16 Great Neck Road North Mashpee, Massachusetts 02649

#### Meeting of the Mashpee Planning Board Wednesday, September 4, 2019 Waquoit Meeting Room, 7:00 PM

#### **Call Meeting to Order**

7:00PM - Waquoit Meeting Room - Mashpee Town Hall

Pledge of Allegiance

#### **Approval of Minutes**

Review and approval of meeting minutes from August 7, 2019 and August 21, 2019

#### **Public Hearings**

#### 7:05 PM - Best Buy Beverage (Continued from 8/21/2019)

Kevin Andrade has filed an application for a Special Permit to construct a commercial building to be used for retail use, redemption center and office space to be located at 11 Evergreen Circle, Mashpee, MA 02649 currently identified as Lot A on the plan titled definitive Subdivision Plan, Evergreen Circle, prepared for Evergreen Industrial Park, #588 Main Street (Route 130) in Mashpee, MA approved on 11-20-17 by Mashpee Planning Board. This application is made pursuant to Sections 174-24 C (1) and under Section 174-25 E (12) under the Mashpee Zoning Bylaw. The property is located in the C-3 Zoning District and is within the Light Industrial Overlay District.

#### 7:10PM - Blue Sky Towers II, LLC

Blue Sky Towers II, LLC has made an application for a special permit to erect a Personal Wireless Service Facility as required by Section 174-25 (H)(9); 174-45.3 of the Mashpee Zoning By-Law at 101 Red Brook Road, Mashpee Fire Station #2 (Assessors Map 104, Lot 2) consisting of a 150' monopole. This public hearing is being reopened by the Planning Board following referral to The Cape Cod Commission as a Development of Regional Impact (DRI).

#### 7:30 PM - Modi LLC (Continued from 8/21/2019)

Modi, LLC has filed an application for a Special Permit to construct a coffee shop with facilities for processing and packaging coffee along with a future industrial tenant at 10 Evergreen Circle, Lot B (Map 19 Block 10) as required by Section 174-25 (I)(16) and Section 174-45.6 of the Mashpee Zoning Bylaw. The property is located in the C-3 Zoning District and is within the Light Industrial Overlay District. The Board will also consider a request for waivers made pursuant to §174-25.1(4) of the Mashpee Zoning Bylaw.

#### **New Business**

- Charles Rowley August Invoice
- Vote to set public hearing date for zoning article proposals for October 2019 Town Meeting

#### **Old Business**

**Chairman's Report** 

MASHPEE TOWN CLERK

AUG 2 9 2019

### Town of Mashpee

16 Great Neck Road North Mashpee, Massachusetts 02649

#### **Board Member Committee Reports**

 Cape Cod Commission, Community Preservation Committee, Design Review, Plan Review, Environmental Oversight Committee, Greenways/Quashnet Footbridge, Historic District Commission, Military Civilian Advisory Council.

#### **Updates from Town Planner**

• Discussion on amending standards for development in C-3 Districts and the requirements established in Section 174-31, special footnote 14 at a future Town Meeting.

#### Additional Topics (not reasonably anticipated by Chair)

<u>Adjournment</u>

# Mashpee Planning Board Minutes of Meeting August 21, 2019 at 7:00 p.m. Mashpee Town Hall-Waquoit Meeting Room 16 Great Neck Road North Approved 10/2/19

Present: Chairman Mary Waygan, Vice Chairman Joe Cummings, Dennis Balzarini, Joseph

Callahan, Robert (Rob) Hansen (Alt.)

Also: Evan Lehrer-Town Planner, Charles Rowley-Consultant Engineer

Absent: John (Jack) Phelan

#### **CALL TO ORDER**

The Town of Mashpee Planning Board meeting was opened with a quorum in the Waquoit Meeting Room at Mashpee Town Hall by Chairman Waygan, at 7:00 p.m. on Wednesday, August 21, 2019. The Chair stated that the meeting was being videotaped and recorded and noted that, if the public addressed the Board, to do so stating their name, address and comment. The Chair asked that Board members speak clearly into the microphone as the Board Secretary would be drafting minutes from the video. The Pledge of Allegiance was recited.

#### APPROVAL OF MINUTES—July 17, 2019 and August 7, 2019

The August 7 minutes were not available. The Chair referenced the July 17 minutes regarding discussion about the Development Agreement, noting that after Mr. Phelan indicated that he had all necessary related documentation, she asked that all other members be in receipt of the supporting documentation and Mr. Lehrer agreed to provide the information the next day.

MOTION: Mr. Balzarini made a motion to accept as amended. Mr. Callahan seconded the motion. All voted unanimously.

#### **PUBLIC HEARINGS**

7:10 p.m. Best Buy Beverage

Application for a Special Permit filed by Kevin Andrade to construct a commercial building to be used for retail use, redemption center and office space to be located at 11 Evergreen Circle, currently identified as Lot A on the plan titled Definitive Subdivision Plan, Evergreen Circle, prepared for Evergreen Industrial Park, #588 Main Street (Route 130) approved on 11/20/17 by Mashpee Planning Board. This application is made pursuant to Sections 174-25 C (1) and under Section 174-25 E (12) under the Mashpee Zoning Bylaw. The property is located in the C-3 Zoning District and is within the Light Industrial Overlay District.

The appointed time having arrived, the Chair opened the Public Hearing and read the request and Public Hearing Notice. The Chair inquired about the noticing date and abutter's letter, suggesting there may have been a typographical error in the Notice which should have read 174-24 C (1). Mr. Lehrer would check the abutter's letters. The project proponent was in agreement that it should have been 174-24 C (1).

The Chair recognized the project proponent. Raul Lizardi, Cape and Islands Engineering, represented the applicant. Mr. Lizardi confirmed that the project had been presented to the Plan Review and Design Review Committees, as well as the Board of Health. Mr. Lizardi stated that the property was located at the northern corner of the newly developed Evergreen Circle, and Main Street (Route 130) and located in the C-3 business district. The proposed building would total approximately 9,900 square feet and would be utilized for Best Buy Beverage, currently located nearby on Echo Road. The business would be moving to the new location, and feature the same uses as their existing site, a bottle redemption center and approximately 2,000 square feet for office space. Under Section 174-24 C (1), these uses required Special Permit granting from the Planning Board, due to its location.

Mr. Lizardi stated that the project was simple and the site was fairly level and sandy soils typical of Mashpee. Groundwater was located fairly deep. The site was not located in Zone 2 and drainage would be created with four basins using surface drainage swales, as well as subsurface systems. Utilities would be provided underground with Evergreen, except for the fire service from Main Street, as recommended by the Water District.

Mr. Balzarini inquired about whether there would be sufficient parking spaces and Mr. Lizardi confirmed that the office parking requirements totaled 7 spaces and the retail requirements totaled 20 spaces and bottle redemption required 5 spaces, for a total of 32, which was the number of spaces proposed. Mr. Balzarini inquired about large vehicles collecting the recycling and Mr. Lizardi responded that the site was developed with a looped driveway and large entrance to allow for a semi-trailer truck to access the loading zone area. Mr. Lizardi confirmed that there was 200 feet from the center of Route 130 to the proposed entrance and the average length trailer was typically 50-55 feet in length. Mr. Balzarini asked Mr. Rowley if it would be sufficient space to avoid backing up traffic and Mr. Rowley responded that he would review it with a template to confirm it would be sufficient space.

#### Mr. Callahan had no questions.

The Chair stated that Mr. Rowley would be working on a report regarding this application. Mr. Lehrer confirmed that the abutter letter did read Section 174-25 C (1). The Chair asked that Mr. Lehrer follow up with Town Counsel regarding the best way to address the matter of re-noticing the abutters.

Mr. Hansen referenced the other properties being listed on Evergreen's single signpost and inquired about additional signage planned by the project proponent. Mr. Lizardi stated there would be no stand-alone signage on the driveway but there would be a sign similar to the existing sign located on the face of the building. Mr. Lizardi confirmed that there would be 100 feet of undisturbed land with existing vegetation. Mr. Hansen inquired whether the sign would then be seen and Mr. Lizardi responded that it was primarily pitch pines with canopies at the top,

so it was possible for it to be seen. The Chair asked if there were additional comments regarding the signage, to please share with the Board.

The Chair referenced the May 2019 Town Meeting and amendments to Mashpee Zoning Bylaw Articles 26 and 27 regarding the Light Industrial Overlay District and Table Uses and changes to architectural and site design changes, as recommended by the Cape Cod Commission. The Chair recommended acquiring the changes from the Town Planner. Mr. Lizardi confirmed that he was familiar with the design standard recommendations. The Chair highly recommended that the project proponent's design meet the new standards set in the Bylaw.

Mr. Rowley confirmed that a water quality report had been completed for the overall Evergreen subdivision. The Chair asked that the project proponent submit the letter as part of the record to confirm compliance. Mr. Lizardi confirmed that the Fire Department had reviewed the plan at Site Plan Review and Design Review and there were no objections noted. The Chair asked Mr. Lehrer for meeting minutes. Mr. Rowley inquired whether the Fire Department used their template to assess the turning radius and Mr. Lizardi responded that it was believed to be the WB 50 turning movement for larger trucks so it would not be an issue. Mr. Rowley recommended a letter from the Fire Department and Mr. Lizardi responded that he would request a letter. There was consensus from the Board that Mr. Rowley could consult with Mr. Lizardi regarding the plan.

Mr. Lehrer noted that he had discussed the Cape Cod Commission's Design Guidelines at Plan and Design Review, but at that time, they had not yet been approved by the Attorney General but had since be approved and established retroactive to Town Meeting.

The Chair opened the matter to Public Comment.

Bob Laline, Main Street and across from the project, was present to learn more about the project. The Chair encouraged Mr. Laline to share his comments because the Planning Board wished to know how the project could impact their property or living environment. The Chair noted that the property owner had a right to develop their property, but if they were seeking relief, they would need to show justification to allow for the relief. The Chair inquired if relief was being sought and Mr. Lizardi responded that a list had been submitted with the application, listing the items. The Chair referenced the Zoning Compliance table, Mr. Lizardi confirmed that they were not seeking relief for setbacks and lot coverages and would be meeting those regulations. Mr. Laline attended a prior meeting regarding a 40% buffer requirement that was reduced by 14%, allowing the removal of trees to dig a ditch for runoff, adding that his property often floods. It was confirmed that this was not the project seeking relief from the buffer requirement. Mr. Lizardi confirmed that they were protecting the 100 foot buffer offset from the residential areas and was not the site with the large depression. Mr. Laline stated his preference that zoning be maintained for these projects, specifically expressing concerns about drainage and signage issues. As a long-time resident, Mr. Laline also expressed preference for a fence so that he would not have to look at large commercial buildings and asked that the Town give

consideration to residents who have lived on their properties for up to 30 years, in the residential area. The Chair asked that the project proponent consider the comments shared about fencing and landscaping. Mr. Lizardi confirmed that a landscaping plan, in addition to preserving existing vegetation, had been submitted and reviewed by Design and Plan Review. The Chair shared the landscaping plans with Mr. Laline and encouraged him to follow up with Mr. Lehrer with any comments or concerns, to be shared with the Planning Board.

There was no additional comment. Mr. Rowley noted that the list of waivers was covered on the plan and questioned whether they were applicable. Mr. Lizardi responded that they asked for relief because they sometimes do not provide specific details. Mr. Rowley confirmed that he would work with Mr. Lizardi to resolve any questions and the Chair encouraged the project proponent to consider comments made by the abutter. Mr. Cummings referenced the abutter's concerns about the signage, specifically if it was a distraction to drivers on the road. Regarding drainage, Mr. Rowley stated that there was no drainage on Route 130 that would be impacted by the site and all drainage generated by the site would be contained on site. Mr. Laline stated that the Town's water drained onto the site adjacent to the Best Buy Beverage site.

MOTION: Mr. Balzarini made a motion to continue the Public Hearing to September 4<sup>th</sup> at 7:05 p.m. Mr. Cummings seconded the motion. All voted unanimously.

#### 7:20 p.m. Modi, LLC (Continued from 8/7/19)

Application for Special Permit to Construct Coffee Shop with Facilities for Processing and Packaging Coffee, with Future Industrial Tenant at 10 Evergreen Circle, Lot B (Map 19 Block 10) as required by Sections 174-25 (I)(16) and Section 174-45.6 of the Mashpee Zoning Bylaw. The property is located in the C-3 Zoning District and is within the Light Industrial Overlay District. The Board will also consider a request to reduce the required 100 foot undisturbed naturally vegetated buffer adjacent to any residentially zoned parcel outside of the C-3 District to 50 feet. This waiver request is made pursuant to Section 174-25.1(4).

The appointed time having arrived, the Chair opened the Public Hearing and read the request from Modi, LLC. Kevin Kirrane, attorney, and Patrick Johnson from Atlantic Engineering were present to represent the project proponent for this Special Permit request. Mr. Kirrane stated that it was his understanding that the hearing was continued to clarify interpretation regarding 40% undisturbed natural space as required by the Bylaw. Mr. Kirrane stated that the applicant presented a plan to the Zoning Board of Appeals seeking a variance from the Bylaw requirement to maintain 40% of the site as natural undisturbed land, and was then granted a variance by the ZBA to reduce 40% natural undisturbed land to 26%. The plan submitted showed that the reduction would enable the applicant to provide additional parking on site. The Chair stated that the last plan presented to the Planning Board showed 40% undisturbed natural land, so the reduction had not yet been discussed by the Board. Mr. Kirrane stated that reducing the undisturbed land to 26% required modification to drainage and to allow for filling in the depression at the front of the site where water gathered, draining from Route 130. Mr. Kirrane

stated that he had received an email from DPW Director Catherine Laurent stating that filling in the area would not impact road drainage or contribute to drainage issues on other properties. Mr. Kirrane had submitted for the record the approved variance from the ZBA. Mr. Kirrane further noted that reduction of the undisturbed land also fulfilled a need to increase parking on site to for future potential uses. The revised landscaping plan was still being developed, and would include screening around the area of the depression in order to maintain a landscaped buffer at the front. Concerns had been raised by the abutters regarding screening and the project proponent had agreed to increase landscaping in the buffer areas. Plans were shared with the public at the request of the Chair. Screening would also be placed around the outdoor seating area. Mr. Kirrane added that the project proponent was also seeking relief from a 100 to a 50 foot buffer. Reference was made to the Standards of Development in the C-3 District.

Mr. Balzarini inquired about the increase in parking spaces and it was confirmed that there would be 46 parking spaces, though 35 was required. Mr. Balzarini inquired about access and it was confirmed that there were two points of access. Mr. Balzarini inquired about delivery trucks and the project proponent, Jan Aggerbeck responded that delivery vans would be used. Mr. Balzarini expressed concern about access for larger vehicles and, since there would be an additional tenant. The Chair inquired whether the Board wished to add a condition regarding larger vehicle access. Mr. Rowley suggested that small adjustments could be made to better accommodate larger vehicles and Mr. Kirrane confirmed that they would work with Mr. Rowley to address the matter. Reference was made to the original plan and Mr. Kirrane stated that parking had to be reconfigured to maintained the 26% undisturbed natural vegetation.

Mr. Hansen inquired about adjustments to lighting in the trash area and it was confirmed that changes were made. Mr. Hansen suggested that the area of replanting trees around the depression area appeared to be thinner than the existing conditions. Mr. Kirrane suggested that the final landscaping plan would show a greater depth of landscaping, adding that they wished to accommodate concerns expressed by the abutters. Mr. Callahan expressed the same concern.

The Chair referenced the June 15<sup>th</sup> plan showing 45.5% undisturbed land and the new plan showing 26% undisturbed land. Mr. Kirrane explained that the original plan included landscaped land with undisturbed natural area. The need for the reduction with the ZBA was a result of clarification between landscaped area and undisturbed natural area. The Chair expressed concern about reducing the undisturbed area from 45% to 26% and asked that the project proponent carefully consider the feedback from the abutters regarding their quality of life. The Chair added that she would consult with Town Counsel and expressed frustration that the project proponent did not notify the Planning Board of their plans to request a variance from the ZBA. The Chair noted that she had recommendations for the site but instead, the project proponent sought a decision for another board, making it harder for the Planning Board to provide further comment. Mr. Kirrane stated that they would be happy to consider comments from the Chair.

The Chair noted that coffee roaster did not appear in the use table for Light Industrial zoning, but that food incubator/food manufacturing/food processing did appear on uses, and would follow up with Town Counsel to confirm that it was an allowable use. Mr. Kirrane believed it was an allowable use. Additionally, changes made to the Bylaw in May 2019 and approved by the Attorney General, required consideration of design standards. The Chair previously requested a summary from the project proponent about the appearance of the building and architectural and site design standards, Articles 26 and 27. Mr. Kirrane inquired whether the Plan and Review Committees were aware of the design standards and the Chair responded that she had notified the project proponent and anticipated that the building would comply with the guidelines, but a summary was needed in writing. Mr. Kirrane spoke with the architect who would look into the matter further.

#### Mr. Cummings had no comment.

Regarding use, Mr. Lehrer confirmed that the proposed use of coffee roasting was an allowable use in the Bylaw. Regarding seeking relief from the ZBA without notifying the Planning Board, Mr. Lehrer stated that the project proponent believed their plan was compliant based upon advice from the Planning Department. After the first Public Hearing, and the matter of 40% undisturbed area, Mr. Lehrer advised the applicant to seek relief from the section. The Chair asked that Mr. Lehrer first consult with the Chair because the hearing had been continued in order to receive the report from the Town's Consultant Engineer. Mr. Lehrer stated that applicants had a right to seek relief from any board.

Mr. Rowley referenced the ZBA decision granting the variance and referencing 6 pages of plans, noting that the plans presented tonight were different than what was considered by the ZBA. Mr. Rowley inquired whether the ZBA had reviewed the plans with the 26% undisturbed area and Mr. Kirrane responded that the ZBA received a sketched plan and it would not conflict with the decision of the Planning Board. Regarding traffic movements noted by Mr. Balzarini, the plan showed the route of the fire truck through the site. Mr. Rowley stated that he had not yet been in receipt of the new plans for review, and would need to do so in order to issue a new report.

The Chair stated that there was a request to reduce the required 100 foot undisturbed naturally vegetated buffer adjacent to a residential zoned parcel in C-3 to 50 feet. It was Mr. Kirrane's opinion that the natural buffer was not applicable, but would supplement with landscaping. Mr. Rowley had not yet reviewed that aspect of the plan. Mr. Kirrane stated that they were seeking relief in order to fill in the hole on site. Mr. Kirrane stated that they were seeking relief from the 100 feet and not the undisturbed natural area, adding that the site was not next to any residentially zoned parcel. Mr. Kirrane confirmed that the applicant was seeking relief from 174-25.1 Sub Section 4. The Chair stated that it was not included in the Public Hearing Notice. Mr. Lehrer stated that the Zoning did not allow development within 100 feet of a residentially zoned parcel, while requiring a 100 foot buffer, but that the Planning Board could waive it to 50 feet. Mr. Lehrer confirmed that the abutters were appropriately noticed and it was his opinion that the section of the bylaw cited in the Notice applied but Mr. Kirrane believed differently. Mr.

Kirrane confirmed that Design Review had considered the matter and the Chair asked that documentation be submitted from Design Review. Mr. Lehrer confirmed that Design Review had approved the plans, but not specifically the reduction. Mr. Kirrane stated that the original plans considered by Design Review did not include the undisturbed natural buffer, but did include landscaping. Mr. Johnson confirmed that 50 feet was shown on the map. The Chair noted that reducing to 50 foot would not touch the property. Mr. Kirrane added that they would not be seeking a full 50 foot reduction because they would be providing landscaping, where the hole was being filled. It was Mr. Balzarini's opinion that the hole would look better filled, with landscaping added, especially with larger trees.

The Chair inquired whether the front designed area was intended to draw in the customer or for customers on site. Mr. Aggerbeck stated that the intent was to make the area attractive for customers to linger and be protected from the sound of traffic, adding that the existing trees did not provide a buffer due to their height.

The Chair recommended that the project proponent review the minutes from the last meeting. Mr. Phelan had inquired about correspondence from the Fire Department regarding access and Mr. Lehrer would be providing the DRI decision from the Cape Cod Commission. The Chair had suggested a condition to ensure a compatible use for any incoming tenant. Mr. Johnson confirmed that turning radius had been confirmed with Mr. Rowley. The Chair suggested the possibility of having to re-advertise the relief if it had nothing to do with the naturally undisturbed buffer, but Mr. Lehrer disagreed.

#### The Chair invited public comment.

Kathy Petersen, Main Street, confirmed that there originally had been a full natural buffer, but the original owner of the property clear cut the trees, leaving only the tall trees. Ms. Petersen expressed concern about visibility with plans to offer out door games and a fire pit to customers, adding that she had met with Mr. Aggerbeck. Ms. Petersen stated that the original intent was industrial, as a coffee maker, but expressed concern with plans to make it more of a family friendly destination. Ms. Petersen agreed that filling in the hole, with proper landscaping would be an improvement. Ms. Petersen expressed concern about the speed of Route 130 with children playing outside. Ms. Petersen also expressed concern about noise with increased traffic entering and exiting the site, 8 a.m. to 8 p.m. The Chair referenced Article 27 that allowed outside seating for an established eating place in an industrial area, but would require appropriate visual screening areas abutting a residential zone. Mr. Kirrane stated that it was the intent of the applicant to provide screening.

Bob Laline, Main Street, voiced his concern regarding the buffer and encouraged all to read Section 174 and the 100 foot buffer requirement, and the 40% requirement. Mr. Laline noted that all of the other businesses were set back, as required, and it would be unfair to allow this applicant relief from what was required. Mr. Laline referenced the front of the building on Route 130 and another front on Evergreen Circle. Mr. Laline suggested that the porch on the front

facing Route 130, and the plan included also picnic tables and a fire pit out in front of the porch. Mr. Laline expressed concern about the traffic as well as the second tenant and reference to it possibly being a tasting facility. Mr. Laline was concerned about addressing planning now without knowing the details about another tenant, as well as seeing many different and changing plans. Mr. Laline also stated his preference for a more natural buffer rather than a landscaped buffer. Mr. Laline would prefer that the site be more set back and also expressed concern about the water problems experienced in the area and a potential impact to his property.

The Chair announced that Mr. Lehrer was in receipt of a letter from DPW Director Catherine Laurent and read the letter for the record. The DPW was in the process of redesigning the drainage system at Evergreen Circle and Route 130. Mr. Kirrane stated that all of their drainage would remain on site. Mr. Aggerbeck would have liability issues with children so every effort would be made so that they did not access Route 130. In addition, Mr. Kirrane pointed out that there were a number of businesses along Route 130 that did not have sufficient buffering, and the applicant would be providing adequate landscaping to address the concerns of the residents. The Chair added that a split rail fence had been proposed on the plan and Mr. Kirrane added that they would add landscaping around the fence. The Chair asked if the landscape architect had been directed to block the visual of the project and it was confirmed that was the case. Mr. Johnson expected that the plans would be available next week and agreed to share them with the abutters. Mr. Kirrane pointed out that there were impacts, that there were areas where commercial and residential zones would be abutting.

Tom Rullo, North Way, stated that he knew the owner and referenced his effort to create a nice looking building in Mashpee. Chief Rullo noted the challenge of creating screening while also maintaining buffer space, adding that the natural vegetation had already been removed. Chief Rullo also noted that a successful business was good for the entire town, it helped the tax base and assist with future sewering needs.

The Chair stated that any additional comments could be forward to Mr. Lehrer. The Chair read a letter of support into the record from Jill Leshard, noting the addition of new jobs in Mashpee and Cape Cod Coffee's support of local non-profits and businesses.

