  - None within the project site but Silver Creek, a river, is located directly east of the site within the same wetland complex as those on site.

Rock wall adjacent to HA4

Wetland (HA4 – interior wetland, further from roadway)

- At least seven (7) vegetative species listed.
  - Highbush blueberry, winterberry, red maple, swamp white oak, dewberry, Cinnamon fern, sensitive fern, sphagnum
- Evidence of flooding?
  - No, appears more likely to have some surface water present but primarily saturated, more wetland microtopography here than to the west
- In watershed of public drinking water supply?
  - No
- Any evidence of human disturbance present?
  - Some residential homes nearby but less disturbances and quieter than the rest of the site
- Does the wetland extend off-site/ is it connected to a larger wetland system?
  - The wetland does extend off site to the south and east.
- Flowing waterbodies?
  - None within the project site but Silver Creek, a river, is located directly east of the site within the same wetland complex as those on site.
  -

Some flooding adjacent to HA4

Rule 10.02E.4.a – Wildlife and Wildlife Habitat

- A listing of observed and potential wildlife species; see attached
  - Observed
    - Black capped chickadee (Call)
    - Blue Jay (Call)
    - White tailed deer (Scat throughout site)
    - Paper wasp (visible nest)

- What type of wildlife species benefit most in this wetland? What features are available to support this determination? Place corresponding number next to feature:

1.) Birds; 2.) Small mammals; 3.) Large mammals; 4.) Reptiles 5.) Amphibians; 6.) Odonata 7.) Fish

Feature:
Tree cavities/nest holes: 1,2
dead snags: 1,2
rock crevices:
flat rocks:
Beaver lodges/dams:
stone walls: 2,4,5
organic debris/leaf litter:
Water soaked/rotten logs:
overhanging branches:
steep, dirt banks with nest holes (swallow nests)
sphagnum carpet:
emergent vegetation (odonates):
Nests observed:
Extreme dense vegetation:

- Are there travel corridors within the wetland or property? List exact location:
  - Yes, there do appear to be some deer trails throughout the property an cross through the stone wall along the eastern side of the property in some locations. Additionally, the sewer line may also be utilized by large mammals such as deer as there was significant deer scat along the cleared sewer easement line.

Rule 10.02E.4.b – Recreation and Aesthetics

- Overall aesthetic value of wetland?
  - Moderate. The portion of wetland to the north of the sewer line has minimal aesthetic value as it is separated from the larger system, much more exposed to the roadway and surrounding residential areas and is generally more disturbed and colonized by non-native species such as Morrow's honeysuckle. The value increases further interior but does not provide more than moderate aesthetic value related to view or wildlife.

- Potential onsite for:

Hunting		No
Trapping		No
Wildlife observation	Yes	
Photography	Yes	
Bird watching	Yes	
Swimming		No
Canoeing		No
Fishing		No

Hiking	Yes

- Public access to wetland?
    - No public access as the property is private

Rule 10.02E.4.c – Flood Protection

- Can the wetland temporarily store flood waters?
    - Yes some areas, along the eastern edge however the majority of wetlands on site are seasonally saturated, including those within the proposed limit of disturbance.

- Will the inflow of flood waters endanger surrounding upland development?
    - No

- Does the wetland currently receive waters from existing adjacent stormwater facilities?
    - None observed

- What is the hydrology of the wetland?
    - Seasonally saturated primarily on site, flooded to the east

- Will an influx of flood waters (as a result of the filling of a portion of the wetland) result in an increase potential for flood events in areas surrounding the wetland/ downstream?
    - No, very little filling is required within the wetland, and only within seasonally saturated areas. Additionally, the wetland system itself is large has the capacity to adjust to any small influx.

Rule 10.02E.4.d – Groundwater and Surface Water Supplies

- Is the wetland groundwater fed?
    - Yes

- Does the wetland receive surface waters from surrounding uplands or via a culvert?
    - Both

- Does water flow out of the wetland or is it retained?
    - Flows out

Rule 10.0E.4.e – Water Quality

- Evidence of human disturbances that negatively impacted water quality?
    - There is some trash within the wetland along the edge of the roadway

- Inflow of waters from culverts, stormwater runoff, etc. that may negatively affect water quality?

- Stormwater runoff from the road likely contributes to negative water quality on the flooded areas to the east of the property

Orange coloration within standing water adjacent to roadway

- Evidence of eutrophication?
  - Some evidence within adjacent property to the south

Appendix C

Statements of Qualification

SCOTT P. RABIDEAU

1001 Hill Road, Pascoag, RI · (401) 556-6095 · nrsscott@gmail.com

PROFESSIONAL EXPERIENCE

PRESIDENT/PRINCIPAL BIOLOGIST — 1987–PRESENT

NATURAL RESOURCE SERVICES, INC, HARRISVILLE, RI

Natural Resource Services, which was founded by Scott Rabideau in 1987, is a private environmental consulting firm specializing in freshwater and coastal wetland studies in Rhode Island and Massachusetts. Experience within the company includes:

- Conducting wetland delineations
- Designing replacement wetlands
- Restoring wetlands
- Conducting wildlife habitat evaluations
- Permitting alterations through state and federal agencies
- Providing representation at public hearings
- Providing expert testimony
- Hiring, training, and managing a staff of up to 12

ADMINISTRATOR — 1987–1988

NORTHBRIDGE NURSING HOME, NORTHBRIDGE, MA

Oversaw operations and management of a 100-bed non-union skilled nursing facility.

PERSONNEL DIRECTOR — 1985–1987

HOPKINS HEALTH CENTER, NORTH PROVIDENCE, RI

Responsible for hiring, managing, and scheduling all professional and non-professional nursing staff in a 200-bed unionized skilled nursing facility.

MANAGER, FAXON FARM — 1982–1985

LINCOLN SCHOOL, PROVIDENCE, RI

Managed a 32-acre environmental education center and athletic facility, developed nature programs, and managed wetland and upland habitat at a private K–12 school.

EDUCATION

MASTER OF SCIENCE, APPLIED MANAGEMENT — 1986

LESLEY COLLEGE, CAMBRIDGE, MA

BACHELOR OF SCIENCE, NATURAL RESOURCES — 1982

UNIVERSITY OF RHODE ISLAND, KINGSTON, RI

PROFESSIONAL LICENSES & CERTIFICATIONS

SENIOR PROFESSIONAL WETLAND SCIENTIST #1410
SOCIETY OF WETLAND SCIENTISTS

OWTS INSTALLER #L1379
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

ELECTED POSITIONS

STATE REPRESENTATIVE, DISTRICT 60 1995–2002
RI GENERAL ASSEMBLY, BURRILLVILLE, RI

- Ranking minority member, Committee on Judiciary
- Ranking minority member, House Committee on Environmental Accountability
- Ranking minority member, Joint Committee on Energy and the Environment
- Ranking minority member, Committee for Redistricting

PUBLIC APPOINTMENTS

SPECIAL MASTER, SUPERIOR COURT 2009–PRESENT
TILLINGHAST VS. RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

- Acting on behalf of the Superior Court to seek resolution in dispute between the defendant and plaintiff regarding freshwater wetland alterations.

JUDICIAL NOMINATING COMMISSION 2014-2020
STATE OF RHODE ISLAND

- Appointed by Governor Lincoln Chafee.
- Responsible for vetting candidates seeking appointments to all state courts, including Supreme, Superior, District, Family, Works Compensation, and Traffic.
- Meeting quarterly or as required to fulfill the statutory mandate for providing the governor with qualified candidates for judicial vacancies.

LEGISLATIVE COMMISSION 2013-2015
FRESHWATER WETLANDS ACT REVIEW

- Acted as a small business representative on the commission.
- Held hearings and heard testimony on changes to the RI Freshwater Wetlands Act.
- Drafted a bill to replace the previous statute—the act was passed by the General Assembly and signed into law by Governor Raimondo in July 2015.

PUBLIC APPOINTMENTS, CONT.

BOARD OF SEWER COMMISSIONERS, CHAIRMAN 2006–2007
TOWN OF BURRILLVILLE, RI

BOARD OF SEWER COMMISSIONERS 2004–2008
TOWN OF BURRILLVILLE, RI

VICE CHAIRMAN, CONSERVATION COMMISSION 1983–1985
TOWN OF REHOBOTH, MA

PROFESSIONAL ORGANIZATIONS

THE WILDLIFE SOCIETY 1985–PRESENT

INVESTMENT REVIEW COMMITTEE MEMBER 2013–2017

- Met on a quarterly basis to review TWS Endowment Accounts.
- Responsible for adjusting account allocations in conformation with TWS Executive Committee's guidelines.

SOCIETY OF WETLAND SCIENTISTS 1995–PRESENT

RI ASSOCIATION OF WETLAND SCIENTISTS

CHARTER MEMBER 1992–1998

PRESIDENT/MEMBER OF BOARD OF DIRECTORS 1993–1994

TREASURER/MEMBER OF BOARD OF DIRECTORS 1992–1993

US DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE 1989–1990

PROJECT EARTH TEAM

PHILANTHROPIC ORGANIZATIONS

TRUSTEE, JUNE ROCKWELL LEVY FOUNDATION 2018–PRESENT

- One of 10 trustees responsible for administering a $30 million charitable trust.
- Responsible for reviewing and distributing grants to qualified non-profits in Providence County.

RI FOREST CONSERVATORS ORGANIZATION 2001–PRESENT

PHILANTHROPIC ORGANIZATIONS, CONT.

OCEAN STATE POWER SCHOLARSHIP FOUNDATION 1995–2002
BOARD OF DIRECTORS

OCEAN STATE POWER COMMUNITY GRANT FOUNDATION 1995–2002
BOARD OF DIRECTORS

VOLUNTEER WORK

BURRILLVILLE LITTLE LEAGUE 2009–PRESENT

- Volunteer umpire for youth baseball

EXPERT QUALIFICATIONS

WETLAND DELINEATIONS, HABITAT EVALUATIONS, & WETLAND PERMITTING

- RI Department of Environmental Management
- Administration Adjudication Division

WETLAND DELINEATIONS, HABITAT EVALUATIONS, SOIL SCIENCE & COASTAL PERMITTING

- RI Coastal Resources Management Council

WETLAND DELINEATIONS, HABITAT EVALUATIONS, & SOIL SCIENCE

- Superior Court, Worcester County, MA
- Superior Court, Bristol County, MA
- Superior Court, Fall River, MA

WETLAND DELINEATIONS, HABITAT EVALUATIONS, SOIL SCIENCE & WETLAND PERMITTING

- Superior Court, Providence County, RI
- Superior Court, Kent County, RI
- Superior Court, Newport County, RI

Natural Resource Services, Inc.

HANNAH CHACE
Wetland Biologist

EXPERIENCE

Wetland Biologist 6/2020 – Present

Natural Resource Services, Inc. Harrisville, RI

- **Field Work Experience:** Conducted field work including wetland delineations, habitat assessments, wetland restorations, buffer zone management projects and submerged aquatic vegetation surveys throughout Rhode Island, Massachusetts, and Connecticut;
- **Technical Writer:** Interpret plan sets and provide technical written documentation of impact avoidance and minimization techniques for written narratives submitted for permitting to DEM and CRMC.

EDUCATION

Bachelor of Science Degree, Environmental Science and Management May 2020

Soil Science Minor

University of Rhode Island Kingston, RI

RELATED SKILLS

Wetland delineation; vegetation identification; avian, herp and mammal identification; aerial photograph interpretation; working knowledge of GPS; utilization of the ESRI ArcGIS software and manipulation of RIGIS and MassGIS data; inventorying of wildlife and vegetation.

Bristol, Rhode Island

Mainstay/Sleep Inn Hotel

July, 2020

TRAFFIC IMPACT STUDY

BETA
701 George Washington Hwy
Lincoln, Rhode Island 02865
401.333.2382
www.BETA-Inc.com

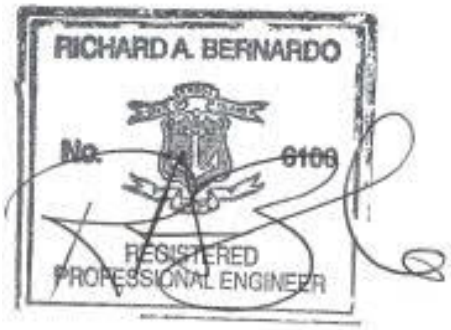
Mainstay/Sleep Inn Hotel
Bristol, Rhode Island

TRAFFIC IMPACT STUDY

Prepared by: BETA GROUP, INC.

Prepared for: Mr. Dennis DeGrazia
D&M, LLC
92 Faunce Corner Road, Suite 160
North Dartmouth, MA 02747

July, 2020



Richard A. Bernardo, PE
Vice President

July 31, 2020

Mr. Dennis DeGrazia
D&M, LLC
92 Faunce Corner Road, Suite 160
North Dartmouth, MA 02747

Re: Proposed Land Development Project
Mainstay/Sleep Inn Hotel
Bristol, Rhode Island
Traffic Engineering Services

Dear Mr. DeGrazia:

BETA Group, Inc., in accordance with our scope of services, has completed a traffic impact study for a proposed land development project in the Town of Bristol, Rhode Island. The site is located on the southerly side of Gooding Avenue just east of Broadcommon Road. The parcel is defined as Assessor's Plat 111, Lot 1 and contains approximately 9.78 acres of undeveloped and wooded land.

Based on information provided by the site engineer, *DiPrete Engineering*, and a review of the proposed development plan, it is our understanding that project includes construction of a three-story *Mainstay/Sleep Inn*, building containing 80 rooms with an associated 80 space parking lot. Access and egress to the hotel will be provided from two new driveways on Gooding Avenue with one full access and the second limited to an entrance only.

The study included herein was conducted to determine the adequacy of the existing servicing roadways to accommodate anticipated traffic to be generated by the land development project. An analysis of potential impacts to the roadway capacity and safety has been completed and is discussed in the following report.

Very truly yours,
BETA Group, Inc.

Paul J. Bannon
Associate

Richard A. Bernardo, P.E.
Vice President

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1.0 INTRODUCTION

The objective of the following study is to assess the potential traffic impacts associated with a proposed hotel development project in the Town of Bristol, Rhode Island. The property is situated on a parcel of land along the southerly side of Gooding Avenue, between Broadcommon Road and Metacom Avenue (Route 136). The subject lot contains approximately 9.78 acres of undeveloped and wooded land. Refer to Figure 1, Project Vicinity Map, on the following page for the project location within the town.

The new development will include construction of a *Mainstay/Sleep Inn* hotel containing 80 rooms. The hotel will be serviced by two new driveways on Gooding Avenue. The driveways to an 80 space parking lot will be provided at a full access curb opening on the western end of the property, and a main one-way entrance only driveway separating the combination *Main Stay* and *Sleep Inn* components of the hotel project. The one-way main driveway allows immediate access to the front entrance of these buildings.

The study summarized herein focused on both traffic flow efficiency and safety along Gooding Avenue in the immediate area, and at the proposed site driveways. The impacts associated with the site related traffic have been defined and evaluated in accordance with standard traffic engineering guidelines and procedures.

The traffic engineering study completed for this project included the following:

- A traffic counting program to define existing traffic patterns and operating characteristics along the servicing roadway including Gooding Avenue. The data collection included an automatic traffic recorder (ATR) count on Gooding Avenue and manual turning movement count (TMC) at the intersection of Gooding Avenue with Metacom Avenue (Route 136).

- An analysis of crash records obtained from the Bristol Police Department to determine if there are any safety concerns relative to the frequency, severity, or pattern of crashes in the project area.

- An inventory of the physical roadway characteristics of Gooding Avenue to determine the adequacy of the existing roadway geometric features in reference to access, safety, and operations.

- An estimate of future traffic volumes for the proposed commercial development was calculated using data from the "Trip Generation" Manual, an informational report published by the Institute of Transportation Engineers (ITE).

- Evaluation and analysis of the traffic safety and operational issues for existing and future traffic conditions.

- Development of recommendations for mitigation where necessary that would be required to maintain safe and efficient traffic flow in the project area.

Mainstay/Sleep Inn Hotel

BRISTOL, RHODE ISLAND

Figure 1 - Project Vicinity Map

2.0 PROJECT AREA

As noted in the previous section, the subject property is situated on the southerly side of Gooding Avenue just east of Broadcommon Road. Figure 2 on the following page depicts the general project area of the study and the boundary lines of the subject property. The 9.78 acre parcel is undeveloped and wooded. Land use in the immediate area can be described predominately commercial in nature along the Gooding Avenue corridor including small commercial plazas containing food markets, restaurants, banks, automotive centers, and retail stores. Medium density residential properties are situated off intersecting side streets. Immediately abutting the subject property to the south and east is undeveloped and wooded land. To the west is a single-family residential property and to the north across Gooding Avenue are small commercial businesses. Further to the east along the Route 136 corridor are a mixture of commercial and residential properties. Further to the west along Hope Street (Route 114) are medium density residential properties. In addition, the *Roger Williams University* campus is located to the south along Route 136.

Gooding Avenue will serve as the primary access route to the new hotel. Based upon the volume of traffic serviced along the immediate servicing roadways, and the low volume of traffic anticipated by the proposed hotel use during peak daily traffic conditions, a study impact area was defined for this project. The limits of our analysis focused on Gooding Avenue between Route 136 to the east and Naomi Street to the west, with a primary focus on the Gooding Avenue intersections with Route 136 and the site driveways.

3.0 EXISTING CONDITIONS

3.1 ROADWAYS

Gooding Avenue

Gooding Avenue is classified as an urban minor arterial, running in an east/west direction extending between Metacom Avenue (Route 136) to the east and Hope Street (Route 114) to the west. In the project area, Gooding Avenue is approximately 36 feet wide with a 12-foot travel lane and a 6-foot shoulder in each direction, delineated by a double yellow centerline and white shoulder markings. The speed limit is posted at 35mph. Cement concrete curbing is provided along both sides for the entire length of the road.

Mainstay/Sleep Inn Hotel

BRISTOL, RHODE ISLAND

Figure 2 - Project Area Map

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Cement concrete sidewalks are provided along the northerly side for the entire length of Gooding Avenue, with the southerly side only having sidewalks between Route 114 and Broadcommon Road. The pavement can be classified as being in fair condition with minor longitudinal cracking. Sporadic cobra-head light fixtures on utility poles are provided along the northerly side of the roadway for nighttime illumination. The photograph on the previous page depicts the physical characteristics of Gooding Avenue looking east with the subject property to the right.

3.2 INTERSECTIONS

Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road

Gooding Avenue and Narrows Road intersect Metacom Avenue (Route 136) to form a 4-way signalized intersection. The Metacom Avenue northbound approach provides a separate left turn lane and a shared thru/right turn lane. The Metacom Avenue southbound approach includes a separate left turn lane, a thru lane and a shared thru/right turn lane. The Gooding Avenue eastbound approach provides a separate left turn lane, a thru lane, and a separate right turn lane. It should be noted that a lane use control sign or a right arrow pavement marking for the separate right turn lane are not provided to designate the lane use restriction on this approach. The Narrows Road westbound approach provides a separate left turn lane, a thru lane, and a separate right turn lane. Marked crosswalks with curb ramps are provided across all approaches to the intersection.

The photograph below depicts the typical characteristics of the intersection looking east on Gooding Avenue towards Metacom Avenue. The traffic signal system appears to be in fair condition. The layout of the equipment consists of mast arm mounted signal heads with in-road vehicle loop detection. A combination of mast arm pole bracket mounted, and pedestal mounted pedestrian signal heads with pedestrian push buttons, though not ADA-compliant, are present at the intersection for pedestrian control.

The intersection was determined to operate in a fully actuated mode consisting of four phases. The Metacom Avenue northbound and southbound movements are serviced in two phases including an advanced protected left, followed by through/right concurrent movements. The Gooding Avenue eastbound and Narrows Road westbound movements are serviced under the two remaining phases including protected/permitted left turn movements, followed by through/right concurrent movements.

3.3 Traffic Flow Data

Existing traffic flow characteristics for this area were developed from a traffic counting program completed by BETA and review of record data available from the RIDOT. The data collection included Manual Turning Movement Counts (TMC) at the intersection of Route 136 with Gooding Avenue/Narrows Road and Automatic Traffic Recorder (ATR) counts on Gooding Avenue in the project area in January and March 2019, respectively.

Based upon the ATR data obtained, Gooding Avenue in the project area was found to service an Average Daily Traffic (ADT) volume of approximately 8,100 vehicles per day. On a typical weekday along Gooding Avenue, traffic volumes begin to increase at 6:00 AM with no defined morning peak hour as the volumes gradually increase hourly until the afternoon peak of approximately 800 vehicles occurring between 4:00 and 5:00 PM.

In addition to the ATR data collected, manual turning movement counts were conducted at the Route 136 intersection with Gooding Avenue/Narrows Road. Data was collected during the peak weekday morning and afternoon periods. Based upon review of the TMC data, Route 136 was found to service approximately 1,460 vehicles during the weekday morning peak hour with approximately 760 vehicles northbound and 700 vehicles southbound. During the same time period, Gooding Avenue was found to service 490 vehicles with 215 vehicles eastbound and 275 vehicles westbound. Traffic volumes recorded during weekday afternoon peak hour on Route 136 was determined to be 1,680 vehicles serviced with approximately 805 vehicles northbound and 875 vehicles southbound. During the same time period, Gooding Avenue was found to service 720 vehicles with 380 vehicles eastbound and 340 vehicles westbound. The results of the TMC data collection effort found that the weekday morning and afternoon peak hours typically occur from 7:30 to 8:30 AM and 4:30 to 5:30 PM, respectively. Figure 3 on the following page depicts the daily peak hour turning movement volumes at the study intersection. Complete count information can be found in the Appendix.

4.0 Safety Analysis

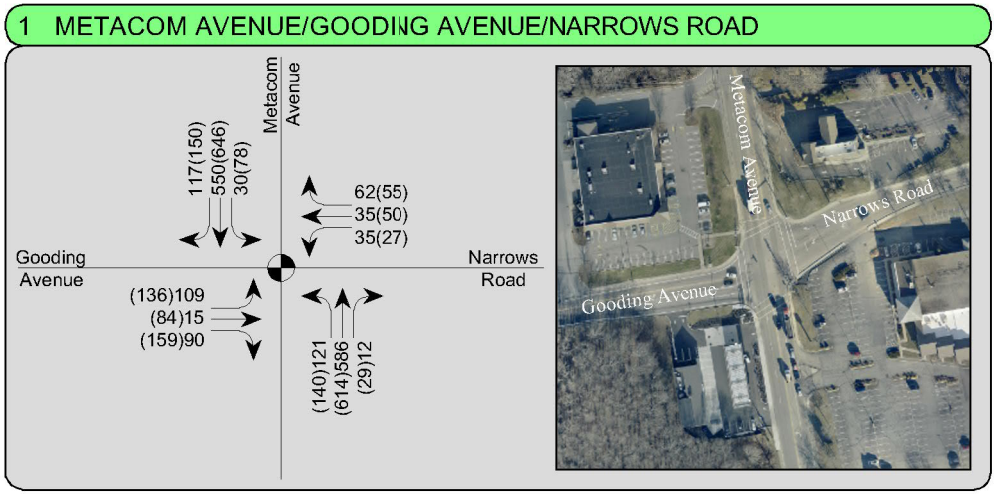
To determine if there are any limiting factors affecting safety relating to access to the proposed hotel development, the physical characteristics of Gooding Avenue in the study area were investigated. These limiting factors would potentially include horizontal or vertical alignment changes or roadside obstructions that limit sight distances for vehicles traveling along the road or entering the road from a side street or driveway location. In this instance, the sight distance standard is necessary to permit turning vehicles to safely enter and exit the site driveways.

The horizontal vertical alignment of Gooding Avenue in the project area is generally straight and level east of the site with a gradual incline west of the site to a crest vertical curve approximately 400 feet west of Broadcommon Road. Based upon the existing roadway geometry as described, the available sight distances at the proposed main driveway intersection with Gooding Avenue are greater than 400 feet to the east and west. These values are in excess of AASHTO's recommended minimum sight distance of 250 feet for the posted speed limit of 35 mph and 360 feet based on the measured 85th percentile speed of 45 mph recorded along Gooding Avenue.

Mainstay/Sleep Inn Hotel

BRISTOL, RHODE ISLAND

Figure 3 - Existing Traffic Volumes



LEGEND:

- TURN LANE
- XXX AM PEAK VOLUMES (7:30 TO 8:30)
- (XXX) PM PEAK VOLUMES (4:30 TO 5:30)
- 1 STUDY INTERSECTION
- TRAFFIC SIGNAL

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As a result of the preliminary evaluation of the existing roadway geometry and physical features, it does not appear that any significant physical roadway safety deficiencies exist within the defined study area. Also, as part of our analysis, a review of crash statistics was completed. Data was reviewed from the Town of Bristol Police Department for the latest three-year period from January 2017 to December 2019 to determine if any location in the immediate vicinity of the development experienced a high frequency or pattern of crashes.

A total of twenty-five crashes (avg. eight per year) occurred over the study period (2017-2019), with four involving an injury. Summarizing the data, fifteen of the crashes, with two involving injuries, occurred at the signalized intersection of Metacom Avenue with Gooding Avenue/Narrows Road and ten of the crashes, with two involving injuries, occurred along the section of Gooding Avenue between Metacom Avenue and Naomi Street.

Eight of the crashes at the signalized junction of Metacom Avenue with Gooding Avenue/Narrows Road were rear-end collisions, five were angle collisions, one was a head-on collision, and one was a collision with an object. This is typical of signalized junctions where the majority of the crashes were rear-end collisions due to the numerous starting and stopping movements required for the signal change intervals. The angle crashes can be attributed to running red lights and drivers not yielding the right-of-way. The head-on crash involved a driver driving the vehicle on the wrong side of the road while operating under the influence. The collision with an object involved a vehicle hitting a large rock on the roadway.

Five of the crashes that occurred along Gooding Avenue between Metacom Avenue and Naomi Street were angle crashes caused by drivers not yielding the right-of-way and drivers attempting to pass a turning vehicle at a driveway or intersecting side street; three crashes were rear end collisions that can be attributed to drivers not stopping when the vehicle in front slows/stops to turn; and two involved collisions with a deer.

Based upon the historical crash data obtained from the local police department, and review of existing roadway geometry and operations, roadway or traffic related safety improvements could be considered within the study area. As previously noted, there are no indications (signing or pavement markings) for the right lane restriction on the Gooding Avenue eastbound approach to the signalized intersection with Route 136. Is it recommended that an intersection lane use control sign supplemented with arrow pavement markings on the Gooding Avenue eastbound approach to Route 136 intersection be installed to emphasize the lane use restriction. A summary of the crash data depicting the number, type, and severity is provided in the Appendix.

5.0 IMPACT ANALYSIS

5.1 TRIP GENERATION

To determine the traffic impact of a proposed development, estimates of anticipated traffic to be generated by a particular land use must be calculated. As previously discussed, this development

Mainstay/Sleep Inn Hotel

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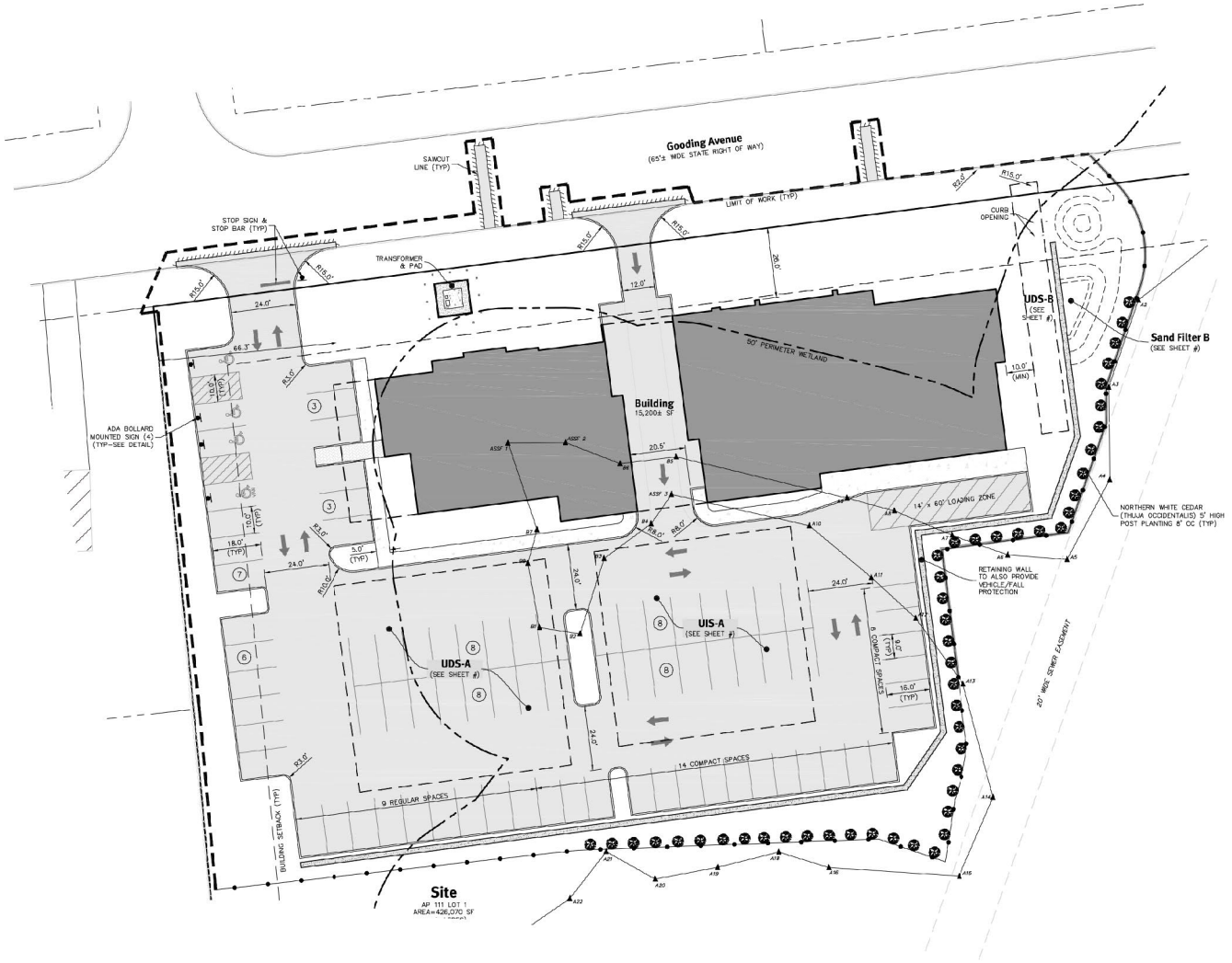
Figure 4 - Site Layout



Site Plan provided by DiPrete Engineering

proposal includes construction of a new *Mainstay/Sleep Inn* hotel with associated parking. Access and egress to the hotel will be provided from two new driveways on Gooding Avenue that include a full access driveway and a one-way entrance only driveway. Figure 4 on the following page depicts the site layout and access plan provided by *DiPrete Engineering.*

For this site, projected traffic volumes for the proposed hotel were based on use of trip generation factors. These factors are taken from the "Trip Generation" manual, an informational report published by the Institute of Transportation Engineers (ITE), a national professional organization for traffic and transportation engineers. The data provided in the ITE report are based on extensive traffic studies for various types of land uses (residential, commercial, industrial, etc.). This data has been found to be very reliable and provides a sound basis for estimating future trips to new developments.

For the new commercial development project, Land Use Code 310 Hotel was reviewed for applicability in developing an estimate of site related vehicle trips. The appropriate worksheets from the manual are included in the Appendix along with the trip estimate calculations. Table 1 summarizes the estimate trip volumes calculated for this project.

TABLE 1 – Trip Generation Estimate

	Description	Enter	Exit	Total
AM PEAK HOUR				
ITE Land Use Code 310	Hotel	29	21	50
PM PEAK HOUR				
ITE Land Use Code 310	Hotel	28	31	59

5.2 Future Traffic Volumes

In order to properly assess the impacts of a development, future traffic conditions of area roadways should be estimated for the period when the development is constructed and fully occupied. Typically, the expansion of base traffic is calculated when a project is to be constructed over an extended period (3 to 5 years). In all instances, area growth that may affect capacity results should be considered. For this project, based upon record information that has seen little to no traffic growth in the last decade, a conservative annual growth rate of 1.0 percent was utilized for the future build condition to account for any future potential developments in the vicinity of the project.

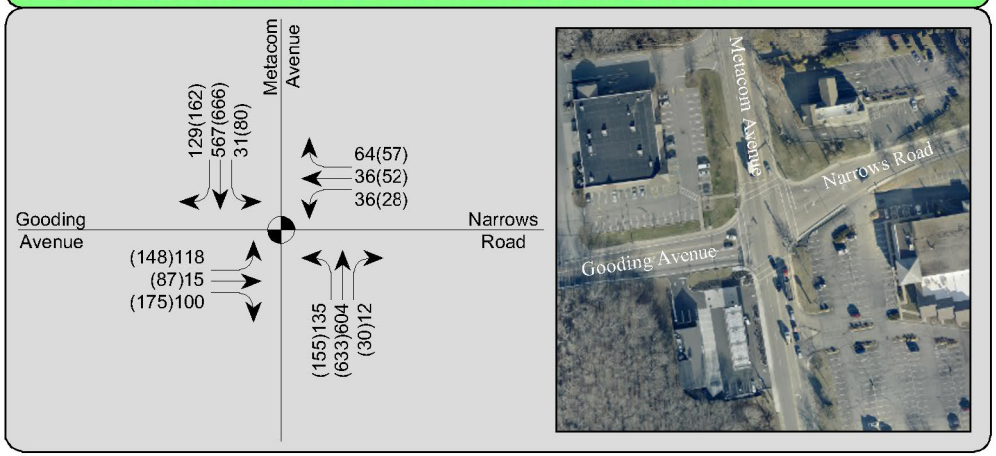
In developing the intersection volumes to be analyzed under the build condition, a directional distribution of the site traffic was estimated based upon the current traffic patterns in the project area. It is estimated that 60% of the site traffic will arrive from and depart to the east and 40% will arrive from and depart to the west during the AM and PM peak hours. Figure 4 on the following page depicts the future Build traffic conditions during the AM and PM peak hours studied for this project. Site distribution figures are provided in the Appendix.

Mainstay/Sleep Inn Hotel

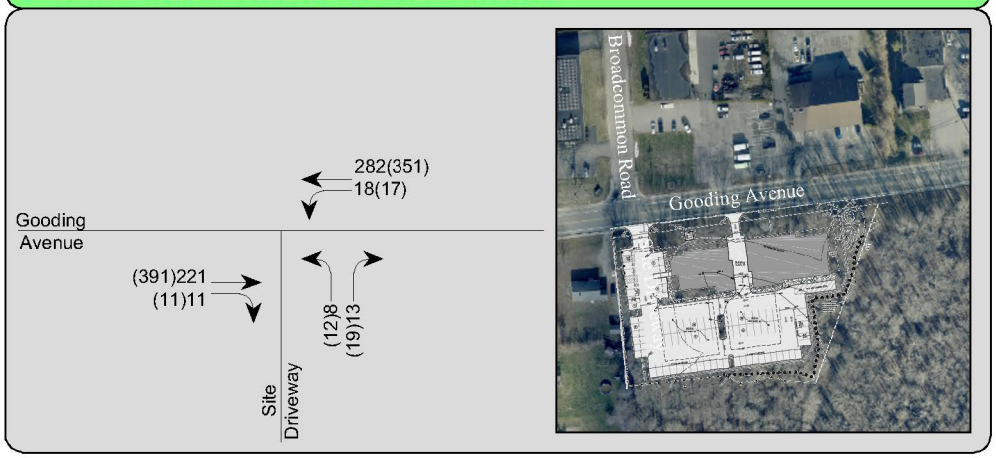
BRISTOL, RHODE ISLAND

Figure 5 - Future Traffic Volumes

1 METACOM AVENUE/GOODING AVENUE/NARROWS ROAD



2 GOODING AVENUE/MAIN SITE DRIVEWAY



LEGEND:

- TURN LANE
- XXX AM PEAK VOLUMES (7:30 TO 8:30)
- (XXX) PM PEAK VOLUMES (4:30 TO 5:30)
- 1 STUDY INTERSECTION
- TRAFFIC SIGNAL

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5.3 Operation Analysis

The key to any traffic impact analysis is the evaluation of roadway operations during peak traffic periods on the servicing roadway system. This situation would occur when the site-generated traffic, combined with the traffic volumes on the main roadway, result in the highest one-hour volume serviced along a roadway segment, or through an intersection. Review of the record traffic data found that the weekday AM and PM peak hours would represent this worst-case combination of site-generated traffic with the servicing roadway peak traffic period.

The Highway Capacity Manual methodology provides the most accurate means of evaluating traffic capacity and delays for roadways and intersections. The results of this procedure are expressed in terms of Level of Service (LOS). Level of Service is a qualitative measure of traffic flow efficiency based on anticipated vehicle delays. For example, LOS "A" represents the best condition with little or no delay, while LOS "F" indicates that the roadway/intersection is at full capacity resulting in extended vehicle delays and potential queuing. Table 2 below outlines the Level of Service delay criteria presented in the Highway Capacity Manual for signalized and unsignalized intersections.

TABLE 2 – Highway Capacity Manual Criteria

Level of Service	Unsignalized Delay Per Vehicle (sec)	Signalized Delay Per Vehicle (sec)
A	<10	<10
B	>10 and <15	>10 and <20
C	>15 and <25	>20 and <35
D	>25 and <35	>35 and <55
E	>35 and <50	>55 and <80
F	>50	>80

The Gooding Avenue intersection with Metacom Avenue (Route 136) was reviewed for Existing conditions where a No-Build condition was not determined necessary due to the short duration of construction and operation of the hotel, which is estimated at 12-18 months. The main study intersection along with the proposed site driveway were analyzed for the weekday morning and afternoon peak hour, for the Future Build condition, which would represent the periods of greatest impact of site related traffic. The capacity analysis worksheets are included in the Appendix and Tables 3 and 4 summarize the results of the analyses.

Table 3 depicts the current operating conditions at the study intersection. As can be seen in the table, the signalized intersection of Route 136 with Gooding Avenue/Narrows Road operates in an acceptable manner at an overall LOS B and LOS C during the morning and afternoon peak periods, respectively. All critical movements operate at LOS D or better, with no movement experiencing excessive delays or queueing.

TABLE 3 – Level of Service Summary (Existing Conditions)

Location / Movement	EXISTING CONDITIONS							
	AM Peak Hour				PM Peak Hour			
	LOS	Delay	95th % Queue Length (veh.)	v/c	LOS	Delay	95th % Queue Length (veh.)	v/c
Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road (S)								
Gooding Avenue EB Left	C	35.0	4	0.46	D	36.3	5	0.53
Gooding Avenue EB Thru	D	36.2	1	0.07	D	36.4	4	0.30
Gooding Avenue EB Right	A	7.6	2	0.32	A	9.6	2	0.43
Narrows Road WB Left	C	28.5	2	0.16	C	27.0	2	0.12
Narrows Road WB Thru	D	41.9	2	0.24	D	42.4	3	0.31
Narrows Road WB Right	A	4.0	1	0.27	A	2.1	1	0.23
Metacom Avenue NB Left	D	45.7	5	0.56	D	47.2	6	0.61
Metacom Avenue NB Thru/Right	B	14.9	16	0.56	C	20.3	20	0.64
Metacom Avenue SB Left	D	42.0	2	0.22	D	45.0	4	0.45
Metacom Avenue SB Thru/Right	B	14.5	8	0.39	B	16.2	9	0.47
OVERALL	B	18.8	-	-	C	22.4	-	-

(S) – Signalized
(U) – Unsignalized

TABLE 4 – Level of Service Summary (Build Conditions)

Location / Movement	2023 BUILD CONDITIONS							
	AM Peak Hour				PM Peak Hour			
	LOS	Delay	95th % Queue Length (veh.)	v/c	LOS	Delay	95th % Queue Length (veh.)	v/c
Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road (S)								
Gooding Avenue EB Left	D	36.0	4	0.50	D	38.4	5	0.59
Gooding Avenue EB Thru	D	36.1	1	0.07	D	39.7	4	0.36
Gooding Avenue EB Right	A	9.5	2	0.35	B	10.5	2	0.49
Narrows Road WB Left	C	28.5	2	0.16	C	26.9	2	0.12
Narrows Road WB Thru	D	42.0	2	0.24	D	42.4	3	0.31
Narrows Road WB Right	A	4.6	1	0.28	A	2.5	1	0.24
Metacom Avenue NB Left	D	45.4	5	0.58	D	46.9	6	0.63
Metacom Avenue NB Thru/Right	B	15.4	16	0.57	C	21.2	22	0.66
Metacom Avenue SB Left	D	42.1	2	0.23	D	45.0	4	0.45
Metacom Avenue SB Thru/Right	B	15.2	8	0.42	B	17.2	10	0.50
OVERALL	B	19.5	-	-	C	23.4	-	-
Gooding Avenue at Main Site Driveway (U)								
Gooding Avenue WB	A	7.8	1	0.02	A	8.2	1	0.01
Site Driveway NB	B	11.0	1	0.04	B	13.4	1	0.07

(S) – Signalized
(U) – Unsignalized

Table 4 presents the future build conditions at the study intersections where the analysis found that the estimated increase in traffic during the peak periods resulting from the proposed hotel development will have minimal impact on overall traffic operations along Gooding Avenue, specifically at the defined study intersections reviewed for this project. The signalized intersection of Route 136 with Gooding Avenue/Narrows Road will continue to operate in an acceptable manner at an overall LOS B and LOS C during the morning and afternoon peak periods, respectively. All critical movements operate at LOS D or better, with no movement experiencing excessive delays or queueing. In addition, the left turn entering and left/right turn exiting movement at the unsignalized intersection of the propose main site driveway with Gooding Avenue will operate efficiently at LOS B or better during the daily peak hours of traffic.

6.0 CONCLUSIONS AND RECOMMENDATIONS

In summary, the study has shown that the proposed commercial project, *Mainstay/Sleep Inn* hotel, access and circulation plan has been designed to provide a level of traffic safety and efficiency on the servicing roadway system. In reference to safety, as previously noted, we recommend installation of an intersection lane use control sign supplemented with arrow pavement markings on the Gooding Avenue eastbound approach to the signalized intersection with Route 136 to emphasize the lane use restriction.

The safety of the servicing roadways and specifically the site driveway intersections were also reviewed for geometry and sight distances. The intersections reviewed were determined to provide sufficient sight distances in accordance with AASHTO criteria for visibility and decision making of drivers attempting to enter/exit main street traffic from a side street or driveway location.

The results of the operational analysis determined that the estimated minor increase in traffic during the peak periods resulting from the proposed commercial development will have a negligible effect on overall traffic operations along the servicing roadways, particularly during the daily morning and afternoon peak hours when the new hotel would generate its highest daily traffic volumes.

Therefore, based upon the data collected on the servicing roadways, the analysis completed as part of this study, it can be concluded that the future traffic conditions resulting from the proposed commercial development, will provide for adequate and safe access to a public street, and will not have a detrimental effect on public safety and welfare in the study area.

APPENDIX

A. Traffic Volume Data

B. Traffic Crash Data

C. Trip Generation

D. Operational Analysis

APPENDIX A – Traffic Volume Data

Automatic Traffic Recorder Count

Gooding Avenue

Intersection Turning Movement Count

Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road

A

Automatic Traffic Recorder Count

Gooding Avenue

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Lincoln, Rhode Island 02865

Project Name: Proposed Commercial Development
Town/City: Bristol, RI
Roadway: Gooding Avenue
Location: West of Route 136

Start Date: 3/2/2020
End Date: 3/9/2020

3/2/2020 Time	Gooding Ave.
12:00 AM	*
1:00	*
2:00	*
3:00	*
4:00	*
5:00	*
6:00	*
7:00	*
8:00	*
9:00	*
10:00	*
11:00	*
12:00 PM	*
1:00	*
2:00	*
3:00	208
4:00	807
5:00	819
6:00	563
7:00	361
8:00	222
9:00	148
10:00	54
11:00	31
Total	3213
AM Peak	
Volume	0
PM Peak	5:00
Volume	819

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Project Name: Proposed Commercial Development
Town/City: Bristol, RI
Roadway: Gooding Avenue
Location: West of Route 136

Start Date: 3/2/2020
End Date: 3/9/2020

3/3/2020 Time	Gooding Ave.
12:00 AM	21
1:00	13
2:00	4
3:00	6
4:00	13
5:00	57
6:00	154
7:00	440
8:00	501
9:00	595
10:00	635
11:00	643
12:00 PM	664
1:00	687
2:00	736
3:00	779
4:00	796
5:00	761
6:00	485
7:00	288
8:00	178
9:00	122
10:00	63
11:00	39
Total	8680
AM Peak	12:00 PM
Volume	664
PM Peak	4:00
Volume	796

BETA Group, Inc.
701 George Washington Highway
Lincoln, Rhode Island 02865

Project Name: Proposed Commercial Development
Town/City: Bristol, RI
Roadway: Gooding Avenue
Location: West of Route 136

Start Date: 3/2/2020
End Date: 3/9/2020

3/4/2020 Time	Gooding Ave.
12:00 AM	26
1:00	14
2:00	8
3:00	5
4:00	18
5:00	63
6:00	185
7:00	453
8:00	524
9:00	552
10:00	602
11:00	622
12:00 PM	632
1:00	622
2:00	712
3:00	761
4:00	764
5:00	731
6:00	564
7:00	365
8:00	223
9:00	144
10:00	67
11:00	51
Total	8708
AM Peak	12:00 PM
Volume	632
PM Peak	4:00
Volume	764

BETA Group, Inc.
701 George Washington Highway
Lincoln, Rhode Island 02865

Project Name: Proposed Commercial Development
Town/City: Bristol, RI
Roadway: Gooding Avenue
Location: West of Route 136

Start Date: 3/2/2020
End Date: 3/9/2020

3/5/2020 Time	Gooding Ave.
12:00 AM	27
1:00	15
2:00	5
3:00	6
4:00	23
5:00	44
6:00	179
7:00	487
8:00	530
9:00	547
10:00	625
11:00	593
12:00 PM	703
1:00	676
2:00	668
3:00	753
4:00	802
5:00	811
6:00	592
7:00	374
8:00	199
9:00	130
10:00	90
11:00	44
Total	8923
AM Peak	12:00 PM
Volume	703
PM Peak	5:00
Volume	811

BETA Group, Inc.
701 George Washington Highway
Lincoln, Rhode Island 02865

Project Name: Proposed Commercial Development
Town/City: Bristol, RI
Roadway: Gooding Avenue
Location: West of Route 136

Start Date: 3/2/2020
End Date: 3/9/2020

3/6/2020 Time	Gooding Ave.
12:00 AM	24
1:00	18
2:00	11
3:00	8
4:00	23
5:00	56
6:00	154
7:00	456
8:00	517
9:00	582
10:00	653
11:00	687
12:00 PM	751
1:00	731
2:00	743
3:00	835
4:00	825
5:00	779
6:00	572
7:00	340
8:00	242
9:00	160
10:00	92
11:00	59
Total	9318
AM Peak	12:00 PM
Volume	751
PM Peak	3:00
Volume	835

BETA Group, Inc.
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Lincoln, Rhode Island 02865

Project Name: Proposed Commercial Development
Town/City: Bristol, RI
Roadway: Gooding Avenue
Location: West of Route 136

Start Date: 3/2/2020
End Date: 3/9/2020

3/7/2020 Time	Gooding Ave.
12:00 AM	55
1:00	23
2:00	11
3:00	13
4:00	31
5:00	23
6:00	80
7:00	186
8:00	377
9:00	620
10:00	714
11:00	755
12:00 PM	751
1:00	745
2:00	718
3:00	605
4:00	574
5:00	524
6:00	406
7:00	293
8:00	169
9:00	130
10:00	102
11:00	76
Total	7981
AM Peak	11:00
Volume	755
PM Peak	12:00 PM
Volume	751

BETA Group, Inc.
701 George Washington Highway
Lincoln, Rhode Island 02865

Project Name: Proposed Commercial Development
Town/City: Bristol, RI
Roadway: Gooding Avenue
Location: West of Route 136

Start Date: 3/2/2020
End Date: 3/9/2020

3/8/2020 Time	Gooding Ave.
12:00 AM	38
1:00	20
2:00	0
3:00	11
4:00	3
5:00	13
6:00	38
7:00	101
8:00	249
9:00	397
10:00	536
11:00	621
12:00 PM	705
1:00	761
2:00	723
3:00	692
4:00	645
5:00	501
6:00	410
7:00	256
8:00	200
9:00	79
10:00	46
11:00	33
Total	7078
AM Peak	12:00 PM
Volume	705
PM Peak	1:00
Volume	761

BETA Group, Inc.
701 George Washington Highway
Lincoln, Rhode Island 02865

Project Name: Proposed Commercial Development
Town/City: Bristol, RI
Roadway: Gooding Avenue
Location: West of Route 136

Start Date: 3/2/2020
End Date: 3/9/2020

3/9/2020 Time	Gooding Ave.		
12:00 AM	18		
1:00	10		
2:00	3		
3:00	6		
4:00	16		
5:00	56		
6:00	143		
7:00	414		
8:00	546		
9:00	539		
10:00	565		
11:00	687		
12:00 PM	710		
1:00	773		
2:00	742		
3:00	465		
4:00	*		
5:00	*		
6:00	*		
7:00	*		
8:00	*		
9:00	*		
10:00	*		
11:00	*		
Total	5693		
AM Peak	12:00 PM		
Volume	710		
PM Peak	1:00		
Volume	773		
Grand Total	59594		
ADT		ADT: 8,051	AADT: 8,051

BETA Group, Inc.
701 George Washington Highway
Lincoln, Rhode Island 02865

Project Name: Proposed Commercial Development
Town/City: Bristol, RI
Roadway: Gooding Avenue
Location: West of Route 136

Start Date: 3/2/2020
End Date: 3/9/2020

3/2/2020	Monday		Tuesday		Wednesday		Thursday		Friday		Weekday Average		Saturday		Sunday	
Time	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	*	*	7	14	11	15	13	14	13	11	11	14	31	24	21	17
1:00	*	*	7	6	3	11	5	10	10	8	6	9	10	13	15	5
2:00	*	*	2	2	4	4	4	1	8	3	4	2	5	6	0	0
3:00	*	*	4	2	4	1	4	2	4	4	4	2	4	9	6	5
4:00	*	*	4	9	7	11	9	14	13	10	8	11	14	17	1	2
5:00	*	*	22	35	29	34	20	24	20	36	23	32	13	10	8	5
6:00	*	*	79	75	103	82	94	85	87	67	91	77	37	43	17	21
7:00	*	*	255	185	256	197	283	204	248	208	260	198	124	62	61	40
8:00	*	*	301	200	305	219	290	240	284	233	295	223	210	167	141	108
9:00	*	*	315	280	297	255	303	244	327	255	310	258	309	311	234	163
10:00	*	*	332	303	311	291	331	294	312	341	322	307	339	375	278	258
11:00	*	*	341	302	301	321	298	295	343	344	321	316	391	364	313	308
12:00 PM	*	*	317	347	329	303	354	349	390	361	348	340	378	373	382	323
1:00	*	*	343	344	318	304	350	326	367	364	344	334	370	375	412	349
2:00	*	*	354	382	364	348	331	337	369	374	354	360	358	360	381	342
3:00	101	107	387	392	361	400	341	412	388	447	316	352	284	321	341	351
4:00	387	420	382	414	367	397	397	405	379	446	382	416	310	264	327	318
5:00	396	423	397	364	365	366	413	398	390	389	392	388	291	233	251	250
6:00	266	297	217	268	291	273	298	294	297	275	274	281	230	176	216	194
7:00	163	198	109	179	174	191	182	192	172	168	160	186	158	135	136	120
8:00	122	100	75	103	100	123	97	102	129	113	105	108	94	75	113	87
9:00	70	78	60	62	62	82	67	63	90	70	70	71	80	50	44	35
10:00	31	23	31	32	32	35	54	36	51	41	40	33	63	39	25	21
11:00	15	16	21	18	23	28	21	23	35	24	23	22	39	37	20	13
Total	1551	1662	4362	4318	4417	4291	4559	4364	4726	4592	4463	4340	4142	3839	3743	3335
Day	3213		8680		8708		8923		9318		8803		7981		7078	
AM Peak			11:00	12:00 PM	12:00 PM	11:00	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	11:00	10:00	12:00 PM	12:00 PM
Volume	0	0	341	347	329	321	354	349	390	361	348	340	391	375	382	323
PM Peak	5:00	5:00	5:00	4:00	4:00	3:00	5:00	3:00	12:00 PM	3:00	5:00	4:00	12:00 PM	1:00	1:00	3:00
Volume	396	423	397	414	367	400	413	412	390	447	392	416	378	375	412	351

BETA Group, Inc.
701 George Washington Highway
Lincoln, Rhode Island 02865

Project Name: Proposed Commercial Development
Town/City: Bristol, RI
Roadway: Gooding Avenue
Location: West of Route 136

Start Date: 3/2/2020
End Date: 3/9/2020

3/9/2020	Monday		Tuesday		Wednesday		Thursday		Friday		Weekday Average		Saturday		Sunday	
Time	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
12:00 AM	8	10	*	*	*	*	*	*	*	*	8	10	*	*	*	*
1:00	3	7	*	*	*	*	*	*	*	*	3	7	*	*	*	*
2:00	1	2	*	*	*	*	*	*	*	*	1	2	*	*	*	*
3:00	4	2	*	*	*	*	*	*	*	*	4	2	*	*	*	*
4:00	6	10	*	*	*	*	*	*	*	*	6	10	*	*	*	*
5:00	26	30	*	*	*	*	*	*	*	*	26	30	*	*	*	*
6:00	83	60	*	*	*	*	*	*	*	*	83	60	*	*	*	*
7:00	248	166	*	*	*	*	*	*	*	*	248	166	*	*	*	*
8:00	306	240	*	*	*	*	*	*	*	*	306	240	*	*	*	*
9:00	290	249	*	*	*	*	*	*	*	*	290	249	*	*	*	*
10:00	313	252	*	*	*	*	*	*	*	*	313	252	*	*	*	*
11:00	361	326	*	*	*	*	*	*	*	*	361	326	*	*	*	*
12:00 PM	381	329	*	*	*	*	*	*	*	*	381	329	*	*	*	*
1:00	415	358	*	*	*	*	*	*	*	*	415	358	*	*	*	*
2:00	398	344	*	*	*	*	*	*	*	*	398	344	*	*	*	*
3:00	237	228	*	*	*	*	*	*	*	*	237	228	*	*	*	*
4:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
6:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
7:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
8:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	3080	2613	0	0	0	0	0	0	0	0	3080	2613	0	0	0	0
Day	5693		0		0		0		0		5693		0		0	
AM Peak	12:00 PM	12:00 PM									12:00 PM	12:00 PM				
Volume	381	329	0	0	0	0	0	0	0	0	381	329	0	0	0	0
PM Peak	1:00	1:00									1:00	1:00				
Volume	415	358	0	0	0	0	0	0	0	0	415	358	0	0	0	0
Comb Total	8906		8680		8708		8923		9318		14496		7981		7078	
ADT	ADT: 8,051		AADT: 8,051													

BETA Group, Inc.
701 George Washington Highway
Lincoln, Rhode Island 02865

SPEED DATA ANALYSIS

Location

Gooding Avenue
West of Route 136
Bristol, RI

Analysis Time Period

Start	End
3/2/2020	3/9/2020
3:43 PM	2:35 PM

Speed Limit

35

85th Percentile Speed

42

A

Intersection Turning Movement Count

Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road

BETA Group, Inc.
701 George Washington Highway
Lincoln, Rhode Island, 02865
P:401.333.2382

Project: Gooding Avenue Hotel
Town/City: Bristol, RI
Location: Metacom Ave at Gooding Ave
Weather: Sunny/30s

File Name : 695401 - Metacom Ave @ Gooding Ave - AM-PM
Site Code : 01292020
Start Date : 1/29/2020
Page No : 1

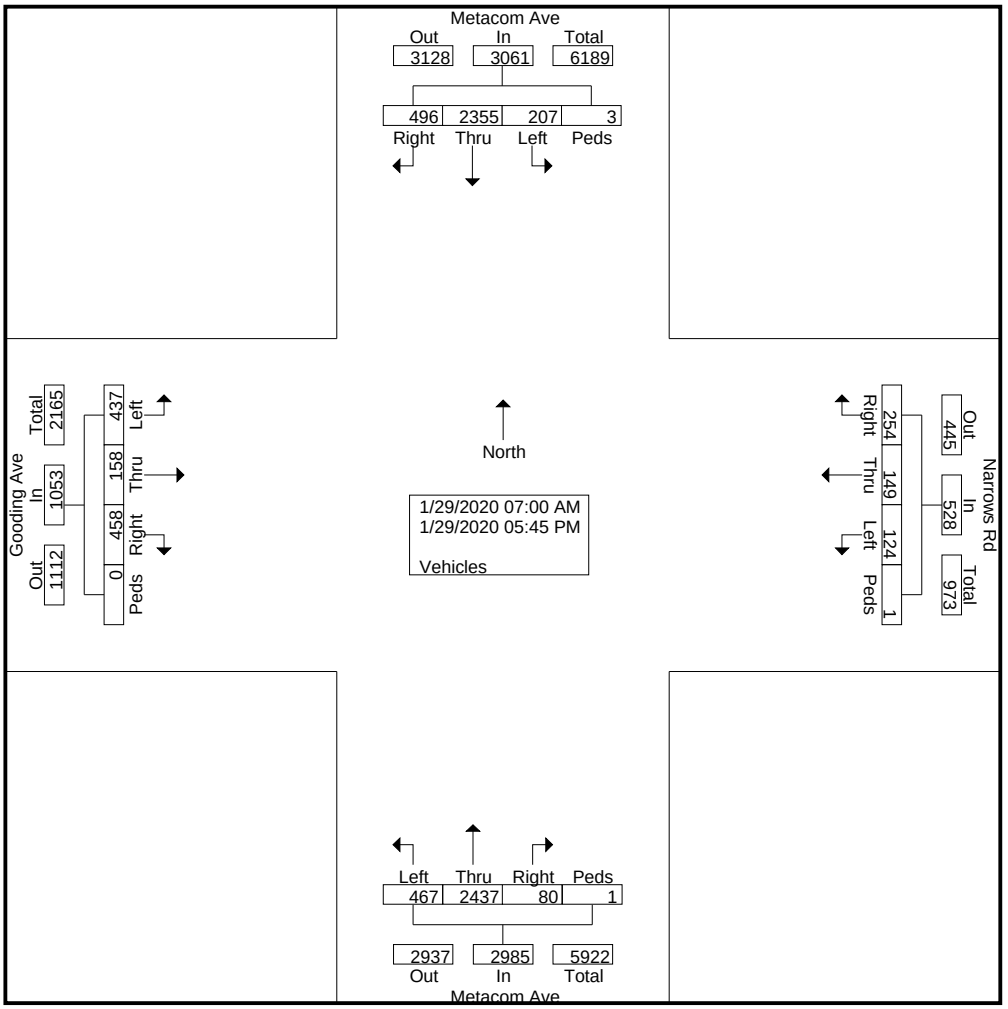
Groups Printed- Vehicles

	Metacom Ave From North					Narrows Rd From East					Metacom Ave From South					Gooding Ave From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	15	112	1	0	128	26	4	13	0	43	4	190	22	0	216	18	4	15	0	37	424
07:15 AM	26	137	4	0	167	19	8	7	0	34	1	133	24	0	158	17	1	10	0	28	387
07:30 AM	25	176	7	1	209	16	8	9	0	33	2	117	17	0	136	19	1	13	0	33	411
07:45 AM	49	160	5	0	214	15	11	10	0	36	1	134	25	0	160	29	5	34	0	68	478
Total	115	585	17	1	718	76	31	39	0	146	8	574	88	0	670	83	11	72	0	166	1700
08:00 AM	18	123	5	0	146	14	9	8	0	31	4	148	37	0	189	15	4	36	0	55	421
08:15 AM	27	124	9	0	160	17	3	6	0	26	2	160	34	0	196	19	3	20	0	42	424
08:30 AM	23	143	11	0	177	16	12	11	0	39	5	144	25	0	174	27	3	19	0	49	439
08:45 AM	37	131	12	1	181	12	13	10	0	35	4	134	26	0	164	30	8	26	0	64	444
Total	105	521	37	1	664	59	37	35	0	131	15	586	122	0	723	91	18	101	0	210	1728
*** BREAK ***																					
04:00 PM	37	135	16	0	188	14	8	4	0	26	3	195	23	0	221	39	13	33	0	85	520
04:15 PM	33	156	19	0	208	13	8	6	0	27	9	152	30	0	191	29	11	38	0	78	504
04:30 PM	38	165	22	0	225	15	6	6	1	28	6	158	35	0	199	32	13	29	0	74	526
04:45 PM	34	148	24	0	206	16	13	6	0	35	6	138	37	0	181	38	21	39	0	98	520
Total	142	604	81	0	827	58	35	22	1	116	24	643	125	0	792	138	58	139	0	335	2070
05:00 PM	31	176	17	0	224	12	18	9	0	39	11	165	38	0	214	43	20	37	0	100	577
05:15 PM	39	151	20	1	211	11	10	7	0	28	7	169	32	0	208	39	19	29	0	87	534
05:30 PM	46	171	17	0	234	16	9	5	0	30	5	142	33	0	180	39	24	31	0	94	538
05:45 PM	18	147	18	0	183	22	9	7	0	38	10	158	29	1	198	25	8	28	0	61	480
Total	134	645	72	1	852	61	46	28	0	135	33	634	132	1	800	146	71	125	0	342	2129
Grand Total	496	2355	207	3	3061	254	149	124	1	528	80	2437	467	1	2985	458	158	437	0	1053	7627
Apprch %	16.2	76.9	6.8	0.1		48.1	28.2	23.5	0.2		2.7	81.6	15.6	0		43.5	15	41.5	0		
Total %	6.5	30.9	2.7	0	40.1	3.3	2	1.6	0	6.9	1	32	6.1	0	39.1	6	2.1	5.7	0	13.8	

BETA Group, Inc.
701 George Washington Highway
Lincoln, Rhode Island, 02865
P:401.333.2382

Project: Gooding Avenue Hotel
Town/City: Bristol, RI
Location: Metacom Ave at Gooding Ave
Weather: Sunny/30s

File Name : 695401 - Metacom Ave @ Gooding Ave - AM-PM
Site Code : 01292020
Start Date : 1/29/2020
Page No : 2

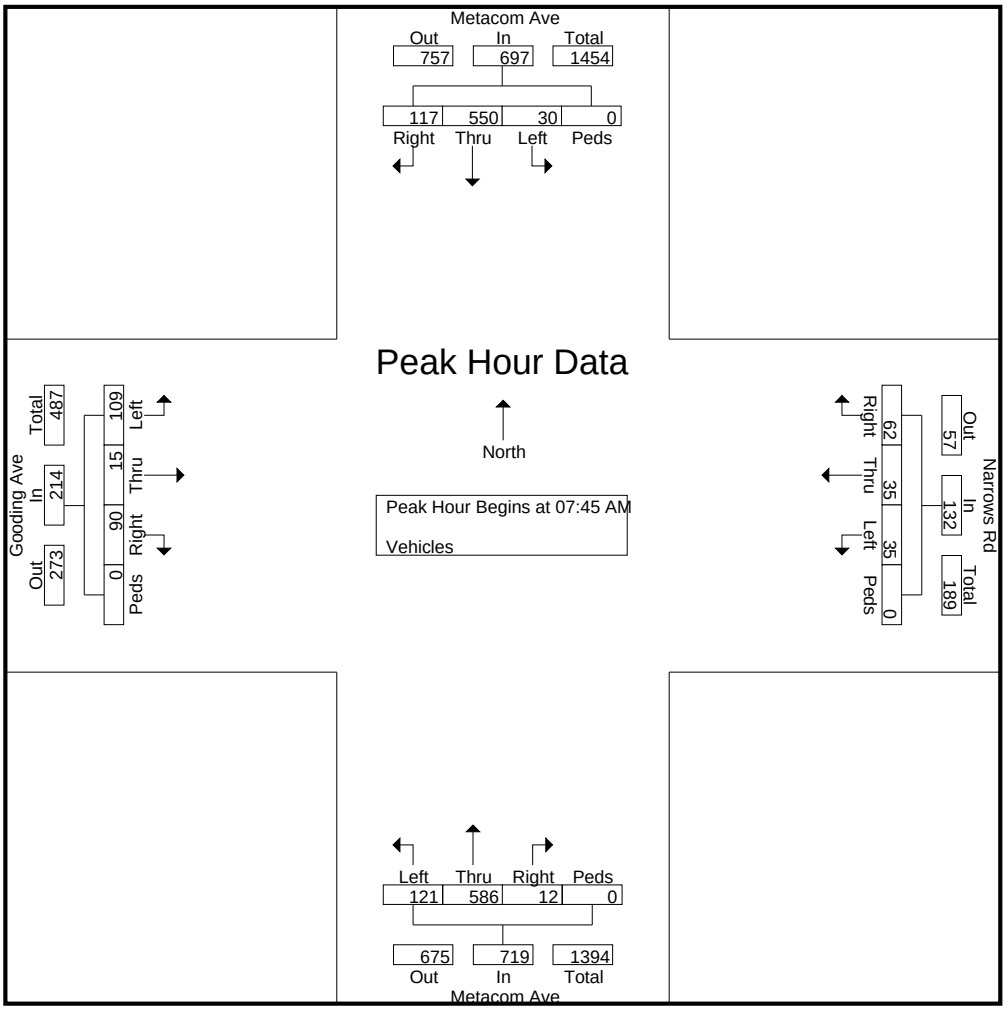


BETA Group, Inc.
701 George Washington Highway
Lincoln, Rhode Island, 02865
P:401.333.2382

Project: Gooding Avenue Hotel
Town/City: Bristol, RI
Location: Metacom Ave at Gooding Ave
Weather: Sunny/30s

File Name : 695401 - Metacom Ave @ Gooding Ave - AM-PM
Site Code : 01292020
Start Date : 1/29/2020
Page No : 3

	Metacom Ave From North					Narrows Rd From East					Metacom Ave From South					Gooding Ave From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	**49**	**160**	5	0	**214**	15	11	10	0	36	1	134	25	0	160	**29**	**5**	34	0	**68**	**478**
08:00 AM	18	123	5	0	146	14	9	8	0	31	4	148	**37**	0	189	15	4	**36**	0	55	421
08:15 AM	27	124	9	0	160	**17**	3	6	0	26	2	**160**	34	0	**196**	19	3	20	0	42	424
08:30 AM	23	143	**11**	0	177	16	**12**	**11**	0	**39**	**5**	144	25	0	174	27	3	19	0	49	439
Total Volume	117	550	30	0	697	62	35	35	0	132	12	586	121	0	719	90	15	109	0	214	1762
% App. Total	16.8	78.9	4.3	0		47	26.5	26.5	0		1.7	81.5	16.8	0		42.1	7	50.9	0		
PHF	.597	.859	.682	.000	.814	.912	.729	.795	.000	.846	.600	.916	.818	.000	.917	.776	.750	.757	.000	.787	.922

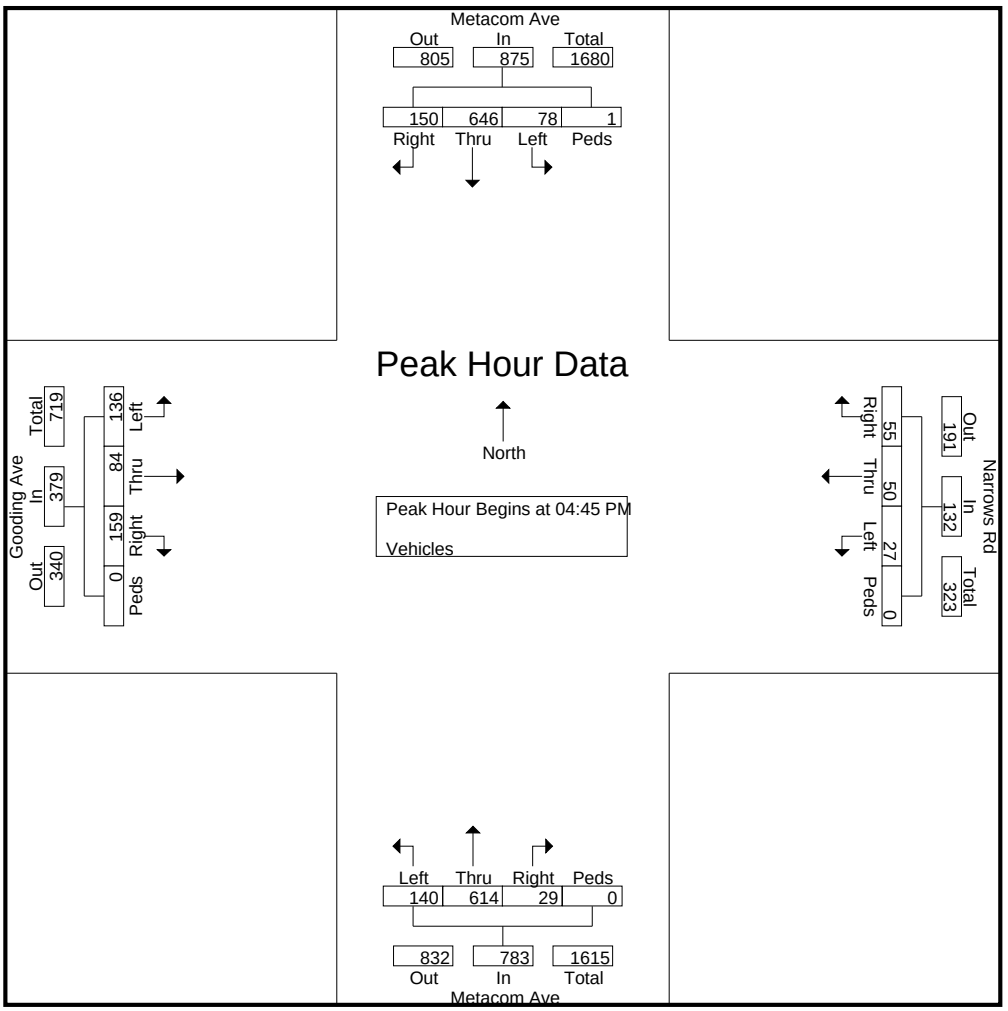


BETA Group, Inc.
701 George Washington Highway
Lincoln, Rhode Island, 02865
P:401.333.2382

Project: Gooding Avenue Hotel
Town/City: Bristol, RI
Location: Metacom Ave at Gooding Ave
Weather: Sunny/30s

File Name : 695401 - Metacom Ave @ Gooding Ave - AM-PM
Site Code : 01292020
Start Date : 1/29/2020
Page No : 4

	Metacom Ave From North					Narrows Rd From East					Metacom Ave From South					Gooding Ave From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	34	148	**24**	0	206	**16**	13	6	0	35	6	138	37	0	181	38	21	**39**	0	98	520
05:00 PM	31	**176**	17	0	224	12	**18**	**9**	0	**39**	**11**	165	**38**	0	**214**	**43**	20	37	0	**100**	**577**
05:15 PM	39	151	20	**1**	211	11	10	7	0	28	7	**169**	32	0	208	39	19	29	0	87	534
05:30 PM	**46**	171	17	0	**234**	16	9	5	0	30	5	142	33	0	180	39	**24**	31	0	94	538
Total Volume	150	646	78	1	875	55	50	27	0	132	29	614	140	0	783	159	84	136	0	379	2169
% App. Total	17.1	73.8	8.9	0.1		41.7	37.9	20.5	0		3.7	78.4	17.9	0		42	22.2	35.9	0		
PHF	.815	.918	.813	.250	.935	.859	.694	.750	.000	.846	.659	.908	.921	.000	.915	.924	.875	.872	.000	.948	.940



APPENDIX B – Traffic Crash Data

January 2017 through December 2019

Gooding Avenue

Crash Data Summary

	Year			Total	Average per Year
	2017	2018	2019		
Intersections					
Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road	1	6	8	15	5
Corridor					
Gooding Avenue	2	5	3	10	3
Total	3	11	11	25	8

Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road

		2017	2018	2019	Total	Percent
Collision Type						
	Rear End	1	3	4	8	53%
	Angle	0	3	2	5	33%
	Head-On	0	0	1	1	7%
	Pedestrian	0	0	0	0	0%
	Sideswipe, Same Direction	0	0	0	0	0%
	Sideswipe, Opposite Direction	0	0	0	0	0%
	Collision with Object	0	0	1	1	7%
	Collision with Deer	0	0	0	0	0%
	Other	0	0	0	0	0%
	Unknown	0	0	0	0	0%
Accident Severity						
	Property	1	6	6	13	87%
	Injury	0	0	2	2	13%
Light Condition						
	Daylight	1	5	4	10	67%
	Dawn	0	0	0	0	0%
	Dusk	0	0	0	0	0%
	Dark - Lighted	0	1	3	4	27%
	Dark - Not Lighted	0	0	0	0	0%
	Dark - Unknown Lighting	0	0	1	1	7%
Road Condition						
	Dry	1	5	6	12	80%
	Wet	0	1	2	3	20%
	Snow	0	0	0	0	0%
	Other	0	0	0	0	0%
	Unknown	0	0	0	0	0%
Hour of Day						
	6:00 AM - 9:00 AM	0	0	0	0	0%
	9:00 AM - 3:00 PM	0	3	1	4	27%
	3:00 PM - 6:00 PM	1	2	3	6	40%
	6:00 PM - 6:00 AM	0	1	4	5	33%
	Total Accidents:	1	6	8	15	

Gooding Avenue

		2017	2018	2019	Total	Percent
Collision Type						
	Rear End	0	1	2	3	30%
	Angle	1	4	0	5	50%
	Head-On	0	0	0	0	0%
	Pedestrian	0	0	0	0	0%
	Sideswipe, Same Direction	0	0	0	0	0%
	Sideswipe, Opposite Direction	0	0	0	0	0%
	Collision with Object	1	0	1	2	20%
	Collision with Deer	0	0	0	0	0%
	Other	0	0	0	0	0%
	Unknown	0	0	0	0	0%
Accident Severity						
	Property	1	5	2	8	80%
	Injury	1	0	1	2	20%
Light Condition						
	Daylight	0	4	2	6	60%
	Dawn	0	0	0	0	0%
	Dusk	0	1	0	1	10%
	Dark - Lighted	1	0	1	2	20%
	Dark - Not Lighted	0	0	0	0	0%
	Dark - Unknown Lighting	1	0	0	1	10%
Road Condition						
	Dry	1	4	3	8	80%
	Wet	1	1	0	2	20%
	Snow	0	0	0	0	0%
	Other	0	0	0	0	0%
	Unknown	0	0	0	0	0%
Hour of Day						
	6:00 AM - 9:00 AM	0	0	0	0	0%
	9:00 AM - 3:00 PM	0	2	1	3	30%
	3:00 PM - 6:00 PM	1	3	1	5	50%
	6:00 PM - 6:00 AM	1	0	1	2	20%
	Total Accidents:	2	5	3	10	

APPENDIX C – Trip Generation

ITE Trip Generation Summary

Site Trip Distribution

ITE Land Use Code

ITE Land Use Code 310 – Hotel

C

ITE Trip Generation Summary

Trip Generation Summary

Summary;

	Description	Enter	Exit	Total
AM Peak Hour				
ITE Land Use Code 310	Hotel	29	21	50
PM Peak Hour				
ITE Land Use Code 310	Hotel	28	31	59

Calculations;

ITE Land Use Code 310 Hotel (80 Occupied Rooms)

Independent Variable (X) = Occupied Rooms X = 80

AM Peak *Directional Distribution: 58% Entering 42% Exiting*

T = 0.62 (X)
T = 0.62 80
T = 50

Enter: 29
Exit: 21
Total: 50

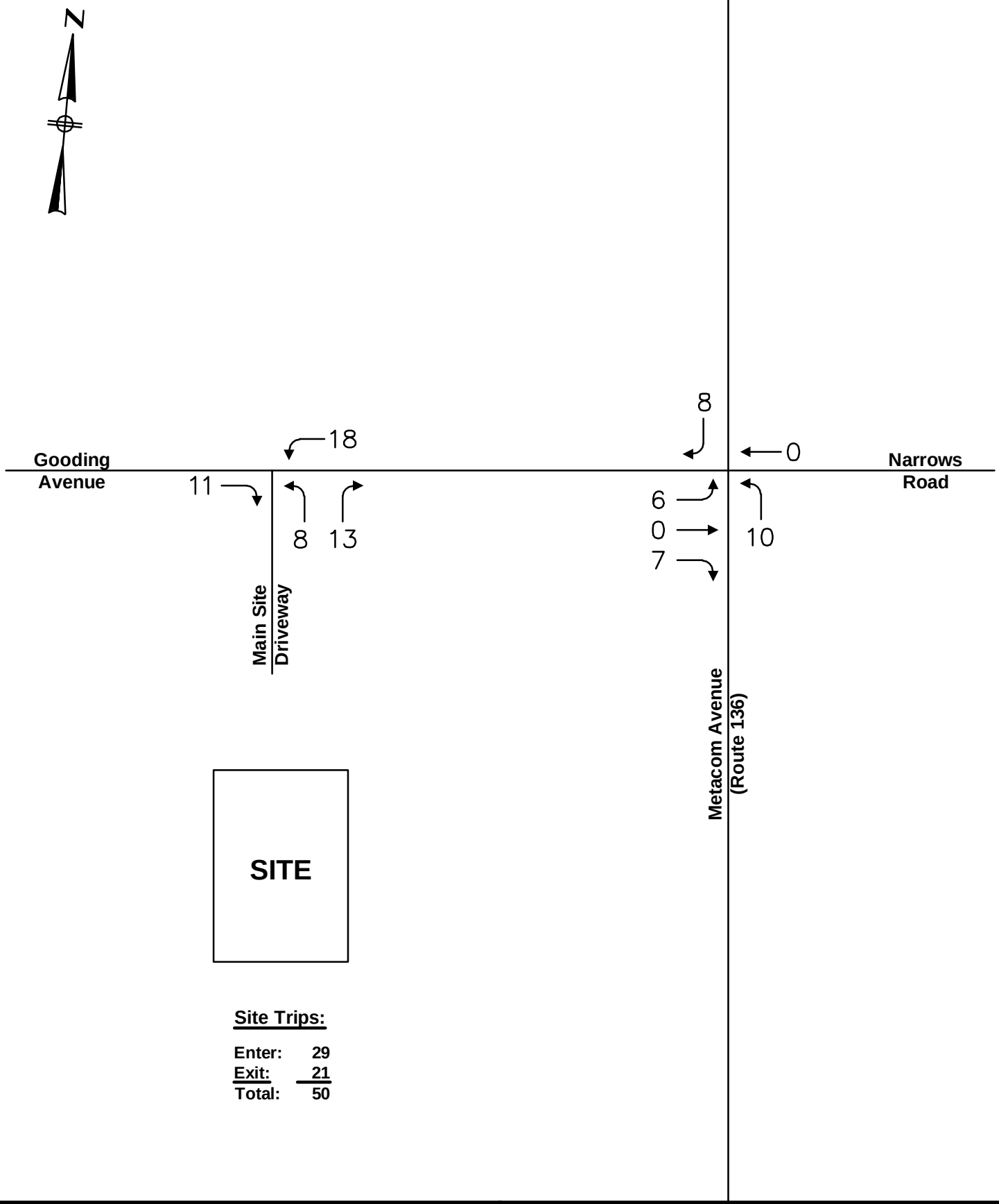
PM Peak *Directional Distribution: 49% Entering 51% Exiting*

T = 0.73 (X)
T = 0.73 80
T = 59

Enter: 28
Exit: 31
Total: 59

C

Site Trip Distribution



Site Trips:

Enter:	29
Exit:	21
Total:	50

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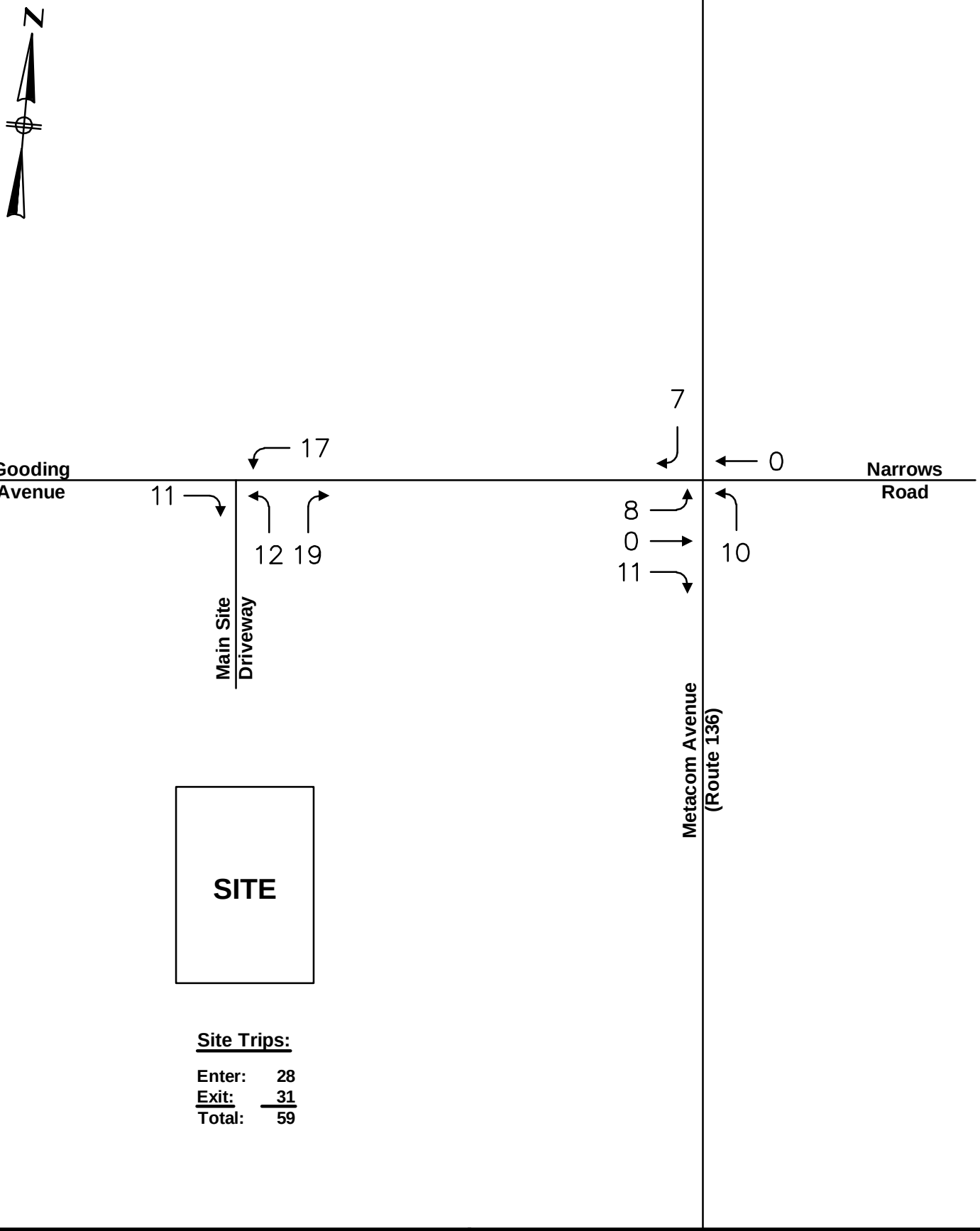
WEEKDAY TRAFFIC DISTRIBUTION
AM PEAK HOUR BUILD

MAINSTAY/SLEEP INN HOTEL
BRISTOL, RHODE ISLAND



Site Trips:

Enter:	**28**
Exit:	**31**
Total:	**59**

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WEEKDAY TRAFFIC DISTRIBUTION
PM PEAK HOUR BUILD

MAINSTAY/SLEEP INN HOTEL
BRISTOL, RHODE ISLAND

C

ITE Land Use Code

ITE Land Use Code 310 – Hotel

Land Use: 310
Hotel

Description

A hotel is a place of lodging that provides sleeping accommodations and supporting facilities such as restaurants, cocktail lounges, meeting and banquet rooms or convention facilities, limited recreational facilities (pool, fitness room), and/or other retail and service shops. All suites hotel (Land Use 311), business hotel (Land Use 312), motel (Land Use 320), and resort hotel (Land Use 330) are related uses.