Cindy Jones, Great River Road, stated that Cape Cod Coffee was a business that also gave back to the community, and was an honor to have as part of Mashpee.

John Cotton, Nobska Road, also stated that Cape Cod Coffee had been a true community partner, involved with non-profits and consistently played a role in the community, including in the schools.

Nicole Spencer, West Way, stated her support for Cape Cod Coffee, adding that they served as an example of the type of business that Mashpee would want to have in the community.

There was confirmation that the applicant would provide the apropriate plans to Mr. Rowley. Mr. Rowley requested to speak with Ms. Laurent regarding the Town's plans for drainage. Mr. Aggerbeck confirmed that he would provide Mr. Lehrer with the landscaping plans to share with the abutters and would attend a scheduled meeting. Mr. Aggerbeck also stated that they had received one extension from the bank, but would like to be scheduled for a meeting prior to the 18<sup>th</sup>.

MOTION: Mr. Balzarini made a motion to continue the Public Hearing to September 4<sup>th</sup> at 7:30 p.m. Mr. Callahan seconded the motion. All voted unanimously.

The Chair asked that Mr. Lehrer send a letter, with the whole paragraph, to the abutters.

#### **NEW BUSINESS**

Charles Rowley, July Invoice for Southport- An invoice was received for Southport in the amount of \$100.

MOTION: Mr. Balzarini made a motion to pay Charles Rowley for his services to Southport in the amount of \$100. Mr. Cummings seconded the motion. All voted unanimously.

Planning Board members signed the authorization.

Request for Release of Open Space Parcel 1 from the Covenant-Evergreen Energy LLC-

The Chair announced that the Board had a copy of the Release of Covenant Agreement for Open Space Parcel 1, dated November 15, 2017 and owned by Evergreen Energy LLC. Mr. Lehrer confirmed that the building lots had been released, but the open space conservation lot had not yet been released. Mr. Lehrer stated that Evergreen would be seeking to transfer the title to the Conservation Commission this week, requiring that the lot be released by the Planning Board. The Conservation Commission approved of the transfer and the Board of Selectmen would also need to accept the deed, but first required release by the Planning Board. The Chair inquired about a modification to the plan and Mr. Lehrer confirmed that the Open Space Parcel originally was not intended to be transferred to the Conservation Commission, until the stripping of the land was discovered. After working with the Conservation Commission to develop a restoration plan for the land, Evergreen opted to transfer that parcel to the Conservation Commission, which was also accepted by the Cape Cod Commission. The Chair stated that requests were typically submitted in writing and Mr. Lehrer indicated that it was sent by email, which was not received by Board members. Mr. Lehrer confirmed that the email was received from Michael and Jeffrey Ford, attorneys for Evergreen Energy LLC. The Chair asked that the email be located for consideration by the Board.

There was a recess taken at 8:50 p.m. and the meeting reconvened at 8:54 p.m. to locate the email.

MOTION: Mr. Balzarini made a motion to release Open Space Parcel 1 from the Covenant. Mr. Callahan seconded the motion. All voted unanimously.

The Chair will notarize the signatures on the document and have it ready tomorrow for recording.

#### **OLD BUSINESS**

Proposed Development Agreement with Mashpee Commons, Presentation by Cape Cod Commission-Chairman Waygan reported that the Chair of the Board of Selectmen was working with the Cape Cod Commission to schedule a presentation regarding Development Agreements. The Chair recommended that Board members review the most recent BOS meeting regarding the matter. The Chair submitted a letter to the BOS and Buff Chace of Mashpee Commons.

#### **CHAIRMAN'S REPORT**

**October 2019 Town Meeting Warrant-**The Chair reported that there would be a meeting tomorrow with the Board of Selectmen to discuss wastewater and Warrant Articles.

Employment of Outside Consultants-The Chair was also in discussion with the Town Manager about the Board's ability to hire additional consultants. The Chair referenced the Mashpee Rotary Safety Audit. Mr. Rowley had been a participant and suggested the solutions offered may not adequately address the traffic needs. The Chair recommended Board members review the study. Mr. Lehrer stated that the output of the rotary study was specific to road safety, adding that the crash data showed that most accidents occurred at the entries to the rotary. It was Mr. Balzarini's opinion that, with only two lanes on Route 28, there would always be a bottle neck. Mr. Lehrer noted that the rotary was created as a one lane rotary but was used as a two lane rotary. The Chair also reported to Mr. Collins the need to have both rooms for Planning Board meetings and Board of Selectmen agendas would be forwarded to members of the Planning Board by way of Mr. Lehrer. Agendas and packets of materials would also be available online.

#### **BOARD MEMBER COMMITTEE UPDATES**

Cape Cod Commission-Mr. Callahan referenced the road study project, noting that there would be a big meeting tomorrow. The Chair inquired about the online open comments for the Cape Cod Commission's LCP Guidelines but Mr. Lehrer responded that he believed they had already been adopted.

**Community Preservation Committee-**A proposal to lower the surcharge for Community Preservation funds to 1% would be considered at tomorrow night's Board of Selectmen meeting. There had been multiple proposals suggested to change the configuration of the funding.

**Design Review Committee-**No meeting

Plan Review-No meeting

Environmental Oversight Committee-Mr. Cummings reported that Santuit Pond water quality issues would be monitored by new technology developed in Woods Hole. Funding was expected from the Mass Municipal Vulnerability Preparedness Program. Although there was some theft, ¾ of the plots in the community gardens had been sold. It was reported that none of the estuaries were meeting water quality standards and Popponesset was in the worst shape.

Shellfish programs were doing well, but were not expected to meet the 30% goal. It was expected that Phase I and Phase II would be met with the success of the shellfish program. There was discussion regarding the need to place a wastewater facility in the area of the transfer station, and the challenges associated with addressing the wastewater issue in Mashpee.

Greenway Project & Quashnet Footbridge-No meeting Historic District Commission- No meeting Military Civilian Advisory Council- No update

#### UPDATES FROM TOWN PLANNER

Mass Municipal Vulnerability Preparedeness Program-Mr. Lehrer stated that funding had been received and a scope of work and contract was awaiting a signature before moving forward with the workshops. It was recommended not to have workshops during travel times for seasonal residents, but possibly during late spring and/or early summer.

Discussion on amending standards for development in C-3 Districts and the requirements established in Section 174-31, special footnote 14 at a future Town Meeting-Mr. Lehrer proposed that the undisturbed natural buffer could be waived in place of a comprehensive landscape plan in parts of Great Neck Road, Route 130, Route 28 and Route 151. It was Mr. Rowley's opinion that the natural buffer, because of the footnote 14, should have been retained for Cape Cod Coffee, but Town Counsel had ruled otherwise. Mr. Rowley suggested that footnote 14 may need to be revised. Mr. Lehrer stated footnotes varied for C-3 and C-2. The Chair stated that she would be seeking additional feedback from Town Counsel.

Local Comprehensive Plan, New Guidance from Cape Cod Commission-Mr. Lehrer believed that the new LCP Guidelines had been adopted by the Cape Cod Commission and requested that they address the Planning Board regarding any changes. October 2 was the proposed meeting date.

#### ADDITIONAL TOPICS

#### **ADJOURNMENT**

MOTION: Mr. Balzarini made a motion to adjourn. Mr. Callahan seconded the motion. All voted unanimously. The meeting adjourned at 9:24 p.m.

Respectfully submitted and drafted from video,

Jennifer M. Clifford Board Secretary

#### LIST OF DOCUMENTS PROVIDED

Additional documentation may be available in the Planning Department

- -Minutes July 17, 2019
- -Charles Rowley Invoice for Southport Services for July 2019
- -Kevin Andrade Application for Special Permit and Plans

- -Release of Covenant Agreement for Open Space Parcel 1 at Evergreen Circle and Supporting Documentation
- -Mary Waygan Memo Dated 8/15/19 to Andrew Gottlieb, Regarding Mashpee Commons -Mary Waygan Letter Dated 8/15/19 to Buff Chace, Regarding Mashpee Commons

# Mashpee Planning Board Minutes of Meeting August 7, 2019 at 6:00 p.m. Mashpee Town Hall-Waquoit Meeting Room 16 Great Neck Road North Approved 9/4/19

**Present:** Chairman Mary Waygan, Vice Chairman Joe Cummings, Dennis Balzarini, John (Jack)

Phelan, Joseph Callahan, Robert (Rob) Hansen (Alt.)

Also: Evan Lehrer-Town Planner, Charles Rowley-Consultant Engineer

#### CALL TO ORDER

The Town of Mashpee Planning Board meeting was opened with a quorum in the Waquoit Meeting Room at Mashpee Town Hall by Chairman Waygan, at 6:04 p.m. on Wednesday, August 7, 2019. The Chair welcomed attendees and stated that the meeting was being videographed and recorded and noted that, if the public were to address the Board, to do so stating their name, address and comment. The Pledge of Allegiance was recited. There was a moment of silence.

#### **APPROVAL OF MINUTES—July 17, 2019**

Minutes were not considered.

Workshop on Proposed Amendments to the ADU/Accessory Apartment Zoning Bylaw to Receive Public Comment and Possibly Revise Article Submitted to Board of Selectmen-The Chair stated that public comment was welcome at tonight's workshop meeting, noting that it could not be accepted previously. The Board of Selectmen had provided additional comments regarding the proposed amendment. The Chair explained that the proposed amendment would be a modification to the existing ADU Bylaw, which allowed for accessory apartments. The proposed amendment would allow accessory apartments by right, removing the requirement of a Special Permit, and changes to the definition would allow for two bedroom units, instead of one. Mr. Lehrer clarified that the Bylaw contained definition inconsistencies, noting that accessory apartments allowed two bedrooms but the ADU allowed only one bedroom, but the modification would correct inconsistencies allowing for a maximum of two bedrooms, which would include rooms considered to be a study. In addition, the Board of Selectmen have requested that provisions be added that would allow for monitoring.

Mr. Balzarini inquired whether the projects would be considered by Design Review. The Chair referenced the last meeting when it was suggested that abutters be notified, as was currently required under the Special Permit, which could be done by application to Plan Review. Mr. Phelan stated that notification was intended for detached structures only and Mr. Balzarini agreed. The Chair confirmed that it was added to the form. Mr. Phelan expressed concern that the additional review and notification would make the process more complicated and costly, adding that homeowners were allowed to build a detached garage. Mr. Phelan stated that the intent was to increase housing and all should be allowed by right, provided all other building codes were being met.

Mr. Balzarini expressed concern about maintaining the units as affordable and suggested the possibility of the units being used for summer rentals, rather than more permanent rentals. Mr. Callahan noted that units were restricted from being rented nightly or weekly.

The Chair summarized that "By Right" would allow a homeowner to acquire a permit from the Building Department, rather than be reviewed in a hearing by a Committee or Board. There could be no waiver from Board of Health, Wetlands Protection Act or Rivers Act.

The Chair read the proposed amendment and explained the different sections.

There was discussion about Section A and principal dwelling unit and residency requirements. The Chair would follow up with the Building Commissioner to inquire further regarding the requirements. Mr. Balzarini inquired whether the homeowner could move into the accessory apartment in order to rent his primary home on a weekly basis. Mr. Lehrer was unsure about the restrictions of short term rentals for the primary home, but that the accessory apartment could not be rented weekly.

Mr. Rowley recommended the addition of "Conservation Commission" in Section B.

Regarding Section D, Lynn Bardy of Surfside Drive inquired further about separate entrances and Mr. Lehrer responded that it was not required to have a separate entrance. The Chair confirmed that the unit would need to maintain two legal means of egress.

Mr. Balzarini inquired whether an apartment on the second floor would require a separate entrance in Section E and Mr. Phelan responded that there was no specific requirement. It was confirmed that the detached unit was required to coordinate with the principal building.

Regarding parking in Section F, Mr. Hansen inquired about parking enforcement and the possibility of the resident parking on the street. The Chair suggested the likelihood that neighbors would contact the Building Commissioner should parking become an issue. Mr. Lehrer stated that plans submitted would need to demonstrate parking availability on the property, in order to acquire the building permit.

Section H was added at the request of the Board of Selectmen and would require a rental certificate acquired from the Board of Health.

Section I detailed the allowable rental period as not less than one month. There had been prior discussion regarding a possible minimum of 3 months, but there was also discussion about renters needing less than 3 months to work in the area. New resident, Larry Marsh, suggested that the intent of the bylaw was to provide year round affordable housing for permanent residents, rather than short term rentals. Mr. Callahan noted that additional workforce housing was needed in the summer. Mr. Hansen agreed that additional housing was needed for summer part time residents, adding that the bylaw would not preclude annual rentals. Stephanie Coxe, SmarterCape Partnership, stated that the intent of the Cape Cod Commission model was to provide more attainable housing for year round residents, but also provide flexibility for the workforce and homeowners. Short term rental legislation allowed towns to monitor any short term rentals and provided a disincentive for short term rentals due to the potential for incurring fines. George Virgello, Polaris Drive, noted the shortage of year round housing and stated that, if the goal was to provide workforce housing, consideration should be made to require proof employment, to prevent units from being used as vacation rentals. Arden Russell, Stratton Ridge, referenced Barnstable's cumbersome accessory unit bylaw which had greatly limited

the creation of units. Ms. Russell recommended simplicity to encourage the development of a variety of rental units. Mr. Phelan agreed, noting that it was a matter of supply and demand.

Mr. Lehrer noted that Section K was a new addition, following a joint meeting with other regulatory boards. Sections K, L, M were added to address existing illegal rental units and a general bylaw to be developed that would require rental certificates and the Board of Health taking inventory of the rental unit. Non-compliance would make the property owner liable to fines. An amnesty clause would address illegal accessory apartments allowing them to demonstrate their ability to meet the design criteria of the bylaw in order to acquire an occupancy permit. Mr. Balzarini inquired who would be enforcing the bylaw and Mr. Lehrer responded that it was intended that the Building Commissioner and the Board of Health, or its designee, would enforce that which fell within their jurisdiction, depending upon the bylaw. It was confirmed that there were currently 63 accessory apartments since the Bylaw's passing in 2003. Mr. Hansen suggested that data should be used to ensure compliance to the Bylaw and that homeowners should be advised they would be monitored for non-compliance. There was a suggestion to add "All means to ensure compliance with this Bylaw should be employed." Mr. Lehrer suggested that the Rental Property Bylaw could address the matter, but was best placed in the General Bylaws.

Referencing Section I, Mr. Rowley inquired about the distinction between an accessory apartment and offering boarding for lodging as a commercial entity. It was determined that the first sentence of I would be deleted, removing "An accessory apartment shall not be used for boarding and lodging, or other commercial use."

Seeing no additional comments from Board members or staff, the Chair opened to Public Comment.

Terry Ronhock, Sunset Circle, stated her opinion that the addition of an accessory apartment should be allowed by right, and should not be dependent on approval from neighbors. Ms. Ronhock also agreed with allowing one month rentals as there could be short term workers seeking housing in the area, and it provided protections to the homeowner by allowing month to month leases. In addition, renters may also be looking for flexibility. Ms. Ronhock emphasized the need in Mashpee for residents of all ages.

Katie Martin, Falmouth resident, expressed her gratitude for the Board's consideration of the Bylaw changes. As a realtor in Mashpee, Ms. Martin stated that many had reached out to her seeking rental units in Town.

Larry Marsh, Polaris Drive, expressed his concern that the ADU Bylaw was an assault on the single family home as well as concern about who would be allowed to rent, without restrictions. Mr. Marsh inquired whether the Board would consider limitations as to the number of units that could be built within a year, as it was essentially the building of a second home on one parcel of land, without any right for other homeowners to appeal. Mr. Marsh noted that other towns had placed a limit of approximately 10 units per year. The Chair noted that Mashpee had averaged less than 5 units per year.

Ms. Russell stated her preference that ADU/Accessory Apartments be allowed by right, making it easier for the homeowner to assist with the growing housing crisis here on the Cape. Ms. Alden noted

that the Cape Cod Commission reported that the Cape was 22,000 housing units behind what was needed, adding that it was not financially feasible to build large structures to accommodate the need and ADUs would create much needed housing diversity.

Melinda Baker, South Sandwich Road, agreed that it should be easier for homeowners to create a space to allow residents to live in Mashpee. Ms. Baker suggested not to add a lot of restrictions and to allow homeowners to become part of the solution.

The Chair read letters from John Miller, Shellback Way and Amanda Kaiser supporting the ADA Bylaw.

Mr. Rowley inquired whether there had been correspondence with the Board of Health, referencing the long term effects of nitrogen loading as a potential issue, although, a few added units per year may be negligible. The Chair would follow up with the Health Department and the Sewer Commission. The Chair noted that, should the Bylaw be added to the Town Meeting Warrant, a public hearing would be held by the Planning Board to render their decision on the matter. Mr. Lehrer confirmed that the Board of Health would provide certification that the existing septic system could handle the additional flow, in order to receive a Rental Certificate. Mr. Rowley added that the Bylaw suggested that if the existing septic system could not manage the flow, the system could be upgraded to do so, provided it met with Title V requirements.

There was no additional Public Comment.

The Chair referenced the graph regarding review of detached and attached by right or by review. Mr. Balzarini liked the idea of abutters being notified for a detached accessory apartment. Mr. Lehrer inquired about adding an accessory apartment to an existing detached structure. Mr. Balzarini responded that he was suggesting notification to abutters for a newly built detached structure, though he also liked the idea of making the process easier in order to provide greater access to affordable housing, but further agreed to remove the requirement to allow all by right. Mr. Hansen stated that a new structure on a lot could provide more variables, such as drainage, that may not be closely considered by the Building Commissioner, but would be by the Planning Board. Mr. Rowley inquired how it would differ from the construction of a 2-car garage, which had no further requirement. Mr. Rowley suggested that a plot plan could be provided to show that there would be no impacts to adjacent properties. Mr. Phelan suggested that the construction of a garage typically included a site plan with elevations, but not the grading. Mr. Rowley suggested that language could be drafted providing discretion to the Building Commissioner, should there be perceived impact. There was consensus from Board members and language was suggested that "The Building Commissioner shall have the authority to request the applicant for further information, if conditions require it to show that there was no negative impact to the abutters."

The appointed time having arrived, the Chair opened the 7:10 p.m. Public Hearing. (See Public Hearings). At the conclusion of the 7:25 Public Hearing, the Chair returned to discussion about Accessory Dwellings.

The Chair shared a letter of support submitted by Lauren Kanzer, which also recommended consideration of developing a co-housing system. The Chair inquired whether room rentals were allowable by the Board of Health but Mr. Lehrer was unsure and referenced a proposed Golden Girl Bylaw in Dennis.

In reference to the definition page, Mr. Lehrer made a labeling correction. The Chair asked that Mr. Lehrer follow up with the Building Commissioner regarding evidence to show principal occupancy, in preparation for Town Meeting. "Conservation Commission" shall be added to Section B. There was confirmation from Mr. Phelan that two points of egress were necessary to meet code. Regarding H, Mr. Phelan noted the importance of the Rental Certificate Bylaw to pass, in order to support this Bylaw change. The first sentence would be struck in Section I. There was consensus to define the minimum rental time period to 30 days. It was confirmed that this section was new to the Bylaw.

The Chair indicated that the intent of this Bylaw was not written to provide year round affordable housing and inquired whether there was interest in limiting a maximum addition of 10 units per year. Mr. Phelan suggested not limiting the number but to address problems as they arise. Mr. Balzarini and Mr. Hansen agreed. It was noted that increased housing was a benefit to Mashpee and a penalty clause in place should reduce issues. It was suggested that enforcement be included with this Bylaw and Mr. Lehrer agreed to inquire further.

MOTION: Mr. Balzarini made a motion to submit to the Board of Selectmen, for their consideration, this Article to see if the Town would vote to amend 174-45.4 with two modifications; in Paragraph B add the requirements of the Mashpee Conservation Commission right after "shall meet all" and strike the first sentence of Paragraph I. Mr. Phelan seconded the motion. All voted unanimously.

MOTION: Mr. Balzarini made a motion that the Article changing the Use Table and introduce Plan Review for detached accessory apartment units would not be going forward or submitted. Mr. Callahan seconded the motion. All voted unanimously.

MOTION: Mr. Balzarini made a motion to see if the Town will vote to amend 174.3 of the Mashpee Zoning Bylaw, Terms defined as the following, the accessory apartment definition the dwelling accessory apartment and vote to submit to the Board of Selectmen as presented. Mr. Cummings seconded the motion. All voted unanimously.

#### **PUBLIC HEARINGS**

#### 7:10 p.m. Proposed Road Naming, Mendes Way

The appointed time having arrived, the Chair opened the Public Hearing and read for the record the Public Hearing Notice and request. Beth Wade, Land Acquisition and Permitting Director for Habitat for Humanity, read a letter requesting the naming of Mendes Way. The Chair confirmed that a letter was also received from Mashpee's 911 Coordinator, stating that the Address Working Group found no conflicts with the naming of #4 and #8 Mendes Way. Mr. Phelan stated that, because it did not conform to street requirements, the way was in fact a driveway and not a street and posed a more complicated public safety matter and fire apparatus accessibility with its naming. Mr. Lehrer stated that the Board was considering only the naming of Mendes Way and that the ZBA had already made

the decision to create the road. It was confirmed that the road would be signed like other streets in Town. It was noted that it would take some time for the road name to be updated.

There was no additional comment.

MOTION: Mr. Balzarini made a motion to approve the proposed name for this private way, at the parcel of land currently addressed as 341 Great Neck Road, to Mendes Way. Mr. Cummings seconded the motion. All voted unanimously.

Mr. Lehrer asked that a member of the Board return to Town Hall to sign the Certificate of Action and Mr. Phelan agreed to do so.

## 7:20 p.m. Cape & Islands Engineering Application, Definitive Subdivision Plan for 103 Meetinghouse Road (Continued from July 17, 2019)

The Chair opened the Public Hearing and read request. The Chair read correspondence received from Mathew Costa, Cape & Islands Engineering, regarding a request to withdraw without prejudice the applications for 103 Meetinghouse Road. The applications would be refiled following a land swap process, when they will also request fee waivers.

MOTION: Mr. Balzarini made a motion to withdraw without prejudice the Definitive Subdivision. Mr. Callahan seconded the motion. All voted unanimously.

### 7:25 p.m. Cape & Islands Engineering Application, Special Permit for Cluster Subdivision for 103 Meetinghouse Road (Continued from July 17, 2019)

The appointed time having arrived, the Chair opened the Public Hearing for the Special Permit and read for the record the request.

MOTION: Mr. Balzarini made a motion to allow withdrawal without prejudice. Mr. Callahan seconded the motion. All voted unanimously.

Mr. Phelan would sign the Certificates of Action for both decisions.

# 7:45 p.m. Modi, LLC Application for Special Permit to Construct Coffee Shop with Facilities for Processing and Packaging Coffee, with Future Industrial Tenant at 10 Evergreen Circle, Lot B (Map 19 Block 10) Located in the C-3 Zoning District, within the Light Industrial Overlay District

The appointed time having arrived, the Chair opened the Public Hearing and read the request from Modi, LLC. The Chair read an August 6 letter from Jan Aggerbeck, owner of Modi, LLC/Cape Cod Coffee, requesting a continuance while seeking a variance from the ZBA.

MOTION: Mr. Balzarini made a motion to continue the Public Hearing to 7:20 p.m. on August 21st. Mr. Callahan seconded the motion. All voted unanimously.

#### **NEW BUSINESS**

Charles Rowley, July Invoice-Mr. Lehrer stated that a future vote by the Board would be necessary to address the Southport invoice. An invoice dated August 1 was received in the amount of \$1,340 for regular Planning Board business.