Additional Data

Studies of hotel employment density indicate that, on the average, a hotel will employ 0.9 employees per room.[1]

Twenty-five studies provided information on occupancy rates at the time the studies were conducted. The average occupancy rate for these studies was approximately 82 percent.

Some properties contained in this land use provide guest transportation services such as airport shuttles, limousine service, or golf course shuttle service, which may have an impact on the overall trip generation rates.

Time-of-day distribution data for this land use are presented in Appendix A. For the one center city core site with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 8:30 and 9:30 a.m. and 3:15 and 4:15 p.m., respectively. On Saturday and Sunday, the peak hours were between 5:00 and 6:00 p.m. and 10:15 and 11:15 a.m., respectively.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, District of Columbia, Florida, Georgia, Indiana, Minnesota, New York, Pennsylvania, South Dakota, Texas, Vermont, Virginia, and Washington.

For all lodging uses, it is important to collect data on occupied rooms as well as total rooms in order to accurately predict trip generation characteristics for the site.

Trip generation at a hotel may be related to the presence of supporting facilities such as convention facilities, restaurants, meeting/banquet space, and retail facilities. Future data submissions should specify the presence of these amenities. Reporting the level of activity at the supporting facilities such as full, empty, partially active, number of people attending a meeting/banquet during observation may also be useful in further analysis of this land use.

Source Numbers

170, 260, 262, 277, 280, 301, 306, 357, 422, 507, 577, 728, 867, 872, 925, 951

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[1] Buttke, Carl H. Unpublished studies of building employment densities, Portland, Oregon.

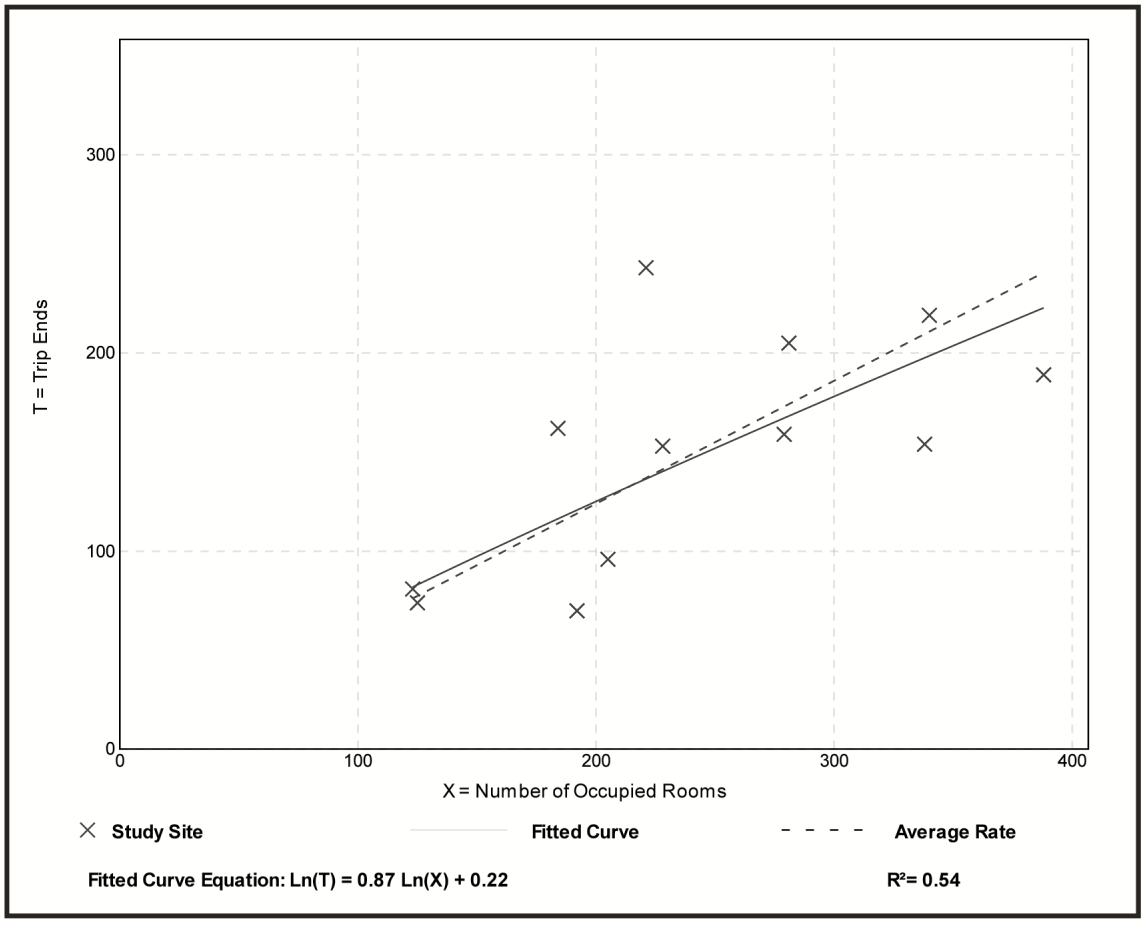
Hotel
(310)

Vehicle Trip Ends vs: **Occupied Rooms**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 12
Avg. Num. of Occupied Rooms: 242
Directional Distribution: 58% entering, 42% exiting

Vehicle Trip Generation per Occupied Room

Average Rate	Range of Rates	Standard Deviation
0.62	0.36 - 1.10	0.20

Data Plot and Equation



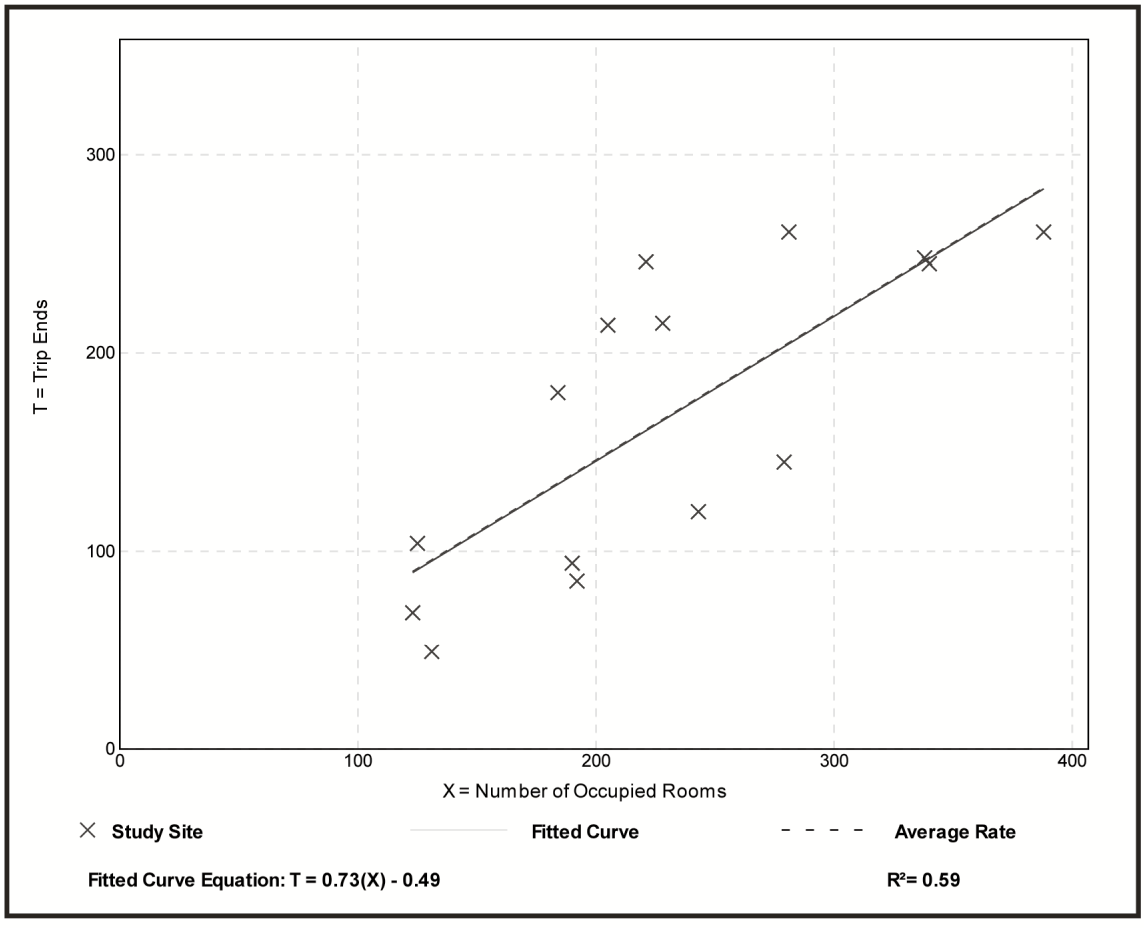
Hotel
(310)

Vehicle Trip Ends vs:	**Occupied Rooms**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	15
Avg. Num. of Occupied Rooms:	231
Directional Distribution:	49% entering, 51% exiting

Vehicle Trip Generation per Occupied Room

Average Rate	Range of Rates	Standard Deviation
0.73	0.37 - 1.11	0.22

Data Plot and Equation



APPENDIX D – Operational Analysis

Existing Conditions

Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road

Future Build Conditions

Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road
Gooding Avenue at Main Site Driveway

D

Existing Weekday AM / PM Peak Hour

Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road

Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road

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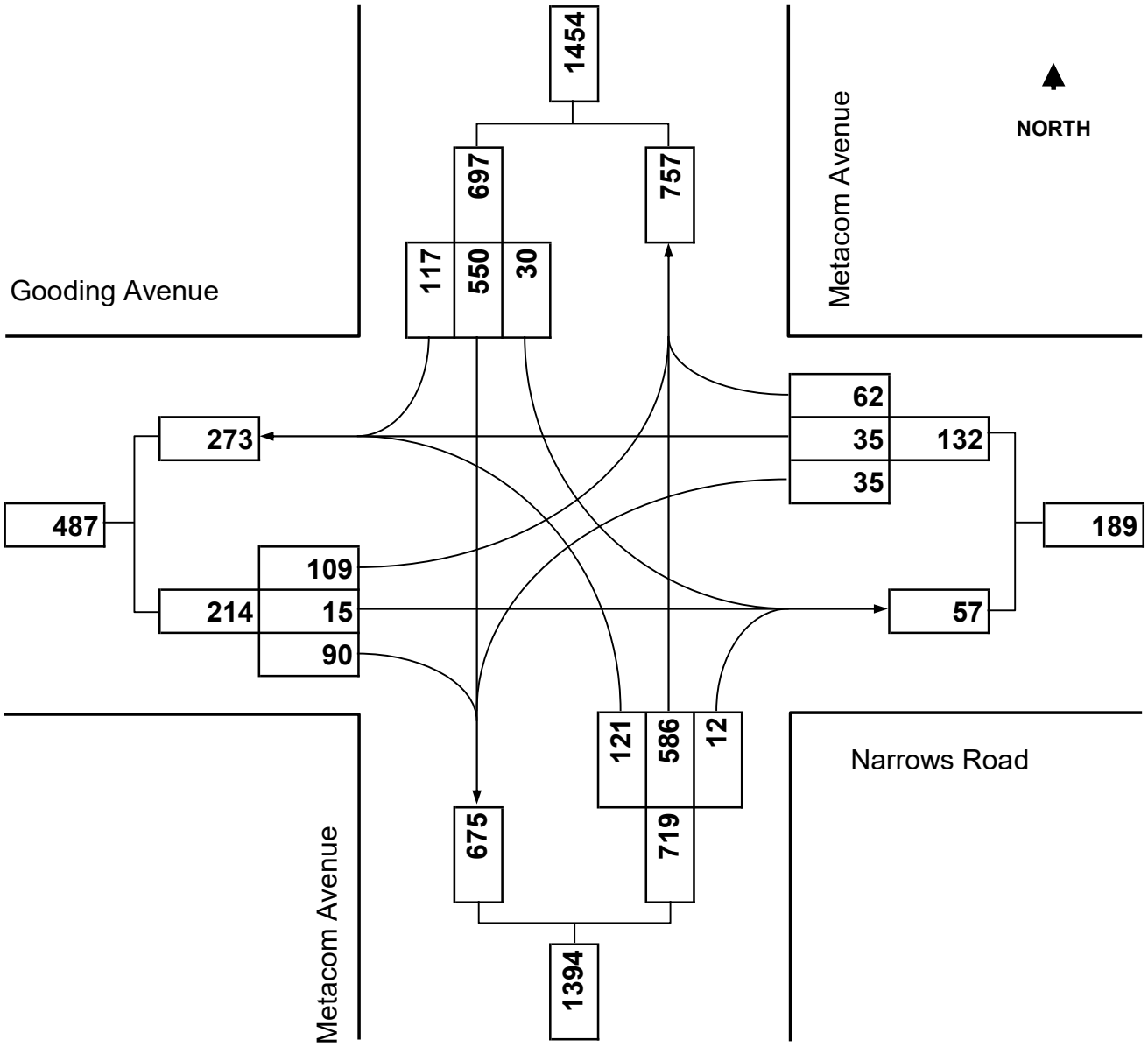
Turning Movement Diagram

Major Street:	Metacom Avenue	**Minor Street**:	Gooding Avenue
City/Town:	Bristol, RI	**Day of Week**:	Weekday
Reference No.:	6954	**Peak Period**:	7:30 AM - 8:30 AM
Existing:	AM Peak Hour	**Future**:	n/a



Mainstay/Sleep Inn Hotel — Bristol, RI
Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road — 07/30/2020

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	15	90	35	35	62	121	586	12	30	550	117
Future Volume (vph)	109	15	90	35	35	62	121	586	12	30	550	117
Satd. Flow (prot)	1805	1900	1615	1805	1900	1615	1805	1894	0	1805	3516	0
Flt Permitted	0.464			0.747			0.950			0.950		
Satd. Flow (perm)	882	1900	1615	1419	1900	1615	1805	1894	0	1805	3516	0
Satd. Flow (RTOR)			121			121		1			35	
Lane Group Flow (vph)	118	16	98	38	38	67	132	650	0	33	725	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Total Split (s)	13.0	22.0	22.0	11.0	20.0	20.0	13.0	46.0		11.0	44.0	
Total Lost Time (s)	4.0	4.5	4.5	4.0	4.5	4.5	4.0	5.0		4.0	5.0	
Act Effct Green (s)	17.2	11.3	11.3	13.6	7.6	7.6	11.7	55.6		7.5	47.0	
Actuated g/C Ratio	0.19	0.13	0.13	0.15	0.08	0.08	0.13	0.62		0.08	0.52	
v/c Ratio	0.46	0.07	0.32	0.16	0.24	0.27	0.56	0.56		0.22	0.39	
Control Delay	35.0	36.2	7.6	28.5	41.9	4.0	45.7	14.9		42.0	14.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	35.0	36.2	7.6	28.5	41.9	4.0	45.7	14.9		42.0	14.5	
LOS	C	D	A	C	D	A	D	B		D	B	
Approach Delay		23.5			20.6			20.1			15.7	
Approach LOS		C			C			C			B	
Queue Length 50th (ft)	56	8	0	17	21	0	71	237		18	124	
Queue Length 95th (ft)	100	27	32	41	50	8	124	390		46	191	
Internal Link Dist (ft)		343			274			231			269	
Turn Bay Length (ft)	330		150	100		100	225			140		
Base Capacity (vph)	263	377	417	244	327	378	240	1170		149	1851	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.45	0.04	0.24	0.16	0.12	0.18	0.55	0.56		0.22	0.39	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 13 (14%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.56
Intersection Signal Delay: 18.8 — Intersection LOS: B
Intersection Capacity Utilization 61.4% — ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 1:

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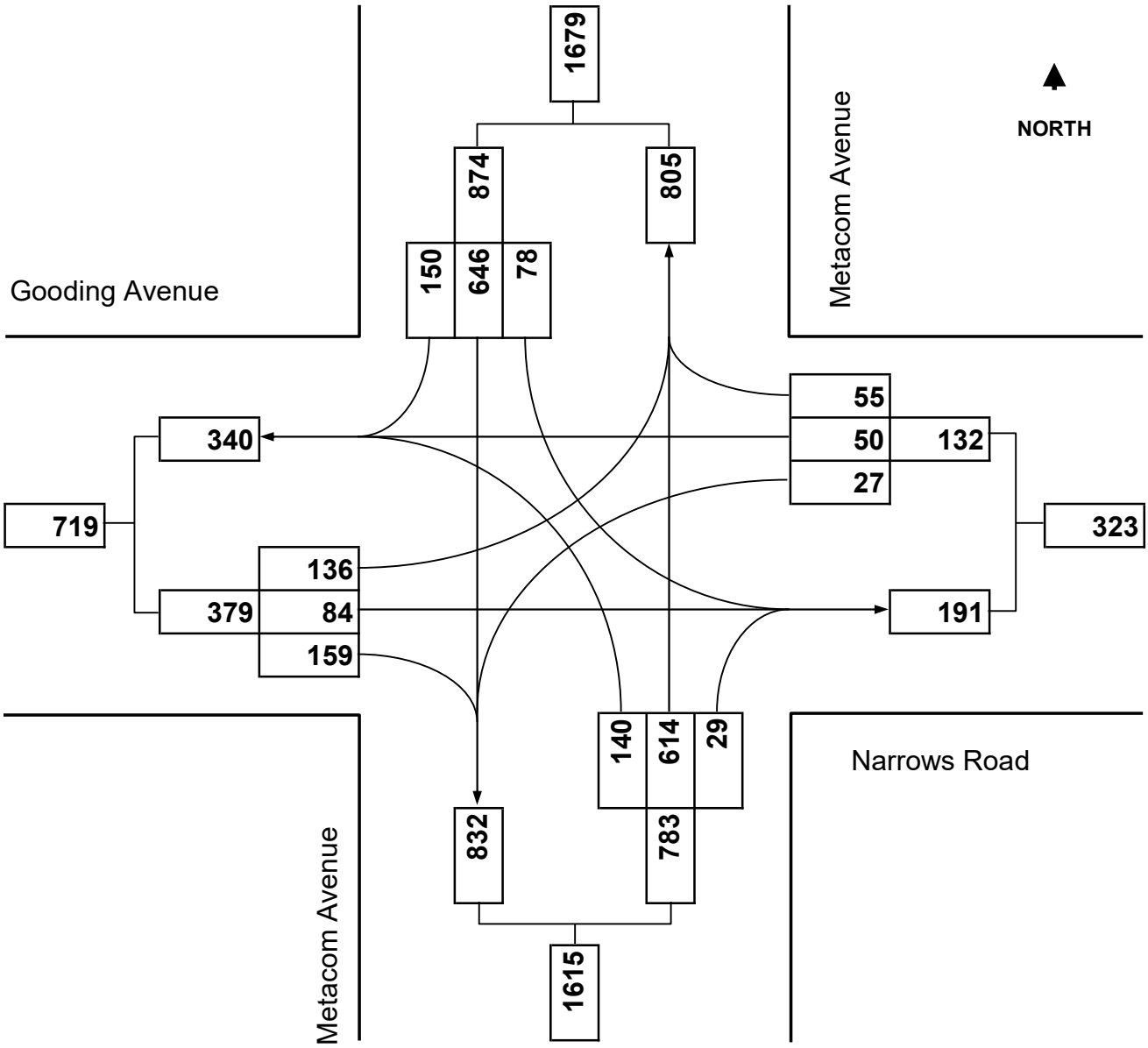
Turning Movement Diagram

Major Street:	Metacom Avenue	**Minor Street**:	Gooding Avenue
City/Town:	Bristol, RI	**Day of Week**:	Weekday
Reference No.:	6954	**Peak Period**:	4:30 PM - 5:30 PM
Existing:	PM Peak Hour	**Future**:	n/a



Mainstay/Sleep Inn Hotel — Bristol, RI
Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road — 07/30/2020

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	84	159	27	50	55	140	614	29	78	646	150
Future Volume (vph)	136	84	159	27	50	55	140	614	29	78	646	150
Satd. Flow (prot)	1805	1900	1615	1805	1900	1615	1805	1887	0	1805	3509	0
Flt Permitted	0.488			0.699			0.950			0.950		
Satd. Flow (perm)	927	1900	1615	1328	1900	1615	1805	1887	0	1805	3509	0
Satd. Flow (RTOR)			169			121		3			39	
Lane Group Flow (vph)	145	89	169	29	53	59	149	684	0	83	847	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Total Split (s)	13.0	22.0	22.0	11.0	20.0	20.0	14.0	42.0		15.0	43.0	
Total Lost Time (s)	4.0	4.5	4.5	4.0	4.5	4.5	4.0	5.0		4.0	5.0	
Act Effct Green (s)	18.3	14.2	14.2	14.2	8.2	8.2	12.2	50.8		9.3	45.7	
Actuated g/C Ratio	0.20	0.16	0.16	0.16	0.09	0.09	0.14	0.56		0.10	0.51	
v/c Ratio	0.53	0.30	0.43	0.12	0.31	0.23	0.61	0.64		0.45	0.47	
Control Delay	36.3	36.4	9.6	27.0	42.4	2.1	47.2	20.3		45.0	16.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	36.3	36.4	9.6	27.0	42.4	2.1	47.2	20.3		45.0	16.2	
LOS	D	D	A	C	D	A	D	C		D	B	
Approach Delay		25.1			22.4			25.1			18.8	
Approach LOS		C			C			C			B	
Queue Length 50th (ft)	69	41	0	13	29	0	80	275		45	158	
Queue Length 95th (ft)	117	91	56	33	63	2	138	#501		87	236	
Internal Link Dist (ft)		343			274			231			269	
Turn Bay Length (ft)	330		150	100		100	225			140		
Base Capacity (vph)	279	393	468	247	327	378	252	1065		226	1800	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.52	0.23	0.36	0.12	0.16	0.16	0.59	0.64		0.37	0.47	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 15 (17%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 22.4 — Intersection LOS: C
Intersection Capacity Utilization 65.4% — ICU Level of Service C
Analysis Period (min) 15
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1:

D

Future Build Weekday AM / PM Peak Hour

Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road
Gooding Avenue at Site Driveway

Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road

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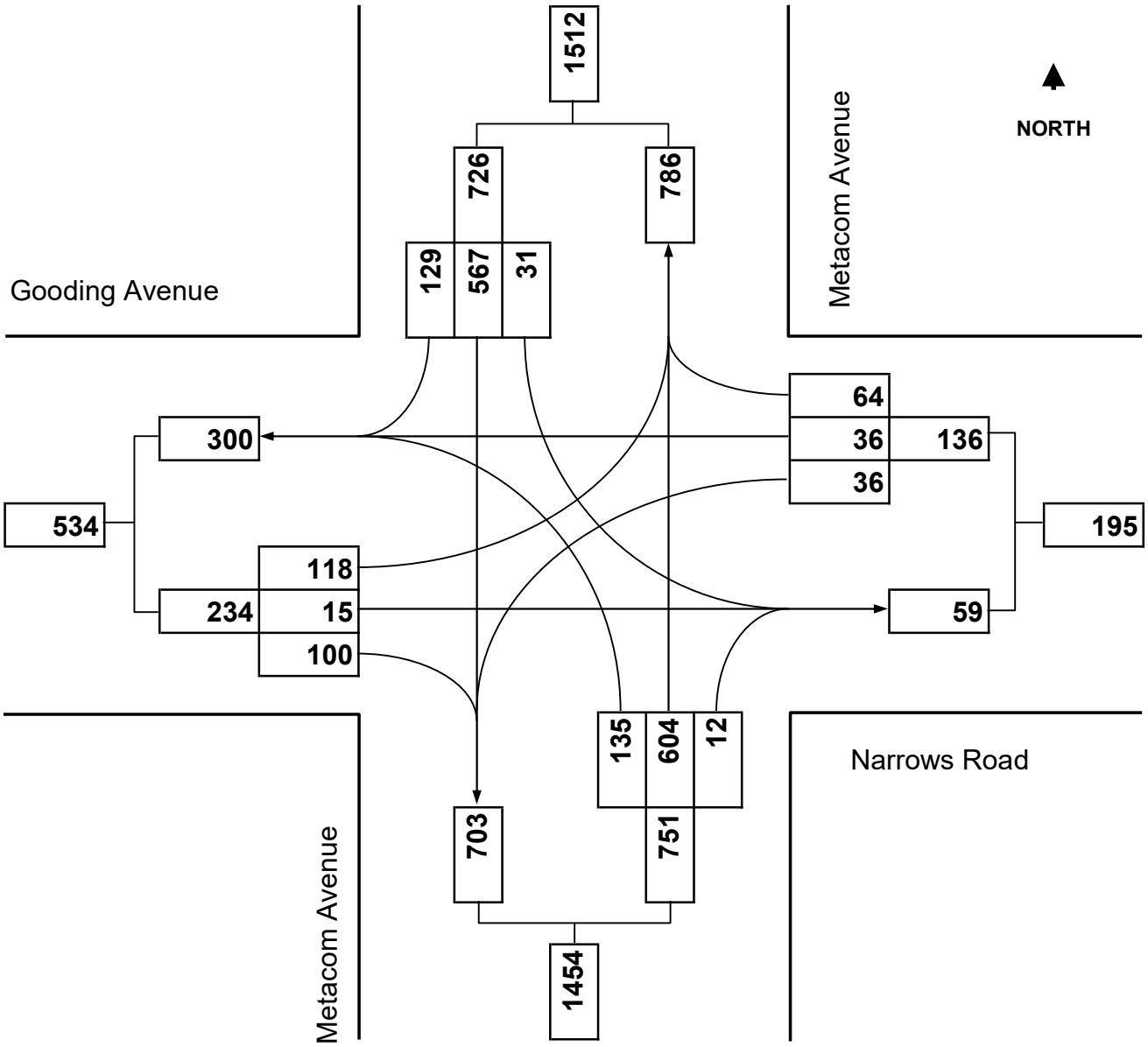
Turning Movement Diagram

Major Street:	Metacom Avenue	**Minor Street**:	Gooding Avenue
City/Town:	Bristol, RI	**Day of Week**:	Weekday
Reference No.:	6954	**Peak Period**:	AM Peak Hour
Existing:	n/a	**Future**:	2023 Build



Mainstay/Sleep Inn Hotel — Bristol, RI
Metacom Avenue (Route 136) at Gooding Avenue/Narrows Road — 07/30/2020

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	118	15	100	36	36	64	135	604	12	31	567	129
Future Volume (vph)	118	15	100	36	36	64	135	604	12	31	567	129
Satd. Flow (prot)	1805	1900	1615	1805	1900	1615	1805	1894	0	1805	3509	0
Flt Permitted	0.466			0.747			0.950			0.950		
Satd. Flow (perm)	885	1900	1615	1419	1900	1615	1805	1894	0	1805	3509	0
Satd. Flow (RTOR)			121			121		1			38	
Lane Group Flow (vph)	128	16	109	39	39	70	147	670	0	34	756	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Total Split (s)	13.0	22.0	22.0	11.0	20.0	20.0	13.0	46.0		11.0	44.0	
Total Lost Time (s)	4.0	4.5	4.5	4.0	4.5	4.5	4.0	5.0		4.0	5.0	
Act Effct Green (s)	17.3	11.4	11.4	13.6	7.6	7.6	12.6	55.5		7.5	45.9	
Actuated g/C Ratio	0.19	0.13	0.13	0.15	0.08	0.08	0.14	0.62		0.08	0.51	
v/c Ratio	0.50	0.07	0.35	0.16	0.24	0.28	0.58	0.57		0.23	0.42	
Control Delay	36.0	36.1	9.5	28.5	42.0	4.6	45.4	15.4		42.1	15.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	36.0	36.1	9.5	28.5	42.0	4.6	45.4	15.4		42.1	15.2	
LOS	D	D	A	C	D	A	D	B		D	B	
Approach Delay		24.6			20.8			20.8			16.4	
Approach LOS		C			C			C			B	
Queue Length 50th (ft)	61	8	0	18	21	0	79	248		19	135	
Queue Length 95th (ft)	107	27	40	42	51	11	136	410		47	201	
Internal Link Dist (ft)		1673			274			231			269	
Turn Bay Length (ft)	330		150	100		100	225			140		
Base Capacity (vph)	264	378	418	244	327	378	254	1167		150	1809	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.48	0.04	0.26	0.16	0.12	0.19	0.58	0.57		0.23	0.42	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 13 (14%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.58
Intersection Signal Delay: 19.5 — Intersection LOS: B
Intersection Capacity Utilization 62.8% — ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 1:

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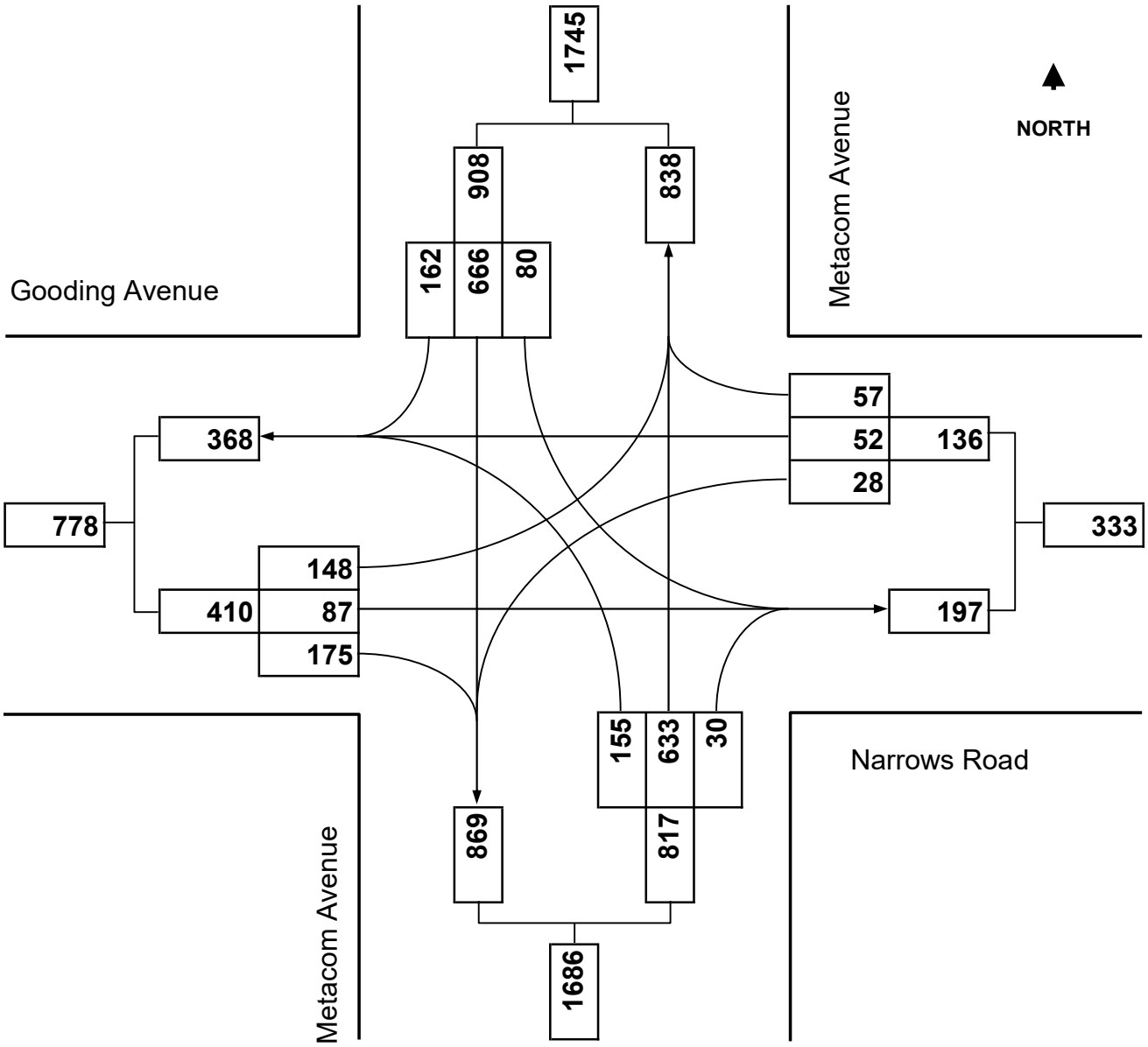
Turning Movement Diagram

Major Street:	Metacom Avenue	**Minor Street**:	Gooding Avenue
City/Town:	Bristol, RI	**Day of Week**:	Weekday
Reference No.:	6954	**Peak Period**:	PM Peak Hour
Existing:	n/a	**Future**:	2023 Build



Mainstay/Sleep Inn Hotel — Bristol, RI
Metacom Avenue at Gooding Avenue/Narrows Road — 07/30/2020

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	148	87	175	28	52	57	155	633	30	80	666	162
Future Volume (vph)	148	87	175	28	52	57	155	633	30	80	666	162
Satd. Flow (prot)	1805	1900	1615	1805	1900	1615	1805	1887	0	1805	3505	0
Flt Permitted	0.472			0.697			0.950			0.950		
Satd. Flow (perm)	897	1900	1615	1324	1900	1615	1805	1887	0	1805	3505	0
Satd. Flow (RTOR)			186			121		3			41	
Lane Group Flow (vph)	157	93	186	30	55	61	165	705	0	85	881	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Total Split (s)	13.0	22.0	22.0	11.0	20.0	20.0	14.0	42.0		15.0	43.0	
Total Lost Time (s)	4.0	4.5	4.5	4.0	4.5	4.5	4.0	5.0		4.0	5.0	
Act Effct Green (s)	18.0	12.1	12.1	14.3	8.3	8.3	13.1	50.6		9.4	44.6	
Actuated g/C Ratio	0.20	0.13	0.13	0.16	0.09	0.09	0.15	0.56		0.10	0.50	
v/c Ratio	0.59	0.36	0.49	0.12	0.31	0.24	0.63	0.66		0.45	0.50	
Control Delay	38.4	39.7	10.5	26.9	42.4	2.5	46.9	21.2		45.0	17.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	38.4	39.7	10.5	26.9	42.4	2.5	46.9	21.2		45.0	17.2	
LOS	D	D	B	C	D	A	D	C		D	B	
Approach Delay		26.8			22.5			26.1			19.6	
Approach LOS		C			C			C			B	
Queue Length 50th (ft)	75	50	0	13	30	0	88	291		46	172	
Queue Length 95th (ft)	124	94	58	34	64	4	153	#557		89	248	
Internal Link Dist (ft)		1775			274			231			269	
Turn Bay Length (ft)	330		150	100		100	225			140		
Base Capacity (vph)	273	380	471	248	327	378	266	1061		227	1758	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.58	0.24	0.39	0.12	0.17	0.16	0.62	0.66		0.37	0.50	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 15 (17%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.66
Intersection Signal Delay: 23.4 — Intersection LOS: C
Intersection Capacity Utilization 67.1% — ICU Level of Service C
Analysis Period (min) 15
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1:

Mainstay/Sleep Inn Hotel — Bristol, RI
Metacom Avenue at Gooding Avenue/Narrows Road — 07/30/2020

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	391	11	17	351	12	19
Future Volume (vph)	391	11	17	351	12	19
Satd. Flow (prot)	1892	0	0	1896	1709	0
Flt Permitted				0.998	0.981	
Satd. Flow (perm)	1892	0	0	1896	1709	0
Lane Group Flow (vph)	437	0	0	400	34	0
Sign Control	Free			Free	Stop	

Intersection Summary	
Control Type: Unsignalized	
Intersection Capacity Utilization 42.3%	ICU Level of Service A
Analysis Period (min) 15	

Gooding Avenue at Main Site Driveway

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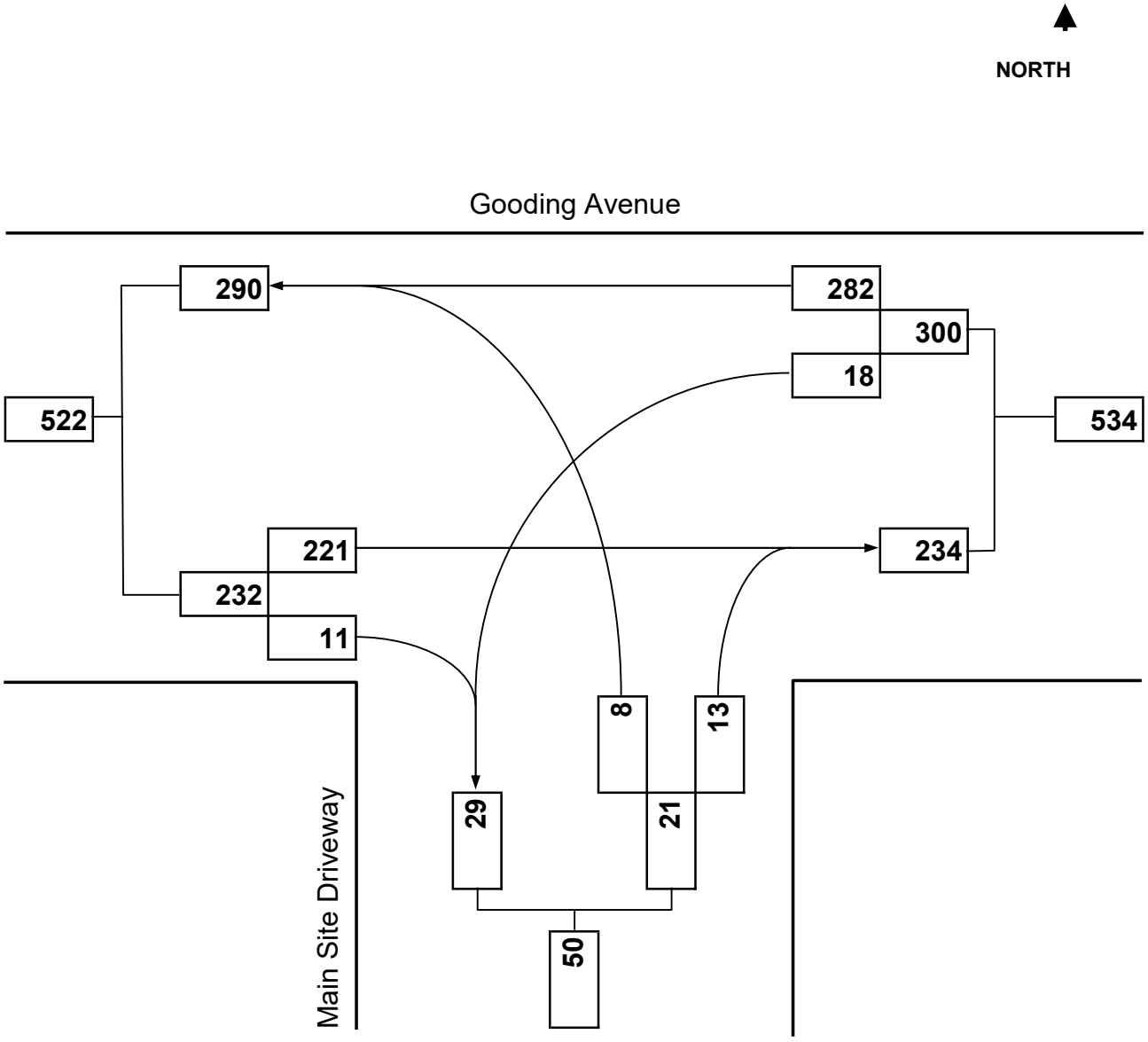
Turning Movement Diagram

Major Street:	Gooding Avenue	**Minor Street**:	Main Site Driveway
City/Town:	Bristol, RI	**Day of Week**:	Weekday
Reference No.:	6954	**Peak Period**:	AM Peak Hour
Existing:	n/a	**Future**:	2023 Build

NORTH



Mainstay/Sleep Inn Hotel
Gooding Avenue at Main Site Driveway

Bristol, RI
07/30/2020

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	221	11	18	282	8	13
Future Vol, veh/h	221	11	18	282	8	13
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	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	240	12	20	307	9	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	252	0	593	246
Stage 1	-	-	-	-	246	-
Stage 2	-	-	-	-	347	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1325	-	472	798
Stage 1	-	-	-	-	800	-
Stage 2	-	-	-	-	720	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1325	-	464	798
Mov Cap-2 Maneuver	-	-	-	-	464	-
Stage 1	-	-	-	-	800	-
Stage 2	-	-	-	-	707	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	11
HCM LOS			B

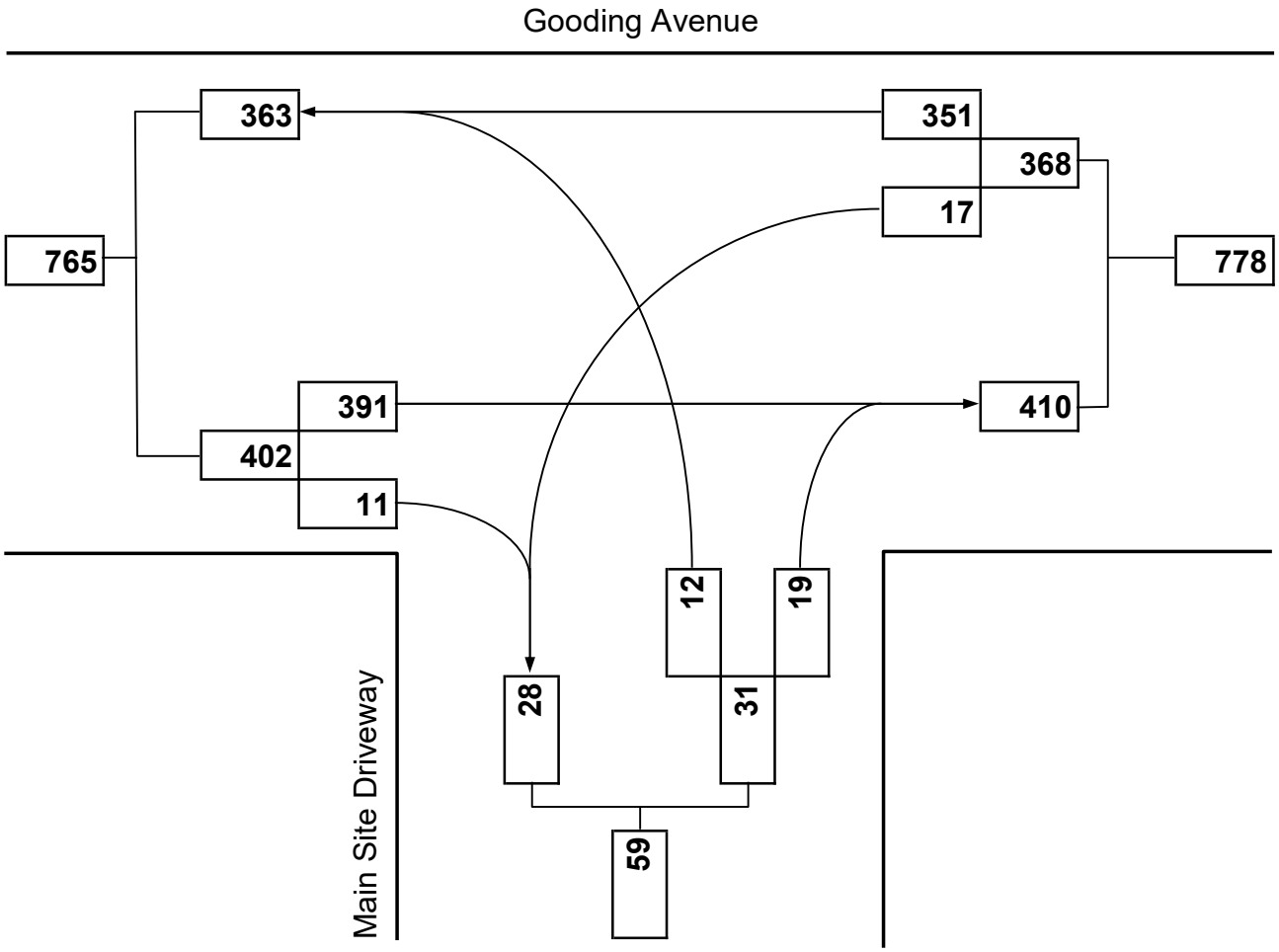
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	626	-	-	1325	-
HCM Lane V/C Ratio	0.036	-	-	0.015	-
HCM Control Delay (s)	11	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

www.BETA-Inc.com

Turning Movement Diagram

Major Street:	Gooding Avenue	**Minor Street**:	Main Site Driveway
City/Town:	Bristol, RI	**Day of Week**:	Weekday
Reference No.:	6954	**Peak Period**:	PM Peak Hour
Existing:	n/a	**Future**:	2023 Build

NORTH



Mainstay/Sleep Inn Hotel
Gooding Avenue at Main Site Driveway

Bristol, RI
07/30/2020

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	391	11	17	351	12	19
Future Vol, veh/h	391	11	17	351	12	19
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	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	425	12	18	382	13	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	437	0	849	431
Stage 1	-	-	-	-	431	-
Stage 2	-	-	-	-	418	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1134	-	334	629
Stage 1	-	-	-	-	660	-
Stage 2	-	-	-	-	669	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1134	-	327	629
Mov Cap-2 Maneuver	-	-	-	-	327	-
Stage 1	-	-	-	-	660	-
Stage 2	-	-	-	-	656	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	13.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	463	-	-	1134	-
HCM Lane V/C Ratio	0.073	-	-	0.016	-
HCM Control Delay (s)	13.4	-	-	8.2	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

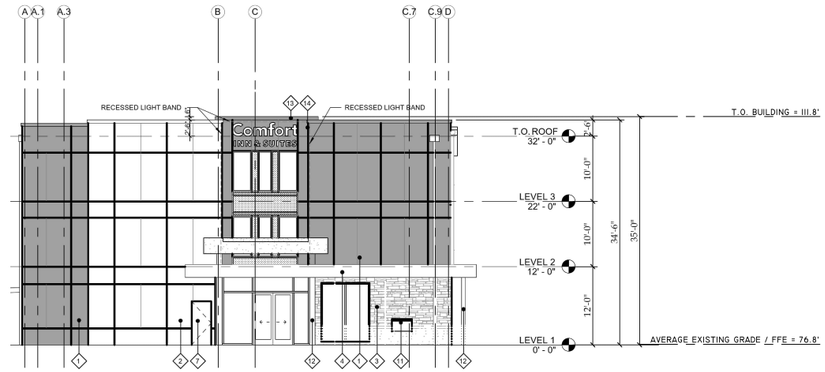
PROPOSED BUILDING

AVERAGE EXISTING GRADE = 76.8' (EXISTING GRADE)

PROPOSED FIRST FLOOR = 76.8'

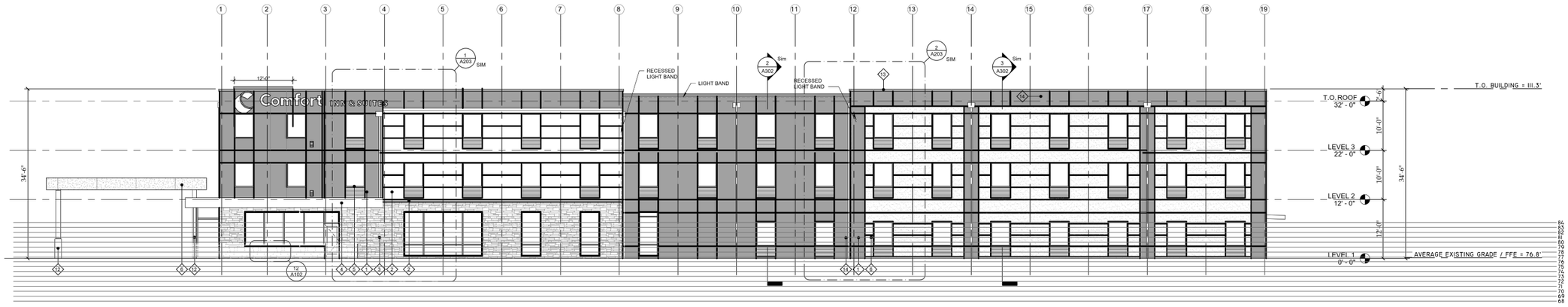
TOP OF ROOF = 111.8' (35.0' ABOVE AVERAGE EXISTING GRADE)

MAXIMUM ALLOWABLE HEIGHT = 35.0' = 111.8' TOP OF ROOF



SIDE ELEVATION

SCALE: 3/32" = 1'-0"



FRONT ELEVATION (GOODING AVENUE)

SCALE: 3/32" = 1'-0"

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NO.	DATE	DESCRIPTION	BY:
0	X-X-X	EXTERIOR ELEVATIONS EXHIBIT PLAN	J.A.R.

DRAWN BY: J.A.R.

EXTERIOR ELEVATIONS EXHIBIT PLAN

COMFORT INN & SUITES

AP 111 LOT 1
BRISTOL, RHODE ISLAND

OWNER & APPLICANT:
D&M BOCA DEVELOPMENT, LLC
92 FAUNCE CORNER ROAD, SUITE 160,
NORTH DARTMOUTH, MA 02747

SHEET | OF 1

DE JOB NO: 2536-001

Z:\DEMAIN\PROJECTS\2536-001 GOODING AVENUE\AUTOCAD DRAWINGS\2536-001-PLAN.DWG PLOTTED: 1/15/2025

SUBMISSION CHECKLIST
PREAPPLICATION CONFERENCE AND CONCEPT REVIEW

01-27-2025
J.A.R.
Date & Initials of Reviewer

A. Plan of Existing Conditions - Five (5) blueline or photocopies of the subject property no larger than 24" x 36" as it currently exists including locations and dimensions of existing lots if the proposed subdivision constitutes a replat or if the development consists of several lots and all natural features such as existing contours at five (5) foot intervals.	✓ See Survey
B. Concept Plans - Five (5) blueline or photocopies no larger than 24" x 36" of the concept plan for the development showing, at a minimum, the following information**:**	
1. Name of proposed subdivision or development; All Sheets	✓
2. Name and address of the property owner and applicant; All Sheets	✓
3. Name, address, and telephone number of preparer; All Sheets	✓
4. Date plan prepared, with revision date(s) (if any): All Sheets	✓
5. Graphic scale and north arrow; Sheets 2, 4	✓
6. Assessor's Plat and lot number(s) of the subject property; All Sheets	✓
7. Zoning district(s) of the subject property. If more than one district, zoning boundary lines must be shown; Sheet 4	✓
8. Perimeter boundary lines of the entire tract under the applicant's ownership; Sheet 4	✓
9. Area of the subject property and proposed number of buildable lots, dwellings or other proposed improvements; Sheet 4	✓
10. Location, names, and pavement and right-of-way widths of existing streets adjacent to the subject property; Sheet 4	✓
11. Names of abutting property owners and property owners immediately across any adjacent streets; Sheet 4	✓
12. Location and dimension of existing easements and rights-of-way adjacent to or within the subject property, if any; See provided Survey (by others)	✓
13. Notation of existing ground cover and approximate location of wooded areas (if any); Sheet 4	✓
14. Approximate location of wetlands, watercourses or coastal features, and other significant natural or manmade features (i.e. stonewalls) within and immediately adjacent to the subdivision parcel, if any; See provided Survey (by others) and Sheet 4	✓
15. Location and approximate size of existing buildings on or immediately adjacent to the subject property, if any; including, historic designation, if applicable; Sheet 4	✓
16. Proposed improvements including streets, lots, lot lines with approximate lot areas and dimensions and building envelopes; Sheet 4	✓
17. A notation of the existing on-site utilities (gas, water, sewer, electric), if any; Sheet 4	✓
18. Proposed connections with existing water supply and sanitary sewer systems, or a notation that wells and ISDS are proposed; Sheet 4	✓
19.Provisions for collecting and discharging stormwater; Sheet 4	✓

SUBMISSION CHECKLIST, CONT.

	Date & Initials of Reviewer
20. Notation on the plan if the subject property is located within any of the following areas: Town Overlay Districts, Special Flood Hazard Areas, or Coastal Resources Management Council jurisdiction. Sheet 3	✓
C. Supporting Materials -	
1. One (1) copy of a narrative report providing the general description of the existing physical environment and existing use(s) of the property; and, the general description of the uses and type of development proposed by the applicant; See provided	✓
2. A reduced copy of plans required in Items A and B above (minimum size 8 1/2" x 11", maximum size 11"x 17"); See provided	✓
3. Completed Application Form. See provided	✓

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
235 Promenade Street
Providence, Rhode Island 02908

CERTIFIED MAIL

December 6, 2024

KenDan, LLC
c/o Daniel D. Donovan, III
613 Aquidneck Avenue
Middletown, RI 02842

PERMIT TO ALTER FRESHWATER WETLANDS

RE: Wetlands Application No. 22-0264, RIPDES File No. RIR101247; and Groundwater Discharge/UIC No. 001650 in reference to the location below:

Approximately 150 feet south of Gooding Avenue near Utility Pole No. 218, and approximately 300 feet southeast of its intersection with Broadcommon Road, Assessor's Plat 111, Lot 1, Bristol, RI.

Dear Mr. Donovan:

The Department of Environmental Management's ("DEM") Freshwater Wetlands Program ("Program") has completed its review of your **Application to Alter a Freshwater Wetland** regarding the proposed construction of a 76-room hotel and associated parking area, screen plantings, stormwater mitigation systems, utilities (electrical utility connection and connections to town water line, gas line, and sewer line), with clearing, grading, and soil disturbance as described and detailed in the material and information submitted in support of your application and on site plans received by the DEM on November 8, 2023. These site plans describing the project were made available for public comment as part of the forty-five (45) day public notice period required in accordance with the Freshwater Wetlands Act (R.I. Gen. Laws § 2-1-18 et seq.) and the procedures set forth in the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act, 250-RICR-150-15-1, specifically in 250-RICR-150-15-1.10.

This Program received thirty-five (35) letters relating to your application which were submitted during the public notice period. These letters expressed concern regarding your project's impacts to freshwater wetland values. This Program reviewed these letters together with any supporting documents and evaluated the potential impacts from the project upon the values mentioned in the letters. The Program has determined that the comments contained within these letters do not constitute an objection of a substantive nature as defined in 250-RICR-150-15-1.10(D)(3)(c). Therefore, a public hearing pursuant to R.I. Gen. Laws § 2-1-22 is not required.

Pursuant to the Program's review and evaluation of your application including all supporting information and material, as well as the record to date, the Program has determined that this project does not represent a random, unnecessary, or undesirable alteration of freshwater wetlands. Therefore, this Program hereby issues this permit to alter freshwater wetlands **subject to all controlling Rules and the Terms and Conditions set forth herein.**

Terms and Conditions for Wetlands Application No. 22-0264; RIPDES No. RIR101247; Groundwater Discharge/UIC No. 001650:

1. This letter is the DEM's permit for this project under the R.I. Fresh Water Wetlands Act, R.I. Gen. Laws § 2-1-18 et seq. This application review has also included review of any stormwater infiltration system subject to the DEM Groundwater Discharge Rules, 250-RICR-150-05-4 (Rules for the Discharge of Non-Sanitary Wastewater and Other Fluid to or Below the Ground Surface).

2. This determination also includes your final authorization to discharge storm water associated with construction activity under the **2020 RIDPES General Permit for Stormwater Discharge During Construction Activity ("CGP").** For future references and inquiry, your permit authorization number is **RIPDES No. RIR101247.** This RIPDES CGP permit is not transferable to any person except after written notice to the Director, in the form of a Permit Transfer Form available on the RIDEM Stormwater Construction Permitting website.

3. This permit is specifically limited to the project, site alterations and limits of disturbance as detailed on the site plans submitted with your application and received by the DEM on November 8, 2023. A copy of the site plans stamped approved by the DEM is enclosed. Changes or revisions to the project that would alter freshwater wetlands are not authorized without a permit from the DEM.

4. Where the terms and conditions of the permit conflict with the approved site plans, these terms and conditions shall be deemed to supersede the site plans.

5. You must notify this Program in writing of the anticipated start date, and of your contractor's contact information, by submitting the Notice of Start of Construction Form prior to commencement of any permitted site alterations or construction activity. You must also notify this Program in writing upon completion of the project, including submittal of the Notice of Termination Form. The Start of Construction Form and the Notice of Termination can be found on the webpage: dem.ri.gov/stormwaterconstruction

6. A copy of the stamped approved site plans and a copy of this permit must be kept at the site at all times during site preparation, construction, and final stabilization. Copies of this permit and the stamped approved plans must be made available for review by any DEM or town representative upon request.

7. Within ten (10) days of the receipt of this permit, you must record this permit in the land evidence records of the Town of Bristol and supply this Program with written documentation obtained from the Town showing this permit was recorded.

8. The effective date of this permit is the date this letter was issued. This permit expires one (1) year from the date of this letter unless renewed pursuant to 250-RICR-150-15-1.10(G)(6).

9. Any material utilized in this project must be clean and free of matter that could pollute any freshwater wetland.

10. Prior to commencement of site alterations, you shall erect or post a sign resistant to the weather and at least twelve (12) inches wide and eighteen (18) inches long, which boldly identifies the initials "DEM" and the application number of this permit. This sign must be maintained at the site in a conspicuous location until such time that the project is complete, and the Program issues a Notice of Completion of Work.

11. Both the owner and the contractor retained to undertake the construction activity are required to comply with all terms and conditions of the CGP. This includes maintaining the Soil Erosion and Sediment Control (SESC) Plan, performing the required inspections and maintenance of the selected Best Management Practices (BMPs), and retaining inspection records. Further information on the requirements of the CGP is available at: http://www.dem.ri.gov/programs/benviron/water/permits/ripdes/pdfs/cgp092620.pdf.

12. Temporary erosion and sediment controls detailed or described on the approved site plans shall be properly installed at the site prior to or commensurate with site alterations. Such controls shall be properly maintained, replaced, supplemented, or modified as necessary throughout the life of this project to minimize soil erosion and to prevent sediment from being deposited in any wetlands not subject to disturbance under this permit.

13. Upon permanent stabilization of all disturbed soils, temporary erosion and/or sediment controls must be removed.

14. You are responsible for the proper installation, operation, maintenance, and stability of any mitigative features, stormwater treatment facilities, and systems of treatment and control that are installed or used in compliance with this permit to prevent harm to adjacent wetlands until documentation is provided that this responsibility has been assigned to another entity. The long-term operation and maintenance plan shall be strictly followed. The long-term operation and maintenance plan shall be as described in the plan entitled "Operation & Maintenance Plan, Gooding Avenue Development, Located in Bristol, Rhode Island; Applicant: Kendan, LLC", dated 1-23-2018, Revised 4-06-2021, dated received 6/27/2022, as prepared by DiPrete Engineering.

15. You are obligated to install, utilize, maintain, and follow all best management practices detailed or described on the approved site plans in the construction of the project to minimize or prevent adverse impacts to any adjacent freshwater wetlands and the functions and values provided by such wetlands.

16. All plantings of shrubs, trees or other forms of vegetation as shown or detailed on the approved plans, or detailed in this permit, must be installed as soon as possible after completion of final grading; weather and season permitting. You must notify this Program in writing upon completion of the required plantings for a compliance inspection by a Program representative.

17. Buffer zone plantings of trees and/or shrubs proposed between the project and any adjacent freshwater wetland areas, except for necessary replacement, must be allowed to develop naturally without being subjected to mowing or manicuring.

18. Any plantings which fail to survive one full growing season shall be replaced. Replacement plantings shall be similarly guaranteed for one full growing season.

19. Artificial lighting authorized by this permit must be directed away from all vegetated wetland areas. Where this is not possible, the use of deflectors to concentrate lighting away from vegetated wetlands must be employed.

20. An environmental consultant, experienced in site assessments and measures necessary to protect sensitive aquatic environments or sensitive ecosystems, must be employed prior to the commencement of site alterations to monitor this project and to ensure compliance with the terms and conditions of this permit. This Program must be notified in writing of the consultant chosen to comply with this condition and must receive monthly written progress reports from the consultant regarding compliance with this permit until such time that the project is complete, or this Program issues a Notice of Completion of Work.

21. You must provide written certification from a registered land surveyor or registered professional engineer that the stormwater drainage system including any and all basins, piping systems, catch basins, culverts, swales and any other stormwater management control features have been constructed/installed in accordance with the site plans approved by this permit. This written certification must be submitted to this Program within twenty (20) days of its request or upon completion of the project.

22. Also prior to commencement of any site alterations, permanent buffer zone markers must be installed along the limit of disturbance at the locations indicated in red ink on the approved site plans, in order to provide permanent reference points on site that are clear to present and future property owners. Acceptable permanent type markers include 4" x 4" pressure treated timber posts, galvanized fence posts with cap, or granite or concrete bounds. Markers must extend a minimum 24" above grade. A permanent-type tag or sign labeled "RIDEM Buffer Zone" must be placed on each marker. A permanent-type fence at least 24" tall placed along the limits of disturbance and similarly labeled may be substituted where desired. No alterations of any kind are permitted beyond these markers without first obtaining the necessary permit from this Program.

23. Immediately upon installation of the buffer zone markers, this Program must be contacted to arrange an on-site inspection. Once proper installation has been confirmed by this Program, work may be initiated on the project as herein approved.

Pursuant to the provisions in 250-RICR-150-15-1.7(A)(9) and 250-RICR-150-15-1.11(D), as applicable, any properly recorded and valid permit is automatically transferred to the new owner upon sale of the property. Pursuant to the provisions in 250-RICR-150-15-1.7(A)(9)(c), within ten (10) days of any property transfer, the subsequent transferee must notify the Department by forwarding a certified copy of the deed of transfer.

Please be aware that the RIDEM's Rules and Regulations Governing the Establishment of Various Fees (250-RICR-30-00-1) require that RIPDES CGP permit holders to pay an Annual Fee of $100.00. An invoice will be sent to the owner on record in May/June of each year if the construction was still active as of December 31st of the previous year. The owner will be responsible for the Annual Fee until the construction activity has been completed, the site has been properly stabilized, and a completed Notice of Termination (NOT) has been received by the RIPDES Program.

You are required to comply with the terms and conditions of this permit and to carry out this project in compliance with the Rules at all times. Failure to do so may result in an enforcement action against you by the DEM.

If you have not already done so, or in order to check on the status of their review, please contact the U.S. Army Corps of Engineers to determine federal permit requirements on your project. Write the Corps' New England District, Regulatory Branch, 696 Virginia Road, Concord, MA 01742-2751; website: https://www.nae.usace.army.mil/Missions/Regulatory/or email at cenaer@usace.army.mil . Please note that the Department of the Army authorization must be obtained before any work is initiated in areas subject to Corps jurisdiction.

In permitting the proposed alterations, the Department assumes no responsibility for damages resulting from faulty design or construction. This permit does not remove your obligation to obtain any local, state, or federal approvals or permits required by ordinance or law and does not relieve you from any duties owed to adjacent landowners with specific reference to any changes in drainage.

If you are aggrieved by this decision, you may, within thirty (30) days of the receipt of this letter, request an adjudicatory hearing in writing. This request must be sent directly to the DEM Administrative Adjudication Division ("AAD"), 235 Promenade Street, Suite 350, Providence, RI 02908. A copy of the request should also be forwarded to this Program and to the Office of Legal Services, at the same address. Your written request for an adjudicatory hearing must be timely filed and should conform to the requirements of 250-RICR-10-00-1.7(B) of the DEM Rules and Regulations for the Administrative Adjudication Division, 250-RICR-10-00-1. Section 250-RICR-10-00-1.7(B) provides:

"The request for a hearing shall state clearly and concisely the specific issues which are in dispute, and the facts in support thereof, the relief sought, if any, the license or permit sought or involved, and any additional information required by applicable statues and regulations."

The written request must be accompanied by an adjudicatory hearing fee of two thousand dollars ($2,000.00); in the form of a certified bank check or money order made payable to the Rhode Island General Treasurer; however, in the event that the cost of the hearing exceeds the fee paid, the Program through the AAD will require an additional fee which the applicant must submit prior to the DEM's issuance of any final decision regarding this application. The adjudicatory hearing will be held before a Hearing Officer from the AAD. Such hearing will be held in compliance with 250-RICR-10-00-1, R.I. Gen. Laws Chapter 42-35-1 et seq., and other governing laws, rules, and regulations adopted by the DEM. Please note that you have the right to be represented by legal counsel in any proceeding which may be held in this matter.

If you have any questions regarding this matter, you may contact me or Jessica Lord of my staff at this office (telephone: 401-537-4249).

Sincerely,

Martin D. Wencek

Martin D. Wencek, Environmental Scientist IV
Office of Water Resources
Freshwater Wetlands Program
MDW/JAL/jal

Enclosure: Approved Site Plans

ec: Mary Dalton, Administrative Adjudication Division
Mary Kay, Executive Counsel, DEM Office of Legal Services
Neal Personeus, DEM Stormwater Program
Elizabeth Waterhouse, U.S. Army Corps of Engineers, New England District
Kevin DeMers, P.E., DiPrete Engineering
Dianne M. Williamson, Director of Community Development, Town of Bristol
Stephen Greenleaf, Town of Bristol Building Official
Alex Van Buren
Denise Duarte
Raymond Payson, Bristol Land Conservation Trust President
Linda M. Jackson
Patrick Barosh, Ph.D., Geologist
Susan Pasqual
Veronica A. Tucker, Board Member, Bristol Conservation Land Trust
Margaret M. Godwin
Patricia J. Pinskey
Melissa Cordeiro, Town Clerk/Council Clerk, Town of Bristol

Edward Spinard
Emily Spinard
Timothy and Melissa Velleca
Tony Morettini, Chair, The Bristol Conservation Commission
Nicole Carvalho-Ahmed
Patricia E. Chalmers
Paul Sousa
Abigail Demopulos
Loren Byrne and Kim Seymour
George Voutes
Lisa Voutes
Mike Proto
James and Carol O'Neill
Patti and Arthur Cirillo
Maria Franzen
Jane and Clifford Teixeira
Maureen McManus
Kayla Barrett
Deborah Schmeller
Kate McPherson, Professional Wetland Scientist, Narragansett Bay Riverkeeper
Deirdre Robinson
Sarah J. Weedon
Nancy E. Dobie
Noelle and Thomas Mello
Aaron J. Ley, Ph.D.

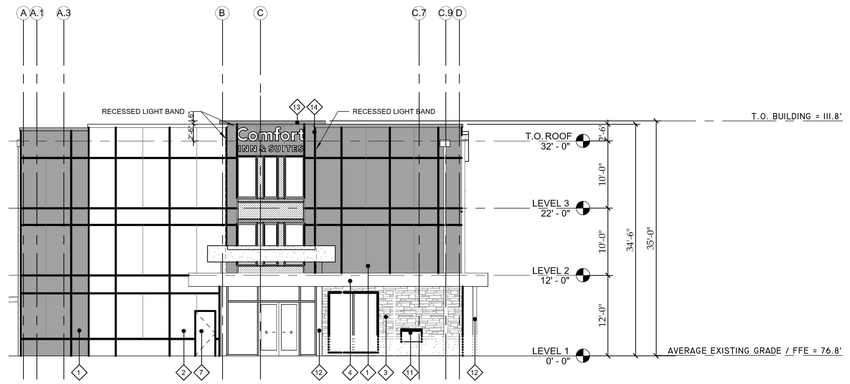
PROPOSED BUILDING

AVERAGE EXISTING GRADE = 76.8' (EXISTING GRADE)

PROPOSED FIRST FLOOR = 76.8'

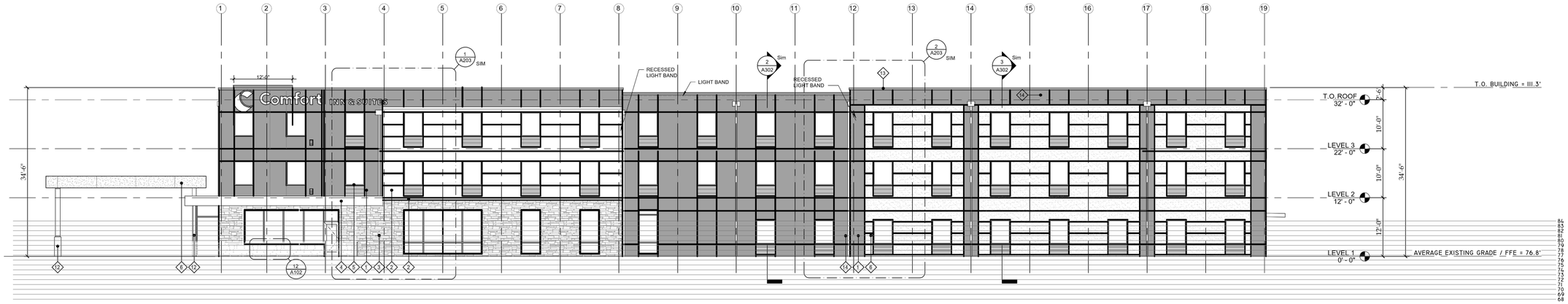
TOP OF ROOF = 111.8' (35.0' ABOVE AVERAGE EXISTING GRADE)

MAXIMUM ALLOWABLE HEIGHT = 35.0' = 111.8' TOP OF ROOF



SIDE ELEVATION

SCALE: 3/32" = 1'-0"



FRONT ELEVATION (GOODING AVENUE)

SCALE: 3/32" = 1'-0"

Z:\DEPAM\PROJECTS\2536-001 GOODING AVENUE\AUTOCAD DRAWINGS\2536-001-PLAN.DWG PLOTTED: 1/15/2025

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NO.	DATE	DESCRIPTION	BY:
0	X-X-X	EXTERIOR ELEVATIONS EXHIBIT PLAN	J.A.R.

DRAWN BY: J.A.R.

EXTERIOR ELEVATIONS EXHIBIT PLAN

COMFORT INN & SUITES

AP 111 LOT 1
BRISTOL, RHODE ISLAND

OWNER & APPLICANT:
D&M BOCA DEVELOPMENT, LLC
92 FAUNCE CORNER ROAD, SUITE 160,
NORTH DARTMOUTH, MA 02747

SHEET 1 OF 1

DE JOB NO. 2536-001 COPYRIGHT 2025 BY DIPRETE ENGINEERING ASSOCIATES, INC.

100 feet Abutters List Report

Bristol, RI
January 27, 2025

Subject Property:

Parcel Number:	111-1	Mailing Address:	D & M BOCA DEVELOPMENT LLC
CAMA Number:	111-1		92 FAUNCE CORNER RD SUITE 160
Property Address:	GOODING AVE		NORTH DARTMOUTH, MA 02747

Abutters:

Parcel Number:	106-59	Mailing Address:	11 BROADCOMMON, LLC
CAMA Number:	106-59		11 BROADCOMMON RD
Property Address:	11 BROADCOMMON RD		BRISTOL, RI 02809
Parcel Number:	108-67	Mailing Address:	TOWN OF BRISTOL
CAMA Number:	108-67		10 COURT ST
Property Address:	GOODING AVE		BRISTOL, RI 02809
Parcel Number:	111-15	Mailing Address:	LIV IN FULFULLING ENVIR INC C/O
CAMA Number:	111-15		LAWRENCE WIEDENHOFE
Property Address:	DIXON AVE		490 METACOM AVE
			BRISTOL, RI 02809
Parcel Number:	111-36	Mailing Address:	BOTELHO, MARIA I (SOLE OWNER)
CAMA Number:	111-36		35 ANDREWS CT
Property Address:	42 ANDREWS CT		BRISTOL, RI 02809
Parcel Number:	111-37	Mailing Address:	REINHART II, MARK
CAMA Number:	111-37		38 ANDREWS CT
Property Address:	38 ANDREWS CT		BRISTOL, RI 02809
Parcel Number:	111-38	Mailing Address:	SAVASTANO, SALVATORE L.
CAMA Number:	111-38		11 MELROSE RD
Property Address:	40 ANDREWS CT		BRISTOL, RI 02809
Parcel Number:	111-39	Mailing Address:	DARCANGELO, LAURIE E
CAMA Number:	111-39		36 ANDREWS CT
Property Address:	36 ANDREWS CT		BRISTOL, RI 02809
Parcel Number:	111-40	Mailing Address:	GARCIA, MANUEL T & MARIA LE T REM:
CAMA Number:	111-40		GARCIA, LUIS AS TRUSTEE
Property Address:	34 ANDREWS CT		34 ANDREWS CT
			BRISTOL, RI 02809
Parcel Number:	111-41	Mailing Address:	DA SILVA, JOSEPH & JUDITH TE
CAMA Number:	111-41		32 ANDREWS CT
Property Address:	32 ANDREWS CT		BRISTOL, RI 02809
Parcel Number:	111-8	Mailing Address:	ZINA, WAYNE
CAMA Number:	111-8		74 GOODING AVE
Property Address:	74 GOODING AVE		BRISTOL, RI 02809

100 feet Abutters List Report

Bristol, RI
January 27, 2025

Parcel Number:	111-9	Mailing Address:	SIMONS, JEFFREY J
CAMA Number:	111-9		78 GOODING AVE
Property Address:	78 GOODING AVE		BRISTOL, RI 02809
Parcel Number:	112-100	Mailing Address:	TOWN OF BRISTOL
CAMA Number:	112-100		10 COURT ST
Property Address:	DIXON AVE		BRISTOL, RI 02809
Parcel Number:	112-79	Mailing Address:	ESTATE OF OLIVER, PAUL A SR &
CAMA Number:	112-79		MAZE, SUSAN E TOWN OF BRISTOL TT
Property Address:	DIXON AVE		160 WATER ST
			WARREN, RI 02885
Parcel Number:	112-80	Mailing Address:	EST OF OLIVER, PAUL A & MAZE SUSAN
CAMA Number:	112-80		TOWN OF BRISTOL TT
Property Address:	DIXON AVE		160 WATER ST
			WARREN, RI 02885
Parcel Number:	112-81	Mailing Address:	EST OF OLIVER, PAUL A & MAZE SUSAN
CAMA Number:	112-81		TOWN OF BRISTOL TT
Property Address:	DIXON AVE		160 WATER ST
			WARREN, RI 02885
Parcel Number:	112-82	Mailing Address:	EST OF OLIVER, PAUL A & MAZE SUSAN
CAMA Number:	112-82		TOWN OF BRISTOL TT
Property Address:	DIXON AVE		160 WATER ST
			WARREN, RI 02885
Parcel Number:	113-243	Mailing Address:	LIV IN FULFULLING ENVIR INC C/O
CAMA Number:	113-243		LAWRENCE WIEDENHOFE
Property Address:	DIXON AVE		490 METACOM AVE
			BRISTOL, RI 02809
Parcel Number:	113-247	Mailing Address:	PIERSON, KEEVIN & VERITY TE
CAMA Number:	113-247		27 DIXON AVE
Property Address:	27 DIXON AVE		BRISTOL, RI 02809
Parcel Number:	113-253	Mailing Address:	SOUSA, PAUL B. CARBONE, ANTHONY
CAMA Number:	113-253		JT
Property Address:	31 DIXON AVE		31 DIXON AVE
			BRISTOL, RI 02809
Parcel Number:	113-256	Mailing Address:	EST OF OLIVER, PAUL A & MAZE SUSAN
CAMA Number:	113-256		TOWN OF BRISTOL TT
Property Address:	DIXON AVE		160 WATER ST
			WARREN, RI 02885
Parcel Number:	98-10	Mailing Address:	D&J ACQUISITIONS, LLC
CAMA Number:	98-10		93 GOODING AVE STE 1
Property Address:	93 GOODING AVE		BRISTOL, RI 02809
Parcel Number:	98-11	Mailing Address:	MINTURN-METACOM, LLC
CAMA Number:	98-11		370 METACOM AVE
Property Address:	87 GOODING AVE		BRISTOL, RI 02809

100 feet Abutters List Report

Bristol, RI
January 27, 2025

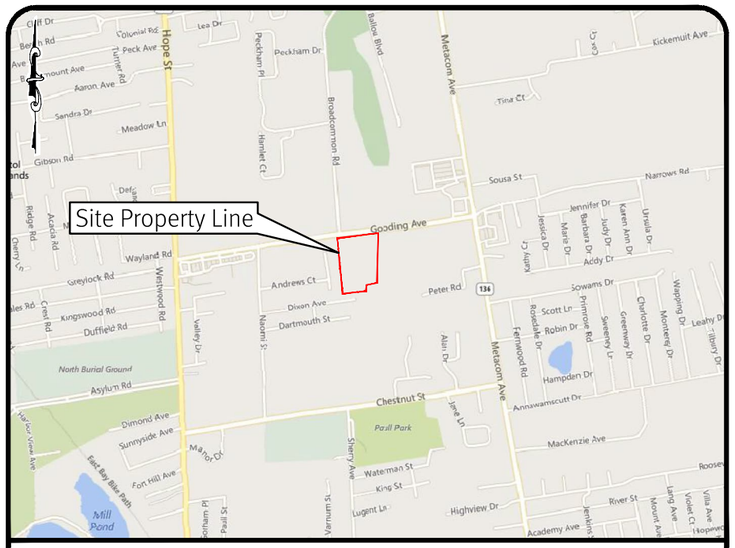
Parcel Number:	98-13	Mailing Address:	D&J ACQUISITIONS, LLC
CAMA Number:	98-13		93 GOODING AVE STE 1
Property Address:	GOODING AVE		BRISTOL, RI 02809
Parcel Number:	98-8	Mailing Address:	85 GOODING AVE, LLC
CAMA Number:	98-8		85 GOODING AVE
Property Address:	85 GOODING AVE		BRISTOL, RI 02809
Parcel Number:	98-9	Mailing Address:	NARRAGANSETT ELECTRIC CO. C/O
CAMA Number:	98-9		REALISTATE TAXES
Property Address:	99 GOODING AVE		2 NORTH 9TH STREET
			ALLENTOWN, PA 18101

Permitting / Pre-Application Submission

Comfort Inn & Suites

Located on Gooding Avenue
Bristol, Rhode Island

Assessor's Plat 111 Lot 1



Location Map Scale: 1" = 1000'

Sheet List Table

1 Cover Sheet
2 Aerial Half Mile Radius
3 General Notes and Legend
4 Erosion & Sediment Control Plan
5 Site Layout Plan
6 Grading Plan
7 Drainage and Utilities Plan
8 RIDOT ROW Improvements
9 Underground System A & Details
10 Underground System B, Sand Filter B & Details
11 Detail Sheet

Plans by Others

Property Line Survey (Sheet 1 of 1) by Barker Land Surveying

SESC / O&M
The Soil Erosion and Sediment Control Plan (SESC) and Operations and Maintenance Plan (O&M) are required documents with this plan set and must be maintained by the contractor and owner onsite.