MOTION: Mr. Balzarini made a motion to pay Charles Rowley \$1,340. Mr. Callahan seconded the motion. All voted unanimously.

Planning Board members signed the authorization.

Sign Road Taking Plans Approved at the May 2019 Town Meeting for Leatherleaf Lane, Bog River Bend, Miller Farm Road and Ferngully Path-Board members signed the plans. Mr. Lehrer will confirm the appropriate date of approval.

**Set Public Hearing Date for Application for Blue Sky Towers II, LLC**-The Chair asked for a vote for the matter to be referred to the Cape Cod Commission, as it was a new application, while also scheduling the Public Hearing. An application was previously reviewed by the Cape Cod Commission, but there was a scrivener error in the Town's Bylaw at the time. Section 13-D3 of the Cape Cod Commission Act required that a development that was not consistent with the underlying zoning, required consideration by the Cape Cod Commission.

MOTION: Mr. Balzarini made a motion that the application be sent to the Cape Cod Commission for a review, whatever review they find feasible. Mr. Cummings seconded the motion.

Mr. Callahan stated that the matter seemed to be back and forth. The Chair responded that, in order to reduce the liability of the Town, it would be prudent to send the matter back to the Cape Cod Commission. Mr. Balzarini added that the Cape Cod Commission considered the application, they understood the area to be zoned to allow cell towers due to the scrivener's error, when in fact, it was not zoned for a cell tower. Mr. Phelan inquired whether it would be required to be reviewed by the Cape Cod Commission as a new application and the Chair confirmed that it was the standard process. The Chair suggested that a public hearing be scheduled in case the Cape Cod Commission responded within the week, regarding the matter. Mr. Lehrer stated that he had been in contact with the Regulatory staff of the Cape Cod Commission who stated that they would not reopen the Development of Regional Impact process. The Chair read the letter she had drafted to the Chair of the Cape Cod Commission regarding the matter, attaching the scrivener's error and updated Bylaw. Mr. Lehrer corrected the date of the vote for the Bylaw changes for the Chair's letter as 1998, rather than 1996.

The motion was revised to set a Public Hearing date.

MOTION: Mr. Balzarini made a motion that the application be sent to the Cape Cod Commission for a review, whatever review they find feasible, and set the Public Hearing date to September 4<sup>th</sup> at 7:10 p.m. Mr. Cummings seconded the motion. All voted unanimously.

Mr. Rowley inquired whether the Board wished for him to review the plans submitted and there was consensus from the Board to do so.

#### **OLD BUSINESS**

Proposed Development Agreement with Mashpee Commons-The Chair indicated that correspondence had been received from the Board of Selectmen, as well as a letter from Mashpee Commons Developer, Buff Chace, and summary of Development Agreement Process from Tom Ferronti. Other documents referenced and shared included Section 9, Regional Regulatory Review and Section 6, Goals and Objectives. Mr. Lehrer confirmed that he had been in contact with Jonathan Idman of the Cape Cod Commission, regarding processing and the goals and priorities of the RPP. Goals and priorities of the RPP focused on mitigation requests as negotiated by the Planning Board and other invited parties. The criteria to enter in to a Development Agreement required an approved LCP, though it was recommended that Mashpee update their LCP prior to the Agreement being established. Mr. Lehrer confirmed that the Cape Cod Commission had recently completed their LCP, creating a more streamlined process. Mr. Lehrer suggested that it would be prudent to being planning the LCP around Mashpee Commons. The Chair suggested that an updated LCP would require a Town Meeting vote, but Mr. Lehrer believed that was no longer the case.

Mr. Balzarini inquired whether the Town would still need to vote on Zoning changes and the Development Agreement. The Chair stated that if there was a zoning change within the Development Agreement, the entire Development Agreement would be considered at Town Meeting, and the zoning change would impact only that project. If a zoning change was separate from the Agreement, then only the zoning change would be considered at Town Meeting, and would be a Town-wide change.

A recess was taken at 8:13 p.m. for Mr. Lehrer to make copies of Selectman Gottlieb's letter and the meeting reconvened at 8:15 p.m.

There was consensus to draft a letter from the Planning Board to Mashpee Commons indicating that they were supportive of the idea of using the Development Agreement for the expansion of Mashpee Commons. The Chair indicated that it would be an opportunity to review the Master Plan, adding that the Planning Board had initially requested that Mashpee Commons draft a summary how their plan would address each chapter of the LCP. Mr. Phelan noted reference in the letter made about time constraints and the necessity to meet outside the standard two meetings per month.

MOTION: Mr. Balzarini made a motion to respond to Mashpee Commons that the Development Agreement would be advantageous to all parties to pursue. Mr. Callahan seconded the motion. All voted unanimously.

Mr. Callahan stated that, although the Planning Board would be in charge, other parties would be involved but it would allow the matter to move along more quickly. Mr. Balzarini referenced 25 questions the Chair had submitted previously to Mashpee Commons regarding the needs of the Town. The Chair noted that, once the Planning Board was in receipt of the Development Agreement, other Boards could be invited to provide comment. It was the Chair's hope that there could be one single presentation from Mashpee Commons and then comment accepted form other Board and Committee members at that time to become part of the negotiation process. The Chair confirmed that the Bylaw confirmed that other Committee and Boards could be included if needed. One single presentation from

Mashpee Commons should provide materials to all as well offer information to all electronically. In addition, Boards and Committees should be allowed time to further discuss the matter after the presentation in order to submit comments to the Planning Board, to be used for negotiation.

The Chair would send correspondence to Selectman Gottlieb and Mr. Chace. The Chair suggested reviewing Commission materials ahead of time and requested that the item remain on the agenda. Mr. Lehrer confirmed that there were six other existing Development Agreements considered by the Cape Cod Commission, including the Mashpee Business Park. Further information was available on the website.

#### **CHAIRMAN'S REPORT**

No report at this time.

#### **BOARD MEMBER COMMITTEE UPDATES**

One Cape Reports-The Chair attended the first day regarding impacts of climate change and financing wastewater and discussed what she learned. Mr. Phelan attended workshops regarding accessory apartments being addressed with cluster subdivisions. Mr. Hansen referenced the example used of Pine Hills to develop a cluster subdivision. Mr. Lehrer stated that he had been invited to speak about form-based code.

Cape Cod Commission-Mr. Callahan stated that there would be testimony accepted to amend the Local Comprehensive Plan Regulations. There was consensus from the Board for Mr. Lehrer to invite the acting Chief Planner of the Cape Cod Commission to discuss new regulations with the Planning Board. The Chair asked that notices from the Cape Cod Commission be forwarded to the Planning Board, and a hard copy provided in packets.

Community Preservation Committee-There was no meeting, but the Chair reported that a draft Warrant Article for Town Meeting would create a property tax surcharge to address wastewater, and occur through the Community Preservation Committee. There was discussion whether the surcharge would be 2%, along with 2% CPA funds or 3% wastewater and 1% CPA. There was discussion regarding reuse of wastewater as well ongoing conversations with Joint Base Cape Cod regarding municipality shared use of their wastewater facility.

**Design Review Committee**-Mr. Callahan stated that signage was passed for 53 Market Street for Cape Cod Coffee.

Plan Review-No meeting

**Environmental Oversight Committee-**No meeting, but the straw, styrofoam and helium ban would be considered at Town Meeting.

Greenway Project & Quashnet Footbridge-No update

Historic District Commission- No meeting

**Military Civilian Advisory Council-**Mr. Phelan confirmed that a vote would be taken by the State and he would be attending the first meeting in October.

#### **UPDATES FROM TOWN PLANNER**

Mr. Lehrer referenced the Light Industrial Overlay District and the need to provide better visibility for a neighborhood amenity. Mr. Lehrer suggested that the current development standards were not consistent with the intent of the Overlay District, hiding the building behind undisturbed natural vegetation. Mr. Lehrer inquired whether the Planning Board would consider a Bylaw change to allow businesses to elevate their landscaping for their businesses to be seen from the road. Mr. Phelan inquired whether applicants would provide detailed landscaping plans for review by the Planning Board and Mr. Lehrer confirmed that substantial landscaping plans would be required for neighborhood amenities to create an inviting presence. Mr. Balzarini suggested Mr. Lehrer work on a

draft. The Chair was open to a landscaped buffer but cautioned against changing the 40% lot coverage as many businesses had been required to maintain that coverage. Mr. Phelan noted that every lot in the Industrial Park was granted a variance by the ZBA, resulting in no 40% coverage limit. Mr. Rowley referenced inconsistencies in Footnote 14, which applied only to C-1 and C-2 districts, but also an area along Route 130 that was C-3. The Chair suggested providing a map of the lots that would be impacted and recommended keeping the matter on the agenda.

#### ADDITIONAL TOPICS

#### **ADJOURNMENT**

MOTION: Mr. Balzarini made a motion to adjourn. Mr. Callahan seconded the motion. All voted unanimously. The meeting adjourned at 8:50 p.m.

Respectfully submitted,

Jennifer M. Clifford Board Secretary

#### LIST OF DOCUMENTS PROVIDED

Additional documentation may be available in the Planning Department

- -ADU/Accessory Apartment Zoning Bylaw
- -Red Lined ADU/Accessory Apartment Zoning Bylaw
- -Corrected ADU/Accessory Apartment Zoning Bylaw
- -Table of Use Regulations
- -Future Proposed Rental Property Zoning Bylaw
- -7/1/19 Letter from Arden Russell Regarding ADU/Accessory Apartment Zoning Bylaw
- -8/7/19 Email from John Miller Regarding ADU/Accessory Apartment Zoning Bylaw
- -8/7/19 Email from Amanda Kaiser Regarding ADU/Accessory Apartment Zoning Bylaw
- -7/29/19 Email from Lauren Kanzer Regarding ADU/Accessory Apartment Zoning Bylaw
- -8/7/19 Email from Tom Fudala Regarding ADU/Accessory Apartment Zoning Bylaw
- -Public Hearing Notice, Road Naming Mendes Way
- -8/7/19 Letter from Elizabeth Wade Regarding Mendes Way
- -6/17/19 Letter from Clayson Nicholson Regarding Mendes Way
- -Map of Mendes Way
- -8/1/19 Mathew Costa Request to Withdraw without Prejudice, 103 Meetinghouse Road
- -8/6/19 Jan Aggerbeck Request for Continuance, 10 Evergreen Circle
- -8/1/19 Charles Rowley Invoice for July
- -Hearing Notice for Blue Sky Towers II, LLC
- -Application for Blue Sky Towers II, LLC
- -7/19/19 Buff Chace Letter to Andrew Gottlieb, Chair, Board of Selectmen
- -7/31/19 Andrew Gottlieb Letter to Mary Waygan, Chair, Planning Board
- -Development Agreement Process Highlights
- -Section 9, Regional Regulatory Review
- -Section 6, Goals and Objectives



### Town of Mashpee

Planning Board

Mashpee, Massachusells 12049 ERK

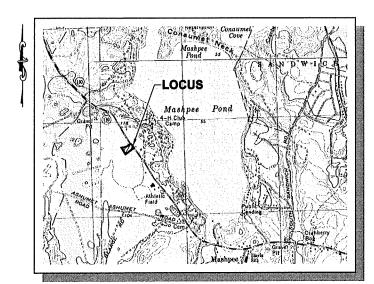
JUN 1 7 2019

# APPLICATION FOR SPECIAL PERMIT RECEIVED BY

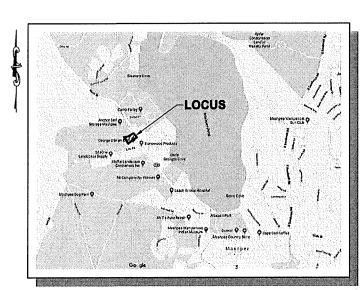
Date		
The undersigned l	nereby applies for a Special	Permit from the Planning Board.
Name of Applicant	Modi, LLC	Phone (508) 477-2400
Address	348 Main Street, Mashpee, MA	02649
Owner, if different	Evergreen Energy LLC	Phone (508) 962-5022
	Road, Mashpee, MA 02649 ) most recent recorded deed	and (b) tax bill or Assessors' certification.
	ecorded in Barnstable Coun cate of Title No	ty Registry Book <u>29541</u> Page <u>136</u> or
Location and desc	ription of property <u>10 Everg</u> i	reen Circle, Lot B - Evergreen Industrial Park Subdivision
Mashpee Assessor	s Map(s) and Block(s) Map	19 Block 10
Zoning District(s)	in which property is located	C-3 and Light Industrial Overlay District
How long have you	ı owned the property <u>Under</u>	Agreement
Section(s) of the Z	oning Bylaw which require t	the permit you seek <u>174-25 Table of Use Regulation</u>
Present use of pro	perty <u>Vacant</u>	
	future industrial tenant.	les for processing and packaging coffee along with a
		abutters via certified mail, with return d, and will provide certified abutters list.
		nning Department send notice to parties in laborate provide labels and certified abutters list.
Signature of Owner	er or Authorized Representa	tive 
KOUNA. PEPE	•	eation signed by owner.
PROPERTY MAR.	ON buful of Everyour	Everyy CC

# SITE PLANS FOR COPFEE LOCATED AT

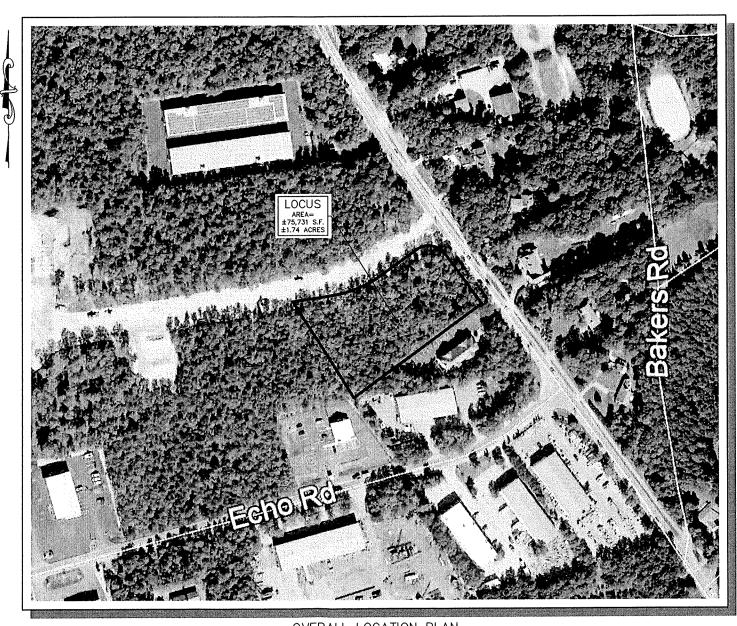
LOT B/#10 EVERGREEN CIRCLE MASHPEE, MASSACHUSETTS 02601 DATE: JUNE 21, 2019



 $\frac{\text{VICINITY MAP}}{\text{SCALE: 1"} = 1,500'}$ 



LOCUS MAP SCALE: 1" = 1,500'



OVERALL LOCATION PLAN SCALE: 1" = 100'

INDEX OF PLANS			
SHEET NO.	TITLE	SCALE	
1	COVER SHEET	1" = 100'	
2	EXISTING CONDITIONS PLAN	1" = 20'	
3	SITE LAYOUT PLAN	1" = 20'	
4	UTILITY, GRADING, DRAINAGE & EROSION CONTROL PLAN	1" = 20'	
5	SEPTIC DESIGN PLAN	1" = 20'	
6	DETAILS PLAN	N.T.S.	

#### OWNER:

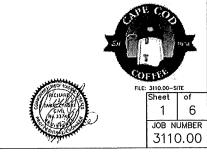
EVERGREEN ENERGY LLC 81 ECHO ROAD MASHPEE, MASSACHUSETTS 02649

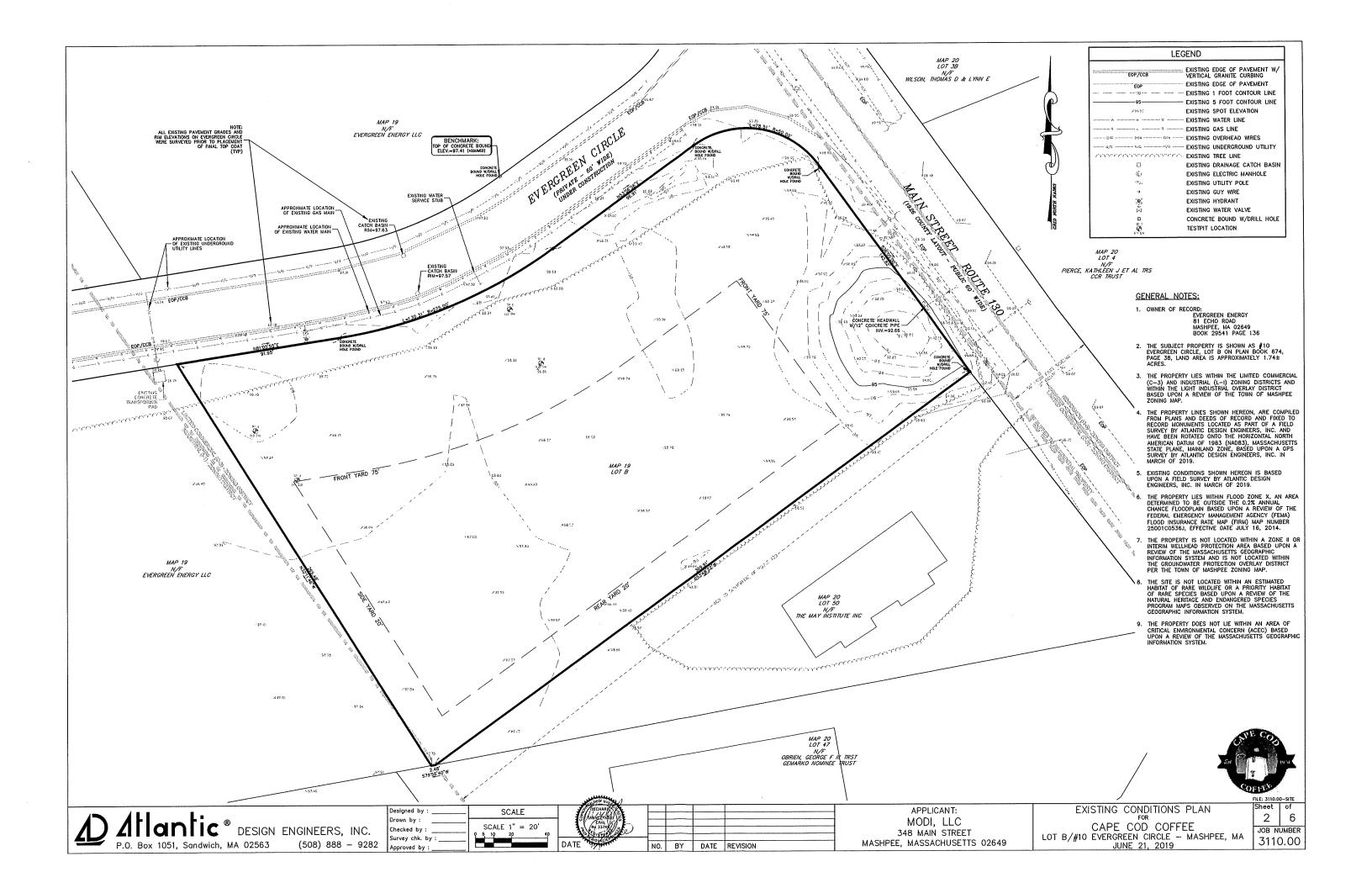
#### **APPLICANT:**

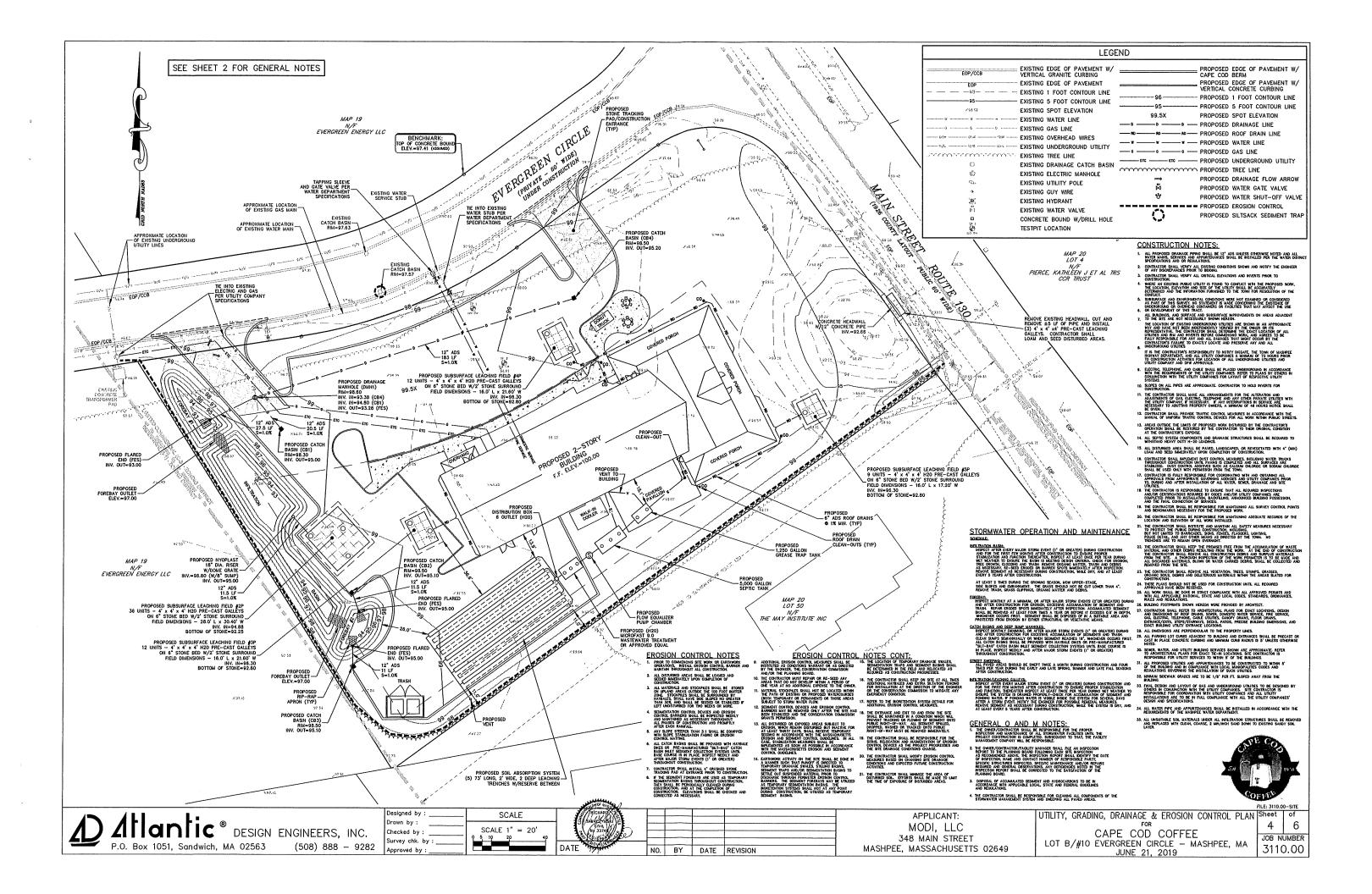
MODI, LLC 348 MAIN STREET MASHPEE, MASSACHUSETTS 02649

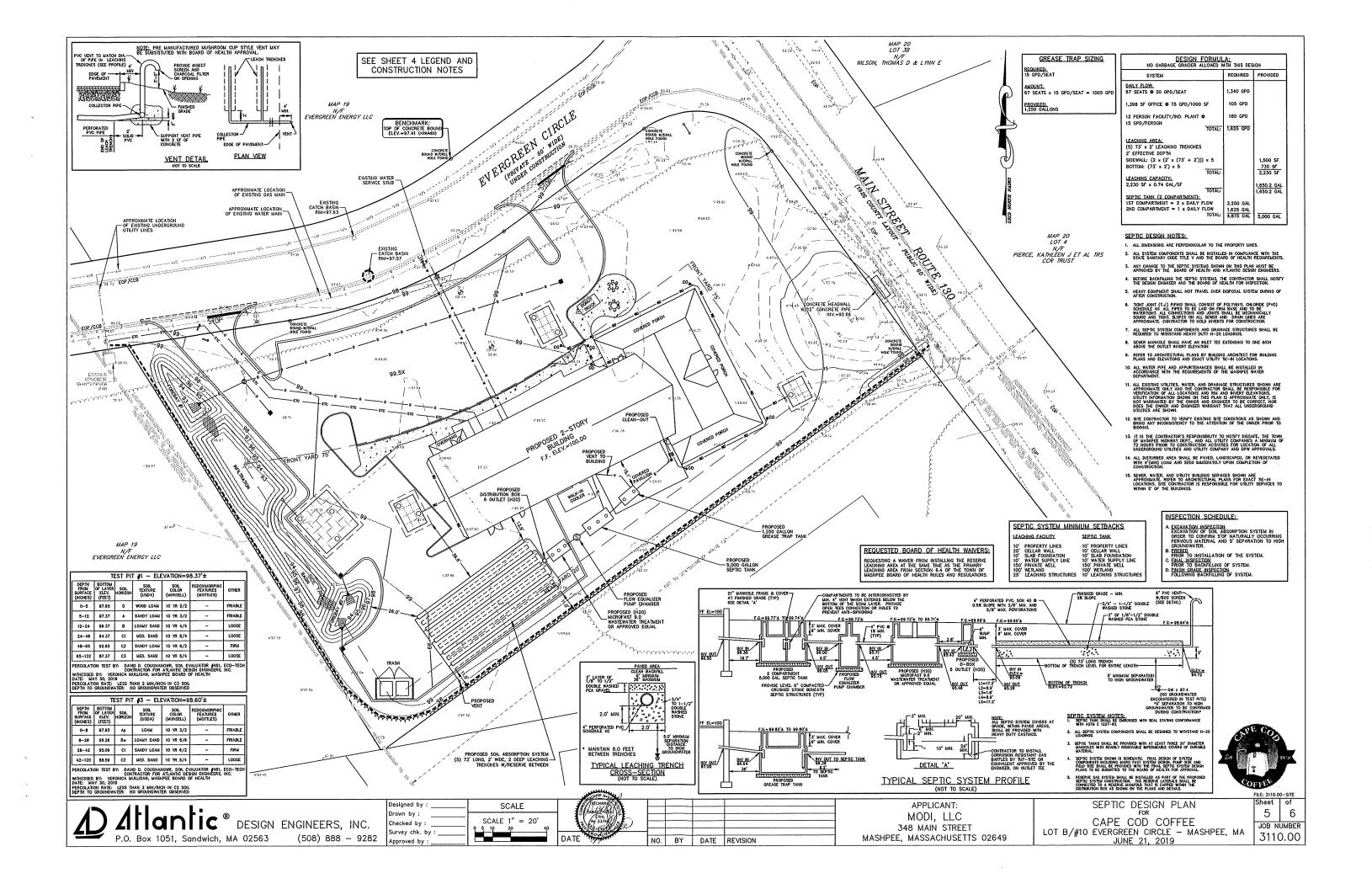
#### **ENGINEER:**

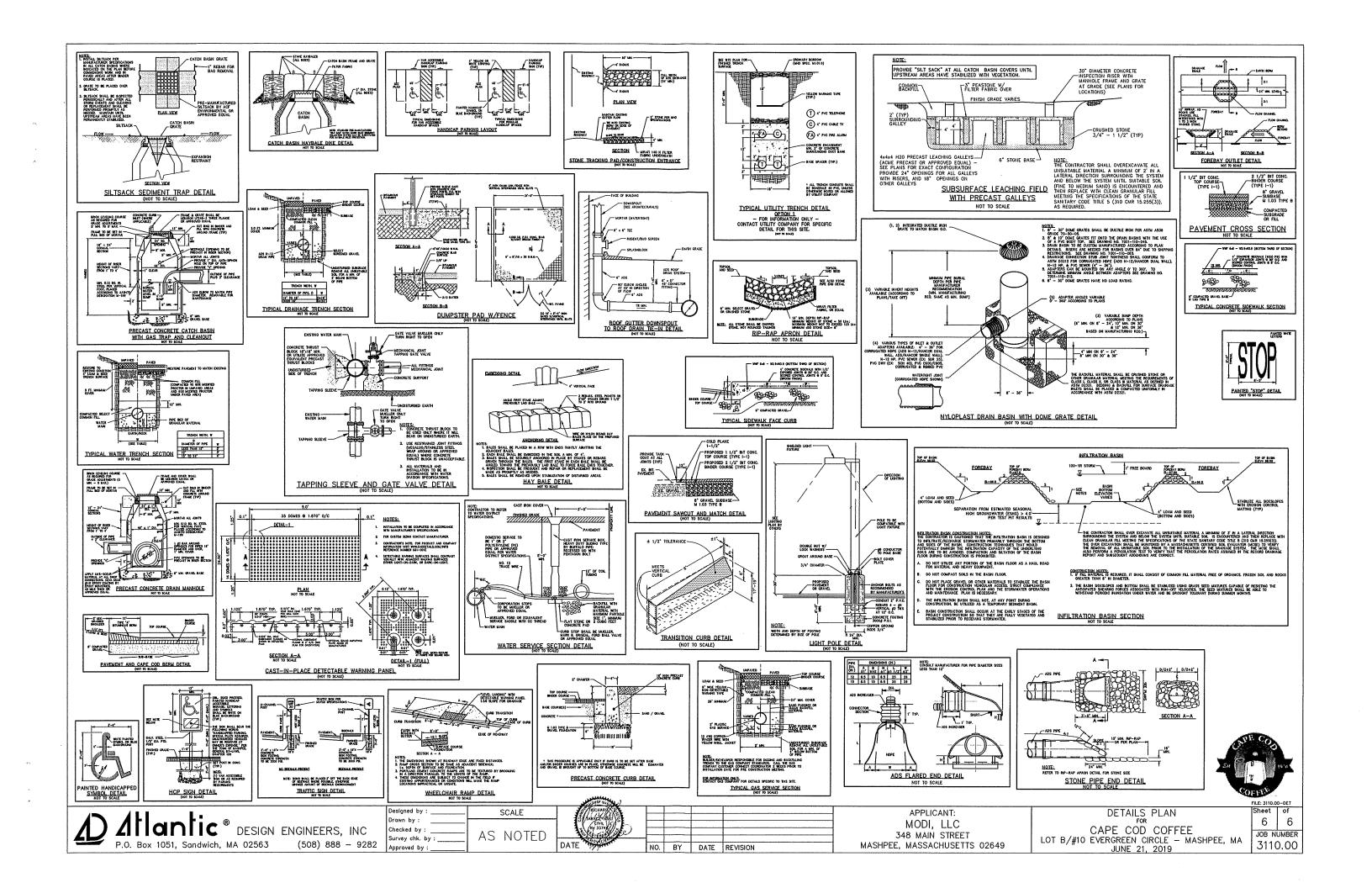
















August 27, 2019

Mary Waygan, Chairman Town of Mashpee Planning Board Town Hall 16 Great Neck Road North Mashpee, MA 02649

RE: Response to Site Plan Review Comments, July 12, 2019 Cape Cod Coffee – Mashpee, MA

ADE Job #3110.00

Dear Chairman Waygan:

This response letter addresses the comments made in the Site Plan Review letter dated July 12, 2019 provided by Consulting Engineer Charles L. Rowley, PE, PLS for the above-referenced project. Please note that the Consulting Engineer's comments are italicized, and our responses follow in bold text.

Conformance with Zoning By-Law

1. Landscape buffers: Special Footnote 14 of Section 174-31 Land Space Requirements indicates that a 10-foot wide buffer of either natural vegetation or an approved landscape plan is required for rear and side lot lines in Commercial Zoning Districts. The site plan shows complete disturbance to both the side and rear lot lines of the project.

The Town Council has rendered an opinion that Special Footnote 14 of Section 174-31 does not apply to the C-3 Zone.

Portions of these areas along the side and rear lot lines will remain in their natural state as shown on the revised plans.

2. Vegetated Buffer on Route 130: Special Footnote 14 also requires an undisturbed natural buffer of 50 feet along Route 130 west of Great Neck Road. The proposed re-contouring of the site suggests that there will be disturbance of the natural cover in this area. Regrading will be sufficient to cover the base and root structure of mature trees by as much as 6 feet in some areas. The Footnote does allow signs and road openings if approved by the Planning Board under a Special Permit.

The Town Council has rendered an opinion that Special Footnote 14 of Section 174-31 does not apply to the C-3 Zone.





A portion of the area along Rte. 130 will remain in it's natural state, as shown on the revised site plans and landscape plans. This, along with a 6' solid fence has been provided for screening of the outdoor areas.

Site Plans

Sheet 2 of 6: Plan of existing conditions.

1. The plan indicates that the existing grades along Evergreen Circle were obtained prior to the placement of the top course of paving. The paving now having been completed, the plan should be revised to reflect actual surface elevations.

The proposed grading shown on Sheet 4 takes into account the additional finish coat of pavement. The note from Sheet 2 has been carried over to Sheet 4 for clarity.

Sheet 3 of 6, Site Layout Plan

1. The parking layout has been located in front of the proposed building. Under Section 174-37 of the Zoning By-Law parking should be to the side and/or rear of the developed area. Latitude is given to the SPGA to approve parking as shown if it is demonstrated to be superior to the required locations.

The "front" of the building has been determined to be facing Rte. 130, so the parking is located to the side and rear.

2. The parking limits need to be enhanced with additional top of curb and bottom of curb elevations, curb radii and straight-line lengths to assist in confirming the layout in the field. Where pavement is shown with Cape Cod Berms, spot grades should be shown along the gutter line.

Additional spot grades are provided on Sheet 4.

3. The parking layout in front of the building is along curved lines. The minimum 9-foot wide spaces should be dimensioned at the curb line for the spaces closest to Evergreen Circle and along the edge of the travel aisle for those spaces that abut the sidewalk in front of the building.

The minimum 9-foot dimensions are labelled accordingly on Sheet 3.

4. No site lighting has been shown on the plan.

Site lighting plans have since been provided.





5. The plan shows a covered pavilion and covered porch attached to the building. Are those features on a slab and if so, what is the slab elevation?

The slab elevation of the pavilion is now shown on the plans.

6. The 10-foot wide buffers for the rear and side yards should be shown.

The Town Council has rendered an opinion that Special Footnote 14 of Section 174-31 does not apply to the C-3 Zone.

- 7. The Mashpee Fire/Rescue template for the tower apparatus was checked for the two driveway entrances and for internal turning movements. In both instances the template shows that the apparatus cannot make turns without going outside the pavement limits. (Ref. Section 174-45(B) of the Zoning By-Law.
  - a. It is recommended that the entrance closer to Route 130 be relocated northerly toward Route 130 in order to meet template requirements.

The easterly entrance has been adjusted accordingly.

b. It is recommended that the 15-foot radius on the more southerly driveway be increased to 20 feet to meet template requirements.

The westerly entrance has been adjusted accordingly.

c. Internal turning movements should be discussed with Mashpee Fire/Rescue to see if other configuration changes should be made.

Discussed and resolved at the 7/24/19 meeting at Town Hall. The fire truck routing is shown on Sheet 3.

Sheet 4 of 6: Utility, Grading, Drainage and Erosion Control

1. Similar comments regarding spot grades, top and bottom of curb and layout dimensioning apply to this sheet as well.

Additional spot grades are shown on Sheet 4.

2. Sections of vertical curbing are shown at the two catch basins located near the rear drainage forebay. This vertical curbing is not necessary as the Cape Cod Berm can be carried around the catch basin grates uniformly and with no breaks.

The vertical curbing has been removed.





3. Label the chain link fence proposed for around the dumpster pad.

The chain link fence is labelled on Sheet 3 and is shown in the detail on Sheet 6.

4. Assign invert elevations for the roof drain lines at the building and at the entry into the sub-surface infiltration units shown on the plan.

Inverts are shown for the roof drains on Sheet 4.

5. The plan shows a 1250-gallon grease trap under the covered pavilion. It is recommended that it be relocated. Servicing it may be difficult. If the pavilion has weather curtains that can be closed, it would place the trap within an enclosed area.

The grease trap has been relocated.

6. Is there a loading dock or loading area that should be defined?

The loading area is shown on Sheet 3.

Sheet 5 of 6 Septic Design Plan

This sheet is for the on-site sewage disposal facility only and is subject to approval by the Mashpee Board of Health. No further comment is required other than to point out that a waiver from the requirement to construct the reserve area will be requested of BOH. Should the waiver not be allowed, any grading or relo-cation modifications should be addressed with the Planning Board.

#### No response necessary.

Sheet 6 of 6 Details Plan

1. Add a note to each catch basin and manhole detail for a 12" x 12" cement concrete collar around each casting brought level with the top of the binder course of mix.

A note has been added to the appropriate details on Sheet 6.

2. Add a not to each catch basin and manhole detail that required pipes to be mortared inside and outside of the structure.

A note has been added to the appropriate details on Sheet 6.

3. For the Subsurface Leaching Field Detail: line the excavated sidewall area with filter fabric wherever the system is located under pavement surfaces. Also cover the complete





stone and galley top surface with filter fabric to reduce potential for settlement. Show the risers as mortared in place and with cement concrete collars as noted above.

Notes have been added to the appropriate details on Sheet 6.

4. Overdigs for the removal of unsuitable soil should be extended to 5 feet beyond the limits of the system.

The overdig has been revised to be 5' in the leaching galley detail and in the infiltration basin detail.

5. It is recommended that reclaimed asphalt material (RAP) be used under the pavement surfaces in place of M1.03 B gravel unless the latter is accompanied by a certificate that the material meets that standard.

A note has been added to require a gradation/sieve analysis of the gravel be submitted and approved prior to placement and reclaimed asphalt material has been added as an option for the sub-base.

#### Landscape Plan L1.0

1. The details that are in front of the main entrance on the left of the building (at the donut truck) are not consistent with the site plan as shown on Sheet 4 of 6.

#### The landscape plan has been adjusted.

2. Landscape trees and lawn are proposed along Route 130 that is supposed to be kept in its natural state unless otherwise authorized by the Planning Board. (Section 174-31, Footnote 14)

The Town Council has rendered an opinion that Special Footnote 14 of Section 174-31 does not apply to the C-3 Zone.

A portion of the area along Rte. 130 will remain in it's natural state, as shown on the revised site plans and landscape plans. This, along with a 6' solid fence has been provided for screening of the outdoor areas.

3. The landscaped sign area at the entrance is within the buffer area as well but may be allowed if authorized by the Planning Board.

Planning Board to determine.



Response to Site Plan Review Comments, July 29, 2019 Cape Cod Coffee – Mashpee, MA August 27, 2019 – Page 6

4. The plan shows a proposed cedar fence along the easterly lot line extending from Route 130 to the walk-in cooler. The fence is not shown on the site plans.

The fence is now shown on Sheet 3.

5. No landscaping is shown along the rear or side lot lines.

No landscaping is proposed. The area will be grassed or will remain it's natural state as shown on the revised site and landscape plans.

6. The plan indicates that the stormwater infiltration areas are to be loamed and seeded. The bottom of the open infiltration area should be moved to not less than 4 inches in height.

A note has been added to the detail on Sheet 4 and this is also noted on Paeg 2 of the Operation & Maintenance plan submitted as Appendix D to the Stormwater Report.

#### Stormwater Calculations

1. The stormwater calculations are generally consistent with accepted practice subject to a check on the rainfall amounts that have been assigned to the various storm events. The numbers are slightly smaller than what have been shown on other stormwater calculation reports. The numbers should be confirmed.

The analysis has been re-run using a 100-year storm of 7.1 inches and the system is still sized adequately. (See revised Stormwater Report.)

2. The Operation and Maintenance Plan contained within the Stormwater Report should be referenced in any approval that the Board may grant. It is further recommended that notations be placed on the plans to indicate that all subsurface infiltration areas are to be protected against sediment contamination during the construction phase of the project. Contamination could require the complete replacement of the system before it is put into operation.

Notes regarding sediment contamination during construction has been added to Sheet 4 and to the appropriate details on Sheet 6.

3. The stormwater systems appear to be consistent with the requirements of the Zoning By-Law.

No response necessary.



Response to Site Plan Review Comments, July 29, 2019 Cape Cod Coffee – Mashpee, MA August 27, 2019 – Page 7

General Comment:

Evergreen Circle subdivision approval included a Water Quality Report for nitrogen loading that was prepared by Holmes and McGrath, Inc. The report includes a provision that the conclusions were based on buildings on one level and with areas of just below 10,000 square feet in size.

The site plan (Sheet 3 of 6) shows a total floor area of under 10,000 square feet however, the total footprint of the building including the covered porch and covered pavilion is 11,784 square feet.

If the porch and pavilion are not included the building footprint is 8,650 square feet.

A determination should be made as to which footprint applies to the limitations noted in the Water Quality Report.

In our experience, roof size has minimal affect on Nitrate Loading as the loading rate (0.75 ppm) for rooftop is minimal compared to the loading rate for sewage flow for instance (35 ppm).

That being said, a November 15, 2017 letter from Homes and McGrath, Inc. to the Planning Board indicates that the revised Nitrate Loading Calculations assumed a building size of 20% of the lot area. In this case, that calculates to a building size of 15,158 SF, more than what is proposed.

Please call me at (508) 888-9282 if you should have any questions.

Sincerely,

ATLANTIC DESIGN ENGINEERS, INC.

Richard . Tabaczynski, P.E.

Vice President

RJT/rp



# August 27, 2019

To: Mashpee Design Review

**Planning Board** 

From: David Vachon

**Registered Architect** 

**Re:** Cape Cod Coffee

10 Evergreen Circle

# **Design Guidelines**

The project consists of a newly constructed building to facilitate the relocation of Cape Cod Coffee for the purpose of manufacturing coffee with support functions such as retail, beverage and food services, and recreational outdoor activities.

This project is a commercial use less than 10,000 sq. ft, and has been designed to meet the guidelines of the Cape Cod Commission "Designing the Future to Honor the Past" as well as its Addendum, "Contextual Design for Cape Cod."

The proposed design meets the guideline criteria as outlined below.

### Section 1 Selecting a Site for Development; a-e

• This site was selected for its applicability to the nature of the business and blends the retail and manufacturing aspects of this business perfectly.

# Section 2 Developing The Site; a-e

• The revised design minimizes the impact of development on the site and situates the building in such a way that it blends as best possible into its surroundings.

# Section 3 Special Considerations for the Coast; a-l

The proposed development is not on the coast.

# Section 4 Planning Open Space; a-k

This business incorporates significant open space into its concept and has made great effort to offer outdoor areas for recreation and entertainment.

### Section 5 Streetscapes and Roadways; a-l

• This property fronts two streets. Route 130 (Main Street) is already well developed and the concept for Evergreen Circle has already been approved by the town and will continue to be completed over time.

# Section 6 Architecture; a-g

- The building is a combination of wood framing and pre-engineered metal structure. The largest volume is the metal structure to house the coffee processing line, this allows for clear spans and heights required by the coffee equipment. This portion of the facility is set back to reduce the visual impact along route 130 and fronts Evergreen Circle, adjacent to neighboring industrial uses.
- To the front of this larger volume, along route 130, is a well detailed, human scaled, cottage style structure complete with gabled roofs, porches and traditional materials.
- The traditional patterns of Cape Cod are reinforced with the smaller building masses attached to the larger mass to reduce the scale.
- This commercial development remains consistent with Cape Cod styles and development patterns.
- The exterior will be well integrated by use of a similar materials and colors throughout. It is the intent to keep the color pallet simple so not to overpower the varying roof shapes and porches which are the prominent architectural features.
- The windows and doors have a regular and repeated occurrence that continues into the larger volume behind. The Evergreen Circle elevation will also be enhanced with freestanding trellises to further reduce the scale of the façade. Entrances for each tenant along Evergreen will be scaled down and will each be porched for a single user appearance.

### Section 7 Adaptive Reuse; a-c

 This business has very specific needs and adaptive re-use of an existing building was explored and deemed impractical.

#### **Section 8 Infill Construction; a-e**

This development is not in a village setting and is not considered infill construction.

## Section 9 Landscaping; a-k

- The concept has been re-designed to maintain adequate natural buffers and incorporate new plants that are characteristic of the region.
- A 100 foot buffer will be retained along route 130 and additional fencing will be provided to screen the outdoor seating. The property will maintain approximately 50% green area.

#### Section 10 Alternatives to the Automobile; a-e

 This development is easily accessed by the existing sidewalk along Main Street.

### Section 11 Accessibility; a-b

 The building and site will be completely accessible to the public as per ADA requirements. This accessibility will extend to the outdoor environments as well.

# Section 12 Parking; a-j

• The structure is perpendicular to route 130 further reducing the impact with the parallel side facing Evergreen Circle. The building is located to provide the required parking along the side and rear of the site and not in the front of the building.

# Section 13 Utilities; a-c

Utilities to the building will be underground

# Section 14 Outdoor Lighting; a-f

 All outdoor lighting has been designed to meet dark sky compliance a full cutoff fixtures will be used.

# Section 15 Signage; a-g

 The existing, previously permitted and approved, Cape Cod Coffee sign will be relocated to this location.

Respectfully submitted,

David Vachon Registered Architect



348 Main Street (Rt 130) Mashpee, MA 02649 (508) 477-2400 www.CapeCodCoffee.com

August 6, 2019

# Dear Chair Waygan

I am writing to request the public hearing scheduled for August 7, 2019 at 7:45 PM for Modi, LLC. be continued until August 21, 2019. Subsequent conversations from our first meeting with the Planning Board have resulted in a request to the Zoning Board of Appeals for a variance from the provisions of Sec. 174-25.1 (1). We would like to approach the Planning Board with a plan that reflects the deliberation and decision of the ZBA.

Thank you for your thoughtful consideration of this request

Sincerely,

Jan Aggerbeck

Cape Cod Coffee & Modi LLC

348 Main Street (Route 130)

Mashpee, MA 02649

(508) 477-2400 office (508) 330-3711 mobile

Jan@CapeCodCoffee.com

CapeCodCoffee.com

# Charles L. Rowley, PE, PLS

# Consulting Engineer and Land Surveyor

5 Carver Road PO Box 9 West Wareham, MA 02576 Tel: 508-295-1881 Cell: 508-295-0545 E-mail: <u>crsr63@verizon.net</u>

July 12, 2019

Town of Mashpee Planning Board Town Hall 16 Great Neck Road North Mashpee, MA 02649

> Re: Site Plan Review for Cape Cod Coffee #10 Evergreen Circle

Attention: Mary Waygan, Chairman

Dear Chairman Waygan:

I am in receipt of a set of plans and stormwater report for the above referenced project. Documents have been prepared by Atlantic Design Engineers, Inc., Sandwich MA and MLC Landscape Design, Plymouth, MA. with dates of June 21, 2019 and 6/20/19 respectively. The following is a summary of the technical review completed for the project.