RIDOT
The Proposed Improvements Will Not Increase the Rate of Stormwater Runoff Onto the State Highway. All Work Within the State Right of Way Must Conform to the RI Standard Specifications, Details, and Addendums.

DiPrete Engineering
90 Broadway Newport, RI 02840
tel 401-619-2890 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

KEVIN DEMERS
No. 8567
REGISTERED PROFESSIONAL ENGINEER CIVIL

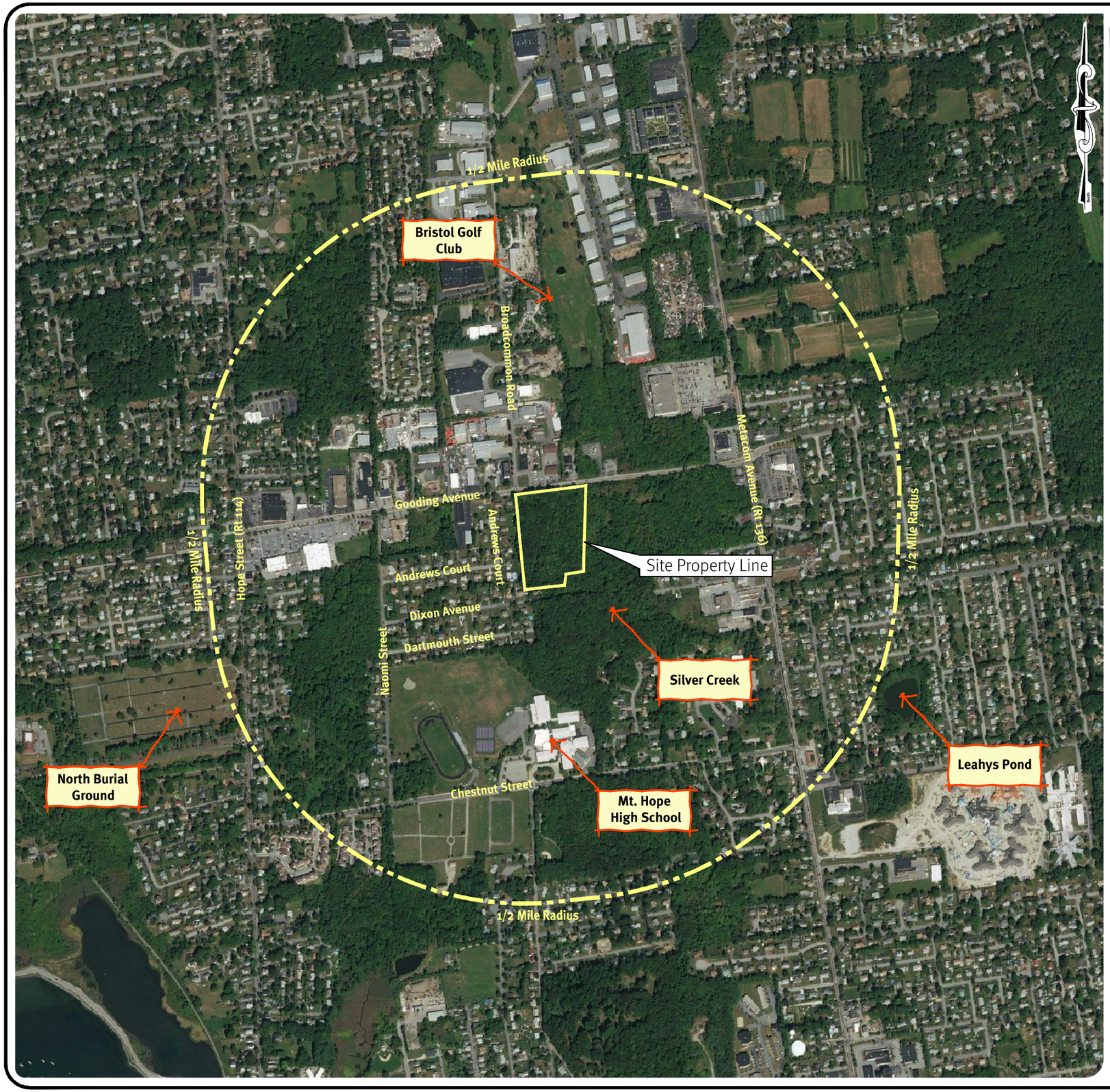
No.	Date	Description	By:
0	12/12/2025	Pre-Application Submission	J.A.R.

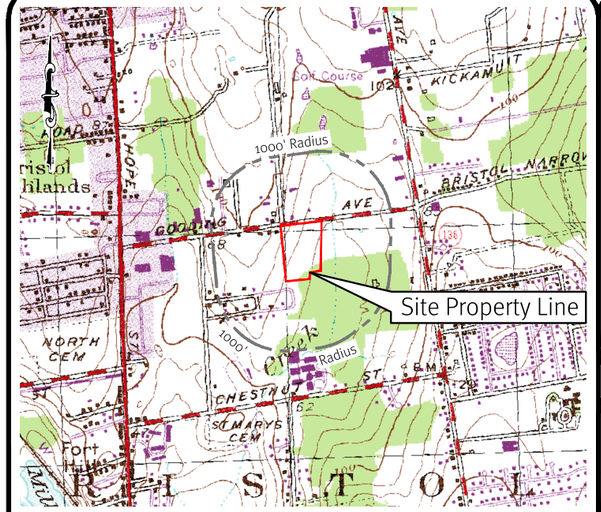
Drawn By: D.R.N. Design By: K.I.D.

Cover Sheet
Comfort Inn & Suites
AP 111 Lot 1
Bristol, Rhode Island
Owner & Applicant
D&M BOCA DEVELOPMENT, LLC
92 Fance Corner Road, Suite 160,
North Dartmouth, MA 02747

SHEET 1 OF 11

z:\clients\projects\2536-001 gooding avenue\autocad drawings\2536-001-cvsr.dwg Plotted: 2/3/2025





USGS Map Scale: 1"=1000'

Photo Obtained from the ARCGIS 2008 Orthophotography.

Scale: 1"=400'
0 200' 400' 800'

Legend:

PROPERTY LINE
PROPERTY LINE (USGS MAP)
HALF MILE RADIUS LINE

DiPrete Engineering
90 Broadway Newport, RI 02840
tel 401-619-5890 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

KEVIN DEMERS
No. 8557
REGISTERED PROFESSIONAL ENGINEER
CIVIL

No.	Date	Description	By
0	12-02-2025	Pre-Application Submission	LAF

Design By: K.J.D.
Drawn By: D.R.N.

Aerial Half Mile Radius

Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island

Prepared for:
D&M BOCA DEVELOPMENT, LLC
92 Fluvanna Road, Suite 160,
West Orange, NJ 07052

SHEET 2 OF 11

General Notes:

1. THE SITE IS LOCATED ON THE TOWN OF BRISTOL ASSESSOR'S PLAT 111 LOT 1.
2. THE SITE IS APPROXIMATELY 9.78 ACRES, IS ZONED GB, AND IS CURRENTLY WOODED.
3. THE APPLICANT OF AP 111 LOT 1 IS:
   D&M BOCA DEVELOPMENT, LLC.
   92 FAUNCE CORNER ROAD, SUITE 160
   NORTH DARTMOUTH, MA 02747
4. THIS SITE IS LOCATED IN FEMA FLOOD ZONES X AND AE. REFERENCE FEMA FLOOD INSURANCE RATE MAP 44001C0011H, MAP REVISED JULY 7, 2014.
5. THIS PLAN IS SUBSTANTIALLY CORRECT IN ACCORDANCE WITH A CLASS IV STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS. THIS PLAN IS NOT TO BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY AND MAY BE SUBJECT TO SUCH CHANGES AS AN ACCURATE BOUNDARY SURVEY MAY DISCLOSE.
6. THE SITE IS NOT WITHIN A:
   GROUNDWATER PROTECTION AREA
   NATURAL HERITAGE AREA
   GROUNDWATER PROTECTION OVERLAY DISTRICT
7. THE FOLLOWING DOCUMENTS ARE CONSIDERED PART OF THE PROJECT PLANS AND THE CONTRACTOR / OWNER MUST MAINTAIN THESE DOCUMENTS AS PART OF A FULL PLAN SET:
   - SOIL EROSION AND SEDIMENT CONTROL PLAN (SESC). THE SESC CONTAINS THE FOLLOWING:
     - EROSION CONTROL MEASURES
     - SHORT TERM MAINTENANCE
     - ESTABLISHMENT OF VEGETATIVE COVER
     - CONSTRUCTION POLLUTION PREVENTION
     - SEQUENCE OF CONSTRUCTION
   - OPERATIONS AND MAINTENANCE PLAN (O&M). THE O&M CONTAINS THE FOLLOWING:
     - LONG TERM MAINTENANCE
     - LONG TERM POLLUTION PREVENTION
8. THIS PLAN SET REFERENCES RIDOT STANDARD DETAILS (DESIGNATED AS RIDOT STD X.X.X.). RIDOT STANDARD DETAILS ARE AVAILABLE FROM RIDOT AND ONLINE AT: HTTP://WWW.DOT.RI.GOV/BUSINESS/CONTRACTORSANDCONSULTANTS.PHP.
9. THE SITE IS TO BE SERVICED BY PUBLIC WATER AND PUBLIC SEWER.
10. THE SITE WILL FULLY COMPLY WITH ALL OF THE TOWN OF BRISTOL RULES AND REGULATIONS INCLUDING THE SUBDIVISION AND DEVELOPMENT REVIEW REGULATIONS AND THE ZONING ORDINANCE. THE SITE DOES NOT REQUIRE ANY VARIANCES, SPECIAL USE PERMITS, OR WAIVERS.
11. THE DRAINAGE SYSTEM IS DESIGNED TO MEET THE TOWN OF BRISTOL SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WITH THE USE OF CATCH BASINS, CULVERTS, AND UNDERGROUND DRAINAGE BASINS. THE STORMWATER MANAGEMENT SYSTEM MEETS THE RIDEM BEST MANAGEMENT PRACTICES.
12. THE SITE IS PROPOSED TO BE BUILT IN 1 PHASE.
13. TEST PITS AND SOIL EVALUATIONS WERE COMPLETED BY SITEC, INC. ON 12/12/2014.

Soil Information:

(REFERENCE: USDA NATURAL RESOURCES CONSERVATION SERVICE)

SOIL NAME	DESCRIPTION
PmA	PITTSTOWN SILT LOAM, 0 TO 3 PERCENT SLOPES
PmB	PITTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES
Se	STISSING SILT LOAM

Plan References:

PLAN ENTITLED "PROPERTY LINE SURBEY FOR KENDAN, LLC" BY BARKER LAND SURVEYING, INC. REVISED 9/30/14.

Lidar Note:

CONTOUR DATA SHOWN ON THIS PLAN CONFORMS TO A T-4 TOPOGRAPHICAL SURVEY STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS; SAID DATA IS BASED ON ELEVATION INFORMATION THAT WAS COLLECTED WITH AIRBORNE LIDAR TECHNOLOGY FOR THE ENTIRE AREA OF RHODE ISLAND BETWEEN APRIL 22 AND MAY 6, 2011 AS PART OF THE NORTHEAST LIDAR PROJECT. THIS DATA'S POSITIONAL ACCURACY AND RELIABILITY HAS NOT BEEN VERIFIED BY DIPRETE ENGINEERING AND IS SUBJECT TO CHANGES AN AUTHORITATIVE FIELD SURVEY MAY DISCLOSE.

Demolition Notes:

1. ALL EXISTING UTILITIES SHOWN ARE FROM VISIBLE INFORMATION, DRAWINGS FROM OTHERS, OR INFORMATION PROVIDED TO DIPRETE ENGINEERING AND ARE SUBJECT TO CHANGE. THE LOCATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM AFOREMENTIONED PLANS OF RECORD AND ARE APPROXIMATE ONLY. PRIOR TO CONSTRUCTION, THE PROPER UTILITY ENGINEERING DEPARTMENTS SHALL BE CONTACTED AND THE ACTUAL LOCATION OF SUBSURFACE STRUCTURES SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. CALL THE DIG SAFE CENTER TOLL FREE AT 1-888-344-7233 72 HOURS PRIOR TO EXCAVATION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO EXCAVATION. ANY DAMAGE TO UTILITIES WHICH ARE SHOWN ON THE PLANS OR DETAILED BY DIG SAFE SHALL BE THE SITE CONTRACTORS RESPONSIBILITY.
2. CONTRACTOR TO OBTAIN ALL FEDERAL, STATE, AND MUNICIPAL APPROVALS PRIOR TO THE START OF CONSTRUCTION.
3. CONTRACTOR TO PERFORM DAILY SWEEPING AT CONSTRUCTION ENTRANCE DURING DEMOLITION AND CONSTRUCTION TO MINIMIZE SEDIMENTS ON GOODING AVENUE.
4. ANY DAMAGE TO THE PROPERTY CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) ALL MATERIALS INDICATED ON THE PLANS UNLESS SPECIFIED OTHERWISE HERE IN. R&D MATERIALS TO INCLUDE BUT NOT LIMITED TO PAVEMENT, GRAVEL, CATCH BASINS, MANHOLES, GRATES/FRAMES/COVERS, AND ANY EXCESS SOIL THAT IS NOT INCORPORATED INTO THE WORK.
6. IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, ALL DISTURBED AREAS INCLUDING THE CONTRACTOR'S STOCKPILE AND STAGING AREAS WITHIN THE LIMIT OF WORK SHALL BE RESTORED TO MATCH THE DESIGN PLANS.

Traffic Notes:

1. DURING CONSTRUCTION TRAFFIC CONES ARE TO BE USED FOR SEPARATION OF ACTIVE TRAFFIC FROM WORK ZONE.
2. DURING CONSTRUCTION FLAGGERS SHALL BE EMPLOYED TO ENSURE SAFETY FOR INTERACTION OF CONSTRUCTION VEHICLES AND ACTIVE TRAFFIC.
3. ALL SIGNS, FLAGGERS, TRAFFIC CONTROL DEVICES, AND TEMPORARY TRAFFIC ZONE ACTIVITIES SHALL MEET THE REQUIREMENTS OF THE MUTCD LATEST EDITION AND SUBSEQUENT ADDENDA.
4. TEMPORARY CONSTRUCTION SIGNS SHALL BE MOUNTED ON RIDOT APPROVED SUPPORTS AND SHALL BE REMOVED OR COVERED WHEN NOT APPLICABLE.
5. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES CURRENT EDITION.

As-Built Notes:

1. ALL COMPONENTS OF THE DRAINAGE MUST BE ASBUILT PRIOR TO COVERING. ENGINEER TO BE NOTIFIED PRIOR TO COVERING SURVEY ASBUILT LOCATIONS. ENGINEER WILL NOT ACCEPT FIELD MEASUREMENTS FROM THE SITE CONTRACTOR.

RIDOT Notes:

1. ALL WORK TO BE DONE WITHIN THE STATE RIGHT OF WAY MUST CONFORM TO RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AUGUST 2023 EDITION WITH ALL REVISIONS. STANDARD DETAILS FOR THIS WORK ARE R.I. STANDARD DETAILS 1998 EDITION (AMENDED OCTOBER 2022) WITH ALL REVISIONS.
2. CONTRACTOR MUST OBTAIN A UTILITY CONNECTION PERMIT FOR WORK WITHIN THE STATE RIGHT-OF-WAY (ROW) PRIOR TO CONSTRUCTION. THE PHYSICAL ALTERATION PERMIT (PAP) IS NOT A SUBSTITUTE FOR THE UTILITY PERMIT AND THE PAP DOES NOT CONSTITUTE AN APPROVAL OF ANY UTILITY WORK.
3. ALL TRAFFIC CONTROL MUST CONFORM TO THE MUTCD, LATEST EDITION, WITH ALL REVISIONS.
4. NO LANE OR SHOULDER CLOSURES ARE ALLOWED TO BE PERFORMED WITHIN THE STATE ROW DURING PEAK TRAFFIC HOURS.
5. SEWER AND WATER CONNECTIONS WITHIN THE STATE ROW WILL REQUIRE A SEPARATE RIDOT UTILITY PERMIT, WHICH CONTRACTOR MUST OBTAIN BEFORE CONSTRUCTION.
6. THE DRAINAGE SYSTEM IS DESIGNED TO DECREASE BOTH STORMWATER RUNOFF RATE, AND STORMWATER RUNOFF VOLUME TO THE STATE ROW FROM PRE-DEVELOPMENT TO POST-DEVELOPMENT. THERE SHALL BE NO INCREASE IN RUNOFF TO THE STATE ROW FROM THE PROPOSED DEVELOPMENT.
7. WORK WITHIN THE STATE'S ROW WILL CONFORM TO PROPOSED PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG). WORK ONSITE WILL CONFORM TO AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) UNLESS THE WORK IS ON STATE OWNED LAND.
8. AS-BUILTS ARE REQUIRED FOR ALL DRAINAGE CONNECTIONS WITHIN THE STATE ROW. AS-BUILTS MUST BE PROVIDED TO THE RIDOT STORMWATER OFFICE AND INCLUDE, INVERTS, MATERIALS, AND PIPE SIZES.

Layout and Materials:

1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
2. CURB RADII ARE 5 FEET UNLESS OTHERWISE NOTED.
3. CURBING SHALL BE PRECAST CONCRETE OR AS LABELED ON THE PLANS.
4. SIDEWALK SHALL BE CONCRETE, STAMPED CONCRETE OR AS LABELED ON THE PLANS.
5. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.
6. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
7. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR.
8. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.

Grading and Utility Notes:

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ONSITE. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER, THE DIRECTOR OF PUBLIC WORKS, THE TOWN ENGINEER, AND RI DEPT. OF ENVIRONMENTAL MANAGEMENT AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. CONTRACTOR TO OBTAIN ALL FEDERAL, STATE, AND MUNICIPAL APPROVALS PRIOR TO THE START OF CONSTRUCTION.
3. CONSTRUCTION TO COMMENCE SPRING 2025 OR UPON RECEIPT OF ALL NECESSARY APPROVALS.
4. ALL WORK PERFORMED HEREIN SHALL BE GOVERNED BY THE RHODE ISLAND STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AND TOWN OF BRISTOL STANDARD SPECIFICATIONS AND DETAILS.
5. SEQUENCE OF CONSTRUCTION PROVIDED IN SESC MAY BE MODIFIED AS FIELD CONDITIONS WARRANT WITH PRIOR APPROVAL FROM THE OWNER OR OWNER'S REPRESENTATIVE.
6. THE CONTRACTOR SHALL COORDINATE WITH ALL OF THE APPROPRIATE UTILITY COMPANIES FOR AGREEMENTS TO SERVICE THE PROPOSED BUILDING. THIS SHALL BE DONE PRIOR TO CONSTRUCTION. NO REPRESENTATIONS ARE MADE BY DIPRETE ENGINEERING THAT UTILITY SERVICE IS AVAILABLE.
7. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING FINISH GRADING AND DRAINAGE AROUND THE BUILDING TO ENSURE SURFACE WATER AND/OR GROUND WATER ARE DIRECTED AWAY FROM THE STRUCTURE.
8. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.
9. ALL PROPOSED UNDERGROUND UTILITIES SERVING THE SITE AND BUILDINGS TO BE COORDINATED WITH APPLICANT, ARCHITECT, AND ENGINEER PRIOR TO INSTALLATION.
10. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION INCLUDING ALL REVISIONS.
11. ALL RETAINING WALLS AND STEEP SLOPES ARE SHOWN SCHEMATICALLY ONLY AND DIPRETE ENGINEERING IS NOT PROVIDING THE DESIGN OF THESE ITEMS. THE ACTUAL WALLS AND SLOPES ARE TO BE BUILT UNDER THE DIRECTION OF A GEOTECHNICAL ENGINEER AND CERTIFIED TO THE OWNER PRIOR TO THE COMPLETION OF THE PROJECT. SHOP DRAWINGS TO BE SUBMITTED PRIOR TO CONSTRUCTION.
12. ALL CUT AND FILL AREAS ARE TO BE DONE UNDER THE DIRECTION OF A GEOTECHNICAL ENGINEER WITH TESTING AND CERTIFICATION TO BE PROVIDED TO THE APPLICANT AT THE COMPLETION OF THE PROJECT. DIPRETE ENGINEERING ASSOCIATES, INC. IS NOT PROVIDING THE FILL SPECIFICATION, GEOTECHNICAL ENGINEERING, STRUCTURAL ENGINEERING SERVICES, OR SUPERVISION AS PART OF THESE DRAWINGS.
13. ALL COMPONENTS OF THE DRAINAGE, SEWER AND WATER SYSTEMS MUST BE ASBUILT PRIOR TO COVERING. ENGINEER TO BE NOTIFIED PRIOR TO COVERING TO SURVEY ASBUILT LOCATIONS. ENGINEER WILL NOT ACCEPT FIELD MEASUREMENTS FROM THE SITE CONTRACTOR.
14. NO STOCKPILING OF MATERIAL TO BE LOCATED IN THE RIGHT OF WAY AND NO OPEN TRENCHES ARE TO BE LEFT OVERNIGHT.
15. ALL LOAM IN DISTURBED AREAS TO BE STOCKPILED FOR FUTURE USE.
16. ALL EXCESS SOIL, TREES, ROCKS, BOULDERS, AND OTHER REFUSE, SHALL BE DISCARDED OFF SITE IN AN ACCEPTABLE MANNER AT AN APPROVED LOCATION. STUMPS SHALL BE GROUND ONSITE OR REMOVED.
17. NO STUMP DUMPS ARE PROPOSED ONSITE.
18. IF CONCRETE TRUCKS ARE WASHED OUT ONSITE, ALL WASHOUT MUST BE COMPLETED IN THE DESIGNATED CONCRETE WASHOUT AREA.

ADA Notes:

1. ALL IMPROVEMENTS SHALL COMPLY WITH THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG)" BY THE DEPARTMENT OF JUSTICE.
2. MAXIMUM RUNNING SLOPE ALONG ALL ACCESSIBLE PATHS OF TRAVEL SHALL BE 4.5% OR 0.045 '/, AND MAXIMUM CROSS SLOPE ALONG ALL ACCESSIBLE PATHS OF TRAVEL SHALL BE 0.015'/,.
3. MAXIMUM SLOPE IN ALL DIRECTIONS FOR ALL ACCESSIBLE PARKING SPACES AND LOADING AREAS SHALL BE 0.015'/,.
4. A 5'x5' LANDING WITH A MAXIMUM SLOPE OF 1.5% OR 0.015'/, IN ALL DIRECTIONS SHALL BE PROVIDED IN FRONT OF ALL PUBLICLY ACCESSIBLE BUILDING ENTRANCES/EGRESSES.
5. SIDEWALK CURB RAMPS SHALL COMPLY WITH DIPRETE ENGINEERING DETAILS THAT MEET OR EXCEEDING RIDOT STANDARDS 43.3.0, 43.3.1, & 43.4.1 AS SHOWN ON THE DETAIL SHEET.
6. PLEASE NOTE THAT THE GRADING AND PLAN VIEWS AS WELL AS THE STANDARD DETAILS MAY NOT SHOW THE DETAIL NECESSARY TO CONSTRUCT WALKWAYS AND RAMPS TO ADA STANDARDS. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE LEVEL OF CARE NECESSARY TO BE CERTAIN THAT THE CONSTRUCTED PRODUCT MEETS ADA STANDARDS. IN THE EVENT OF ANY CONFLICTS THE CONTRACTOR SHALL NOTIFY THE DESIGNER BEFORE CONSTRUCTION FOR ADVICE IN FINDING A RESOLUTION.

Soil Erosion and Sedimentation Control Notes:

1. ALL EROSION CONTROL, TEMPORARY SWALES, TEMPORARY SEDIMENTATION TRAPS, ETC. SHALL BE INSTALLED PER THE RHODE ISLAND SOIL EROSION AND SEDIMENTATION CONTROL LATEST EDITION AND THE SOIL EROSION SEDIMENTATION CONTROL PLAN (SESC).
2. TEMPORARY SWALES SHALL BE USED TO CONTROL RUNOFF DURING CONSTRUCTION. TEMPORARY SWALES SHALL BE VEGETATED AFTER CONSTRUCTION. EROSION CONTROL MATS SHALL BE INSTALLED IF NECESSARY TO PREVENT EROSION AND SUPPORT VEGETATION. AFTER CONSTRUCTION IS COMPLETE AND TRIBUTARY ARES TO THE SWALES HAVE BEEN STABILIZED, THE TEMPORARY SWALES SHALL BE CLEARED AND FINAL DESIGN, INCLUDING INSTALLATION OF THE GRASS SWALE SHALL BE PER THE DESIGN PLANS.
3. ONCE THE SEDIMENTATION TRAP IS NO LONGER REQUIRED AND ALL TRIBUTARY AREAS HAVE BEEN STABILIZED, THE TEMPORARY SEDIMENTATION TRAP SHALL CLEANED AND BROUGHT TO FINAL DESIGN GRADES.
4. INLET PROTECTION SHALL BE INSTALLED ON ALL CATCH BASINS ONCE CONSTRUCTED.
5. SEE SECTION 2.2 OF THE SESC FOR SEQUENCE OF CONSTRUCTION ACTIVITY.
6. SEE SECTION 2.2 OF THE SESC FOR PROJECT PHASING.
7. CONTRACTOR MAY MODIFY SEQUENCE OF CONSTRUCTION WITH APPROVAL FROM DESIGN ENGINEER.
8. FOR CONSTRUCTION PHASING SEE SECTION 2.2 OF SOIL EROSION AND SEDIMENT CONTROL PLAN.

Abbreviations Legend

AP	ASSESSOR'S PLAT	OHW	OVERHEAD WIRE
BC	BOTTOM OF CURB	PE	POLYETHYLENE
BT	BOTTOM OF TESTHOLE	℄	PROPERTY LINE
BIT	BITUMINOUS (BERM)	PR	PROPOSED
BIO	BIORETENTION	PVC	POLYVINYL CHLORIDE
BW	BOTTOM OF WALL (FINISHED GRADE AT BOTTOM OF WALL)	R	RADIUS
		R&D	REMOVE AND DISPOSE
CB	CATCH BASIN	RCP	REINFORCED CONCRETE PIPE
(C)	CALCULATED	RIHB	RHODE ISLAND HIGHWAY BOUND
℄	CENTERLINE	RL	ROOF LEADER
(CA)	CHORD ANGLE	ROW	RIGHT OF WAY
CLDIP	CONCRETE LINED DUCTILE IRON PIPE	S	SLOPE
CO	CLEAN OUT	SD	SUBDRAIN
CONC	CONCRETE	SED	SEDIMENT FOREBAY
(D)	DEED	SE	SLAB ELEVATION
DCB	DOUBLE CATCH BASIN	SF	SQUARE FOOT
DI	DROP INLET	SFL	STATE FREEWAY LINE
DMH	DRAINAGE MANHOLE	SFM	SEWER FORCE MAIN
DP	DETENTION POND	SHL	STATE HIGHWAY LINE
EOP	EDGE OF PAVEMENT	SMH	SEWER MANHOLE
ESC	EROSION AND SEDIMENT CONTROL	SNDF	SAND FILTER
EX	EXISTING	SS	SIDE SLOPE
FES	FLARED END SECTION	STA	STATION
FFE	FINISH FLOOR ELEVATION	TC	TOP OF CURB
GFE	GARAGE FLOOR ELEVATION	TD	TRENCH DRAIN
GWT	GROUND WATER TABLE	TF	TOP OF FOUNDATION
HC	HANDICAPPED	TRANS	TRANSITION
HW	HEADWALL	TW	TOP OF WALL (FINISHED GRADE AT TOP OF WALL)
HC	HIGH CAPACITY CATCH BASIN GRATE		
HDPE	HIGH DENSITY POLYETHYLENE	TYP	TYPICAL
ID	INLINE DRAIN	UDS	UNDERGROUND DETENTION SYSTEM
INV	INVERT	UIS	UNDERGROUND INFILTRATION SYSTEM
IP	INFILTRATION POND	UP	UTILITY POLE
LF	LINEAR FEET	WO	WALKOUT
LOD	LIMIT OF DISTURBANCE	WQ	WATER QUALITY
LP	LIGHT POLE		
(M)	MEASURED		
N/F	NOW OR FORMERLY		

Site Callouts Legend

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

- (7.2.4) RIDOT STD PRECAST CONCRETE CURB STOP
- (4W45) 4" WHITE STRIPING 2' ON CENTER AT 45'
- (ADAS) ADA SPACE PAVEMENT MARKINGS MUST COMPLY WITH ALL ADA AND MUTCD REGULATIONS AND REQUIREMENTS.
- (ADAR) ADA CURB RAMP MUST COMPLY WITH ALL ADA REGULATIONS AND REQUIREMENTS.
- (ADAV) VAN ADA SPACE PAVEMENT MARKINGS MUST COMPLY WITH ALL ADA AND MUTCD REGULATIONS AND REQUIREMENTS.
- (CWK) CROSSWALK PAVEMENT MARKINGS. SOLID 2' WHITE LINES SPACED 4' OC (REFERENCE MUTCD SECTION 3B.18)

Existing Legend

(AS SHOWN ON PROPOSED PLANS)

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

PROPERTY LINE; ASSESSORS LINE; BUILDING; BRUSHLINE; TREELINE; GUARDRAIL; FENCE; RETAINING WALL; STONE WALL; MINOR CONTOUR LINE (2); MAJOR CONTOUR LINE (10); WATER LINE (W); SEWER LINE (S); SEWER FORCE MAIN (SFM); GAS LINE (G); ELECTRIC LINE (E); OVERHEAD WIRES (OHW); DRAINAGE LINE (D); SOILS LINES (HkC, CaD); 50' PERIMETER WETLAND; 100' RIVERBANK WETLAND; 200' RIVERBANK WETLAND; NATURAL HERITAGE AREA; FEMA BOUNDARY (ZONE X / ZONE X); STREAM; WETLAND LINE & FLAG (B1, B2); NATURAL HERITAGE AREA

NAIL FOUND/SET; DRILL HOLE FOUND/SET; BOUND FOUND/SET; SIGN; BOLLARD; SOIL EVALUATION; CB CATCH BASIN; DCB DOUBLE CATCH BASIN; DMH DRAINAGE MANHOLE; FES FLARED END SECTION; GUY POLE; EMH ELECTRIC MANHOLE; UP UTILITY/POWER POLE; LIGHTPOST; SMH SEWER/SEPTIC MANHOLE; SEWER VALVE; CLEANOUT; HYDRANT; IRRIGATION VALVE; WV WATER VALVE; WELL; MONITORING WELL; UNKNOWN MANHOLE; GV GAS VALVE; BENCH MARK; STREAM FLOW DIRECTION

Proposed Legend

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

PROPERTY LINE; BUILDING SETBACKS; TREELINE; CHAINLINK FENCE; GUARDRAIL (RIDOT STD 34.2.0, 34.4.0 OR APPROVED EQUAL); RETAINING WALL; MINOR CONTOUR LINE (308); MAJOR CONTOUR LINE (310); SPOT ELEVATION (+312); EDGE OF PAVEMENT; CONCRETE CURB (RIDOT STD 7.1.0); BUILDING FOOTPRINT; BUILDING OVERHANG; BUILDING ENTRY; ASPHALT PAVEMENT; STAMPED CONCRETE; CONCRETE SIDEWALK; SAWCUT LINE; SIGN (RIDOT STD 24.6.2 AS APPLICABLE); SINGLE LIGHT; DOUBLE LIGHT; OVERHANGING LIGHT; ACCESSIBLE PARKING SPACE SYMBOLS (VAN); TRANSFORMER PAD WITH BOLLARDS (PER NATIONAL GRID STANDARD); PARKING COUNT (1)

DRAINAGE LINE; ROOF LEADER (RL); GAS LINE (G); WATER LINE (W); HYDRANT ASSEMBLY; WATER SHUT OFF; WATER VALVE; THRUST BLOCK; SEWER LINE (S); OVERHEAD WIRE (OHW); ELECTRIC, TELEPHONE, CABLE LINE (ETC); LIMIT OF DISTURBANCE - NO EROSION CONTROL; STRAW WATTLE, SILT FENCE (RIDOT STD 9.2.0) OR APPROVED EQUAL AT LIMIT OF DISTURBANCE; 2:1 SLOPES; UNDERGROUND SYSTEM OUTLINE; POND ACCESS; RIP RAP; SAND FILTER; CATCH BASIN; DOUBLE CATCH BASIN; MANHOLE; FLARED END SECTION; HEAD WALL; SHRUB; TREE

Utility Note:

ALL UNDERGROUND UTILITIES SHOWN ON THESE PLANS WERE PROVIDED BY OTHERS AND ARE APPROXIMATE ONLY. LOCATIONS MUST BE DETERMINED IN THE FIELD BEFORE EXCAVATION, BLASTING, UTILITY INSTALLATION, BACKFILLING, GRADING, PAVEMENT RESTORATION, AND ALL OTHER SITE WORK. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THESE DOCUMENTS. CONTACT DIG SAFE A MINIMUM OF 72 WORKING HOURS PRIOR TO ANY CONSTRUCTION AT 811. DIG SAFE IS RESPONSIBLE FOR CONTACTING MEMBER UTILITY COMPANIES. DIG SAFE MEMBER UTILITY COMPANIES ARE RESPONSIBLE TO MARK ONLY THE FACILITIES THAT THEY OWN OR MAINTAIN. NON DIG SAFE MEMBER COMPANIES ARE NOT NOTIFIED BY DIG SAFE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE AND NOTIFY IF ANY PRIVATELY OWNED OR NON DIG SAFE MEMBER UTILITIES ARE IN THE AREA.

PER THE CODE OF FEDERAL REGULATIONS – TITLE 29, PART 1926 IT IS THE SITE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ACCURATE UNDERGROUND UTILITY LINE LOCATIONS FROM THE UTILITY COMPANIES, UTILITY OWNERS AND, OR VIA UNDERGROUND UTILITY LOCATION EQUIPMENT AS NEEDED TO ESTABLISH ACCURATE LOCATIONS PRIOR TO ANY EXCAVATION. THE USE OF PROFESSIONAL UTILITY LOCATING COMPANIES PRIOR TO ANY EXCAVATION IS RECOMMENDED.

DIPRETE ENGINEERING IS NOT A PROFESSIONAL UTILITY LOCATION COMPANY, AND IS NOT RESPONSIBLE FOR UNDERGROUND UTILITIES, DEPICTED OR NOT, EITHER IN SERVICE OR ABANDONED. ANY SIZES, LOCATIONS, EXISTENCE, OR LACK OF EXISTENCE OF UTILITIES SHOWN ON THESE PLANS SHOULD BE CONSIDERED APPROXIMATE UNTIL VERIFIED BY A PROFESSIONAL UTILITY LOCATION COMPANY. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED.

Permit Note:

THE PURPOSE OF THIS PLAN SET IS TO OBTAIN A PERMIT FROM THE REGULATORY AGENCY IT WAS SUBMITTED TO. THIS PLAN SET CONTAINS THE REQUIRED INFORMATION NECESSARY FOR APPROVAL BY THE SPECIFIC AGENCY IT WAS SUBMITTED TO AND MAY NOT HAVE INFORMATION NECESSARY FOR OTHER REGULATORY AGENCIES. THIS PLAN SET MUST NOT BE CONSTRUED AS A FULL CONSTRUCTION OR BID SET. ADDITIONAL DETAIL IS REQUIRED FOR CONSTRUCTION AND BID DOCUMENTS, SUCH AS (BUT NOT LIMITED TO) FINE GRADING, GRADING BETWEEN THE CONTOUR INTERVAL, ADDITIONAL SURVEY'/ MAPPING, BUILDING SHAPE/ LOCATION, ADA, UTILITY CONNECTIONS, UTILITY CROSSINGS, SURFACE AND GROUND WATER MITIGATION, SOIL STABILITY AND CONSISTENCY, SPECIFIC END USER NEEDS, CONSTRUCTABILITY ISSUES, ETC. ANY USER OF THESE PLANS SHOULD UNDERSTAND THIS LIMITATION.

DiPrete Engineering
90 Broadway Newport, RI 02840
tel 401-619-5890 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

KEVIN DEMERS
REGISTERED PROFESSIONAL ENGINEER
CIVIL
No. 8557

This regulatory submission set shall not be used for construction unless signed and sealed for Construction and signed by a DiPrete Engineering representative.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

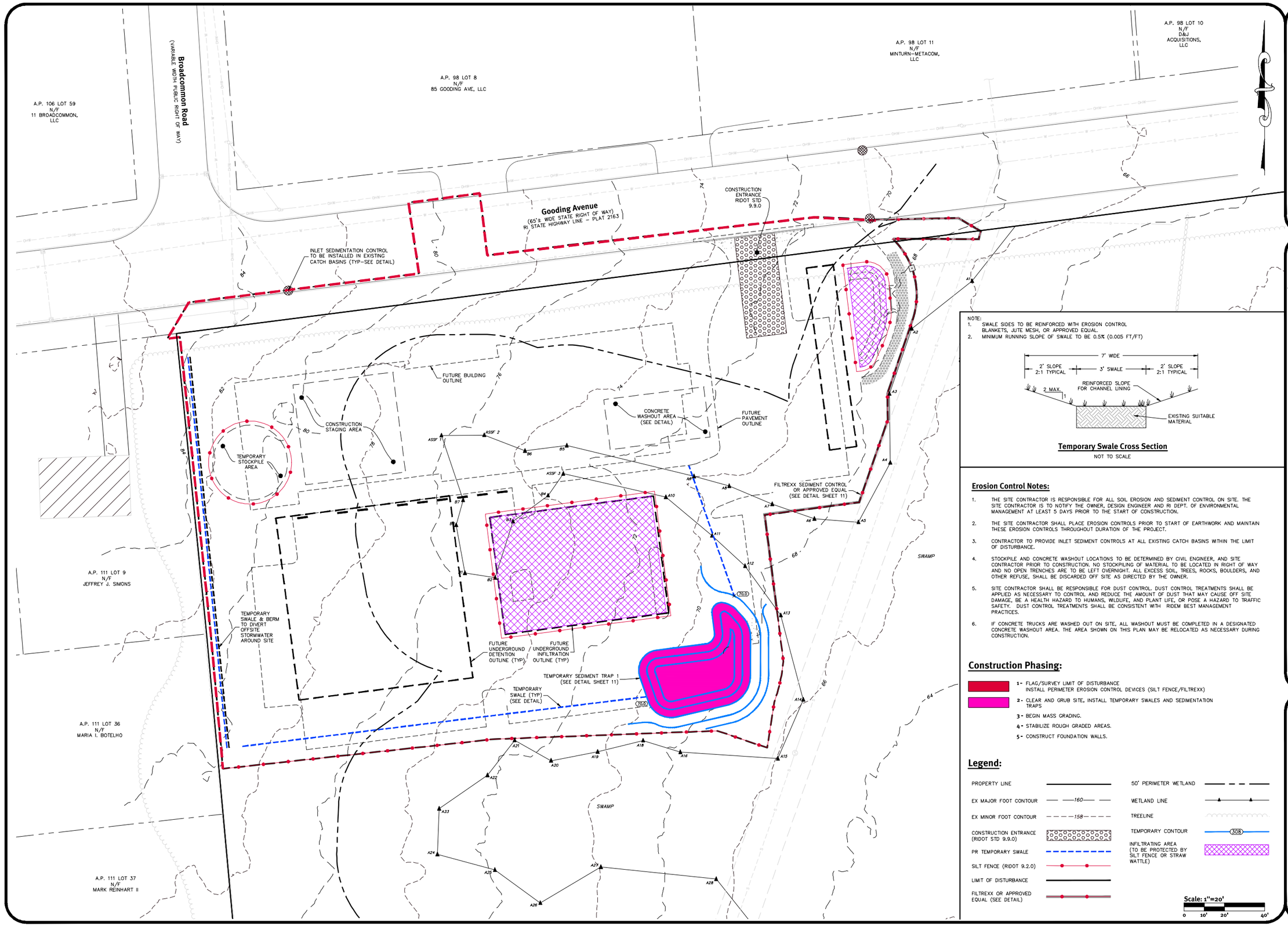
No.	Date	Description	By
0	10/9/2025	Predeparation Submission	D.R.N.

Drawn By: D.R.N. Design By: K.J.D.

General Notes And Legend

Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island
Prepared For:
D&M BOCA DEVELOPMENT, LLC
92 Faunce Corner Road, Suite 160,
North Dartmouth, MA 02747



NOTE:
1. SWALE SIDES TO BE REINFORCED WITH EROSION CONTROL BLANKETS, JUTE MESH, OR APPROVED EQUAL.
2. MINIMUM RUNNING SLOPE OF SWALE TO BE 0.5% (0.005 FT/FT)

Temporary Swale Cross Section

NOT TO SCALE

Erosion Control Notes:

1. THE SITE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ON SITE. THE SITE CONTRACTOR IS TO NOTIFY THE OWNER, DESIGN ENGINEER AND RI DEPT. OF ENVIRONMENTAL MANAGEMENT AT LEAST 5 DAYS PRIOR TO THE START OF CONSTRUCTION.
2. THE SITE CONTRACTOR SHALL PLACE EROSION CONTROLS PRIOR TO START OF EARTHWORK AND MAINTAIN THESE EROSION CONTROLS THROUGHOUT DURATION OF THE PROJECT.
3. CONTRACTOR TO PROVIDE INLET SEDIMENT CONTROLS AT ALL EXISTING CATCH BASINS WITHIN THE LIMIT OF DISTURBANCE.
4. STOCKPILE AND CONCRETE WASHOUT LOCATIONS TO BE DETERMINED BY CIVIL ENGINEER, AND SITE CONTRACTOR PRIOR TO CONSTRUCTION. NO STOCKPILING OF MATERIAL TO BE LOCATED IN RIGHT OF WAY AND NO OPEN TRENCHES ARE TO BE LEFT OVERNIGHT. ALL EXCESS SOIL, TREES, ROCKS, BOULDERS, AND OTHER REFUSE, SHALL BE DISCARDED OFF SITE AS DIRECTED BY THE OWNER.
5. SITE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL. DUST CONTROL TREATMENTS SHALL BE APPLIED AS NECESSARY TO CONTROL AND REDUCE THE AMOUNT OF DUST THAT MAY CAUSE OFF SITE DAMAGE, BE A HEALTH HAZARD TO HUMANS, WILDLIFE, AND PLANT LIFE, OR POSE A HAZARD TO TRAFFIC SAFETY. DUST CONTROL TREATMENTS SHALL BE CONSISTENT WITH RIDEM BEST MANAGEMENT PRACTICES.
6. IF CONCRETE TRUCKS ARE WASHED OUT ON SITE, ALL WASHOUT MUST BE COMPLETED IN A DESIGNATED CONCRETE WASHOUT AREA. THE AREA SHOWN ON THIS PLAN MAY BE RELOCATED AS NECESSARY DURING CONSTRUCTION.

Construction Phasing:

1- FLAG/SURVEY LIMIT OF DISTURBANCE
INSTALL PERIMETER EROSION CONTROL DEVICES (SILT FENCE/FILTREXX)

2- CLEAR AND GRUB SITE, INSTALL TEMPORARY SWALES AND SEDIMENTATION TRAPS

3- BEGIN MASS GRADING.

4- STABILIZE ROUGH GRADED AREAS.

5- CONSTRUCT FOUNDATION WALLS.

Legend:

- PROPERTY LINE
- EX MAJOR FOOT CONTOUR (160)
- EX MINOR FOOT CONTOUR (158)
- CONSTRUCTION ENTRANCE (RIDOT STD 9.9.0)
- PR TEMPORARY SWALE
- SILT FENCE (RIDOT 9.2.0)
- LIMIT OF DISTURBANCE
- FILTREXX OR APPROVED EQUAL (SEE DETAIL)
- 50' PERIMETER WETLAND
- WETLAND LINE
- TREELINE
- TEMPORARY CONTOUR (308)
- INFILTRATING AREA (TO BE PROTECTED BY SILT FENCE OR STRAW WATTLE)

Scale: 1"=20'
0 10' 20' 40'

DiPrete Engineering
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KEVIN DEMERS
No. 8557
REGISTERED PROFESSIONAL ENGINEER
CIVIL

No.	Date	Description	By
0	03-03-2025	Pre-Application Submission	J.A.R.

Drawn By: D.R.K. Design By: K.I.D.

Erosion & Sediment Control Plan
Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island
Owner/Applicant
D&M BOCA DEVELOPMENT, LLC
92 Fluence Corner Road, Suite 100,
North Smithfield, RI 02896

DE Job No. 2536-001

SHEET 4 OF 11

Parking Regulations:

PARKING USE:	HOTEL
PARKING REQUIREMENT:	1 SPACE PER HOTEL ROOM
HOTEL ROOMS:	80 ROOMS
PARKING CALCULATION:	80 X 1/ROOM = 80 SPACES
REQUIRED PARKING SPACES:	80 SPACES
PROVIDED REGULAR (10' X 18') PARKING SPACES:	60
PROVIDED COMPACT* (9' X 16') PARKING SPACES:	20
TOTAL PROVIDED PARKING SPACES:	80 SPACES (REGULAR + COMPACT)
REQUIRED ADA PARKING SPACES:	4 SPACES
PROVIDED ADA PARKING:	4 SPACES
REQUIRED LOADING AREA:	14' x 60' LOADING SPACE
PROVIDED LOADING AREA:	14' x 60' LOADING SPACE

* FOR PARKING AREAS WITH MORE THAN 20 SPACES, UP TO 25 PERCENT OF THE SPACES MAY BE REDUCED IN SIZE FOR SMALL CARS, PROVIDED THAT SUCH SPACES SHALL BE PROMINENTLY SIGNED FOR SMALL CARS ONLY

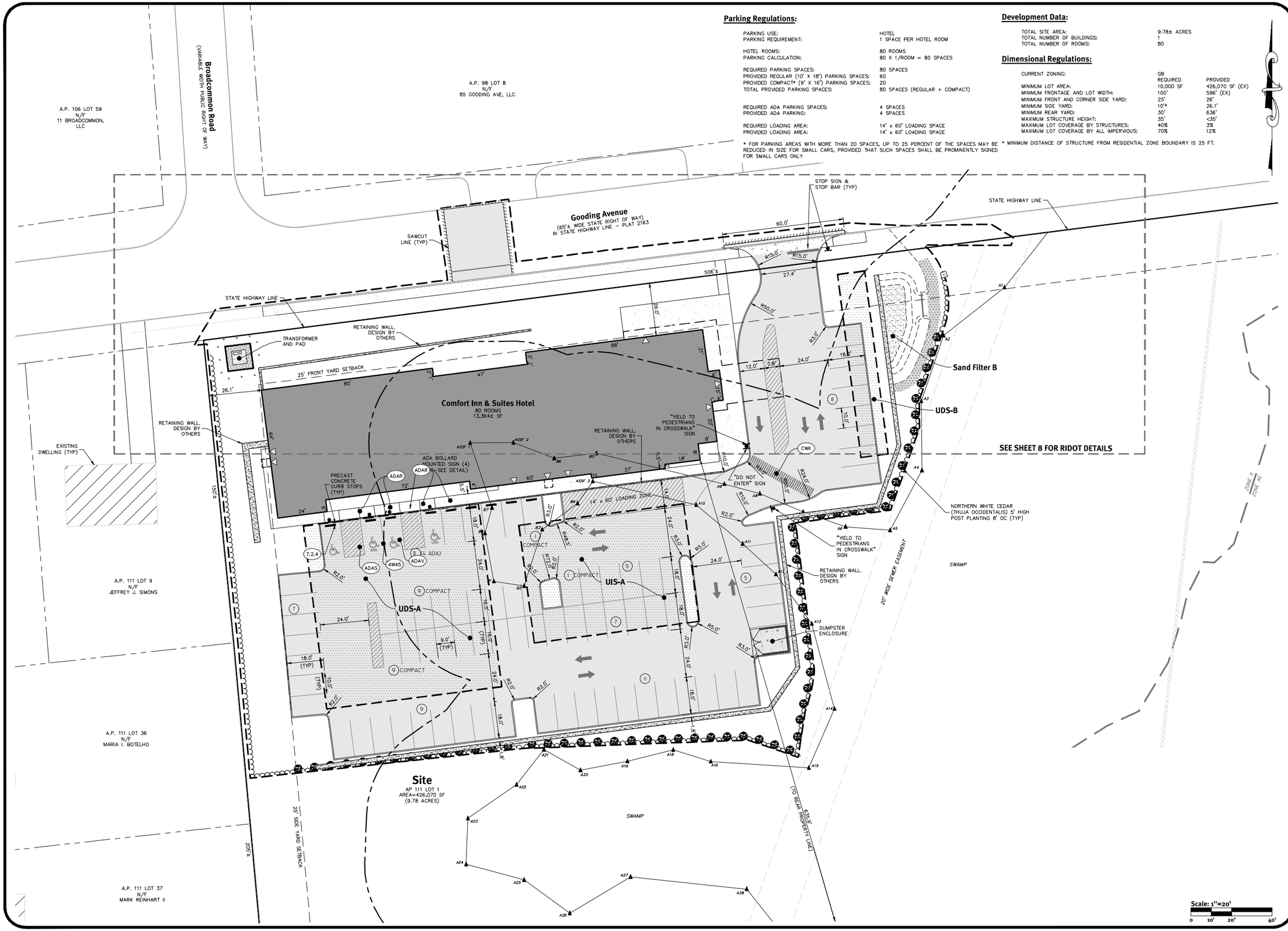
Development Data:

TOTAL SITE AREA:	9.78± ACRES
TOTAL NUMBER OF BUILDINGS:	1
TOTAL NUMBER OF ROOMS:	80

Dimensional Regulations:

CURRENT ZONING:	GB	
	REQUIRED	PROVIDED
MINIMUM LOT AREA:	10,000 SF	426,070 SF (EX)
MINIMUM FRONTAGE AND LOT WIDTH:	100'	596' (EX)
MINIMUM FRONT AND CORNER SIDE YARD:	25'	26'
MINIMUM SIDE YARD:	10'*	26.1'
MINIMUM REAR YARD:	30'	636'
MAXIMUM STRUCTURE HEIGHT:	35'	<35'
MAXIMUM LOT COVERAGE BY STRUCTURES:	40%	3%
MAXIMUM LOT COVERAGE BY ALL IMPERVIOUS:	70%	12%

* MINIMUM DISTANCE OF STRUCTURE FROM RESIDENTIAL ZONE BOUNDARY IS 25 FT.



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KEVIN DEMERS
No. 8557
REGISTERED PROFESSIONAL ENGINEER CIVIL

This regulatory submission set shall not be used for construction purposes unless so noted. Refer to "Construction" and signed by a DiPrete Engineering representative.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

No.	Date	Description	By
1	02-03-2025	Predistribution Submission	J.K.P.
		Drawn By: D.R.N.	Design By: K.I.D.

Site Layout Plan
Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island

Prepared for:
D&M BOCA DEVELOPMENT, LLC
93 Faunce Corner Road, Suite 100,
North Dartmouth, MA 02747

DE Job No: 2536-001

SHEET 5 OF 11

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Grading Plan

Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island

Owner & Applicant:
D&M BOCA DEVELOPMENT, LLC
92 Faunce Corner Road, Suite 160,
North Dartmouth, MA 02747

SHEET 6 OF 11

No.	Date	Description	By:
0	02-03-2025	PreApplication Submission	I.A.R.

Drawn By: D.R.N. | Design By: K.J.D.

This regulatory submission set shall not be used for construction purposes unless stamped 'Issued for Construction' and signed by a DiPrete Engineering representative.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

KEVIN DEMERS
REGISTERED PROFESSIONAL ENGINEER
CIVIL
No. 25571

DiPrete Engineering
90 Broadway Newport, RI 02840
tel 401-619-5890 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

DE Job No: 2536-001

A.P. 106 LOT 59
N/F
11 BROADCOMMON, LLC

Broadcommon Road
(VARIABLE WIDTH PUBLIC RIGHT OF WAY)

A.P. 98 LOT 8
N/F
85 GOODING AVE, LLC

A.P. 98 LOT 11
N/F
MINTURN-METACOM, LLC

A.P. 98 LOT 10
N/F
D&J ACQUISITIONS, LLC

Gooding Avenue
(65'± WIDE STATE RIGHT OF WAY)
RI STATE HIGHWAY LINE - PLAT 2163

SIZE AND MATERIAL FOR GAS LINE PER RI ENERGY REQUIREMENTS

SIZE AND MATERIAL FOR WATER LINE PER BUILDING MEP ENGINEER AND BRISTOL REQUIREMENTS

SIZE AND MATERIAL FOR SEWER LINE PER BUILDING MEP ENGINEER AND BRISTOL REQUIREMENTS

UTILITY POLE (CONNECTION DETAILS AND FINAL DESIGN TO BE PROVIDED BY UTILITY PROVIDER)

TRANSFORMER PAD WITH BOLLARDS PER RI ENERGY STANDARDS

Comfort Inn & Suites Hotel
80 ROOMS
13,364± SF

LOCATION, SIZE & MATERIAL FOR GAS LINE PER RI ENERGY AND BRISTOL REQUIREMENTS

BUILDING ROOFLEADERS. ALL ROOF RUNOFF TO BE DIRECTED TO ROOFLEADER VIA DOWNSPOUTS. EXACT LOCATION OF DOWNSPOUTS AND ROOFLEADER TO BE COORDINATED WITH ARCHITECT.

TIE INTO EXISTING SEWER SERVICE. CONFIRM ALL PROPOSED SEWER INVERT ELEVATIONS WITH DESIGN ENGINEER

Sand Filter B
(SEE SHEET 10)

UDS-B
(SEE SHEET 10)

UIS-A
(SEE SHEET 9)

UDS-A
(SEE SHEET 9)

CO-1
RIM=76.71
INV OUT=75.49(1A)

CSC-1A

CB-13
RIM=75.14
INV OUT=71.44(14)

CB-14
RIM=76.75
INV IN=71.13(13)
INV OUT=71.13(15)

BLDG
INV OUT
=69.70

CO-2
INV IN=72.84(20)
INV OUT=72.84(11)

SLOT DRAIN-20
INV OUT=73.34(21)

SLOT DRAIN

CB-15
RIM=73.70
INV IN=69.37(14)
INV OUT=69.37(16)

SMH-1
RIM=75.50
INV=69.00

12" HDPE
25 LF
S=0.60%

CB-16
RIM=72.53
INV IN=69.22(12)
INV IN=69.22(15)
INV OUT=69.22(CS-3)

12" HDPE
35 LF
S=0.53%

SMH-2
RIM=70.50
INV=65.50

SMH-3
RIM=68.00
INV=63.00

EX SMH-13
RIM=68±
INV=59±

CASCADE SEPARATOR-CS-3
RIM=71.46
INV IN=69.03(16)
INV OUT=69.03(22)

12" HDPE
6 LF
S=0.50%

FES-22
INV=69.00(CS-3)

12" HDPE
95 LF
S=1.86%

12" HDPE
31 LF
S=1.00%

CB-12
RIM=75.12
INV IN=71.62(11)
INV OUT=71.62(16)

12" HDPE
31 LF
S=7.73%

12" HDPE
72 LF
S=1.00%

8" HDPE
101 LF
S=0.50%

8" HDPE
34 LF
S=0.50%

TP-7
GWT=36"

TP-5
GWT=28"

TP-6
GWT=30"

CB-11
RIM=76.00
INV IN=72.67(21)
INV OUT=72.34(12)

24" HDPE
6 LF
S=0.00%

INSPECTION MH-WQ
RIM=77.77
INV IN=73.00()

10" HDPE
32 LF
S=0.50%

10" HDPE
64 LF
S=0.50%

CB FLAT TOP-2
RIM=78.66
INV IN=75.01(1A)
INV OUT=74.59(3)

15" HDPE
35 LF
S=0.49%

DMH-3
RIM=78.99
INV IN=74.42(2)
INV OUT=74.17(4)

18" HDPE
31 LF
S=0.50%

CB-6
RIM=77.53
INV IN=74.28(5)
INV OUT=74.03(7)

12" HDPE
90 LF
S=0.50%

15" HDPE
26 LF
S=0.51%

CB-4
RIM=78.13
INV IN=73.81(3)
INV OUT=73.81(7)

UDS-OUT
INV=70.00(10)

DMH-7
RIM=77.79
INV IN=73.66(4)
INV IN=73.90(6)
INV OUT=73.66(8)

DMH-5
RIM=77.23
INV OUT=74.73(6)

18" HDPE
32 LF
S=0.50%

18" HDPE
71 LF
S=0.50%

12" HDPE
19 LF
S=0.00%

OCS-10
RIM=78.20
INV IN=70.00(OUT)
INV OUT=69.00(19)

12" HDPE
120 LF
S=0.83%

HW-19
INV=68.00(10)

EX SMH-12
RIM=66±
INV=59±

20' WIDE SEWER EASEMENT

SWAMP

ZONE X
ZONE AE

A.P. 111 LOT 9
N/F
JEFFREY J. SIMONS

A.P. 111 LOT 36
N/F
MARIA I. BOTELHO

A.P. 111 LOT 37
N/F
MARK REINHART II

Scale: 1"=20'
0 10' 20' 40'

DiPrete Engineering
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KEVIN DEMERS
No. 8567
REGISTERED PROFESSIONAL ENGINEER
CIVIL

This regulatory submission set shall not be used for construction purposes unless stamped 'Issued for Construction' and signed by a DiPrete Engineering representative.

The contractor is responsible for all of the means, methods, safety precautions and requirements and shall coordinate, control and direct in the implementation of this plan and design.

No.	Date	Description	By:
0	12/05/2025	Pre-Application Submission	J.K.B.
			Design By: K.J.D.
			Drawn By: D.R.N.

Drainage and Utilities Plan
Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island

Owner & Applicant:
D&M BOCA DEVELOPMENT, LLC
92 Faunce Corner Road, Suite 160,
North Dartmouth, MA 02747

SHEET 7 OF 11

DE Job No: 2536-001

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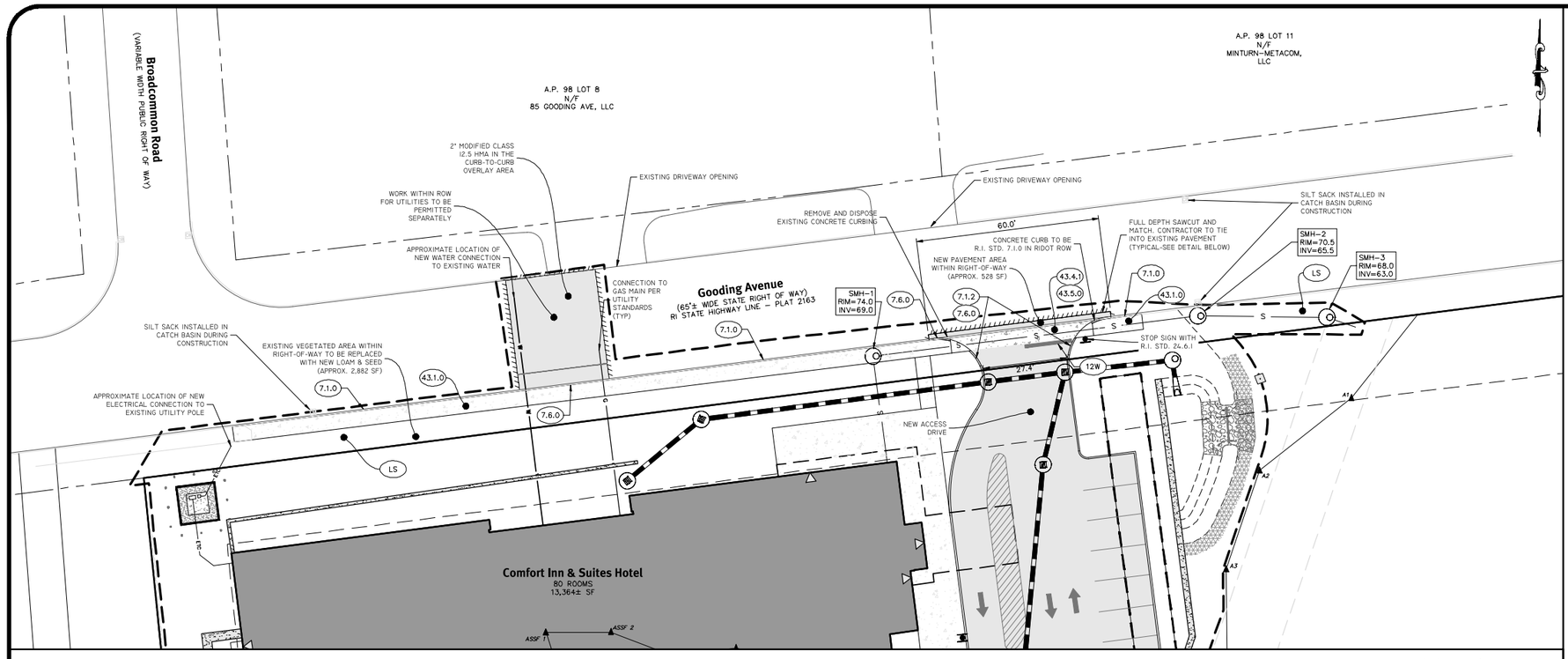


Gooding Avenue Entrance

Scale: 1"=20'
0 10' 20' 40'

RIDOT NOTES:

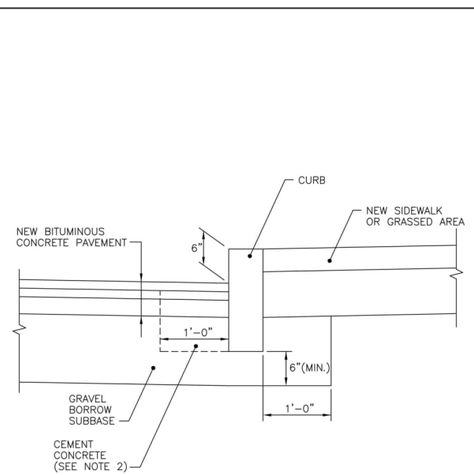
1. ALL WORK TO BE DONE WITHIN THE STATE HIGHWAY RIGHT-OF-WAY SHALL CONFORM TO THE RHODE ISLAND STANDARD SPECIFICATIONS OF ROAD AND BRIDGE CONSTRUCTION, AUGUST 2023 EDITION WITH ALL REVISIONS. STANDARD DETAILS FOR THIS WORK ARE R.I. STANDARD DETAILS 1998 EDITION (AMENDED OCTOBER 2022) WITH ALL REVISIONS.
2. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION, INCLUDING ALL REVISIONS.
3. ALL BITUMINOUS PAVEMENT WITHIN THE STATE ROW SHALL BE AN APPROVED MIX DESIGN PROVIDED BY A RIDOT APPROVED SUPPLIER IN ACCORDANCE WITH THE RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (BLUE BOOK).
4. GRAVEL BORROW SUBBASE PLACED ON STATE ROADS SHALL MATCH EXISTING PAVEMENT DEPTH (MINIMUM 12 INCHES) AND SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
5. SWEEPING AND TACK COAT OF MILLED SURFACE IS REQUIRED PRIOR TO OVERLAY.

UTILITY NOTES:

1. CONTRACTOR MUST COORDINATE WITH RIDOT, RI ENERGY, AND ALL OTHER UTILITY COMPANIES.
2. WITH RESPECT TO UTILITIES CONNECTIONS WITHIN THE STATE'S ROW, THE APPLICANT IS REMINDED THAT THIS APPLICATION IS NOT A SUBSTITUTE FOR THE UTILITY PERMIT AND FURTHER THAT APPROVAL OF THIS APPLICATION DOES NOT CONSTITUTE APPROVAL OF ANY UTILITY WORK, SHOWN OR UN-SHOWN, WITHIN THE STATE'S ROW.

SITE CALLOUTS LEGEND

- 12W — 12" WHITE STOP LINE (REFERENCE MUTCD SECTION 3B.16)
- 4W — 4" WHITE EPOXY RESIN PAVEMENT MARKINGS
- 7.1.0 — RIDOT STD PRECAST CONCRETE CURB
- LS — 4" LOAM AND SEED



NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. CEMENT CONCRETE SHALL BE USED ONLY WHEN THE CURB IS SET AFTER THE BASE AND/OR BINDER COURSES ARE IN PLACE, OTHERWISE THE CEMENT CONCRETE WILL BE ELIMINATED AND THE GRAVEL BROUGHT UP TO BOTTOM OF THE BASE COURSE.

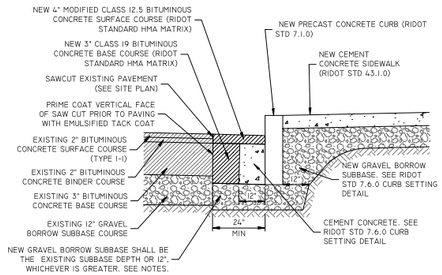
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE
1	MLP	Mar 05

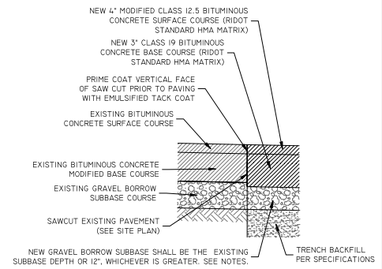
CURB SETTING DETAIL

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 7.6.0

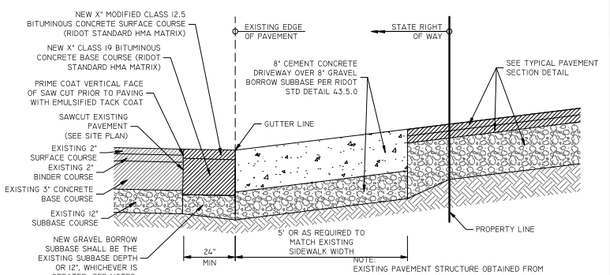


SECTION THROUGH NEW CURB & SIDEWALK
NOT TO SCALE



SECTION THROUGH TRENCH
NOT TO SCALE

NOTES:
1. PROPOSED THICKNESSES SHOWN WITHIN THE STATE RIGHT OF WAY ARE MINIMUMS. IF EXISTING THICKNESSES ARE FOUND TO BE GREATER, THE RESTORATION MUST FOLLOW AND MATCH THE EXISTING PAVEMENT STRUCTURE TO ENSURE SIMILAR STRUCTURAL CAPACITIES.
2. GRAVEL BORROW SUBBASE PLACED ON STATE ROADS SHALL MATCH EXISTING SUBBASE DEPTH (MINIMUM 12 INCHES) AND SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE RIDOT SPECIFICATIONS.
3. IF A CONCRETE BASE IS FOUND IN THE ROADWAY, ANY RESTORATION WORKS SHALL INCLUDE NEW CLASS XX CONCRETE, PINNED AND DOWELED TO THE EXISTING CONCRETE, AT A THICKNESS EQUAL TO THE EXISTING CONCRETE SLAB THICKNESS.
4. SWEEPING AND TACK COAT IS REQUIRED FOR ANY MILLED SURFACE PRIOR TO OVERLAY.
5. CLASS I9 HMA IS TO BE PLACED IN LIFTS OF 3" MINIMUM AND 5-3/4" MAXIMUM.
6. ALL ASPHALT WITHIN THE STATE RIGHT OF WAY SHALL BE AN APPROVED MIX DESIGN PROVIDED BY A RIDOT APPROVED SUPPLIER IN ACCORDANCE WITH THE RIDOT STANDARD SPECIFICATIONS.
7. ALL CONCRETE WITHIN THE STATE RIGHT OF WAY SHALL BE PROVIDED BY A RIDOT APPROVED SUPPLIER, SHALL BE CLASS XX AND CONFORM TO SECTION 601 OF THE RIDOT STANDARD SPECIFICATIONS. TRENCH WORK WILL REQUIRE PINNING AND DOWELING AND THE DEPTH SHALL MATCH EXISTING CONCRETE SLAB THICKNESS.
8. CONTRACTOR MUST HOLD/ SUPPORT/ RESTORE ALL IMPACTED UTILITY POLES AND ABOVEGROUND OBJECTS AS NECESSARY DURING INSTALLATION WORKS AND COORDINATE WITH ALL ASSOCIATED UTILITY OWNERS ACCORDINGLY.



PAVEMENT TIE IN DETAIL - RIDOT
NOT TO SCALE

DiPrete Engineering
90 Broadway Newport, RI 02840
tel 401-619-5890 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

KEVIN DEMERS
No. 8557
REGISTERED PROFESSIONAL ENGINEER
CIVIL

No.	Date	Description	By
0	10/07/2025	Pre-Application Submission	K.M.D.

Drawn By: D.R.N. | Design By: K.M.D.

RIDOT ROW Improvements

Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island

Prepared for:
D&M BOCA DEVELOPMENT, LLC
92 Plum-e Corner Road, Suite 160,
North Dartmouth, MA 02747

SHEET 8 OF 11

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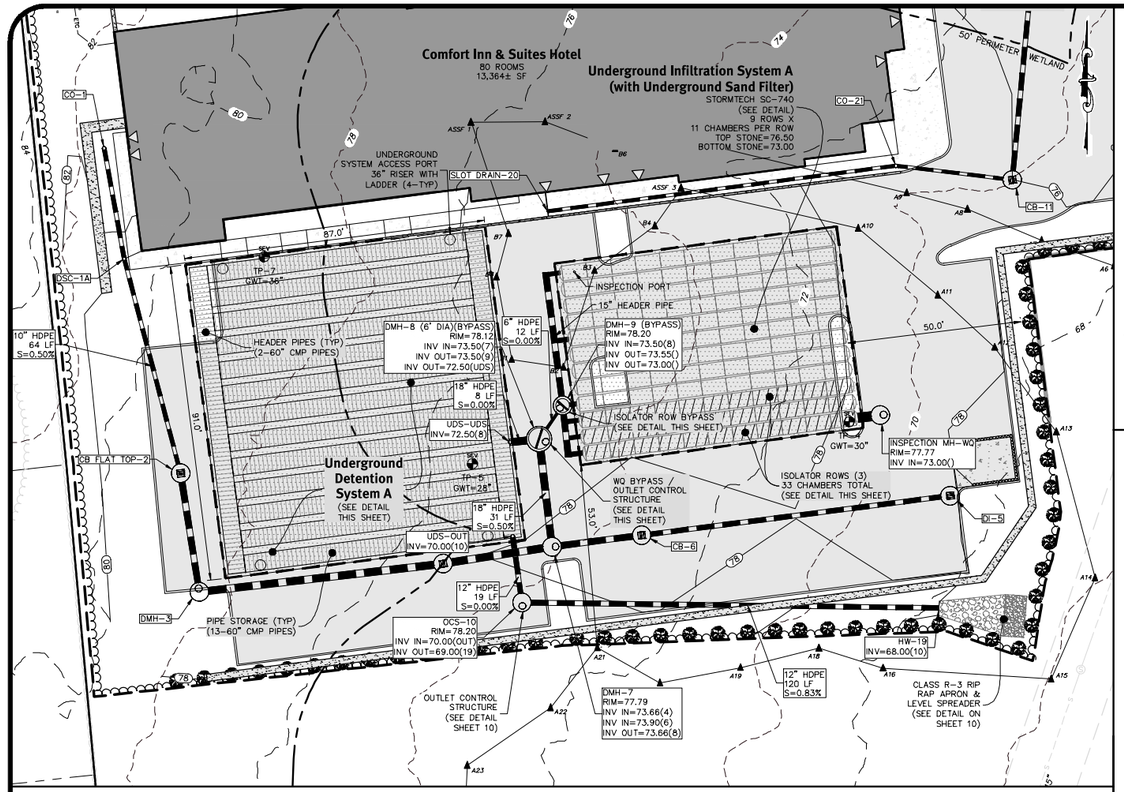


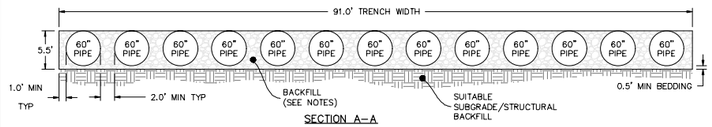
Underground Infiltration/Detention System A (UIS-A & UDS-A)

Scale: 1"=20'
0 10' 20' 40'

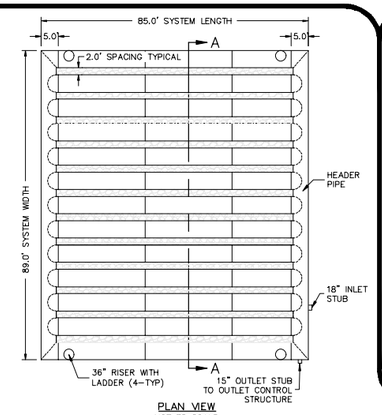
NOTES:

1. STRUCTURAL BACKFILL MATERIAL: SELECT MATERIALS SUCH AS BANK RUN GRAVEL OR OTHER PROCESSED GRANULAR MATERIALS LESS THAN 3 IN. MAXIMUM WITH EXCELLENT STRUCTURAL CHARACTERISTICS ARE PREFERRED. CONTRACTOR TO PROVIDE SIEVE ANALYSIS OF BACKFILL MATERIAL TO DESIGN ENGINEER PRIOR TO CONSTRUCTION.
2. STRUCTURAL BACKFILL PLACEMENT: STRUCTURAL BACKFILL SHALL BE PLACED IN LAYERS FROM 6 TO 12 IN. IN DEPTH DEPENDING ON THE TYPE OF MATERIAL AND COMPACTION EQUIPMENT OR METHOD. EACH LAYER OR "LIFT" SHALL BE COMPACTED TO 95% PROCTOR DENSITY BEFORE ADDING THE NEXT.
3. PIPE SHALL BE HDPE OR ALUMINIZED TYPE 2. ALL PIPE MUST BE WATERTIGHT. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO DESIGN ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
4. HEADER PIPE CAN BE CUSTOM MANUFACTURED OR CONSTRUCTED USING PIPE FITTINGS. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO DESIGN ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.

DESCRIPTION	UDS-A	UDS-B
TOP OF UDS STONE ELEVATION	75.00	70.50
BOTTOM OF UDS STONE ELEVATION	69.50	68.50
100 YEAR STORM ELEVATION	72.84	70.83
10 YEAR STORM ELEVATION	71.20	70.72
1 YEAR STORM ELEVATION	70.43	70.57
SEASONAL HIGH GWT ELEVATION	73.50	66.00
SOIL EVALUATION	TP-5	TP-6



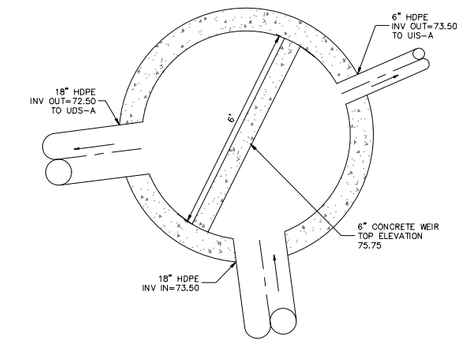
SECTION A-A



PLAN VIEW

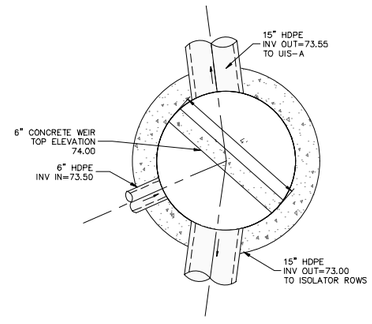
Underground Detention System A

NOT TO SCALE



WQ Bypass DMH-8 (6'Ø Manhole)

SCALE 1"=2'



Isolator Row Bypass DMH-9 (4'Ø Manhole)

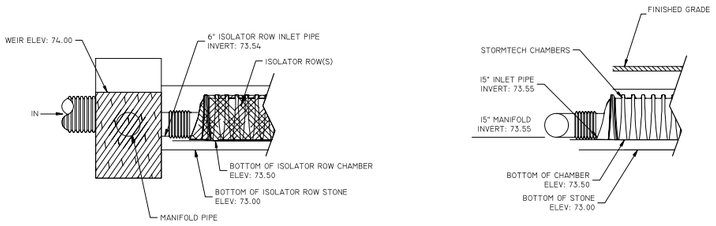
SCALE 1"=2'

DiPrete Engineering
Boston • Providence • Newport
90 Broadway Newport, RI 02840
tel 401-619-5890 fax 401-464-6006 www.diprete-eng.com

KEVIN DEMERS
8557
REGISTERED PROFESSIONAL ENGINEER CIVIL

No.	Date	Description	By
0	10/30/2025	Predeliberation Submission	K.M.

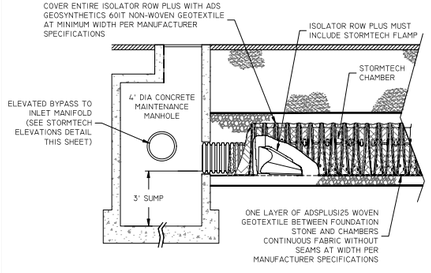
Drawn By: D.R.N. Design By: K.J.D.



SECTION A-A SECTION B-B

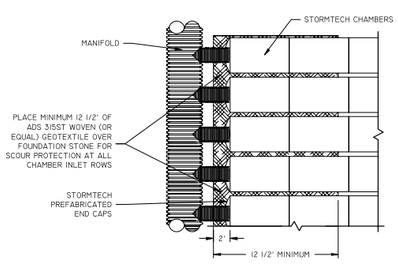
STORMTECH ELEVATIONS

NOT TO SCALE



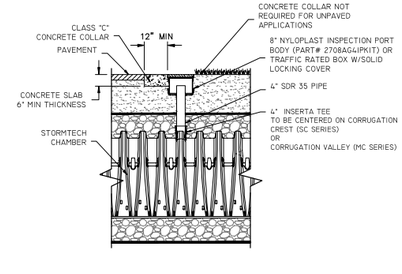
STORMTECH ISOLATOR ROW PLUS DETAIL

NOT TO SCALE



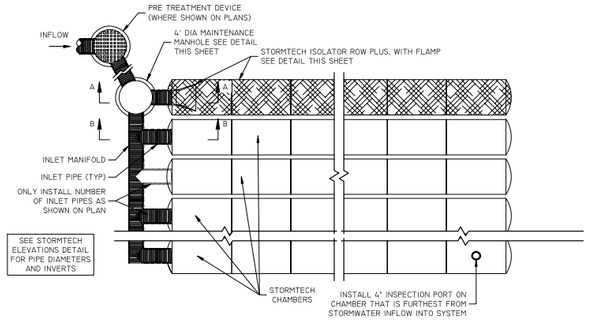
STORMTECH SCOUR PROTECTION DETAIL

NOT TO SCALE



STORMTECH 4" INSPECTION PORT DETAIL

NOT TO SCALE

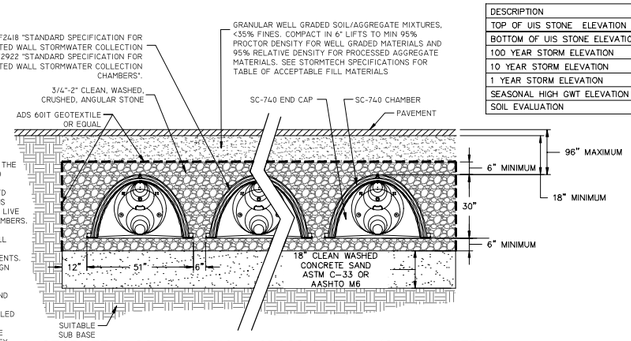


STORMTECH TYPICAL LAYOUT - INFILTRATION

NOT TO SCALE

NOTES:

1. THIS CROSS SECTION DETAILS THE REQUIREMENTS NECESSARY TO SATISFY THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS USING STORMTECH CHAMBERS. SEE APPLICABLE STORMTECH CONSTRUCTION GUIDES AND ALL APPLICABLE DOCUMENTS FOR SPECIFIC MATERIAL REQUIREMENTS.
2. SEE LATEST STORMTECH DESIGN MANUAL FOR CURRENT REQUIREMENTS.
3. ALL STORMTECH CHAMBERS AND ASSOCIATED/ ANCILLARY COMPONENTS MUST BE INSTALLED PER MANUFACTURER RECOMMENDATIONS AND THESE PLANS. CONTRACTOR TO NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO INSTALLATION.