# Conformance with Zoning By-Law

- 1. Landscape buffers: Special Footnote 14 of Section 174-31 Land Space Requirements indicates that a 10-foot wide buffer of either natural vegetation or an approved landscape plan is required for rear and side lot lines in Commercial Zoning Districts. The site plan shows complete disturbance to both the side and rear lot lines of the project.
- 2. Vegetated Buffer on Route 130: Special Footnote 14 also requires an undisturbed natural buffer of 50 feet along Route 130 west of Great Neck Road. The proposed re-contouring of the site suggests that there will be disturbance of the natural cover in this area. Re-grading will be sufficient to cover the base and root structure of mature trees by as much as 6 feet in some areas. The Footnote does allow signs and road openings if approved by the Planning Board under a Special Permit.

#### Site Plans

Sheet 2 of 6: Plan of existing conditions.

1. The plan indicates that the existing grades along Evergreen Circle were obtained prior to the placement of the top course of paving. The paving now having been completed, the plan should be revised to reflect actual surface elevations.

# Sheet 3 of 6, Site Layout Plan

 The parking layout has been located in front of the proposed building. Under Section 174-37 of the Zoning By-Law parking should be to the side and/or rear of the developed area. Latitude is given to the SPGA to approve parking as shown if it is demonstrated to be superior to the required locations. Re: Site Plan Review for Cape Cod Coffee #10 Evergreen Circle Page two

- 2. The parking limits need to be enhanced with additional top of curb and bottom of curb elevations, curb radii and straight-line lengths to assist in confirming the layout in the field. Where pavement is shown with Cape Cod Berms, spot grades should be shown along the gutter line.
- 3. The parking layout in front of the building is along curved lines. The minimum 9-foot wide spaces should be dimensioned at the curb line for the spaces closest to Evergreen Circle and along the edge of the travel aisle for those spaces that abut the sidewalk in front of the building.
- 4. No site lighting has been shown on the plan.
- 5. The plan shows a covered pavilion and covered porch attached to the building. Are those features on a slab and if so, what is the slab elevation?
- 6. The 10-foot wide buffers for the rear and side yards should be shown.
- 7. The Mashpee Fire/Rescue template for the tower apparatus was checked for the two driveway entrances and for internal turning movements. In both instances the template shows that the apparatus cannot make turns without going outside the pavement limits. (Ref. Section 174-45(B) of the Zoning By-Law.
  - a. It is recommended that the entrance closer to Route 130 be relocated northerly toward Route 130 in order to meet template requirements.
  - b. It is recommended that the 15-foot radius on the more southerly driveway be increased to 20 feet to meet template requirements.
  - c. Internal turning movements should be discussed with Mashpee Fire/Rescue to see if other configuration changes should be made.

Sheet 4 of 6: Utility, Grading, Drainage and Erosion Control

- 1. Similar comments regarding spot grades, top and bottom of curb and layout dimensioning apply to this sheet as well.
- Sections of vertical curbing are shown at the two catch basins located near the rear drainage forebay. This vertical curbing is not necessary as the Cape Cod Berm can be carried around the catch basin grates uniformly and with no breaks.
- 3. Label the chain link fence proposed for around the dumpster pad.
- 4. Assign invert elevations for the roof drain lines at the building and at the entry into the sub-surface infiltration units shown on the plan.
- 5. The plan shows a 1250-gallon grease trap under the covered pavilion. It is recommended that it be relocated. Servicing it may be difficult. If the pavilion has weather curtains that can be closed, it would place the trap within an enclosed area.
- 6. Is there a loading dock or loading area that should be defined?

Sheet 5 of 6 Septic Design Plan

This sheet is for the on-site sewage disposal facility only and is subject to approval by the Mashpee Board of Health. No further comment is required other than to point out that a waiver from the requirement to construct the reserve area will be requested of BOH. Should the waiver not be allowed, any grading or relocation modifications should be addressed with the Planning Board.

Re: Site Plan Review for Cape Cod Coffee #10 Evergreen Circle Page 3

### Sheet 6 of 6 Details Plan

- 1. Add a note to each catch basin and manhole detail for a 12" x 12" cement concrete collar around each casting brought level with the top of the binder course of mix.
- 2. Add a not to each catch basin and manhole detail that required pipes to be mortared inside and outside of the structure.
- 3. For the Subsurface Leaching Field Detail: line the excavated sidewall area with filter fabric wherever the system is located under pavement surfaces. Also cover the complete stone and galley top surface with filter fabric to reduce potential for settlement. Show the risers as mortared in place and with cement concrete collars as noted above.
- 4. Overdigs for the removal of unsuitable soil should be extended to 5 feet beyond the limits of the system.
- 5. It is recommended that reclaimed asphalt material (RAP) be used under the pavement surfaces in place of M1.03 B gravel unless the latter is accompanied by a certificate that the material meets that standard.

# Landscape Plan L1.0

- 1. The details that are in front of the main entrance on the left of the building (at the donut truck) are not consistent with the site plan as shown on Sheet 4 of 6.
- 2. Landscape trees and lawn are proposed along Route 130 that is supposed to be kept in its natural state unless otherwise authorized by the Planning Board. (Section 174-31, Footnote 14)
- 3. The landscaped sign area at the entrance is within the buffer area as well but may be allowed if authorized by the Planning Board.
- 4. The plan shows a proposed cedar fence along the easterly lot line extending from Route 130 to the walk-in cooler. The fence is not shown on the site plans.
- 5. No landscaping is shown along the rear or side lot lines.
- 6. The plan indicates that the stormwater infiltration areas are to be loamed and seeded. The bottom of the open infiltration area should be mowed to not less than 4 inches in height.

### **Stormwater Calculations**

- The stormwater calculations are generally consistent with accepted practice subject to a check on the rainfall amounts that have been assigned to the various storm events. The numbers are slightly smaller than what have been shown on other stormwater calculation reports. The numbers should be confirmed.
- 2. The Operation and Maintenance Plan contained within the Stormwater Report should be referenced in any approval that the Board may grant. It is further recommended that notations be placed on the plans to indicate that all subsurface infiltration areas are to be protected against sediment contamination during the construction phase of the project. Contamination could require the complete replacement of the system before it is put into operation.

Re: Site Plan Review for Cape Cod Coffee #10 Evergreen Circle Page 4

3. The stormwater systems appear to be consistent with the requirements of the Zoning By-Law.

### General Comment:

Evergreen Circle subdivision approval included a Water Quality Report for nitrogen loading that was prepared by Holmes and McGrath, Inc. The report includes a provision that the conclusions were based on buildings on one level and with areas of just below 10,000 square feet in size.

The site plan (Sheet 3 of 6) shows a total floor area of under 10,000 square feet however, the total footprint of the building including the covered porch and covered pavilion is 11,784 square feet.

If the porch and pavilion are not included the building footprint is 8,650 square feet.

A determination should be made as to which footprint applies to the limitations noted in the Water Quality Report.

This concludes the report for the information provided for the project. Please feel free to contact me if you have any questions.

Very truly yours,

Charles L. Rowley, PE, PLS

Charles L. Rowley

Cc Evan Lehrer, Mashpee Town Planner P. Johnson, Atlantic Design

16 Great Neck Road North Mashpee, Massachusetts 02649

# **Special Permit Decision**

#### Modi LLC

Coffee Shop with Facilities for Roasting, Processing and Packaging Coffee 10 Evergreen Circle, Mashpee, MA 02649

# I. Proposal.

This decision concerns the application of Modi, LLC., 348 Main Street, Mashpee, MA 02649 (the "Applicant") for approval of a special permit to construct a coffee shop with facilities for roasting, processing and packaging coffee as well as a space for a future industrial tenant consisting of a single two-story building totaling 9,938 square feet. The property is identified on the Mashpee Assessors Maps as Map 19, Block 10. The property owner is identified as Evergreen Energy, LLC. of 81 Echo Road, Mashpee, MA 02649. The application was made pursuant to Sections 174-25(I)(16) and 174-45.6 of the Mashpee Zoning Bylaws.

# II. Jurisdiction.

The application was made and this decision is issued by the Mashpee Planning Board pursuant to Article VI, Section 174-24.C.(9)(c) of the Mashpee Zoning Bylaws as they existed on September 4, 2019, the date on which this special permit was approved by the Mashpee Planning Board. Where reference is made herein to the Mashpee Zoning Bylaw, it shall refer to the provisions thereof as they existed on said date. The project is located in the C-3 Limited Commercial zoning district and within the Light Industrial Overlay District.

# III. Chronology.

The application for this special permit was filed with the Town Clerk on June 17, 2019. The plans were reviewed by the Design Review Committee on 05/07/2019 and by the Plan Review Committee on 05/07/2019. The Design Review Committee recommended approval conditional upon the sign meeting all zoning requirements and that modifications be made to the northern elevation. That condition was satisfied and indicated on plan sheet titled, "Exterior Elevations, sheet A-4, drawn by ConServ Group Inc., dated 6/21/19 by showing trellises along the northern elevation of the building and by indicating the signage dimensions on the plans. The Plan Review Committee recommended approval.

A hearing was opened before the Mashpee Planning Board at the Mashpee Town Hall, 16 Great Neck Road, North, Mashpee, Massachusetts on July 17, 2019. Notice was duly given to abutters in accordance with Massachusetts General Law Chapter 40A. Notice was given by publication in the Mashpee Enterprise, a newspaper of general circulation in the town of Mashpee on June 21 and 28, 2019.

On August 14, 2019 Modi, LLC petitioned the Zoning Board of Appeals for relief from Section 174.25.1(1) of the Mashpee Zoning Bylaw. The Zoning Board of Appeals granted the relief as requested to allow 26% of the subject lot remain as natural undisturbed vegetation.

# IV. Decision and Findings.

On September 4, 2019 the Planning Board closed the public hearing and voted to make the following findings and grant the special permit as described below. The members of the Planning Board were recorded as follows: Mary Waygan, Dennis Balzarini, Joseph Cummings, John Phelan, and Joseph Callahan were recorded as voting in favor of the decision. No members were recorded as voting against.

- 1. The Property is located in the C-3 Limited Commercial zoning district and within the Light Industrial Overlay District. The proposed uses are allowed in those districts.
- 2. The proposed special permit application satisfies the requirements of Massachusetts General Law Chapter 40A, in that it complies with the general purposes and intent of the Mashpee Zoning By-Law.
- 3. These lots were created pursuant to a definitive subdivision approved by the Planning Board after review by the Cape Cod Commission as a development of regional impact in 2011.
- 4. In an email dated August 31, 2019 to the Mashpee Town Planner Evan Lehrer, Mashpee Fire Chief Tom Rullo wrote, "Based on the updated plans the building and lot with Fire Department vehicle flow path meets the Department needs and is thereby approved."
- 5. The applicant requested waivers of the provision of Subsection 174-25.1(4) requiring a 100′ foot buffer strip to be left in its undisturbed natural state adjacent to any residentially zoned parcel outside of this district. On September 4, 2019 the applicant withdrew this request as the plans as amended do not require said waiver.
- 6. The project is consistent with the Cape Cod Commission's design guidelines, "Designing the Future While Honoring the Past" and its addendum "Contextual Design for Cape Cod" as required by 174-45.6(E) of the Mashpee Zoning Bylaw.
- 7. In conformance with the provisions of Article VI, Section 174-24.C.(2) of the Zoning Bylaw, the Planning Board finds that the proposal will not adversely affect public health or safety, will not cause excessive demand on community facilities, will not significantly decrease surface or ground water quality or air quality, will not have significant adverse impact on wildlife habitat, estuarine systems, traffic flow, traffic safety, waterways, fisheries, public lands or neighboring properties, will not cause excessive levels of noise, vibration, electrical disturbance, radioactivity or glare, will not destroy or disrupt any species listed as rare, endangered or threatened by the Massachusetts Natural Heritage program or any known historic or archaeologic site, will not produce amounts of trash, refuse or debris in excess of the town's landfill and waste disposal capacities, will properly dispose of stumps, construction debris, hazardous materials and other wastes, will provide adequate off street parking, will not cause excessive erosion or cause increase runoff into neighboring properties or into any natural river, stream, pond or water body and will not otherwise be

detrimental to the town or the area.

### V. Conditions.

1. The project shall be constructed in conformance with the "Site Plans for Cape Cod Coffee Located at Lot B/#10 Evergreen Circle, Mashpee, MA 02649," by Atlantic Design Engineers, Sandwich, MA, Dated June 21, 2019, Revised August 2, 2019, Revised August 19, 2019, Revised August 27, 2019, Revised September 3, 2019:

"Existing Conditions Plan, Sheet 2 of 6", by Atlantic Design Engineers, Sandwich, MA

"Site Layout Plan, Sheet 3 of 6," by Atlantic Design Engineers, Sandwich, MA

"Utility, Grading, Drainage, & Erosion Control Plan, Sheet 4 of 6," by Atlantic Design Engineers, Sandwich, MA"

"Septic Design Plan, Sheet 5 of 6", by Atlantic Design Engineers, Sandwich, MA

"Details Plan, Sheet 6 of 6", by Atlantic Design Engineers, Sandwich, MA

"Landscape Plan, Sheet L1.0," by ML Curadossi Landscape Design & 3D Imaging, Plymouth, MA, Dated 6/20/2019, Revised 8/27/2019, Revised 09/04/2019.

"Exterior Elevations, Sheet A-4" by ConServ Group Inc, Sagamore Beach, MA, dated 6/21/2019.

- 2. The Board has made no determination with regard to conformance with Section 174-25.1(1) of the Zoning By-law and this permit does not obviate the need for conformance with the provisions of said Section 174-25.1(1) before building or occupancy permits are issued unless any necessary variances are granted by the Zoning Board of Appeals. The Zoning Board of Appeals granted relief from this section to reduce the requirements of undisturbed natural vegetation from 40% to 26% (V-2019-45). At least 26% of the total area of this parcel shall be left undisturbed in its natural state.
- 3. Signage along Main Street shall be constructed only according to the specifications provided on Sheet A-4 titled, "Exterior Elevations" Proposed New Facility for Cape Cod Coffee 10 Evergreen Circle, Mashpee, MA 02649 by ConServ Group Incorporated.
- 4. Any tenant to occupy the commercial/industrial space shall be a use compatible with the primary use of coffee roasting and food service and shall not be any use that will negatively impact the applicant's ability to operate a sanitary facility or any use that will have a detrimental impact on surrounding properties.
- 5. As the Department of Public Works will be redesigning the drainage system at Route 130 to eliminate discharge of stormwater onto private property, the applicant must coordinate work with the Department of Public Works to avoid any impacts on Route 130 and the right-of-way.

- 6. The Stormwater Operation and Maintenance Plan shown on Sheet 4 of 6 titled, "Utility, Grading, Drainage, & Erosion Control Plan," shall run with the property so that future operation and maintenance will be the responsibility of all successive property owners for the project as shown.
- 7. Any future modifications or changes to the site plans shall require Planning Board approval. Changes that are de minimus changes or technical corrections as determined by the Planning Board may be made without the notice and public hearing requirements of MGL Chapter 40A Sections 9 and 11 and the Mashpee Zoning Bylaw 174-24 (C)1.
- 8. All conditions of this special permit shall be binding not only upon the applicant but also on all successors-in-interest and assigns of the applicant.
- 9. No occupancy or building permits shall be issued while there exists any substantial violation of the conditions of this special permit unless the Board, by a favorable vote of 4 members at a regular meeting, should allow such issuance.
- 10. Within 60 days of the approval of this decision, the applicant shall provide to the Board a copy of this decision as recorded with the Barnstable County Registry of Deeds, including an indication as to the book and page at which it was recorded.

# VI. Signature and Filing.

This special permit modification dec thisth day of September 2019.	cision has been	n approved by the Mashpee Planning Board on
ans ady or september 2015.	A true copy Attest	
	/ tecose	Member, Mashpee Planning Board
	NWEALTH OF	MASSACHUSETTS
Barnstable, ss.		Date
appeared, a mem satisfactory evidence of identification	nber of the Ma on, which wer attached docu	ne, the undersigned notary public, personally ashpee Planning Board, proved to me through re, to be the person whose ument, and acknowledged to me that (he/she)
	Notar	ry Public
		mmission expires:
		Date of expiration
A copy of this decision has been du	ly filed on	, 2019 with the Town Clerk of Mashpee.
		Town Clerk
interest designated in M.G.L. Chap	ter 40A, Section shall be made	, 2019 to the applicant, to the parties in on 11 and to all persons at the hearing who pursuant to Section 17 of the Chapter 40A of 0) days after the date of said filing.
	the office of th	the Town of Mashpee, hereby certify that a he Town Clerk on, 2019 and renty (20) days thereafter.
Date		Town Clerk

Upon expiration of the statutory appeal period with no appeal having been filed, this special permit decision has been signed by the Mashpee Planning Board on, 2019 and may be recorded.



Planning Board

16 Great Neck Road North Mashpee, Massachusetts 02649

# APPLICATION FOR SPECIAL PERMIT

Date	
The undersigned hereby applies for a Special Perr	nit from the Planning Board.
Name of Applicant Kevin Andrade	Phone
Address P.O. Box 956, East Falmouth, MA 02536	
Owner, if different Evergreen Energy, LLC.	Phone
Address 81 Echo Road, Mashpee, MA 02649	
Attach copies of (a) most recent recorded deed and	(b) tax bill or Assessors' certification.
Deed of property recorded in Barnstable County R Land Court Certificate of Title No	
Location and description of property Lot A, 11 Evergre	een Circle, Mashpee (aka 588 Main Street) C-3 Zoning.
Vacant commercial lot consisting of 82,120 +/- square feet	
Mashpee Assessors Map(s) and Block(s)	
Zoning District(s) in which property is located	)
How long have you owned the property March 29,	2016
Section(s) of the Zoning Bylaw which require the p	permit you seek
Present use of propertyVacant land	
Proposed use of property Proposed new building and site of	onstruction to provide retail use with office space facility.
Check one: Applicant will send notice to aboreceipt to Mashpee Planning Board, a	
Applicant requests that Plannin interest via certified mail, and will pro	g Department send notice to parties in wide labels and certified abutters list.
Signature of Owner or Authorized Representative	MASHPEE TOWN CLERK
Attach written authorizatio	n signed flactioner By

Mr. Evan Lehrer Mashpee Town Planner 16 Great Neck Road North Mashpee, MA 02649

RE: Application for Special Permit, 11 Evergreen Circle, Mashpee, MA

Dear Mr. Lehrer:

This letter is in regard the above referenced application.

Please accept this letter as my written authorization to allow Matthew C. Costa, P.L.S., R.S. of Cape & Islands Engineering, Inc. and/or his Associates to represent this property on my behalf.

If you have any questions, please feel free to contact me.

Sincerely,

m 5 Putu

Evergreen Energy, LLC. 81 Echo Road Mashpee, MA 02649 SUMMERFIELD PARK 800 FALMOUTH ROAD, SUITE 301C MASHPEE, MA 02649 (508) 477-7272 FAX (508) 477-9072 email: info@CapeEng.com

July 1, 2019

Mr. Evan Lehrer Town Planner Mashpee Planning Board 16 Great Neck Road North Mashpee, MA 02649

RE: 11 Evergreen Circle, Mashpee, MA – Map 19 ~ Parcel 10-12

Dear Mr. Lehrer and Mashpee Planning Board:

On behalf of the Applicant, Kevin Andrade, a request of waivers is being sought after for the above referenced property.

The purpose of this request is to approve the proposed commercial building and site construction to provide retail use with redemption center and office space facility at 11 Evergreen Circle, Mashpee, MA. Under the Town of Mashpee Zoning Bylaws section §174-24 C. 1. Special Permit Use "Any other uses denoted in §174-25 by the letters "SP," or by the letters "PR/SP" where construction of a building or addition containing more than one thousand (1,000') square feet of gross floor area is involved, shall be permitted as a special exception only if the Planning Board so determines and grants a Special Permit therefor..." are allowed if the Planning Board issues a Special Permit for such use.

The new building and site construction will be located on 11 Evergreen Circle Road. This property is one parcel identified as Lot A of the Definitive Subdivision Plan, Evergreen Circle, Prepared for Evergreen Industrial Park, #588 Main Street (Route 130) in Mashpee, MA approved on 11-20-17 by Mashpee Planning Board and recorded at the Barnstable Registry of Deeds under Plan Book 674 Page 38. The Applicant will construct one building for a retail use (liquor store with redemption center) and office space use. The office use is allowed under section 174-25 C. (1) under the symbol PR/SP and the retail use is allowed under section 174-25 E. (12) under the symbol SP, both by special exemption if the Planning Board grants a Special Permit.

Based on a drawing by our firm, dated April 23, 2019, revised June 13, 2019 and entitled "Site Plan" waivers will be needed in order to proceed.

Under Town of Mashpee Planning Board Special Permit Regulations Section IV B, the following Waivers will be needed.

SUMMERFIELD PARK 800 FALMOUTH ROAD, SUITE 301C MASHPEE, MA 02649 (508) 477-7272 FAX (508) 477-9072 email: info@CapeEng.com

# The waivers required are as follows:

### NO. DESCRIPTION

- 4. A plan of the site and all land within 300 feet of the site.
- 5. Natural Resource Map indicating general vegetation type, soil types and groundwater levels. Refer to Site Plan sheet C-121 for soil information
- 6. Impact statement of Town Services and Welfare of the Community.
- 7. Cluster Subdivision Not Applicable
- 8. Phased project Not Applicable
- 10. Detailed Roadway Plans Not Applicable
- 13. Detail wastewater treatment removal rate analysis Not Applicable, typical on-site Title 5 septic system proposed. Site Plan includes septic system design criteria and construction details.
- 19. Water Quality Report, Section 174-27
- 20. Open Space requirements Not Applicable

If you have any questions please feel free to call.

Sincerely

Raúl Lizardi-Rivera, P.E.

Director of Engineering

Encl. Application for Special Permit

Full size plans

Reduced size plans

Owner authorization for representation

Certified Abutters List

Deed

Bk 29541 Pg136 #14890 03-29-2016 @ 01\*54p

> MASSACHUSETTS STATE EXCISE TAX 8ARNSTABLE COUNTY REGISTRY OF DEEDS Date: 03-29-2016 a 01:54pm Ctl4: 1011 Doc4: 14890 Fee: \$5,728.50 Cons: \$1,675,000.00

#### **QUITCLAIM DEED**

CAPE COD COOPERATIVE BANK, a Massachusetts banking corporation with an address of 25 Benjamin Franklin Way, Hyannis, MA 02601,

For consideration paid in the full amount of One Million Six Hundred Seventy-five Thousand and no/100 dollars (\$1,675,000.00),

Grant to EVERGREEN ENERGY LLC, a Massachusetts limited liability company with an address of 81 Echo Road, Mashpee, MA 02649,

#### with QUITCLAIM COVENANTS,

The property in Mashpee, Barnstable County, Massachusetts, at 588 Route 130 (Forestdale Road), shown on the plan entitled "Plan of Land in Mashpee, Massachusetts, Route 130", dated August 22, 2001, prepared by David C. Thulin, PE, PLS, recorded in Barnstable County Registry of Deeds Plan Book 567, Page 75, bounded and described as follows:

NORTHERLY

by land shown on the Plan as of Boston Sand and Gravel and Land Court Plan

39332A, by four lines measuring 5.26, 617.69, 746.51, and 572.45 feet;

EASTERLY

by land shown on the Plan as Lot 3, 277.25 feet;

NORTHERLY

by said Lot 3, 846.09 feet;

NORTHEASTERLY

by Route 130, by two lines measuring 163,87 and 246.46 feet;

SOUTHEASTERLY

by land shown on the Plan as Lot 5, 370.00 feet;

NORTHEASTERLY

by said Lot 5, 0.68 feet;

SOUTHERLY

by land shown on the Plan as of Pamela M. Gangemi, Trustee, 2293.76 feet;

WESTERLY

by land shown on the Plan as of the USA, 115.36 feet;

SOUTHWESTERLY

by said USA land, 380.00 feet;

SOUTHERLY

by said USA land, 74.41 feet;

WESTERLY

by land shown on Plan as of the Massachusetts Military Reservation, in two

lines, measuring 494.22 feet and 19.62 feet.