DESCRIPTION	UIS-A
TOP OF UIS STONE ELEVATION	76.50
BOTTOM OF UIS STONE ELEVATION	73.00
100 YEAR STORM ELEVATION	75.88
10 YEAR STORM ELEVATION	75.14
1 YEAR STORM ELEVATION	73.28
SEASONAL HIGH GWT ELEVATION	70.00
SOIL EVALUATION	TP-4

STORMTECH SC-740 TYPICAL CROSS SECTION (SAND FILTER)

NOT TO SCALE

CONTRACTOR NOTE: SHOULD CONTRACTOR WISH TO PROPOSE ALTERNATE STORMWATER SYSTEM IN LIEU OF ADS STORMTECH, CONTRACTOR MUST SUBMIT THE FOLLOWING FOR REVIEW AND APPROVAL BY OWNER/ DESIGN ENGINEER PRIOR TO CONSTRUCTION:

- COMPLETED "SUBSTITUTION REQUEST" CSI FORM 13.1A (APRIL 2022 VERSION MODIFIED BY DIPRETE ENGINEERING 2023) - FORM AVAILABLE FROM DIPRETE ENGINEERING;
- ALTERNATE PRODUCT DESIGN PLANS SPECIFIC TO THIS PROJECT, STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE SAME STATE AS THIS PROJECT;
- POINT BY POINT COMPARATIVE DATA THAT DEMONSTRATES HOW THE ALTERNATE DESIGN MEETS OR IMPROVES THE DESIGN SHOWN ON THE APPROVED PLANS AND REPORTS, INCLUDING (BUT MAY NOT BE NOT LIMITED TO):
  - STAGE STORAGE
  - PEAK FLOOD ELEVATION
  - PEAK DISCHARGE FOR ALL APPLICABLE DESIGN STORMS
  - ANY OTHER APPLICABLE REQUIREMENTS OR CONSTRAINTS AS SET FORTH IN THE APPROVED PLANS, REPORTS AND CONTRACT DOCUMENTS
- PLANS, CALCULATIONS OR OTHERWISE THAT DEMONSTRATE HOW THE ALTERNATE DESIGN ADDRESSES SITE LAYOUT/ CONNECTIVITY TO THE ADJOINING STORMWATER NETWORK COMPONENTS, INCLUDING (BUT MAY NOT BE LIMITED TO):
  - PROVISION FOR ACCESS AND MAINTENANCE
  - ADEQUATE CONSTRUCTABILITY
  - ACCOMMODATION OF SURROUNDING OBJECTS/ STRUCTURES/ UTILITIES IN ACCORDANCE WITH ALL APPLICABLE OFFSETS, CLEARANCES AND STIPULATIONS AS REQUIRED BY THE APPLICABLE AUTHORITIES HAVING JURISDICTION

APPLICATION FOR SUBSTITUTION

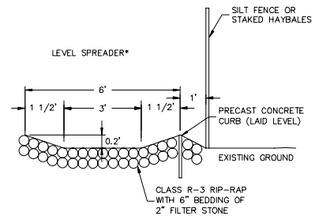
NOT TO SCALE

Underground System A & Details

Comfort Inn & Suites

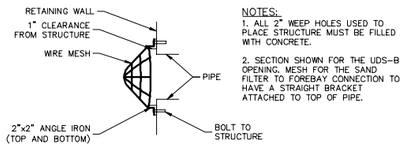
AP 111 Lot 1
Bristol, Rhode Island
Owner/Applicant:
D&M BOCA DEVELOPMENT, LLC
92 Plaut-Lizmer Road, Suite 160,
North Dartmouth MA 02747

SHEET 9 OF 11



NOTE:
* LENGTHS AS SPECIFIED ON SITE PLANS

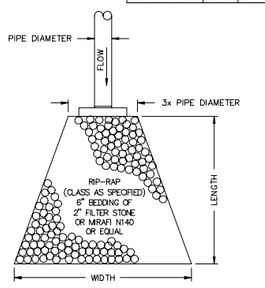
Level Spreader
NOT TO SCALE



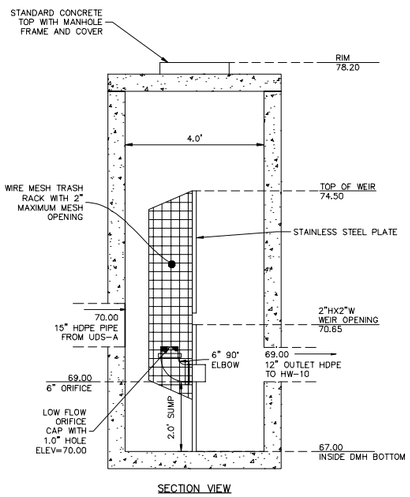
NOTES:
1. ALL 2" WEEP HOLES USED TO PLACE STRUCTURE MUST BE FILLED WITH CONCRETE.
2. SECTION SHOWN FOR THE UDS-B OPENING, MESH FOR THE SAND FILTER TO FOREBAY CONNECTION TO HAVE A STRAIGHT BRACKET ATTACHED TO TOP OF PIPE.

Trash Rack Detail
NOT TO SCALE

FLARED END	LENGTH	WIDTH	RIP RAP CLASS
HW-10	19'	12'	R-3

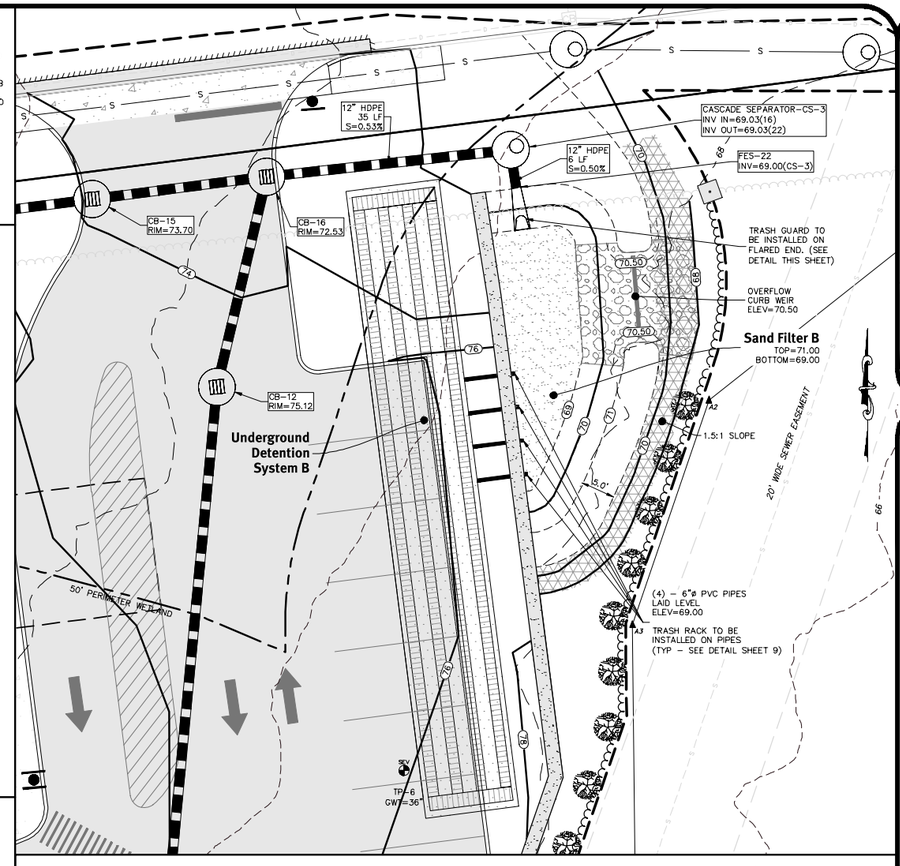


RIP RAP APRON/HW DETAIL
NOT TO SCALE



SECTION VIEW

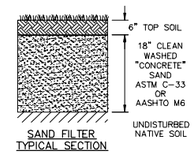
UDS-A Outlet Control Structure (OCS-10)
SCALE: 1"=2'



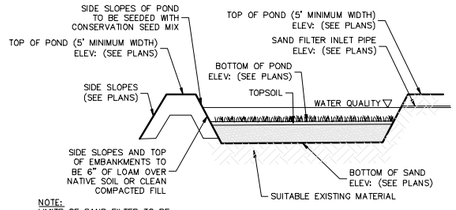
Underground Detention System - B (UDS-B) and Sand Filter B

Scale: 1"=10'
0 5' 10' 20'

DESCRIPTION	SF-B
TOP OF POND ELEVATION	71.00
100 YEAR STORM ELEVATION	70.82
10 YEAR STORM ELEVATION	70.71
1 YEAR STORM ELEVATION	70.57
WQ STORM ELEVATION	69.80
BOTTOM OF POND ELEVATION	69.00
TOP SOIL DEPTH	6"
SAND DEPTH	18"
BOTTOM OF SAND ELEVATION	67.00
SEASONAL HIGH GWT ELEVATION	66.00
SOIL EVALUATION	TH-6



SAND FILTER TYPICAL SECTION

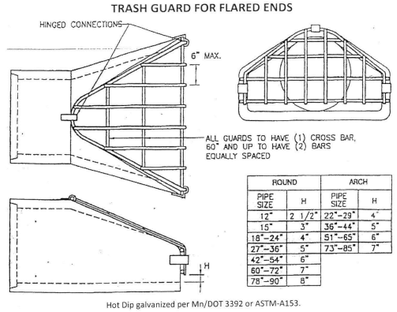


NOTE:
LIMITS OF SAND FILTER TO BE STAKED OUT AND NOT USED AS A TEMPORARY SEDIMENT BASIN DURING CONSTRUCTION (NO CONSTRUCTION TRAFFIC ALLOWED WITHIN FILTER LIMITS)

SAND FILTER
NOT TO SCALE

Sand Filter BMP System
NOT TO SCALE

TRASH GUARD FOR FLARED ENDS

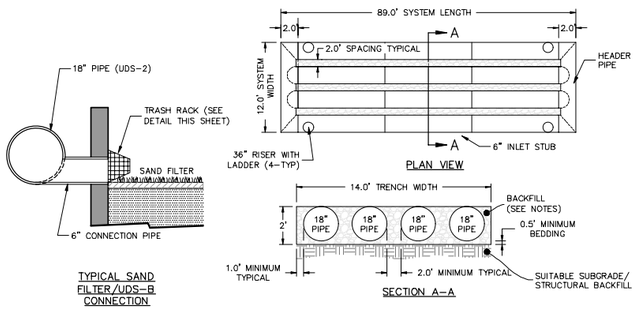


ROUND		ARCH	
PIPE SIZE	H	PIPE SIZE	H
12"	2 1/2"	22"-29"	4"
15"	3"	36"-44"	5"
18"-24"	4"	51"-65"	6"
27"-36"	5"	73"-85"	7"
42"-54"	6"		
60"-72"	7"		
78"-90"	8"		

Hot Dip galvanized per Mn/DOT 3392 or ASTM-A153.

BAR SIZES									
STANDARD DESIGN					HEAVY DESIGN				
	PIPE SIZE	HOLE DIA. REQ'D.	BOLT DIA.	BAR SIZE		PIPE SIZE	HOLE DIA. REQ'D.	BOLT DIA.	BAR SIZE
ROUND	12"-24"	3/4"	5/8"	5/8"	ROUND	12"-24"	3/4"	5/8"	3/4"
	27"-48"	7/8"	3/4"	3/4"		27"-48"	7/8"	3/4"	1"
	54"-90"	1 1/8"	1"	1"		54"-90"	1 1/8"	1"	1 1/4"
ARCH	22"-29"	3/4"	5/8"	5/8"	ARCH	22"-29"	3/4"	5/8"	3/4"
	36"-59"	7/8"	3/4"	3/4"		36"-59"	7/8"	3/4"	1"
	65"-88"	1 1/8"	1"	1"		65"-88"	1 1/8"	1"	1 1/4"
BOLT LG. = PIPEWALL THK. + 2 1/2"					ELLIPTICAL	14x23"	3/4"	5/8"	3/4"
						19x30"	3/4"	5/8"	3/4"
						24x38"	7/8"	3/4"	3/4"
						29x45"	7/8"	3/4"	3/4"
						34x53"	7/8"	3/4"	3/4"
						38x60"	7/8"	3/4"	3/4"
						43x68"	1 1/8"	1"	1"
						48x76"	1 1/8"	1"	1"
						53x83"	1 1/8"	1"	1"

Trash Guard Specifications
NOT TO SCALE



PLAN VIEW

TYPICAL SAND FILTER/UDS-B CONNECTION
NOT TO SCALE

SECTION A-A

Underground Detention System B (UDS-B)
NOT TO SCALE

DiPrete Engineering
90 Broadway Newport, RI 02840
tel 401-619-5890 fax 401-464-6006 www.dipreteeng.com
Boston • Providence • Newport

KEVIN DEMERS
No. 8557
REGISTERED PROFESSIONAL ENGINEER CIVIL

No.	Date	Description	By
0	10/23/2025	Predetication Submission	J.A.K.

Drawn By: D.R.N. | Design By: K.J.D.

Underground System B, Sand Filter B & Details

Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island
Prepared for:
D&M BOCA DEVELOPMENT, LLC
92 Fluence Lane Road, Suite 160,
Northampton, MA 01062

SHEET 10 OF 11

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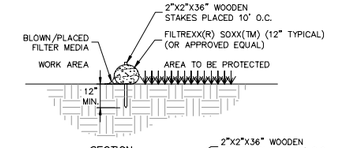
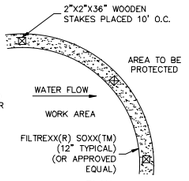


SECTION



PLAN

NOTES:

1. ALL MATERIAL TO MEET FILTREXX(R) SPECIFICATIONS
2. FILTER MEDIA(TM) FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER
4. STAKES ARE NOT TO BE USED IN PAVEMENT AREAS.
5. SELF WEIGHT OF FILTREXX SYSTEM IS ADEQUATE TO PREVENT SYSTEM MOVEMENT ONCE POSITIONED ALONG AREA SHOWN ON THE PLANS.
6. CONTRACTOR TO PLACE FILTREXX SEDIMENT CONTROL OR APPROVED EQUAL AROUND ALL CURB INLET LOCATIONS AS SPECIFIED ON PLANS.

Filtrexx Sediment Control (or Approved Equal)

NOT TO SCALE

DiPrete Engineering
90 Broadway Newport, RI 02840
tel 401-619-5890 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

KEVIN DEMERS
8557
REGISTERED PROFESSIONAL ENGINEER
CIVIL

No.	Date	Description	By
1	10/30/2025	Predeliberation Submission	P.A.R.

Design By: K.J.D.
Drawn By: D.R.N.

GENERAL NOTES:

1. THE TEMPORARY SEDIMENT TRAP SHALL MEET ALL REQUIREMENTS FOR TEMPORARY SEDIMENT TRAPS OUTLINED IN THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (LATEST REVISION) SECTION SIX: SEDIMENT CONTROL MEASURES
2. THE TEMPORARY SEDIMENT TRAP SHALL HAVE AN INITIAL STORAGE VOLUME OF 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA.
3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER EXCEPT FOR THE EXCAVATED WET STORAGE AREA WHERE SLOPES SHALL NOT EXCEED 1.5:1.
4. THE OUTLET SHALL BE LOCATED AT THE MOST DISTANT HYDRAULIC POINT FROM THE INLET.
5. THE OUTLET CONSISTS OF A PERVIOUS STONE DIKE WITH A CORE OF MODIFIED RIPRAP AND FACED ON THE UPSTREAM SIDE WITH STONE.
6. TEMPORARY SEDIMENT TRAPS MUST OUTLET ONTO STABILIZED GROUND.
7. MAXIMUM HEIGHT OF A TEMPORARY SEDIMENT TRAP EMBANKMENT IS LIMITED TO 5 FEET.
8. SIDE SLOPES OF THE EMBANKMENT SHALL BE 2:1 OR FLATTER.
9. MODIFIED RIPRAP: SHALL MEET THE REQUIREMENTS OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SUBSECTION M.10.03.2.
10. FILTER STONE: SHALL MEET THE REQUIREMENTS OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SUBSECTION M.01.03 TABLE I, COLUMN V FILTER STONE.

SEDIMENT TRAP DIMENSIONS	TRAP 1	
TRIBUTARY DRAINAGE AREA	1.15	ac
WET STORAGE DEPTH (Dw)	2.00	ft
DRY STORAGE DEPTH (Dd)	2.00	ft
TOTAL DEPTH (D)	4.00	ft
BOTTOM OF TRAP AREA (Ab)	850	sq.ft
WETTED SURFACE AREA (Aw)	1,400	sq.ft
SURFACE AREA AT OUTLET (Ad)	2,030	sq.ft

TOP WIDTH VS HEIGHT
H=HEIGHT OF EMBANKMENT
W=TOP WIDTH OF EMBANKMENT

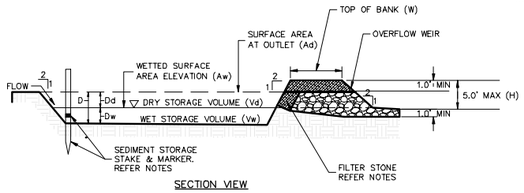
H (ft)	W (ft)
1.5	2.0
2.0	2.0
2.5	3.0
3.0	2.5
3.5	3.0
4.0	3.0
4.5	4.0
5.0	4.5

INSPECTION, MAINTENANCE, AND REMOVAL REQUIREMENTS:

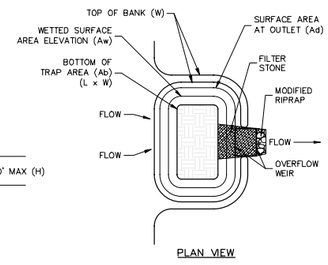
1. INSTALL "SEDIMENT STORAGE" STAKE WITH A MARKER AT ONE HALF OF THE WET STORAGE VOLUME.
2. INSPECT THE TEMPORARY SEDIMENT TRAP AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.25 INCH OR GREATER.
3. CHECK THE OUTLET TO ENSURE THAT IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT.
4. CHECK FOR SEDIMENT ACCUMULATION AND FILTRATION PERFORMANCE.
5. WHEN SEDIMENTS HAVE ACCUMULATED TO ONE HALF THE MINIMUM REQUIRED VOLUME OF THE WET STORAGE, DEWATER THE TRAP AS NEEDED, REMOVE SEDIMENTS AND RESTORE THE TRAP TO ITS ORIGINAL DIMENSIONS.
6. DISPOSE OF THE SEDIMENT REMOVED FROM THE BASIN IN A SUITABLE AREA.
7. THE TEMPORARY SEDIMENT TRAP MAY BE REMOVED AFTER THE CONTRIBUTING DRAINAGE AREA IS STABILIZED.

INSTALLATION NOTES:

1. CLEAR, GRUB AND STRIP ANY VEGETATION AND ROOT MAT FROM ANY PROPOSED EMBANKMENT AND OUTLET AREA.
2. REMOVE STONES AND ROCKS WHOSE DIAMETER IS GREATER THAN THREE (3) INCHES AND OTHER DEBRIS.
3. EXCAVATE WET STORAGE AND CONSTRUCT THE EMBANKMENT AND/OR OUTLET AS NEEDED TO ATTAIN THE NECESSARY STORAGE REQUIREMENTS.
4. USE ONLY FILL MATERIAL FOR THE EMBANKMENT THAT IS FREE FROM EXCESSIVE ORGANICS, DEBRIS, LARGE ROCKS (OVER SIX (6) INCHES) OR OTHER UNSUITABLE MATERIALS. COMPACT THE EMBANKMENT IN 9-INCH LAYERS BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED
5. STABILIZE THE EARTHEN EMBANKMENT USING ANY OF THE FOLLOWING MEASURES, SEEDING FOR TEMPORARY VEGETATION COVER; SEEDING FOR PERMANENT VEGETATIVE COVER; OR SLOPE PROTECTION, IMMEDIATELY AFTER INSTALLATION



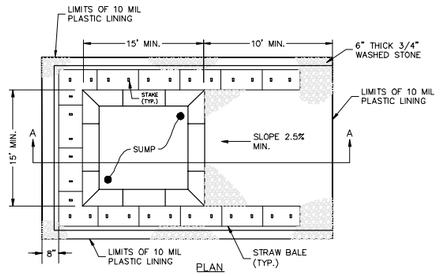
SECTION VIEW



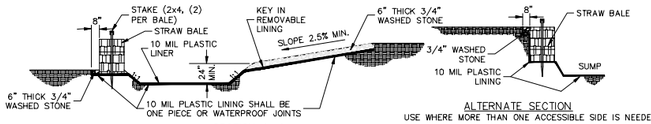
PLAN VIEW

Temporary Sediment Trap Details

NOT TO SCALE



PLAN



SECTION A–A

ALTERNATE SECTION
USE WHERE MORE THAN ONE ACCESSIBLE SIDE IS NEEDED

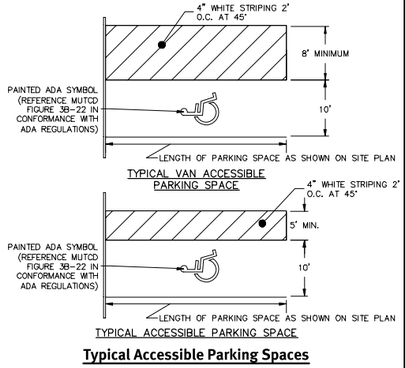
WASHOUT SIGN

NOTES:

1. PIT IS SPECIFICALLY DESIGNATED, DIKED AND IMPERVIOUS CONTAINMENT TO PREVENT CONTACT BETWEEN CONCRETE WASH AND STORMWATER.
2. WASH WATER SHALL NOT BE ALLOWED TO FLOW TO SURFACE WATER.
3. FACILITY MUST HOLD SUFFICIENT VOLUME TO CONTAIN CONCRETE WASTE WITH A MINIMUM FREEBOARD OF 12."
4. FACILITY SHALL NOT BE FILLED BEYOND 95% CAPACITY UNLESS A NEW FACILITY IS CONSTRUCTED.
5. SAW CUT PORTLAND CEMENT CONCRETE, RESIDUE FROM SAWCUT & GRINDING TO BE DISPOSED OF IN THE PIT.
6. CONCRETE WASHOUTS SHALL BE LOCATED A MINIMUM OF 100' FROM DRAINAGE WAYS, INLETS, & SURFACE WATERS.
7. MANUFACTURED CONCRETE WASHOUT DEVICES MAY BE USED IF REMOVED FROM THE SITE WHEN 95% FULL CAPACITY.

CONCRETE WASHOUT AREA

(NOT TO SCALE)



Bollard Mounted Sign Detail

NOT TO SCALE

TYPICAL VAN ACCESSIBLE PARKING SPACE

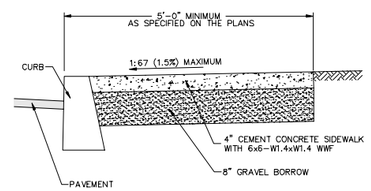
TYPICAL ACCESSIBLE PARKING SPACE

Typical Accessible Parking Spaces

NOT TO SCALE

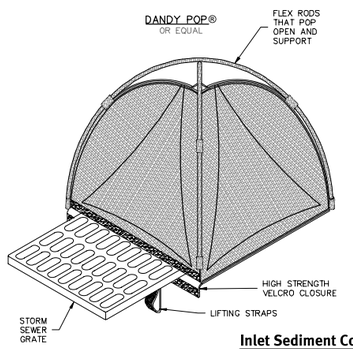
NOTES:

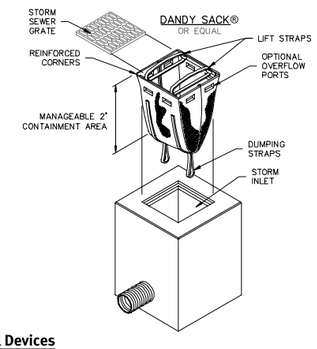
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
2. FOR CURB SETTING DETAIL REFERENCE STD. 7.6.0.
3. MEETS OR EXCEEDS GUIDELINES OF RIDOT STANDARD DETAIL 43.1.0.



Cement Concrete Sidewalk

NOT TO SCALE



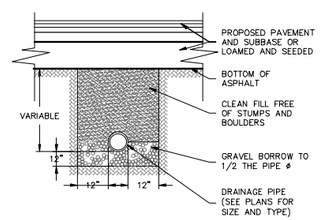


Inlet Sediment Control Devices

NOT TO SCALE

INSTALLATION NOTES:

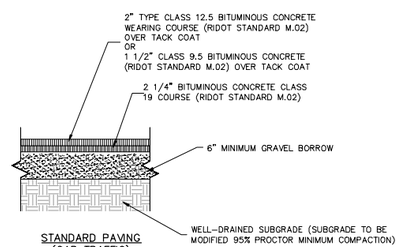
1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS, LATEST ADDITION.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100MM) FOR 4"–24" (100MM–600MM); 6" (150MM) FOR 30"–60" (750MM–900MM).
5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
6. MINIMUM COVER: MINIMUM COVER, H, IN NON–TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" ø PIPE AND 24" OF COVER FOR 54"–60" ø PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.



HDPE Trench Detail

NOT TO SCALE

NOTE:
THIS PAVEMENT SECTION DETAIL REFLECTS MINIMUM REQUIREMENTS. ENGINEER TO DETERMINE DESIGN BASED ON GEOTECHNICAL DATA OF SPECIFIC PROJECT AND DAILY TRAFFIC DESIGN REQUIREMENT.



STANDARD PAVING (CAR TRAFFIC)

Typical Pavement Section

NOT TO SCALE

Detail Sheet
Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island
Owner/Applicant
D&M BOCA DEVELOPMENT, LLC
92 Plum Creek Road, Suite 160,
North Dartmouth, MA 02747

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SHEET 11 OF 11

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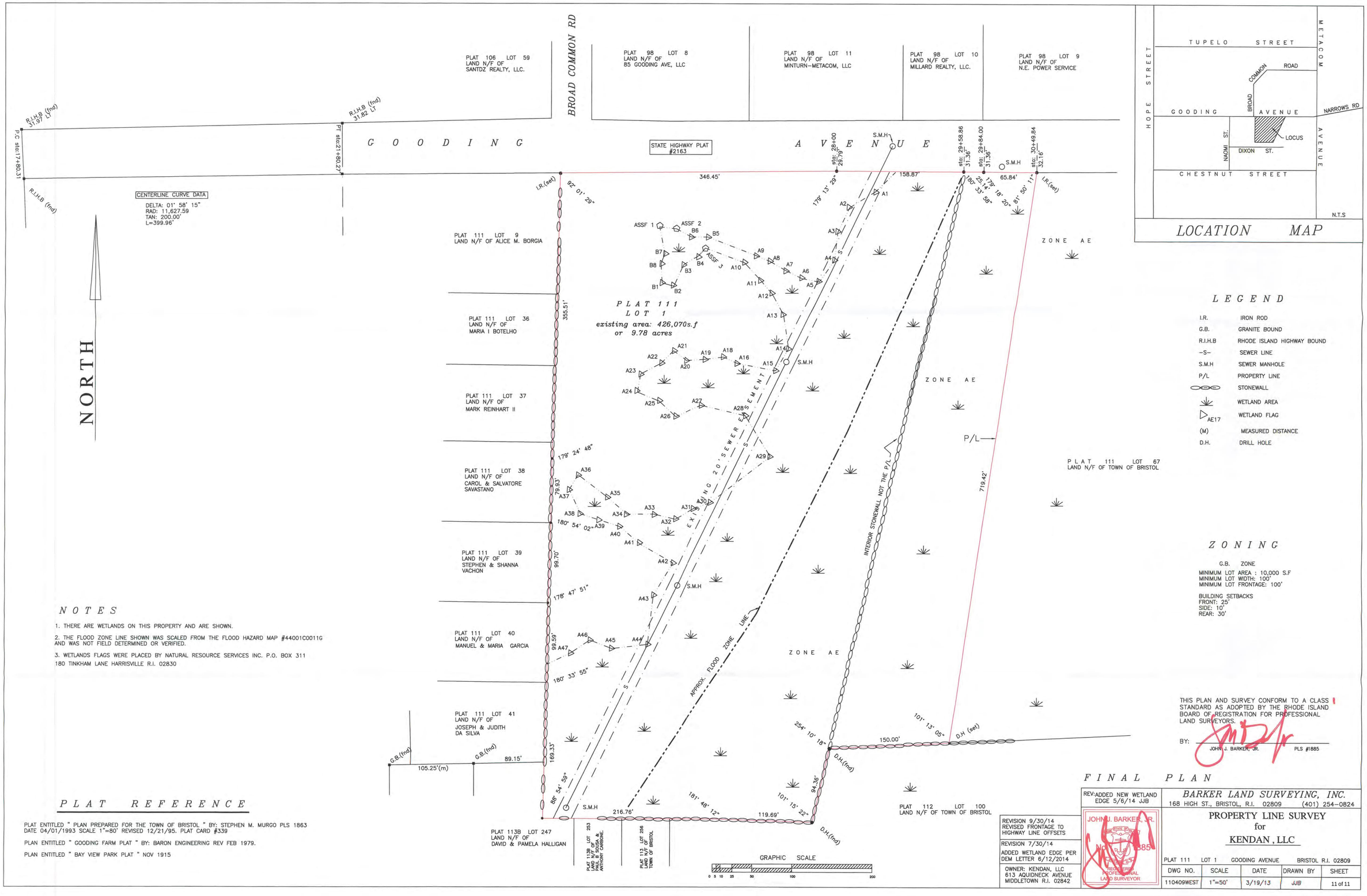


LEGEND

I.R.	IRON ROD
G.B.	GRANITE BOUND
R.I.H.B	RHODE ISLAND HIGHWAY BOUND
-S-	SEWER LINE
S.M.H	SEWER MANHOLE
P/L	PROPERTY LINE
	STONEWALL
	WETLAND AREA
AE17	WETLAND FLAG
(M)	MEASURED DISTANCE
D.H.	DRILL HOLE

ZONING

G.B. ZONE

MINIMUM LOT AREA : 10,000 S.F
MINIMUM LOT WIDTH: 100'
MINIMUM LOT FRONTAGE: 100'

BUILDING SETBACKS
FRONT: 25'
SIDE: 10'
REAR: 30'

NOTES

1. THERE ARE WETLANDS ON THIS PROPERTY AND ARE SHOWN.
2. THE FLOOD ZONE LINE SHOWN WAS SCALED FROM THE FLOOD HAZARD MAP #44001C0011G AND WAS NOT FIELD DETERMINED OR VERIFIED.
3. WETLANDS FLAGS WERE PLACED BY NATURAL RESOURCE SERVICES INC. P.O. BOX 311 180 TINKHAM LANE HARRISVILLE R.I. 02830

PLAT REFERENCE

PLAT ENTITLED " PLAN PREPARED FOR THE TOWN OF BRISTOL " BY: STEPHEN M. MURGO PLS 1863 DATE 04/01/1993 SCALE 1"=80' REVISED 12/21/95. PLAT CARD #339

PLAN ENTITLED " GOODING FARM PLAT " BY: BARON ENGINEERING REV FEB 1979.

PLAN ENTITLED " BAY VIEW PARK PLAT " NOV 1915

THIS PLAN AND SURVEY CONFORM TO A CLASS I STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

BY: _____
JOHN J. BARKER, JR. PLS #1885

FINAL PLAN

REVISION 9/30/14
REVISED FRONTAGE TO HIGHWAY LINE OFFSETS

REVISION 7/30/14
ADDED WETLAND EDGE PER DEM LETTER 6/12/2014

OWNER: KENDAN, LLC
613 AQUIDNECK AVENUE
MIDDLETOWN R.I. 02842

REV: ADDED NEW WETLAND EDGE 5/6/14 JJB

JOHN J. BARKER, JR. No. 1885 REGISTERED PROFESSIONAL LAND SURVEYOR

BARKER LAND SURVEYING, INC.
168 HIGH ST., BRISTOL, R.I. 02809 (401) 254-0824

PROPERTY LINE SURVEY
for
KENDAN , LLC

PLAT 111 LOT 1 GOODING AVENUE BRISTOL R.I. 02809

DWG NO.	SCALE	DATE	DRAWN BY	SHEET
110409WEST	1"=50'	3/19/13	JJB	11 of 11

100' Radius Abutters

Bristol, RI

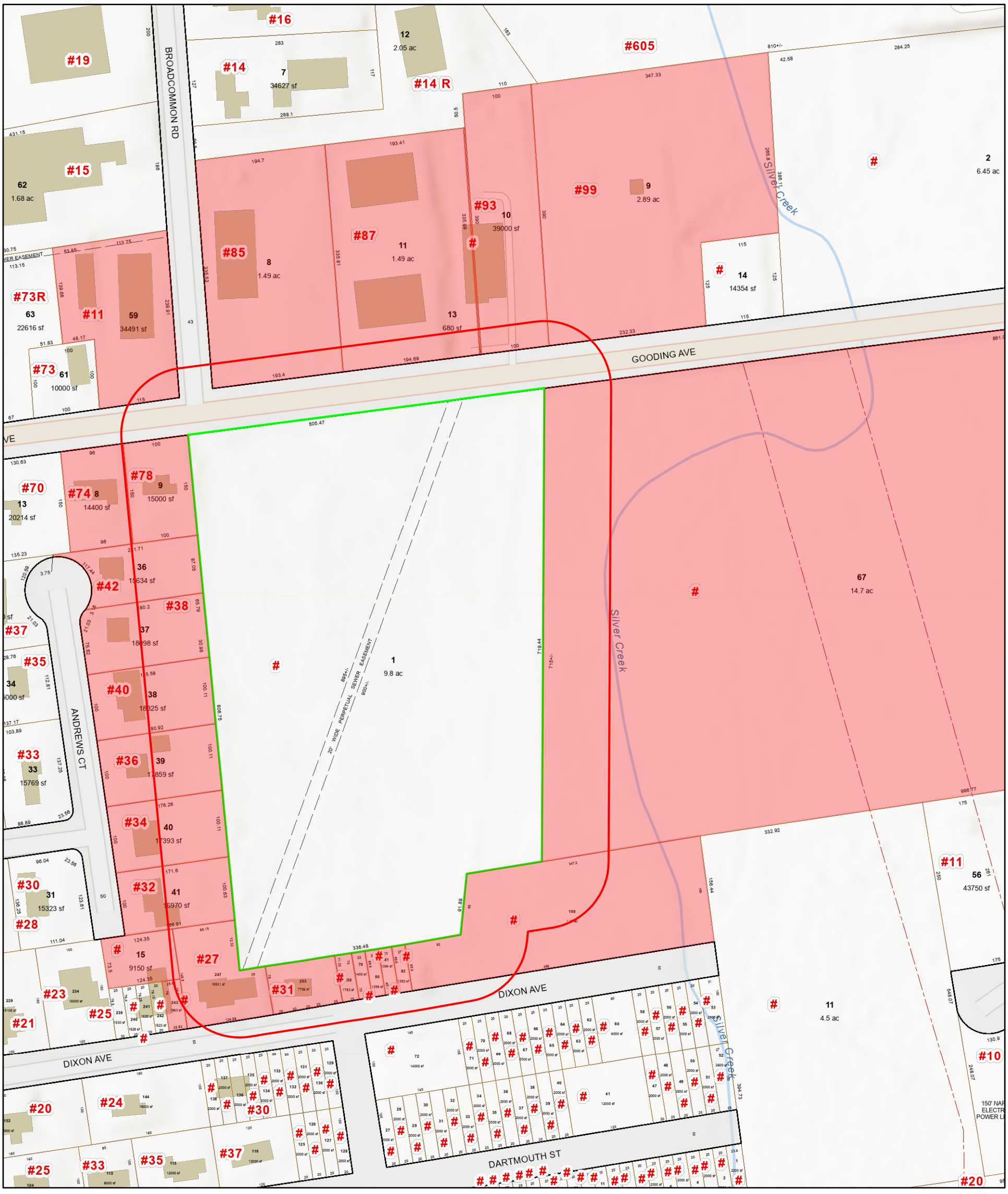
January 27, 2025

1 inch = 150 Feet

0 150 300 450

CAI Technologies
Precision Mapping. Geospatial Solutions.

www.cai-tech.com



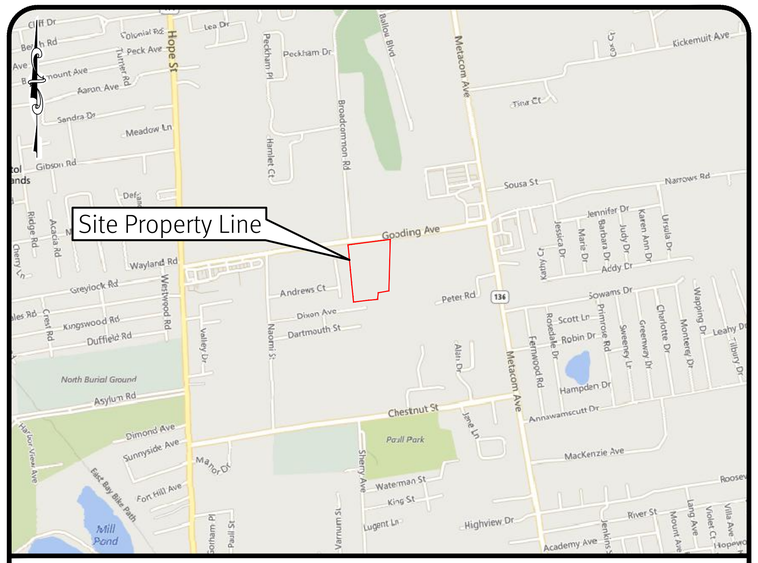
- Property Line
- Public Road
- Right of Way
- Utility
- Address Number
- Microsoft Buildings
- Right of Ways

Permitting / Pre-Application Submission

Comfort Inn & Suites

Located on Gooding Avenue
Bristol, Rhode Island

Assessor's Plat 111 Lot 1



Location Map Scale: 1" = 1000'

Sheet List Table

1 Cover Sheet
2 Aerial Half Mile Radius
3 General Notes and Legend
4 Erosion & Sediment Control Plan
5 Site Layout Plan
6 Grading Plan
7 Drainage and Utilities Plan
8 RIDOT ROW Improvements
9 Underground System A & Details
10 Underground System B, Sand Filter B & Details
11 Detail Sheet

Plans by Others

Property Line Survey (Sheet 1 of 1) by Barker Land Surveying

SESC / O&M
The Soil Erosion and Sediment Control Plan (SESC) and Operations and Maintenance Plan (O&M) are required documents with this plan set and must be maintained by the contractor and owner onsite.

RIDOT
The Proposed Improvements Will Not Increase the Rate of Stormwater Runoff Onto the State Highway. All Work Within the State Right of Way Must Conform to the RI Standard Specifications, Details, and Addendums.

DiPrete Engineering
90 Broadway Newport, RI 02840
tel 401-619-5890 fax 401-404-6006 www.diprete-eng.com
Boston • Providence • Newport

KEVIN DEMERS
No. 8567
REGISTERED PROFESSIONAL ENGINEER CIVIL

This regulatory submission set shall not be used for construction purposes unless stamped 'Issued for Construction' and signed by a DiPrete Engineering representative.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA compliance in the implementation of this plan and design.

No.	Date	Description	By
0	02.03.2025	Pre-Application Submission	J.A.R.

Drawn By: D.R.N. | Design By: K.J.D.

Cover Sheet
Comfort Inn & Suites
AP 111 Lot 1
Bristol, Rhode Island
Owner & Applicant:
D&M BOCA DEVELOPMENT, LLC
92 Faunce Corner Road, Suite 160,
North Dartmouth, MA 02747

SHEET 1 OF 11

DE Job No.: 2336-001 ©Copyright 2025 by DiPrete Engineering Associates, Inc.

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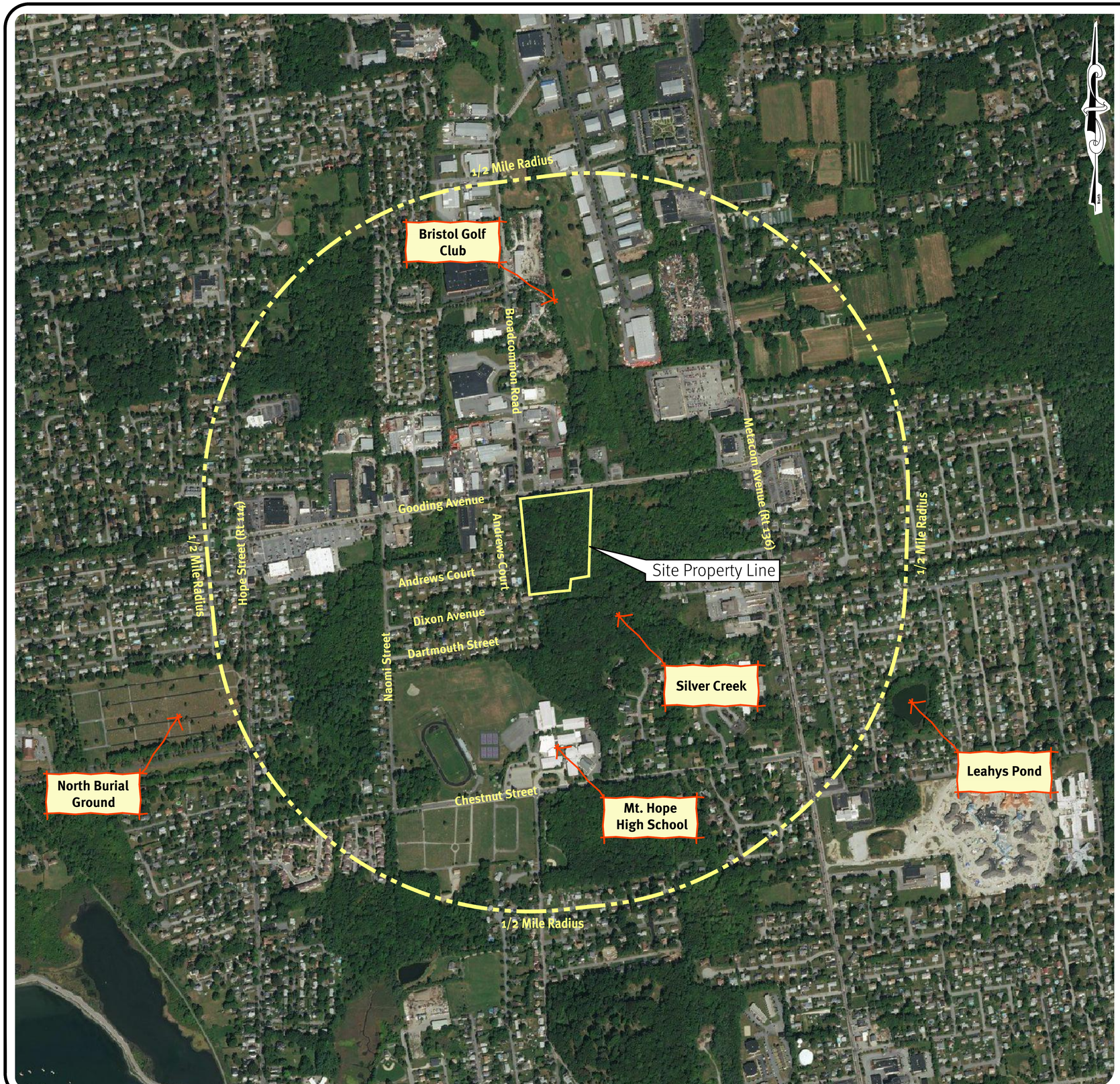

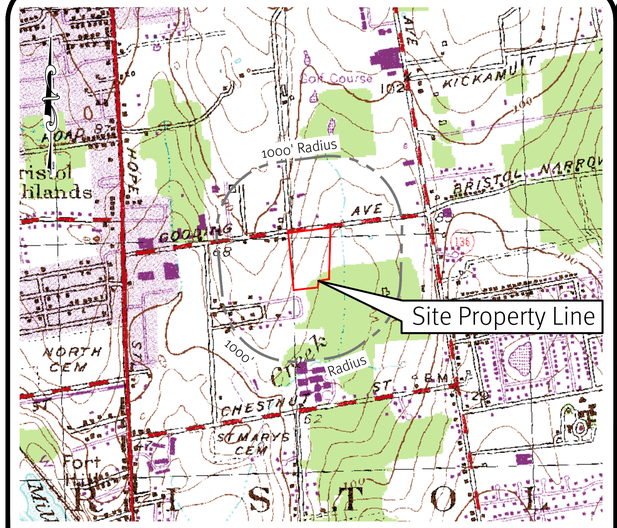

USGS Map Scale: 1"=1000'

Photo Obtained from the ARCGIS 2008 Orthophotography.

Scale: 1"=400'

0 200' 400' 800'

Legend:

PROPERTY LINE

PROPERTY LINE (USGS MAP)

HALF MILE RADIUS LINE

DiPrete Engineering
90 Broadway Newport, RI 02840
tel 401-619-5950 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

KEVIN DEMERS
No. 18557
REGISTERED PROFESSIONAL ENGINEER
CIVIL

No.	Date	Description	By:
0	02-03-2025	Pre-Application Submission	J.A.R.
			Design By: K.I.D.
			Drawn By: D.R.N.

Aerial Half Mile Radius

Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island

Owner & Applicant:
D&M BOCA DEVELOPMENT, LLC
92 Faunce Corner Road, Suite 160,
North Dartmouth, MA 02747

SHEET 2 OF 11

General Notes:

1. THE SITE IS LOCATED ON THE TOWN OF BRISTOL ASSESSOR'S PLAT 111 LOT 1.
2. THE SITE IS APPROXIMATELY 9.78 ACRES, IS ZONED GB, AND IS CURRENTLY WOODED.
3. THE APPLICANT OF AP 111 LOT 1 IS:
   D&M BOCA DEVELOPMENT, LLC.
   92 FAUNCE CORNER ROAD, SUITE 160
   NORTH DARTMOUTH, MA 02747
4. THIS SITE IS LOCATED IN FEMA FLOOD ZONES X AND AE. REFERENCE FEMA FLOOD INSURANCE RATE MAP 44001C0011H, MAP REVISED JULY 7, 2014.
5. THIS PLAN IS SUBSTANTIALLY CORRECT IN ACCORDANCE WITH A CLASS IV STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS. THIS PLAN IS NOT TO BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY AND MAY BE SUBJECT TO SUCH CHANGES AS AN ACCURATE BOUNDARY SURVEY MAY DISCLOSE.
6. THE SITE IS NOT WITHIN A:
   GROUNDWATER PROTECTION AREA
   NATURAL HERITAGE AREA
   GROUNDWATER PROTECTION OVERLAY DISTRICT
7. THE FOLLOWING DOCUMENTS ARE CONSIDERED PART OF THE PROJECT PLANS AND THE CONTRACTOR / OWNER MUST MAINTAIN THESE DOCUMENTS AS PART OF A FULL PLAN SET:
   - SOIL EROSION AND SEDIMENT CONTROL PLAN (SESC). THE SESC CONTAINS THE FOLLOWING:
     - EROSION CONTROL MEASURES
     - SHORT TERM MAINTENANCE
     - ESTABLISHMENT OF VEGETATIVE COVER
     - CONSTRUCTION POLLUTION PREVENTION
     - SEQUENCE OF CONSTRUCTION
   - OPERATIONS AND MAINTENANCE PLAN (O&M). THE O&M CONTAINS THE FOLLOWING:
     - LONG TERM MAINTENANCE
     - LONG TERM POLLUTION PREVENTION
8. THIS PLAN SET REFERENCES RIDOT STANDARD DETAILS (DESIGNATED AS RIDOT STD X.X.X.). RIDOT STANDARD DETAILS ARE AVAILABLE FROM RIDOT AND ONLINE AT: HTTP://WWW.DOT.RI.GOV/BUSINESS/CONTRACTORSANDCONSULTANTS.PHP.
9. THE SITE IS TO BE SERVICED BY PUBLIC WATER AND PUBLIC SEWER.
10. THE SITE WILL FULLY COMPLY WITH ALL OF THE TOWN OF BRISTOL RULES AND REGULATIONS INCLUDING THE SUBDIVISION AND DEVELOPMENT REVIEW REGULATIONS AND THE ZONING ORDINANCE. THE SITE DOES NOT REQUIRE ANY VARIANCES, SPECIAL USE PERMITS, OR WAIVERS.
11. THE DRAINAGE SYSTEM IS DESIGNED TO MEET THE TOWN OF BRISTOL SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WITH THE USE OF CATCH BASINS, CULVERTS, AND UNDERGROUND DRAINAGE BASINS. THE STORMWATER MANAGEMENT SYSTEM MEETS THE RIDEM BEST MANAGEMENT PRACTICES.
12. THE SITE IS PROPOSED TO BE BUILT IN 1 PHASE.
13. TEST PITS AND SOIL EVALUATIONS WERE COMPLETED BY SITEC, INC. ON 12/12/2014.

Soil Information:

(REFERENCE: USDA NATURAL RESOURCES CONSERVATION SERVICE)

SOIL NAME	DESCRIPTION
PmA	PITTSTOWN SILT LOAM, 0 TO 3 PERCENT SLOPES
PmB	PITTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES
Se	STISSING SILT LOAM

Plan References:

PLAN ENTITLED "PROPERTY LINE SURBEY FOR KENDAN, LLC" BY BARKER LAND SURVEYING, INC. REVISED 9/30/14.

Lidar Note:

CONTOUR DATA SHOWN ON THIS PLAN CONFORMS TO A T-4 TOPOGRAPHICAL SURVEY STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS. SAID DATA IS BASED ON ELEVATION INFORMATION THAT WAS COLLECTED WITH AIRBORNE LIDAR TECHNOLOGY FOR THE ENTIRE AREA OF RHODE ISLAND BETWEEN APRIL 22 AND MAY 6, 2011 AS PART OF THE NORTHEAST LIDAR PROJECT. THIS DATA'S POSITIONAL ACCURACY AND RELIABILITY HAS NOT BEEN VERIFIED BY DIPRETE ENGINEERING AND IS SUBJECT TO CHANGES AN AUTHORITATIVE FIELD SURVEY MAY DISCLOSE.

Demolition Notes:

1. ALL EXISTING UTILITIES SHOWN ARE FROM VISIBLE INFORMATION, DRAWINGS FROM OTHERS, OR INFORMATION PROVIDED TO DIPRETE ENGINEERING AND ARE SUBJECT TO CHANGE. THE LOCATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM AFOREMENTIONED PLANS OF RECORD AND ARE APPROXIMATE ONLY. PRIOR TO CONSTRUCTION, THE PROPER UTILITY ENGINEERING DEPARTMENTS SHALL BE CONTACTED AND THE ACTUAL LOCATION OF SUBSURFACE STRUCTURES SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. CALL THE DIG SAFE CENTER TOLL FREE AT 1-888-344-7233 72 HOURS PRIOR TO EXCAVATION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO EXCAVATION. ANY DAMAGE TO UTILITIES WHICH ARE SHOWN ON THE PLANS OR DETAILED BY DIG SAFE SHALL BE THE SITE CONTRACTORS RESPONSIBILITY.
2. CONTRACTOR TO OBTAIN ALL FEDERAL, STATE, AND MUNICIPAL APPROVALS PRIOR TO THE START OF CONSTRUCTION.
3. CONTRACTOR TO PERFORM DAILY SWEEPING AT CONSTRUCTION ENTRANCE DURING DEMOLITION AND CONSTRUCTION TO MINIMIZE SEDIMENTS ON GOODING AVENUE.
4. ANY DAMAGE TO THE PROPERTY CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) ALL MATERIALS INDICATED ON THE PLANS UNLESS SPECIFIED OTHERWISE HERE IN. R&D MATERIALS TO INCLUDE BUT NOT LIMITED TO PAVEMENT, GRAVEL, CATCH BASINS, MANHOLES, GRATES/FRAMES/COVERS, AND ANY EXCESS SOIL THAT IS NOT INCORPORATED INTO THE WORK.
6. IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, ALL DISTURBED AREAS INCLUDING THE CONTRACTOR'S STOCKPILE AND STAGING AREAS WITHIN THE LIMIT OF WORK SHALL BE RESTORED TO MATCH THE DESIGN PLANS.

Traffic Notes:

1. DURING CONSTRUCTION TRAFFIC CONES ARE TO BE USED FOR SEPARATION OF ACTIVE TRAFFIC FROM WORK ZONE.
2. DURING CONSTRUCTION FLAGGERS SHALL BE EMPLOYED TO ENSURE SAFETY FOR INTERACTION OF CONSTRUCTION VEHICLES AND ACTIVE TRAFFIC.
3. ALL SIGNS, FLAGGERS, TRAFFIC CONTROL DEVICES, AND TEMPORARY TRAFFIC ZONE ACTIVITIES SHALL MEET THE REQUIREMENTS OF THE MUTCD LATEST EDITION AND SUBSEQUENT ADDENDA.
4. TEMPORARY CONSTRUCTION SIGNS SHALL BE MOUNTED ON RIDOT APPROVED SUPPORTS AND SHALL BE REMOVED OR COVERED WHEN NOT APPLICABLE.
5. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES CURRENT EDITION.

As-Built Notes:

1. ALL COMPONENTS OF THE DRAINAGE MUST BE ASBUILT PRIOR TO COVERING. ENGINEER TO BE NOTIFIED PRIOR TO COVERING SURVEY ASBUILT LOCATIONS. ENGINEER WILL NOT ACCEPT FIELD MEASUREMENTS FROM THE SITE CONTRACTOR.

RIDOT Notes:

1. ALL WORK TO BE DONE WITHIN THE STATE RIGHT OF WAY MUST CONFORM TO RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AUGUST 2023 EDITION WITH ALL REVISIONS. STANDARD DETAILS FOR THIS WORK ARE R.I. STANDARD DETAILS 1998 EDITION (AMENDED OCTOBER 2022) WITH ALL REVISIONS.
2. CONTRACTOR MUST OBTAIN A UTILITY CONNECTION PERMIT FOR WORK WITHIN THE STATE RIGHT-OF-WAY (ROW) PRIOR TO CONSTRUCTION. THE PHYSICAL ALTERATION PERMIT (PAP) IS NOT A SUBSTITUTE FOR THE UTILITY PERMIT AND THE PAP DOES NOT CONSTITUTE AN APPROVAL OF ANY UTILITY WORK.
3. ALL TRAFFIC CONTROL MUST CONFORM TO THE MUTCD, LATEST EDITION, WITH ALL REVISIONS.
4. NO LANE OR SHOULDER CLOSURES ARE ALLOWED TO BE PERFORMED WITHIN THE STATE ROW DURING PEAK TRAFFIC HOURS.
5. SEWER AND WATER CONNECTIONS WITHIN THE STATE ROW WILL REQUIRE A SEPARATE RIDOT UTILITY PERMIT, WHICH CONTRACTOR MUST OBTAIN BEFORE CONSTRUCTION.
6. THE DRAINAGE SYSTEM IS DESIGNED TO DECREASE BOTH STORMWATER RUNOFF RATE, AND STORMWATER RUNOFF VOLUME TO THE STATE ROW FROM PRE-DEVELOPMENT TO POST-DEVELOPMENT. THERE SHALL BE NO INCREASE IN RUNOFF TO THE STATE ROW FROM THE PROPOSED DEVELOPMENT.
7. WORK WITHIN THE STATE'S ROW WILL CONFORM TO PROPOSED PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG). WORK ONSITE WILL CONFORM TO AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) UNLESS THE WORK IS ON STATE OWNED LAND.
8. AS-BUILTS ARE REQUIRED FOR ALL DRAINAGE CONNECTIONS WITHIN THE STATE ROW. AS-BUILTS MUST BE PROVIDED TO THE RIDOT STORMWATER OFFICE AND INCLUDE, INVERTS, MATERIALS, AND PIPE SIZES.

Layout and Materials:

1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
2. CURB RADII ARE 5 FEET UNLESS OTHERWISE NOTED.
3. CURBING SHALL BE PRECAST CONCRETE OR AS LABELED ON THE PLANS.
4. SIDEWALK SHALL BE CONCRETE, STAMPED CONCRETE OR AS LABELED ON THE PLANS.
5. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.
6. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
7. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR.
8. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.

Grading and Utility Notes:

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ONSITE. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER, THE DIRECTOR OF PUBLIC WORKS, THE TOWN ENGINEER, AND RI DEPT. OF ENVIRONMENTAL MANAGEMENT AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. CONTRACTOR TO OBTAIN ALL FEDERAL, STATE, AND MUNICIPAL APPROVALS PRIOR TO THE START OF CONSTRUCTION.
3. CONSTRUCTION TO COMMENCE SPRING 2025 OR UPON RECEIPT OF ALL NECESSARY APPROVALS.
4. ALL WORK PERFORMED HEREIN SHALL BE GOVERNED BY THE RHODE ISLAND STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AND TOWN OF BRISTOL STANDARD SPECIFICATIONS AND DETAILS.
5. SEQUENCE OF CONSTRUCTION PROVIDED IN SESC MAY BE MODIFIED AS FIELD CONDITIONS WARRANT WITH PRIOR APPROVAL FROM THE OWNER OR OWNER'S REPRESENTATIVE.
6. THE CONTRACTOR SHALL COORDINATE WITH ALL OF THE APPROPRIATE UTILITY COMPANIES FOR AGREEMENTS TO SERVICE THE PROPOSED BUILDING. THIS SHALL BE DONE PRIOR TO CONSTRUCTION. NO REPRESENTATIONS ARE MADE BY DIPRETE ENGINEERING THAT UTILITY SERVICE IS AVAILABLE.
7. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING FINISH GRADING AND DRAINAGE AROUND THE BUILDING TO ENSURE SURFACE WATER AND/OR GROUND WATER ARE DIRECTED AWAY FROM THE STRUCTURE.
8. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.
9. ALL PROPOSED UNDERGROUND UTILITIES SERVING THE SITE AND BUILDINGS TO BE COORDINATED WITH APPLICANT, ARCHITECT, AND ENGINEER PRIOR TO INSTALLATION.
10. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION INCLUDING ALL REVISIONS.
11. ALL RETAINING WALLS AND STEEP SLOPES ARE SHOWN SCHEMATICALLY ONLY AND DIPRETE ENGINEERING IS NOT PROVIDING THE DESIGN OF THESE ITEMS. THE ACTUAL WALLS AND SLOPES ARE TO BE BUILT UNDER THE DIRECTION OF A GEOTECHNICAL ENGINEER AND CERTIFIED TO THE OWNER PRIOR TO THE COMPLETION OF THE PROJECT. SHOP DRAWINGS TO BE SUBMITTED PRIOR TO CONSTRUCTION.
12. ALL CUT AND FILL AREAS ARE TO BE DONE UNDER THE DIRECTION OF A GEOTECHNICAL ENGINEER WITH TESTING AND CERTIFICATION TO BE PROVIDED TO THE APPLICANT AT THE COMPLETION OF THE PROJECT. DIPRETE ENGINEERING ASSOCIATES, INC. IS NOT PROVIDING THE FILL SPECIFICATION, GEOTECHNICAL ENGINEERING, STRUCTURAL ENGINEERING SERVICES, OR SUPERVISION AS PART OF THESE DRAWINGS.
13. ALL COMPONENTS OF THE DRAINAGE, SEWER AND WATER SYSTEMS MUST BE ASBUILT PRIOR TO COVERING. ENGINEER TO BE NOTIFIED PRIOR TO COVERING TO SURVEY ASBUILT LOCATIONS. ENGINEER WILL NOT ACCEPT FIELD MEASUREMENTS FROM THE SITE CONTRACTOR.
14. NO STOCKPILING OF MATERIAL TO BE LOCATED IN THE RIGHT OF WAY AND NO OPEN TRENCHES ARE TO BE LEFT OVERNIGHT.
15. ALL LOAM IN DISTURBED AREAS TO BE STOCKPILED FOR FUTURE USE.
16. ALL EXCESS SOIL, TREES, ROCKS, BOULDERS, AND OTHER REFUSE, SHALL BE DISCARDED OFF SITE IN AN ACCEPTABLE MANNER AT AN APPROVED LOCATION. STUMPS SHALL BE GROUND ONSITE OR REMOVED.
17. NO STUMP DUMPS ARE PROPOSED ONSITE.
18. IF CONCRETE TRUCKS ARE WASHED OUT ONSITE, ALL WASHOUT MUST BE COMPLETED IN THE DESIGNATED CONCRETE WASHOUT AREA.

ADA Notes:

1. ALL IMPROVEMENTS SHALL COMPLY WITH THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG)" BY THE DEPARTMENT OF JUSTICE.
2. MAXIMUM RUNNING SLOPE ALONG ALL ACCESSIBLE PATHS OF TRAVEL SHALL BE 4.5% OR 0.045 '/, AND MAXIMUM CROSS SLOPE ALONG ALL ACCESSIBLE PATHS OF TRAVEL SHALL BE 0.015'/,.
3. MAXIMUM SLOPE IN ALL DIRECTIONS FOR ALL ACCESSIBLE PARKING SPACES AND LOADING AREAS SHALL BE 0.015'/,.
4. A 5'x5' LANDING WITH A MAXIMUM SLOPE OF 1.5% OR 0.015'/, IN ALL DIRECTIONS SHALL BE PROVIDED IN FRONT OF ALL PUBLICLY ACCESSIBLE BUILDING ENTRANCES/EGRESSES.
5. SIDEWALK CURB RAMPS SHALL COMPLY WITH DIPRETE ENGINEERING DETAILS THAT MEET OR EXCEEDING RIDOT STANDARDS 43.3.0, 43.3.1, & 43.4.1 AS SHOWN ON THE DETAIL SHEET.
6. PLEASE NOTE THAT THE GRADING AND PLAN VIEWS AS WELL AS THE STANDARD DETAILS MAY NOT SHOW THE DETAIL NECESSARY TO CONSTRUCT WALKWAYS AND RAMPS TO ADA STANDARDS. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE LEVEL OF CARE NECESSARY TO BE CERTAIN THAT THE CONSTRUCTED PRODUCT MEETS ADA STANDARDS. IN THE EVENT OF ANY CONFLICTS THE CONTRACTOR SHALL NOTIFY THE DESIGNER BEFORE CONSTRUCTION FOR ADVICE IN FINDING A RESOLUTION.

Soil Erosion and Sedimentation Control Notes:

1. ALL EROSION CONTROL, TEMPORARY SWALES, TEMPORARY SEDIMENTATION TRAPS, ETC. SHALL BE INSTALLED PER THE RHODE ISLAND SOIL EROSION AND SEDIMENTATION CONTROL LATEST EDITION AND THE SOIL EROSION SEDIMENTATION CONTROL PLAN (SESC).
2. TEMPORARY SWALES SHALL BE USED TO CONTROL RUNOFF DURING CONSTRUCTION. TEMPORARY SWALES SHALL BE VEGETATED AFTER CONSTRUCTION. EROSION CONTROL MATS SHALL BE INSTALLED IF NECESSARY TO PREVENT EROSION AND SUPPORT VEGETATION. AFTER CONSTRUCTION IS COMPLETE AND TRIBUTARY ARES TO THE SWALES HAVE BEEN STABILIZED, THE TEMPORARY SWALES SHALL BE CLEARED AND FINAL DESIGN, INCLUDING INSTALLATION OF THE GRASS SWALE SHALL BE PER THE DESIGN PLANS.
3. ONCE THE SEDIMENTATION TRAP IS NO LONGER REQUIRED AND ALL TRIBUTARY AREAS HAVE BEEN STABILIZED, THE TEMPORARY SEDIMENTATION TRAP SHALL CLEANED AND BROUGHT TO FINAL DESIGN GRADES.
4. INLET PROTECTION SHALL BE INSTALLED ON ALL CATCH BASINS ONCE CONSTRUCTED.
5. SEE SECTION 2.2 OF THE SESC FOR SEQUENCE OF CONSTRUCTION ACTIVITY.
6. SEE SECTION 2.2 OF THE SESC FOR PROJECT PHASING.
7. CONTRACTOR MAY MODIFY SEQUENCE OF CONSTRUCTION WITH APPROVAL FROM DESIGN ENGINEER.
8. FOR CONSTRUCTION PHASING SEE SECTION 2.2 OF SOIL EROSION AND SEDIMENT CONTROL PLAN.

Abbreviations Legend

AP	ASSESSOR'S PLAT	OHW	OVERHEAD WIRE
BC	BOTTOM OF CURB	PE	POLYETHYLENE
BT	BOTTOM OF TESTHOLE	℄	PROPERTY LINE
BIT	BITUMINOUS (BERM)	PR	PROPOSED
BIO	BIORETENTION	PVC	POLYVINYL CHLORIDE
BW	BOTTOM OF WALL (FINISHED GRADE AT BOTTOM OF WALL)	R	RADIUS
		R&D	REMOVE AND DISPOSE
CB	CATCH BASIN	RCP	REINFORCED CONCRETE PIPE
(C)	CALCULATED	RIHB	RHODE ISLAND HIGHWAY BOUND
℄	CENTERLINE	RL	ROOF LEADER
(CA)	CHORD ANGLE	ROW	RIGHT OF WAY
CLDIP	CONCRETE LINED DUCTILE IRON PIPE	S	SLOPE
CO	CLEAN OUT	SD	SUBDRAIN
CONC	CONCRETE	SED	SEDIMENT FOREBAY
(D)	DEED	SE	SLAB ELEVATION
DCB	DOUBLE CATCH BASIN	SF	SQUARE FOOT
DI	DROP INLET	SFL	STATE FREEWAY LINE
DMH	DRAINAGE MANHOLE	SFM	SEWER FORCE MAIN
DP	DETENTION POND	SHL	STATE HIGHWAY LINE
EOP	EDGE OF PAVEMENT	SMH	SEWER MANHOLE
ESC	EROSION AND SEDIMENT CONTROL	SNDF	SAND FILTER
EX	EXISTING	SS	SIDE SLOPE
FES	FLARED END SECTION	STA	STATION
FFE	FINISH FLOOR ELEVATION	TC	TOP OF CURB
GFE	GARAGE FLOOR ELEVATION	TD	TRENCH DRAIN
GWT	GROUND WATER TABLE	TF	TOP OF FOUNDATION
HC	HANDICAPPED	TRANS	TRANSITION
HW	HEADWALL	TW	TOP OF WALL (FINISHED GRADE AT TOP OF WALL)
HC	HIGH CAPACITY CATCH BASIN GRATE		
HDPE	HIGH DENSITY POLYETHYLENE	TYP	TYPICAL
ID	INLINE DRAIN	UDS	UNDERGROUND DETENTION SYSTEM
INV	INVERT	UIS	UNDERGROUND INFILTRATION SYSTEM
IP	INFILTRATION POND	UP	UTILITY POLE
LF	LINEAR FEET	WO	WALKOUT
LOD	LIMIT OF DISTURBANCE	WQ	WATER QUALITY
LP	LIGHT POLE		
(M)	MEASURED		
N/F	NOW OR FORMERLY		

Site Callouts Legend

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

- (7.2.4) RIDOT STD PRECAST CONCRETE CURB STOP
- (4W45) 4" WHITE STRIPING 2' ON CENTER AT 45°
- (ADAS) ADA SPACE PAVEMENT MARKINGS MUST COMPLY WITH ALL ADA AND MUTCD REGULATIONS AND REQUIREMENTS.
- (ADAR) ADA CURB RAMP MUST COMPLY WITH ALL ADA REGULATIONS AND REQUIREMENTS.
- (ADAV) VAN ADA SPACE PAVEMENT MARKINGS MUST COMPLY WITH ALL ADA AND MUTCD REGULATIONS AND REQUIREMENTS.
- (CWK) CROSSWALK PAVEMENT MARKINGS. SOLID 2' WHITE LINES SPACED 4' OC (REFERENCE MUTCD SECTION 3B.18)

Existing Legend

(AS SHOWN ON PROPOSED PLANS)

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

- PROPERTY LINE
- ASSESSORS LINE
- BUILDING
- BRUSHLINE
- TREELINE
- GUARDRAIL
- FENCE
- RETAINING WALL
- STONE WALL
- MINOR CONTOUR LINE (2)
- MAJOR CONTOUR LINE (10)
- WATER LINE (W)
- SEWER LINE (S)
- SEWER FORCE MAIN (SFM)
- GAS LINE (G)
- ELECTRIC LINE (E)
- OVERHEAD WIRES (OHW)
- DRAINAGE LINE (D)
- SOILS LINES (HkC, CaD)
- 50' PERIMETER WETLAND
- 100' RIVERBANK WETLAND
- 200' RIVERBANK WETLAND
- NATURAL HERITAGE AREA
- FEMA BOUNDARY (ZONE X / ZONE X)
- STREAM
- WETLAND LINE & FLAG (B1, B2)
- NATURAL HERITAGE AREA
- NAIL FOUND/SET
- DRILL HOLE FOUND/SET
- BOUND FOUND/SET
- SIGN
- BOLLARD
- SOIL EVALUATION
- CB CATCH BASIN
- DCB DOUBLE CATCH BASIN
- DMH DRAINAGE MANHOLE
- FES FLARED END SECTION
- GUY POLE
- EMH ELECTRIC MANHOLE
- UP UTILITY/POWER POLE
- LIGHTPOST
- SMH SEWER/SEPTIC MANHOLE
- SEWER VALVE (SV)
- CLEANOUT
- HYDRANT
- IRRIGATION VALVE
- WV WATER VALVE
- WELL
- MONITORING WELL
- UNKNOWN MANHOLE
- GV GAS VALVE
- BENCH MARK
- STREAM FLOW DIRECTION

Proposed Legend

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

- PROPERTY LINE
- BUILDING SETBACKS
- TREELINE
- CHAINLINK FENCE
- GUARDRAIL (RIDOT STD 34.2.0, 34.4.0 OR APPROVED EQUAL)
- RETAINING WALL
- MINOR CONTOUR LINE (308)
- MAJOR CONTOUR LINE (310)
- SPOT ELEVATION (+312)
- EDGE OF PAVEMENT
- CONCRETE CURB (RIDOT STD 7.1.0)
- BUILDING FOOTPRINT
- BUILDING OVERHANG
- BUILDING ENTRY
- ASPHALT PAVEMENT
- STAMPED CONCRETE
- CONCRETE SIDEWALK
- SAWCUT LINE
- SIGN (RIDOT STD 24.6.2 AS APPLICABLE)
- SINGLE LIGHT
- DOUBLE LIGHT
- OVERHANGING LIGHT
- ACCESSIBLE PARKING SPACE SYMBOLS (VAN)
- TRANSFORMER PAD WITH BOLLARDS (PER NATIONAL GRID STANDARD)
- PARKING COUNT (1)
- DRAINAGE LINE
- ROOF LEADER (RL)
- GAS LINE (G)
- WATER LINE (W)
- HYDRANT ASSEMBLY
- WATER SHUT OFF
- WATER VALVE
- THRUST BLOCK
- SEWER LINE (S)
- OVERHEAD WIRE (OHW)
- ELECTRIC, TELEPHONE, CABLE LINE (ETC)
- LIMIT OF DISTURBANCE – NO EROSION CONTROL
- STRAW WATTLE, SILT FENCE (RIDOT STD 9.2.0) OR APPROVED EQUAL AT LIMIT OF DISTURBANCE
- 2:1 SLOPES
- UNDERGROUND SYSTEM OUTLINE
- POND ACCESS
- RIP RAP
- SAND FILTER
- CATCH BASIN
- DOUBLE CATCH BASIN
- MANHOLE
- FLARED END SECTION
- HEAD WALL
- SHRUB
- TREE

Utility Note:

ALL UNDERGROUND UTILITIES SHOWN ON THESE PLANS WERE PROVIDED BY OTHERS AND ARE APPROXIMATE ONLY. LOCATIONS MUST BE DETERMINED IN THE FIELD BEFORE EXCAVATION, BLASTING, UTILITY INSTALLATION, BACKFILLING, GRADING, PAVEMENT RESTORATION, AND ALL OTHER SITE WORK. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THESE DOCUMENTS. CONTACT DIG SAFE A MINIMUM OF 72 WORKING HOURS PRIOR TO ANY CONSTRUCTION AT 811. DIG SAFE IS RESPONSIBLE FOR CONTACTING MEMBER UTILITY COMPANIES. DIG SAFE MEMBER UTILITY COMPANIES ARE RESPONSIBLE TO MARK ONLY THE FACILITIES THAT THEY OWN OR MAINTAIN. NON DIG SAFE MEMBER COMPANIES ARE NOT NOTIFIED BY DIG SAFE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE AND NOTIFY IF ANY PRIVATELY OWNED OR NON DIG SAFE MEMBER UTILITIES ARE IN THE AREA.

PER THE CODE OF FEDERAL REGULATIONS – TITLE 29, PART 1926 IT IS THE SITE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ACCURATE UNDERGROUND UTILITY LINE LOCATIONS FROM THE UTILITY COMPANIES, UTILITY OWNERS AND, OR VIA UNDERGROUND UTILITY LOCATION EQUIPMENT AS NEEDED TO ESTABLISH ACCURATE LOCATIONS PRIOR TO ANY EXCAVATION. THE USE OF PROFESSIONAL UTILITY LOCATING COMPANIES PRIOR TO ANY EXCAVATION IS RECOMMENDED.

DIPRETE ENGINEERING IS NOT A PROFESSIONAL UTILITY LOCATION COMPANY, AND IS NOT RESPONSIBLE FOR UNDERGROUND UTILITIES, DEPICTED OR NOT, EITHER IN SERVICE OR ABANDONED. ANY SIZES, LOCATIONS, EXISTENCE, OR LACK OF EXISTENCE OF UTILITIES SHOWN ON THESE PLANS SHOULD BE CONSIDERED APPROXIMATE UNTIL VERIFIED BY A PROFESSIONAL UTILITY LOCATION COMPANY. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED.

Permit Note:

THE PURPOSE OF THIS PLAN SET IS TO OBTAIN A PERMIT FROM THE REGULATORY AGENCY IT WAS SUBMITTED TO. THIS PLAN SET CONTAINS THE REQUIRED INFORMATION NECESSARY FOR APPROVAL BY THE SPECIFIC AGENCY IT WAS SUBMITTED TO AND MAY NOT HAVE INFORMATION NECESSARY FOR OTHER REGULATORY AGENCIES. THIS PLAN SET MUST NOT BE CONSTRUED AS A FULL CONSTRUCTION OR BID SET. ADDITIONAL DETAIL IS REQUIRED FOR CONSTRUCTION AND BID DOCUMENTS, SUCH AS (BUT NOT LIMITED TO) FINE GRADING, GRADING BETWEEN THE CONTOUR INTERVAL, ADDITIONAL SURVEY/ MAPPING, BUILDING SHAPE/ LOCATION, ADA, UTILITY CONNECTIONS, UTILITY CROSSINGS, SURFACE AND GROUND WATER MITIGATION, SOIL STABILITY AND CONSISTENCY, SPECIFIC END USER NEEDS, CONSTRUCTABILITY ISSUES, ETC. ANY USER OF THESE PLANS SHOULD UNDERSTAND THIS LIMITATION.

DiPrete Engineering
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90 Broadway Newport, RI 02840
tel 401.619.5990 fax 401.464.6068 www.diprete-eng.com

KEVIN DEMERS
No. 8557
REGISTERED PROFESSIONAL ENGINEER
CIVIL

No.	Date	Description	By
0	02-03-2025	Pre-Application Submission	J.A.R.

Design By: K.J.D.
Drawn By: D.R.N.

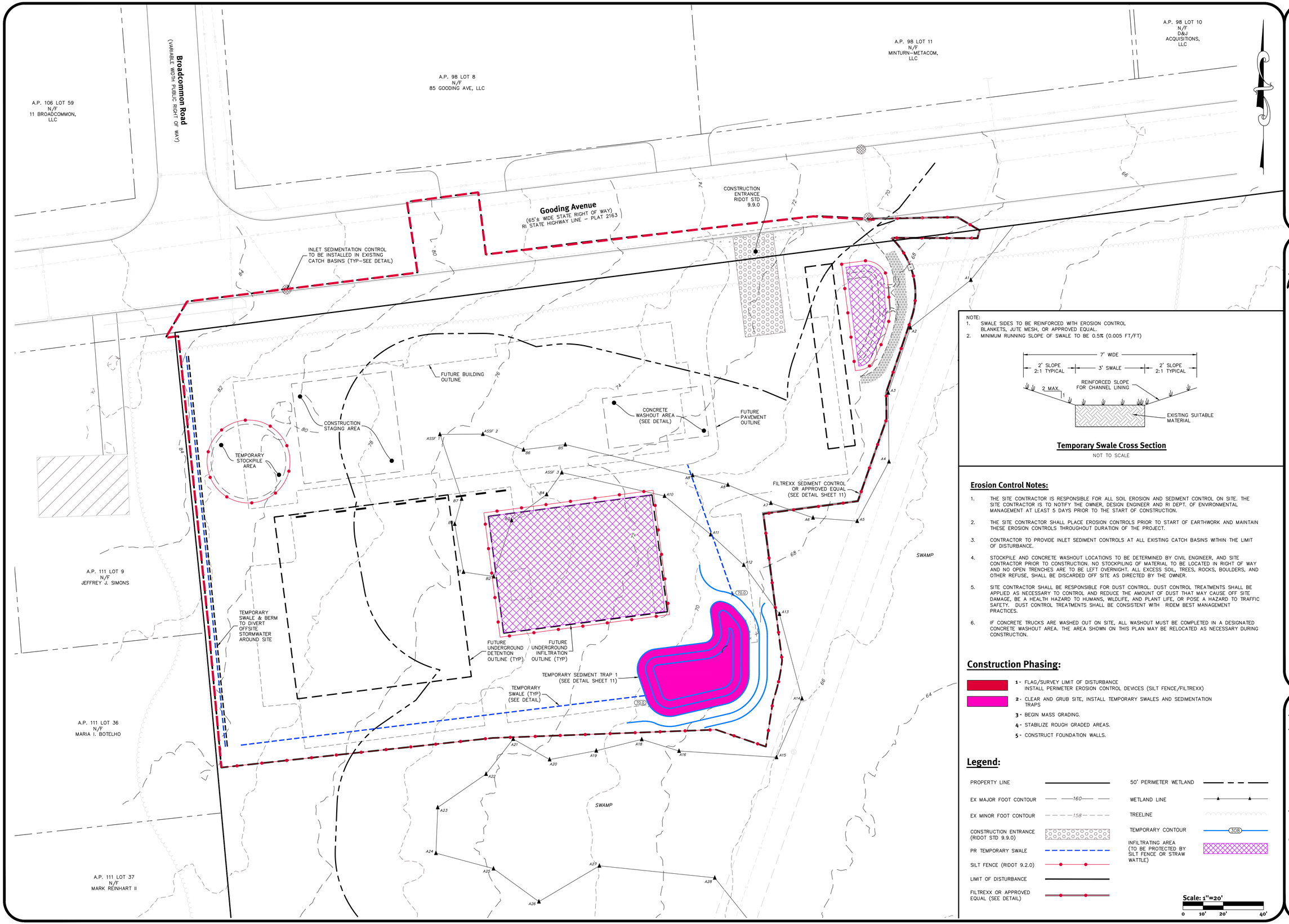
General Notes And Legend

Comfort Inn & Suites

AP 111 LOT 1
Bristol, Rhode Island

Owner & Applicant:
D&M BOCA DEVELOPMENT, LLC
92 Faunce Corner Road, Suite 160,
North Darthmouth, MA 02747

SHEET 3 OF 11



NOTE:
1. SWALE SIDES TO BE REINFORCED WITH EROSION CONTROL BLANKETS, JUTE MESH, OR APPROVED EQUAL.
2. MINIMUM RUNNING SLOPE OF SWALE TO BE 0.5% (0.005 FT/FT)

Temporary Swale Cross Section

NOT TO SCALE

Erosion Control Notes:

1. THE SITE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ON SITE. THE SITE CONTRACTOR IS TO NOTIFY THE OWNER, DESIGN ENGINEER AND RI DEPT. OF ENVIRONMENTAL MANAGEMENT AT LEAST 5 DAYS PRIOR TO THE START OF CONSTRUCTION.
2. THE SITE CONTRACTOR SHALL PLACE EROSION CONTROLS PRIOR TO START OF EARTHWORK AND MAINTAIN THESE EROSION CONTROLS THROUGHOUT DURATION OF THE PROJECT.
3. CONTRACTOR TO PROVIDE INLET SEDIMENT CONTROLS AT ALL EXISTING CATCH BASINS WITHIN THE LIMIT OF DISTURBANCE.
4. STOCKPILE AND CONCRETE WASHOUT LOCATIONS TO BE DETERMINED BY CIVIL ENGINEER, AND SITE CONTRACTOR PRIOR TO CONSTRUCTION. NO STOCKPILING OF MATERIAL TO BE LOCATED IN RIGHT OF WAY AND NO OPEN TRENCHES ARE TO BE LEFT OVERNIGHT. ALL EXCESS SOIL, TREES, ROCKS, BOULDERS, AND OTHER REFUSE, SHALL BE DISCARDED OFF SITE AS DIRECTED BY THE OWNER.
5. SITE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL. DUST CONTROL TREATMENTS SHALL BE APPLIED AS NECESSARY TO CONTROL AND REDUCE THE AMOUNT OF DUST THAT MAY CAUSE OFF SITE DAMAGE, BE A HEALTH HAZARD TO HUMANS, WILDLIFE, AND PLANT LIFE, OR POSE A HAZARD TO TRAFFIC SAFETY. DUST CONTROL TREATMENTS SHALL BE CONSISTENT WITH RIDEM BEST MANAGEMENT PRACTICES.
6. IF CONCRETE TRUCKS ARE WASHED OUT ON SITE, ALL WASHOUT MUST BE COMPLETED IN A DESIGNATED CONCRETE WASHOUT AREA. THE AREA SHOWN ON THIS PLAN MAY BE RELOCATED AS NECESSARY DURING CONSTRUCTION.

Construction Phasing:

1- FLAG/SURVEY LIMIT OF DISTURBANCE
INSTALL PERIMETER EROSION CONTROL DEVICES (SILT FENCE/FILTREXX)
2- CLEAR AND GRUB SITE, INSTALL TEMPORARY SWALES AND SEDIMENTATION TRAPS
3- BEGIN MASS GRADING.
4- STABILIZE ROUGH GRADED AREAS.
5- CONSTRUCT FOUNDATION WALLS.