Containing 48.09 acres (2,094,989 sq. ft.) according to said plan.

SS main street, maspee

CASH ONLY IF ALL CheckLock™ SECURITY FEATURES LISTED ON BACK INDICATE NO TAMPERING OR COPYING

Shreeji Krupa LLC DBA Best Buy Beverage 16 Echo Rd Mashpee MA 02649 **EASTERN BANK** 53-179/113

13927

07-62-19

PAY TO THE TOWN OF MASHPRE

\$ 2294.00

TWO THOUSAND TWO HUNDRED NINTY FOUR ONLY

DOLLARS

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# STORMWATER MANAGEMENT REPORT AND DESIGN CALCULATIONS

# **Project:**

Commercial Site Development 11 Evergreen Circle Mashpee, MA 02649

> Property Owner: Evergreen Energy, LLC 81 Echo Road, Mashpee, MA 02649

Applicant:
Kevin Andrade
P.O. Box 956
East Falmouth, MA 02536

May 6, 2019 Revised May 24, 2019

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# 1.0 OVERVIEW

#### 1.1 Introduction

Cape & Islands Engineering, Inc. submits this Stormwater Report, on behalf of the applicant, Kevin Andrade who propose to develop a commercial facility located at 11 Evergreen Circle, Mashpee, MA. The project includes construction of a 9,500 square feet building, bituminous pavement parking and driveways, with the associated clearing, grading, utilities and landscaping at the property. Among the proposed utilities for this development is the stormwater management system designed to intercept and dispose of storm runoff generated within the developed areas in accordance with local requirements.

This report describes the hydrologic and hydraulic analysis for the proposed stormwater treatment process and the operation and maintenance requirements associated with stormwater runoff for the proposed development. This report accompanies a set of drawings (Site Plan) that represent the proposed site development and stormwater treatment system, and a set of calculations (enclosed) that identify the stormwater runoff flows and capacity analysis of the receiving facilities.

The applicant proposes to develop the existing vacant parcel to construct a commercial building with paved driveways and parking lot amounting to approximately 39,200 square feet of impervious surfaces. Stormwater systems are proposed to manage surface runoff from four (4) contributing drainage areas and are designed as above grade drain basins with subsurface leaching systems. The surface drain basin areas vary in footprint and are approximately 15 to 22-inches in depth. These systems will collect surface runoff and will provide soil infiltration for the most frequent and less intense rainstorm events. Additional storm flow volume capacity is designed within a subsurface leaching system where runoff volume that exceeds the depth of the drain basin system infiltrates through the sand texture soil stratum. This drainage system has been designed to control up to the 100-year 24-hour design storm event (see enclosed HydroCAD analysis) which exceeds regulatory standards.

The proposed system provides peak runoff attenuation, total suspended solids (TSS) removal, pollutant removal, and groundwater recharge within the development as required by the Town of Mashpee Bylaws. The system is properly sized to accommodate the first flush of stormwater runoff calculated as one inch (1") of runoff volume over the impervious surfaces infiltrating into the ground in less than 72-hours following the storm event (refer to calculations below). The proposed stormwater systems shall be maintained and inspected in accordance to the Operation and Management Plan (O&M) provided in this report for the proper operation of the stormwater

### 1.2 Applicable Regulations

As an commercial development within the Town of Mashpee the applicable regulation is found under the Mashpee Zoning Code "Article VI §174-27.2 Stormwater Management." The regulation established minimum designed and sizing requirements and recommendations. This same regulation allows for the use of the Massachusetts Department of Environmental Protection Stormwater Management Standards (MassDEP Standards) through the use of the Stormwater Management Handbook to serve as guidance for the design of the stormwater management system. The design and system size for this proposed development is based on the MassDEP Standards. The DEP Standards require storm runoff to meet certain qualities and quantities criteria prior to final discharge in proximity to wetland resource areas. However, the application for this development is not to be reviewed for impacts to wetland resource area given that none exist on the property or within 100-feet of the project. The MassDEP Standards are incorporated to this design by omitting any reference related to wetland resource areas or discharges to wetland resource areas. In combination with the requirements from the Mashpee regulations the following sections, and in particular section 4 describe compliance of the proposed stormwater treatment system with applicable regulations.

# 2.0 BACKGROUND

# 2.1 Existing Conditions

The property is a vacant and naturally vegetated parcel of land containing approximately 81,243 square feet in area. The property is located within the Mashpee Commercial C3 Zoning District along the north side of Evergreen Circle. Properties abutting the parcel are designated the same zoning district except for properties to the west which is designated Industrial I1 district. As is typical of undeveloped properties the subject parcel contains no form of stormwater management system and given its naturally vegetated state there is very little impact from surface storm runoff generated on the property. Surface runoff is not considered a nuisance to adjacent developments. Alterations to the existing conditions will inevitable alter this existing scenario and to mitigate the increase in surface runoff within the property the proposed development will provide adequate on-site stormwater management.

# 2.2 Property History

The vacant property is currently a wooded parcel that is one of the parcels from a recently approved commercial/industrial subdivision of land. No impervious surfaces exist that generate surface runoff. Storm runoff is naturally managed by existing topography (depressions and existing drainage systems) and vegetation and does not contribute to offsite runoff patterns.

#### 2.3 Site Characteristics

As mentioned above the site is a naturally vegetated parcel with no wetland resource areas within one hundred feet (100'). Existing natural vegetation is dominated with pine and oak trees. Surface elevations range from approximately 112-feet to elevation 115-feet as shown and referenced on the construction drawings and based on the 1988 North American Vertical Datum (NAVD 1988). The topography of the land is fairly leveled with a couple of depressed areas.

Geologically the land has been mapped as being part of a glacial outwash. The Soil Survey of Barnstable County, Massachusetts issued by the United States Department of Agriculture in March 1993 classifies the soils as Merimac Sandy Loam. The mapping of the soil corresponds to the composition of upper soil horizons, which indicates a predominant textural class of sandy loam soils. Soil tests performed on the property and on adjacent properties confirm that the existing surface soils correspond to textural class of sandy loam upper soils and at a depth of approximately 32 inches the natural soils encountered are sand texture. Substratum sand texture soils found on-site typically have a hydraulic conductivity of over 30-inches per hour (in./hr.) and permeameter tests performed in the sand texture soils for the designed of the subdivision road (Evergreen Circle) measured infiltration rates of 31 and 56 inches per hour. The Groundwater Contour Maps published for Cape Cod approximate the water table at an elevation of 55-feet which is nearly 60-feet below grade. These findings are taken into consideration for the designed of the stormwater management system.

# 3.0 Proposed Project

# 3.1 Scope of Work

The proposed development consists of building a 9,500 square feet commercial facility with a parking lot to meet the use demands. Approximately 39,200 square feet of impervious surfaces are proposed with the project. Storm runoff generated within the development will be captured and managed within the property in compliance with local requirements.

The stormwater systems is designed and sized to manage surface runoff. The surface runoff patterns will consist of four (4) contributing areas. Surface storm runoff is designed by grading and by edge of pavement gutters to discharge into four (4) drainage basin areas. These basins vary in footprint and are approximately 15 or 22-inches in depth. These systems will collect surface runoff and provide soil infiltration for the most frequent and less intense rainstorm events. The basin systems have been sized to manage the volume equivalent to one-inch (1") of surface runoff over impervious surfaces (refer to calculations). The volume capacity of the drain basins ensures that the majority of storm events, which are of lower rainfall intensity, are properly managed with a system that provides a vegetative filtration to storm runoff that frequently washes impurities from paved surfaces.

Additional storm flow volume capacity is designed within a subsurface leaching system. This added system provides the capacity needed for runoff volume that exceeds the depth of the drain basin. High intensity and less frequent storm events cause a condition where the size of the drain basin is not enough to manage the storm runoff volume. For those events the runoff volume is conveyed from the drain basin system through an inlet grate and into the subsurface system to be infiltrated through the sand texture soil stratum. There will be no outfalls to water bodies or wetland resource areas. This drainage system has been designed to control up to the 100-year 24-hour design storm event (see enclosed HydroCAD analysis) which exceeds regulatory standards.

The proposed system provides peak runoff attenuation, total suspended solids (TSS) removal, pollutant removal, and groundwater recharge within the development as required by the Town of Mashpee Bylaws. The system is properly sized to accommodate the first flush of stormwater runoff calculated as one inch (1") of runoff volume over the impervious surfaces infiltrating into the ground in less than 72-hours following the storm event (refer to calculations below). The proposed stormwater systems shall be maintained and inspected in accordance to the Operation and Management Plan (O&M) provided in this report for the proper operation of the stormwater system

### 3.2 Construction Methodology

Once a contractor for the project is retained a well-defined construction methodology will be established. In general, the construction phase for the site will follow typical industry methods. The work area will be accessed through the proposed driveway opening off Evergreen Circle where an entrance gravel protection pad is proposed. The site will be prepared for construction by clearing the necessary area of existing vegetation to be occupied by the proposed improvement. Limits of work will be established and protection to drainage inlets will be provided. Work will be done by different contractors, often, at different times. Efforts will be coordinated to minimize construction time and disturbance within and around the area.

During construction the contractor shall provide adequate erosion and sedimentation control to protect the construction site and adjacent properties. The majority of the cleared areas will be built on with the new building addition and pavement structures. Other areas will be stabilized with adequate landscape and planting and/or erosion control measures. Overtime the proposed landscape will mature providing proper screening and natural erosion protection for the development. The proposed drainage system will be installed at some point during the grading stages of the construction and properly protected from other construction activities on the site. The construction erosion and control measures should be properly maintained and inspected throughout the duration of the work to ensure adequate protection. Once the site reaches stability of the disturbed areas the temporary protection installed throughout the site and within the drainage systems shall be removed.

#### 3.3. Proposed Drainage

Four (4) surface runoff patterns are being analyzed to be managed by the stormwater management system. Correspondingly, there are four (4) drainage systems to manage storm runoff generated from these areas. First, the entrance driveway and front right side of the development delivery (Drain Area 'A') will be graded to discharge a proposed drain basin. This area also includes

runoff from one quarter of the building roof area. Stormwater runoff enters the basin areas through payed waterways and a stone splash apron and by roof runoff drain pipes. A proposed subsurface leaching system will be installed to manage high intensity storm events. Similarly a second system is proposed to collect surface runoff from the front left side of the development (Drain Area 'B'). The rear left portion of the development (Drain Area 'C'), which includes the delivery and loading zone area, will be serviced by the third drainage system. The fourth drainage area (Drain Area 'D') is relatively the smallest and correspondingly includes the smallest drainage system. Roof runoff is proposed to be conveyed to drainage system through 6" HDPE roof drains contributing to all four drainage systems. The proposed paved swale and drainage basin side slopes will be protected with erosion control blankets and seeded with a erosion control seed mixture. Once established, the proposed vegetation provides natural filtration to storm runoff. Large runoff volume enter a series of grate inlets that convey the runoff volume to subsurface leaching system. The subsurface leaching system consists of pre-cast chambers surrounded with crushed stone installed within the existing sand texture subsoil for rapid infiltration and for groundwater recharge. The proposed stormwater management system follows best management practice (BMPs) and conforms to requirements adopted by the appropriate regulatory agency.

# 4.0 MassDEP Standard Compliance

## 4.1 Standard #1: No untreated discharge or erosion to wetlands

The proposed project provides a drainage system as means of treatment to storm runoff generated from the development to maintain storm runoff within the property and infiltrate into the ground. There are no wetlands within the property nor within 100 feet of the property, therefore there will be no untreated discharge directed to wetlands.

#### 4.2 Standard #2: Peak rate attenuation

Post-development storm peak runoff discharge is required to be kept at levels that do not exceed pre-development values at the point of discharge or down-gradient property boundary. Currently, the site is undeveloped and contains surface runoff within. The undeveloped stage of the property produces very little storm runoff except for extreme events of high intensity rainstorms. Storm runoff eventually filters into the ground due to the existing high permeable soils, existing depressions and drain systems. The area within the subject property that do not flow into existing depressions and produce surface runoff to offsite area will not be altered with the proposed development.

The proposed development as designed provides control and stormwater management up to the 100-year 24-hour design rainstorm. The proposed developed areas of the facility as designed will not produce overwhelming runoff volume to the drainage system in Evergreen Circle. The proposed stormwater management system reduces (attenuates) overall site runoff rates by containing the runoff volume up to the 100-year 24-hour design storm in conformance with this standard.

### 4.3 Standard #3: Stormwater recharge

Recharge to groundwater is required by the DEP Standards and by the Mashpee regulations to approximate existing conditions. Because the existing site retains and infiltrates storm precipitation, the proposed stormwater systems is designed to also intercept and infiltrate storm volume. The soil type on the site and the size of the stormwater system determines the capacity of volume infiltration. The Natural Resources Conservation Service (NRCS) assigns different Soil Class to differentiate the capacity of the topsoil to intercept stormwater. The site has been mapped as Hydrologic Soil Class A and well drain soil. The recharge will be attained through the drain basin areas and subsurface leaching system. Mashpee regulations require pre-treatment to one inch of runoff from the development surfaces prior to discharge to a leaching system. The one-inch target will have to be accumulated within the drainage basin prior to the leaching system. The one-inch target also exceeds

the Target depth factor (F) of 0.60 inches required by Mass DEP Standards and therefore the vegetated basin should be design for at least a volume equal to one-inch runoff. Volume in excess of one-inch will overflow into the leaching system. The drainage system will provide an adequate holding volume capacity to contain the quality volume and comply with the quality treatment to the storm runoff prior to infiltration.

### 4.4 Standard #4: Water Quality

The proposed drainage systems will provide treatment to the stormwater prior to final discharge. The Mashpee regulations require that one inch of runoff from the contributing area impervious surfaces be treated for quality before reaching the leaching component of the drainage system. The proposed drainage basins will provide the majority of the treatment. Prior to the drainage basin the system chain of components will allow for debris and suspended solids carried within the runoff to settle in the drain basin areas. Before storm volume enters the subsurface leaching system the sump within the catch basin will provide additional settlement of suspended solids. The one-inch requirement by the Mashpee regulations forces the design to be similar to a design for a site considered a LUHPPL by the DEP Standards. Calculations for runoff water quality conformance are provided in the section below.

# 4.5 Standard #5: Land uses with higher potential pollutant loads (LUHPPL)

The proposed stormwater treatment system is design to treat the equivalent of one-inch runoff volume. This parameter is the requirement for LUHPPL sites as specified within the DEP Standards. LUHPPL sites are specific to some type of uses and developments as defined under the regulations set forth on 310 CMR 10.04. As proposed this development conforms with this standard even if the facility is not a LUHPPL site and this standard found to not be applicable.

#### 4.6 Standard #6: Critical areas

As stated previously, the site is not located near wetland resources and is not located within a DEP approved Zone II for public water supply. Therefore this Standard is not applicable.

#### 4.7 Standard #7: Redevelopment

The proposed project is for an expansion over an area that is currently a vacant parcel it is considered new development therefore this Standard is not applicable.

### 4.8 Standard #8: Construction period controls

Proper control measures during the construction stages of this project are needed to prevent erosion and sedimentation problems. Open excavation and piled material and equipment shall be properly managed to avoid conditions that may result detrimental to the project. Refer to the Plan details for the proposed erosion and sedimentation measures during the construction period. The Erosion and Sedimentation Control Plan includes the following:

- The contractor shall establish the limit of work (construction or silt fence) as indicated in the Construction Drawings and maintain the limit of work in good conditions throughout the duration of the work.
- 2. The Contractor shall install silt bags within nearby exiting catch basins in front of the work site to protect against siltation. The Contractor shall regularly and at least once a week remove the silt sac and properly dispose the accumulated sediments and replace the silt sac in the catch basin
- 3. The Installer shall examine the work area and site conditions under which this work is to be performed prior to installation of sedimentation and erosion control.
- 4. After every rainstorm the Contractor shall examine the conditions of all the erosion and sedimentation controls and perform any required repairs or replacements.

- The Contractor shall maintain on site 200 linear feet of silt fence in the event erosion occurs. If erosion occurs during construction the Contractor shall take steps to control the erosion.
- 6. The Contractor shall remove all land clearing and construction activities debris (brush, stumps, wood, chips, etc.) from site and properly transport to an approved disposal site.
- 7. Stripped topsoil from areas to be graded shall be stockpiled at locations approved by the project engineer and shall be enclosed within a siltation fence or bales of straw.
- 8. Stabilization for construction of the parking and driveway shall be achieved by installing the gravel base immediately after the rough grading and sub-base compaction is complete.
- 9. The Contractor shall avoid smearing the bottom levels of the excavation and the exposed excavation face walls for subsurface leaching systems. The contractor shall scarified any areas where smearing occurs to provide adequate filtration through the soils.
- 10. The Contractor shall avoid using dirty or silty crushed stone for the construction of the leaching systems. The Contractor shall use double washed crushed stone for the construction of the subsurface leaching system. The stone shall be inspected and approved by the project engineer prior to installation.
- 11. All excavated areas rendering a slope greater than 3 horizontal to 1 vertical (3:1) shall be stabilized with the installation of erosion control matte.

### 4.9 Standard #9: Operation and Maintenance Plan

A properly operating drainage system is the basis for long life of the roads and parking areas and for the protection of wetland resources against pollutants carried by stormwater. If the drainage system fails to work, frequent pooling of stormwater would be expected to occur along the pavement surface leading to saturation of the gravel base and shortening the life expectancy of the pavement also, failing to protect the wetland resource areas. The owner or designated representative will be responsible for maintenance and operation of drainage system.

The owner or designated representative shall maintain a copy of the construction drawings as means of illustration of the location of the stormwater system, or other drawings depicting the site with all components of the drainage system location. Only authorized personnel by the owner shall maintain and operate the drainage system.

The drainage system has been design with consideration of the use as a commercial development. The owner or designated representative shall implement the following long-term pollution prevention measures:

- 1. The drainage system is intended for the interception of rainfall precipitation and snowmelt runoff. No other discharges shall be allowed within the systems unless reviewed by the appropriate trade professional for conformance with the design parameters of the system.
- 2. Proper road maintenance shall be performed without harming the drainage system.
- 3. Lawns, gardens and landscape care and maintenance clippings and refuse shall be properly disposed of. Dumping of yard waste should not be allowed within the drainage systems.
- 4. Snow and ice shall be properly managed. Snow or ice removal shall not obstruct the stormwater inlets and outlets. Snow piles shall not be placed within the stormwater vegetated basins.
- 5. A contractor who specializes on spill cleanings shall be engaged in the event of spills into the drainage system. The contractor shall properly clean the affected areas and the drainage system.

To provide for adequate maintenance of the drainage system, the following inspections and procedures will be required:

- 1. Inspect drainage basins after every major storm event (typically a storm of one inch of rainfall) and at least four times a year. Inspection will include measuring the depth of silt and sediment collected in the stone splash areas before the stone checks.
- 2. If a depth of sediments of over 4 inches is noticed the owner shall arrange for a contractor to properly remove the accumulated sediments.

- 3. The proposed crushed stone pads should be kept cleaned by routinely removing any debris that may be collected on the surface.
- 4. If water pooling remains within the drainage basin after 72 hours following a storm event remove and properly scarified the soil surface and aerate the soil to increase permeability. No need to remove established vegetation within the system.
- 5. If standing water is observed above the grate inlet rim 24 hours past a storm event inspect the system for the presence of clogging or obstruction. If clogging or an obstacle exists arrange for the system to be cleaned.
- 6. Inspect each drain basin at least once a year by observing the pooling duration after storm events. Remove any debris accumulation within the system. If pooling remains after 72 hours following a storm event scarified and aerate the soil surface to increase permeability. No need to remove established shrubs or trees within the system.
- 7. Provide watering as needed to all plantings on the site. Water immediately after planting and continue watering at least twice a week unless the rain does the job. As a general rule, planting needs one-inch of irrigation during the growing season. The planting within the vegetated basin should not require additional watering once the planting is established.
- 8. If standing water is observed above the outlet structure rim 24 hours past a storm event inspect the outlet piping for the presence of clogging or obstruction. If clogging or an obstacle exists within the pipe, arrange for the piping to be cleaned. If pooling persists and no apparent clogging is present refer to leaching system inspection.

At leaching systems locations, inspect the system by removing the cover and inspecting the interior. Measure the depth of standing water and compare to the actual depth of the structure. If the standing water is greater than half the depth of the structure, the leaching system shall be cleaned and inspected on a monthly basis. The leaching system is considered in failure when pooling occurs at the inlet grate at the leaching system and investigation has determined no apparent clogging or obstructions within the leaching system. To repair this situation, a contractor shall be hired to install the same size system in an adjacent area to the leaching system in failure, subject to subsurface soil investigations concerning permeability. The contractor shall connect the new system to the old failed system with the same size pipe and slope that currently exists.

### 4.10 Standard #10: Prohibition of Illicit Discharges

As noted within Standard 9 above several long-term pollution prevention measures are recommended to protect not only the stormwater management system but also the community and the environment. The drainage system has been design with consideration of the proposed use as a commercial development and the owner or designated representative shall implement the long-term pollution prevention measures to preserve a properly operating drainage system. A properly operated drainage system is the basis for long life of the roads and parking areas. The owner or designated representative will be responsible for maintenance and operation of drainage system.

#### 5.0 STORMWATER DESIGN CALCULATIONS

#### 5.1 Stormwater Quality and Quantity Volume

The stormwater treatment systems as described above will intercept stormwater runoff for the proposed development. Approximately 39,200 square feet of impervious surface is proposed to contribute surface storm runoff to the four (4) drainage systems (refer to attached Drainage Basin Plan). The proposed drain basin system for each contributing drainage area will manage the equivalent quality and quantity storm volume calculated as one-inch (1") over the proposed impervious areas even if the subsurface leaching systems were not accounted for. The table below identifies the contributing impervious surface and total drainage areas:

Area	Area Contributing Drain Area in square feet					
Description	Area A	Area B	Area C	Area D	Total	
Impervious	10,400	11,900	10,400	6,500	39,200	
Total	18,200	14,500	18,100	12,000	52,000	

The water quality volume is calculated as one-inch (1") over impervious areas noted above. This volume is contained within the capacity of the proposed corresponding drain basin areas. As depicted below, the proposed drain basin areas are sized to properly contain the quality volume before any possible overtopping.

Drain basin volume obtained from HydroCAD storage calculations.