Legend:

- PROPERTY LINE
- EX MAJOR FOOT CONTOUR (160)
- EX MINOR FOOT CONTOUR (158)
- CONSTRUCTION ENTRANCE (RIDOT STD 9.9.0)
- PR TEMPORARY SWALE
- SILT FENCE (RIDOT 9.2.0)
- LIMIT OF DISTURBANCE
- FILTREXX OR APPROVED EQUAL (SEE DETAIL)
- 50' PERIMETER WETLAND
- WETLAND LINE
- TREELINE
- TEMPORARY CONTOUR (308)
- INFILTRATING AREA (TO BE PROTECTED BY SILT FENCE OR STRAW WATTLE)

Scale: 1"=20'
0 10' 20' 40'

DiPrete Engineering
90 Broadway Newport, RI 02840
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Boston • Providence • Newport

KEVIN DEMERS
No. 18557
REGISTERED PROFESSIONAL ENGINEER
CIVIL
2-3-25

No.	Date	Description	By
0	02-03-2025	Pre-Application Submission	LAR

Design By: K.J.D.
Drawn By: D.R.N.

Erosion & Sediment Control Plan

Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island

Owner & Applicant:
D&M BOCA DEVELOPMENT, LLC
92 Faunce Corner Road, Suite 160,
North Dartmouth, MA 02747

Parking Regulations:

PARKING USE:	HOTEL
PARKING REQUIREMENT:	1 SPACE PER HOTEL ROOM
HOTEL ROOMS:	80 ROOMS
PARKING CALCULATION:	80 X 1/ROOM = 80 SPACES
REQUIRED PARKING SPACES:	80 SPACES
PROVIDED REGULAR (10' X 18') PARKING SPACES:	60
PROVIDED COMPACT* (9' X 16') PARKING SPACES:	20
TOTAL PROVIDED PARKING SPACES:	80 SPACES (REGULAR + COMPACT)
REQUIRED ADA PARKING SPACES:	4 SPACES
PROVIDED ADA PARKING:	4 SPACES
REQUIRED LOADING AREA:	14' x 60' LOADING SPACE
PROVIDED LOADING AREA:	14' x 60' LOADING SPACE

* FOR PARKING AREAS WITH MORE THAN 20 SPACES, UP TO 25 PERCENT OF THE SPACES MAY BE REDUCED IN SIZE FOR SMALL CARS, PROVIDED THAT SUCH SPACES SHALL BE PROMINENTLY SIGNED FOR SMALL CARS ONLY

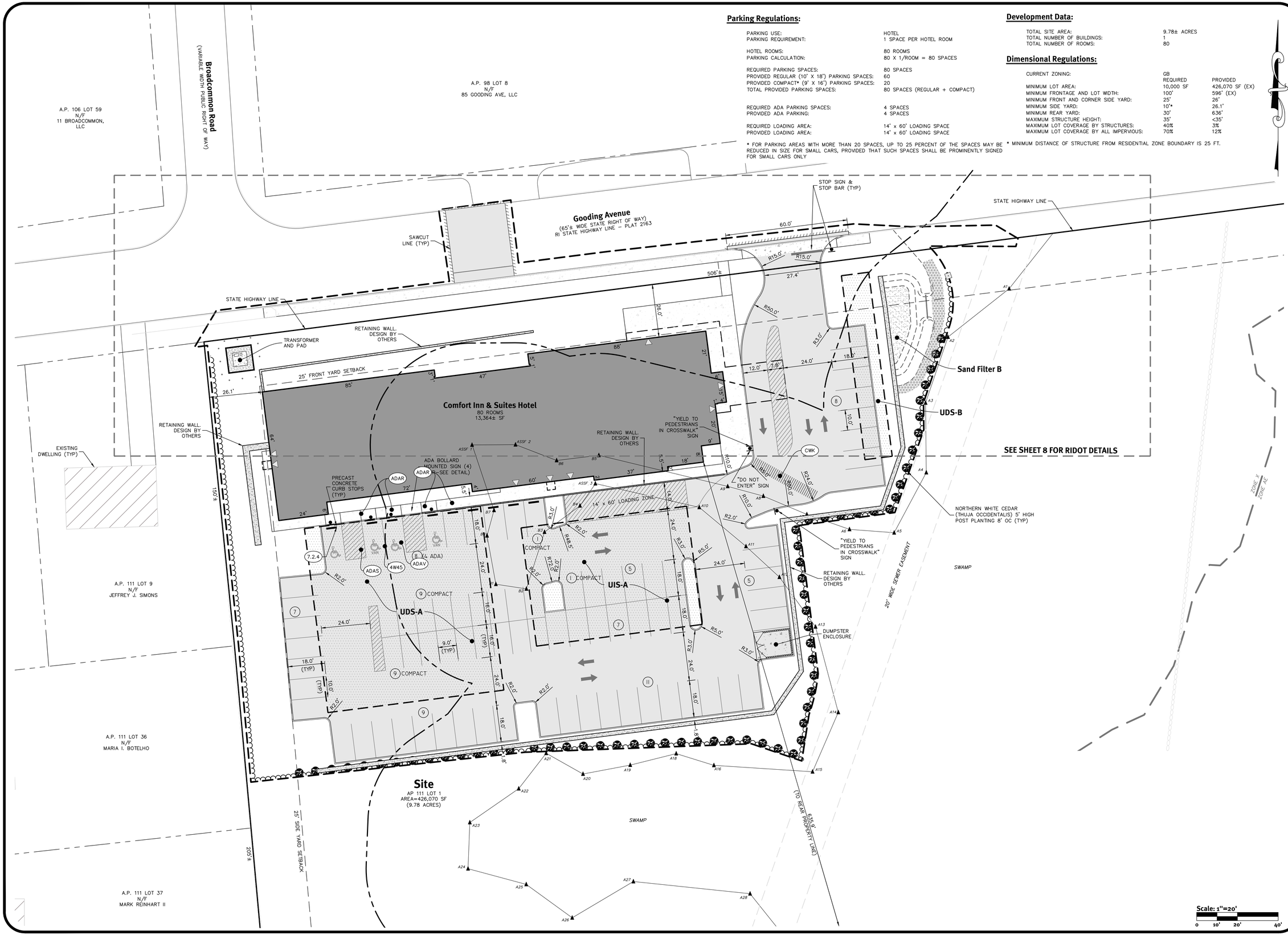
Development Data:

TOTAL SITE AREA:	9.78± ACRES
TOTAL NUMBER OF BUILDINGS:	1
TOTAL NUMBER OF ROOMS:	80

Dimensional Regulations:

CURRENT ZONING:	GB	
	REQUIRED	PROVIDED
MINIMUM LOT AREA:	10,000 SF	426,070 SF (EX)
MINIMUM FRONTAGE AND LOT WIDTH:	100'	596' (EX)
MINIMUM FRONT AND CORNER SIDE YARD:	25'	26'
MINIMUM SIDE YARD:	10'*	26.1'
MINIMUM REAR YARD:	30'	636'
MAXIMUM STRUCTURE HEIGHT:	35'	<35'
MAXIMUM LOT COVERAGE BY STRUCTURES:	40%	3%
MAXIMUM LOT COVERAGE BY ALL IMPERVIOUS:	70%	12%

* MINIMUM DISTANCE OF STRUCTURE FROM RESIDENTIAL ZONE BOUNDARY IS 25 FT.



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tel 401 619 5950 fax 401 464 6006 www.diprete-eng.com
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KEVIN DEMERS
No. 18557
REGISTERED PROFESSIONAL ENGINEER
CIVIL

No.	Date	Description	By:
0	02-03-2025	Pre-Application Submission	J.A.R.
	Drawn By: D.R.N.		Design By: K.J.D.

Site Layout Plan
Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island

Owner & Applicant:
D&M BOCA DEVELOPMENT, LLC
92 Faunce Corner Road, Suite 160,
North Dartmouth, MA 02747

SHEET 5 OF 11

Grading Plan

Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island

Owner & Applicant:
D&M BOCA DEVELOPMENT, LLC

92 Faunce Corner Road, Suite 160,
North Dartmouth, MA 02747

SHEET 6 OF 11

No.	Date	Description	By:
0	02-03-2025	Pre-Application Submission	J.A.R.

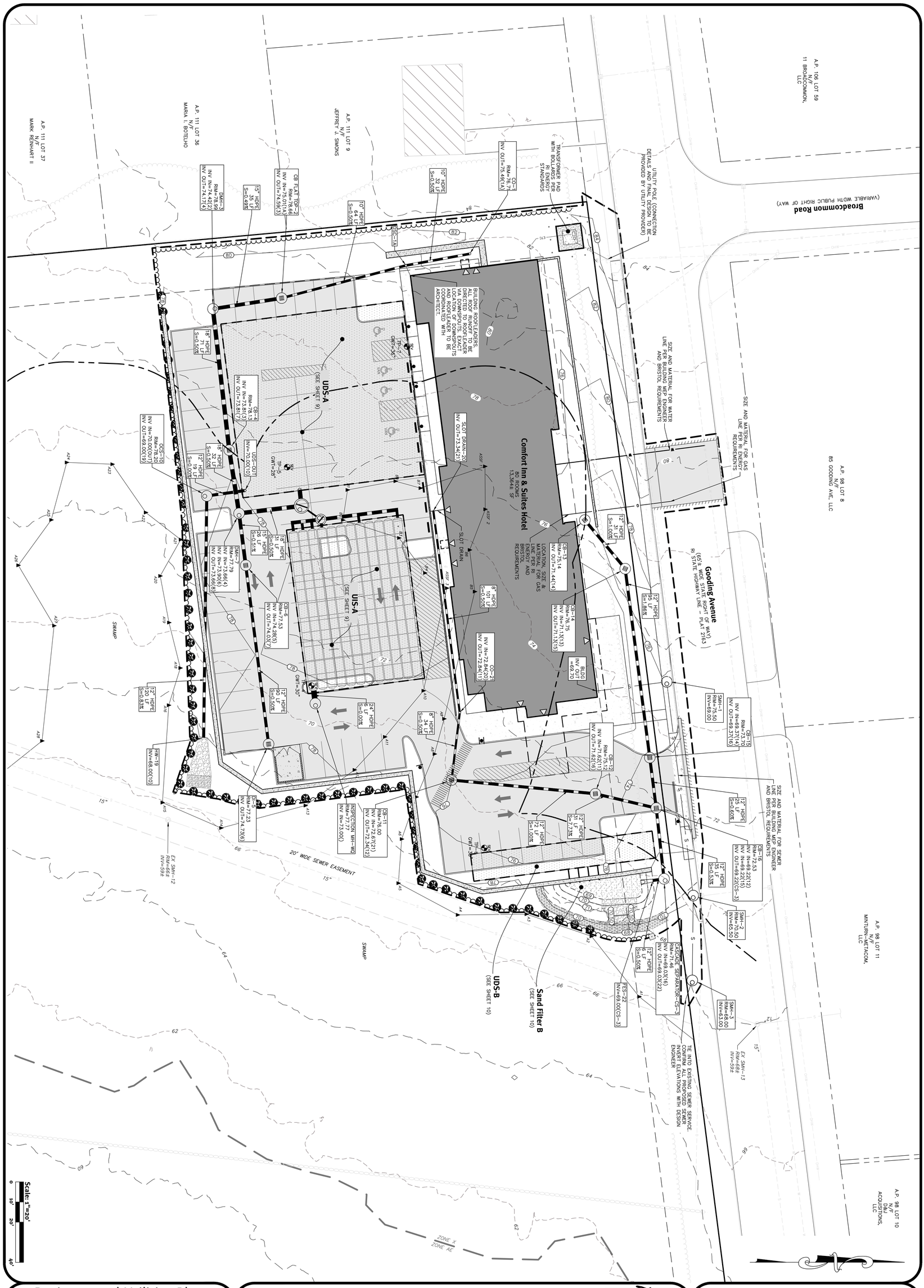
Drawn By: D.R.N. | Design By: K.J.D.

This regulatory submission set shall not be used for construction purposes unless stamped 'Issued for Construction' and signed by a DiPrete Engineering representative.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

KEVIN DEMERS
REGISTERED PROFESSIONAL ENGINEER
No. 15557

DiPrete Engineering
90 Broadway Newport, RI 02840
tel 401-619-5890 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport



Drainage and Utilities Plan

Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island

Owner & Applicant:
D&M BOCA DEVELOPMENT, LLC
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North Darthmoth, MA 02747

SHEET 7 OF 11

No.	Date	Description	By:
0	02-03-2025	Pre-Application Submission	J.A.R.

Drawn By: D.R.N. | Design By: K.J.D.

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The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

KEVIN DEMERS
No. 9837
REGISTERED PROFESSIONAL ENGINEER
STATE OF RHODE ISLAND

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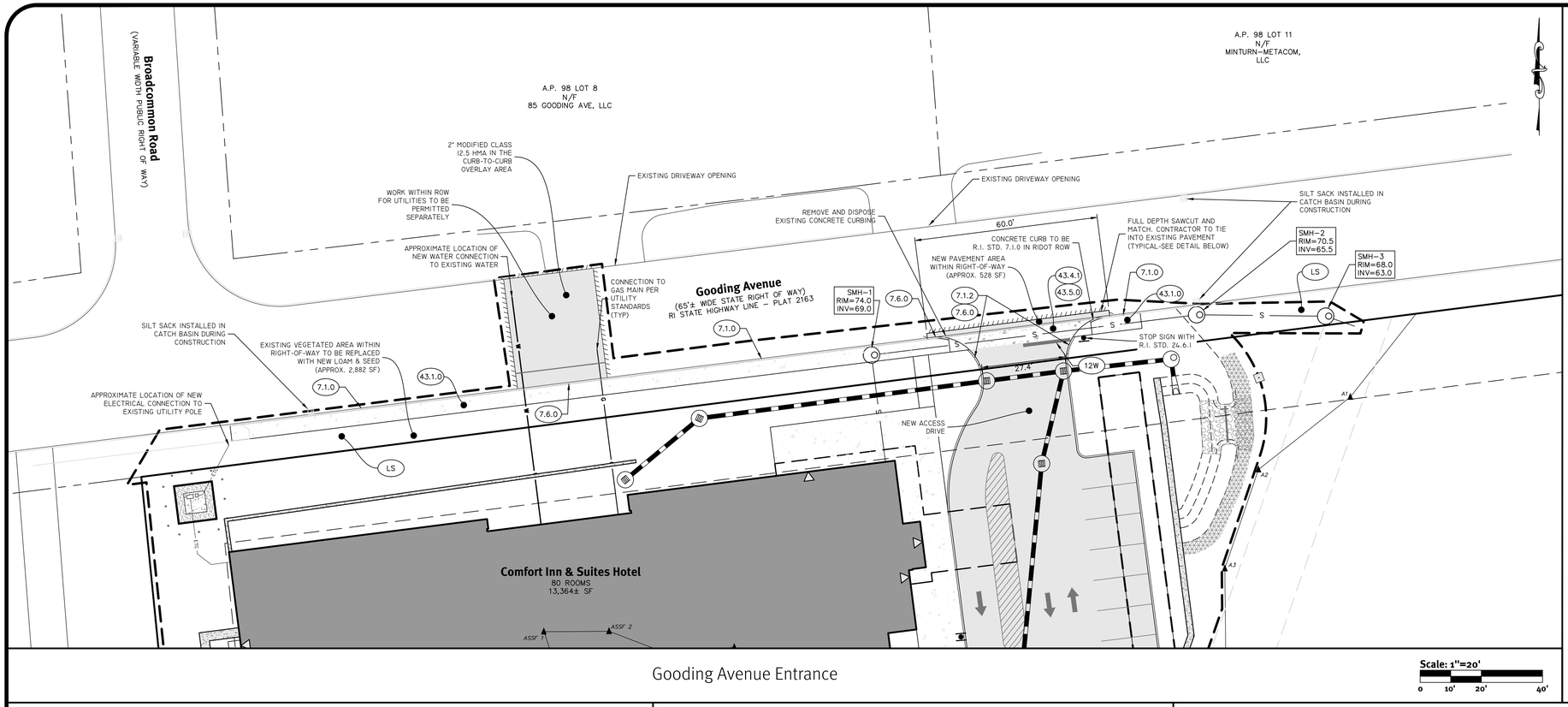
Item 02



Gooding Avenue Entrance

Scale: 1"=20'
0 10' 20' 40'

RIDOT NOTES:

1. ALL WORK TO BE DONE WITHIN THE STATE HIGHWAY RIGHT-OF-WAY SHALL CONFORM TO THE RHODE ISLAND STANDARD SPECIFICATIONS OF ROAD AND BRIDGE CONSTRUCTION, AUGUST 2023 EDITION WITH ALL REVISIONS. STANDARD DETAILS FOR THIS WORK ARE R.I. STANDARD DETAILS 1998 EDITION (AMENDED OCTOBER 2022) WITH ALL REVISIONS.
2. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION, INCLUDING ALL REVISIONS.
3. ALL BITUMINOUS PAVEMENT WITHIN THE STATE ROW SHALL BE AN APPROVED MIX DESIGN PROVIDED BY A RIDOT APPROVED SUPPLIER IN ACCORDANCE WITH THE RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (BLUE BOOK).
4. GRAVEL BORROW SUBBASE PLACED ON STATE ROADS SHALL MATCH EXISTING PAVEMENT DEPTH (MINIMUM I2 INCHES) AND SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
5. SWEEPING AND TACK COAT OF MILLED SURFACE IS REQUIRED PRIOR TO OVERLAY.

UTILITY NOTES:

1. CONTRACTOR MUST COORDINATE WITH RIDOT, RI ENERGY, AND ALL OTHER UTILITY COMPANIES.
2. WITH RESPECT TO UTILITIES CONNECTIONS WITHIN THE STATE'S ROW, THE APPLICANT IS REMINDED THAT THIS APPLICATION IS NOT A SUBSTITUTE FOR THE UTILITY PERMIT AND FURTHER THAT APPROVAL OF THIS APPLICATION DOES NOT CONSTITUTE APPROVAL OF ANY UTILITY WORK, SHOWN OR UN-SHOWN, WITHIN THE STATE'S ROW.

SITE CALLOUTS LEGEND

- 12W — I2" WHITE STOP LINE (REFERENCE MUTCD SECTION 3B.16)
- 4W — 4" WHITE EPOXY RESIN PAVEMENT MARKINGS
- 7.1.0 — RIDOT STD PRECAST CONCRETE CURB
- LS — 4" LOAM AND SEED

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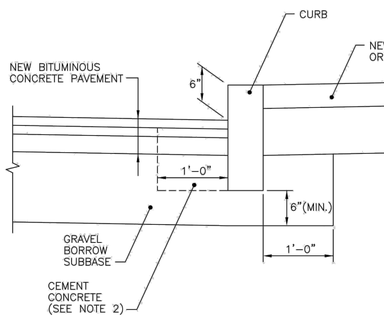
Drawn By: D.R.N.



NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. CEMENT CONCRETE SHALL BE USED ONLY WHEN THE CURB IS SET AFTER THE BASE AND/OR BINDER COURSES ARE IN PLACE, OTHERWISE THE CEMENT CONCRETE WILL BE ELIMINATED AND THE GRAVEL BROUGHT UP TO BOTTOM OF THE BASE COURSE.

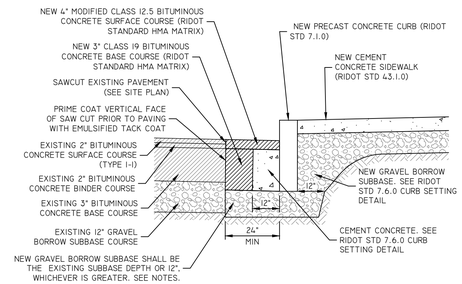
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE
1	MLP	Mar 05

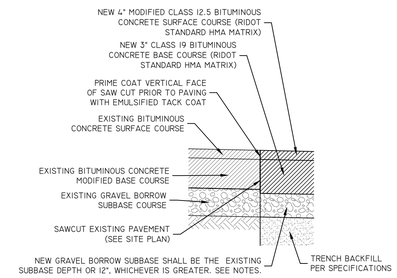
CURB SETTING DETAIL

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 7.6.0

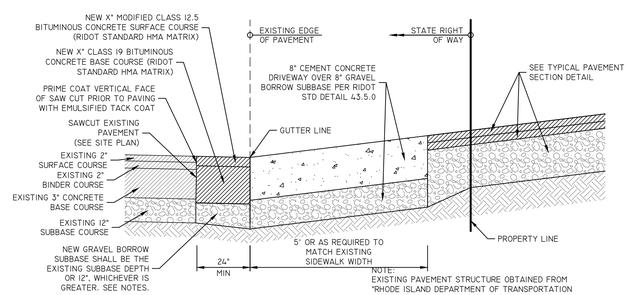


SECTION THROUGH NEW CURB & SIDEWALK
NOT TO SCALE



SECTION THROUGH TRENCH
NOT TO SCALE

NOTES:
1. PROPOSED THICKNESSES SHOWN WITHIN THE STATE RIGHT OF WAY ARE MINIMUMS. IF EXISTING THICKNESSES ARE FOUND TO BE GREATER, THE RESTORATION MUST FOLLOW AND MATCH THE EXISTING PAVEMENT STRUCTURE TO ENSURE SIMILAR STRUCTURAL CAPACITIES.
2. GRAVEL BORROW SUBBASE PLACED ON STATE ROADS SHALL MATCH EXISTING SUBBASE DEPTH (MINIMUM I2 INCHES) AND SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE RIDOT SPECIFICATIONS.
3. IF A CONCRETE BASE IS FOUND IN THE ROADWAY, ANY RESTORATION WORKS SHALL INCLUDE NEW CLASS XX CONCRETE, PINNED AND DOWELED TO THE EXISTING CONCRETE, AT A THICKNESS EQUAL TO THE EXISTING CONCRETE SLAB THICKNESS.
4. SWEEPING AND TACK COAT IS REQUIRED FOR ANY MILLED SURFACE PRIOR TO OVERLAY.
5. CLASS I9 HMA IS TO BE PLACED IN LIFTS OF 3" MINIMUM AND 5-3/4" MAXIMUM.
6. ALL ASPHALT WITHIN THE STATE RIGHT OF WAY SHALL BE AN APPROVED MIX DESIGN PROVIDED BY A RIDOT APPROVED SUPPLIER IN ACCORDANCE WITH THE RIDOT STANDARD SPECIFICATIONS.
7. ALL CONCRETE WITHIN THE STATE RIGHT OF WAY SHALL BE PROVIDED BY A RIDOT APPROVED SUPPLIER, SHALL BE CLASS XX AND CONFORM TO SECTION 601 OF THE RIDOT STANDARD SPECIFICATIONS. TRENCH WORK WILL REQUIRE PINNING AND DOWELING AND THE DEPTH SHALL MATCH EXISTING CONCRETE SLAB THICKNESS.
8. CONTRACTOR MUST HOLD/ SUPPORT/ RESTORE ALL IMPACTED UTILITY POLES AND ABOVEGROUND OBJECTS AS NECESSARY DURING INSTALLATION WORKS AND COORDINATE WITH ALL ASSOCIATED UTILITY OWNERS ACCORDINGLY.



PAVEMENT TIE IN DETAIL - RIDOT
NOT TO SCALE

RIDOT ROW Improvements
Comfort Inn & Suites
AP 111 Lot 1
Bristol, Rhode Island

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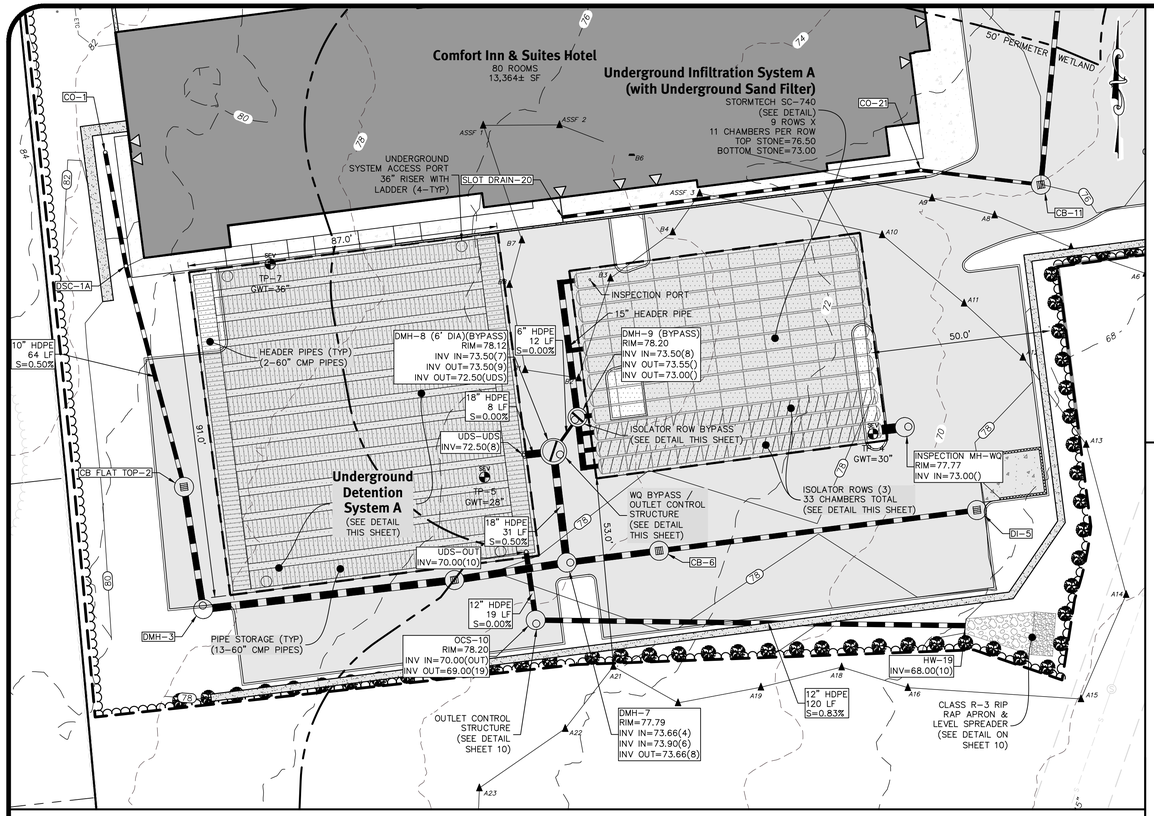
North Dartmouth, MA 02747

SHEET 8 OF 11

DE Job No: 2536-001



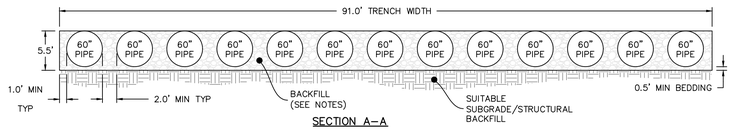
Underground Infiltration/Detention System A (UIS-A & UDS-A)

Scale: 1"=20'
0 10' 20' 40'

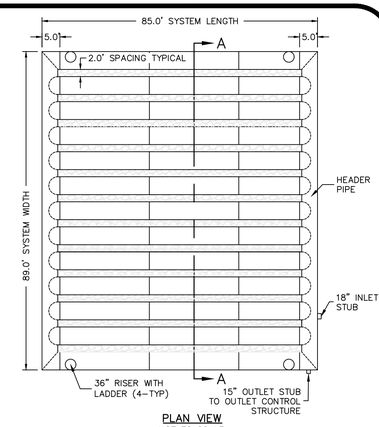
NOTES:

1. STRUCTURAL BACKFILL MATERIAL: SELECT MATERIALS SUCH AS BANK RUN GRAVEL OR OTHER PROCESSED GRANULAR MATERIALS LESS THAN 3 IN. MAXIMUM WITH EXCELLENT STRUCTURAL CHARACTERISTICS ARE PREFERRED. CONTRACTOR TO PROVIDE SIEVE ANALYSIS OF BACKFILL MATERIAL TO DESIGN ENGINEER PRIOR TO CONSTRUCTION.
2. STRUCTURAL BACKFILL PLACEMENT: STRUCTURAL BACKFILL SHALL BE PLACED IN LAYERS FROM 6 TO 12 IN. IN DEPTH DEPENDING ON THE TYPE OF MATERIAL AND COMPACTION EQUIPMENT OR METHOD. EACH LAYER OR "LIFT" SHALL BE COMPACTED TO 95% PROCTOR DENSITY BEFORE ADDING THE NEXT.
3. PIPE SHALL BE HDPE OR ALUMINIZED TYPE 2. ALL PIPE MUST BE WATERTIGHT. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO DESIGN ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
4. HEADER PIPE CAN BE CUSTOM MANUFACTURED OR CONSTRUCTED USING PIPE FITTINGS. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO DESIGN ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.

DESCRIPTION	UDS-A	UDS-B
TOP OF UDS STONE ELEVATION	75.00	70.50
BOTTOM OF UDS STONE ELEVATION	69.50	68.50
100 YEAR STORM ELEVATION	72.84	70.83
10 YEAR STORM ELEVATION	71.20	70.72
1 YEAR STORM ELEVATION	70.43	70.57
SEASONAL HIGH GWT ELEVATION	73.50	66.00
SOIL EVALUATION	TP-5	TP-6



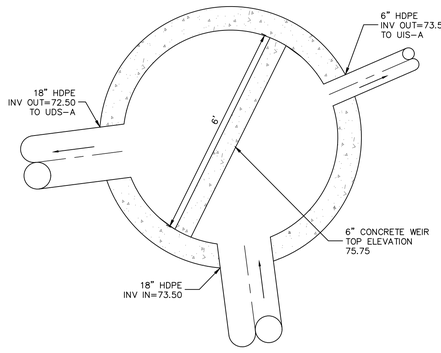
SECTION A-A



PLAN VIEW

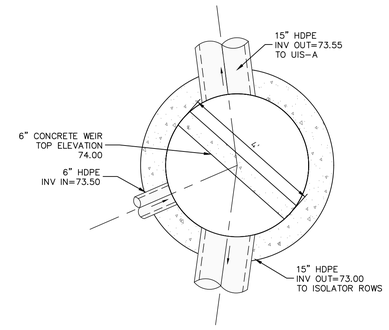
Underground Detention System A

NOT TO SCALE



WQ Bypass DMH-8 (6'Ø Manhole)

SCALE 1"=2'



Isolator Row Bypass DMH-9 (4'Ø Manhole)

SCALE 1"=2'

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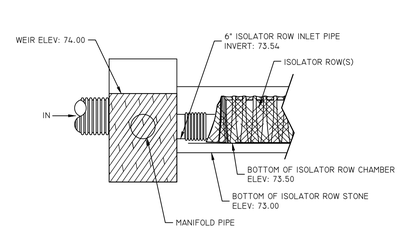
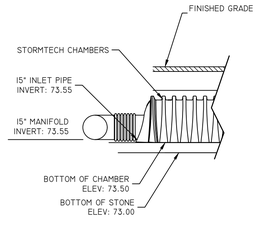


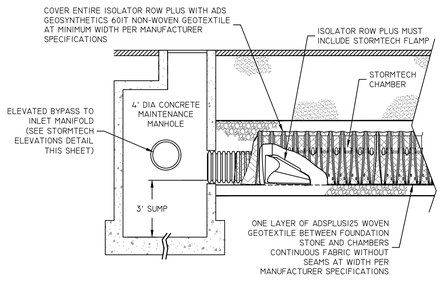
SECTION A-A



SECTION B-B

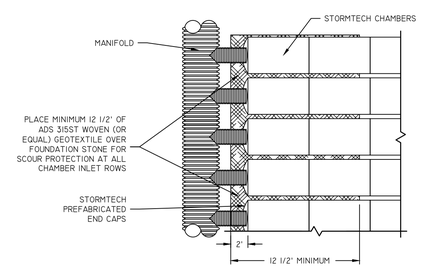
STORMTECH ELEVATIONS

NOT TO SCALE



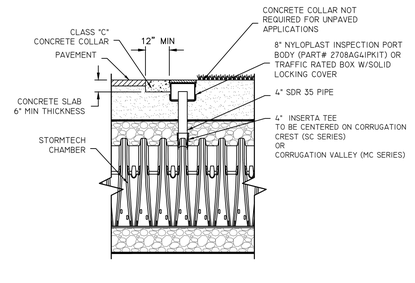
STORMTECH ISOLATOR ROW PLUS DETAIL

NOT TO SCALE



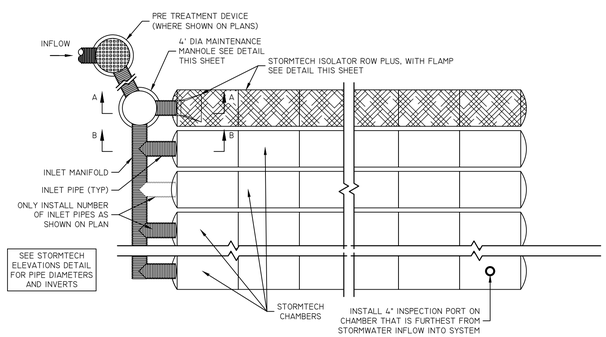
STORMTECH SCOUR PROTECTION DETAIL

NOT TO SCALE



STORMTECH 4" INSPECTION PORT DETAIL

NOT TO SCALE

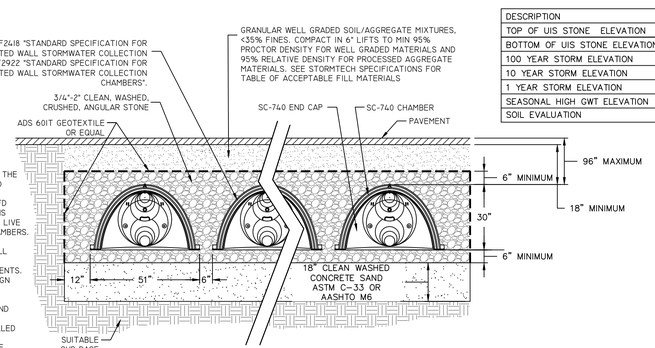


STORMTECH TYPICAL LAYOUT - INFILTRATION

NOT TO SCALE

NOTES:

1. THIS CROSS SECTION DETAILS THE REQUIREMENTS NECESSARY TO SATISFY THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS USING STORMTECH CHAMBERS. SEE APPLICABLE STORMTECH CONSTRUCTION GUIDES AND ALL APPLICABLE DOCUMENTS FOR SPECIFIC MATERIAL REQUIREMENTS.
2. SEE LATEST STORMTECH DESIGN MANUAL FOR CURRENT REQUIREMENTS.
3. ALL STORMTECH CHAMBERS AND ASSOCIATED/ ANCILLARY COMPONENTS MUST BE INSTALLED PER MANUFACTURER RECOMMENDATIONS AND THESE PLANS. CONTRACTOR TO NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO INSTALLATION.



DESCRIPTION	UIS-A
TOP OF UIS STONE ELEVATION	76.50
BOTTOM OF UIS STONE ELEVATION	73.00
100 YEAR STORM ELEVATION	75.88
10 YEAR STORM ELEVATION	75.14
1 YEAR STORM ELEVATION	73.28
SEASONAL HIGH GWT ELEVATION	70.00
SOIL EVALUATION	TP-4

STORMTECH SC-740 TYPICAL CROSS SECTION (SAND FILTER)

NOT TO SCALE

CONTRACTOR NOTE: SHOULD CONTRACTOR WISH TO PROPOSE ALTERNATE STORMWATER SYSTEM IN LIEU OF ADS STORMTECH, CONTRACTOR MUST SUBMIT THE FOLLOWING FOR REVIEW AND APPROVAL BY OWNER/ DESIGN ENGINEER PRIOR TO CONSTRUCTION:

- COMPLETED "SUBSTITUTION REQUEST" CSI FORM 13.1A (APRIL 2022 VERSION MODIFIED BY DIPRETE ENGINEERING 2023) - FORM AVAILABLE FROM DIPRETE ENGINEERING;
- ALTERNATE PRODUCT DESIGN PLANS SPECIFIC TO THIS PROJECT, STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE SAME STATE AS THIS PROJECT;
- POINT BY POINT COMPARATIVE DATA THAT DEMONSTRATES HOW THE ALTERNATE DESIGN MEETS OR IMPROVES THE DESIGN SHOWN ON THE APPROVED PLANS AND REPORTS, INCLUDING (BUT MAY NOT BE NOT LIMITED TO):
  - STAGE STORAGE
  - PEAK FLOOD ELEVATION
  - PEAK DISCHARGE FOR ALL APPLICABLE DESIGN STORMS
  - ANY OTHER APPLICABLE REQUIREMENTS OR CONSTRAINTS AS SET FORTH IN THE APPROVED PLANS, REPORTS AND CONTRACT DOCUMENTS
- PLANS, CALCULATIONS OR OTHERWISE THAT DEMONSTRATE HOW THE ALTERNATE DESIGN ADDRESSES SITE LAYOUT/ CONNECTIVITY TO THE ADJOINING STORMWATER NETWORK COMPONENTS, INCLUDING (BUT MAY NOT BE LIMITED TO):
  - PROVISION FOR ACCESS AND MAINTENANCE
  - ADEQUATE CONSTRUCTABILITY
  - ACCOMMODATION OF SURROUNDING OBJECTS/ STRUCTURES/ UTILITIES IN ACCORDANCE WITH ALL APPLICABLE OFFSETS, CLEARANCES AND STIPULATIONS AS REQUIRED BY THE APPLICABLE AUTHORITIES HAVING JURISDICTION

APPLICATION FOR SUBSTITUTION

NOT TO SCALE

Underground System A & Details
Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island

Owner & Applicant:
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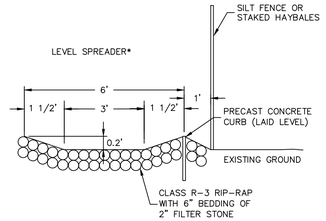
SHEET 9 OF 11

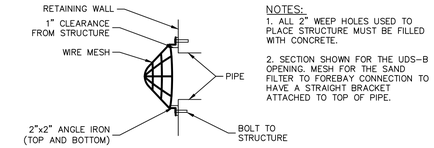
DE Job No: 2536.001



NOTE:
* LENGTHS AS SPECIFIED ON SITE PLANS

Level Spreader

NOT TO SCALE



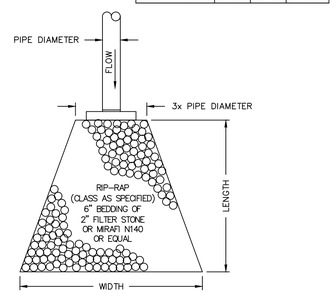
NOTES:
1. ALL 2" WEEP HOLES USED TO PLACE STRUCTURE MUST BE FILLED WITH CONCRETE.

2. SECTION SHOWN FOR THE UDS-B OPENING. MESH FOR THE SAND FILTER TO FOREBAY CONNECTION TO HAVE A STRAIGHT BRACKET ATTACHED TO TOP OF PIPE.

Trash Rack Detail

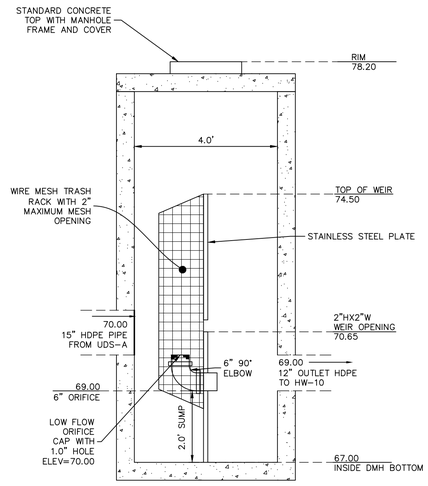
NOT TO SCALE

FLARED END	LENGTH	WIDTH	RIP RAP CLASS
HW-10	19'	12'	R-3



RIP RAP APRON/HW DETAIL

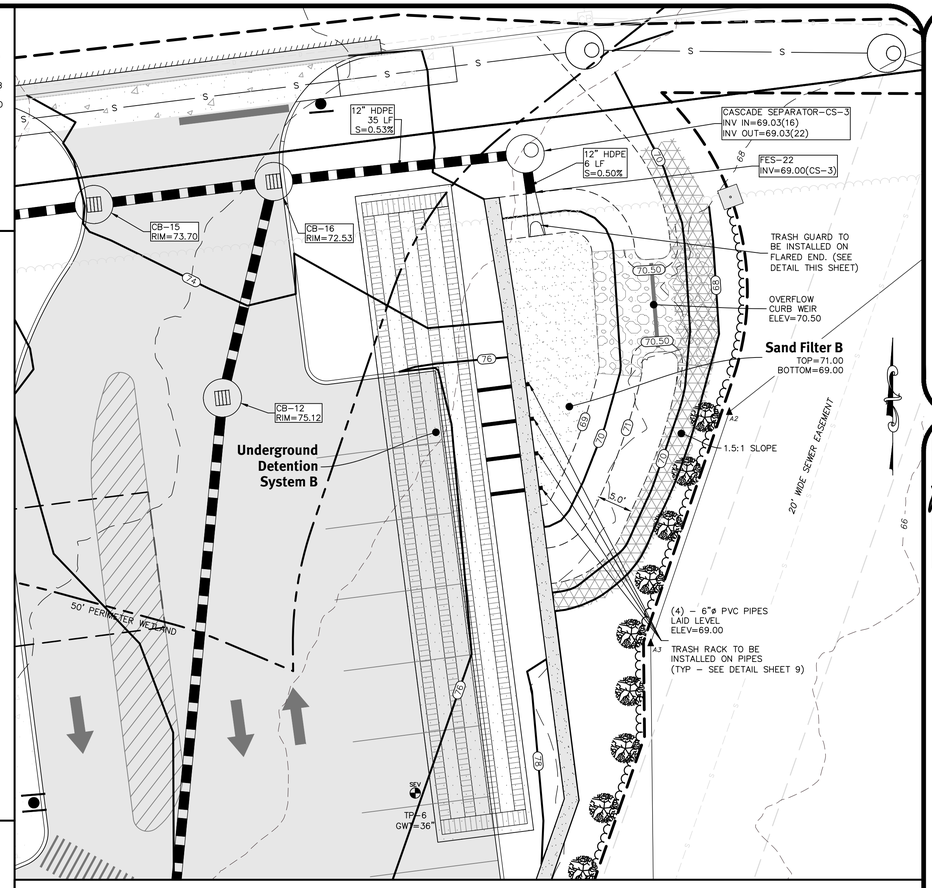
NOT TO SCALE



SECTION VIEW

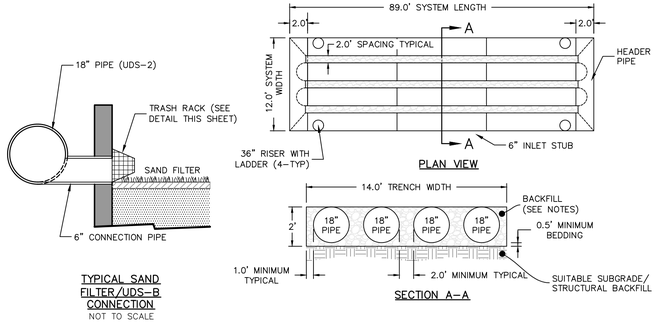
UDS-A Outlet Control Structure (OCS-10)

SCALE: 1"=2'



Underground Detention System - B (UDS-B) and Sand Filter B

Scale: 1"=10'
0 5' 10' 20'

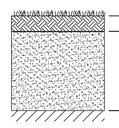


TYPICAL SAND FILTER/UDS-B CONNECTION
NOT TO SCALE

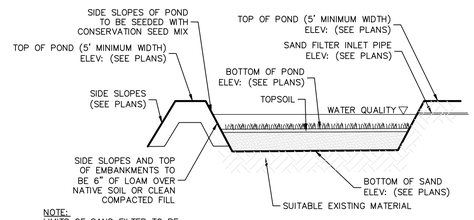
Underground Detention System B (UDS-B)

NOT TO SCALE

DESCRIPTION	SF-B
TOP OF POND ELEVATION	71.00
100 YEAR STORM ELEVATION	70.82
10 YEAR STORM ELEVATION	70.71
1 YEAR STORM ELEVATION	70.57
WQ STORM ELEVATION	69.80
BOTTOM OF POND ELEVATION	69.00
TOP SOIL DEPTH	6"
SAND DEPTH	18"
BOTTOM OF SAND ELEVATION	67.00
SEASONAL HIGH GWT ELEVATION	66.00
SOIL EVALUATION	TH-6



SAND FILTER
TYPICAL SECTION



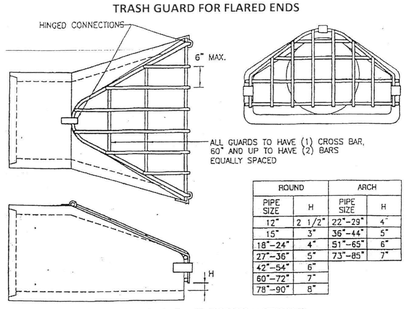
NOTE:
LIMITS OF SAND FILTER TO BE STAKED OUT AND NOT USED AS A TEMPORARY SEDIMENT BASIN DURING CONSTRUCTION. (NO CONSTRUCTION TRAFFIC ALLOWED WITHIN FILTER LIMITS)

SAND FILTER
NOT TO SCALE

Sand Filter BMP System

NOT TO SCALE

TRASH GUARD FOR FLARED ENDS



ROUND		ARCH	
PIPE SIZE	H	PIPE SIZE	H
12"	2 1/2"	22"-29"	4"
15"	3"	36"-44"	5"
18"-24"	4"	51"-65"	6"
27"-36"	5"	73"-85"	7"
42"-54"	6"		
60"-72"	7"		
78"-90"	8"		

Hot Dip galvanized per Mn/DOT 3392 or ASTM-A153.

BAR SIZES								
STANDARD DESIGN					HEAVY DESIGN			
	PIPE SIZE	HOLE DIA. REQ'D.	BOLT DIA.	BAR SIZE		PIPE SIZE	HOLE DIA. REQ'D.	BOLT DIA.	BAR SIZE
ROUND	12"-24"	3/4"	5/8"	5/8"	ROUND	12"-24"	3/4"	5/8"	3/4"
	27"-48"	7/8"	3/4"	3/4"		27"-48"	7/8"	3/4"	1"
	54"-90"	1 1/8"	1"	1"		54"-90"	1 1/8"	1"	1 1/4"
ARCH	22"-29"	3/4"	5/8"	5/8"	ARCH	22"-29"	3/4"	5/8"	3/4"
	36"-59"	7/8"	3/4"	3/4"		36"-59"	7/8"	3/4"	1"
	65"-88"	1 1/8"	1"	1"		65"-88"	1 1/8"	1"	1 1/4"
BOLT LG. = PIPEWALL THK. + 2 1/2"					ELLIPTICAL	14x23"	3/4"	5/8"	3/4"
						19x30"	3/4"	5/8"	3/4"
						24x38"	7/8"	3/4"	3/4"
						29x45"	7/8"	3/4"	3/4"
						34x53"	7/8"	3/4"	3/4"
						38x60"	7/8"	3/4"	3/4"
						43x68"	1 1/8"	1"	1"
						48x76"	1 1/8"	1"	1"
						53x83"	1 1/8"	1"	1"

HAALA INDUSTRIES
1201 Hwy. 4 South
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Sleepy Eye, MN 56085
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KEVIN DEMERS
No. 8557
REGISTERED PROFESSIONAL ENGINEER
CIVIL

No.	Date	Description	By
0	02-05-2025	Pre-Application Submission	J.A.R.

Design By: K.J.D.
Drawn By: D.R.N.

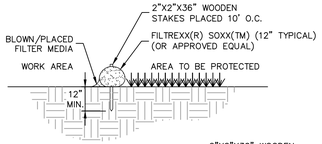
Underground System B, Sand Filter B & Details

Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island

Owner & Applicant:
D&M BOCA DEVELOPMENT, LLC
92 Faunce Corner Road, Suite 160,
North Dartmouth, MA 02747

SHEET 10 OF 11



NOTES:

1. ALL MATERIAL TO MEET FILTREXX(R) SPECIFICATIONS
2. FILTER MEDIA(TM) FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER
4. STAKES ARE NOT TO BE USED IN PAVEMENT AREAS.
5. SELF WEIGHT OF FILTREXX SYSTEM IS ADEQUATE TO PREVENT SYSTEM MOVEMENT ONCE POSITIONED ALONG AREA SHOWN ON THE PLANS.
6. CONTRACTOR TO PLACE FILTREXX SEDIMENT CONTROL OR APPROVED EQUAL AROUND ALL CURB INLET LOCATIONS AS SPECIFIED ON PLANS.

Filtrexx Sediment Control (or Approved Equal)

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90 Broadway Newport, RI 02840
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GENERAL NOTES:

1. THE TEMPORARY SEDIMENT TRAP SHALL MEET ALL REQUIREMENTS FOR TEMPORARY SEDIMENT TRAPS OUTLINED IN THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (LATEST REVISION) SECTION SIX: SEDIMENT CONTROL MEASURES
2. THE TEMPORARY SEDIMENT TRAP SHALL HAVE AN INITIAL STORAGE VOLUME OF 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA.
3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER EXCEPT FOR THE EXCAVATED WET STORAGE AREA WHERE SLOPES SHALL NOT EXCEED 1.5:1.
4. THE OUTLET SHALL BE LOCATED AT THE MOST DISTANT HYDRAULIC POINT FROM THE INLET.
5. THE OUTLET CONSISTS OF A PERVIOUS STONE DIKE WITH A CORE OF MODIFIED RIPRAP AND FACED ON THE UPSTREAM SIDE WITH STONE.
6. TEMPORARY SEDIMENT TRAPS MUST OUTLET ONTO STABILIZED GROUND.
7. MAXIMUM HEIGHT OF A TEMPORARY SEDIMENT TRAP EMBANKMENT IS LIMITED TO 5 FEET.
8. SIDE SLOPES OF THE EMBANKMENT SHALL BE 2:1 OR FLATTER.
9. MODIFIED RIPRAP: SHALL MEET THE REQUIREMENTS OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SUBSECTION M.10.03.2.
10. FILTER STONE: SHALL MEET THE REQUIREMENTS OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SUBSECTION M.01.03 TABLE I, COLUMN V FILTER STONE.

INSPECTION, MAINTENANCE, AND REMOVAL REQUIREMENTS:

1. INSTALL "SEDIMENT STORAGE" STAKE WITH A MARKER AT ONE HALF OF THE WET STORAGE VOLUME.
2. INSPECT THE TEMPORARY SEDIMENT TRAP AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.25 INCH OR GREATER.
3. CHECK THE OUTLET TO ENSURE THAT IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT.
4. CHECK FOR SEDIMENT ACCUMULATION AND FILTRATION PERFORMANCE.
5. WHEN SEDIMENTS HAVE ACCUMULATED TO ONE HALF THE MINIMUM REQUIRED VOLUME OF THE WET STORAGE, DEWATER THE TRAP AS NEEDED, REMOVE SEDIMENTS AND RESTORE THE TRAP TO ITS ORIGINAL DIMENSIONS.
6. DISPOSE OF THE SEDIMENT REMOVED FROM THE BASIN IN A SUITABLE AREA.
7. THE TEMPORARY SEDIMENT TRAP MAY BE REMOVED AFTER THE CONTRIBUTING DRAINAGE AREA IS STABILIZED.

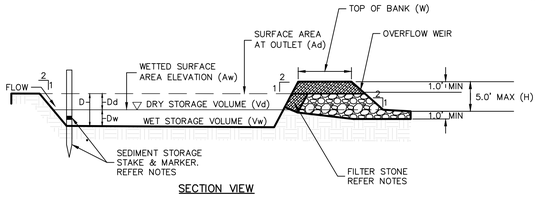
INSTALLATION NOTES:

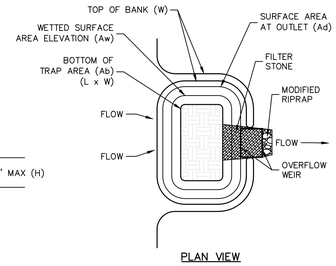
1. CLEAR, GRUB AND STRIP ANY VEGETATION AND ROOT MAT FROM ANY PROPOSED EMBANKMENT AND OUTLET AREA.
2. REMOVE STONES AND ROCKS WHOSE DIAMETER IS GREATER THAN THREE (3) INCHES AND OTHER DEBRIS.
3. EXCAVATE WET STORAGE AND CONSTRUCT THE EMBANKMENT AND/OR OUTLET AS NEEDED TO ATTAIN THE NECESSARY STORAGE REQUIREMENTS.
4. USE ONLY FILL MATERIAL FOR THE EMBANKMENT THAT IS FREE FROM EXCESSIVE ORGANICS, DEBRIS, LARGE ROCKS (OVER SIX (6) INCHES) OR OTHER UNSUITABLE MATERIALS. COMPACT THE EMBANKMENT IN 9-INCH LAYERS BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED
5. STABILIZE THE EARTHEN EMBANKMENT USING ANY OF THE FOLLOWING MEASURES, SEEDING FOR TEMPORARY VEGETATION COVER; SEEDING FOR PERMANENT VEGETATIVE COVER; OR SLOPE PROTECTION, IMMEDIATELY AFTER INSTALLATION

SEDIMENT TRAP DIMENSIONS	TRAP 1	
TRIBUTARY DRAINAGE AREA	1.15	ac
WET STORAGE DEPTH (Dw)	2.00	ft
DRY STORAGE DEPTH (Dd)	2.00	ft
TOTAL DEPTH (D)	4.00	ft
BOTTOM OF TRAP AREA (Ab)	850	sq.ft
WETTED SURFACE AREA (Aw)	1,400	sq.ft
SURFACE AREA AT OUTLET (Ad)	2,030	sq.ft

TOP WIDTH VS HEIGHT
H=HEIGHT OF EMBANKMENT
W=TOP WIDTH OF EMBANKMENT

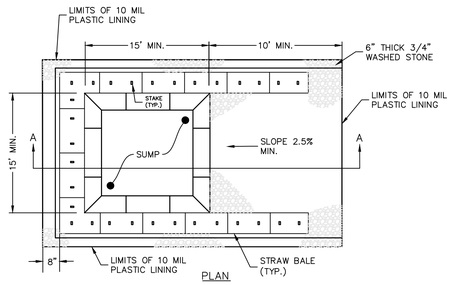
H (ft)	W (ft)
1.5	2.0
2.0	2.0
2.5	3.0
3.0	2.5
3.5	3.0
4.0	3.0
4.5	4.0
5.0	4.5

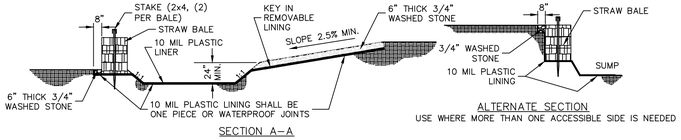




Temporary Sediment Trap Details

NOT TO SCALE



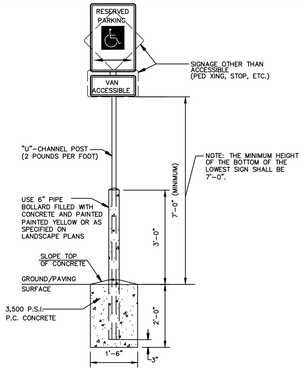


NOTES:

1. PIT IS SPECIFICALLY DESIGNATED, DIKED AND IMPERVIOUS CONTAINMENT TO PREVENT CONTACT BETWEEN CONCRETE WASH AND STORMWATER.
2. WASH WATER SHALL NOT BE ALLOWED TO FLOW TO SURFACE WATER.
3. FACILITY MUST HOLD SUFFICIENT VOLUME TO CONTAIN CONCRETE WASTE WITH A MINIMUM FREEBOARD OF 12."
4. FACILITY SHALL NOT BE FILLED BEYOND 95% CAPACITY UNLESS A NEW FACILITY IS CONSTRUCTED.
5. SAW CUT PORTLAND CEMENT CONCRETE, RESIDUE FROM SAWCUT & GRINDING TO BE DISPOSED OF IN THE PIT.
6. CONCRETE WASHOUTS SHALL BE LOCATED A MINIMUM OF 100' FROM DRAINAGE WAYS, INLETS, & SURFACE WATERS.
7. MANUFACTURED CONCRETE WASHOUT DEVICES MAY BE USED IF REMOVED FROM THE SITE WHEN 95% FULL CAPACITY.

CONCRETE WASHOUT AREA

(NOT TO SCALE)



Bollard Mounted Sign Detail

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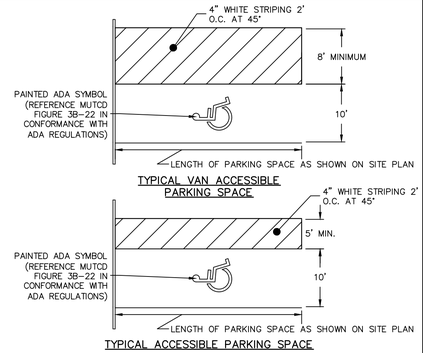
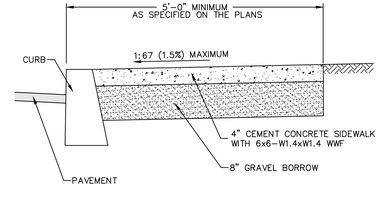


Typical Accessible Parking Spaces

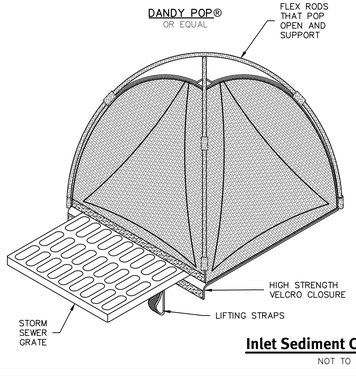
NOT TO SCALE

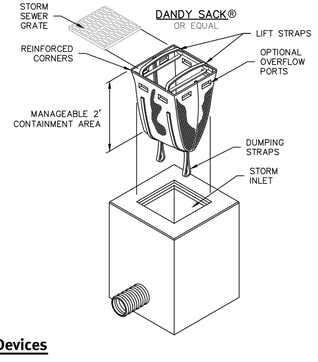
NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
2. FOR CURB SETTING DETAIL, REFERENCE STD. 7.6.0.
3. MEETS OR EXCEEDS GUIDELINES OF RIDOT STANDARD DETAIL 43.1.0.



Cement Concrete Sidewalk

NOT TO SCALE



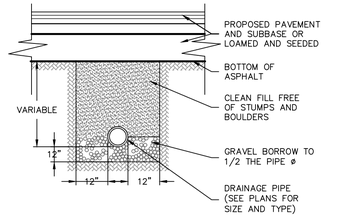


Inlet Sediment Control Devices

NOT TO SCALE

INSTALLATION NOTES:

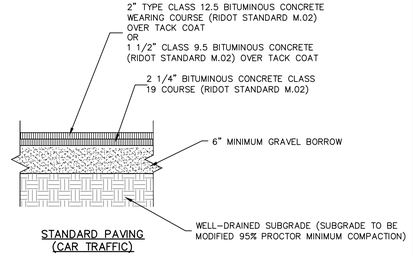
1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS, LATEST ADDITION.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100MM) FOR 4"-24" (100MM-600MM); 6" (150MM) FOR 30"-60" (750MM-900MM).
5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" ø PIPE AND 24" OF COVER FOR 54"-60" ø PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.



HDPE Trench Detail

NOT TO SCALE

NOTE:
THIS PAVEMENT SECTION DETAIL REFLECTS MINIMUM REQUIREMENTS. ENGINEER TO DETERMINE DESIGN BASED ON GEOTECHNICAL DATA OF SPECIFIC PROJECT AND DAILY TRAFFIC DESIGN REQUIREMENT.



Typical Pavement Section

NOT TO SCALE

KEVIN DEMERS
No. 8557
REGISTERED PROFESSIONAL ENGINEER
CIVIL

This regulatory submission set shall not be used for construction purposes unless stamped 'Issued for Construction' and signed by a DiPrete Engineering representative.

The contractor is responsible for all of the means, methods, techniques, sequences, procedures, and OSHA conformance in the implementation of this plan and design.

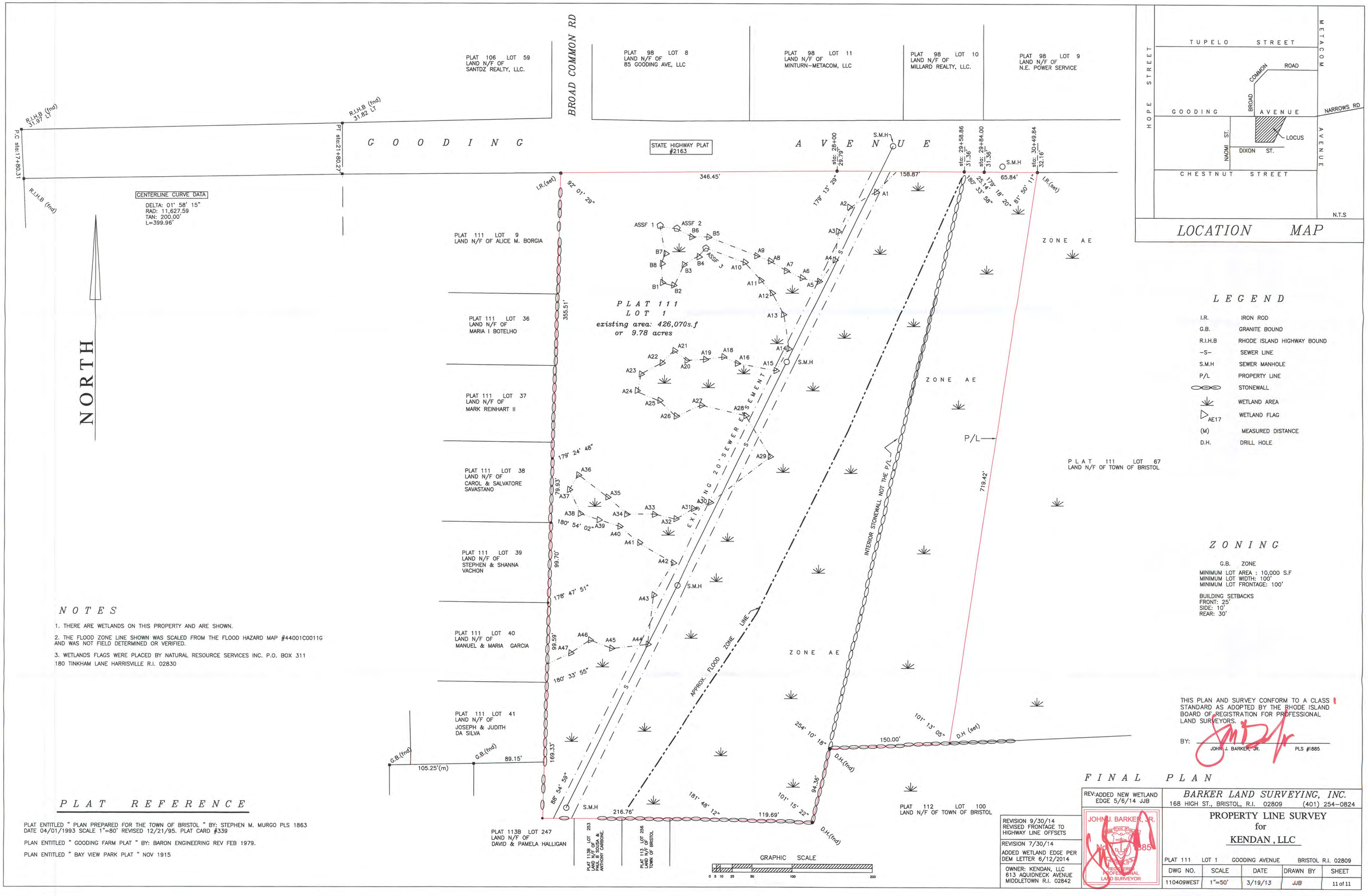
No.	Date	Description	By
0	12.05.2025	Pre-Application Submission	J.A.R.

Drawn By: D.R.N. | Design By: K.J.D.

Detail Sheet
Comfort Inn & Suites
AP 111 Lot 1
Bristol, Rhode Island
Owner & Applicant:
D&M BOCA DEVELOPMENT, LLC
92 Faunce Corner Road, Suite 160,
North Dartmouth, MA 02747

SHEET 11 OF 11

DE Job No: 2536-001



LEGEND

I.R.	IRON ROD
G.B.	GRANITE BOUND
R.I.H.B	RHODE ISLAND HIGHWAY BOUND
-S-	SEWER LINE
S.M.H	SEWER MANHOLE
P/L	PROPERTY LINE
	STONEWALL
	WETLAND AREA
AE17	WETLAND FLAG
(M)	MEASURED DISTANCE
D.H.	DRILL HOLE

ZONING

G.B. ZONE

MINIMUM LOT AREA : 10,000 S.F
MINIMUM LOT WIDTH: 100'
MINIMUM LOT FRONTAGE: 100'

BUILDING SETBACKS
FRONT: 25'
SIDE: 10'
REAR: 30'

NOTES

1. THERE ARE WETLANDS ON THIS PROPERTY AND ARE SHOWN.
2. THE FLOOD ZONE LINE SHOWN WAS SCALED FROM THE FLOOD HAZARD MAP #44001C0011G AND WAS NOT FIELD DETERMINED OR VERIFIED.
3. WETLANDS FLAGS WERE PLACED BY NATURAL RESOURCE SERVICES INC. P.O. BOX 311 180 TINKHAM LANE HARRISVILLE R.I. 02830

PLAT REFERENCE

PLAT ENTITLED " PLAN PREPARED FOR THE TOWN OF BRISTOL " BY: STEPHEN M. MURGO PLS 1863 DATE 04/01/1993 SCALE 1"=80' REVISED 12/21/95. PLAT CARD #339

PLAN ENTITLED " GOODING FARM PLAT " BY: BARON ENGINEERING REV FEB 1979.

PLAN ENTITLED " BAY VIEW PARK PLAT " NOV 1915

THIS PLAN AND SURVEY CONFORM TO A CLASS STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

BY: _____
JOHN J. BARKER, JR. PLS #1885

FINAL PLAN

REV: ADDED NEW WETLAND EDGE 5/6/14 JJB

REVISION 9/30/14
REVISED FRONTAGE TO HIGHWAY LINE OFFSETS

REVISION 7/30/14
ADDED WETLAND EDGE PER DEM LETTER 6/12/2014

OWNER: KENDAN, LLC
613 AQUIDNECK AVENUE
MIDDLETOWN R.I. 02842

JOHN J. BARKER, JR. NO. 1885 REGISTERED PROFESSIONAL LAND SURVEYOR

BARKER LAND SURVEYING, INC.
168 HIGH ST., BRISTOL, R.I. 02809 (401) 254-0824

PROPERTY LINE SURVEY
for
KENDAN , LLC

PLAT 111 LOT 1 GOODING AVENUE BRISTOL R.I. 02809

DWG NO.	SCALE	DATE	DRAWN BY	SHEET
110409WEST	1"=50'	3/19/13	JJB	11 of 11

z:\demain\projects\2536-001 gooding avenue\autocad drawings\2536-001-plan.dwg Plotted: 2/24/2025

Scale: 1"=50'
0
25'
50'
100'

Overall Site Exhibit

Comfort Inn & Suites

AP 111 Lot 1
Bristol, Rhode Island

Owner & Applicant:
D&M BOCA DEVELOPMENT, LLC
92 Faunce Corner Road, Suite 160,
North Darthmouth, MA 02747

SHEET 1 OF 1

No.	Date	Description	By:
1	02-24-2025	Overall Site Exhibit	J.A.R.
0	02-20-2025	Overall Site Exhibit	J.A.R.

Drawn By: D.R.N. | Design By: K.J.D.

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The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

DiPrete Engineering
90 Broadway Newport, RI 02840
tel 401-619-5890 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

Town of Bristol, Rhode Island

Department of Community Development

10 Court Street
Bristol, RI 02809
www.bristolri.us
401-253-7000

TECHNICAL REVIEW COMMITTEE MEETING
CONCEPT REVIEW & PREAPPLICATION REVIEW OF THE
DEVELOPMENT PLAN APPLICATION OF
D&M BOCA DEVELOPMENT, LLC FOR
KENDAN, LLC – MAINSTAY/SLEEP INN HOTEL

The meeting was held on Wednesday, August 19, 2020 at 10:00 a.m. via zoom video teleconferencing. Meeting ID number 944 2512 9286

Attending:
Technical Review Committee:
Administrative Officer- Diane Williamson
Zoning Officer- Edward Tanner
Planning Board Duty Member- Jerome Squartrito
Planning Board Duty Member- Richard Ruggiero
Bristol County Water Authority (BCWA) Sue Rabideau
Battalion Chief – Rob Ferguson
Town Solicitor- Andy Tietz
Consulting Engineer- Kevin Harrop of Caputo & Wick

Applicant:
Applicant-Denis Degnasio
Applicant- Michael Harison
Applicant – Dan Donnavan Lowner
Applicant – Richard LeFrance (hotel representative)
Engineer- Molly Titus
Engineer- Chris Duhamell-DiPrete Engineering
John Rego, Esq.
Scott Spear, Esq

Other Participants

Paul Sousa	Marlene
Richard LaFrance	Chris
Emily Spinard	
Jeffrey Simons	
Lin	

The TRC reviewed the current proposed project for the Mainstay/Sleep Inn Hotel. The Concept Review- Pre application Review for the Development plan application of D&M Boca Development, LLC. The plan proposes construction of a 3-Story, 15,200 square foot building for an eighty (80) room Mainstay/Sleep Inn Hotel.

The property is located on the south side Gooding Avenue beginning at a point opposite the intersection of Broadcommon Road and Gooding Avenue and running approximately 538' to the east along Gooding Avenue. The property is zoned General Business.

Diane Williamson provided an introduction to the scope of review and the meeting.
Scott Spear introduced members of the applicant's team.
Chris Duhamel presented application plans. Concept level plans but have taken design to higher level. Worked with RIDEM to make sure it is viable. No zoning variances required. No planning board waiver required.

The following items were discussed:

- Site is 9.8 acres on south side of Gooding Ave
- General Business zone
- 80 room hotel purposed
- Civil site design/engineering, drainage has been complete
- Traffic design completed
- 1.6 acres proposed to be disturbed
- RIDEM has approved revised design. Less wetland impact. Smaller footprint, storm-water design improving conditions. Underground detention and infiltration.
- No work in flood plain
- Some wetland alterations
- Public water , sewer, gas and utilities
- 80 parking spaces proposed compliant with zoning.
- Buffer plantings all around
- TRC engineer has provided comments. Applicant believes all comments can be addresses and will be incorporates into later submissions
- Drainage design will be provided in greater detail at next application stem
- RIDEM has not reviewed new building design, but they have approved layout, parking impervious, limits of disturbance, etc.
- RIDEM has not seen move of access from east of building to center of building. Next step after pre-application conference with TRC is to submit modified permit request to RIDEM for approval.
- Current RIDEM permit will expire late August. Permit needs to be extended again.
- John Grosvenor- Mainstay Choice Hotel Sleep Inn prototype building design with exception of addition of entrance under building.
- Building will meet zoning setbacks, height, and lot coverage requirements.
- Building height was calculated of average for 4 corners of actual building. Average height used.
- John Rego, Esq. representing owners of property

- Scott Spear, Esq. Representing applicant/developer
- Comments from town - sewer needs to tie in at easement not in street. No sewer in street.
- Coordinate design with Bristol Fire Department
- BCWA- no specific comments. Water is in high elevation location. 40 PSI in this area but for 3 stories it may require a booster pump. Fire suppression looks ok. More details in later applications. Fire and domestic services will need to be separate.
- Kevin Harrop, PE for town - memo prepares checklist was met in general for this level of review. RIDEM approval and drainage design will be key review details.
- Diane Williamson - process discussions
    - Hotel is permitted use in GB zone.
    - Development plan review by TRC if no waivers or variances. TRC can refer to full planning board for review. (probably will)
    - Gooding Avenue is a state road P.A.P. required
    - Traffic study and traffic circulation plan needed.
    - Site details for future submittals (landings, sidewalks, buffering)
- Mainstay suits - will they have kitchens? Long term stay?
- Richard LaFrance- Choice Hotel – discussed overall brand. Sleep Inn smaller rooms for weekends. Mainstay – extended stay1-2 weeks- has kitchenette with microwave and kitchen sink. No stoves.
- TRC members not happy with kitchen in hotel rooms. Not designed or branded for long term stay. Branding will be a 20 year contract. Will not allow apartments.
- Will review with developer to see options in design for rooms.
- TRC discussed size of building and environmental impacts, massing and scale of building. Will need elevation plans showing all sides of building. Building seems large for Bristol. Planning Board may request peer review for architectural design. Also need to confirm average grade for building heights with Z.E.O.
- Marketing study to show that 80 units are viable in town
- TRC member's around room. No further comments
- Applicant requesting review clarification. Major land development or development plan review? Would like to get further refinement with town before going back to RIDEM. Drainage approval then full design of hotel. Drainage calculation will be submitted.
- Preliminary application to TRC. Refer to planning board will be next.
- Mr. Spinard has submitted a letter in opposition. Discussed concerns and fears re: flooding, drainage, wetlands, storm water.
- Applicant will review comments from neighbors and respond.
- Next steps: another concept review? Applicant will discuss first and get back to us. Preliminary application with TRC then planning board.

Meeting adjourned at 11:30 a.m.
Notes by Ed Tanner

Town of Bristol, Rhode Island

Department of Community Development

10 Court Street
Bristol, RI 02809
www.bristolri.us
401-253-7000

TECHNICAL REVIEW COMMITTEE MEETING
GOODING AVENUE
APPLICANT: MAINSTAY/SLEEP IN HOTEL
PRE-APPLICATION/CONCEPT REVIEW

The Technical Review Committee held a meeting for Pre-Application/Concept Review of the proposed plan for property located at Gooding Avenue (plat 111, lot 1).

The meeting was held on **November 29, 2021** at 10:00 a.m. in the 2nd floor conference room at 9 Court Street.

Attending:
Diane Williamson - Administrative Officer
Edward Tanner – Zoning Officer
Jerome Squatrito, Planning Board Chariman
Armand Bilotti – Planning Board Duty Member
Sue Rabideau – Bristol County Water Authority
Jose DaSilva – Bristol Water Pollution Control Facility Director
Michael Demello – Bristol Fire Chief
Andrew Teitz – Asst. Town Solicitor

John G. Rego Sr – Attorney for Applicant
Scott Spear – Attorney for Applicant
Dennis DeGrazia – D&M Boca
Chris Duhammel – DiPiete Engineering

See Attached Sign-In Sheet for additional attendees.

- TRC members conducted introductions
- TRC reviewed Pre-App/Concept Review application definition from Subdivision regulations
- There was a previous Concept review TRC meeting for this application in August 2020
- Applicant's attorney summarized proposal and updated TRC on plan revisions since last meeting. Revised plans will be a "Comfort Inn" and will not have kitchens in individual rooms.
- Building height issues have been reviewed and engineer will discuss, confident that there is no building height issue.
- Applicant's Engineer summarized changes and discussed new RIDEM permit to reference revised site design as presented.
- Drainage: Decrease in runoff volume and runoff rate meets RI Storm Water Design Mainland RIDEM requirements. Summarized analysis of storm water management. Flood Zones nearby in Silver Creek elevations reviewed.

- This property consists of a 9.7 acre site. 1.6 acres will be distributed by proposed development (~20%)
- Existing soils will be modified and replaced with sand materials for underground infiltration and will allow infiltration of storm water for parking lot and roof areas. Post-construction will see a decrease in runoff volume and runoff rate. Design will be complaint with recommendations of town's engineer (Beta Engineering) Silver Creek Watershed Study from 2008.
- Applicant's engineer is willing to respond in person or in writing to comments of neighbors.
- Applicant's engineer feels they have met all requirements and concerns regarding runoff, drainage and storm water management.
- Sanitary sewer from proposed development will connect to existing sewer interceptor line which bisects the site. Rather than connecting to the line in Gooding Ave as shown on plans.
- Zoning setbacks and other requirements will be met.

- Bristol County Water Authority (BCWA) Sue Rabideau - Discussed water system upgrades in area. Need to evaluate this proposal to make sure it will not adversely impact new system design.

- Fire Chief has no comments at this time.

- Sewer Department – Need to see flow estimates at capacity to evaluate system needs. Will need a pre-treatment plan. Grease interceptor may be needed. Requirements will depend on proposed uses within the building. Proposed hotel will have a buffet breakfast area. Not a full kitchen. Laundry service will impact flow. Will there be meeting rooms or facilitates? Connection to sewer interceptor line will require a new manhole on south side of Gooding Avenue road shoulder

- Zoning – Building height discussed. Off street parking should consider all uses. Rooming units as well as any potential conference/meeting space.

- Revised architectural plans have not been submitted. Will be reviewed when full application is submitted.

- TRC may require peer-review for architectural and landscape designs.

- TRC engineer consultant requested clarification on storm water management design. Applicant Engineer reviewed design. Infiltration, sand filter, detention system, pre-treatment.

- TRC members questioned wetland delineation and location of wetlands

- Planning Board engineer consultant will need to review drainage in detail and report back to Planning Board

- TRC consultant engineer has provided an outline for a traffic study that applicant will need to submit with formal application. Gooding Avenue is a state road, so a physical alteration permit will be required from RIDOT.

- TRC discussed “kitchen” in individual rooms. New layout and design plans have not yet been submitted. TRC will not allow sink or stove tops within individual rooms.

- Applicant should respond in writing to comments & concerns

- Process Moving Forward:
    - A formal Development Plan Review Application
        - Another Concept Review with TRC
        - Then Planning Board Meeting

    - TRC discussed sending to full Planning Board for full review.
        - TRC will review full application prior to planning board meeting.

    - Applicant suggested another Concept Review TRC meeting just to discuss drainage. With response to comments by neighbors and consulting engineer review

- Time clock for Planning Board decision starts when full application is submitted and certified complete. Applicant agreed to submit in writing with application a permission to extend decision timeline.

- TRC discussed the need for a traffic engineer review with particular attention to the Gooding Ave and Broadcommon Road intersection and potential conflicts with in/out movements from proposed development.

- Revised architectural plans should be submitted with next submittal so the TRC can review design.

- TRC discussed application review schedule and public participation at each step. Public meetings vs. public hearings. TRC recommendations to the Planning Board are not on the merits of the application, just about whether it is complete or not.

Meeting adjourned at 11:15 a.m.

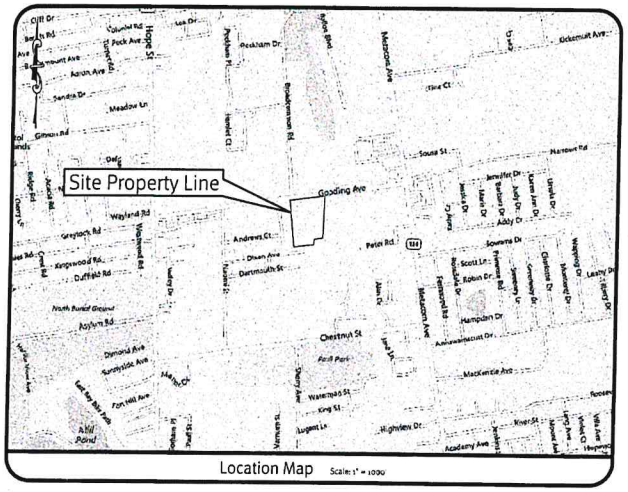
Notes by Ed Tanner

Permitting Submission

Mainstay/Sleep Inn Hotel

Located on Gooding Avenue
Bristol, Rhode Island

Assessor's Plat 111 Lot 1



Sheet Index

1. Cover Sheet
2. Aerial Half Mile Radius
3. General Notes and Legend
4. Erosion & Sediment Control Plan
5. Site Layout Plan
6. Grading Plan
7. Drainage and Utilities Plan
8. Underground Systems A & B Details
9. Sand Filter B and Details
10. Detail Sheet

Plans by Others

11. Property Line Survey (Sheet 1 of 1) by Barker Land Surveying

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: DEC 0 5 2024 FILE #: 23-0264
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

RI Environmental Management
NOV 08 2023
Office of Water Resources

SESC / O&M
The Soil Erosion and Sediment Control Plan (SESC) and Operations and Maintenance Plan (O&M) are required documents with this plan set and must be maintained by the contractor and owner onsite.

RIDOT
The Proposed Improvements Will Not Increase the Rate of Stormwater Runoff Onto the State Highway. All Work Within the State Right of Way Must Conform to the RI Standard Specifications, Details, and Addendums.

PLAN FOR NOTICE

DiPrete Engineering
50 Broadway, Newport, RI 02840
tel 401-619-3890 fax 401 484 6606 www.diprete-eng.com
Boston • Providence • Newport

KEVIN DOMERS
8567
REGISTERED PROFESSIONAL ENGINEER
CIVIL

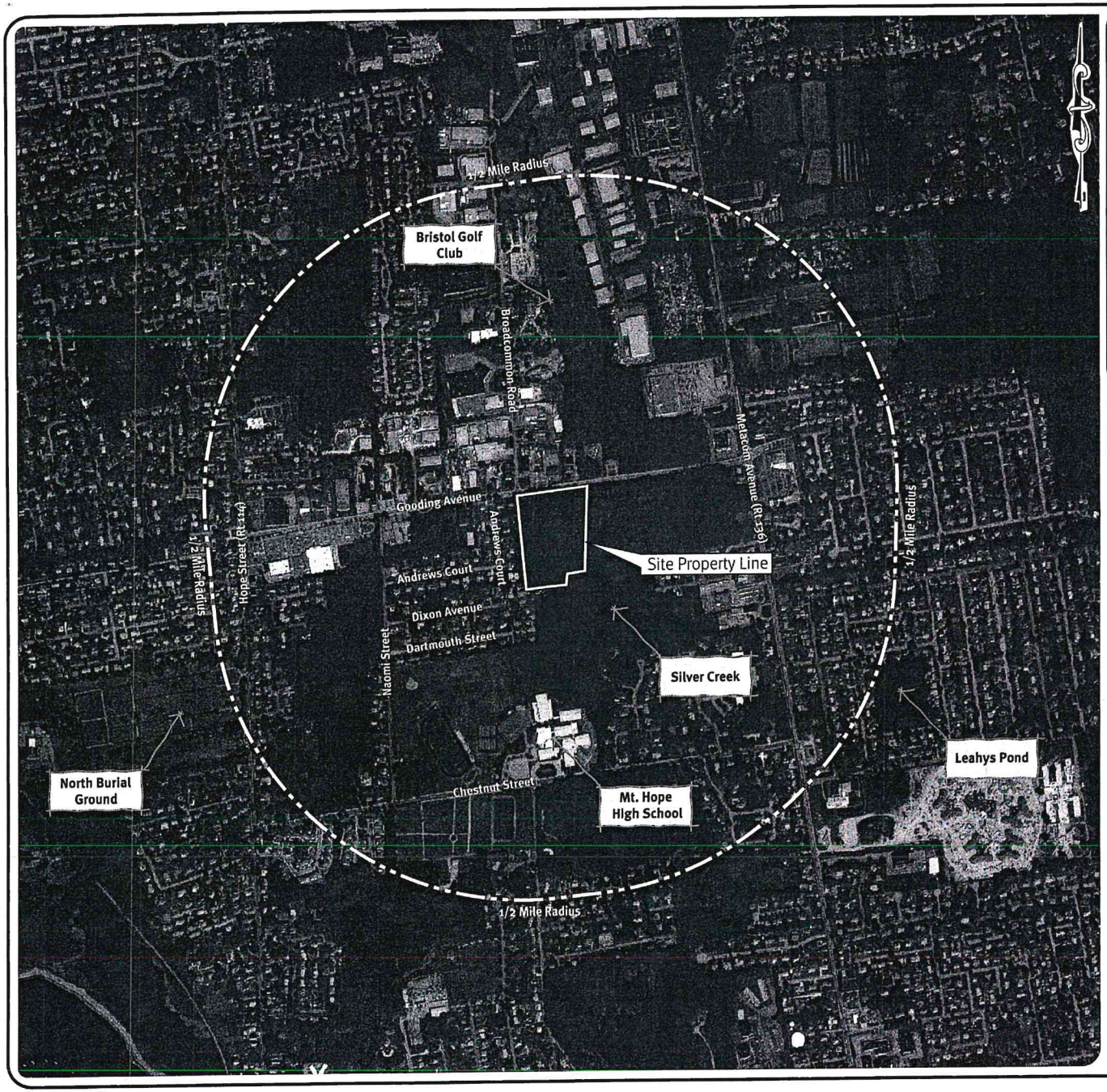
No.	Date	Description	By
1	10.25.2023	RI DEM Comments	KJD
2	11.8.2023	RI DEM Comments	KJD
3	11.14.2023	RI DEM Comments	KJD
4	12.5.2024	RI DEM Comments	KJD
5	12.13.2024	RI DEM Comments	KJD

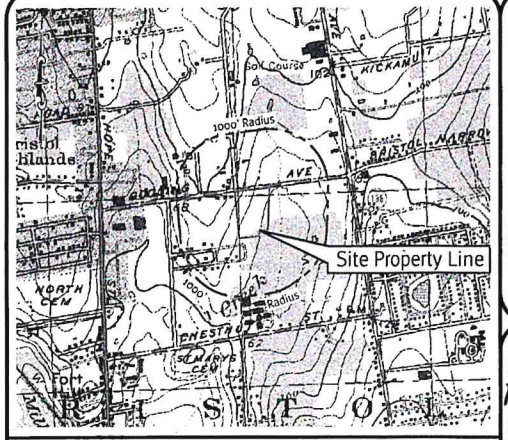
Issued By: D.D.K. Design By: K.J.D.

Cover Sheet
Mainstay/Sleep Inn Hotel
AP 111 Lot 1
Bristol, Rhode Island

Owner: D&M BOCA DEVELOPMENT, LLC
Applicant: Kendan, LLC

SHEET 1 OF 11





USGS Map Scale: 1"=1000'

Photo Obtained from the ARCGIS 2008 Orthophotography.

Scale: 1"=400'
0 200' 400' 800'

Legend:

PROPERTY LINE
PROPERTY LINE (USGS MAP)
HALF MILE RADIUS LINE

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: DEC 05 2024 FILE #: 22-0344
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Agustin D. Semedo
NOV 08 2023

DiPrete Engineering
50 Broadway, Newport, RI 02840
tel 401 293 9399 fax 401 683 6006 www.diprete-eng.com
Boston • Providence • Newport

KEVIN DEMERS
REGISTERED PROFESSIONAL ENGINEER
CIVIL

This regulatory submission set shall not be used for construction purposes unless stamped "Issued for Construction" and signed by a DiPrete Engineering representative.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and construction procedures in the implementation of this plan and design.

No.	Date	Description	By
1	10/31/2023	Revised per comments	KLS
2	10/26/2023	Revised per comments	KLS
3	10/13/2023	Revised per comments	KLS
4	10/04/2023	Revised per comments	KLS
5	9/27/2023	Revised per comments	KLS
6	9/13/2023	Revised per comments	KLS
7	8/31/2023	Revised per comments	KLS

Drawn By: DMK Design By: KLS

Aerial Half Mile Radius
Mainstay/Sleep Inn Hotel
AP 11 Lot 1
Bristol, Rhode Island

Owner:
D&M BOCA DEVELOPMENT, LLC
50 Francis Lowe Street Suite 102
North Dartmouth, MA 02747

Owner:
Kendan, LLC
c/o Dimeco and Sons
143 Rockdale Avenue, Middletown, RI 02842

DE Job No: 2536401 Copyright 2023 by DiPrete Engineering Associates, Inc.

SHEET 2 OF 11

General Notes:

1. THE SITE IS LOCATED ON THE TOWN OF BRISTOL ASSESSOR'S PLAT 111 LOT 1.
2. THE SITE IS APPROXIMATELY 9.78 ACRES, IS ZONED GB, AND IS CURRENTLY WOODED.
3. THE OWNER OF AP 111 LOT 1 IS:
   KENDAN, LLC.
   813 AQUIDNECK AVENUE
   MIDDLETOWN, RI 02842
   THE APPLICANT OF AP 111 LOT 1 IS:
   D&M BOCA DEVELOPMENT, LLC.
   92 FAUNCE CORNER ROAD, SUITE 180
   NORTH DARTMOUTH, MA 02747
4. THIS SITE IS LOCATED IN FEMA FLOOD ZONES X AND AE. REFERENCE FEMA FLOOD INSURANCE RATE MAP 44001C0011H, MAP REVISED JULY 7, 2014.
5. THIS PLAN IS SUBSTANTIALLY CORRECT IN ACCORDANCE WITH A CLASS IV STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS. THIS PLAN IS NOT TO BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY AND MAY BE SUBJECT TO SUCH CHANGES AS AN ACCURATE BOUNDARY SURVEY MAY DISCLOSE.
6. THE SITE IS NOT WITHIN A:
   - GROUNDWATER PROTECTION AREA
   - NATURAL HERITAGE AREA
   - GROUNDWATER PROTECTION OVERLAY DISTRICT
7. THE FOLLOWING DOCUMENTS ARE CONSIDERED PART OF THE PROJECT PLANS AND THE CONTRACTOR/ OWNER MUST MAINTAIN THESE DOCUMENTS AS PART OF A FULL PLAN SET.
   - SOIL EROSION AND SEDIMENT CONTROL PLAN (SESC). THE SESC CONTAINS THE FOLLOWING:
     - EROSION CONTROL MEASURES
     - SHORT TERM MAINTENANCE
     - ESTABLISHMENT OF VEGETATIVE COVER
     - CONSTRUCTION POLLUTION PREVENTION
     - SEQUENCE OF CONSTRUCTION
   - OPERATIONS AND MAINTENANCE PLAN (O&M). THE O&M CONTAINS THE FOLLOWING:
     - LONG TERM MAINTENANCE
     - LONG TERM POLLUTION PREVENTION
8. THIS PLAN SET REFERENCES RIDOT STANDARD DETAILS (DESIGNATED AS RIDOT STD X.X.X.) RIDOT STANDARD DETAILS ARE AVAILABLE FROM RIDOT AND ONLINE AT: HTTP://WWW.DOT.RI.GOV/BUSINESS/CONTRACTORSANDCONSULTANTS.PHP.
9. THE SITE IS TO BE SERVICED BY PUBLIC WATER AND PUBLIC SEWER.
10. THE SITE WILL FULLY COMPLY WITH ALL OF THE TOWN OF BRISTOL RULES AND REGULATIONS INCLUDING THE SUBDIVISION AND DEVELOPMENT REVIEW REGULATIONS AND THE ZONING ORDINANCE. THE SITE DOES NOT REQUIRE ANY VARIANCES, SPECIAL USE PERMITS, OR WAIVERS.
11. THE DRAINAGE SYSTEM IS DESIGNED TO MEET THE TOWN OF BRISTOL SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WITH THE USE OF CATCH BASINS, CULVERTS, AND UNDERGROUND DRAINAGE BASINS. THE STORMWATER MANAGEMENT SYSTEM MEETS THE RIDEM BEST MANAGEMENT PRACTICES.
12. THE SITE IS PROPOSED TO BE BUILT IN 1 PHASE.
13. TEST PITS AND SOIL EVALUATIONS WERE COMPLETED BY SITEC, INC. ON 12/12/2014.

Soil Information:

(REFERENCE: USDA NATURAL RESOURCES CONSERVATION SERVICE)

SOIL NAME	DESCRIPTION
PmA	PITTSTOWN SILT LOAM, 0 TO 3 PERCENT SLOPES
PmB	PITTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES
Se	STISSING SILT LOAM

Plan References:

PLAN ENTITLED "PROPERTY LINE SURBEY FOR KENDAN, LLC" BY BARKER LAND SURVEYING, INC. REVISED 9/30/14.

Lidar Note:

CONTOUR DATA SHOWN ON THIS PLAN CONFORMS TO A 1-4 TOPOGRAPHICAL SURVEY STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS. SAID DATA IS BASED ON ELEVATION INFORMATION THAT WAS COLLECTED WITH AIRBORNE LIDAR TECHNOLOGY FOR THE ENTIRE AREA OF RHODE ISLAND BETWEEN APRIL 22 AND MAY 6, 2011 AS PART OF THE NORTHEAST LIDAR PROJECT. THIS DATA'S POSITIONAL ACCURACY AND RELIABILITY HAS NOT BEEN VERIFIED BY DIPRETE ENGINEERING AND IS SUBJECT TO CHANGES AN AUTHORITATIVE FIELD SURVEY MAY DISCLOSE.

Demolition Notes:

1. ALL EXISTING UTILITIES SHOWN ARE FROM VISIBLE INFORMATION, DRAWINGS FROM OTHERS, OR INFORMATION PROVIDED TO DIPRETE ENGINEERING AND ARE SUBJECT TO CHANGE. THE LOCATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM AFOREMENTIONED PLANS OF RECORD AND ARE APPROXIMATE ONLY. PRIOR TO CONSTRUCTION, THE PROPER UTILITY ENGINEERING DEPARTMENTS SHALL BE CONTACTED AND THE ACTUAL LOCATION OF SUBSURFACE STRUCTURES SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. CALL THE DIG SAFE CENTER TOLL FREE AT 1-888-344-7233 72 HOURS PRIOR TO EXCAVATION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO EXCAVATION. ANY DAMAGE TO UTILITIES WHICH ARE SHOWN ON THE PLANS OR DETAILED BY DIG SAFE SHALL BE THE SITE CONTRACTORS RESPONSIBILITY.
2. CONTRACTOR TO OBTAIN ALL FEDERAL, STATE, AND MUNICIPAL APPROVALS PRIOR TO THE START OF CONSTRUCTION.
3. CONTRACTOR TO PERFORM DAILY SWEEPING AT CONSTRUCTION ENTRANCE DURING DEMOLITION AND CONSTRUCTION TO MINIMIZE SEDIMENTS ON GOODING AVENUE.
4. ANY DAMAGE TO THE PROPERTY CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) ALL MATERIALS INDICATED ON THE PLANS UNLESS SPECIFIED OTHERWISE HERE IN. R&D MATERIALS TO INCLUDE BUT NOT LIMITED TO PAVEMENT, GRAVEL, CATCH BASINS, MANHOLES, GRATES/FRAMES/COVERS, AND ANY EXCESS SOIL THAT IS NOT INCORPORATED INTO THE WORK.
6. IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, ALL DISTURBED AREAS INCLUDING THE CONTRACTOR'S STOCKPILE AND STAGING AREAS WITHIN THE LIMIT OF WORK SHALL BE RESTORED TO MATCH THE DESIGN PLANS.

Traffic Notes:

1. DURING CONSTRUCTION TRAFFIC CONES ARE TO BE USED FOR SEPARATION OF ACTIVE TRAFFIC FROM WORK ZONE.
2. DURING CONSTRUCTION FLAGGERS SHALL BE EMPLOYED TO ENSURE SAFETY FOR INTERACTION OF CONSTRUCTION VEHICLES AND ACTIVE TRAFFIC.
3. ALL SIGNS, FLAGGERS, TRAFFIC CONTROL DEVICES, AND TEMPORARY TRAFFIC ZONE ACTIVITIES SHALL MEET THE REQUIREMENTS OF THE MUTCD LATEST EDITION AND SUBSEQUENT ADDENDA.
4. TEMPORARY CONSTRUCTION SIGNS SHALL BE MOUNTED ON RIDOT APPROVED SUPPORTS AND SHALL BE REMOVED OR COVERED WHEN NOT APPLICABLE.
5. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES CURRENT EDITION.

As-Built Notes:

1. ALL COMPONENTS OF THE DRAINAGE MUST BE ASBUILT PRIOR TO COVERING. ENGINEER TO BE NOTIFIED PRIOR TO COVERING FOR SURVEY ASBUILT LOCATIONS. ENGINEER WILL NOT ACCEPT FIELD MEASUREMENTS FROM THE SITE CONTRACTOR.

RIDOT Notes:

1. ALL WORK TO BE DONE WITHIN THE STATE RIGHT OF WAY (ROW) SHALL CONFORM TO RI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AMENDED AUGUST 2013 WITH ALL REVISIONS AND ADDENDA. STANDARD DETAILS FOR THIS WORK ARE RI STANDARD DETAILS 1998 EDITIONS WITH ALL REVISIONS.
2. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, INCLUDING ALL REVISIONS.
3. NO LANE OR SHOULDER CLOSURES SHALL BE PERFORMED WITHIN THE STATE'S R.O.W. DURING PEAK TRAFFIC HOURS.
4. SEWER AND WATER CONNECTIONS WITHIN THE STATE R.O.W. WILL REQUIRE A SEPARATE RIDOT UTILITY PERMIT. CONTRACTOR TO OBTAIN BEFORE CONSTRUCTION.
5. THE DRAINAGE SYSTEM IS DESIGNED TO DECREASE BOTH STORM WATER RUNOFF RATE, DISCHARGE, AND STORM WATER RUNOFF VOLUME TO THE STATE RIGHT-OF-WAY FROM PRE-DEVELOPMENT TO POST-DEVELOPMENT. THERE WILL BE NO INCREASE IN RUNOFF TO THE STATE RIGHT OF WAY FROM THE PROPOSED DEVELOPMENT.

Layout and Materials:

1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
2. CURB RADII ARE 5 FEET UNLESS OTHERWISE NOTED.
3. CURBING SHALL BE PRECAST CONCRETE OR AS LABELED ON THE PLANS.
4. SIDEWALK SHALL BE CONCRETE, STAMPED CONCRETE OR AS LABELED ON THE PLANS.
5. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.
6. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
7. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR.
8. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.

Grading and Utility Notes:

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ONSITE. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER, THE DIRECTOR OF PUBLIC WORKS, THE TOWN ENGINEER, AND RI DEPT. OF ENVIRONMENTAL MANAGEMENT AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. CONTRACTOR TO OBTAIN ALL FEDERAL, STATE, AND MUNICIPAL APPROVALS PRIOR TO THE START OF CONSTRUCTION.
3. CONSTRUCTION TO COMMENCE SPRING 2021 OR UPON RECEIPT OF ALL NECESSARY APPROVALS.
4. ALL WORK PERFORMED HEREIN SHALL BE GOVERNED BY THE RHODE ISLAND STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AND TOWN OF BRISTOL STANDARD SPECIFICATIONS AND DETAILS.
5. SEQUENCE OF CONSTRUCTION PROVIDED IN SESC MAY BE MODIFIED AS FIELD CONDITIONS WARRANT WITH PRIOR APPROVAL FROM THE OWNER OR OWNER'S REPRESENTATIVE.
6. THE CONTRACTOR SHALL COORDINATE WITH ALL OF THE APPROPRIATE UTILITY COMPANIES FOR AGREEMENTS TO SERVICE THE PROPOSED BUILDING. THIS SHALL BE DONE PRIOR TO CONSTRUCTION. NO REPRESENTATIONS ARE MADE BY DIPRETE ENGINEERING THAT UTILITY SERVICE IS AVAILABLE.
7. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING FINISH GRADING AND DRAINAGE AROUND THE BUILDING TO ENSURE SURFACE WATER AND/OR GROUND WATER ARE DIRECTED AWAY FROM THE STRUCTURE.
8. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.
9. ALL PROPOSED UNDERGROUND UTILITIES SERVING THE SITE AND BUILDINGS TO BE COORDINATED WITH APPLICANT, ARCHITECT, AND ENGINEER PRIOR TO INSTALLATION.
10. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION INCLUDING ALL REVISIONS.
11. ALL RETAINING WALLS AND STEEP SLOPES ARE SHOWN SCHEMATICALLY ONLY AND DIPRETE ENGINEERING IS NOT PROVIDING THE DESIGN OF THESE ITEMS. THE ACTUAL WALLS AND SLOPES ARE TO BE BUILT UNDER THE DIRECTION OF A GEOTECHNICAL ENGINEER AND CERTIFIED TO THE OWNER PRIOR TO THE COMPLETION OF THE PROJECT. SHOP DRAWINGS TO BE SUBMITTED PRIOR TO CONSTRUCTION.
12. ALL CUT AND FILL AREAS ARE TO BE DONE UNDER THE DIRECTION OF A GEOTECHNICAL ENGINEER WITH TESTING AND CERTIFICATION TO BE PROVIDED TO THE APPLICANT AT THE COMPLETION OF THE PROJECT. DIPRETE ENGINEERING ASSOCIATES, INC. IS NOT PROVIDING THE FILL SPECIFICATION, GEOTECHNICAL ENGINEERING, STRUCTURAL ENGINEERING SERVICES, OR SUPERVISION AS PART OF THESE DRAWINGS.
13. ALL COMPONENTS OF THE DRAINAGE, SEWER AND WATER SYSTEMS MUST BE ASBUILT PRIOR TO COVERING. ENGINEER TO BE NOTIFIED PRIOR TO COVERING TO SURVEY ASBUILT LOCATIONS. ENGINEER WILL NOT ACCEPT FIELD MEASUREMENTS FROM THE SITE CONTRACTOR.
14. NO STOCKPILING OF MATERIAL TO BE LOCATED IN THE RIGHT OF WAY AND NO OPEN TRENCHES ARE TO BE LEFT OVERNIGHT.
15. ALL LOAM IN DISTURBED AREAS TO BE STOCKPILED FOR FUTURE USE.
16. ALL EXCESS SOIL, TREES, ROCKS, BOULDERS, AND OTHER REFUSE, SHALL BE DISCARDED OFF SITE IN AN ACCEPTABLE MANNER AT AN APPROVED LOCATION. STUMPS SHALL BE GROUND ONSITE OR REMOVED.
17. NO STUMP DUMPS ARE PROPOSED ONSITE.
18. IF CONCRETE TRUCKS ARE WASHED OUT ONSITE, ALL WASHOUT MUST BE COMPLETED IN THE DESIGNATED CONCRETE WASHOUT AREA.

ADA Notes:

1. ALL IMPROVEMENTS SHALL COMPLY WITH THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG)" BY THE DEPARTMENT OF JUSTICE.
2. MAXIMUM RUNNING SLOPE ALONG ALL ACCESSIBLE PATHS OF TRAVEL SHALL BE 4.8% OR 0.045 %, AND MAXIMUM CROSS SLOPE ALONG ALL ACCESSIBLE PATHS OF TRAVEL SHALL BE 0.015%.
3. MAXIMUM SLOPE IN ALL DIRECTIONS FOR ALL ACCESSIBLE PARKING SPACES AND LOADING AREAS SHALL BE 0.015%.
4. A 5'x5' LANDING WITH A MAXIMUM SLOPE OF 1.5% OR 0.015%, IN ALL DIRECTIONS SHALL BE PROVIDED IN FRONT OF ALL PUBLICLY ACCESSIBLE BUILDING ENTRANCES/EGRESSES.
5. SIDEWALK CURB RAMPS SHALL COMPLY WITH DIPRETE ENGINEERING DETAILS THAT MEET OR EXCEEDING RIDOT STANDARDS 43.2.0, 43.3.1, & 43.4.1 AS SHOWN ON THE DETAIL SHEET.
6. PLEASE NOTE THAT THE GRADING AND PLAN VIEWS AS WELL AS THE STANDARD DETAILS MAY NOT SHOW THE DETAIL NECESSARY TO CONSTRUCT WALKWAYS AND RAMPS TO ADA STANDARDS. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE LEVEL OF CARE NECESSARY TO BE CERTAIN THAT THE CONSTRUCTED PRODUCT MEETS ADA STANDARDS. IN THE EVENT OF ANY CONFLICTS THE CONTRACTOR SHALL NOTIFY THE DESIGNER BEFORE CONSTRUCTION FOR ADVICE IN FINDING A RESOLUTION.

Soil Erosion and Sedimentation Control Notes:

1. ALL EROSION CONTROL, TEMPORARY SWALES, TEMPORARY SEDIMENTATION TRAPS, ETC. SHALL BE INSTALLED PER THE RHODE ISLAND SOIL EROSION AND SEDIMENTATION CONTROL LATEST EDITION AND THE SOIL EROSION SEDIMENTATION CONTROL PLAN (SESC).
2. TEMPORARY SWALES SHALL BE USED TO CONTROL RUNOFF DURING CONSTRUCTION. TEMPORARY SWALES SHALL BE VEGETATED AFTER CONSTRUCTION. EROSION CONTROL MATS SHALL BE INSTALLED IF NECESSARY TO PREVENT EROSION AND SUPPORT VEGETATION. AFTER CONSTRUCTION IS COMPLETE AND TRIBUTARY AREA TO THE SWALES HAVE BEEN STABILIZED, THE TEMPORARY SWALES SHALL BE CLEANED AND FINAL DESIGN, INCLUDING INSTALLATION OF THE GRASS SWALE SHALL BE PER THE DESIGN PLANS.
3. ONCE THE SEDIMENTATION TRAP IS NO LONGER REQUIRED AND ALL TRIBUTARY AREAS HAVE BEEN STABILIZED, THE TEMPORARY SEDIMENTATION TRAP SHALL CLEANED AND BROUGHT TO FINAL DESIGN GRADES.
4. INLET PROTECTION SHALL BE INSTALLED ON ALL CATCH BASINS ONCE CONSTRUCTED.
5. SEE SECTION 2.2 OF THE SESC FOR SEQUENCE OF CONSTRUCTION ACTIVITY.
6. SEE SECTION 2.0 OF THE SESC FOR PROJECT PHASING.
7. CONTRACTOR MAY MODIFY SEQUENCE OF CONSTRUCTION WITH APPROVAL FROM DESIGN ENGINEER.
8. FOR CONSTRUCTION PHASING SEE SECTION 2.2 OF SOIL EROSION AND SEDIMENT CONTROL PLAN.

Abbreviations Legend

AP	ASSESSOR'S PLAT	OHW	OVERHEAD WIRE
BC	BOTTOM OF CURB	PE	POLYETHYLENE
BT	BOTTOM OF TESTHOLE	℄	PROPERTY LINE
BIT	BITUMINOUS (BERM)	PR	PROPOSED
BIO	BIORETENTION	PVC	POLYVINYL CHLORIDE
BW	BOTTOM OF WALL (FINISHED GRADE AT BOTTOM OF WALL)	R	RADIUS
		R&D	REMOVE AND DISPOSE
CB	CATCH BASIN	RCP	REINFORCED CONCRETE PIPE
(C)	CALCULATED	RIHB	RHODE ISLAND HIGHWAY BOUND
℄	CENTERLINE		
(CA)	CHORD ANGLE	RL	ROOF LEADER
CLDIP	CONCRETE LINED DUCTILE IRON PIPE	ROW	RIGHT OF WAY
CO	CLEAN OUT	S	SLOPE
CONC	CONCRETE	SD	SUBDRAIN
(D)	DEED	SED	SEDIMENT FOREDAY
DCB	DOUBLE CATCH BASIN	SE	SLAB ELEVATION
DI	DROP INLET	SF	SQUARE FOOT
DMH	DRAINAGE MANHOLE	SFL	STATE FREEWAY LINE
DP	DETENTION POND	SFM	SEWER FORCE MAIN
EOP	EDGE OF PAVEMENT	SHL	STATE HIGHWAY LINE
ESC	EROSION AND SEDIMENT CONTROL	SMH	SEWER MANHOLE
EX	EXISTING	SNDF	SAND FILTER
FES	FLARED END SECTION	SS	SIDE SLOPE
FFE	FINISH FLOOR ELEVATION	STA	STATION
GFE	GARAGE FLOOR ELEVATION	TC	TOP OF CURB
GWT	GROUND WATER TABLE	TD	TRENCH DRAIN
HC	HANDICAPPED	TF	TOP OF FOUNDATION
HW	HEADWALL	TRANS	TRANSITION
HC	HIGH CAPACITY CATCH BASIN GRATE	TW	TOP OF WALL (FINISHED GRADE AT TOP OF WALL)
HDPE	HIGH DENSITY POLYETHYLENE		
IO	INLINE ORAIN	TYP	TYPICAL
INV	INVERT	UDS	UNDERGROUND DETENTION SYSTEM
IP	INFILTRATION POND		
LF	LINEAR FEET	UIS	UNDERGROUND INFILTRATION SYSTEM
LOD	LIMIT OF DISTURBANCE		
LP	LIGHT POLE	UP	UTILITY POLE
(M)	MEASURED	WO	WALKOUT
M/F	NOW OR FORMERLY	WQ	WATER QUALITY

Existing Legend

(AS SHOWN ON PROPOSED PLANS)

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

- PROPERTY LINE
- ASSESSORS LINE
- BUILDING
- BRUSHLINE
- TREELINE
- GUARDRAIL
- FENCE
- RETAINING WALL
- STONE WALL
- MINOR CONTOUR LINE
- MAJOR CONTOUR LINE
- WATER LINE
- SEWER LINE
- SEWER FORCE MAIN
- GAS LINE
- ELECTRIC LINE
- OVERHEAD WIRES
- DRAINAGE LINE
- SOILS LINES
- 50' PERIMETER WETLAND
- 100' RIVERBANK WETLAND
- 200' RIVERBANK WETLAND
- NATURAL HERITAGE AREA
- FEMA BOUNDARY
- STREAM
- WETLAND LINE & FLAG
- NATURAL HERITAGE AREA
- NAIL FOUND/SET
- DRILL HOLE FOUND/SET
- BOUND FOUND/SET
- SIGN
- BOLLARD
- SOIL EVALUATION
- CATCH BASIN
- DOUBLE CATCH BASIN
- DRAINAGE MANHOLE
- FLARED END SECTION
- GUY POLE
- ELECTRIC MANHOLE
- UTILITY/POWER POLE
- LIGHTPOST
- SEWER/SEPTIC MANHOLE
- SEWER VALVE
- CLEANOUT
- HYDRANT
- IRRIGATION VALVE
- WATER VALVE
- WELL
- MONITORING WELL
- UNKNOWN MANHOLE
- GAS VALVE
- BENCH MARK
- STREAM FLOW DIRECTION

Proposed Legend

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

- PROPERTY LINE
- BUILDING SETBACKS
- TREELINE
- CHAINLINK FENCE
- GUARDRAIL (RIDOT STD 34.2.0, 34.4.0 OR APPROVED EQUAL)
- RETAINING WALL
- MINOR CONTOUR LINE
- MAJOR CONTOUR LINE
- SPOT ELEVATION
- EDGE OF PAVEMENT
- CONCRETE CURB (RIDOT STD 7.1.0)
- BUILDING FOOTPRINT
- BUILDING OVERHANG
- ASPHALT PAVEMENT
- STAMPED CONCRETE
- CONCRETE SIDEWALK
- SAWCUT LINE
- SIGN (RIDOT STD 24.0.2 AS APPLICABLE)
- SINGLE LIGHT
- DOUBLE LIGHT
- OVERHANGING LIGHT
- ACCESSIBLE PARKING SPACE SYMBOLS
- TRANSFORMER PAD WITH BOLLARDS (PER NATIONAL GRID STANDARD)
- DRAINAGE LINE
- ROOF LEADER
- GAS LINE
- WATER LINE
- HYDRANT ASSEMBLY
- WATER SHUT OFF
- WATER VALVE
- THRUST BLOCK
- SEWER LINE
- OVERHEAD WIRE ELECTRIC, TELEPHONE, CABLE LINE
- LIMIT OF DISTURBANCE – NO EROSION CONTROL
- STRAW WATTLE, SILT FENCE (RIDOT STD 9.2.0) OR APPROVED EQUAL AT LIMIT OF DISTURBANCE
- 2:1 SLOPES
- UNDERGROUND SYSTEM OUTLINE
- POND ACCESS
- RIP RAP
- SAND FILTER
- CATCH BASIN
- DOUBLE CATCH BASIN
- MANHOLE
- FLARED END SECTION
- HEAD WALL
- SHRUB
- TREE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: DEC 06 2024 FILE #: 22-0604
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
NOV 03 2023

Utility Note:

ALL UNDERGROUND UTILITIES SHOWN ON THESE PLANS WERE PROVIDED BY OTHERS AND ARE APPROXIMATE ONLY. LOCATIONS MUST BE DETERMINED IN THE FIELD BEFORE EXCAVATION, BLASTING, UTILITY INSTALLATION, BACKFILLING, GRADING, PAVEMENT RESTORATION, AND ALL OTHER SITE WORK. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THESE DOCUMENTS. CONTACT DIG SAFE A MINIMUM OF 72 WORKING HOURS PRIOR TO ANY CONSTRUCTION AT 811. DIG SAFE IS RESPONSIBLE FOR CONTACTING MEMBER UTILITY COMPANIES. DIG SAFE MEMBER UTILITY COMPANIES ARE RESPONSIBLE TO MARK ONLY THE FACILITIES THAT THEY OWN OR MAINTAIN. NON DIG SAFE MEMBER COMPANIES ARE NOT NOTIFIED BY DIG SAFE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE AND NOTIFY IF ANY PRIVATELY OWNED OR NON DIG SAFE MEMBER UTILITIES ARE IN THE AREA.

PER THE CODE OF FEDERAL REGULATIONS – TITLE 29, PART 1926 IT IS THE SITE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ACCURATE UNDERGROUND UTILITY LINE LOCATIONS FROM THE UTILITY COMPANIES. UTILITY OWNERS AND, OR VIA UNDERGROUND UTILITY LOCATION EQUIPMENT AS NEEDED TO ESTABLISH ACCURATE LOCATIONS PRIOR TO ANY EXCAVATION. THE USE OF PROFESSIONAL UTILITY LOCATING COMPANIES PRIOR TO ANY EXCAVATION IS RECOMMENDED.

DIPRETE ENGINEERING IS NOT A PROFESSIONAL UTILITY LOCATION COMPANY, AND IS NOT RESPONSIBLE FOR UNDERGROUND UTILITIES, DEPICTED OR NOT, EITHER IN SERVICE OR ABANDONED, ANY SIZES, LOCATIONS, EXISTENCE, OR LACK OF EXISTENCE OF UTILITIES SHOWN ON THESE PLANS SHOULD BE CONSIDERED APPROXIMATE UNTIL VERIFIED BY A PROFESSIONAL UTILITY LOCATION COMPANY. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED.

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tel 401-619-2590 fax 401-847-6666 www.diprete-eng.com
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KEVIN DEMERS
REGISTERED PROFESSIONAL ENGINEER
CIVIL

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The contractor is responsible for all of the means, methods, safety precautions and procedures, and OSHA conformance in the implementation of this plan and design.

NO.	DATE	DESCRIPTION
1	10/25/21	PER PLANNING BOARD COMMENTS
2	12/13/21	PER PLANNING BOARD COMMENTS
3	1/24/22	PER PLANNING BOARD COMMENTS
4	2/14/22	PER PLANNING BOARD COMMENTS
5	3/14/22	PER PLANNING BOARD COMMENTS
6	4/25/22	PER PLANNING BOARD COMMENTS
7	5/23/22	PER PLANNING BOARD COMMENTS
8	6/27/22	PER PLANNING BOARD COMMENTS
9	8/15/22	PER PLANNING BOARD COMMENTS
10	9/19/22	PER PLANNING BOARD COMMENTS
11	10/24/22	PER PLANNING BOARD COMMENTS
12	11/28/22	PER PLANNING BOARD COMMENTS
13	12/19/22	PER PLANNING BOARD COMMENTS
14	1/23/23	PER PLANNING BOARD COMMENTS
15	2/27/23	PER PLANNING BOARD COMMENTS
16	3/27/23	PER PLANNING BOARD COMMENTS
17	4/24/23	PER PLANNING BOARD COMMENTS
18	5/22/23	PER PLANNING BOARD COMMENTS
19	6/26/23	PER PLANNING BOARD COMMENTS
20	7/24/23	PER PLANNING BOARD COMMENTS
21	8/28/23	PER PLANNING BOARD COMMENTS
22	9/25/23	PER PLANNING BOARD COMMENTS
23	10/23/23	PER PLANNING BOARD COMMENTS
24	11/27/23	PER PLANNING BOARD COMMENTS
25	12/18/23	PER PLANNING BOARD COMMENTS
26	1/22/24	PER PLANNING BOARD COMMENTS
27	2/26/24	PER PLANNING BOARD COMMENTS
28	3/25/24	PER PLANNING BOARD COMMENTS
29	4/22/24	PER PLANNING BOARD COMMENTS
30	5/20/24	PER PLANNING BOARD COMMENTS
31	6/24/24	PER PLANNING BOARD COMMENTS
32	7/22/24	PER PLANNING BOARD COMMENTS
33	8/26/24	PER PLANNING BOARD COMMENTS
34	9/23/24	PER PLANNING BOARD COMMENTS
35	10/28/24	PER PLANNING BOARD COMMENTS
36	11/25/24	PER PLANNING BOARD COMMENTS
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39	2/24/25	PER PLANNING BOARD COMMENTS
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42	5/26/25	PER PLANNING BOARD COMMENTS
43	6/23/25	PER PLANNING BOARD COMMENTS
44	7/28/25	PER PLANNING BOARD COMMENTS
45	8/25/25	PER PLANNING BOARD COMMENTS
46	9/22/25	PER PLANNING BOARD COMMENTS
47	10/27/25	PER PLANNING BOARD COMMENTS
48	11/24/25	PER PLANNING BOARD COMMENTS
49	12/22/25	PER PLANNING BOARD COMMENTS
50	1/26/26	PER PLANNING BOARD COMMENTS

Drawn By: DJM | Design By: KJD

General Notes And Legend
Mainstay/Sleep Inn Hotel

Applicant: D&M BOCA DEVELOPMENT, LLC
Owner: Kendan, LLC
92 Faunce Corner Road, Suite 180, North Dartmouth, MA 02747
Site Address: 813 Aquidneck Avenue, Middletown, RI 02842
Plat 111 Lot 1
Bristol, RI
Zone GB

SHEET 3 OF 11

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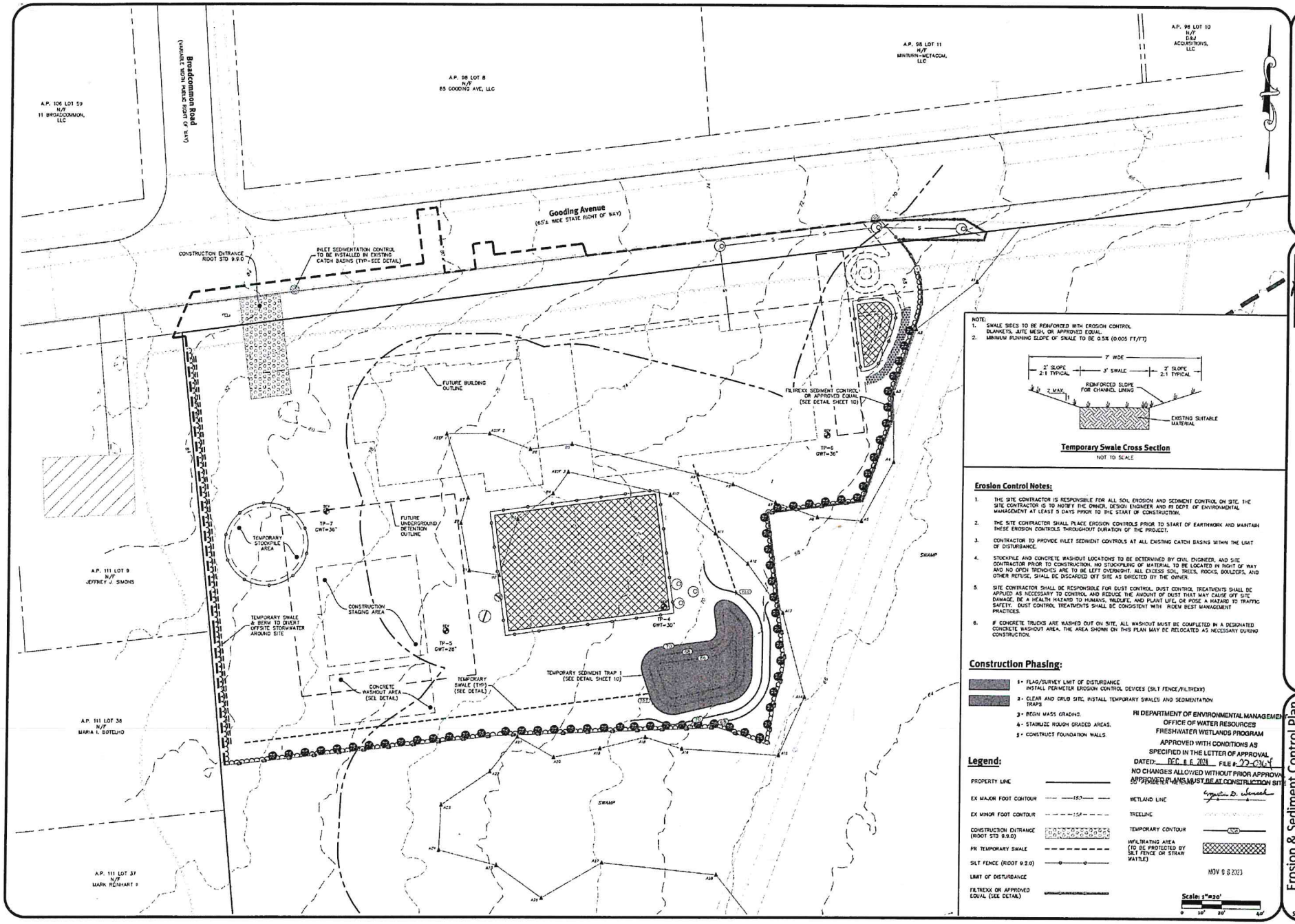

NOTE:
1. SWALE SIDES TO BE REINFORCED WITH EROSION CONTROL BLANKETS, JUTE MESH, OR APPROVED EQUAL.
2. MINIMUM RUNNING SLOPE OF SWALE TO BE 0.5% (0.005 FT/FT)

Temporary Swale Cross Section
NOT TO SCALE

Erosion Control Notes:

1. THE SITE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ON SITE. THE SITE CONTRACTOR IS TO NOTIFY THE OWNER, DESIGN ENGINEER AND RI DEPT. OF ENVIRONMENTAL MANAGEMENT AT LEAST 5 DAYS PRIOR TO THE START OF CONSTRUCTION.
2. THE SITE CONTRACTOR SHALL PLACE EROSION CONTROLS PRIOR TO START OF EARTHWORK AND MAINTAIN THESE EROSION CONTROLS THROUGHOUT DURATION OF THE PROJECT.
3. CONTRACTOR TO PROVIDE INLET SEDIMENT CONTROLS AT ALL EXISTING CATCH BASINS WITHIN THE LIMIT OF DISTURBANCE.
4. STOCKPILE AND CONCRETE WASHOUT LOCATIONS TO BE DETERMINED BY CIVIL ENGINEER, AND SITE CONTRACTOR PRIOR TO CONSTRUCTION. NO STOCKPILING OF MATERIAL TO BE LOCATED IN RIGHT OF WAY AND NO OPEN TRENCHES ARE TO BE LEFT OVERNIGHT. ALL EXCESS SOIL, TREES, ROCKS, BOULDERS, AND OTHER REFUSE, SHALL BE DISCARDED OFF SITE AS DIRECTED BY THE OWNER.
5. SITE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL. DUST CONTROL TREATMENTS SHALL BE APPLIED AS NECESSARY TO CONTROL AND REDUCE THE AMOUNT OF DUST THAT MAY CAUSE OFF SITE DAMAGE, BE A HEALTH HAZARD TO HUMANS, WILDLIFE, AND PLANT LIFE, OR POSE A HAZARD TO TRAFFIC SAFETY. DUST CONTROL TREATMENTS SHALL BE CONSISTENT WITH RIDEM BEST MANAGEMENT PRACTICES.
6. IF CONCRETE TRUCKS ARE WASHED OUT ON SITE, ALL WASHOUT MUST BE COMPLETED IN A DESIGNATED CONCRETE WASHOUT AREA. THE AREA SHOWN ON THIS PLAN MAY BE RELOCATED AS NECESSARY DURING CONSTRUCTION.

Construction Phasing:

1. FLAG/SURVEY LIMIT OF DISTURBANCE INSTALL PERIMETER EROSION CONTROL DEVICES (SILT FENCE/FILTREXX)
2. CLEAR AND GRUB SITE, INSTALL TEMPORARY SWALES AND SEDIMENTATION TRAPS
3. BEGIN MASS GRADING.
4. STABILIZE ROUGH GRADED AREAS.
5. CONSTRUCT FOUNDATION WALLS.

Legend:

- PROPERTY LINE
- EX MAJOR FOOT CONTOUR
- EX MINOR FOOT CONTOUR
- CONSTRUCTION ENTRANCE (RIDOT STD 9.9.0)
- PR TEMPORARY SWALE
- SILT FENCE (RIDOT 9.2.0)
- LIMIT OF DISTURBANCE
- FILTREXX OR APPROVED EQUAL (SEE DETAIL)
- WETLAND LINE
- TREELINE
- TEMPORARY CONTOUR
- INFILTRATING AREA (TO BE PROTECTED BY SILT FENCE OR STRAW WATTLE)

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: DEC 06 2024 FILE #: 22-0364
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

NOV 08 2023

Scale: 1"=20'
0 10' 20' 40'

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KEVIN DEMERS
No. 8567
REGISTERED PROFESSIONAL ENGINEER
CIVIL

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The contractor is responsible for all of the means, methods, techniques, sequences and procedures, and OSHA compliance in the implementation of this plan and design

No.	Date	Description	By
4	10/11/2024	CW/RIDEM RFI comments	DJC
3	08/30/2024	CW/RIDEM RFI comments	DJC
2	06/20/2024	ADA/RIDEM RFI comments	DJC
1	04/19/2024	CW/RIDEM RFI comments	DJC
0	03/13/2024	1st Submission per RIDEM comments	KJD

Drawn By: DJC | Design By: KJD

Erosion & Sediment Control Plan
Mainstay/Sleep Inn Hotel

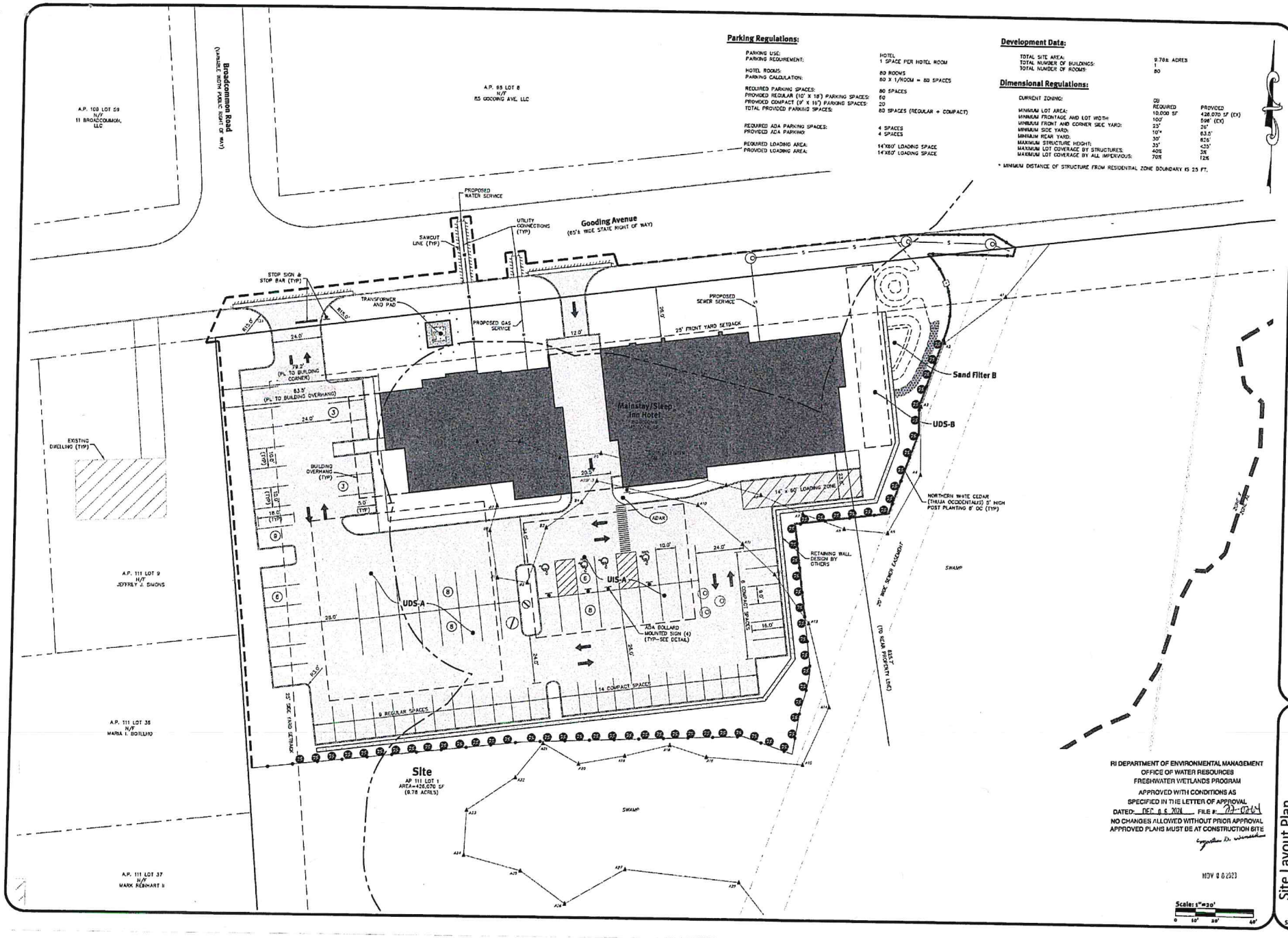
AP 211 Lot 1
Bristol, Rhode Island

Owner:
D&M BOCA DEVELOPMENT, LLC
1 Old Boston Post Rd.
North Scituate, RI 02857

Prepared for:
Keridan, LLC
c/o Dominick Sica
1 Old Boston Post Rd.
North Scituate, RI 02857

Architect:
Christiansen & Gallup

SHEET 4 OF 11



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The contractor is responsible for all of the means, methods, safety precautions and procedures, and shall coordinate the implementation of this plan and design.

No.	Date	Description	By
1	10/13/23	Revised per Comments	KDD
2	10/26/23	Revised per Comments	KDD
3	11/8/23	Revised per Comments	KDD
4	11/27/23	Revised per Comments	KDD
5	12/12/23	Revised per Comments	KDD
6	12/19/23	Revised per Comments	KDD
7	1/5/24	Revised per Comments	KDD

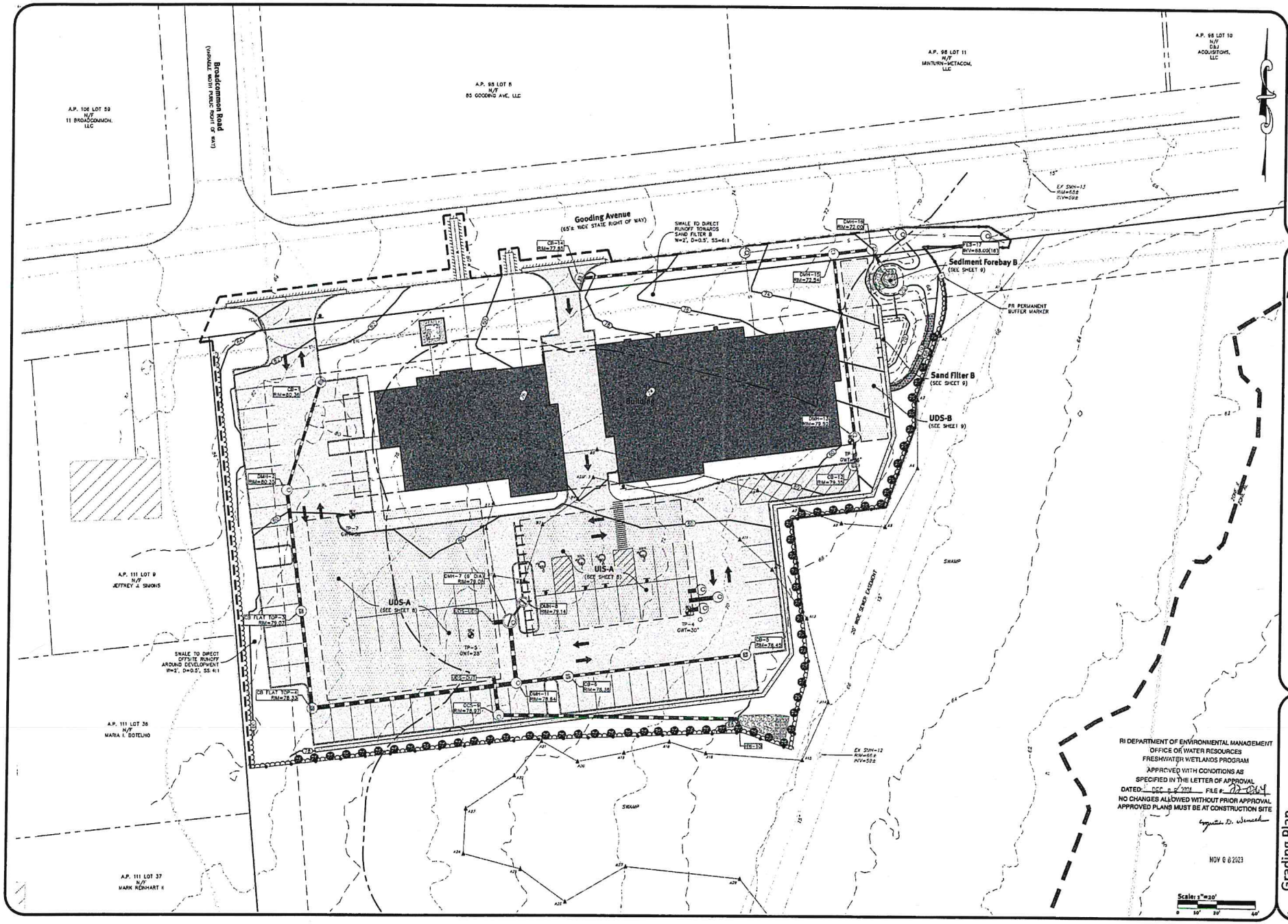
Drawn By: D.E.P.I. Design By: K.D.

Site Layout Plan
Mainstay/Sleep Inn Hotel
AP 111 Lot 1
Bristol, Rhode Island

Owner
D&M BOCA DEVELOPMENT, LLC
14 Bruce Reynolds Blvd, Suite 104
Fall River, MA 02722

Kendan, LLC
Conference and Suite
44 Anthony Avenue, Providence, Rhode Island

SHEET 5 OF 11



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KEVIN DEMERS
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The contractor is responsible for all of the means, methods, safety precautions and requirements necessary for performance in the implementation of this plan and design.

No.	Date	Description	By
1	10/27/2023	Revised per RIDEM comments	KJD
2	11/13/2023	Revised per RIDEM comments	KJD
3	11/17/2023	Revised per RIDEM comments	KJD
4	12/7/2023	Revised per RIDEM comments	KJD

Drawn By: D.R.K. Design By: K.J.D.

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: DEC 8 2023 FILE #: 23-0164
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
NOV 0 8 2023

Scale: 1"=20'
0 10' 20' 40'

Grading Plan

Mainstay/Sleep Inn Hotel

AP 111 Lot 11
Bristol, Rhode Island

Applicant
D&M BOCA DEVELOPMENT, LLC
167 Access Center Road, Suite 104
North Kingstown, RI 02852

Owner
Kendan, LLC
J.A. Brown and Sons
141 Hardscrabble Avenue, Middletown, RI 02842

SHEET 6 OF 11

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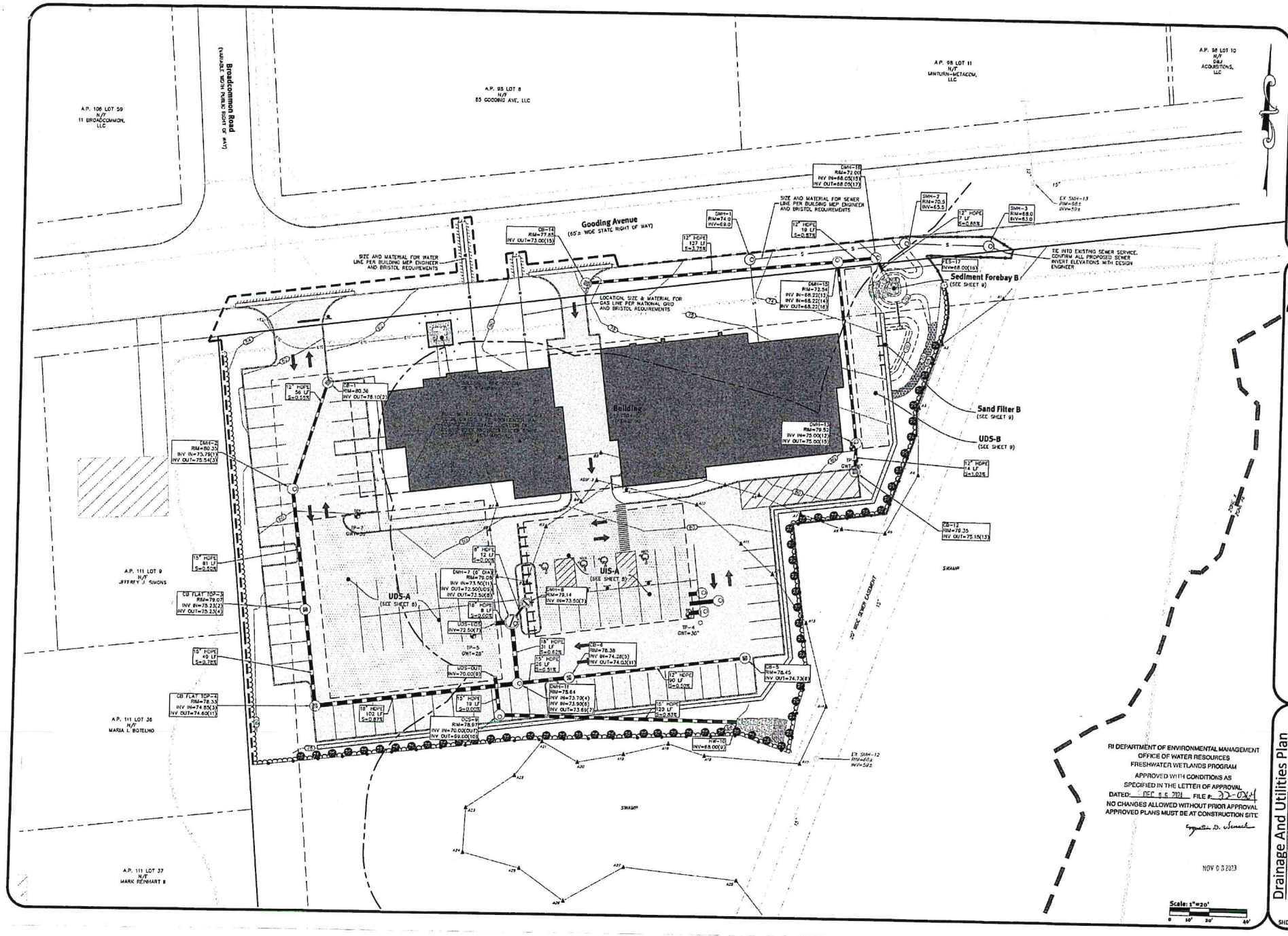

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The contractor is responsible for all of the means, methods, techniques, sequences and procedures, and OSHA requirements in the implementation of this plans and design.

No.	Date	Description	By
1	03.01.2024	ADD SEWER EASEMENT	LAK
2	07.01.2024	ADD SEWER EASEMENT	LAK
3	08.01.2024	ADD SEWER EASEMENT	LAK
4	09.01.2024	ADD SEWER EASEMENT	LAK
5	10.01.2024	ADD SEWER EASEMENT	LAK
6	11.01.2024	ADD SEWER EASEMENT	LAK

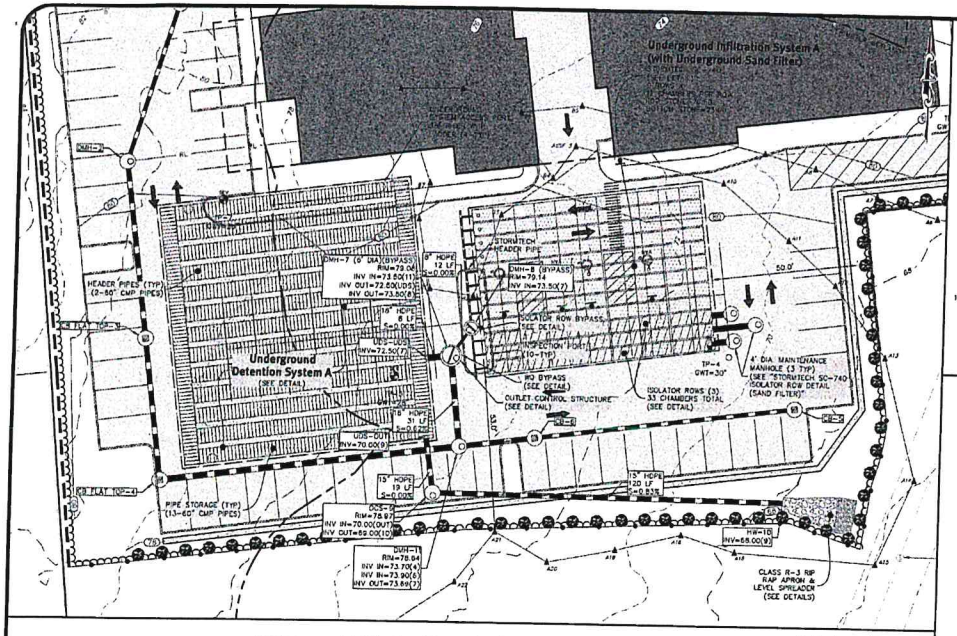
Design By: KJD
Drawn By: DJH

Drainage And Utilities Plan
Mainstay/Sleep Inn Hotel

Address:
400 Gooding Avenue
Bristol, Rhode Island
AP 111 Lot 9

Owner:
DRUM BOCA DEVELOPMENT, LLC
87 Technology Park, Suite 104
Huntington Beach, CA 92648

Applicant:
Kendan, LLC
c/o Dutchman's 2-2004
40 Aquidneck Avenue, Middletown, RI 02842



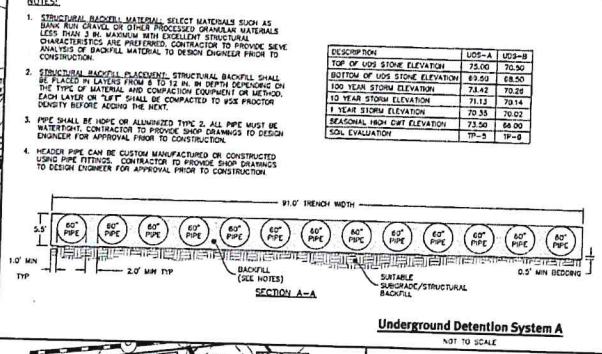
Underground Infiltration/Detention System A (UIS-A & UDS-A)

Scale: 1"=20'

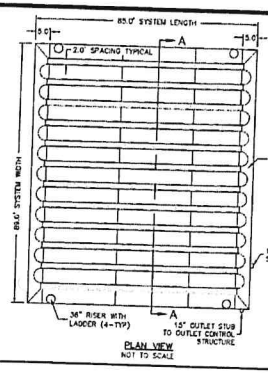
NOTES:

1. STRUCTURAL BACKFILL MATERIAL: SELECT MATERIALS SUCH AS BANK RUN GRAVEL OR OTHER PROCESSED GRANULAR MATERIALS LESS THAN 3 IN. MAXIMUM WITH EXCELLENT STRUCTURAL CHARACTERISTICS ARE PREFERRED. CONTRACTOR TO PROVIDE SIEVE ANALYSIS OF BACKFILL MATERIAL TO DESIGN ENGINEER PRIOR TO CONSTRUCTION.
2. STRUCTURAL BACKFILL PLACEMENT: STRUCTURAL BACKFILL SHALL BE PLACED IN LAYERS FROM 6 TO 12 IN. IN DEPTH DEPENDING ON THE TYPE OF MATERIAL AND COMPACTION EQUIPMENT OR METHOD. EACH LAYER OR "LIFT" SHALL BE COMPACTED TO 95% PROCTOR DENSITY BEFORE ADDING THE NEXT.
3. PIPE SHALL BE HDPE OR ALUMINIZED TYPE 2. ALL PIPE MUST BE WATERTIGHT. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO DESIGN ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
4. HEADER PIPE CAN BE CUSTOM MANUFACTURED OR CONSTRUCTED USING PIPE FITTINGS. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO DESIGN ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.

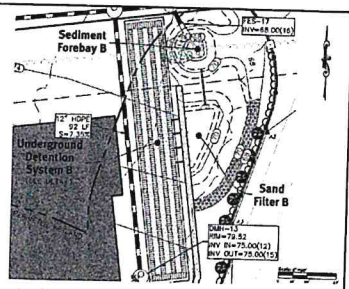
DESCRIPTION	UDS-A	UDS-B
TOP OF UDS STONE ELEVATION	75.00	70.50
BOTTOM OF UDS STONE ELEVATION	69.50	68.50
100 YEAR STORM ELEVATION	73.42	70.26
10 YEAR STORM ELEVATION	71.13	70.14
1 YEAR STORM ELEVATION	70.35	70.02
SEASONAL HIGH GWT ELEVATION	73.50	68.00
SOIL EVALUATION	TP-5	TP-8



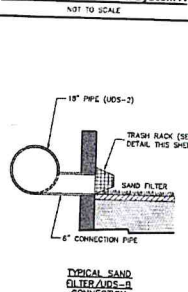
Underground Detention System A
NOT TO SCALE



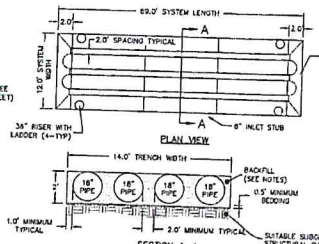
NOT TO SCALE



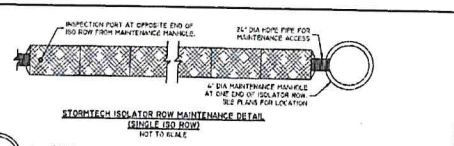
Underground Detention System B (UDS-B)



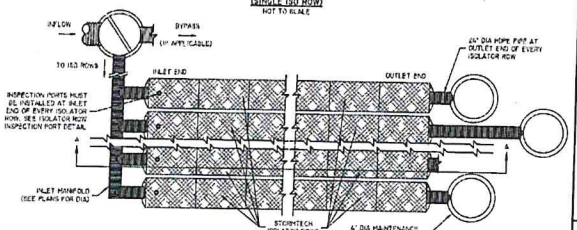
TYPICAL SAND FILTER/UDS-B CONNECTION
NOT TO SCALE



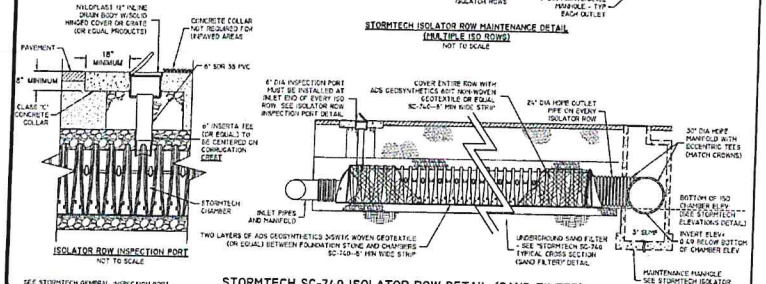
Underground Detention System B
NOT TO SCALE



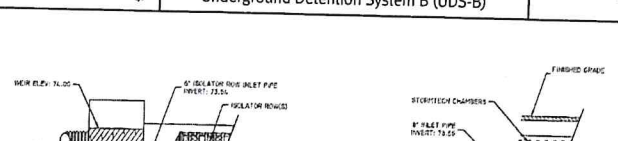
STORMTECH ISOLATOR ROW MAINTENANCE DETAIL
(SINGLE ISO ROW)
NOT TO SCALE



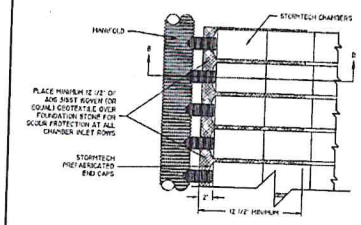
STORMTECH ISOLATOR ROW MAINTENANCE DETAIL
(MULTIPLE ISO ROWS)
NOT TO SCALE



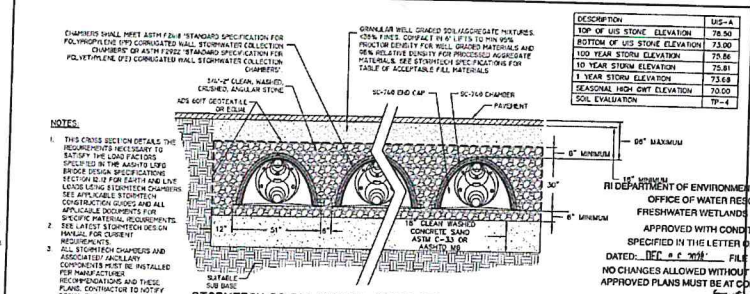
STORMTECH SC-740 ISOLATOR ROW DETAIL (SAND FILTER)
NOT TO SCALE



STORMTECH ELEVATIONS
NOT TO SCALE



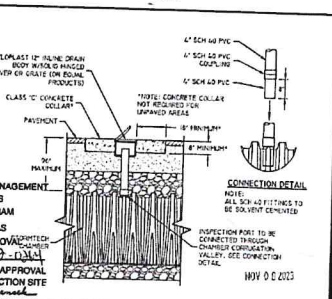
STORMTECH MANIFOLD DETAIL
NOT TO SCALE



DESCRIPTION	UIS-A
TOP OF UIS STONE ELEVATION	76.50
BOTTOM OF UIS STONE ELEVATION	73.00
100 YEAR STORM ELEVATION	75.86
10 YEAR STORM ELEVATION	75.81
1 YEAR STORM ELEVATION	73.69
SEASONAL HIGH GWT ELEVATION	70.00
SOIL EVALUATION	TP-4

STORMTECH SC-740 TYPICAL CROSS SECTION (SAND FILTER)
NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: DEC 6 2023 FILE #: 23-0354
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Signature



STORMTECH GENERAL INSPECTION PORT DETAIL
NOT TO SCALE

DiPrete Engineering
50 Broadway Newport, RI 02840
tel 401-639-9690 fax 401 424-6005 www.dipreteeng.com
Boston • Providence • Newport

KEVIN DEMERS
No. 15697
REGISTERED PROFESSIONAL ENGINEER
DATE

This regulatory submission is not shall not be used for construction purposes unless stamped "Issued for Construction" and signed by a DiPrete Engineering representative.

The contractor is responsible for all of the means, methods, techniques, procedures and requirements and OSHA compliance for the implementation of this plan and design.

No.	Date	Description	By
1	12/1/23	Revised per Comments	KJD
2	12/5/23	Revised per Comments	KJD
3	12/6/23	Revised per Comments	KJD
4	12/8/23	Revised per Comments	KJD
5	12/8/23	Revised per Comments	KJD
6	12/8/23	Revised per Comments	KJD
7	12/8/23	Revised per Comments	KJD

Design by: KJD
Drawn by: DRAL
Checked by: KJD

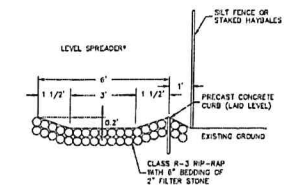
Underground Systems A & B Details
Mainstay/Sleep Inn Hotel
Assessor's Plat 1 Lot 1
Bristol, Rhode Island

Applicant:
D&M BOCA DEVELOPMENT, LLC
50 Pond Street, Suite 104
Stoughton, MA 02072

Owner:
Keedan, LLC
C/O Thomas and Sons
700 Washington Avenue, Middletown, RI 02842

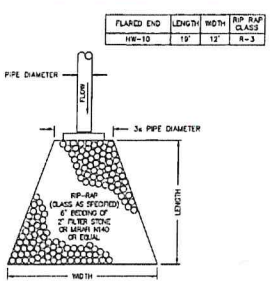
DE Job No: 23-06-001 Copyright 2023 by DiPrete Engineering Associates, Inc.

SHEET 8 OF 11



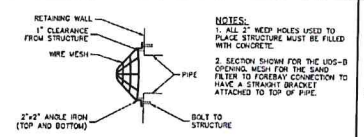
NOTE:
* LENGTHS AS SPECIFIED ON SITE PLANS

Level Spreader
NOT TO SCALE



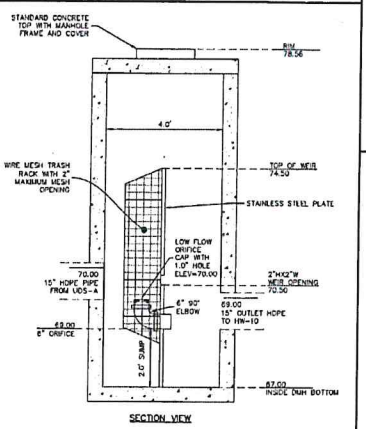
FLARED END	LENGTH	WIDTH	RIP RAP CLASS
HW-10	19'	12'	R-3

RIP RAP APRON/HW DETAIL
NOT TO SCALE

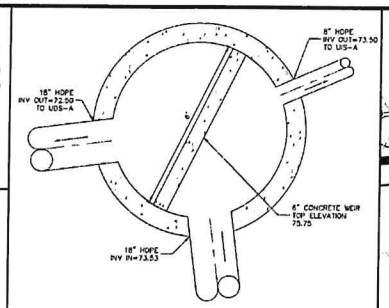


NOTES:
1. ALL 2" WEEP HOLES USED TO PLACE STRUCTURE MUST BE FILLED WITH CONCRETE.
2. SECTION SHOWN FOR THE UDS-B OPENING. MESH FOR THE SAND FILTER TO FOREBAY CONNECTION TO HAVE A STRAIGHT BRACKET ATTACHED TO TOP OF PIPE.

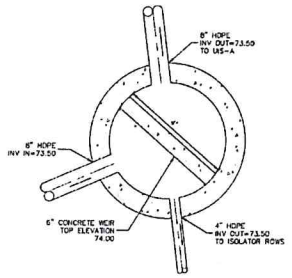
Trash Rack Detail
NOT TO SCALE



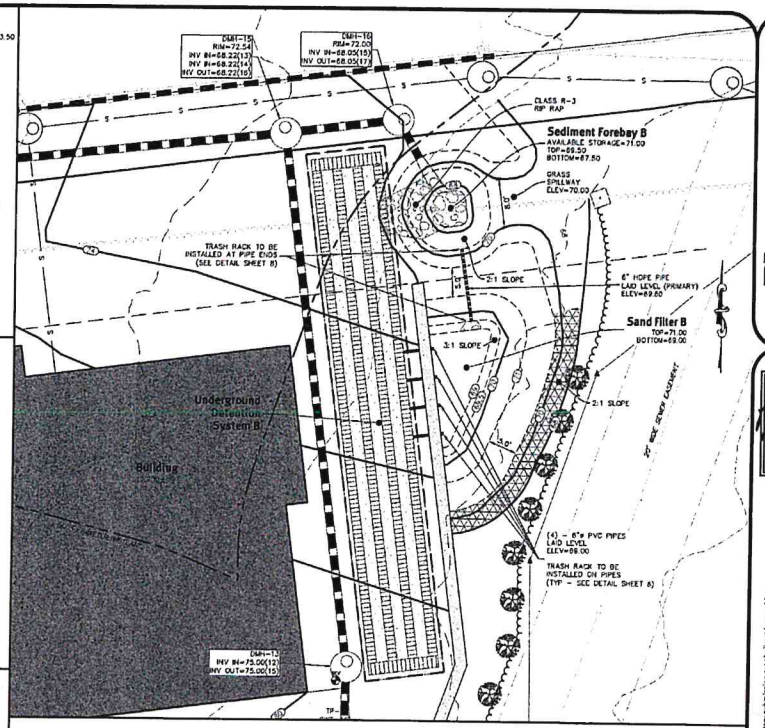
UDS-A Outlet Control Structure (OCS-9)
SCALE: 1"=2'



WQ Bypass DMH-7 (6'Ø Manhole)
SCALE 1"=2'



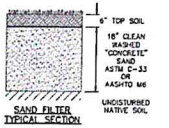
Isolator Row Bypass DMH-8 (4'Ø Manhole)
SCALE 1"=2'



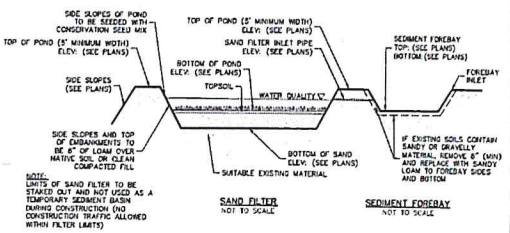
Sand Filter B

Scale: 1"=10'
0 5' 10' 20'

DESCRIPTION	SF-B
TOP OF POND ELEVATION	71.00
100 YEAR STORM ELEVATION	70.25
10 YEAR STORM ELEVATION	70.14
1 YEAR STORM ELEVATION	70.02
WQ STORM ELEVATION	69.36
BOTTOM OF POND ELEVATION	69.00
TOP SOIL DEPTH	6"
SAND DEPTH	18"
BOTTOM OF SAND ELEVATION	67.00
SEASONAL HIGH GWT ELEVATION	66.00
SOIL EVALUATION	TH-6



SAND FILTER TYPICAL SECTION



NOTE:
LIMITS OF SAND FILTER TO BE STAKED OUT AND NOT USED AS A TEMPORARY SEDIMENT BASIN DURING CONSTRUCTION. (NO CONSTRUCTION TRAFFIC ALLOWED WITHIN FILTER LIMITS)

SAND FILTER
NOT TO SCALE

SEDIMENT FOREBAY
NOT TO SCALE

Sand Filter BMP System
NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: DEC 05 2024 FILE #: 22-0161
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

NOV 05 2024

DiPrete Engineering
50 Broadway Newport, RI 02840
TEL 401 619 9390 FAX 401 846 6666 www.dipreteengineering.com
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KEVIN DEMERS
No. 8567
REGISTERED PROFESSIONAL ENGINEER
CIVIL

This regulatory submission set shall not be used for construction purposes unless stamped 'Issued for Construction' and signed by a DiPrete Engineering representative.

The contractor is responsible for all of the means, methods, safety precautions and requirements incidental to the execution of the implementation of this plan and design.

NO	DATE	DESCRIPTION	BY
1	4/23/2024	PER PEER REVIEW COMMENTS	KJD
2	5/24/2024	PER CLIENT COMMENTS	KJD
3	6/24/2024	PER PEER REVIEW COMMENTS	KJD
4	8/23/2024	PER RIDEM COMMENTS	KJD
5	10/7/2024	PER RIDEM COMMENTS	KJD
6	11/5/2024	PER RIDEM COMMENTS	KJD

Drawn By: DEM Designed By: KJD

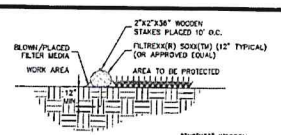
Sand Filter B and Details

Mainstay/Sleep Inn Hotel
AP 11 Lot 1
Bristol, Rhode Island

Applicant:
DELA BOCA DEVELOPMENT, LLC
611 Anthony Blvd, Suite 104
North Dartmouth, MA 02747

Owner:
Kendan, LLC
611 Anthony Blvd
North Dartmouth, MA 02747

SHEET 9 OF 11



NOTES:

1. ALL MATERIAL TO MEET FILTREXX(R) SPECIFICATIONS
2. FILTER MEDIA(TM) FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER
4. STAKES ARE NOT TO BE USED IN PAVEMENT AREAS.
5. SELF WEIGHT OF FILTREXX SYSTEM IS ADEQUATE TO PREVENT SYSTEM MOVEMENT ONCE POSITIONED ALONG AREA SHOWN ON THE PLANS.
6. CONTRACTOR TO PLACE FILTREXX SEDIMENT CONTROL OR APPROVED EQUAL AROUND ALL CURB INLET LOCATIONS AS SPECIFIED ON PLANS.

Filtrexx Sediment Control (or Approved Equal)

NOT TO SCALE

DiPrete Engineering
50 Broadway Newport, RI 02840
tel 401-683-9500 fax 401-846-8006 www.dipreteengr.com
Boston • Providence • Newport

GENERAL NOTES:

1. THE TEMPORARY SEDIMENT TRAP SHALL MEET ALL REQUIREMENTS FOR TEMPORARY SEDIMENT TRAPS OUTLINED IN THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (LATEST REVISION) SECTION SIX: SEDIMENT CONTROL MEASURES
2. THE TEMPORARY SEDIMENT TRAP SHALL HAVE AN INITIAL STORAGE VOLUME OF 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA.
3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER EXCEPT FOR THE EXCAVATED WET STORAGE AREA WHERE SLOPES SHALL NOT EXCEED 1.5:1.
4. THE OUTLET SHALL BE LOCATED AT THE MOST DISTANT HYDRAULIC POINT FROM THE INLET.
5. THE OUTLET CONSISTS OF A PERVIOUS STONE DIKE WITH A CORE OF MODIFIED RIPRAP AND FACED ON THE UPSTREAM SIDE WITH STONE.
6. TEMPORARY SEDIMENT TRAPS MUST OUTLET ONTO STABILIZED GROUND.
7. MAXIMUM HEIGHT OF A TEMPORARY SEDIMENT TRAP EMBANKMENT IS LIMITED TO 5 FEET.
8. SIDE SLOPES OF THE EMBANKMENT SHALL BE 2:1 OR FLATTER
9. MODIFIED RIPRAP: SHALL MEET THE REQUIREMENTS OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SUBSECTION M.19.03.2.
10. FILTER STONE: SHALL MEET THE REQUIREMENTS OF RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SUBSECTION M.01.03 TABLE 1, COLUMN V FILTER STONE.