Doromotor		Contributing Drain Area					
Parameter	Area A	Area B	Area C	Area D	Total		
Impervious area, s.f.	10,400	11,900	10,400	6,500	39,200		
Quality volume, c.f.	867	992	867	542	3,267		
Drain basin depth, in.	21.8	17.3	20.9	15.6	N/A		
Drain basin volume, c.f.	872	1,011	872	546	3,301		

The drainage basin systems have enough surface area and provide a soil texture that allows for the quality volume contained within to infiltrate the soils in less than 72-hours (3 days) to prevent ponding of rain water for extended periods of time. The volume drawdown time is calculated by allowing the drain basin bottom area to infiltrate the water at an assigned infiltration rate. Based on the encountered soils the design assigns a saturated hydraulic conductivity (Ks) of 2.41 in./hr. from the recommendations published in Rawls table. The table below illustrates the time needed for the quality volume to completely dissipate from the surface of the drain basin areas confirming a drawdown time less than the maximum recommendation of 72-hours:

Drawdown time = (quality volume / Drain basin area) / (infiltration rate) x (units conversion factors)

Parameter		Contributing Drain Area					
Parameter	Area A	Area B	Area C	Area D			
Drain basin area, s.f.	230	365	255	230			
Quality volume, c.f.	867	992	867	542			
Drawdown time, hours	18.8	13.5	16.9	11.7			

#### 5.2 Total Suspended Solid Analysis

As part of the quality treatment the drainage system shall remove total suspended solids (TSS) from the storm runoff water. The removal of TSS is provided by allowing the water volume some still time for suspended soils to drop out of the water. The methods used for the proposed design includes the grassed drain basins and the subsurface leaching systems. The drain basin area will be the main TSS removal component of this system. The subsurface leaching system assist in TSS removal for high intensity storm events.

TSS removal calculations (TSS Removal by BMP component/system) per MassDEP Stormwater Manual. All proposed drainage system will follow the same treatment train and therefore the same calculated TSS removal rates.

Starting TSS load at first BMP for any system set at 1.00

- 1. Drain Basin Area (BA) = 80% assigned removal rate
- 2. Infiltration System (IS) = 80% assigned removal rate

BMP	Removal rate	Starting TSS	Removed TSS	Remaining TSS		
BA	80	1.00	0.80	0.20		
IS	80	0.20	0.16	0.04		
Total Suspended Solids (TSS) REMOVAL = 96%						

### 5.3 Overall Stormwater Design for High Intensity Design Storms

During major storm events the runoff volume will exceed the capacity of the proposed drain basin areas and be conveyed into the subsurface leaching system. The subsurface leaching system is designed to manage an event equivalent to the 100-year design storm. The water level within the drain basin area and within the subsurface leaching system will vary depending on the intensity and duration of the storm event but the levels will be kept within the constraints of the drainage system. Below is a table comparing the water level within the drain basin and the subsurface system for the 100-year 24-hour design storms.

Parameter	Contributing Drain Area				
Parameter	Area A	Area B	Area C	Area D	
Drain basin bottom elevation, ft.	111.0	112.0	111.0	112.0	
100-year flood level elevation, ft.	113.20	113.90	112.96	113.84	
Water depth, inches	26.4	22.8	23.5	22.1	

# 6.0 SUMMARY

#### **6.1 Conclusion**

The intended commercial development for this site is typical and in keeping with the surrounding commercial and industrial neighborhood. The stormwater management system and erosion and sedimentation control plan proposed provides protection for the development once constructed and during the construction phases from stormwater impacts. Information as described in this report and within the construction documents submitted is comprehensive and informative enough for a qualified and experienced contractor to properly implement on the ground. Proper maintenance tasks and inspections procedures are recommended for the proposed erosion and sedimentation control measures for the contractor to implement and maintenance during the construction stages. Similarly, recommendations area provided for operation and maintenance of the stormwater management system for longevity and protection of the system as proposed. The design and sizing of the stormwater management system is adequate to manage stormwater runoff on the subject property and conforms with applicable requirements. The stormwater system as proposed is appropriate to manage runoff water for this development.

#### **6.2 Contact Information**

In an effort to reduce the amount of paper required for filings, the entire application can be emailed upon request to regulatory staff and commission members. Please contact Cape & Islands Engineering, Inc. by phone or email to obtain any paper or digital copies of project information.

Please contact Raul Lizardi-Rivera at 508.477.7272 or Raul@capeeng.com for copies of project information.

The Applicants representative:

Raul Lizardi-Rivera, P.E. Director of Engineering

Cape & Islands Engineering, Inc.

800 Falmouth Road, Suite 301C

Mashpee, MA 02649

508.477.7272

508.477.9072 (fax)

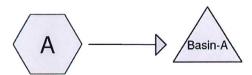
raul@capeeng.com

# 7.0 APPENDIXES

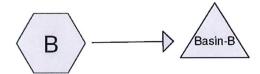
# 7.1 Appendix A – Development Drainage Basin Areas

&

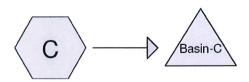
# 7.2 Appendix B – Drainage Calculations (HydroCAD analysis)



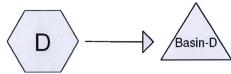
Front Right Underground Detention & Infiltration



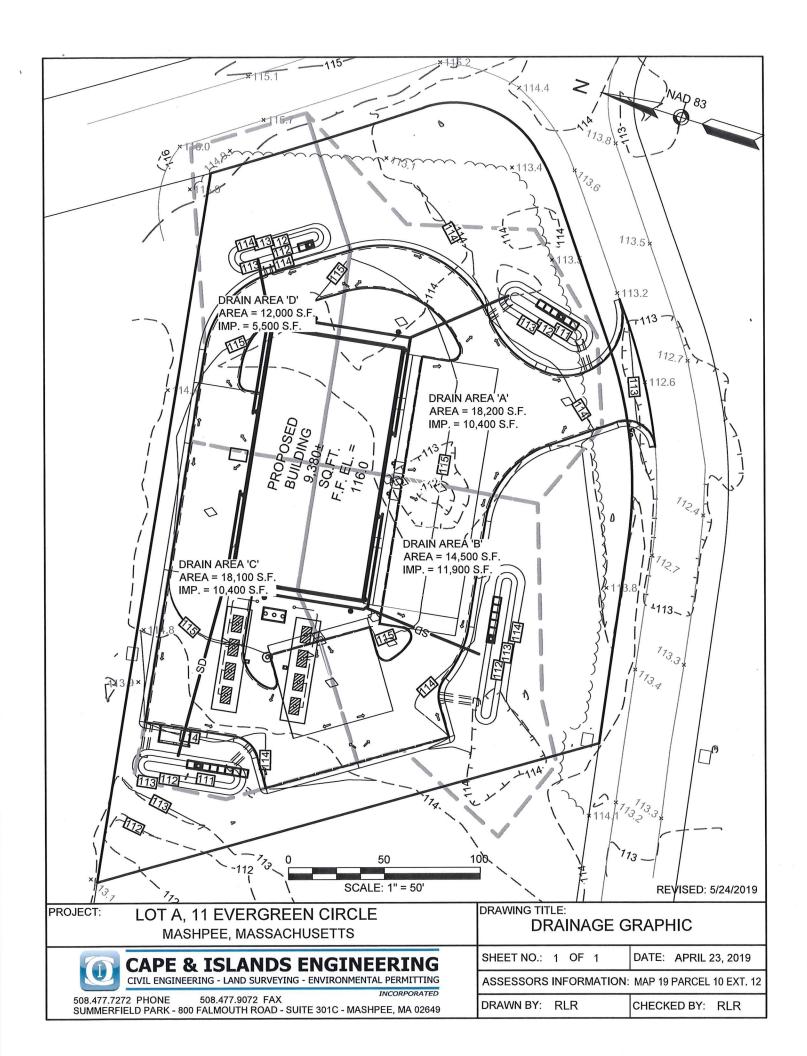
Front Left Underground Detention & Infiltration



Rear Left Underground Detention & Infiltration



Rear Right Underground Detention & Infiltration



# 11 Evergreen - Area A-B

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4/23/2019

# Subcatchment A: Front Right

Runoff

1.88 cfs @ 12.02 hrs, Volume=

6,231 cf, Depth= 4.11"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.10 hrs Type III 24-hr 100-Year Rainfall=7.20"

A	rea (sf)	CN	Description			
	10,400	98	Roofs & parking area			
	7,800	39	>75% Gras	s - Landsca	ape Area	<u> </u>
	18,200	73	Weighted A	verage		
	7,800		Pervious Ar	ea		
	10,400		Impervious	Area		
Tc (min)	Length (feet)	Slope (ft/ft	•	Capacity (cfs)	Description	
5.0					Direct Entry,	

# Subcatchment B: Front Left

Runoff

2.00 cfs @ 12.02 hrs, Volume=

6,855 cf, Depth= 5.67"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.10 hrs Type III 24-hr 100-Year Rainfall=7.20"

Aı	rea (sf)	CN	Description		
	11,900	98	parking area	a	
	2,600	39	>75% Gras	s - Landsca	ape Area
	14,500		Weighted A		
	2,600 11,900		Pervious Ar Impervious		
	11,900		impervious	Alba	
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
5.0					Direct Entry,

# Pond Basin-A: Underground Detention & Infiltration

Inflow Area =	18,200 sf, Inflow Depth = 4.11"	for 100-Year event
Inflow =	1.88 cfs @ 12.02 hrs, Volume=	6,231 cf
Outflow =	0.25 cfs @ 12.00 hrs, Volume=	6,231 cf, Atten= 87%, Lag= 0.0 min
Discarded =	0.25 cfs @ 12.00 hrs, Volume=	6,231 cf

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.10 hrs Peak Elev= 113.20' @ 12.69 hrs Surf.Area= 300 sf Storage= 2,227 cf

Plug-Flow detention time= 71.5 min calculated for 6,210 cf (100% of inflow) Center-of-Mass det. time= 71.3 min (890.3 - 819.0)

#### 11 Evergreen - Area A-B

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Volume	Invert	Avail.Storage	Storage Description
#1	111.00'	2,077 cf	Drain basin (Irregular) Listed below (Recalc) -Impervious
#2	105.00'	384 cf	4.00'W x 4.00'L x 4.00'H 4'x4'x4' galley x 6 Inside #3
#3	104.00'	446 cf	10100 11 % 00100 = % 0100 11 = 2001011 111 010110 20011111
			1,500 cf Overall - 384 cf Embedded = 1,116 cf x 40.0% Voids

2,908 cf Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
111.00	230	100.0	0	0	230
111.50	386	109.0	152	152	389
112.00	557	119.0	234	387	579
112.50	472	128.0	257	644	766
113.50	2,700	260.0	1,434	2,077	4,846

Device Routing Invert Outlet Devices

#1 Discarded

0.00' 15.500 in/hr Exfiltration over Wetted area

**Discarded OutFlow** Max=0.25 cfs @ 12.00 hrs HW=111.31' (Free Discharge) **1=Exfiltration** (Exfiltration Controls 0.25 cfs)

#### Pond Basin-B: Underground Detention & Infiltration

Inflow Area = 14,500 sf, Inflow Depth = 5.67" for 100-Year event

Inflow = 2.00 cfs @ 12.02 hrs, Volume= 6,855 cf

Outflow = 0.25 cfs @ 12.00 hrs, Volume= 6,855 cf, Atten= 87%, Lag= 0.0 min

Discarded = 0.25 cfs @ 12.00 hrs, Volume= 6,855 cf

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.10 hrs Peak Elev= 113.90' @ 12.64 hrs Surf.Area= 300 sf Storage= 2,469 cf

Plug-Flow detention time= 73.8 min calculated for 6,832 cf (100% of inflow)

Center-of-Mass det. time= 73.6 min (858.1 - 784.5)

Volume	Invert	Avail.Storage	Storage Description
#1	112.00'	2,005 cf	Drain basin (Irregular) Listed below (Recalc) -Impervious
#2	106.00'	384 cf	4.00'W x 4.00'L x 4.00'H 4'x4'x4' galley x 6 Inside #3
#3	105.00'	446 cf	10.00'W x 30.00'L x 5.00'H Excavation w/stone backfill
			1,500 cf Overall - 384 cf Embedded = 1,116 cf x 40.0% Voids

2,836 cf Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
112.00	365	254.0	0	0	365
112.50	602	163.0	239	239	3,387
113.00	854	172.0	362	601	3,641
113.75	1,120	182.0	738	1,339	3,952
114.00	4,600	340.0	666	2,005	10,516

Device Routing Invert Outlet Devices

#1 Discarded 0.00' 15.500 in/hr Exfiltration over Wetted area

Discarded OutFlow Max=0.25 cfs @ 12.00 hrs HW=112.63' (Free Discharge)

1=Exfiltration (Exfiltration Controls 0.25 cfs)

#### 11 Evergreen - Area C-D

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4/23/2019

#### Subcatchment C: Rear Left

Runoff

1.87 cfs @ 12.02 hrs, Volume=

6,197 cf, Depth= 4.11"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.10 hrs Type III 24-hr 100-Year Rainfall=7.20"

Area (sf)	CN	Description		
10,400	98	Roofs & pai	king area	
7,700	39	>75% Gras	s - Landsca	ape Area
18,100	73	Weighted A	verage	
7,700		Pervious Ar	ea	
10,400		Impervious	Area	
Tc Lengtl (min) (feet	,	•	Capacity (cfs)	•
5.0				Direct Entry,

#### **Subcatchment D: Rear Right**

Runoff

1.01 cfs @ 12.03 hrs, Volume=

3,362 cf, Depth= 3.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.10 hrs Type III 24-hr 100-Year Rainfall=7.20"

	Area (sf)	CN	Description		
	5,500	98	parking are	a	
	6,500	39	>75% Gras	s - Landsca	ape Area
	12,000	66	Weighted A	verage	
	6,500		Pervious A	rea	
	5,500		Impervious	Area	
	- , ,,	01		0	December
	c Length		•	Capacity	·
(mii	n) (feet)	(ft/ft	) (ft/sec)	(cfs)	
5	.0				Direct Entry,

## Pond Basin-C: Underground Detention & Infiltration

Inflow Area =	18,100 sf, Inflow Depth = 4.11"	for 100-Year event
Inflow =	1.87 cfs @ 12.02 hrs, Volume=	6,197 cf
Outflow =	0.31 cfs @ 12.10 hrs, Volume=	6,197 cf, Atten= 84%, Lag= 4.7 min
Discarded =	0.31 cfs @ 12.10 hrs, Volume=	6,197 cf

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.10 hrs Peak Elev= 112.96' @ 12.56 hrs Surf.Area= 380 sf Storage= 2,026 cf

Plug-Flow detention time= 49.4 min calculated for 6,176 cf (100% of inflow) Center-of-Mass det. time= 49.3 min (868.3 - 819.0)

4/23/2019

Volume	Invert	Avail.	.Storage	Storage Descript	ion			
#1	111.00'		1,103 cf			w (Recalc) -Impervious		
#2	106.00'		410 cf			alley x 8 Inside #3		
#3	105.00'		555 cf	512 cf Overall x 80.0% Voids <b>10.00'W x 38.00'L x 5.00'H Excavation w/stone backfill</b> 1,900 cf Overall - 512 cf Embedded = 1,388 cf x 40.0% Voids				
			2,068 cf	Total Available S	torage			
Elevatio		rf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)		
111.0	00	255	110.0	0	Ó	255		
111.5	50	426	119.0	168	168	429		
112.0	00	617	129.0	259	428	636		
112.5	50	542	138.0	290	717	838		
113.0	00	1,026	147.0	386	1,103	1,054		
Device #1	Routing Discarded	lnv 0.		et Devices 00 in/hr Exfiltratio	on over Wetted are	ea		

**Discarded OutFlow** Max=0.31 cfs @ 12.10 hrs HW=111.91' (Free Discharge) 1=Exfiltration (Exfiltration Controls 0.31 cfs)

#### Pond Basin-D: Underground Detention & Infiltration

Inflow Area = 12,000 sf, Inflow Depth = 3.36" for 100-Year event

Inflow = 3,362 cf

1.01 cfs @ 12.03 hrs, Volume= 0.14 cfs @ 12.00 hrs, Volume= Outflow = 3,362 cf, Atten= 86%, Lag= 0.0 min

0.14 cfs @ 12.00 hrs, Volume= Discarded =

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.10 hrs Peak Elev= 113.84' @ 12.76 hrs Surf.Area= 140 sf Storage= 1,186 cf

Plug-Flow detention time= 72.1 min calculated for 3,351 cf (100% of inflow) Center-of-Mass det. time= 71.9 min (906.3 - 834.4)

<u>Volume</u>	Invert	Avail.Storage	Storage Description
#1	112.00'	990 cf	Drain basin (Irregular) Listed below (Recalc) -Impervious
#2	106.00'	102 cf	4.00'W x 4.00'L x 4.00'H 4'x4'x4' galley x 2 Inside #3
			128 cf Overall x 80.0% Voids
#3	105.00'	229 cf	10.00'W x 14.00'L x 5.00'H Excavation w/stone backfill
			700 cf Overall - 128 cf Embedded = 572 cf x 40.0% Voids
		1 000 1	T

1,322 cf Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
112.00	230	100.0	0	0	230
112.50	386	109.0	152	152	389
113.00	557	119.0	234	387	579
113.50	472	128.0	257	644	766
114.00	941	134.0	347	990	907
Device Routing	j Inv	ert Outlet l	Devices		

#1 Discarded 0.00' 15.500 in/hr Exfiltration over Wetted area

**Discarded OutFlow** Max=0.14 cfs @ 12.00 hrs HW=112.40' (Free Discharge) 1=Exfiltration (Exfiltration Controls 0.14 cfs)

Assessors Map will be updated within next Fiscal Year.

Abutters to: 14-10-0

Certified by: Surew & Device

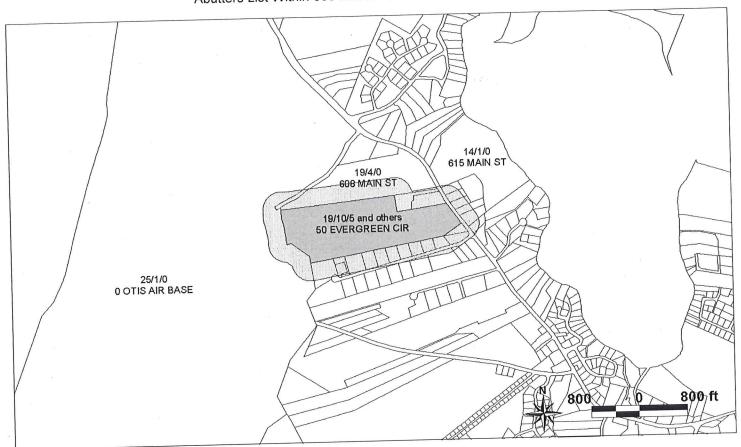
TOWN OF MASHPEE, MA BOARD OF ASSESSORS 16 Great Neck Rd., North, Mashpee, MA (126)

June 13, 2019

588 Main St

Number of Abutters: 41)

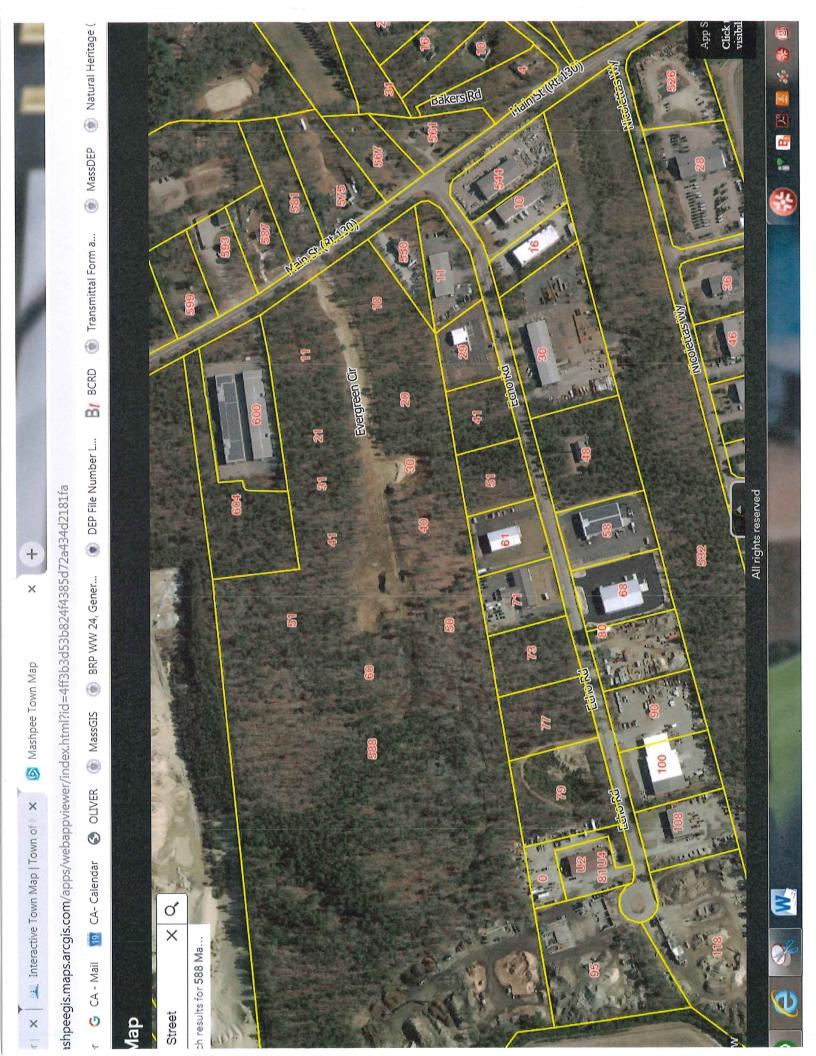
Abutters List Within 300 feet of Parcel 19/10/5 and others