SEDIMENT TRAP DIMENSIONS	TRAP 1	
TRIBUTARY DRAINAGE AREA	1.15	ac
WET STORAGE DEPTH (Dw)	2.00	ft
DRY STORAGE DEPTH (Dd)	2.00	ft
TOTAL DEPTH (D)	4.00	ft
BOTTOM OF TRAP AREA (Ab)	850	sq.ft
WETTED SURFACE AREA (Aw)	1,400	sq.ft
SURFACE AREA AT OUTLET (Ad)	2,030	sq.ft

TOP WIDTH VS HEIGHT
H=HEIGHT OF EMBANKMENT
W=TOP WIDTH OF EMBANKMENT

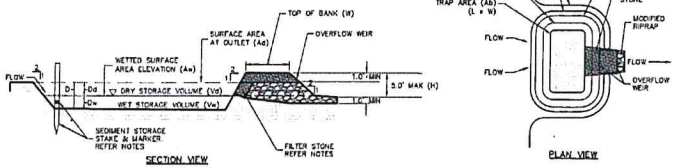
H (ft)	W (ft)
1.5	2.0
2.0	2.0
2.5	3.0
3.0	2.5
3.5	3.0
4.0	3.0
4.5	4.0
5.0	4.5

INSPECTION, MAINTENANCE, AND REMOVAL REQUIREMENTS:

1. INSTALL "SEDIMENT STORAGE" STAKE WITH A MARKER AT ONE HALF OF THE WET STORAGE VOLUME.
2. INSPECT THE TEMPORARY SEDIMENT TRAP AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.25 INCH OR GREATER.
3. CHECK THE OUTLET TO ENSURE THAT IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT.
4. CHECK FOR SEDIMENT ACCUMULATION AND FILTRATION PERFORMANCE.
5. WHEN SEDIMENTS HAVE ACCUMULATED TO ONE HALF THE MINIMUM REQUIRED VOLUME OF THE WET STORAGE, DEWATER THE TRAP AS NEEDED, REMOVE SEDIMENTS AND RESTORE THE TRAP TO ITS ORIGINAL DIMENSIONS.
6. DISPOSE OF THE SEDIMENT REMOVED FROM THE BASIN IN A SUITABLE AREA.
7. THE TEMPORARY SEDIMENT TRAP MAY BE REMOVED AFTER THE CONTRIBUTING DRAINAGE AREA IS STABILIZED.

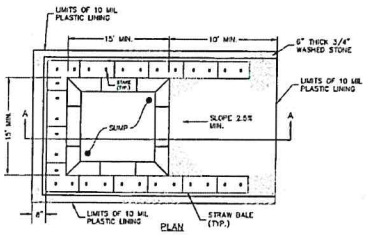
INSTALLATION NOTES:

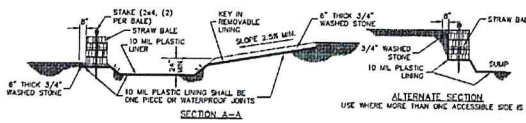
1. CLEAR, GRUB AND STRIP ANY VEGETATION AND ROOT MAT FROM ANY PROPOSED EMBANKMENT AND OUTLET AREA.
2. REMOVE STONES AND ROCKS WHOSE DIAMETER IS GREATER THAN THREE (3) INCHES AND OTHER DEBRIS.
3. EXCAVATE WET STORAGE AND CONSTRUCT THE EMBANKMENT AND/OR OUTLET AS NEEDED TO ATTAIN THE NECESSARY STORAGE REQUIREMENTS.
4. USE ONLY FILL MATERIAL FOR THE EMBANKMENT THAT IS FREE FROM EXCESSIVE ORGANICS, DEBRIS, LARGE ROCKS (OVER SIX (6) INCHES) OR OTHER UNSUITABLE MATERIALS. COMPACT THE EMBANKMENT IN 9-INCH LAYERS BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED
5. STABILIZE THE EARTHEN EMBANKMENT USING ANY OF THE FOLLOWING MEASURES. SEEDING FOR TEMPORARY VEGETATION COVER: SEEDING FOR PERMANENT VEGETATIVE COVER; OR SLOPE PROTECTION, IMMEDIATELY AFTER INSTALLATION



Temporary Sediment Trap Details

NOT TO SCALE



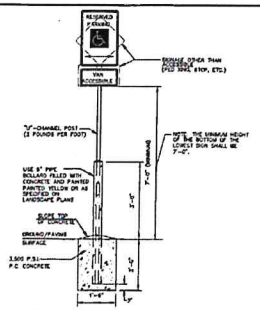


NOTES:

1. PIT IS SPECIFICALLY DESIGNATED, DIKED AND IMPERVIOUS CONTAINMENT TO PREVENT CONTACT BETWEEN CONCRETE WASH AND STORMWATER.
2. WASH WATER SHALL NOT BE ALLOWED TO FLOW TO SURFACE WATER.
3. FACILITY MUST HOLD SUFFICIENT VOLUME TO CONTAIN CONCRETE WASTE WITH A MINIMUM FREEBOARD OF 12."
4. FACILITY SHALL NOT BE FILLED BEYOND 85% CAPACITY UNLESS A NEW FACILITY IS CONSTRUCTED.
5. SAW CUT PORTLAND CEMENT CONCRETE, RESIDUE FROM SAWCUT & GRINDING TO BE DISPOSED OF IN THE PIT.
6. CONCRETE WASHOUTS SHALL BE LOCATED A MINIMUM OF 100' FROM DRAINAGE WAYS, INLETS, & SURFACE WATERS.
7. MANUFACTURED CONCRETE WASHOUT DEVICES MAY BE USED IF REMOVED FROM THE SITE WHEN 85% FULL CAPACITY.

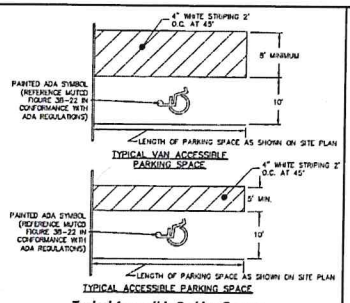
CONCRETE WASHOUT AREA

(NOT TO SCALE)



Bollard Mounted Sign Detail

NOT TO SCALE

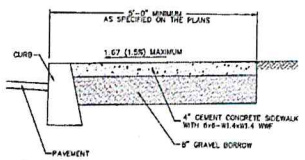


Typical Accessible Parking Spaces

NOT TO SCALE

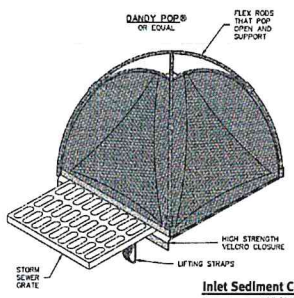
NOTES:

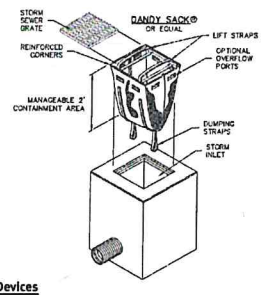
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
2. FOR CURB SETTING DETAIL REFERENCE STD. 7.8.0.
3. MEETS OR EXCEEDS GUIDELINES OF RIDOT STANDARD DETAIL 423.0.



Cement Concrete Sidewalk

NOT TO SCALE



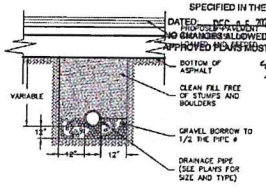


Inlet Sediment Control Devices

NOT TO SCALE

INSTALLATION NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS, LATEST ADDITION.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. FOUNDATION. WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
4. BEDDING. SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100MM) FOR 4"-24" (100MM-600MM); 6" (150MM) FOR 30"-60" (750MM-900MM).
5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" Ø PIPE AND 24" OF COVER FOR 54"-60" Ø PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

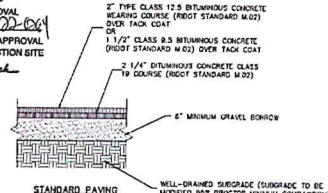


HDPE Trench Detail

NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED DEC 6 2024 FILE # 22-0424
PROPOSED PAVEMENT
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



Typical Pavement Section

NOT TO SCALE

NOV 0 0 2023

KEVIN DEMERS
No. 8567
REGISTERED PROFESSIONAL ENGINEER
STATE OF RHODE ISLAND

This regulatory submission set shall not be used for construction (except where stamped "Issued for Construction") unless signed & issued by a DiPrete Engineering representative.

The contractor is responsible for all of the means, methods, techniques, sequences, and procedures and for safety conformance in the implementation of this plan and design.

No.	Date	Description	By
1	9/30/2022	Revised per Comments	MJS
2	11/30/2022	Revised per Comments	MJS
3	2/28/2023	Revised per Comments	MJS
4	5/31/2023	Revised per Comments	MJS
5	8/31/2023	Revised per Comments	MJS
6	10/31/2023	Revised per Comments	MJS
7	11/30/2023	Revised per Comments	MJS

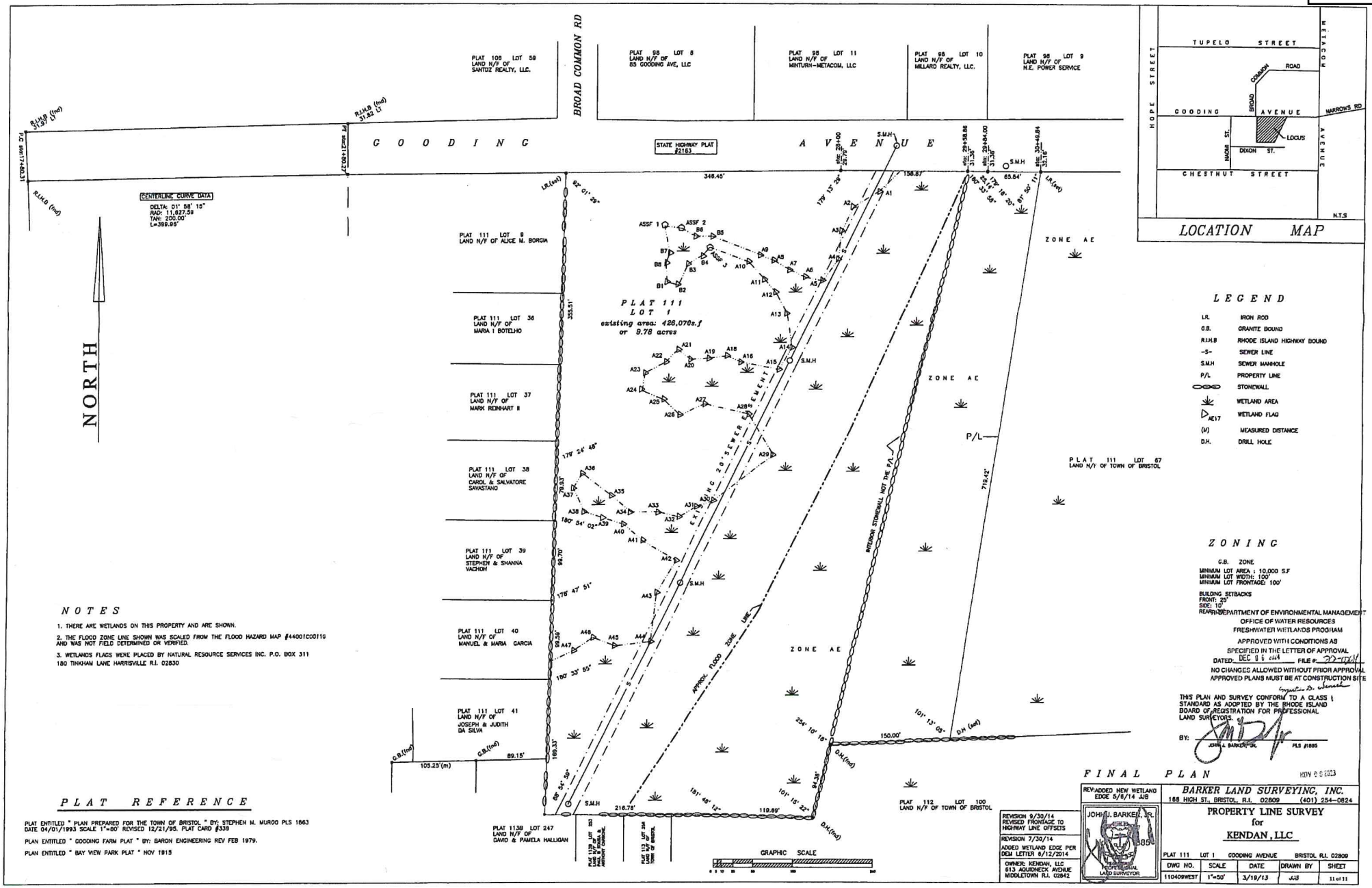
Design By: J.S.M.
Drawn By: J.S.M.

Detail Sheet
Mainstay/Sleep Inn Hotel
AP 111 Lot 1
Bristol, Rhode Island

Owner:
D&M BOCA DEVELOPMENT, LLC
167 Pacific Farms Blvd, Suite 101
North Dartmouth, MA 02747

Kendus, LLC
c/o Christopher Kendus
143 Hazelhurst Avenue, Middletown, RI 02842

SHEET 10 OF 11



NOTES

1. THERE ARE WETLANDS ON THIS PROPERTY AND ARE SHOWN.
2. THE FLOOD ZONE LINE SHOWN WAS SCALED FROM THE FLOOD HAZARD MAP #44001C0011G AND WAS NOT FIELD DETERMINED OR VERIFIED.
3. WETLANDS FLAGS WERE PLACED BY NATURAL RESOURCE SERVICES INC. P.O. BOX 311 180 TINKHAM LANE HARRISVILLE R.I. 02830

PLAT REFERENCE

PLAT ENTITLED " PLAN PREPARED FOR THE TOWN OF BRISTOL " BY: STEPHEN M. MURGO PLS 1663 DATE 04/01/1993 SCALE 1"=80' REVISED 12/21/95. PLAT CARD #339

PLAN ENTITLED " GOODING FARM PLAT " BY: BARON ENGINEERING REV FEB 1979.

PLAN ENTITLED " BAY VIEW PARK PLAT " NOV 1915

LEGEND

I.R.	IRON ROD
G.B.	GRANITE BOUND
R.I.H.B	RHODE ISLAND HIGHWAY BOUND
-S-	SEWER LINE
S.M.H	SEWER MANHOLE
P/L	PROPERTY LINE
	STONEWALL
	WETLAND AREA
AE17	WETLAND FLAG
(M)	MEASURED DISTANCE
D.H.	DRILL HOLE

ZONING

G.B. ZONE

MINIMUM LOT AREA : 10,000 S.F
MINIMUM LOT WIDTH: 100'
MINIMUM LOT FRONTAGE: 100'

BUILDING SETBACKS
FRONT: 25'
SIDE: 10'
REAR: 30'

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: DEC 06 2013 FILE #: 92-7611
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Jennifer D. Hoxsie

THIS PLAN AND SURVEY CONFORM TO A CLASS I STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

BY: JOHN J. BARKER, JR. PLS #1885

FINAL PLAN

NOV 6 0 2013

REVISION
REV:ADDED NEW WETLAND EDGE 5/8/14 JJB
REVISION 9/30/14 REVISED FRONTAGE TO HIGHWAY LINE OFFSETS
REVISION 7/30/14 ADDED WETLAND EDGE PER DEM LETTER 6/12/2014

OWNER: KENDAN, LLC
813 AQUIDNECK AVENUE
MIDDLETOWN R.I. 02842

JOHN J. BARKER, JR. PLS 1885 REGISTERED PROFESSIONAL LAND SURVEYOR

BARKER LAND SURVEYING, INC.
168 HIGH ST., BRISTOL, R.I. 02809 (401) 254-0824

PROPERTY LINE SURVEY
for
KENDAN, LLC

PLAT 111 LOT 1 COODING AVENUE BRISTOL R.I. 02809

DWG NO.	SCALE	DATE	DRAWN BY	SHEET
110409WEST	1"=50'	3/19/13	JJB	11 of 11

Town of Bristol, Rhode Island

Department of Community Development

10 Court Street
Bristol, RI 02809
bristolri.gov
401-253-7000

March 6, 2025

TO: Planning Board

FROM: Diane M. Williamson, Director

RE: Staff Report – Gooding Hotel "Comfort Inn and Suites"
Pre-Application Conference

The following is provided in order to further explain the process and provide some additional clarity to the materials submitted for the Pre-Application Conference on the above project. In further review of the submission and the Planning Board's Subdivision and Development Regulations, I also provide some additional guidance and recommendations for the Board's consideration.

1. As provided in the memo from Solicitor Amy Goins, this type of application will be processed as a major land development project. The pre-application conference is the first step in that process. A pre-application conference is non-binding and there is no vote of the Planning Board taken at a pre-application meeting. All pre-application discussions are intended for the guidance of the applicant and shall not be considered approval or disapproval of a project or its elements.

2. The TRC meeting notes that I provided in your packet were meant to provide some historical context on the hotel proposal; however, these are just to give the Board some sense of previous meetings on this property and reflect the prior pre-application / concept review plans when this was proposed as a Main Stay/Sleep Inn Hotel. Upon the future submission of this Comfort Inn and Suites application, there will be TRC meetings to provide comments and recommendations to the Board as part of the Master Plan and Preliminary Phases of review.

3. The traffic study presented in the packet by the applicant was done based on an earlier iteration of the plan and does not reflect the plans presented as part of this pre-application submission. It is also noted that the traffic study in your packet was done in June 2020 during the COVID-19 pandemic. An updated traffic study, based on current plan, was submitted to me today via email. The Planning Board will also have to commission a

consultant peer review engineer for the traffic study which the applicant will have to reimburse the Town for.

4. Per the Planning Board's Subdivision and Development Review Regulations, the composition of the TRC for Major Land Development Projects shall include an architect and a landscape architect registered in the State of RI to assist the TRC in evaluating specific complex or contextually sensitive submissions. If the Planning Bord finds that the existing conditions and proposed changes will not be such that a more detailed level of review are needed, the architect and/or landscape architect may not be required. The Planning Board Engineer, architect and/or landscape architect shall be selected by the Town as a consultant with the fee for same paid for by the applicant per section 7.5C. I recommend that an architect be required for the review of the façade of this building so that it can designed to fit into the character of Bristol rather than the standard chain facades.

5. The 2018 RIDEM permit provided in the applicant's narrative is extraneous information that was part of the applicant's previous narrative to RIDEM. The 2024 permit is the most recent permit on this property from RIDEM. The 2024 permit was included in your packets; however, I inadvertently omitted the plans that were approved by the RIDEM as part of this permit. These plans are attached and you will see that the proposed development also reflects the Main Stay/Sleep Inn Hotel which is different from this current plan submission. The applicant has presented a request to RIDEM to modify the permit based on the new design. A copy of that request was emailed to my office today and is attached for your information. It is also noted in this 2018 narrative that the Town supports this project; however, the Town Council has not taken a position either for or against this project. In 2023, the Town Council did submit correspondence to the RIDEM on this project requesting careful consideration of the flooding concerns in the area.

6. Per the Planning Board's Subdivision and Development Review Regulations (Section 6.6) a Major Land Development is required to include a narrative describing the proposed project's major elements, potential significant impacts on the surrounding neighborhood and /or community and the means by which these identified impacts shall be mitigated by the project design or otherwise.

7. Also per Section 6.6 of the Subdivision and Development Review Regulations, a Fiscal Impact Assessment is required.

8. As Gooding Avenue is a State Road, a Physical Alteration Permit will be required for this project.

9. A floor plan was not submitted with this pre-application; however, it is noted that the rooms cannot have kitchens per the Zoning Ordinance definition of a hotel.

10. A hotel is a permitted use in the General Business zone, which this property is zoned for. The pre-application does not indicate if any waivers are being requested or whether any variances are needed.

11. The property is in the Silver Creek Watershed and the application will need to be designed for drainage to meet the requirements of the Town relative to any increase in storm runoff volume up to and including the 10-year storm event. (Appendix F – Section I of the Subdivision and Development Review Regulations).

12. Reference is made to the parking lot landscaping requirement in the Zoning Ordinance as well as the parking lot striping.

13. A sidewalk and street trees will be recommended along the street frontage of Gooding Avenue.

14. A copy of the application form is also provided for your information.

APPLICATION FORM AND SUBMISSION CHECKLIST FOR PREAPPLICATION CONFERENCE AND CONCEPT REVIEW

Preapplication Conference - An initial meeting between developers and the Town which affords developers the opportunity to present their proposals informally and to receive comments and directions from the Town and other agencies.

Concept Plan - A drawing with accompanying information showing the basic elements of a proposed land development plan or subdivision as used for pre-application meeting and early discussions, and classification of the project within the approval process.

The following completed application form and Items A, B, and C from the attached checklist shall be submitted to the Administrative Officer for a meeting with the Technical Review Committee (TRC).

Date of Submission 01-27-2025 ~~TRC Meeting Date~~ Planning Board mtg. 3/13/2025

APPLICATION FORM

1. Name, address, and telephone number of the property owner:
D&M Boca Development, LLC, 92 Faunce Corner Road, Suite 160, North Dartmouth, MA 02747

2. Name, address and telephone number of the applicant (If different from owner, a written, notarized confirmation from the property owner authorizing the applicant to make this submission shall also be submitted):

3. Assessor's plat and lot number(s): AP 111, Lot 1

4. Zoning district(s), including any special Town or State overlay districts (i.e. Historic District, CRMC Jurisdiction, etc.): GB - General Business

5. Area of the parcel: 9.78+/- Acres

6. Proposed number of buildable lots, dwellings or other proposed improvements: (1) Proposed Building and associated parking and infrastructure

7. Name and owner of existing streets or rights-of-way adjacent to the parcel:

Gooding Avenue - Southeast of intersection with Broadcommon Road

TOWN OF BRISTOL COMMUNITY DEV. 2025 FEB 12 AM 9:19

A list showing the names and addresses of all abutting and adjacent property owners shall be attached to this application.

Signature of Owner/Applicant _____ Date 2/4/25

Notarized:

Subscribed and sworn to before me this 4th day of February, 2025.

_____
NOTARY PUBLIC

ANTHONY JACOB PAULINE
Notary Public
Commonwealth of Massachusetts
My Commission Expires
June 8, 2029

DiPrete Engineering

Letter of Transmittal

To:	Diane M. Williamson, ALCP, CFM Director, Community Development Town of Bristol 9 Court Street Bristol, RI 02809 (401) 253-7000

Date:	3/6/2025
Job No:	2536-001
Re:	Pre-Application Submission Comfort Inn & Suites

Number of Copies:	Description:
1	Traffic Impact Assessment prepared by SOLLI Engineering, dated April 14, 2023
1	Narrative correspondence to Martin Wencek, Supervisor, RIDEM Office of Water Resources, Freshwater Wetland program, January 9, 2025.

Remarks:

Dear Ms. Williamson,

Please find the attached traffic study and narrative updated per your request. Let me know if you need anything else.

Thank you

From: Christopher Duhamel, PE, PLS
Principal

Copy:

DiPrete Engineering

jraymond@diprete-eng.com

SOLLI ENGINEERING

April 14, 2023
Revised January 10, 2024

Mr. Dennis DeGrazia
Highridge Development Co., LLC
92 Faunce Corner Road, Suite 160
North Dartmouth, MA 02747

RE: Traffic Impact Assessment
Proposed Hotel
Parcel #111-1, Gooding Avenue
Bristol, Rhode Island 02809
Project Number: 23103601

Dear Dennis,

Solli Engineering, LLC has prepared this assessment to provide an analysis of the potential traffic impacts associated with the proposed 80-room hotel located along Gooding Avenue in Bristol, Rhode Island. The evaluation has been completed in accordance with the Town of Bristol and Rhode Island Department of Transportation requirements as well as standard traffic engineering methodology. Our investigation concludes that the proposed development will not have an adverse impact on the existing roadway network.

Project Description:

The property is located along Gooding Avenue between Broadcommon Road and Metacom Avenue (Route 136). The site is currently undeveloped and bound by Gooding Avenue to the north, undeveloped land to the south and east, and residential parcels to the west. The parcel is located within the General Business (GB) zoning district in the Town of Bristol. Refer to Figure 1, Site Location Map, for additional information regarding the project location.

The project proposes to construct a 80-unit hotel with appurtenant parking, loading, landscape, utility, and drainage features. Access to the site is proposed along Gooding Avenue via one full-movement STOP-controlled site driveway. Refer to the Site Layout Plan, prepared by DiPrete Engineering and included as a supporting document to this assessment, for additional information regarding the proposed site configuration.

Existing Conditions:

Gooding Avenue is an east-west roadway classified by the Rhode Island Department of Transportation as a minor arterial roadway with a posted speed limit of 35 miles per hour. Gooding Avenue is generally a two-lane, bi-directional roadway with 12-foot lanes and 6-foot shoulders. At the intersection of Metacom Avenue (Route 136) & Gooding Avenue / Narrows Road, Gooding Avenue forms the eastbound approach to the intersection and widens to provide dedicated left-, through, and right- turn lanes. Gooding Avenue provides access to commercial and industrial parcels. Concrete sidewalks are located along the northern edge of Gooding Avenue in its entirety.

Metacom Avenue (Route 136) is a north-south roadway classified by the Rhode Island Department of Transportation as a principal arterial roadway with a posted speed limit of 40 miles per hour. Metacom Avenue (Route 136) is generally a two-lane bi-directional roadway with a shared two-way-left-turn-lane, with various additional turn lanes at intersections. Metacom Avenue (Route 136) generally consists of 11 foot lanes and 4 foot shoulders. Metacom Avenue (Route 136) provides access to various commercial and residential parcels along the corridor. At the intersection of Metacom Avenue (Route 136) & Gooding Avenue / Narrows Road, Metacom Avenue (Route 136) forms the northbound and southbound approached of the intersection, with dedicated left-, through, and right- turn lanes at the southbound approach and a dedicated left-turn lane at the northbound approach. Sidewalks are provided along both sides of Metacom Avenue (Route 136) in the vicinity of the project site.

Narrows Road is an east-west roadway classified by the Rhode Island Department of Transportation as a major collector roadway with a posted speed limit of 25 miles per hour. Narrows Road is generally a two-lane bi-directional roadway with 11-foot lanes and 2-foot shoulders. At the intersection of Metacom Avenue (Route 136) & Gooding Avenue / Narrows Road, Narrows Road forms the westbound approach to the intersection and widens to provide dedicated left-, through, and right- turn lanes. Sidewalks are provided along both sides of Narrows Road in the vicinity of the project site.

The most recent three full years of accident data (January 2020 – December 2022) was obtained from the Bristol Police Department Records Division for the study area intersections and intermediate roadway segments. There was a total of forty-eight (48) crashes at the intersection of Gooding Avenue & Metacom Avenue (Route 136) over the three-year period, with an average of 16 crashes per year at this intersection. There was a total of thirteen (13) crashes identified along Gooding Avenue from its intersection with Broadcommon Road to its intersection with Metacom Avenue (Route 136) over the three-year period, with an average of 4.33 crashes per year. Overall, the quantity of crashes relative to the existing volumes on the arterial roadways in the study area network is low and does not indicate crash patterns or deficiencies in the roadway network that require mitigation. A letter from the Bristol Police Department Records Division confirming accident quantities in the study area is included as a supporting document to this assessment.

Turning movement count data was collected in April 2023 for the weekday AM and weekday PM peak hours, as these are the periods with the greatest potential impact on the adjacent roadways. The 2023 existing peak hour volumes for the weekday AM and weekday PM peak hours are illustrated in Figure 2. The raw turning movement count data is included as a supporting document to this assessment.

Volume and speed data were collected in April 2023 along Gooding Avenue in the vicinity of the proposed site driveway using an Automatic Traffic Recorder (ATR). The 2023 bi-directional ADT along Gooding Avenue was reported as 9,476 vehicles. The 85th percentile speed observed along Gooding Avenue was reported as 42.39 miles per hour eastbound and 35.96 miles per hour westbound. The raw ATR data is included as a supporting document to this assessment.

Proposed Conditions:

The project proposes to construct a 80-unit hotel with appurtenant parking, loading, landscape, utility, and drainage features. Access to the site is proposed along Gooding Avenue via one full-movement STOP-controlled site driveway.

Intersection sight distance (ISD) at the proposed site driveway was reviewed and evaluated per guidance provided in the 2008 edition of the RIDOT Highway Design Manual. The 85th percentile speed traveling westbound was recorded as 35.95 mph therefore the intersection sight distance looking right was based on a design speed of 40 mph (posted speed limit plus 5 mph) to provide a conservative analysis. The required sight distance looking right from the proposed driveway is 445 feet and the required sight distance looking left from the proposed driveway is 470 feet based on the 85th percentile speed of 42.39 miles per hour. The proposed site driveway has been designed to satisfy the required sight distances looking left

and right. Refer to the Intersection Sight Distance Figure, Figure ISD, for additional information regarding intersection sight distance.

To evaluate the potential traffic impact associated with the proposed development, the anticipated trips to be generated by the proposed land use was estimated using data from the Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition. The trip generation was calculated for the weekday AM and weekday PM peak hours based on the proposed Hotel (Land Use Code 310) land use with an independent variable of hotel rooms, as these are the peak periods with the greatest potential for impact on the adjacent street traffic. The proposed development is anticipated to generate 37 (21 entering, 16 exiting) trips during the weekday AM peak hour and 48 (24 entering, 24 exiting) trips during the weekday PM peak hour. The trip generation rate sheets are provided as a supporting document to this assessment. A detailed breakdown of the proposed trip generation calculations is provided as a supporting document to this assessment. Table 1 below summarizes the anticipated trip generation for the proposed development.

TABLE 1
TRIP GENERATION SUMMARY

LAND USE	WEEKDAY AM PEAK HOUR			WEEKDAY PM PEAK HOUR		
	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
Hotel - LUC 310 *(80 Rooms)*	21	16	37	24	24	48
Total New Trips	**21**	**16**	**37**	**24**	**24**	**48**

The anticipated distribution of new traffic entering and exiting the site was developed based on area populations, existing traffic patterns, and the layout of the adjacent roadway network. The following distributions were applied to the new site generated trips:

- 25% to/from the north via Metacom Avenue (Route 136)
- 25% to/from the south via Metacom Avenue (Route 136)
- 50% to/from the west via Gooding Avenue

The anticipated percent distribution of the new site generated trips is illustrated in Figure 3. The new site generated trips were assigned based on the anticipated percent distributions illustrated in Figure 3 and the resulting trip assignment is illustrated in Figure 4.

As the proposed development is anticipated to be opened in 2025, background traffic growth is estimated to account for any traffic increase as a result of regional population growth. Based on Census data provided y the United States Census Bureau, there has been a minor decrease in population in the Town of Bristol in recent years. The population reported in the 2010 census was 22,954 people, while the population reported in the 202 census was 22,493 people. As a result, the existing traffic volumes were projected to the 2025 design year using a conservative 1.0 percent per year growth factor to establish the 2025 background traffic volumes. The 2025 background traffic volumes are illustrated in Figure 5. Census data provided by the United States Census Bureau is included as a supporting document to this assessment.

The trip assignment volumes illustrated in Figure 4 were combined with the 2025 background volumes in Figure 5 to develop the build traffic volumes. Figure 6 illustrates the 2025 build traffic volumes.

The Town of Bristol was contacted to identify any ongoing or proposed projects within the study area which may impact the analysis. No projects were identified which may impact the analysis.

Capacity Analysis:

To determine the operating conditions of the site driveway after the development has been constructed, the study area intersections were analyzed using the Synchro 11 capacity analysis software for the existing, background, and build peak hour conditions during the weekday AM and weekday PM peak hours, as these peak periods have the greatest potential for impact by the proposed development.

The results of the Synchro analysis describe the traffic impact in terms of Level of Service (LOS). LOS describes the operational condition of the signalized intersection in terms of delay (in seconds per vehicle) and is expressed on a scale of A through F with LOS A being the best and LOS F being the worst. LOS A reflects intersection operations with little to no vehicle delay (less than 10 seconds per vehicle) and LOS F reflects intersection conditions that are over capacity and experience long delays(more than 50 seconds of delay per vehicle at unsignalized intersections or 80 seconds of delay at signalized intersections). For unsignalized intersections, only the delay on the STOP-controlled approach is reported. Table 2 below summarizes the level of service for the study area intersections during the existing, background, and build conditions of the weekday AM and weekday PM peak hours. A detailed capacity analysis summary as well as Synchro 11 capacity analysis reports are included as supporting documents to this assessment.

TABLE 2
WEEKDAY CAPACITY ANALYSIS SUMMARY
(LOS/DELAY)

INTERSECTION	2023 Existing AM/PM	2025 Background AM/PM	2025 Build AM/PM
Metacom Avenue (Route 136) & Gooding Avenue / Narrows Road	(B/19.9) / (C/25.4)	(C/20.8) / (C/25.8)	(C/21.1) / (C/26.1)
Metacom Avenue (Route 136) – Northbound	(C/21.3) / (C/29.0)	(C/22.2) / (C/29.7)	(C/22.4) / (C/29.7)
Metacom Avenue (Route 136) – Southbound	(B/17.6) / (C/21.8)	(B/18.6) / (C/22.2)	(B/19.0) / (C/22.6)
Gooding Avenue – Eastbound	(C/23.8) / (C/28.4)	(C/23.8) / (C/28.6)	(C/24.5) / (C/29.1)
Narrows Road – Westbound	(C/20.0) / (C/20.6)	(C/20.2) / (C/20.8)	(C/20.2) / (C/20.8)
Gooding Avenue & Site Driveway*			
Site Driveway – Northbound	--	--	(B/11.3) / (B/14.2)
Gooding Avenue – Eastbound			
Gooding Avenue – Westbound			

*Unsignalized Intersection

Under the 2025 build condition, the proposed full movement STOP-controlled site driveway intersection with Gooding Avenue will operate at LOS B with 11.3 seconds of delay during the weekday AM peak hour and a LOS B with 14.2 seconds during the weekday PM peak hour. Gooding Avenue has 12-foot wide lanes and a 6-foot shoulder. It is anticipated that the existing roadway geometry will support a vehicle by-pass traveling westbound while vehicles make a left-turn into the site.

Under the 2025 build condition, the signalized intersection of Metacom Avenue (Route 136) & Gooding Avenue / Narrows Road is anticipated to operate at a LOS C with 21.1 seconds of delay during the weekday AM peak hour and a LOS C with 26.1 seconds of delay during the weekday PM peak hour. All intersection approaches and a majority of the individual intersection movements will maintain background operating conditions with one exception. The eastbound left movement is anticipated to change in operation from a LOS C with 34.5 seconds of delay to a LOS D with 35.6 seconds of delay during the weekday AM peak hour when comparing background to build conditions, representing a minor increase in delay of 1.1 seconds at this movement. The signalized intersection of Metacom Avenue (Route 136) & Gooding Avenue / Narrows Road will maintain acceptable operating conditions under the 2025 Build condition during the weekday AM and weekday PM peak hours.

The maximum 95th percentile queue at the site driveway onto Gooding Avenue is anticipated to be 0.1 vehicles during the weekday AM peak hour and 0.2 vehicles during the weekday PM peak hour, which can be accommodated with the proposed driveway layout. At the intersection of Metacom Avenue (Route 136) & Gooding Avenue / Narrows Road, no 95th percentile queue lengths are anticipated to increase more than 25 feet (1 vehicle length) during the weekday AM and weekday PM peak hours when comparing 2025 background conditions to 2025 build conditions.

Conclusion:

A traffic impact analysis of the study area intersections indicates that the proposed development along Gooding Avenue can be accommodated without adverse impacts on the study area roadway network. The project proposes to construct a 80-unit hotel with appurtenant parking, loading, landscape, utility, and drainage features. Access to the site is proposed along Gooding Avenue via one full-movement STOP-controlled site driveway.

Based on the analysis, the proposed development is anticipated to generate 37 (21 entering, 16 exiting) trips during the weekday AM peak hour and 48 (24 entering, 24 exiting) trips during the weekday PM peak hour. Under the build condition in the year 2025, the site driveway is expected to operate at level of service B during the weekday AM and weekday PM peak hours.

It is the professional opinion of Solli Engineering that the traffic anticipated to be generated by the proposed development can be accommodated by the surrounding roadway network. There is no indication that the proposed development will have an adverse impact on the operations of the adjacent roadway network.

If you have any questions or require any additional information, please call at your convenience.

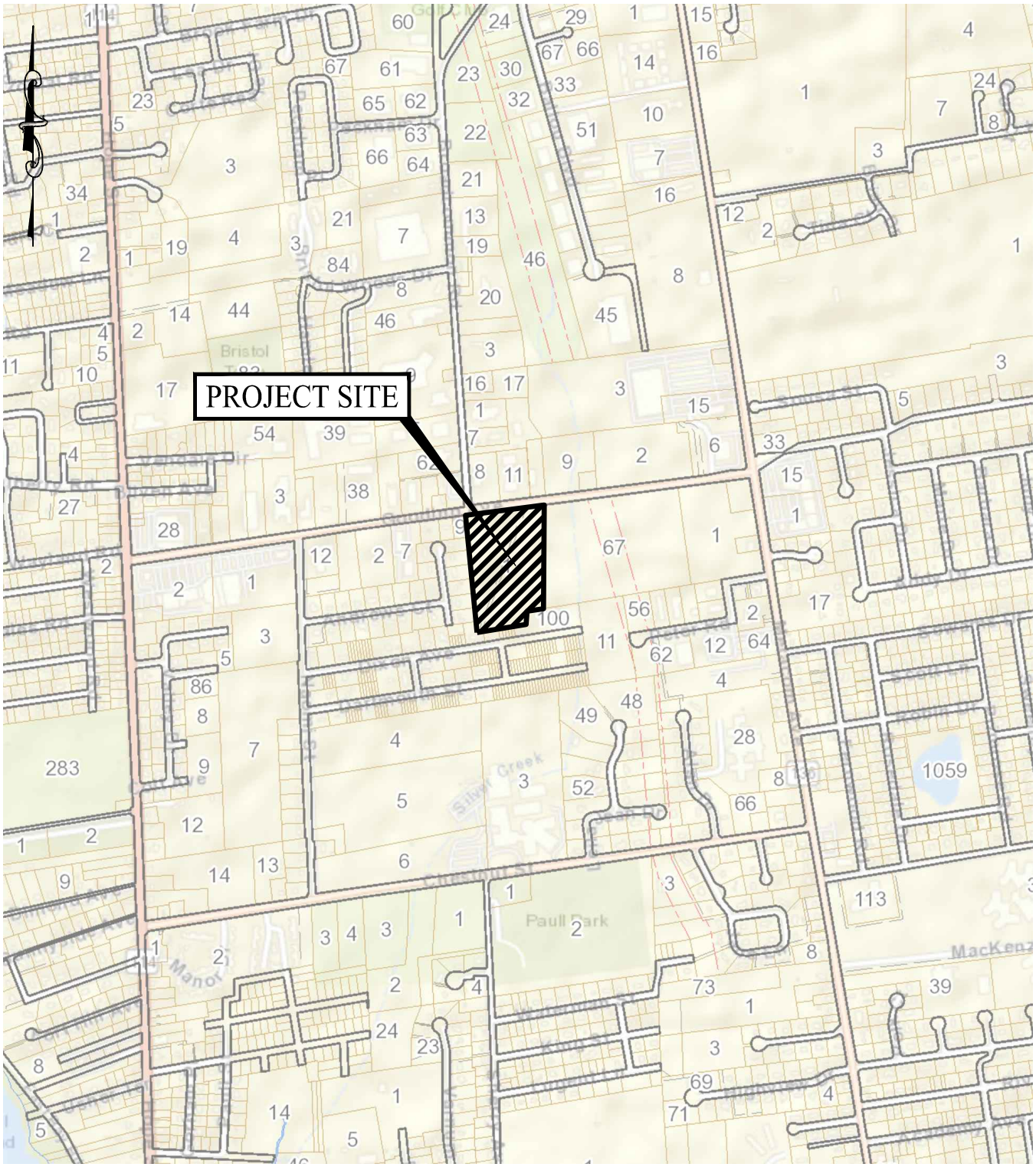
Sincerely,
Solli Engineering, LLC

Matt Baldino, P.E., PTOE
Assistant Project Manager

Kevin Solli, P.E., PTOE
Principal

Supporting Documents:

Site Location Map	(Figure 1)
2023 Existing Traffic Volumes	(Figure 2)
Trip Distribution	(Figure 3)
Trip Assignment	(Figure 4)
2025 Background Traffic Volumes	(Figure 5)
2025 Build Traffic Volumes	(Figure 6)
Site Plan	
Intersection Sight Distance	(ISD)
Trip Generation Summary	
ITE Trip Generation Rate Sheets	
Accident Summary Letter	
Capacity Analysis Summary Table	
Synchro Analysis Reports	
US Census Bureau Data	
Turning Movement Count Data	
ATR Data	



NOTE: BASE MAP INFORMATION TAKEN FROM https://www.axisgis.com/bristolri/

1,000 0 500 1,000

SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 F: (203) 880-9695

SITE LOCATION MAP

GOODING AVENUE
BRISTOL, RHODE ISLAND

Project #:	23103601
Plan Date:	04/14/23
Scale:	1" = 1,000'
Figure:	1

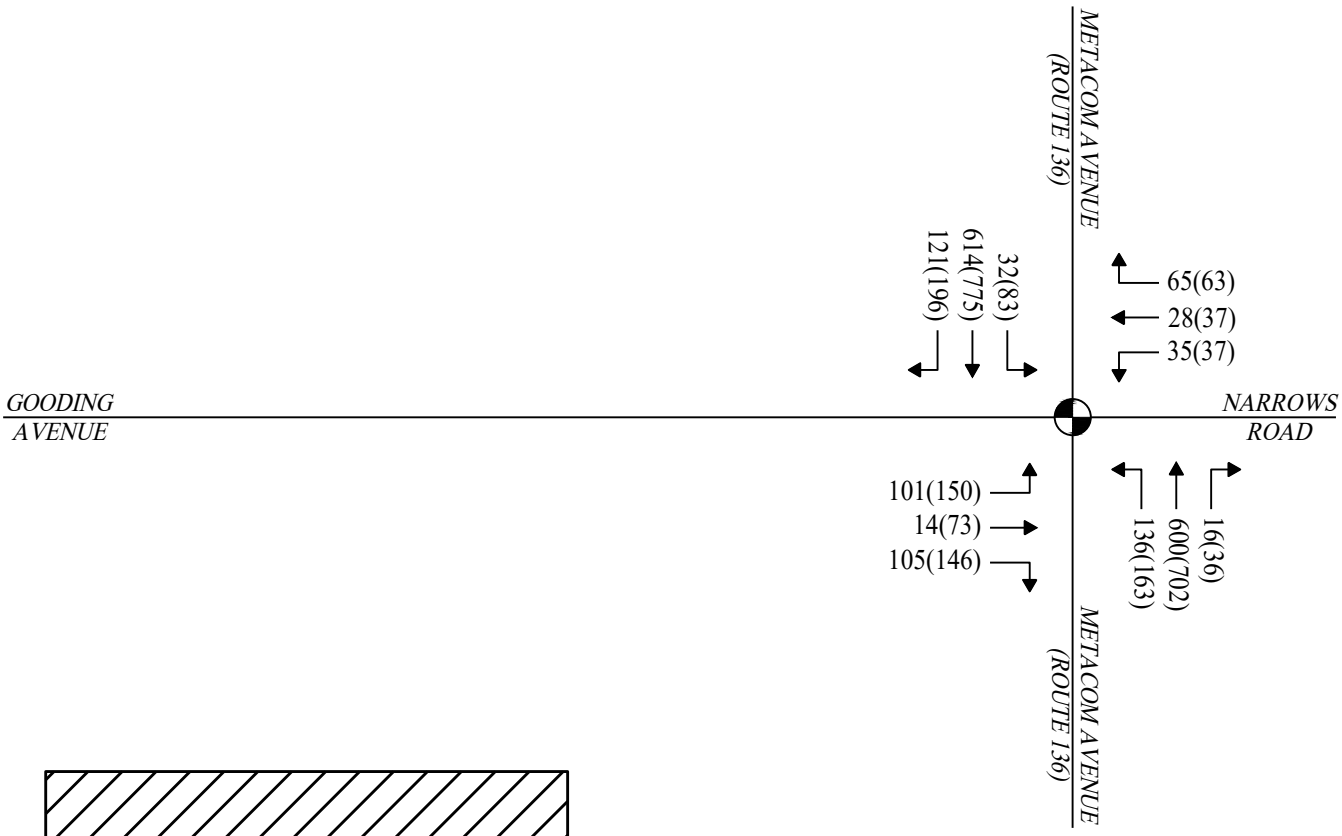
LEGEND

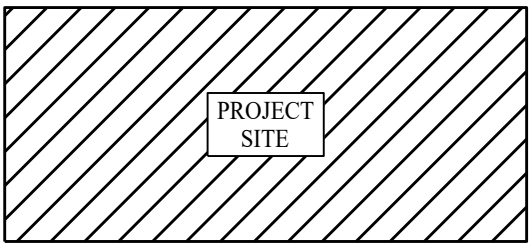
SIGNALIZED INTERSECTION

UNSIGNALIZED INTERSECTION

EXISTING ROADWAY

AM(PM)





SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 F: (203) 880-9695

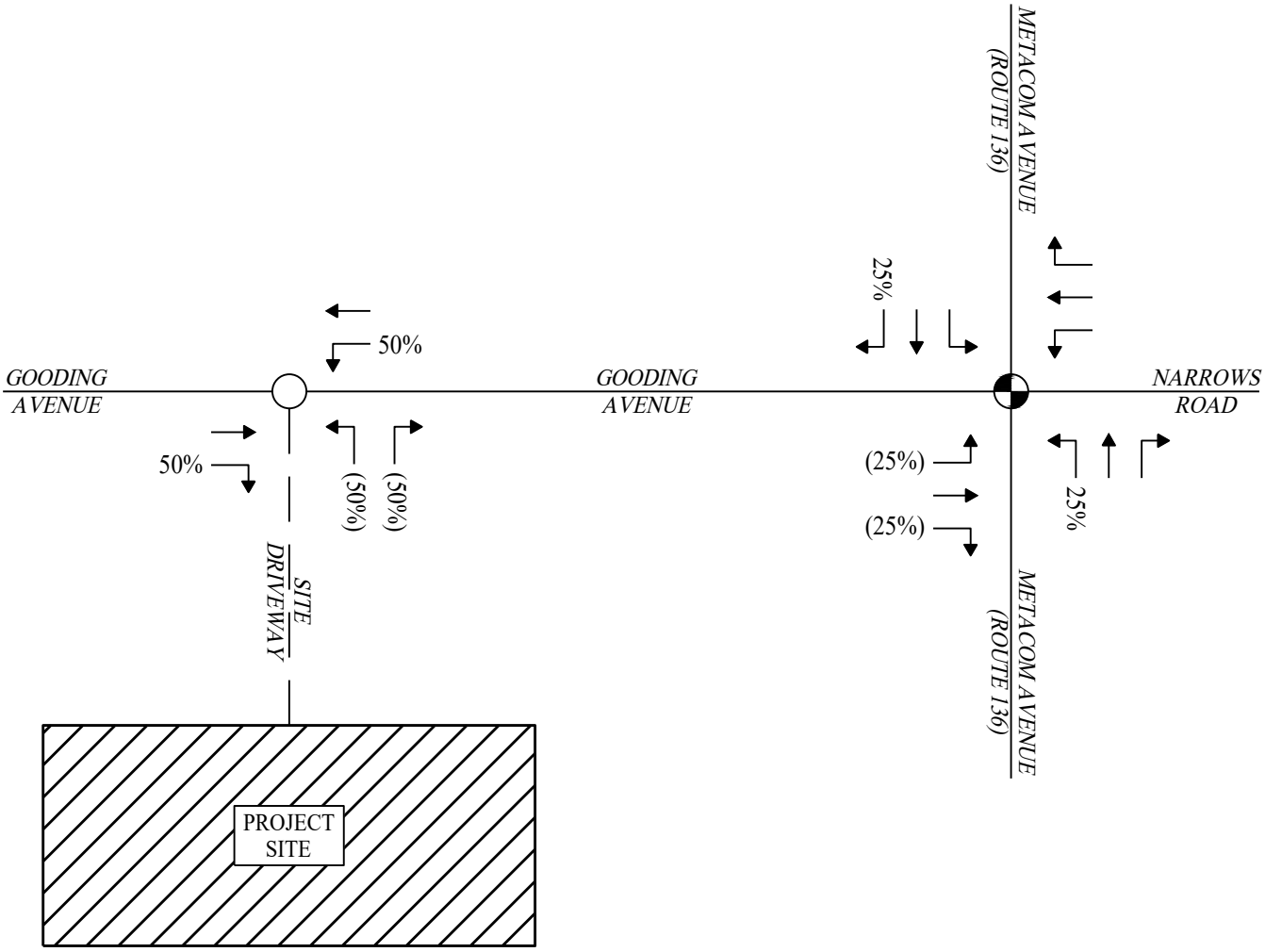
2023 EXISTING TRAFFIC VOLUMES

GOODING AVENUE
BRISTOL, RHODE ISLAND

Project #:	23103601
Plan Date:	01/10/24
Scale:	NTS
Figure:	2

LEGEND

- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION
- EXISTING ROADWAY
- PROPOSED ROADWAY
- ENTER(EXIT)



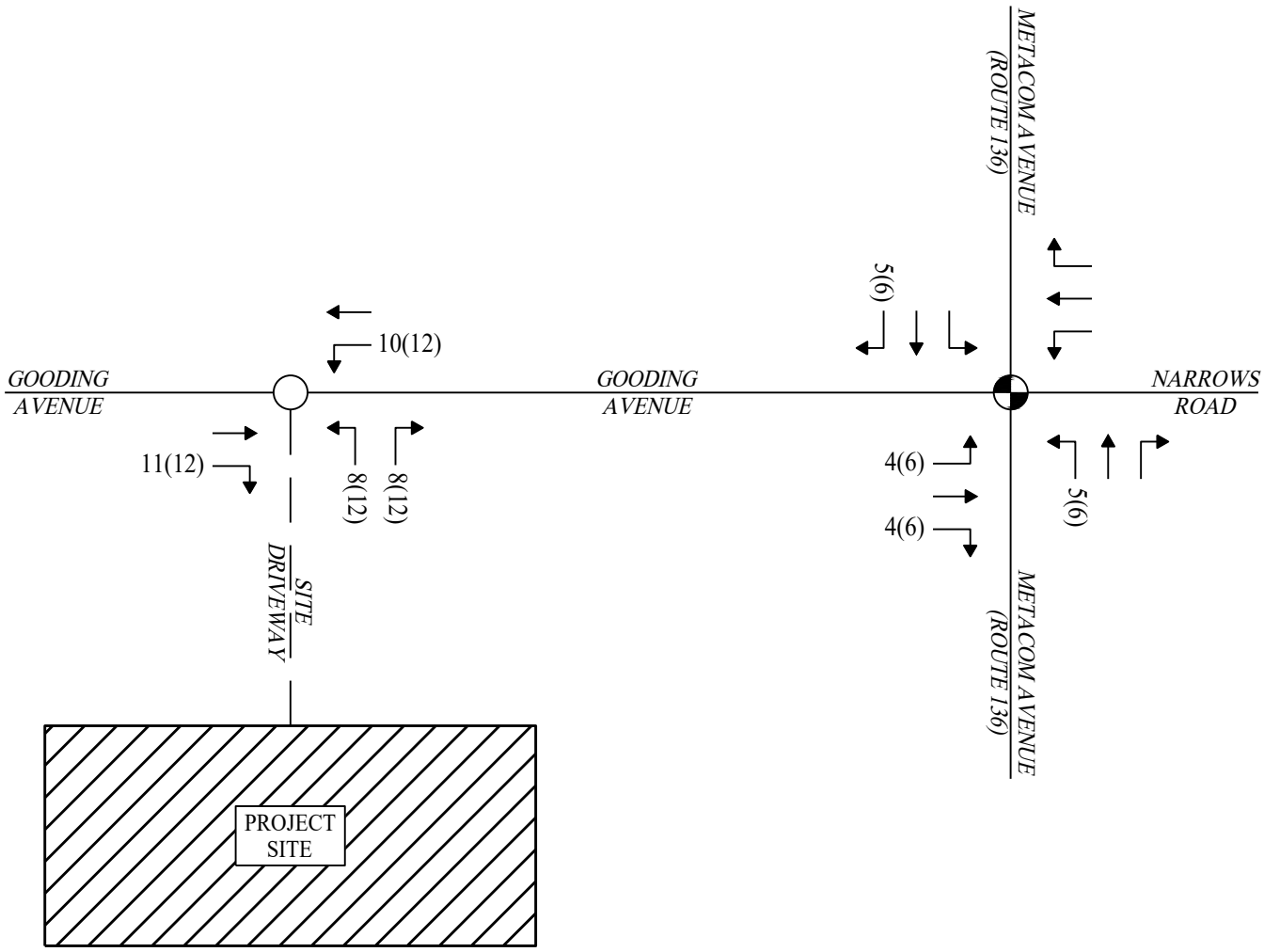
SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 F: (203) 880-9695

TRIP DISTRIBUTION
GOODING AVENUE
BRISTOL, RHODE ISLAND

Project #:	23103601
Plan Date:	01/10/24
Scale:	NTS
Figure:	3

LEGEND

- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION
- EXISTING ROADWAY
- PROPOSED ROADWAY
- AM(PM)



SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 F: (203) 880-9695

TRIP ASSIGNMENT

GOODING AVENUE
BRISTOL, RHODE ISLAND

Project #:	23103601
Plan Date:	01/10/24
Scale:	NTS
Figure:	4

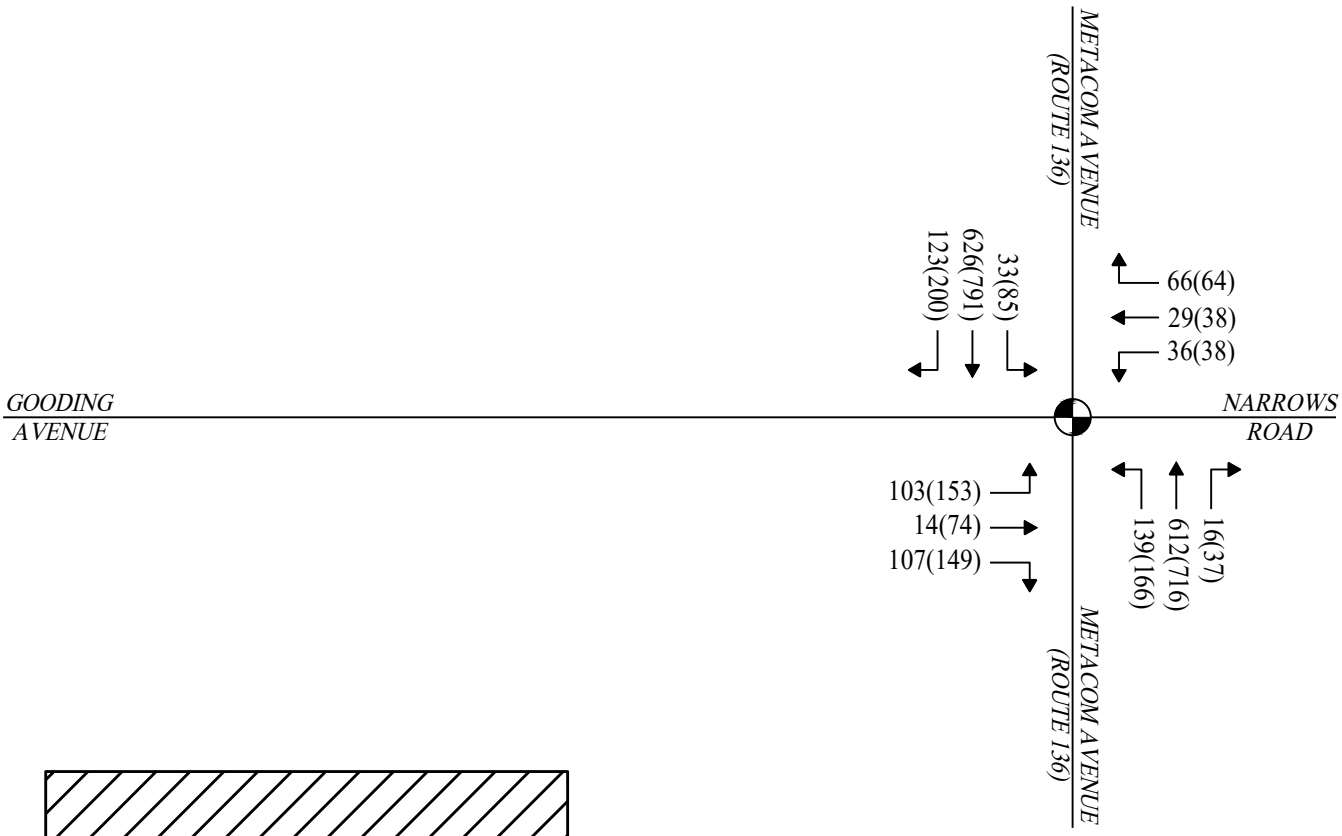
LEGEND

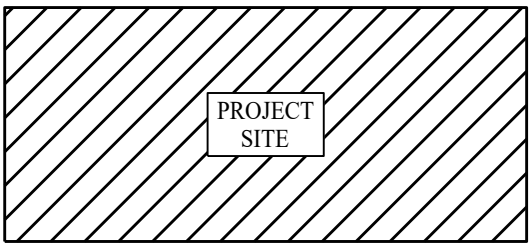
SIGNALIZED INTERSECTION

UNSIGNALIZED INTERSECTION

EXISTING ROADWAY

AM(PM)





SOLLI ENGINEERING
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T: (203) 880-5455 F: (203) 880-9695

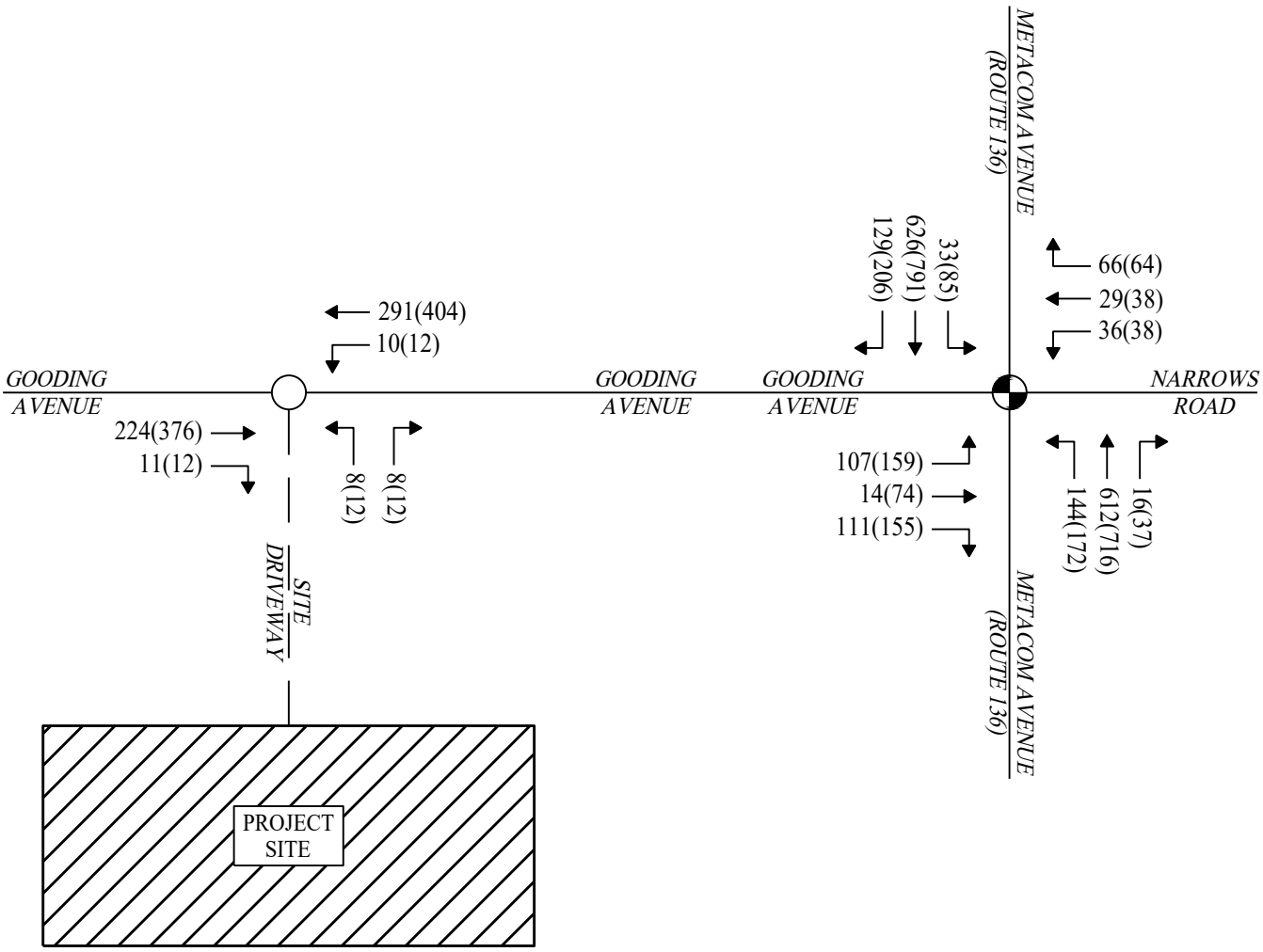
2025 BACKGROUND TRAFFIC VOLUMES

GOODING AVENUE
BRISTOL, RHODE ISLAND

Project #:	23103601
Plan Date:	01/10/24
Scale:	NTS
Figure:	5

LEGEND

- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION
- EXISTING ROADWAY
- PROPOSED ROADWAY
- AM(PM)

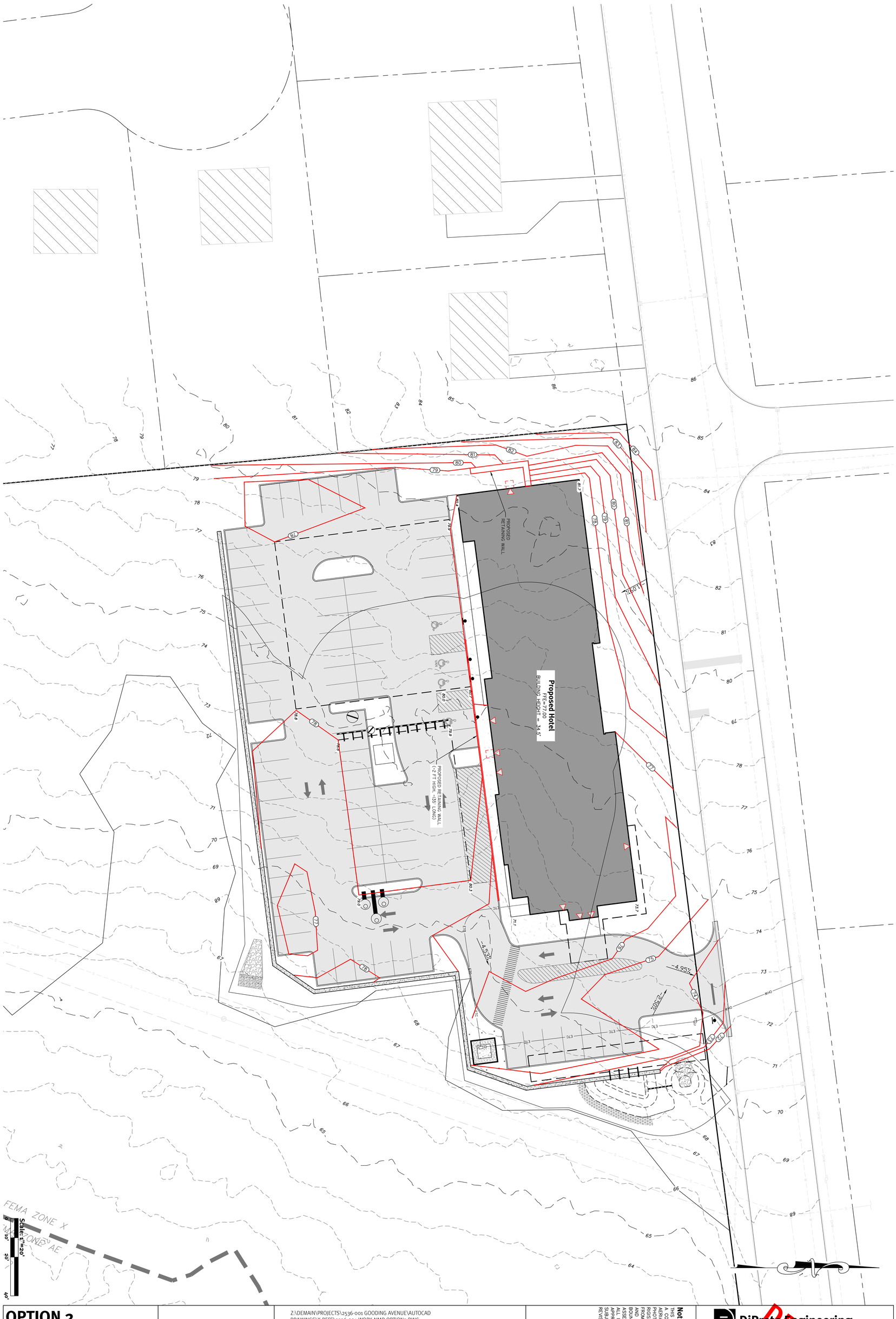


SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 F: (203) 880-9695

2025 BUILD TRAFFIC VOLUMES

GOODING AVENUE
BRISTOL, RHODE ISLAND

Project #:	23103601
Plan Date:	01/10/24
Scale:	NTS
Figure:	6



OPTION 2

2536-001 Gooding Avenue Development

Date: 11/3/2016 10:44 AM
Plotted By: NPATTIE

This printed worksheet is an internal design aid only. It is NOT intended to be a finished product.

Z:\DEMAIN\PROJECTS\2536-001 GOODING AVENUE\AUTOCAD DRAWINGS\X-REFS\2536-001-WORK-NMP-OPTION2.DWG

Note:
THE INFORMATION SHOWN ON THESE WORKSHEETS IS A COMPILATION OF AERIAL PHOTOGRAPHY FROM RIGIS, TOPOGRAPHY FROM LIDAR DATA, ROAD RIGHT-OF-WAY AND PROPERTY BOUNDARY INFORMATION FROM ASSESSOR'S MAPS. ALL INFORMATION IS APPROXIMATE AND SUBJECT TO CHANGE AND REVISIONS.

DRAFT

DiPrete Engineering
Two Stafford Court Cranston, RI 02921
tel 401-943-1000 fax 401-464-6006 www.DiPrete-Eng.com

Item 02

NOTES:

1. INTERSECTION SIGHT DISTANCE IS MEASURED 15 FEET FROM THE SHOULDER.
2. INTERSECTION SIGHT DISTANCE IS BASED ON A DESIGN SPEED SPEED OF 40 MILES PER HOUR WESTBOUND AND AN 85TH PERCENTILE SPEED OF 42.39 MILES PER HOUR EASTBOUND ALONG GOODING AVENUE.
3. INTERSECTION SIGHT DISTANCES BASED ON GUIDANCE PROVIDED IN THE 2008 EDITION OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION HIGHWAY DESIGN MANUAL.

60 0 30 60

Rev. #:	Date	Description
1	01/10/24	Revised Per Site Layout Change

SOLLI ENGINEERING
501 Main Street, Monroe, CT 06468
T: (203) 880-5455 | F: (203) 880-9695

Drawn By:	ABS
Checked By:	KMS
Project #:	23103601
Plan Date:	04/14/23
Scale:	1" = 60'

Project:
PROPOSED DEVELOPMENT
GOODING AVENUE
BRISTOL, RHODE ISLAND

Sheet Title:
INTERSECTION SIGHT DISTANCE

SHEET #:
ISD

Trip Generation Summary
Proposed Hotel, Bristol, Rhode Island

			AM Peak Hour			PM Peak Hour		
	Variable	LUC	Enter	Exit	Total	Enter	Exit	Total
Hotel	80	310	21	16	37	24	24	48
Total New Trips			**21**	**16**	**37**	**24**	**24**	**48**

Source: ITE Trip Generation, 11th Edition

Land Use	Time Period	Avg Rate	Entering	Exiting
LUC 310 - Hotel	AM	0.46	56%	44%
	PM	0.59	51%	49%

SOLLI ENGINEERING

Land Use: 310
Hotel

Description

A hotel is a place of lodging that provides sleeping accommodations and supporting facilities such as a full-service restaurant, cocktail lounge, meeting rooms, banquet room, and convention facilities. A hotel typically provides a swimming pool or another recreational facility such as a fitness room. All suites hotel (Land Use 311), business hotel (Land Use 312), motel (Land Use 320), and resort hotel (Land Use 330) are related uses.

Additional Data

Twenty-five studies provided information on occupancy rates at the time the studies were conducted. The average occupancy rate for these studies was approximately 82 percent.

Some properties in this land use provide guest transportation services (e.g., airport shuttle, limousine service, golf course shuttle service) which may have an impact on the overall trip generation rates.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, District of Columbia, Florida, Georgia, Indiana, Minnesota, New York, Ontario (CAN), Pennsylvania, South Dakota, Texas, Vermont, Virginia, and Washington.

For all lodging uses, it is important to collect data on occupied rooms as well as total rooms in order to accurately predict trip generation characteristics for the site.

Trip generation at a hotel may be related to the presence of supporting facilities such as convention facilities, restaurants, meeting/banquet space, and retail facilities. Future data submissions should specify the presence of these amenities. Reporting the level of activity at the supporting facilities such as full, empty, partially active, number of people attending a meeting/banquet during observation may also be useful in further analysis of this land use.

Source Numbers

170, 260, 262, 277, 280, 301, 306, 357, 422, 507, 577, 728, 867, 872, 925, 951, 1009, 1021, 1026, 1046

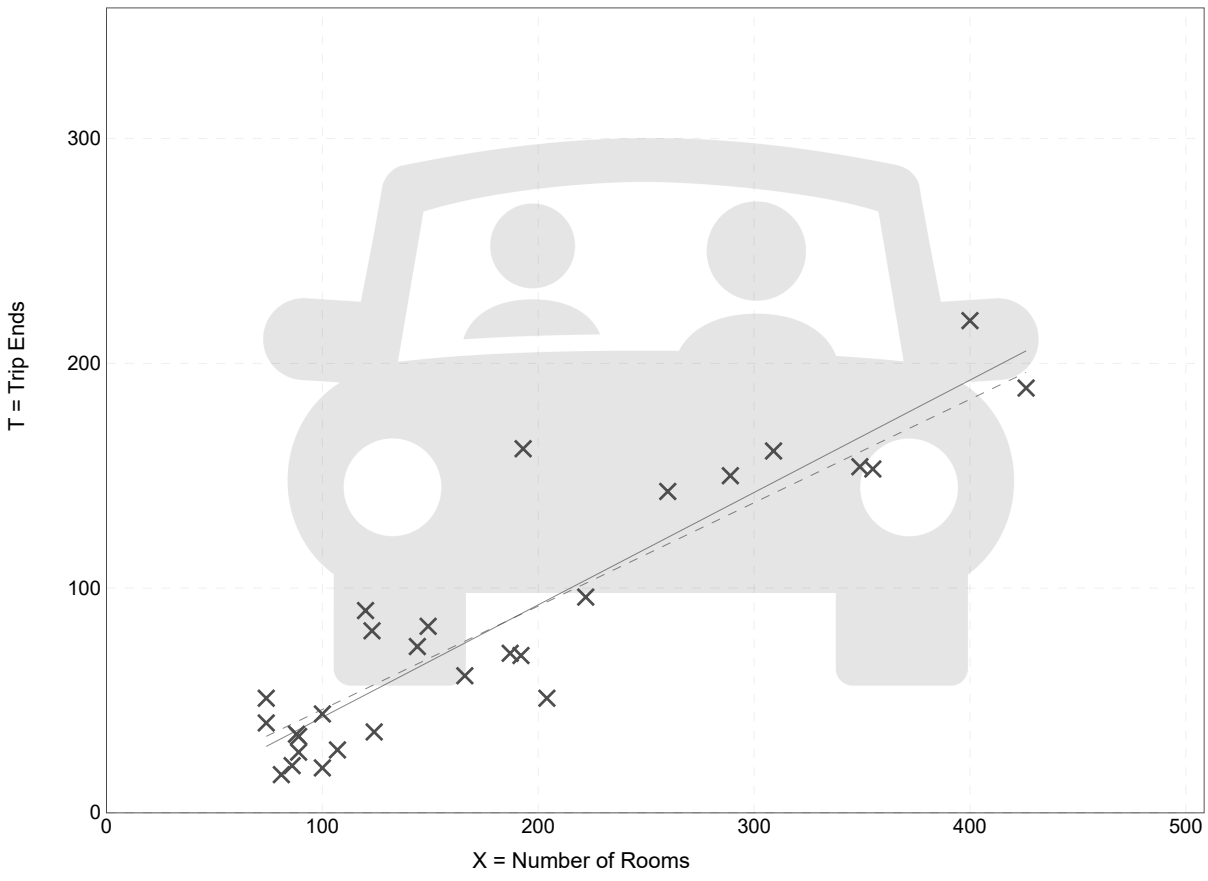
Hotel
(310)

Vehicle Trip Ends vs: **Rooms**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 28
Avg. Num. of Rooms: 182
Directional Distribution: 56% entering, 44% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.46	0.20 - 0.84	0.14

Data Plot and Equation



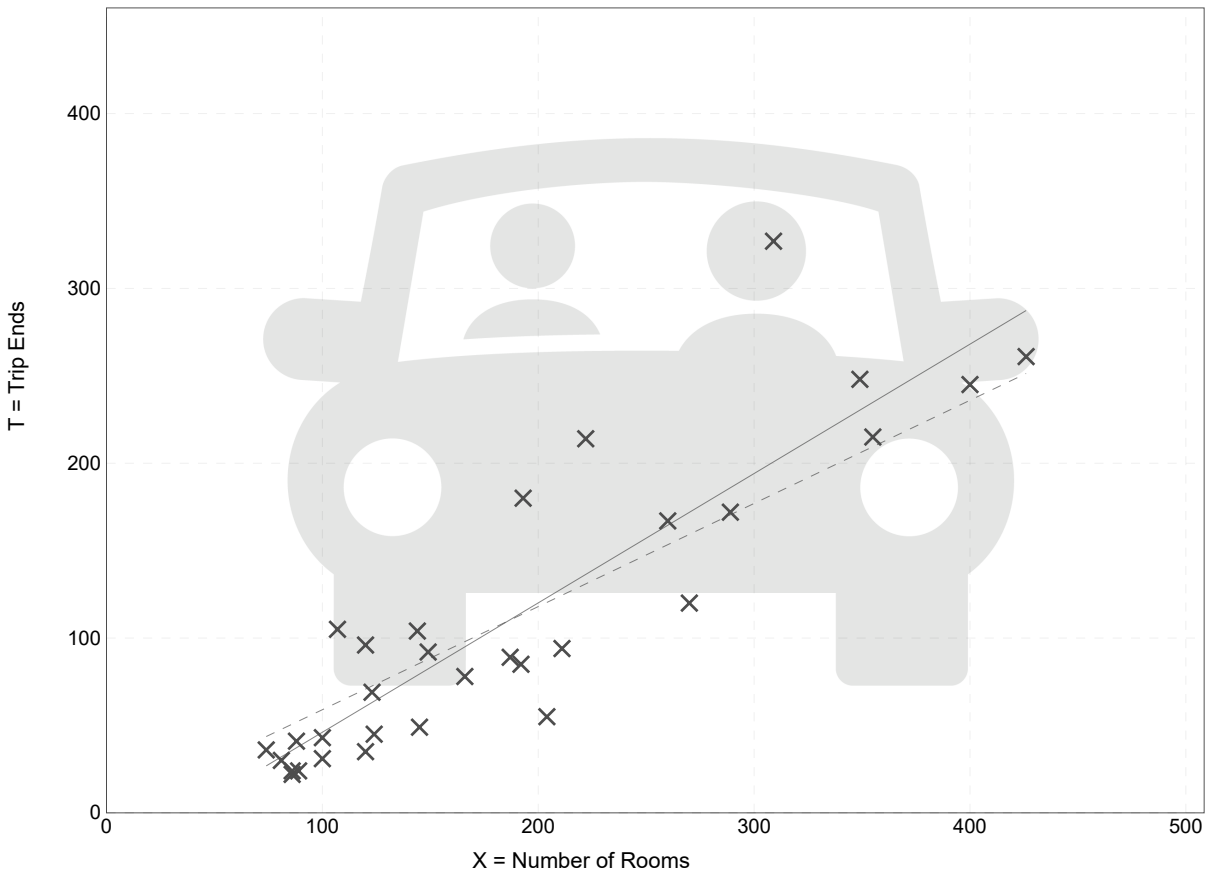
Hotel
(310)

Vehicle Trip Ends vs: **Rooms**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 31
Avg. Num. of Rooms: 186
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per Room

Average Rate	Range of Rates	Standard Deviation
0.59	0.26 - 1.06	0.22

Data Plot and Equation



Fitted Curve Equation: T = 0.74(X) - 27.89

R^2= 0.78

Bristol Police Department

395 METACOM AVENUE ❖ BRISTOL, RHODE ISLAND 02809
TELEPHONE (401) 253-6900

KEVIN M. LYNCH
Chief of Police

April 3, 2023

Mr. Andrew Schroder
501 Main Street, Suite 2A
Monroe, CT 06468

Dear Mr. Schroder:

Your Public Records request for motor vehicle accident reports/data for the last three (3) years January 2020 – December 2022 from the Bristol Police Department has been received.

As per our phone conversation here are the numbers for those years:

- 2020 Gooding Ave. from Broadcommon Rd. to Metacom Ave. 6 MVA's reported with 6 at the intersection of Gooding and Metacom and 10 at Metacom and Gooding Ave.
- 2021 Gooding Ave. from Broadcommon Rd. to Metacom Avenue 3 MVA's reported with 6 reported on Gooding at Metacom and 9 at Metacom and Gooding Ave.
- 2022 Gooding Ave. from Broadcommon Rd. to Metacom Ave. 4 MVA's reported with 7 on Gooding at Metacom and 10 Metacom Ave. at Gooding Ave.

There is no cost for this information as I indicated in our phone conversation as the first hour of retrieval is free, however should you require the actual reports or further data after the first hour its $22.50 per hour and $ .15 per page. To include self-addressed postage. You may however set up a cooperate account as we discussed through LexisNexis for your convenience.

If you have any questions or should require further assistance, please contact us.

Sincerely,

Natalie Carroll
Clerk

Weekday AM Peak Hour
Capacity Analysis Summary
Proposed Development - Gooding Avenue, Bristol, RI

	Lane Use	Storage Length (ft)	2023 Existing				2025 Background				2025 Build			
			LOS/Delay(s)	V/C Ratio	Queue (ft) 50th	Queue (ft) 95th	LOS/Delay(s)	V/C Ratio	Queue (ft) 50th	Queue (ft) 95th	LOS/Delay(s)	V/C Ratio	Queue (ft) 50th	Queue (ft) 95th
Metacom Avenue (Route 136) & Gooding Avenue / Narrows Road														
Gooding Avenue														
	EB-LEFT	300	C/34.8	0.45	52	96	C/34.5	0.44	53	98	D/35.6	0.48	56	101
	EB-THRU		D/36.3	0.07	8	27	D/36.2	0.07	8	27	D/36.1	0.07	8	27
	EB-RIGHT	150	B/11.6	0.41	0	46	B/11.8	0.41	0	48	B/12.1	0.42	0	49
	Overall EB Approach		**C/23.8**				**C/23.8**				**C/24.5**			
Narrows Road														
	WB-LEFT	90	C/29.0	0.18	18	42	C/28.9	0.18	19	42	C/28.9	0.18	19	42
	WB-THRU		D/41.8	0.22	18	44	D/41.8	0.22	19	45	D/41.8	0.22	19	45
	WB-RIGHT	100	A/5.8	0.31	0	12	A/5.9	0.31	0	12	A/5.9	0.31	0	12
	Overall WB Approach		**C/20.0**				**C/20.2**				**C/20.2**			
Metacom Avenue (Route 136)														
	NB-LEFT	225	D/44.9	0.58	79	139	D/44.6	0.58	80	141	D/44.0	0.58	83	145
	NB-THRU/RIGHT		B/16.1	0.58	261	439	B/17.3	0.63	270	455	B/17.4	0.63	272	456
	Overall NB Approach		**C/21.3**				**C/22.2**				**C/22.4**			
	SB-LEFT	125	D/42.8	0.26	20	47	D/43.1	0.27	21	49	D/43.1	0.27	21	49
	SB-THRU/RIGHT		B/16.5	0.48	166	229	B/17.5	0.52	172	234	B/18.0	0.53	177	236
	Overall SB Approach		**B/17.6**				**B/18.6**				**B/19.0**			
Overall Intersection			**B/19.9**				**C/20.8**				**C/21.1**			
Gooding Avenue & Site Driveway*														
Gooding Avenue														
	EB-THRU/RIGHT													
	Overall EB Approach													
	WB-LEFT/THRU										A/7.8	0.008		0.0***
	Overall WB Approach													
Site Driveway														
	NB-LEFT/RIGHT										B/11.3	0.030		0.1***
	Overall NB Approach													
Overall Intersection														

*** = Queue length recorded in vehicles
*= Unsignalized Intersection

Weekday PM Peak Hour
Capacity Analysis Summary
Proposed Development - Gooding Avenue, Bristol, RI

Lane Use		Storage Length (ft)	2023 Existing				2025 Background				2025 Build			
			LOS/Delay(s)	V/C Ratio	Queue (ft) 50th	95th	LOS/Delay(s)	V/C Ratio	Queue (ft) 50th	95th	LOS/Delay(s)	V/C Ratio	Queue (ft) 50th	95th
Metacom Avenue (Route 136) & Gooding Avenue / Narrows Road														
Gooding Avenue														
	EB-LEFT	300	D/39.9	0.60	75	126	D/40.4	0.61	77	128	D/41.8	0.64	81	134
	EB-THRU		D/39.4	0.32	41	82	D/39.5	0.32	42	82	D/39.4	0.32	42	82
	EB-RIGHT	150	B/11.2	0.46	0	53	B/11.1	0.46	0	54	B/11.1	0.47	0	55
	Overall EB Approach		**C/28.4**				**C/28.6**				**C/29.1**			
Narrows Road														
	WB-LEFT	90	C/28.4	0.18	18	42	C/28.5	0.18	18	42	C/28.5	0.18	18	42
	WB-THRU		D/41.3	0.23	21	51	D/41.4	0.24	22	51	D/41.4	0.24	22	51
	WB-RIGHT	100	A/3.8	0.27	0	8	A/3.9	0.27	0	8	A/3.9	0.27	0	8
	Overall WB Approach		**C/20.6**				**C/20.8**				**C/20.8**			
Metacom Avenue (Route 136)														
	NB-LEFT	225	D/45.4	0.62	91	157	D/45.1	0.62	92	161	D/44.6	0.62	95	166
	NB-THRU/RIGHT		C/25.4	0.77	350	#672	C/26.3	0.79	363	#693	C/26.4	0.79	363	#693
	Overall NB Approach		**C/29.0**				**C/29.7**				**C/29.7**			
	SB-LEFT	125	D/45.5	0.47	48	90	D/45.6	0.47	49	91	D/45.6	0.47	49	91
	SB-THRU/RIGHT		B/19.7	0.62	220	310	C/20.2	0.64	228	319	C/20.7	0.65	233	321
	Overall SB Approach		**C/21.8**				**C/22.2**				**C/22.6**			
Overall Intersection			**C/25.4**				**C/25.8**				**C/26.1**			
Gooding Avenue & Site Driveway*														
Gooding Avenue														
	EB-THRU/RIGHT													
	Overall EB Approach													
	WB-LEFT/THRU										A/8.2	0.011		0.0***
	Overall WB Approach													
Site Driveway														
	NB-LEFT/RIGHT										B/14.2	0.062		0.2***
	Overall NB Approach													
Overall Intersection														

*** = Queue length recorded in vehicles
*= Unsignalized Intersection
= 95th percentile volume exceeds capacity, queue may be longer

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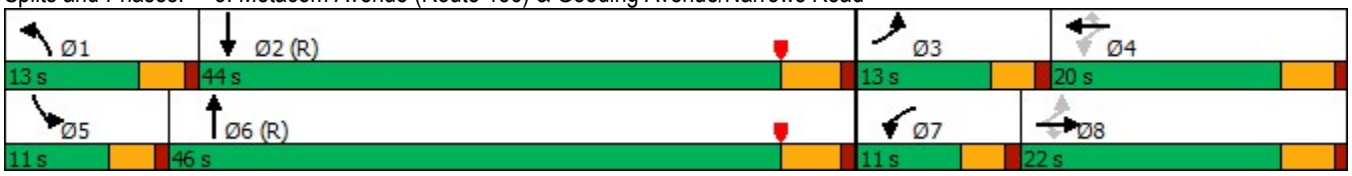
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	14	105	35	28	65	136	600	16	32	614	121
Future Volume (vph)	101	14	105	35	28	65	136	600	16	32	614	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	11	12	12	12	11	11	11	11	11	11
Storage Length (ft)	300		150	90		100	225		0	125		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt			0.850			0.850		0.996			0.975	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	1837	1446	1805	1827	1615	1678	1758	0	1646	3256	0
Flt Permitted	0.513			0.747			0.950			0.950		
Satd. Flow (perm)	937	1837	1446	1419	1827	1615	1678	1758	0	1646	3256	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			121			121		2			32	
Link Speed (mph)		35			25			40			40	
Link Distance (ft)		2032			751			749			760	
Travel Time (s)		39.6			20.5			12.8			13.0	
Peak Hour Factor	0.90	0.90	0.90	0.86	0.86	0.86	0.92	0.92	0.92	0.88	0.88	0.88
Heavy Vehicles (%)	4%	0%	8%	0%	4%	0%	4%	4%	6%	6%	5%	2%
Adj. Flow (vph)	112	16	117	41	33	76	148	652	17	36	698	138
Shared Lane Traffic (%)												
Lane Group Flow (vph)	112	16	117	41	33	76	148	669	0	36	836	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1		2	2	
Detector Template	Left		Right	Left		Right	Left					
Leading Detector (ft)	40	40	40	40	40	30	40	40		211	211	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40	30	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)										205	205	
Detector 2 Size(ft)										6	6	
Detector 2 Type										Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)										0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Detector Phase	3	8	8	7	4	4	1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	9.0	11.5	11.5	9.0	11.5	11.5	11.0	12.0		11.0	12.0	
Total Split (s)	13.0	22.0	22.0	11.0	20.0	20.0	13.0	46.0		11.0	44.0	
Total Split (%)	14.4%	24.4%	24.4%	12.2%	22.2%	22.2%	14.4%	51.1%		12.2%	48.9%	
Maximum Green (s)	9.0	17.5	17.5	7.0	15.5	15.5	9.0	41.0		7.0	39.0	
Yellow Time (s)	3.0	3.5	3.5	3.0	3.5	3.5	3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.5	4.5	4.0	4.5	4.5	4.0	5.0		4.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.7	2.7	2.5	2.7	2.7	2.5	2.7		2.5	2.7	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	17.0	11.3	11.3	12.8	7.5	7.5	13.6	58.7		7.7	47.4	
Actuated g/C Ratio	0.19	0.13	0.13	0.14	0.08	0.08	0.15	0.65		0.09	0.53	
v/c Ratio	0.45	0.07	0.41	0.18	0.22	0.31	0.58	0.58		0.26	0.48	
Control Delay	34.8	36.3	11.6	29.0	41.8	5.8	44.9	16.1		42.8	16.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	34.8	36.3	11.6	29.0	41.8	5.8	44.9	16.1		42.8	16.5	
LOS	C	D	B	C	D	A	D	B		D	B	
Approach Delay		23.8			20.0			21.3			17.6	
Approach LOS		C			C			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 47 (52%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 19.9		Intersection LOS: B	
Intersection Capacity Utilization 61.9%		ICU Level of Service B	
Analysis Period (min) 15			

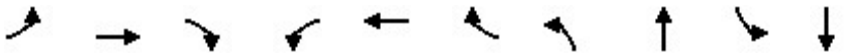
Splits and Phases: 3: Metacom Avenue (Route 136) & Gooding Avenue/Narrows Road



Queues — Gooding Avenue - Bristol, RI

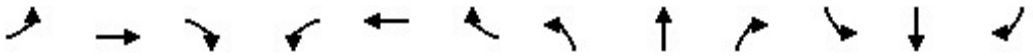
3: Metacom Avenue (Route 136) & Gooding Avenue/Narrows Road

2023 Existing AM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	112	16	117	41	33	76	148	669	36	836
v/c Ratio	0.45	0.07	0.41	0.18	0.22	0.31	0.58	0.58	0.26	0.48
Control Delay	34.8	36.3	11.6	29.0	41.8	5.8	44.9	16.1	42.8	16.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.8	36.3	11.6	29.0	41.8	5.8	44.9	16.1	42.8	16.5
Queue Length 50th (ft)	52	8	0	18	18	0	79	261	20	166
Queue Length 95th (ft)	96	27	46	42	44	12	139	439	47	229
Internal Link Dist (ft)		1952			671			669		680
Turn Bay Length (ft)	300		150	90		100	225		125	
Base Capacity (vph)	263	363	382	243	314	378	253	1148	140	1730
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.04	0.31	0.17	0.11	0.20	0.58	0.58	0.26	0.48

Intersection Summary

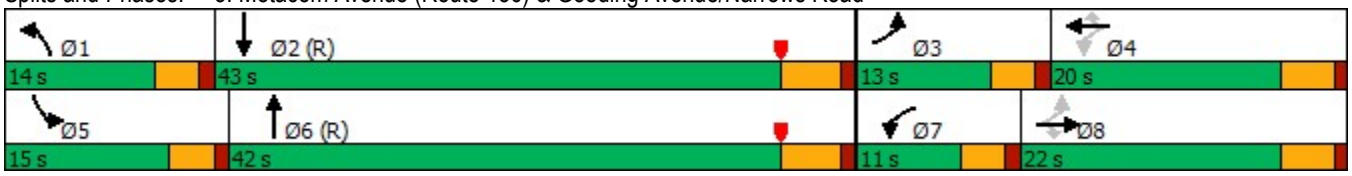


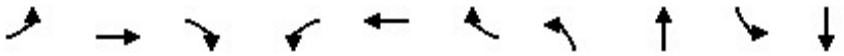
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	73	146	37	37	63	163	702	36	83	775	196
Future Volume (vph)	150	73	146	37	37	63	163	702	36	83	775	196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	11	12	12	12	11	11	11	11	11	11
Storage Length (ft)	300		150	90		100	225		0	125		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt			0.850			0.850		0.993			0.970	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1837	1546	1752	1900	1583	1728	1790	0	1745	3345	0
Flt Permitted	0.470			0.708			0.950			0.950		
Satd. Flow (perm)	875	1837	1546	1306	1900	1583	1728	1790	0	1745	3345	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			152			121		3			43	
Link Speed (mph)		35			25			40			40	
Link Distance (ft)		2032			751			749			760	
Travel Time (s)		39.6			20.5			12.8			13.0	
Peak Hour Factor	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	0%	1%	3%	0%	2%	1%	2%	0%	0%	1%	2%
Adj. Flow (vph)	156	76	152	39	39	66	172	739	38	87	816	206
Shared Lane Traffic (%)												
Lane Group Flow (vph)	156	76	152	39	39	66	172	777	0	87	1022	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1		2	2	
Detector Template	Left		Right	Left		Right	Left					
Leading Detector (ft)	40	40	40	40	40	30	40	40		211	211	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40	30	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)										205	205	
Detector 2 Size(ft)										6	6	
Detector 2 Type										Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)										0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Detector Phase	3	8	8	7	4	4	1	6		5	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	5.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	11.5	11.5	9.0	11.5	11.5	11.0	12.0		11.0	12.0	
Total Split (s)	13.0	22.0	22.0	11.0	20.0	20.0	14.0	42.0		15.0	43.0	
Total Split (%)	14.4%	24.4%	24.4%	12.2%	22.2%	22.2%	15.6%	46.7%		16.7%	47.8%	
Maximum Green (s)	9.0	17.5	17.5	7.0	15.5	15.5	10.0	37.0		11.0	38.0	
Yellow Time (s)	3.0	3.5	3.5	3.0	3.5	3.5	3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.5	4.5	4.0	4.5	4.5	4.0	5.0		4.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.7	2.7	2.5	2.7	2.7	2.5	2.7		2.5	2.7	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	17.7	11.8	11.8	13.1	7.9	7.9	14.4	50.8		9.6	43.8	
Actuated g/C Ratio	0.20	0.13	0.13	0.15	0.09	0.09	0.16	0.56		0.11	0.49	
v/c Ratio	0.60	0.32	0.46	0.18	0.23	0.27	0.62	0.77		0.47	0.62	
Control Delay	39.9	39.4	11.2	28.4	41.3	3.8	45.4	25.4		45.5	19.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	39.9	39.4	11.2	28.4	41.3	3.8	45.4	25.4		45.5	19.7	
LOS	D	D	B	C	D	A	D	C		D	B	
Approach Delay		28.4			20.6			29.0			21.8	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 44 (49%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 25.4		Intersection LOS: C	
Intersection Capacity Utilization 71.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Metacom Avenue (Route 136) & Gooding Avenue/Narrows Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	156	76	152	39	39	66	172	777	87	1022
v/c Ratio	0.60	0.32	0.46	0.18	0.23	0.27	0.62	0.77	0.47	0.62
Control Delay	39.9	39.4	11.2	28.4	41.3	3.8	45.4	25.4	45.5	19.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.9	39.4	11.2	28.4	41.3	3.8	45.4	25.4	45.5	19.7
Queue Length 50th (ft)	75	41	0	18	21	0	91	350	48	220
Queue Length 95th (ft)	126	82	53	42	51	8	157	#672	90	310
Internal Link Dist (ft)		1952			671			669		680
Turn Bay Length (ft)	300		150	90		100	225		125	
Base Capacity (vph)	264	367	431	236	327	372	276	1011	221	1649
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.21	0.35	0.17	0.12	0.18	0.62	0.77	0.39	0.62

Intersection Summary

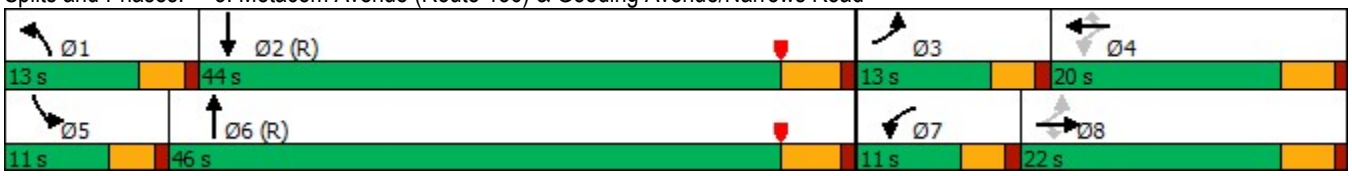
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

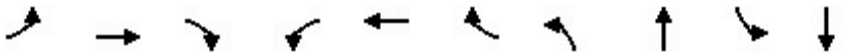
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	14	107	36	29	66	139	612	16	33	626	123
Future Volume (vph)	103	14	107	36	29	66	139	612	16	33	626	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	11	12	12	12	11	11	11	11	11	11
Storage Length (ft)	300		150	90		100	225		0	125		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt			0.850			0.850		0.996			0.975	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	1837	1446	1805	1827	1615	1678	1758	0	1646	3256	0
Flt Permitted	0.540			0.747			0.950			0.950		
Satd. Flow (perm)	987	1837	1446	1419	1827	1615	1678	1758	0	1646	3256	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			121			121		2			32	
Link Speed (mph)		35			25			40			40	
Link Distance (ft)		2032			751			749			760	
Travel Time (s)		39.6			20.5			12.8			13.0	
Peak Hour Factor	0.90	0.90	0.90	0.86	0.86	0.86	0.92	0.92	0.92	0.88	0.88	0.88
Heavy Vehicles (%)	4%	0%	8%	0%	4%	0%	4%	4%	6%	6%	5%	2%
Adj. Flow (vph)	114	16	119	42	34	77	151	665	17	38	711	140
Shared Lane Traffic (%)												
Lane Group Flow (vph)	114	16	119	42	34	77	151	682	0	38	851	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1		2	2	
Detector Template	Left		Right	Left		Right	Left					
Leading Detector (ft)	40	40	40	40	40	30	40	40		211	211	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40	30	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)										205	205	
Detector 2 Size(ft)										6	6	
Detector 2 Type										Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)										0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Detector Phase	3	8	8	7	4	4	1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	9.0	11.5	11.5	9.0	11.5	11.5	11.0	12.0		11.0	12.0	
Total Split (s)	13.0	22.0	22.0	11.0	20.0	20.0	13.0	46.0		11.0	44.0	
Total Split (%)	14.4%	24.4%	24.4%	12.2%	22.2%	22.2%	14.4%	51.1%		12.2%	48.9%	
Maximum Green (s)	9.0	17.5	17.5	7.0	15.5	15.5	9.0	41.0		7.0	39.0	
Yellow Time (s)	3.0	3.5	3.5	3.0	3.5	3.5	3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.5	4.5	4.0	4.5	4.5	4.0	5.0		4.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.7	2.7	2.5	2.7	2.7	2.5	2.7		2.5	2.7	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	17.3	11.3	11.3	13.3	7.5	7.5	13.9	55.4		7.7	44.8	
Actuated g/C Ratio	0.19	0.13	0.13	0.15	0.08	0.08	0.15	0.62		0.09	0.50	
v/c Ratio	0.44	0.07	0.41	0.18	0.22	0.31	0.58	0.63		0.27	0.52	
Control Delay	34.5	36.2	11.8	28.9	41.8	5.9	44.6	17.3		43.1	17.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	34.5	36.2	11.8	28.9	41.8	5.9	44.6	17.3		43.1	17.5	
LOS	C	D	B	C	D	A	D	B		D	B	
Approach Delay		23.8			20.2			22.2			18.6	
Approach LOS		C			C			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 47 (52%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 20.8		Intersection LOS: C	
Intersection Capacity Utilization 62.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Metacom Avenue (Route 136) & Gooding Avenue/Narrows Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	114	16	119	42	34	77	151	682	38	851
v/c Ratio	0.44	0.07	0.41	0.18	0.22	0.31	0.58	0.63	0.27	0.52
Control Delay	34.5	36.2	11.8	28.9	41.8	5.9	44.6	17.3	43.1	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.5	36.2	11.8	28.9	41.8	5.9	44.6	17.3	43.1	17.5
Queue Length 50th (ft)	53	8	0	19	19	0	80	270	21	172
Queue Length 95th (ft)	98	27	48	42	45	12	141	455	49	234
Internal Link Dist (ft)		1952			671			669		680
Turn Bay Length (ft)	300		150	90		100	225		125	
Base Capacity (vph)	268	363	382	245	314	378	259	1082	141	1636
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.04	0.31	0.17	0.11	0.20	0.58	0.63	0.27	0.52

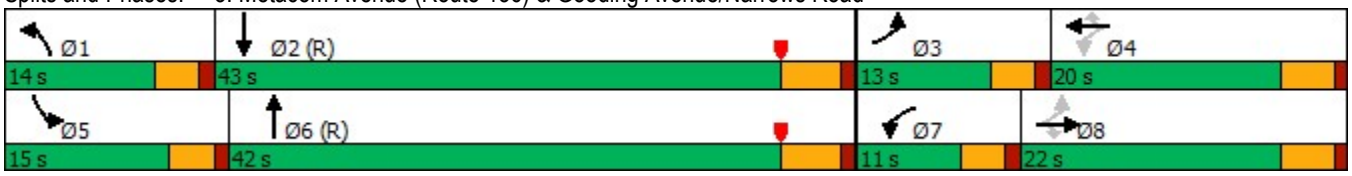
Intersection Summary

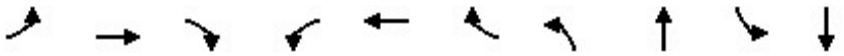
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	74	149	38	38	64	166	716	37	85	791	200
Future Volume (vph)	153	74	149	38	38	64	166	716	37	85	791	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	11	12	12	12	11	11	11	11	11	11
Storage Length (ft)	300		150	90		100	225		0	125		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt			0.850			0.850		0.993			0.970	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1837	1546	1752	1900	1583	1728	1790	0	1745	3345	0
Flt Permitted	0.470			0.707			0.950			0.950		
Satd. Flow (perm)	875	1837	1546	1304	1900	1583	1728	1790	0	1745	3345	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155			121		4			43	
Link Speed (mph)		35			25			40			40	
Link Distance (ft)		2032			751			749			760	
Travel Time (s)		39.6			20.5			12.8			13.0	
Peak Hour Factor	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	0%	1%	3%	0%	2%	1%	2%	0%	0%	1%	2%
Adj. Flow (vph)	159	77	155	40	40	67	175	754	39	89	833	211
Shared Lane Traffic (%)												
Lane Group Flow (vph)	159	77	155	40	40	67	175	793	0	89	1044	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1		2	2	
Detector Template	Left		Right	Left		Right	Left					
Leading Detector (ft)	40	40	40	40	40	30	40	40		211	211	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40	30	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)										205	205	
Detector 2 Size(ft)										6	6	
Detector 2 Type										Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)										0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Detector Phase	3	8	8	7	4	4	1	6		5	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	5.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	11.5	11.5	9.0	11.5	11.5	11.0	12.0		11.0	12.0	
Total Split (s)	13.0	22.0	22.0	11.0	20.0	20.0	14.0	42.0		15.0	43.0	
Total Split (%)	14.4%	24.4%	24.4%	12.2%	22.2%	22.2%	15.6%	46.7%		16.7%	47.8%	
Maximum Green (s)	9.0	17.5	17.5	7.0	15.5	15.5	10.0	37.0		11.0	38.0	
Yellow Time (s)	3.0	3.5	3.5	3.0	3.5	3.5	3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.5	4.5	4.0	4.5	4.5	4.0	5.0		4.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.7	2.7	2.5	2.7	2.7	2.5	2.7		2.5	2.7	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	17.7	11.8	11.8	13.1	7.9	7.9	14.7	50.7		9.7	43.5	
Actuated g/C Ratio	0.20	0.13	0.13	0.15	0.09	0.09	0.16	0.56		0.11	0.48	
v/c Ratio	0.61	0.32	0.46	0.18	0.24	0.27	0.62	0.79		0.47	0.64	
Control Delay	40.4	39.5	11.1	28.5	41.4	3.9	45.1	26.3		45.6	20.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	40.4	39.5	11.1	28.5	41.4	3.9	45.1	26.3		45.6	20.2	
LOS	D	D	B	C	D	A	D	C		D	C	
Approach Delay		28.6			20.8			29.7			22.2	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 44 (49%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 25.8		Intersection LOS: C	
Intersection Capacity Utilization 72.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Metacom Avenue (Route 136) & Gooding Avenue/Narrows Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	159	77	155	40	40	67	175	793	89	1044
v/c Ratio	0.61	0.32	0.46	0.18	0.24	0.27	0.62	0.79	0.47	0.64
Control Delay	40.4	39.5	11.1	28.5	41.4	3.9	45.1	26.3	45.6	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.4	39.5	11.1	28.5	41.4	3.9	45.1	26.3	45.6	20.2
Queue Length 50th (ft)	77	42	0	18	22	0	92	363	49	228
Queue Length 95th (ft)	128	82	54	42	51	8	161	#693	91	319
Internal Link Dist (ft)		1952			671			669		680
Turn Bay Length (ft)	300		150	90		100	225		125	
Base Capacity (vph)	264	367	433	235	327	372	281	1009	221	1638
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.21	0.36	0.17	0.12	0.18	0.62	0.79	0.40	0.64

Intersection Summary

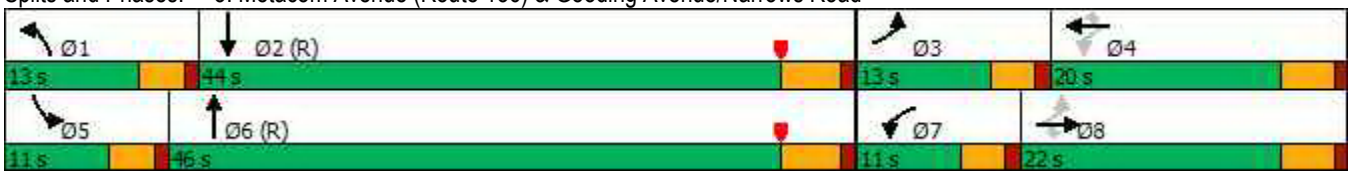
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	107	14	111	36	29	66	144	612	16	33	626	129
Future Volume (vph)	107	14	111	36	29	66	144	612	16	33	626	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	11	12	12	12	11	11	11	11	11	11
Storage Length (ft)	300		150	90		100	225		0	125		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt			0.850			0.850		0.996			0.974	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	1837	1446	1805	1827	1615	1678	1758	0	1646	3253	0
Flt Permitted	0.463			0.747			0.950			0.950		
Satd. Flow (perm)	846	1837	1446	1419	1827	1615	1678	1758	0	1646	3253	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			123			121		2			34	
Link Speed (mph)		35			25			40			40	
Link Distance (ft)		1337			751			749			760	
Travel Time (s)		26.0			20.5			12.8			13.0	
Peak Hour Factor	0.90	0.90	0.90	0.86	0.86	0.86	0.92	0.92	0.92	0.88	0.88	0.88
Heavy Vehicles (%)	4%	0%	8%	0%	4%	0%	4%	4%	6%	6%	5%	2%
Adj. Flow (vph)	119	16	123	42	34	77	157	665	17	38	711	147
Shared Lane Traffic (%)												
Lane Group Flow (vph)	119	16	123	42	34	77	157	682	0	38	858	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1		2	2	
Detector Template	Left		Right	Left		Right	Left					
Leading Detector (ft)	40	40	40	40	40	30	40	40		211	211	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40	30	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)										205	205	
Detector 2 Size(ft)										6	6	
Detector 2 Type										Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)										0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	

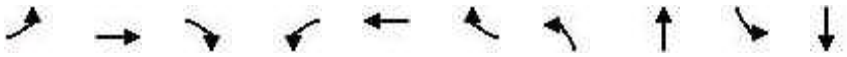
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Detector Phase	3	8	8	7	4	4	1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	9.0	11.5	11.5	9.0	11.5	11.5	11.0	12.0		11.0	12.0	
Total Split (s)	13.0	22.0	22.0	11.0	20.0	20.0	13.0	46.0		11.0	44.0	
Total Split (%)	14.4%	24.4%	24.4%	12.2%	22.2%	22.2%	14.4%	51.1%		12.2%	48.9%	
Maximum Green (s)	9.0	17.5	17.5	7.0	15.5	15.5	9.0	41.0		7.0	39.0	
Yellow Time (s)	3.0	3.5	3.5	3.0	3.5	3.5	3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.5	4.5	4.0	4.5	4.5	4.0	5.0		4.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.7	2.7	2.5	2.7	2.7	2.5	2.7		2.5	2.7	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	17.4	11.4	11.4	12.8	7.6	7.6	14.5	55.3		7.7	44.1	
Actuated g/C Ratio	0.19	0.13	0.13	0.14	0.08	0.08	0.16	0.61		0.09	0.49	
v/c Ratio	0.48	0.07	0.42	0.18	0.22	0.31	0.58	0.63		0.27	0.53	
Control Delay	35.6	36.1	12.1	28.9	41.8	5.9	44.0	17.4		43.1	18.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	35.6	36.1	12.1	28.9	41.8	5.9	44.0	17.4		43.1	18.0	
LOS	D	D	B	C	D	A	D	B		D	B	
Approach Delay		24.5			20.2			22.4			19.0	
Approach LOS		C			C			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 47 (52%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 21.1		Intersection LOS: C	
Intersection Capacity Utilization 62.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Metacom Avenue (Route 136) & Gooding Avenue/Narrows Road



Queues
3: Metacom Avenue (Route 136) & Gooding Avenue/Narrows Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	119	16	123	42	34	77	157	682	38	858
v/c Ratio	0.48	0.07	0.42	0.18	0.22	0.31	0.58	0.63	0.27	0.53
Control Delay	35.6	36.1	12.1	28.9	41.8	5.9	44.0	17.4	43.1	18.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.6	36.1	12.1	28.9	41.8	5.9	44.0	17.4	43.1	18.0
Queue Length 50th (ft)	56	8	0	19	19	0	83	272	21	177
Queue Length 95th (ft)	101	27	49	42	45	12	145	456	49	236
Internal Link Dist (ft)		1257			671			669		680
Turn Bay Length (ft)	300		150	90		100	225		125	
Base Capacity (vph)	257	363	385	243	314	378	269	1080	141	1611
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.04	0.32	0.17	0.11	0.20	0.58	0.63	0.27	0.53

Intersection Summary

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	224	11	10	291	8	8
Future Volume (vph)	224	11	10	291	8	8
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	0.994				0.932	
Flt Protected				0.998	0.976	
Satd. Flow (prot)	1852	0	0	1859	1694	0
Flt Permitted				0.998	0.976	
Satd. Flow (perm)	1852	0	0	1859	1694	0
Link Speed (mph)	35			35	30	
Link Distance (ft)	217			1337	298	
Travel Time (s)	4.2			26.0	6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	243	12	11	316	9	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	255	0	0	327	18	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		60	60		60	60
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	224	11	10	291	8	8
Future Vol, veh/h	224	11	10	291	8	8
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	243	12	11	316	9	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	255	0	587	249
Stage 1	-	-	-	-	249	-
Stage 2	-	-	-	-	338	-
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	-	-	1310	-	472	790
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	722	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1310	-	467	790
Mov Cap-2 Maneuver	-	-	-	-	467	-
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	715	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	11.3
HCM LOS			B

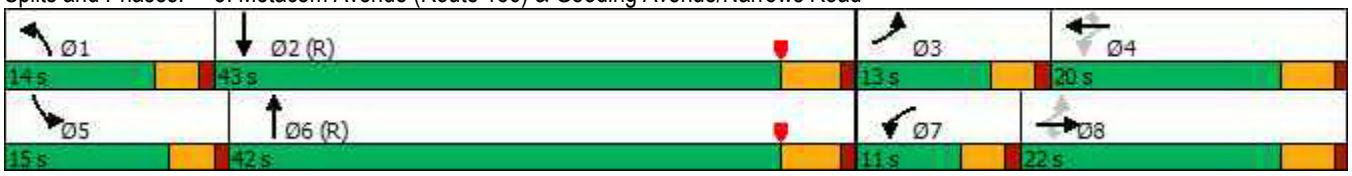
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	587	-	-	1310	-
HCM Lane V/C Ratio	0.03	-	-	0.008	-
HCM Control Delay (s)	11.3	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	159	74	155	38	38	64	172	716	37	85	791	206
Future Volume (vph)	159	74	155	38	38	64	172	716	37	85	791	206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	11	12	12	12	11	11	11	11	11	11
Storage Length (ft)	300		150	90		100	225		0	125		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt			0.850			0.850		0.993			0.969	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1837	1546	1752	1900	1583	1728	1790	0	1745	3341	0
Flt Permitted	0.468			0.707			0.950			0.950		
Satd. Flow (perm)	872	1837	1546	1304	1900	1583	1728	1790	0	1745	3341	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			161			121		4			45	
Link Speed (mph)		35			25			40			40	
Link Distance (ft)		1337			751			749			760	
Travel Time (s)		26.0			20.5			12.8			13.0	
Peak Hour Factor	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	0%	1%	3%	0%	2%	1%	2%	0%	0%	1%	2%
Adj. Flow (vph)	166	77	161	40	40	67	181	754	39	89	833	217
Shared Lane Traffic (%)												
Lane Group Flow (vph)	166	77	161	40	40	67	181	793	0	89	1050	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1		2	2	
Detector Template	Left		Right	Left		Right	Left					
Leading Detector (ft)	40	40	40	40	40	30	40	40		211	211	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	40	40	40	40	40	30	40	40		40	40	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)										205	205	
Detector 2 Size(ft)										6	6	
Detector 2 Type										Cl+Ex	Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)										0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA		Prot	NA	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		8	4		4						
Detector Phase	3	8	8	7	4	4	1	6		5	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	5.0	7.0	7.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.0	11.5	11.5	9.0	11.5	11.5	11.0	12.0		11.0	12.0	
Total Split (s)	13.0	22.0	22.0	11.0	20.0	20.0	14.0	42.0		15.0	43.0	
Total Split (%)	14.4%	24.4%	24.4%	12.2%	22.2%	22.2%	15.6%	46.7%		16.7%	47.8%	
Maximum Green (s)	9.0	17.5	17.5	7.0	15.5	15.5	10.0	37.0		11.0	38.0	
Yellow Time (s)	3.0	3.5	3.5	3.0	3.5	3.5	3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.5	4.5	4.0	4.5	4.5	4.0	5.0		4.0	5.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.7	2.7	2.5	2.7	2.7	2.5	2.7		2.5	2.7	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Act Effct Green (s)	17.7	11.8	11.8	13.1	7.9	7.9	15.2	50.6		9.7	43.0	
Actuated g/C Ratio	0.20	0.13	0.13	0.15	0.09	0.09	0.17	0.56		0.11	0.48	
v/c Ratio	0.64	0.32	0.47	0.18	0.24	0.27	0.62	0.79		0.47	0.65	
Control Delay	41.8	39.4	11.1	28.5	41.4	3.9	44.6	26.4		45.6	20.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	41.8	39.4	11.1	28.5	41.4	3.9	44.6	26.4		45.6	20.7	
LOS	D	D	B	C	D	A	D	C		D	C	
Approach Delay		29.1			20.8			29.7			22.6	
Approach LOS		C			C			C			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 44 (49%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 26.1	Intersection LOS: C
Intersection Capacity Utilization 72.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 3: Metacom Avenue (Route 136) & Gooding Avenue/Narrows Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	166	77	161	40	40	67	181	793	89	1050
v/c Ratio	0.64	0.32	0.47	0.18	0.24	0.27	0.62	0.79	0.47	0.65
Control Delay	41.8	39.4	11.1	28.5	41.4	3.9	44.6	26.4	45.6	20.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.8	39.4	11.1	28.5	41.4	3.9	44.6	26.4	45.6	20.7
Queue Length 50th (ft)	81	42	0	18	22	0	95	363	49	233
Queue Length 95th (ft)	134	82	55	42	51	8	166	#693	91	321
Internal Link Dist (ft)		1257			671			669		680
Turn Bay Length (ft)	300		150	90		100	225		125	
Base Capacity (vph)	263	367	438	235	327	372	291	1008	221	1618
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.21	0.37	0.17	0.12	0.18	0.62	0.79	0.40	0.65

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	376	12	12	404	12	12
Future Volume (vph)	376	12	12	404	12	12
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	0.996				0.932	
Flt Protected				0.999	0.976	
Satd. Flow (prot)	1855	0	0	1861	1694	0
Flt Permitted				0.999	0.976	
Satd. Flow (perm)	1855	0	0	1861	1694	0
Link Speed (mph)	35			35	30	
Link Distance (ft)	217			1337	298	
Travel Time (s)	4.2			26.0	6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	409	13	13	439	13	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	422	0	0	452	26	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	40.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	376	12	12	404	12	12
Future Vol, veh/h	376	12	12	404	12	12
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	409	13	13	439	13	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	422	0	881	416
Stage 1	-	-	-	-	416	-
Stage 2	-	-	-	-	465	-
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	-	-	1137	-	317	637
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	632	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1137	-	312	637
Mov Cap-2 Maneuver	-	-	-	-	312	-
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	623	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	14.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	419	-	-	1137	-
HCM Lane V/C Ratio	0.062	-	-	0.011	-
HCM Control Delay (s)	14.2	-	-	8.2	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Please note that new Connecticut county level geographies are not availabe within the map.

United States Census Bureau

QuickFacts

Bristol town, Bristol County, Rhode Island

QuickFacts provides statistics for all states and counties, and for cities and towns with a ***population of 5,000 or more***.

Table

All Topics	Bristol town, Bristol County, Rhode Island
Population Estimates, July 1, 2022, (V2022)	NA
PEOPLE	
Population	
Population Estimates, July 1, 2022, (V2022)	NA
Population Estimates, July 1, 2021, (V2021)	22,226
Population estimates base, April 1, 2020, (V2022)	NA
Population estimates base, April 1, 2020, (V2021)	22,224
Population, percent change - April 1, 2020 (estimates base) to July 1, 2022, (V2022)	NA
Population, percent change - April 1, 2020 (estimates base) to July 1, 2021, (V2021)	Z
Population, Census, April 1, 2020	22,493
Population, Census, April 1, 2010	22,954
Age and Sex	
Persons under 5 years, percent	2.6%
Persons under 18 years, percent	13.4%
Persons 65 years and over, percent	22.0%
Female persons, percent	50.1%
Race and Hispanic Origin	
White alone, percent	93.4%
Black or African American alone, percent (a)	1.4%
American Indian and Alaska Native alone, percent (a)	0.1%
Asian alone, percent (a)	2.0%
Native Hawaiian and Other Pacific Islander alone, percent (a)	0.0%
Two or More Races, percent	2.6%
Hispanic or Latino, percent (b)	2.1%
White alone, not Hispanic or Latino, percent	92.0%
Population Characteristics	
Veterans, 2017-2021	1,199
Foreign born persons, percent, 2017-2021	11.1%
Housing	
Housing units, July 1, 2021, (V2021)	X
Owner-occupied housing unit rate, 2017-2021	68.7%
Median value of owner-occupied housing units, 2017-2021	$363,200
Median selected monthly owner costs -with a mortgage, 2017-2021	$2,260
Median selected monthly owner costs -without a mortgage, 2017-2021	$860
Median gross rent, 2017-2021	$1,170
Building permits, 2021	X
Families & Living Arrangements	
Households, 2017-2021	8,065
Persons per household, 2017-2021	2.30
Living in same house 1 year ago, percent of persons age 1 year+, 2017-2021	85.9%
Language other than English spoken at home, percent of persons age 5 years+, 2017-2021	15.1%
Computer and Internet Use	
Households with a computer, percent, 2017-2021	89.5%
Households with a broadband Internet subscription, percent, 2017-2021	

Education	
High school graduate or higher, percent of persons age 25 years+, 2017-2021	88.5%
Bachelor's degree or higher, percent of persons age 25 years+, 2017-2021	41.0%
Health	
With a disability, under age 65 years, percent, 2017-2021	7.5%
Persons without health insurance, under age 65 years, percent	⚠ 2.1%
Economy	
In civilian labor force, total, percent of population age 16 years+, 2017-2021	57.5%
In civilian labor force, female, percent of population age 16 years+, 2017-2021	53.2%
Total accommodation and food services sales, 2017 ($1,000) (c)	51,040
Total health care and social assistance receipts/revenue, 2017 ($1,000) (c)	55,921
Total transportation and warehousing receipts/revenue, 2017 ($1,000) (c)	D
Total retail sales, 2017 ($1,000) (c)	160,436
Total retail sales per capita, 2017 (c)	$7,224
Transportation	
Mean travel time to work (minutes), workers age 16 years+, 2017-2021	25.5
Income & Poverty	
Median household income (in 2021 dollars), 2017-2021	$80,727
Per capita income in past 12 months (in 2021 dollars), 2017-2021	$42,658
Persons in poverty, percent	⚠ 6.4%

BUSINESSES

Businesses	
Total employer establishments, 2020	X
Total employment, 2020	X
Total annual payroll, 2020 ($1,000)	X
Total employment, percent change, 2019-2020	X
Total nonemployer establishments, 2019	X
All employer firms, Reference year 2017	530
Men-owned employer firms, Reference year 2017	404
Women-owned employer firms, Reference year 2017	59
Minority-owned employer firms, Reference year 2017	S
Nonminority-owned employer firms, Reference year 2017	476
Veteran-owned employer firms, Reference year 2017	32
Nonveteran-owned employer firms, Reference year 2017	454

GEOGRAPHY

Geography	
Population per square mile, 2020	2,297.8
Population per square mile, 2010	2,336.4
Land area in square miles, 2020	9.79
Land area in square miles, 2010	9.82
FIPS Code	4400109280

About datasets used in this table

Value Notes

⚠ Estimates are not comparable to other geographic levels due to methodology differences that may exist between different data sources.

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable.] Click the Quick Info ⓘ icon to the left of each row in T learn about sampling error.

In Vintage 2022, as a result of the formal request from the state, Connecticut transitioned from eight counties to nine planning regions. For more details, please see the Vintage 2022 release notes available here: Release Notes.

The vintage year (e.g., V2022) refers to the final year of the series (2020 thru 2022). Different vintage years of estimates are not comparable.

Users should exercise caution when comparing 2017-2021 ACS 5-year estimates to other ACS estimates. For more information, please visit the 2021 5-year ACS Comparison Guidance page.

Fact Notes

(a)	Includes persons reporting only one race
(b)	Hispanics may be of any race, so also are included in applicable race categories
(c)	Economic Census - Puerto Rico data are not comparable to U.S. Economic Census data

Value Flags

D	Suppressed to avoid disclosure of confidential information
F	Fewer than 25 firms
FN	Footnote on this item in place of data
NA	Not available
S	Suppressed; does not meet publication standards
X	Not applicable
Z	Value greater than zero but less than half unit of measure shown
-	Either no or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest or upper interval of an open ende
N	Data for this geographic area cannot be displayed because the number of sample cases is too small.

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Poverty Estimates, Sta Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

Client:	Matt Baldino, PE
Project #:	1220_1_Solli
BTD #:	Location 1
Location:	Bristol, RI
Street 1:	Metacom Avenue (Route 136)
Street 2:	Gooding Avenue/Narrows Road
Count Date:	4/5/2023
Day of Week:	Wednesday
Weather:	Cloudy, 40°F

BOSTON TRAFFIC DATA
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PASSENGER CARS & HEAVY VEHICLES COMBINED

	Metacom Avenue (Route 136) Northbound				Metacom Avenue (Route 136) Southbound				Gooding Avenue Eastbound				Narrows Road Westbound			
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00 AM	0	23	163	0	0	7	132	21	0	25	2	11	0	6	8	18
7:15 AM	0	22	150	2	0	4	146	21	0	19	2	18	0	15	8	14
7:30 AM	0	26	153	4	0	9	172	37	0	23	6	25	0	5	7	18
7:45 AM	0	35	166	4	0	10	171	35	0	25	3	33	0	7	5	25
8:00 AM	0	40	145	4	0	5	133	25	0	31	1	18	0	8	7	14
8:15 AM	0	35	136	4	0	8	138	24	0	22	4	29	0	15	9	8
8:30 AM	0	26	123	5	0	4	159	29	0	26	5	20	0	7	8	14
8:45 AM	0	39	153	3	0	6	146	30	0	36	7	34	0	9	13	17

	Metacom Avenue (Route 136) Northbound				Metacom Avenue (Route 136) Southbound				Gooding Avenue Eastbound				Narrows Road Westbound			
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
4:00 PM	0	29	202	5	0	21	181	34	0	35	10	42	0	12	11	19
4:15 PM	0	38	190	4	0	17	203	56	0	43	19	34	0	6	7	18
4:30 PM	0	47	155	12	0	25	176	43	0	34	25	37	0	11	7	18
4:45 PM	0	34	177	8	0	18	194	51	0	36	16	29	0	10	11	15
5:00 PM	0	44	180	12	0	23	202	46	0	37	13	46	0	10	12	12
5:15 PM	0	33	145	9	0	17	172	27	0	32	16	46	0	6	9	13
5:30 PM	0	38	152	10	0	15	168	40	0	29	6	48	0	6	14	11
5:45 PM	0	31	140	6	0	9	164	26	0	33	10	42	0	7	14	9

AM PEAK HOUR 7:30 AM to 8:30 AM	Metacom Avenue (Route 136) Northbound				Metacom Avenue (Route 136) Southbound				Gooding Avenue Eastbound				Narrows Road Westbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
	0	**136**	**600**	**16**	**0**	**32**	**614**	**121**	**0**	**101**	**14**	**105**	**0**	**35**	**28**	**65**
PHF	**0.92**				**0.88**				**0.90**				**0.86**			
HV %	**0.0%**	**3.7%**	**4.5%**	**6.3%**	**0.0%**	**6.3%**	**5.0%**	**2.5%**	**0.0%**	**4.0%**	**0.0%**	**7.6%**	**0.0%**	**0.0%**	**3.6%**	**0.0%**

PM PEAK HOUR 4:15 PM to 5:15 PM	Metacom Avenue (Route 136) Northbound				Metacom Avenue (Route 136) Southbound				Gooding Avenue Eastbound				Narrows Road Westbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
	0	**163**	**702**	**36**	**0**	**83**	**775**	**196**	**0**	**150**	**73**	**146**	**0**	**37**	**37**	**63**
PHF	**0.95**				**0.95**				**0.96**				**0.95**			
HV %	**0.0%**	**0.6%**	**2.3%**	**0.0%**	**0.0%**	**0.0%**	**0.8%**	**1.5%**	**0.0%**	**2.0%**	**0.0%**	**0.7%**	**0.0%**	**2.7%**	**0.0%**	**1.6%**

Client:	Matt Baldino, PE
Project #:	1220_1_Solli
BTD #:	Location 1
Location:	Bristol, RI
Street 1:	Metacom Avenue (Route 136)
Street 2:	Gooding Avenue/Narrows Road
Count Date:	4/5/2023
Day of Week:	Wednesday
Weather:	Cloudy, 40°F

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HEAVY VEHICLES

	Metacom Avenue (Route 136) Northbound				Metacom Avenue (Route 136) Southbound				Gooding Avenue Eastbound				Narrows Road Westbound			
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
7:00 AM	0	2	7	0	0	1	6	0	0	0	0	1	0	0	0	2
7:15 AM	0	1	5	0	0	0	6	0	0	2	0	2	0	0	0	0
7:30 AM	0	0	6	0	0	1	7	2	0	0	0	4	0	0	0	0
7:45 AM	0	2	12	1	0	0	8	1	0	0	0	0	0	0	1	0
8:00 AM	0	2	6	0	0	0	11	0	0	1	0	1	0	0	0	0
8:15 AM	0	1	3	0	0	1	5	0	0	3	0	3	0	0	0	0
8:30 AM	0	0	2	1	0	1	2	0	0	2	0	2	0	0	1	0
8:45 AM	0	2	5	0	0	0	4	2	0	2	0	2	0	0	0	0

	Metacom Avenue (Route 136) Northbound				Metacom Avenue (Route 136) Southbound				Gooding Avenue Eastbound				Narrows Road Westbound			
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
4:00 PM	0	1	3	0	0	0	1	0	0	1	1	0	0	0	0	2
4:15 PM	0	0	7	0	0	0	2	1	0	2	0	1	0	0	0	1
4:30 PM	0	0	4	0	0	0	1	1	0	0	0	0	0	1	0	0
4:45 PM	0	0	4	0	0	0	2	1	0	1	0	0	0	0	0	0
5:00 PM	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0

AM PEAK HOUR 7:15 AM to 8:15 AM	Metacom Avenue (Route 136) Northbound				Metacom Avenue (Route 136) Southbound				Gooding Avenue Eastbound				Narrows Road Westbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
	0	**5**	**29**	**1**	**0**	**1**	**32**	**3**	**0**	**3**	**0**	**7**	**0**	**0**	**1**	**0**
PHF	**0.58**				**0.82**				**0.63**				**0.25**			

PM PEAK HOUR 4:00 PM to 5:00 PM	Metacom Avenue (Route 136) Northbound				Metacom Avenue (Route 136) Southbound				Gooding Avenue Eastbound				Narrows Road Westbound			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
	0	**1**	**18**	**0**	**0**	**0**	**6**	**3**	**0**	**4**	**1**	**1**	**0**	**1**	**0**	**3**
PHF	**0.68**				**0.75**				**0.50**				**0.50**			

Client:	Matt Baldino, PE
Project #:	1220_1_Solli
BTD #:	Location 1
Location:	Bristol, RI
Street 1:	Metacom Avenue (Route 136)
Street 2:	Gooding Avenue/Narrows Road
Count Date:	4/5/2023
Day of Week:	Wednesday
Weather:	Cloudy, 40°F

BOSTON TRAFFIC DATA
PO BOX 1723, Framingham, MA 01701
Office: 978-746-1259
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PEDESTRIANS & BICYCLES

	Metacom Avenue (Route 136) Northbound				Metacom Avenue (Route 136) Southbound				Gooding Avenue Eastbound				Narrows Road Westbound			
Start Time	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
7:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
8:45 AM	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0

	Metacom Avenue (Route 136) Northbound				Metacom Avenue (Route 136) Southbound				Gooding Avenue Eastbound				Narrows Road Westbound			
Start Time	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

AM PEAK HOUR[1] 7:30 AM to 8:30 AM	Metacom Avenue (Route 136) Northbound				Metacom Avenue (Route 136) Southbound				Gooding Avenue Eastbound				Narrows Road Westbound			
	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1

PM PEAK HOUR[1] 4:15 PM to 5:15 PM	Metacom Avenue (Route 136) Northbound				Metacom Avenue (Route 136) Southbound				Gooding Avenue Eastbound				Narrows Road Westbound			
	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

[1] *NOTE: Peak hour summaries here correspond to peak hours identified for passenger cars and heavy vehicles combined.*

Volume Report

Job 1220_1_Solli_ATR
Area Bristol, RI
Location Gooding Avenue, west of Metacom Ave

BOSTON TRAFFIC DATA
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Tuesday, April 4, 2023

Time	Total		EB		WB		Time	Total		EB		WB	
0000	9		5		4		1200	218		110		108	
0015	7		4		3		1215	192		81		111	
0030	6		3		3		1230	199		89		110	
0045	3	25	2	14	1	11	1245	180	789	92	372	88	417
0100	1		0		1		1300	198		106		92	
0115	3		2		1		1315	157		77		80	
0130	6		3		3		1330	161		73		88	
0145	3	13	1	6	2	7	1345	165	681	84	340	81	341
0200	1		1		0		1400	154		80		74	
0215	2		1		1		1415	166		94		72	
0230	2		0		2		1430	190		86		104	
0245	2	7	2	4	0	3	1445	233	743	132	392	101	351
0300	3		2		1		1500	207		103		104	
0315	0		0		0		1515	194		110		84	
0330	0		0		0		1530	190		103		87	
0345	1	4	0	2	1	2	1545	200	791	111	427	89	364
0400	4		1		3		1600	247		123		124	
0415	6		3		3		1615	219		106		113	
0430	6		2		4		1630	235		123		112	
0445	12	28	6	12	6	16	1645	204	905	102	454	102	451
0500	11		5		6		1700	220		105		115	
0515	12		7		5		1715	188		106		82	
0530	15		6		9		1730	240		116		124	
0545	14	52	8	26	6	26	1745	208	856	96	423	112	433
0600	19		11		8		1800	204		112		92	
0615	40		15		25		1815	169		86		83	
0630	55		21		34		1830	140		80		60	
0645	73	187	31	78	42	109	1845	140	653	64	342	76	311
0700	87		43		44		1900	121		69		52	
0715	85		33		52		1915	98		50		48	
0730	122		53		69		1930	125		77		48	
0745	136	430	56	185	80	245	1945	96	440	49	245	47	195
0800	130		59		71		2000	80		39		41	
0815	120		55		65		2015	67		33		34	
0830	132		52		80		2030	53		31		22	
0845	133	515	69	235	64	280	2045	38	238	20	123	18	115
0900	139		64		75		2100	43		23		20	
0915	137		64		73		2115	41		19		22	
0930	152		70		82		2130	35		17		18	
0945	134	562	67	265	67	297	2145	33	152	18	77	15	75
1000	143		65		78		2200	19		9		10	
1015	148		71		77		2215	10		5		5	
1030	166		83		83		2230	6		4		2	
1045	195	652	104	323	91	329	2245	6	41	5	23	1	18
1100	152		77		75		2300	8		6		2	
1115	181		93		88		2315	12		5		7	
1130	171		93		78		2330	7		5		2	
1145	173	677	75	338	98	339	2345	8	35	4	20	4	15
							Total	**9476**		**4726**		**4750**	

Volume Report

Job 1220_1_Solli_ATR
Area Bristol, RI
Location Gooding Avenue, west of Metacom Ave

BOSTON TRAFFIC DATA
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Office: 978-746-1259
DataRequest@BostonTrafficData.com
www.BostonTrafficData.com

Wednesday, April 5, 2023

Time	Total		EB		WB		Time	Total		EB		WB	
0000	6		4		2		1200	185		106		79	
0015	6		5		1		1215	201		90		111	
0030	6		3		3		1230	163		78		85	
0045	6	24	3	15	3	9	1245	166	715	86	360	80	355
0100	1		1		0		1300	172		82		90	
0115	6		4		2		1315	149		73		76	
0130	0		0		0		1330	145		77		68	
0145	1	8	0	5	1	3	1345	187	653	99	331	88	322
0200	1		1		0		1400	181		93		88	
0215	2		2		0		1415	168		90		78	
0230	1		1		0		1430	180		76		104	
0245	0	4	0	4	0	0	1445	203	732	113	372	90	360
0300	0		0		0		1500	199		99		100	
0315	1		1		0		1515	202		103		99	
0330	1		1		0		1530	217		120		97	
0345	4	6	1	3	3	3	1545	205	823	107	429	98	394
0400	2		1		1		1600	207		108		99	
0415	5		2		3		1615	223		112		111	
0430	5		1		4		1630	220		109		111	
0445	9	21	6	10	3	11	1645	211	861	86	415	125	446
0500	10		5		5		1700	248		125		123	
0515	8		5		3		1715	184		96		88	
0530	12		8		4		1730	180		87		93	
0545	20	50	9	27	11	23	1745	171	783	88	396	83	387
0600	10		5		5		1800	154		68		86	
0615	38		15		23		1815	157		74		83	
0630	49		22		27		1830	142		81		61	
0645	78	175	32	74	46	101	1845	136	589	72	295	64	294
0700	88		35		53		1900	122		57		65	
0715	94		39		55		1915	90		55		35	
0730	144		70		74		1930	78		42		36	
0745	138	464	62	206	76	258	1945	67	357	35	189	32	168
0800	135		55		80		2000	54		34		20	
0815	139		66		73		2015	43		24		19	
0830	130		60		70		2030	61		33		28	
0845	156	560	74	255	82	305	2045	48	206	29	120	19	86
0900	135		76		59		2100	34		16		18	
0915	118		60		58		2115	39		23		16	
0930	126		63		63		2130	29		12		17	
0945	177	556	87	286	90	270	2145	32	134	20	71	12	63
1000	172		96		76		2200	18		13		5	
1015	143		71		72		2215	14		9		5	
1030	153		75		78		2230	8		6		2	
1045	158	626	67	309	91	317	2245	11	51	8	36	3	15
1100	156		78		78		2300	7		3		4	
1115	151		75		76		2315	12		9		3	
1130	183		90		93		2330	9		3		6	
1145	146	636	72	315	74	321	2345	9	37	4	19	5	18
							Total	**9071**		**4542**		**4529**	

Classification Report

Job # 1220_1_Solli_ATR
Area Bristol, RI
Location Gooding Avenue, west of Metacom Ave
Direction Eastbound
Tuesday, April 4, 2023

BOSTON TRAFFIC DATA
PO BOX 1723, Framingham, MA 01701
Office: 978-746-1259
DataRequest@BostonTrafficData.com
www.BostonTrafficData.com

Time	Total	Class 1 Motorcycle	Class 2 Passenger Car	Class 3 Vans, Pick up Trucks	Class 4 Bus	Class 5 2 Axle 6 Tires	Class 6 3 Axle Unit	Class 7 4 Axles or more Unit	Class 8 3 or 4 Axle Trailer	Class 9 5 Axle Trailer	Class 10 6 Axle or more Trailer	Class 11 5 Axle or less Multi-Trailer	Class 12 6 Axle Multi-Trailer	Class 13 7 Axle or more Multi-Trailer
0000	14	0	13	1	0	0	0	0	0	0	0	0	0	0
0100	6	0	5	1	0	0	0	0	0	0	0	0	0	0
0200	4	0	3	0	0	0	0	0	0	1	0	0	0	0
0300	2	0	1	1	0	0	0	0	0	0	0	0	0	0
0400	12	0	8	4	0	0	0	0	0	0	0	0	0	0
0500	26	0	17	6	2	1	0	0	0	0	0	0	0	0
0600	78	0	54	16	3	3	2	0	0	0	0	0	0	0
0700	185	0	141	36	3	2	1	0	0	2	0	0	0	0
0800	235	0	177	45	5	6	1	0	0	1	0	0	0	0
0900	265	2	202	53	5	2	0	0	0	1	0	0	0	0
1000	323	0	254	57	3	7	1	0	0	1	0	0	0	0
1100	338	2	283	50	2	0	0	0	0	1	0	0	0	0
1200	372	2	302	59	2	5	0	0	0	2	0	0	0	0
1300	340	1	274	60	0	4	0	0	0	1	0	0	0	0
1400	392	4	313	65	3	6	0	0	0	1	0	0	0	0
1500	427	4	351	63	3	4	1	0	0	1	0	0	0	0
1600	454	1	375	72	4	2	0	0	0	0	0	0	0	0
1700	423	4	374	41	1	2	1	0	0	0	0	0	0	0
1800	342	4	294	39	1	4	0	0	0	0	0	0	0	0
1900	245	0	214	30	0	1	0	0	0	0	0	0	0	0
2000	123	0	108	13	0	2	0	0	0	0	0	0	0	0
2100	77	0	72	4	0	1	0	0	0	0	0	0	0	0
2200	23	0	21	2	0	0	0	0	0	0	0	0	0	0
2300	20	0	17	3	0	0	0	0	0	0	0	0	0	0
Total	**4726**	**24**	**3873**	**721**	**37**	**52**	**7**	**0**	**0**	**12**	**0**	**0**	**0**	**0**
	100.00%	**0.51%**	**81.95%**	**15.26%**	**0.78%**	**1.10%**	**0.15%**	**0.00%**	**0.00%**	**0.25%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**

Classification Report

Job # 1220_1_Solli_ATR
Area Bristol, RI
Location Gooding Avenue, west of Metacom Ave
Direction Eastbound
Wednesday, April 5, 2023

BOSTON TRAFFIC DATA
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Time	Total	Class 1 Motorcycle	Class 2 Passenger Car	Class 3 Vans, Pick up Trucks	Class 4 Bus	Class 5 2 Axle 6 Tires	Class 6 3 Axle Unit	Class 7 4 Axles or more Unit	Class 8 3 or 4 Axle Trailer	Class 9 5 Axle Trailer	Class 10 6 Axle or more Trailer	Class 11 5 Axle or less Multi-Trailer	Class 12 6 Axle Multi-Trailer	Class 13 7 Axle or more Multi-Trailer
0000	15	0	12	2	0	1	0	0	0	0	0	0	0	0
0100	5	0	4	1	0	0	0	0	0	0	0	0	0	0
0200	4	0	3	0	0	1	0	0	0	0	0	0	0	0
0300	3	0	3	0	0	0	0	0	0	0	0	0	0	0
0400	10	0	7	2	1	0	0	0	0	0	0	0	0	0
0500	27	0	20	6	0	1	0	0	0	0	0	0	0	0
0600	74	0	53	13	4	3	1	0	0	0	0	0	0	0
0700	206	0	155	43	1	7	0	0	0	0	0	0	0	0
0800	255	0	204	35	5	8	2	0	0	1	0	0	0	0
0900	286	0	223	51	3	5	1	0	1	2	0	0	0	0
1000	309	2	249	47	2	6	2	0	0	1	0	0	0	0
1100	315	1	248	59	5	2	0	0	0	0	0	0	0	0
1200	360	1	294	57	1	6	1	0	0	0	0	0	0	0
1300	331	0	275	47	3	6	0	0	0	0	0	0	0	0
1400	372	0	328	39	1	4	0	0	0	0	0	0	0	0
1500	429	0	349	69	5	6	0	0	0	0	0	0	0	0
1600	415	0	344	58	3	9	0	0	0	1	0	0	0	0
1700	396	0	337	52	1	6	0	0	0	0	0	0	0	0
1800	295	0	263	28	2	2	0	0	0	0	0	0	0	0
1900	189	0	162	25	0	2	0	0	0	0	0	0	0	0
2000	120	0	102	18	0	0	0	0	0	0	0	0	0	0
2100	71	0	64	6	0	1	0	0	0	0	0	0	0	0
2200	36	1	26	9	0	0	0	0	0	0	0	0	0	0
2300	19	0	16	3	0	0	0	0	0	0	0	0	0	0
Total	**4542**	**5**	**3741**	**670**	**37**	**76**	**7**	**0**	**1**	**5**	**0**	**0**	**0**	**0**
	100.00%	**0.11%**	**82.36%**	**14.75%**	**0.81%**	**1.67%**	**0.15%**	**0.00%**	**0.02%**	**0.11%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**

Classification Report

Job # 1220_1_Solli_ATR
Area Bristol, RI
Location Gooding Avenue, west of Metacom Ave
Direction Westbound
Tuesday, April 4, 2023

BOSTON TRAFFIC DATA
PO BOX 1723, Framingham, MA 01701
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Time	Total	Class 1 Motorcycle	Class 2 Passenger Car	Class 3 Vans, Pick up Trucks	Class 4 Bus	Class 5 2 Axle 6 Tires	Class 6 3 Axle Unit	Class 7 4 Axles or more Unit	Class 8 3 or 4 Axle Trailer	Class 9 5 Axle Trailer	Class 10 6 Axle or more Trailer	Class 11 5 Axle or less Multi-Trailer	Class 12 6 Axle Multi-Trailer	Class 13 7 Axle or more Multi-Trailer
0000	11	0	10	1	0	0	0	0	0	0	0	0	0	0
0100	7	0	6	0	0	0	0	0	0	1	0	0	0	0
0200	3	0	2	1	0	0	0	0	0	0	0	0	0	0
0300	2	0	2	0	0	0	0	0	0	0	0	0	0	0
0400	16	0	16	0	0	0	0	0	0	0	0	0	0	0
0500	26	1	24	0	0	0	0	0	0	1	0	0	0	0
0600	109	2	96	9	0	0	2	0	0	0	0	0	0	0
0700	245	0	223	16	2	1	1	0	0	2	0	0	0	0
0800	280	1	259	16	2	2	0	0	0	0	0	0	0	0
0900	297	1	277	17	1	0	1	0	0	0	0	0	0	0
1000	329	2	299	24	0	4	0	0	0	0	0	0	0	0
1100	339	1	318	17	1	0	1	0	0	1	0	0	0	0
1200	417	2	396	15	0	2	0	0	0	2	0	0	0	0
1300	341	3	323	10	3	1	1	0	0	0	0	0	0	0
1400	351	2	331	13	1	0	1	0	0	3	0	0	0	0
1500	364	4	343	14	3	0	0	0	0	0	0	0	0	0
1600	451	2	416	31	0	1	1	0	0	0	0	0	0	0
1700	433	7	411	15	0	0	0	0	0	0	0	0	0	0
1800	311	3	296	12	0	0	0	0	0	0	0	0	0	0
1900	195	0	187	8	0	0	0	0	0	0	0	0	0	0
2000	115	0	110	5	0	0	0	0	0	0	0	0	0	0
2100	75	0	74	1	0	0	0	0	0	0	0	0	0	0
2200	18	0	18	0	0	0	0	0	0	0	0	0	0	0
2300	15	0	14	1	0	0	0	0	0	0	0	0	0	0
Total	**4750**	**31**	**4451**	**226**	**13**	**11**	**8**	**0**	**0**	**10**	**0**	**0**	**0**	**0**
	100.00%	**0.65%**	**93.71%**	**4.76%**	**0.27%**	**0.23%**	**0.17%**	**0.00%**	**0.00%**	**0.21%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**

Classification Report

Job # 1220_1_Solli_ATR
Area Bristol, RI
Location Gooding Avenue, west of Metacom Ave
Direction Westbound
Wednesday, April 5, 2023

BOSTON TRAFFIC DATA
PO BOX 1723, Framingham, MA 01701
Office: 978-746-1259
DataRequest@BostonTrafficData.com
www.BostonTrafficData.com

Time	Total	Class 1 Motorcycle	Class 2 Passenger Car	Class 3 Vans, Pick up Trucks	Class 4 Bus	Class 5 2 Axle 6 Tires	Class 6 3 Axle Unit	Class 7 4 Axles or more Unit	Class 8 3 or 4 Axle Trailer	Class 9 5 Axle Trailer	Class 10 6 Axle or more Trailer	Class 11 5 Axle or less Multi-Trailer	Class 12 6 Axle Multi-Trailer	Class 13 7 Axle or more Multi-Trailer
0000	9	0	9	0	0	0	0	0	0	0	0	0	0	0
0100	3	1	2	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	3	0	3	0	0	0	0	0	0	0	0	0	0	0
0400	11	0	11	0	0	0	0	0	0	0	0	0	0	0
0500	23	0	20	2	0	0	1	0	0	0	0	0	0	0
0600	101	1	89	9	1	0	1	0	0	0	0	0	0	0
0700	258	0	232	22	1	1	1	0	0	1	0	0	0	0
0800	305	0	275	22	3	1	3	0	0	1	0	0	0	0
0900	270	1	255	12	0	2	0	0	0	0	0	0	0	0
1000	317	1	301	14	0	0	0	0	0	1	0	0	0	0
1100	321	0	294	18	3	5	1	0	0	0	0	0	0	0
1200	355	0	328	23	3	1	0	0	0	0	0	0	0	0
1300	322	0	308	14	0	0	0	0	0	0	0	0	0	0
1400	360	0	348	8	1	2	0	1	0	0	0	0	0	0
1500	394	0	372	19	2	0	0	0	0	1	0	0	0	0
1600	446	0	429	15	1	0	0	0	0	1	0	0	0	0
1700	387	0	370	16	0	1	0	0	0	0	0	0	0	0
1800	294	0	282	10	1	1	0	0	0	0	0	0	0	0
1900	168	0	164	4	0	0	0	0	0	0	0	0	0	0
2000	86	0	84	2	0	0	0	0	0	0	0	0	0	0
2100	63	0	61	2	0	0	0	0	0	0	0	0	0	0
2200	15	0	14	1	0	0	0	0	0	0	0	0	0	0
2300	18	0	18	0	0	0	0	0	0	0	0	0	0	0
Total	**4529**	**4**	**4269**	**213**	**16**	**14**	**7**	**1**	**0**	**5**	**0**	**0**	**0**	**0**
	100.00%	**0.09%**	**94.26%**	**4.70%**	**0.35%**	**0.31%**	**0.15%**	**0.02%**	**0.00%**	**0.11%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**

Speed Report

Job 1220_1_Solli_ATR
Area Bristol, RI
Location Gooding Avenue, west of Metacom Ave
Dir Eastbound
Tuesday, April 4, 2023

BOSTON TRAFFIC DATA
PO BOX 1723, Framingham, MA 01701
Office: 978-746-1259
DataRequest@BostonTrafficData.com
www.BostonTrafficData.com

Time	Total	Speed Bins (mph)															
		0 5	5 10	10 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 75	75 80
0000	14	0	0	0	0	0	1	5	6	2	0	0	0	0	0	0	0
0100	6	0	0	0	0	0	0	2	2	1	1	0	0	0	0	0	0
0200	4	0	0	0	0	0	0	2	0	1	1	0	0	0	0	0	0
0300	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
0400	12	0	0	0	0	0	1	3	3	3	2	0	0	0	0	0	0
0500	26	0	0	0	0	0	1	3	9	10	1	2	0	0	0	0	0
0600	78	0	0	0	0	0	3	15	27	23	9	1	0	0	0	0	0
0700	185	0	0	0	0	0	3	41	68	57	16	0	0	0	0	0	0
0800	235	0	0	0	0	1	3	42	107	75	7	0	0	0	0	0	0
0900	265	0	0	0	1	2	8	55	116	67	14	2	0	0	0	0	0
1000	323	0	0	0	1	3	20	69	140	78	10	2	0	0	0	0	0
1100	338	0	0	0	0	0	15	92	139	77	13	2	0	0	0	0	0
1200	372	0	0	0	0	1	6	87	184	84	7	3	0	0	0	0	0
1300	340	0	0	0	0	2	14	79	147	81	14	3	0	0	0	0	0
1400	392	0	0	0	0	0	25	107	148	97	13	2	0	0	0	0	0
1500	427	0	0	0	0	0	24	118	182	93	7	3	0	0	0	0	0
1600	454	0	0	0	0	0	16	124	206	91	16	1	0	0	0	0	0
1700	423	0	0	0	0	0	4	75	227	101	14	1	0	0	0	0	0
1800	342	0	0	0	0	3	10	94	149	69	16	1	0	0	0	0	0
1900	245	0	0	0	0	0	13	63	109	50	10	0	0	0	0	0	0
2000	123	0	0	0	0	0	6	31	53	24	7	2	0	0	0	0	0
2100	77	0	0	0	0	0	3	19	35	15	4	1	0	0	0	0	0
2200	23	0	0	0	0	0	3	2	7	9	2	0	0	0	0	0	0
2300	20	0	0	0	0	0	0	2	13	4	1	0	0	0	0	0	0
Total	**4726**	**0**	**0**	**0**	**2**	**12**	**179**	**1130**	**2078**	**1113**	**185**	**26**	**0**	**0**	**0**	**0**	**0**
	100.00%	**0.00%**	**0.00%**	**0.00%**	**0.04%**	**0.25%**	**3.79%**	**23.91%**	**43.97%**	**23.55%**	**3.91%**	**0.55%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**

Maximum = 53.7 mph, Minimum = 16.1 mph, Mean = 37.7 mph
85% Speed = 42.39 mph, 95% Speed = 45.52 mph, Median = 37.52 mph
10 mph Pace = 32 - 42, Number in Pace = 3484 (73.91%)
Variance = 22.65, Standard Deviation = 4.76 mph

Speed Report

Job 1220_1_Solli_ATR
Area Bristol, RI
Location Gooding Avenue, west of Metacom Ave
Dir Eastbound
Wednesday, April 5, 2023

BOSTON TRAFFIC DATA
PO BOX 1723, Framingham, MA 01701
Office: 978-746-1259
DataRequest@BostonTrafficData.com
www.BostonTrafficData.com

Time	Total	Speed Bins (mph)															
		0 5	5 10	10 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 75	75 80
0000	15	0	0	0	0	0	1	3	6	3	2	0	0	0	0	0	0
0100	5	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0
0200	4	0	0	0	0	0	0	2	0	1	0	1	0	0	0	0	0
0300	3	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0
0400	10	0	0	0	0	0	2	2	1	3	1	1	0	0	0	0	0
0500	27	0	0	0	0	0	1	7	8	10	1	0	0	0	0	0	0
0600	74	0	0	0	0	0	5	11	25	19	10	4	0	0	0	0	0
0700	206	0	0	0	0	0	9	46	98	44	9	0	0	0	0	0	0
0800	255	0	0	0	2	2	14	66	104	56	11	0	0	0	0	0	0
0900	286	0	0	0	0	0	15	76	141	43	10	1	0	0	0	0	0
1000	309	0	1	1	0	0	17	79	145	53	12	1	0	0	0	0	0
1100	315	0	0	0	0	3	19	75	129	77	10	2	0	0	0	0	0
1200	360	0	0	0	0	0	17	95	168	65	13	2	0	0	0	0	0
1300	331	0	0	0	0	0	10	84	156	73	6	2	0	0	0	0	0
1400	372	0	0	0	0	1	17	106	159	74	11	4	0	0	0	0	0
1500	429	0	0	0	0	7	29	151	164	66	9	3	0	0	0	0	0
1600	415	0	0	0	0	3	21	132	181	63	13	2	0	0	0	0	0
1700	396	0	0	0	0	4	17	105	174	78	15	3	0	0	0	0	0
1800	295	0	0	0	0	1	7	91	123	60	12	1	0	0	0	0	0
1900	189	0	0	0	0	0	5	37	92	43	10	2	0	0	0	0	0
2000	120	0	0	0	0	0	7	32	43	29	7	2	0	0	0	0	0
2100	71	0	0	0	0	0	2	11	30	21	7	0	0	0	0	0	0
2200	36	0	0	1	0	0	3	6	11	9	5	1	0	0	0	0	0
2300	19	0	0	0	0	0	0	4	8	6	1	0	0	0	0	0	0
Total	**4542**	**0**	**1**	**2**	**2**	**21**	**218**	**1221**	**1968**	**901**	**176**	**32**	**0**	**0**	**0**	**0**	**0**
	100.00%	**0.00%**	**0.02%**	**0.04%**	**0.04%**	**0.46%**	**4.80%**	**26.88%**	**43.33%**	**19.84%**	**3.87%**	**0.70%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**

Maximum = 53.6 mph, Minimum = 9.2 mph, Mean = 37.3 mph
85% Speed = 41.94 mph, 95% Speed = 45.63 mph, Median = 37.02 mph
10 mph Pace = 32 - 42, Number in Pace = 3359 (73.95%)
Variance = 23.63, Standard Deviation = 4.86 mph

Speed Report

Job 1220_1_Solli_ATR
Area Bristol, RI
Location Gooding Avenue, west of Metacom Ave
Dir Westbound
Tuesday, April 4, 2023

BOSTON TRAFFIC DATA
PO BOX 1723, Framingham, MA 01701
Office: 978-746-1259
DataRequest@BostonTrafficData.com
www.BostonTrafficData.com

Time	Total	Speed Bins (mph)															
		0 5	5 10	10 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 75	75 80
0000	11	0	0	0	0	0	1	6	4	0	0	0	0	0	0	0	0
0100	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0
0200	3	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0
0300	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
0400	16	0	0	0	0	1	6	7	2	0	0	0	0	0	0	0	0
0500	26	0	0	0	0	0	7	11	6	2	0	0	0	0	0	0	0
0600	109	0	0	0	0	1	12	57	33	6	0	0	0	0	0	0	0
0700	245	0	0	0	0	3	36	134	65	7	0	0	0	0	0	0	0
0800	280	0	0	0	1	1	55	142	75	5	1	0	0	0	0	0	0
0900	297	0	0	1	7	3	65	160	50	10	1	0	0	0	0	0	0
1000	329	0	0	1	0	11	76	174	66	1	0	0	0	0	0	0	0
1100	339	0	0	0	1	3	77	183	68	7	0	0	0	0	0	0	0
1200	417	0	0	0	0	14	85	239	72	6	1	0	0	0	0	0	0
1300	341	0	0	0	1	2	74	201	54	8	1	0	0	0	0	0	0
1400	351	0	0	0	0	6	69	200	70	6	0	0	0	0	0	0	0
1500	364	0	0	0	0	3	89	202	63	6	1	0	0	0	0	0	0
1600	451	0	0	1	1	11	108	252	70	7	1	0	0	0	0	0	0
1700	433	0	0	0	0	4	66	268	85	9	0	0	0	0	0	0	0
1800	311	0	0	1	4	7	61	156	79	3	0	0	0	0	0	0	0
1900	195	0	0	0	0	0	49	104	37	4	1	0	0	0	0	0	0
2000	115	0	0	0	0	1	25	59	24	6	0	0	0	0	0	0	0
2100	75	0	0	1	0	1	16	36	16	5	0	0	0	0	0	0	0
2200	18	0	0	0	0	0	8	6	4	0	0	0	0	0	0	0	0
2300	15	0	0	0	1	1	3	5	5	0	0	0	0	0	0	0	0
Total	**4750**	**0**	**0**	**5**	**16**	**73**	**989**	**2613**	**948**	**98**	**7**	**0**	**0**	**0**	**0**	**0**	**0**
	100.00%	**0.00%**	**0.00%**	**0.11%**	**0.34%**	**1.54%**	**20.82%**	**55.01%**	**19.96%**	**2.06%**	**0.15%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**

Maximum = 48.7 mph, Minimum = 10.9 mph, Mean = 32.5 mph
85% Speed = 35.96 mph, 95% Speed = 38.42 mph, Median = 32.38 mph
10 mph Pace = 28 - 38, Number in Pace = 4033 (85.08%)
Variance = 14.32, Standard Deviation = 3.78 mph

Speed Report

Job 1220_1_Solli_ATR
Area Bristol, RI
Location Gooding Avenue, west of Metacom Ave
Dir Westbound
Wednesday, April 5, 2023

BOSTON TRAFFIC DATA
PO BOX 1723, Framingham, MA 01701
Office: 978-746-1259
DataRequest@BostonTrafficData.com
www.BostonTrafficData.com

Time	Total	Speed Bins (mph)															
		0 5	5 10	10 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 75	75 80
0000	9	0	0	0	0	0	2	3	4	0	0	0	0	0	0	0	0
0100	3	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	3	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0
0400	11	0	0	0	0	1	2	7	1	0	0	0	0	0	0	0	0
0500	23	0	0	0	0	0	8	10	4	1	0	0	0	0	0	0	0
0600	101	0	0	0	0	1	8	52	34	5	1	0	0	0	0	0	0
0700	258	0	0	0	0	3	42	143	59	10	1	0	0	0	0	0	0
0800	305	0	0	0	0	4	57	178	62	3	1	0	0	0	0	0	0
0900	270	0	0	0	0	5	86	132	43	4	0	0	0	0	0	0	0
1000	317	0	1	0	0	5	96	157	55	3	0	0	0	0	0	0	0
1100	321	0	0	0	0	10	101	168	39	3	0	0	0	0	0	0	0
1200	355	0	0	0	0	6	122	186	39	2	0	0	0	0	0	0	0
1300	322	0	0	0	0	10	69	168	71	4	0	0	0	0	0	0	0
1400	360	0	0	0	0	9	97	203	45	5	1	0	0	0	0	0	0
1500	394	0	0	0	0	5	111	220	53	5	0	0	0	0	0	0	0
1600	446	0	0	0	0	11	111	230	87	7	0	0	0	0	0	0	0
1700	387	0	0	0	0	3	61	225	85	11	2	0	0	0	0	0	0
1800	294	0	0	0	0	2	36	172	80	4	0	0	0	0	0	0	0
1900	168	0	0	0	0	1	26	98	37	6	0	0	0	0	0	0	0
2000	86	0	0	0	0	5	15	39	22	5	0	0	0	0	0	0	0
2100	63	0	0	0	0	0	14	30	15	3	1	0	0	0	0	0	0
2200	15	0	0	0	0	0	3	8	4	0	0	0	0	0	0	0	0
2300	18	0	0	0	0	1	2	9	5	1	0	0	0	0	0	0	0
Total	**4529**	**0**	**2**	**0**	**0**	**82**	**1070**	**2441**	**845**	**82**	**7**	**0**	**0**	**0**	**0**	**0**	**0**
	100.00%	**0.00%**	**0.04%**	**0.00%**	**0.00%**	**1.81%**	**23.63%**	**53.90%**	**18.66%**	**1.81%**	**0.15%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**

Maximum = 47.8 mph, Minimum = 9.3 mph, Mean = 32.3 mph
85% Speed = 35.82 mph, 95% Speed = 38.20 mph, Median = 32.21 mph
10 mph Pace = 27 - 37, Number in Pace = 3855 (85.12%)
Variance = 12.88, Standard Deviation = 3.59 mph

DiPrete Engineering

January 9, 2025

Martin D. Wencek
RIDEM Office of Water Resources
Freshwater Wetlands Program
235 Promenade Street
Providence, RI 02908

RE: Gooding Avenue Hotel – AP 111 Lot 1
Bristol, RI
Project #: 2536-001-B01
FWW App No. 22-0264, RIPDES File No. RIR101247 &
Groundwater Discharge/UIC No. 001650

Dear Mr. Wencek:

On behalf of the owner and applicant, D & M Boca Development LLC, we are respectfully submitting this request for a permit modification to Permit No. 22-0264 for the proposed hotel development on Gooding Avenue in Bristol. Based on the building architecture and resulting proposed site circulation, the layout and drainage system have been modified.

The limit of disturbance adjacent to the resource areas remains as originally proposed and approved. The only overall change to the design was capturing more stormwater in the northeastern best management practices (BMPs), due to the building layout allowing more overland flow to reach this area under proposed conditions. This BMP system was increased in storage by approximately 50%, while the underground BMP capturing the remainder of development runoff will remain the same size although the watershed size is reduced.

A summary of the revisions from the original design referenced in the August 22, 2018 approval letter (FWW App. No. 15-0033), the design referenced in the latest approval dated December 6, 2024, and the current design submitted with this proposed modification area listed below:

Impervious areas:
Original design (15-0033) = 51,235 s.f. (1.18 acres)
Current approved design (22-0264) = 48,456 s.f. (1.11 acres)
Proposed modification = 50,257 s.f. (1.15 acres)

Drainage system:
Original design (15-0033)

- Southern drainage system = 886 feet x 60-inch diameter pipe (17,397 c.f. storage) + 120 x ADS SC-740 (13,067 s.f.). Total volume = 30,464 c.f.
- Northeastern drainage system = 575 c.f. Sand Filter + 523 c.f. Underground Detention. Total volume = 1,098 c.f.

Current approved design (22-0264)

- Southern drainage system = 1,153 feet x 60-inch diameter pipe (22,639 c.f. storage) + 99 x ADS SC-740 (10,723 s.f.). Total volume = 33,362 c.f.

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- Northeastern drainage system = 575 c.f. Sand Filter + 676 c.f. Underground Detention. Total volume = 1,251 c.f.

Proposed modification

- Southern drainage system = 1,153 feet x 60-inch diameter pipe (22,639 c.f. storage) + 99 x ADS SC-740 (10,723 s.f.). Total volume = 33,362 c.f.
- Northeastern drainage system = 1,218 c.f. Sand Filter + 676 c.f. Underground Detention. Total volume = 1,894 c.f.

Limit of Dsiturbance Area:
Original design (15-0033) = 77,550 s.f. Total / 4,716 s.f. Wetland
Current approved design (22-0264) = 77,776 s.f. Total / 4,716 s.f. Wetland
Proposed modification = 78,767 s.f. Total / 4,716 s.f. Wetland. (The increase in area from the approved design is entirely due to Gooding Avenue restoration/surfacing)

The enclosed package includes the application and fee check along with three (3) copies of the updated plan set and two (2) copies of the Stormwater Report and Operation & Maintenance document. The Soil Erosion and Sediment Control Plan remains as originally approved and therefore was not included with this application.

If you have any further questions on this matter or require any additional copies or information, please feel free to contact me at your earliest convenience.

Sincerely,
DiPrete Engineering Associates, Inc.

Kevin DeMers, PE
Project Manager
kdemers@diprete-eng.com