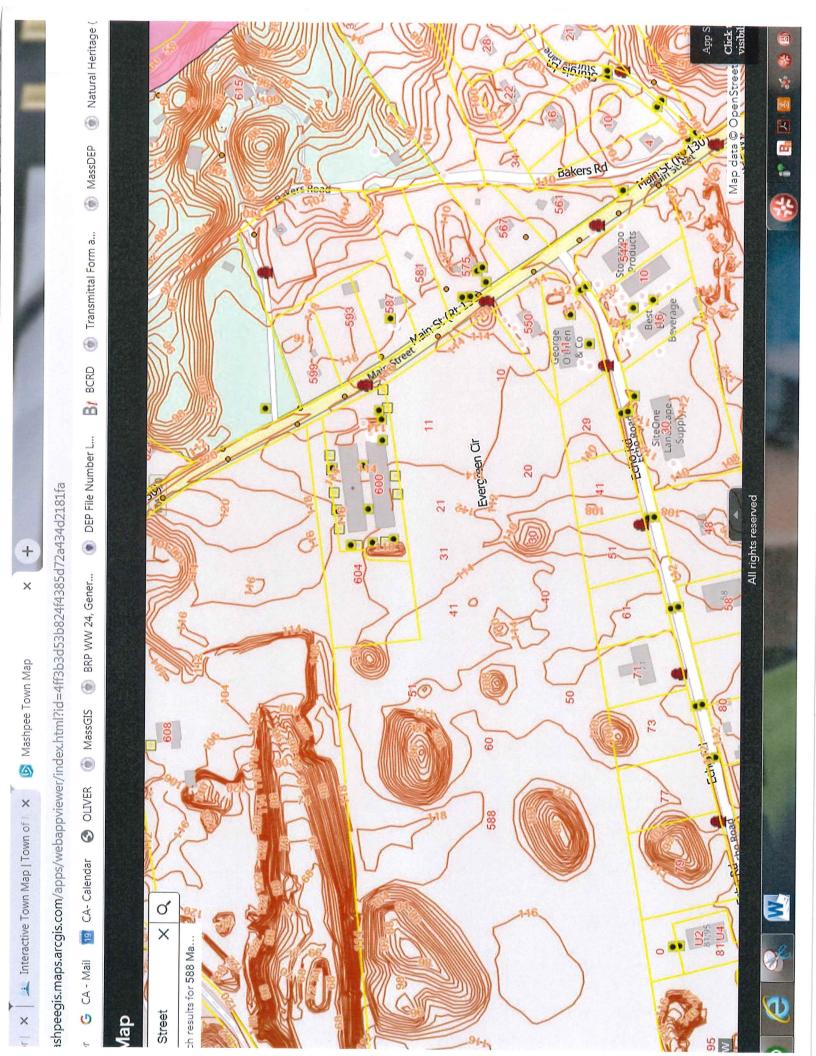


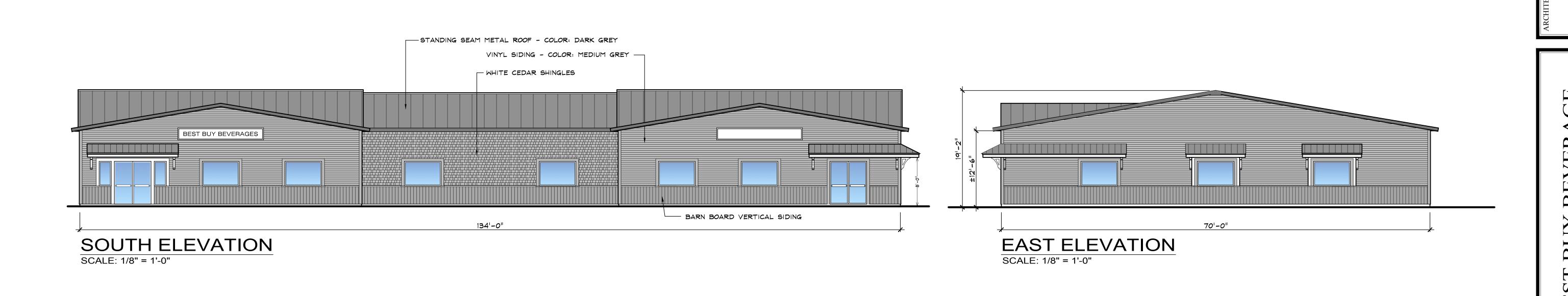
				Mailing Street	Mailing City	ST	ZipCd/Country
Key	Parcel ID	Owner	Location		MASHPEE	MA	02649
289	14-1-0-E	CAPE COD CAMP CORPORATIÓN	615 MAIN ST	615 MAIN STREET			00040
507	19-1-0-R	MIKUTOWICZ JOHN F TRUSTEE 30 ECHO ROAD REALTY TRUST	30 ECHO RD	30 ECHO ROAD	MASHPEE	MA	02649
509	19-3-0-R	CABRAL MANUEL TRUSTEE	95 ECHO RD	81 ECHO RD - UNIT 1	MASHPEE	MA	02649
		LIMITED REALTY TRUST  GANGEMI, PAMELA M TRS	81 ECHO RD	21 PEBBLE PATH	MARSTONS MILLS	MA	02648
18758	19-3-1-E	THE 81 ECHO ROAD REALTY TRUST	0 ECHO RD	37 LADYS SLIPPER LANE	MASHPEE	MA	02649
21897	19-3-2-R	ORCUTT, PATRICK & CABRAL, MANUEL TR			MARSTONS MILLS	MA	02648
21896	19-3-3-R	GANGEMI, PAMELA M TRS 81 ECHO ROAD REALTY TRUST	79 ECHO RD	21 PEBBLE PATH		MA	02648
1802	19-3-4-R	GANGEMI, PAMELA M TRS	77 ECHO RD	21 PEBBLE PATH	MARSTONS MILLS	MA	02040
		81 ECHO ROAD REALTY TRUST DECH LLC	71 ECHO RD	2 SPINNAKER CIRCLE	NANTUCKET	MA	02553
21891	19-3-5-R	,	61 ECHO RD	83 NEWBERN AVENUE	MEDFORD	MA	02155
1890	19-3-6-R	DRISCOLL CAPE 1969 LLC			MARSTONS MILLS	MA	02648
21889	19-3-7-R	VICTURINE, PAMELA M	51 ECHO RD	21 PEBBLE PATH		MA	02649
1 0 0 0	19-3-8-R	GANGEMI, RONALD P	41 ECHO RD	20 WHEELER ROAD	MASHPEE	IVIA	02049
		TRIPLE M MANAGEMENT CO LLC	29 ECHO RD	9 COLLINS AVE	PLYMOUTH	MA	02362
21887	′ 19-3-9-R	% JONATHAN HERLIHY	81-U1 ECHO RD	81-U1 ECHO RD	MASHPEE	MA	02649
18753	3 19-3-A-R	CABRAL, MANUEL	F		SANDWICH	MA	02563
1875	19-3-B-R	EARLE, DENNIS A	81-U2 ECHO RD	PO BOX 876		140	02649
4075	10.3.C.P	ORCUTT, PATRICK	81-U3 ECHO RD	37 LADYS SLIPPER LANE	MASHPEE	WA	02049
	6 19-3-C-R	ORCUTT, PATRICK	81-U3 ECHO RD	37 LADYS SLIPPER LANE	MASHPEE	MA	026

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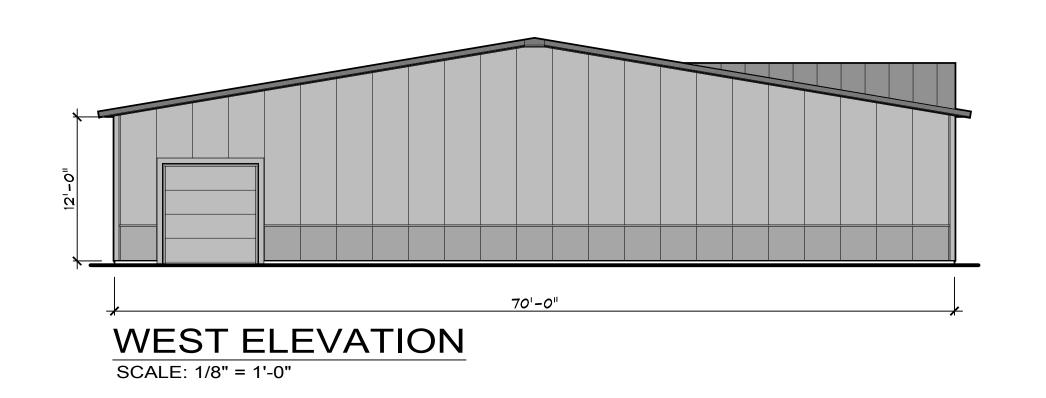
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Key	Parcel ID	Owner	Location	Mailing Street	Mailing City	ST	ZipCd/Country
18757	7 19-3-D-R	GOVONI, PETER J	81-U4 ECHO RD	PO BOX 1323	FORESTDALE	MA	02644
23070	) 19-3-4A-R	GANGEMI, PAMELA M TRS 81 ECHO ROAD REALTY TRUST	73 ECHO RD	21 PEBBLE PATH	MARSTONS MILLS	MA	02648
510	) 19-4-0-R	DRINKWATER INVESTMENT CORP	608 MAIN ST	351 WINTER STREET	HANOVER	MA	02339
516	0000001900000	oooosubdivided forcel					
23461	19-10-1-R	EVERGREEN ENERGY LLC	10 EVERGREEN CIR	81 ECHO ROAD	MASHPEE	MA	02649
23462	19-10-2-R	EVERGREEN ENERGY LLC	20 EVERGREEN CIR	81 ECHO ROAD	MASHPEE	MA	02649
23463	19-10-3-R	EVERGREEN ENERGY LLC	30 EVERGREEN CIR	81 ECHO ROAD	MASHPEE	MA	02649
23464	19-10-4-R	EVERGREEN ENERGY LLC	40 EVERGREEN CIR	81 ECHO ROAD	MASHPEE	MA	02649
23465	19-10-5-R	EVERGREEN ENERGY LLC	50 EVERGREEN CIR	81 ECHO ROAD	MASHPEE	MA	02649
23466	19-10-6-R	EVERGREEN ENERGY LLC	0 EVERGREEN CIR	81 ECHO ROAD	MASHPEE	MA	02649
23467	19-10-7-R	EVERGREEN ENERGY LLC	60 EVERGREEN CIR	81 ECHO ROAD	MASHPEE	MA	02649
23468	19-10-8-R	EVERGREEN ENERGY LLC	51 EVERGREEN CIR	81 ECHO ROAD	MASHPEE	MA	02649
23469	19-10-9-R	EVERGREEN ENERGY LLC	41 EVERGREEN CIR	81 ECHO ROAD	MASHPEE	MA	02649
23470	19-10-10-R	EVERGREEN ENERGY LLC	31 EVERGREEN CIR	81 ECHO ROAD	MASHPEE	MA	02649
23471	19-10-11-R	EVERGREEN ENERGY LLC	21 EVERGREEN CIR	81 ECHO ROAD	MASHPEE	MA	02649
23472	19-10-12-R5	EVERGREEN ENERGY LLC	11 EVERGREEN CIR	81 ECHO ROAD	MASHPEE	MA	02649
517	19-11-0-R	ANCHOR SELF STORAGE OF MASHPEE LLC	600 MAIN ST	600 MAIN ST	MASHPEE	MA	02649
16920	19-12-0-R	UMANO, MICHAEL J ET AL TRS FIFTY FOUR ECHO RD RLTY TRUST	48 ECHO RD	c/o INDUSTRIAL COMMUNICATIONS 40 LONE STREET	MARSHFIELD	MA	02050
16922	19-13-0-R	SEMINARA, ANNE I C/O MERIDIAN FAMILY LTD PARTNE	58 ECHO RD	PO BOX 1219	SOUTH DENNIS	MA	02660
17687	19-15-0-E	MASHPEE, TOWN OF CONSERVATION COMMISSION	604 MAIN ST	16 GREAT NECK RD NORTH	MASHPEE	MA	02649
518	20-1-0-R	CICCOTELLI, CHRISTOPHER A	599 MAIN ST	599 MAIN ST	MASHPEE	MA	02649
519	20-2-0-R	HOLDGATE, BRUCE D	593 MAIN ST	30 FRIENDSHIP LANE	NANTUCKET	MA	02554
520	20-4-0-R	PIERCE, KATHLEEN J ET AL TRS CCR TRUST	575 MAIN ST	575 MAIN ST	MASHPEE	MA	02649
526	20-24-0-R	CUSHMAN, WESTERVELT F TR L & N REALTY TRUST	544 MAIN ST	3 COTTER STREET	CANTON	MA	02021
527	20-25-0-R	MCGEE, PAUL R TRUSTEE ECHO ROAD REALTY TRUST	10 ECHO RD	35 MARWAY	MASHPEE	MA	02649
528	20-26-0-R	DEPAUL, DIANE TRUSTEE EAGLE REALTY TRUST	16 ECHO RD	80 GOLD LEAF LN	MASHPEE	MA	02649
531	20-30-0-R	TIEXEIRA, DOMINGO PINA JR & TIEXEIRA JANET C	567 MAIN ST	P O BOX 55	MASHPEE	MA	02649
532	20-31-0-R	DESROSIERS, HENRY P	561 MAIN ST	561 MAIN ST	MASHPEE	MA	02649
555	20-3A-0-R	MENDES, KEITH S & VANESSA D	587 MAIN ST	587 MAIN ST	MASHPEE	MA	02649
556	20-3B-0-R	WILSON, THOMAS D & LYNN E	581 MAIN ST	581 MAIN ST	MASHPEE	MA	02649
547	20-47-0-R	OBRIEN GEORGE F III TRST GEMARKO NOMINEE TRUST	11 ECHO RD	281 GREAT WESTERN RD	SOUTH DENNIS	MA	02660
550	20-50-0-E	THE MAY INSTITUTE INC	550 MAIN ST	14 PACELLA PARK DRIVE	RANDOLPH	MA	02368
1013	25-1-0-E	UNITED STATES OF AMERICA	0 OTIS AIR BASE	HEADQUARTERS 102D FIGHTER WING	OTIS ANGB	MA	02542-1330
		DEPT OF THE AIR FORCE		MASS AIR NATIONAL GUARD	_ // 0 / 11/00	WIA	0E07E-1000

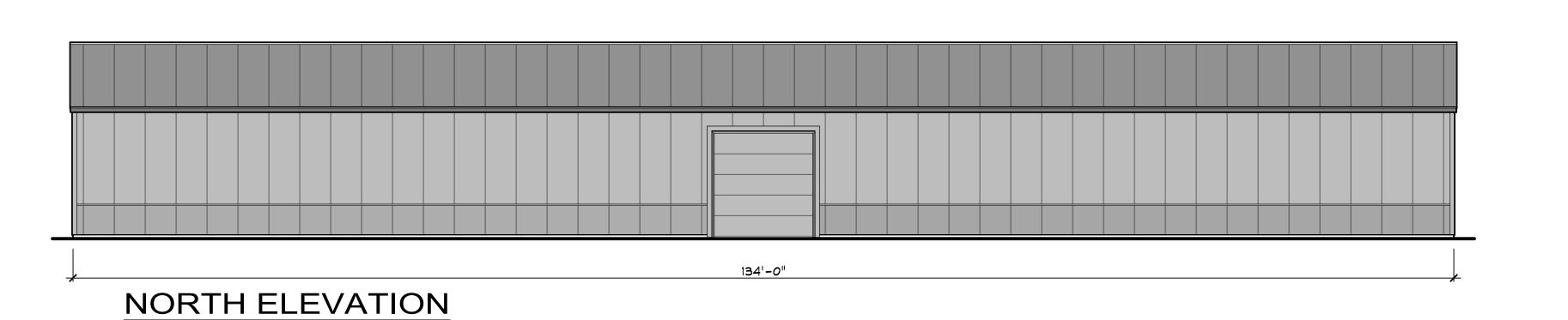


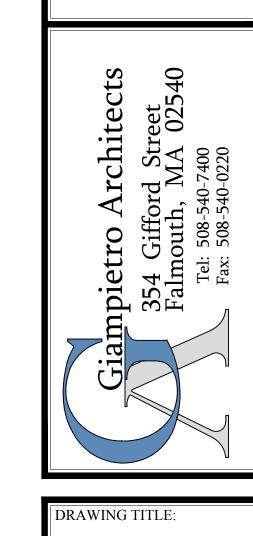




SCALE: 1/8" = 1'-0"







DRAWING TITLE:

ELEVATIONS

DRAWN BY: 

JJM.

CHECKED BY: 

RPC

DATE: 6/12/2019

REVISIONS:

PROJECT No. 

1924

THIS DRAWING IS PART OF A COMPLETE ARCHITECTURAL SET. THERE IS INFORMATION PERTAINING TO THIS DRAWING ON OTHER SHEETS. REFER TO TI FOR COMPLETE SHEET LIST. DO NOT DO TAKE OFFS, BIDDING OR CONSTRUCTION ON THIS STRUCTURE WITHOUT A COMPLETE SET.

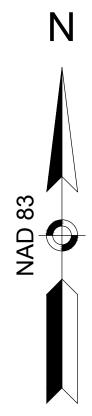
A1

SHEET No.

SCHEMATIC DESIGN

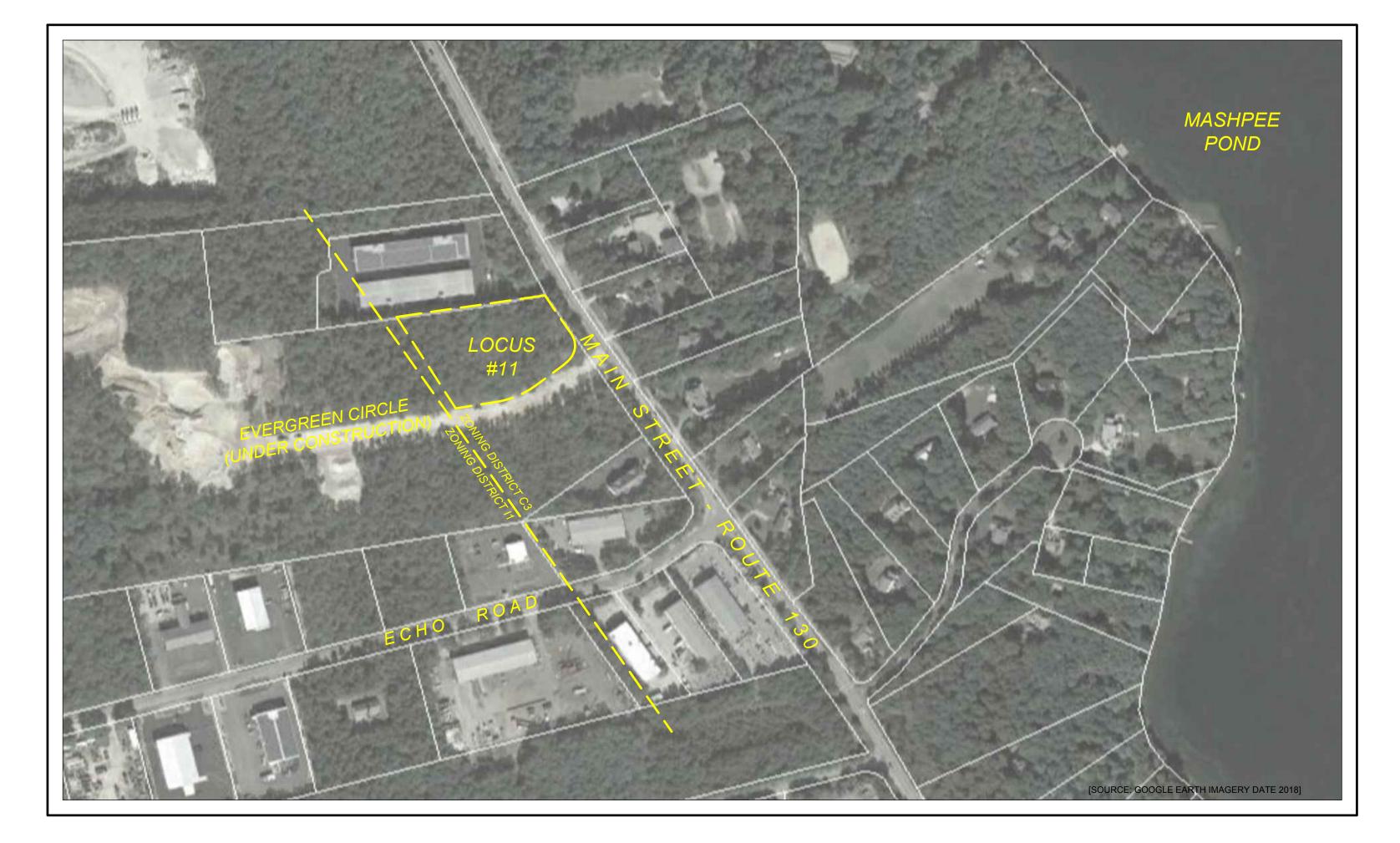


LOCUS MAP NOT TO SCALE



## LEGEND

LEGEND	
	CONCRETE BOUND
~-	STONE BOUND ROD CAP
©IP	IRON PIPE FOUND
①	TELEPHONE MANHOLE
	UNKNOWN MANHOLE
	CABLE TV MANHOLE METAL COVER
#	
	WATER SHUTOFF
· ·	WATERGATE
<b>®</b>	
₩ ©	WATER METER PIT GAS GATE
	CATCH BASIN SQUARE
	CATCH BASIN ROUND
	TRAFFIC CONTROL BOX
÷	TRAFFIC SIGNAL UTILITY POLE
<u> </u>	GUY POLE
←	GUY WIRE
	LIGHT POLE
	ELECTRIC HANDHOLE TELEPHONE HANDHOLE
☐ CHH	CABLE TV HANDHOLE
	UNKNOWN HANDHOLE
<del>v</del>	
	FLAGPOLE TREE
	CONIFEROUS TREE DESIDUOUS TREE
~	CONIFEROUS SHRUB
_	ELECTRIC METER
	SEWER CLEANOUT
⑤ □	SEWER MANHOLE D-BOX
	SEPTIC VENT
	UNKNOWN HANDHOLE
	SEWER MANHOLE
	DRAIN MANHOLE LIGHT POST
0	
<b></b>	
CATV—	
SD	STORM DRAIN
DD	DRAIN LINE
EE	ELECTRIC LINE
OEOE	OVERHEAD ELECTRIC
UFUF	UNDERGROUND ELECTRIC
E/T/C	
G G IR	GAS LINE
FM	SEMED FORCE MAIN
SS	SANITARY SEWER LINE
T	TELEPHONE LINE
OT	OVERHEAD TELEPHONE LINE
T/C	TELEPHONE / CABLE TV FIRE PROTECTION WATER SERVICE
W	WATER LINE
——— WET—————————————————————————————————	WETLAND LINE
——————————————————————————————————————	FWR-A ZONE
	FWR-V ZONE
———— FZ— — ——	FLOOD ZONE
——————————————————————————————————————	
xxx	PICKET ROW
xxxx	CHAINLINK FENCE
_ 0 0 0 0 0 0 0 0 0 0	GUARDRAIL
LOW	
	HAYBALE KUW



# PROPOSED SITE DEVELOPMENT AT LOT A, 11 EVERGREEN CIRCLE

MASHPEE, MASSACHUSETTS

## ZONING COMPLIANCE TABLE

ZONING DISTRICT: INDUSTRIAL C3 (LOCUS)

REQUIRED NUMBER OF ACCESSIBLE SPACES (A.A.B. 521 CMR 23.2.1)

PROPOSED NUMBER OF ACCESSIBLE SPACES

ABUTTING ZONING DISTRICTS: INDUSTRIAL I1 TO SOUTH & WEST, AND COMMERCIAL C3 TO THE EAST AND NORTH

= 2 SPACES

= 2 SPACES

REQUIRED CRITERIA EXISTING / PROPOSED MINIMUM LOT AREA 81,243+/- S.F. 40,000 S.F. MINIMUM LOT FRONTAGE 200 FT. 548.52 FT. FRONT YARD SETBACK 75 FT. 85 & 101 FT. SIDE YARD SETBACK 20 FT. 104 FT. REAR YARD SETBACK 20 FT. 44 FT. MAXIMUM LOT COVERAGE BY STRUCTURES 25% 9% 2 1/2 STORIES 1 STORY MAXIMUM BUILDING HEIGHT PARKING REQUIREMENTS: §1740-39 - RETAIL USE RETAIL USE = 1 SPACE PER 150 S.F. REQUIRED SPACES = 3,000 / 150 = 20 SPACES OFFICE USE = 1 SPACE PER 300 S.F. REQUIRED SPACES = 2,000 / 300 = 7 SPACES WAREHOUSE USE = 1 SPACE PER 900 S.F. REQUIRED SPACES = 4,212 / 900 = 5 SPACES REQUIRED ON-SITE TOTAL PARKING SPACES = 32 SPACES PROPOSED ON-SITE TOTAL PARKING SPACES = 32 SPACES

## **GENERAL NOTES**

LOCATIONS ARE BASED ON AN "ON THE GROUND" INSTRUMENT SURVEY AND ELEVATIONS BASED ON THE NAVD 1988 DATUM. COORDINATE SYSTEM USED IS THE MA-MAINLAND COORDINATE SYSTEM, DATUM: NAD 83, UNITS: U.S. SURVEY FEET.

ZONING DISTRICT: C-3 AND LIGHT INDUSTRIAL OVERLAY DISTRICT

PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION OF NON-HAZARD X BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 25001C0751J, WITH A MAP EFFECTIVE DATE OF JULY 16, 2014.

THIS LOT IS NOT LOCATED WITHIN A DEP APPROVED ZONE II WELLHEAD PROTECTION AREA.

THIS LOT IS NOT MAPPED WITHIN A MESA NATURAL HERITAGE AND ENDANGERED SPECIES AREA.

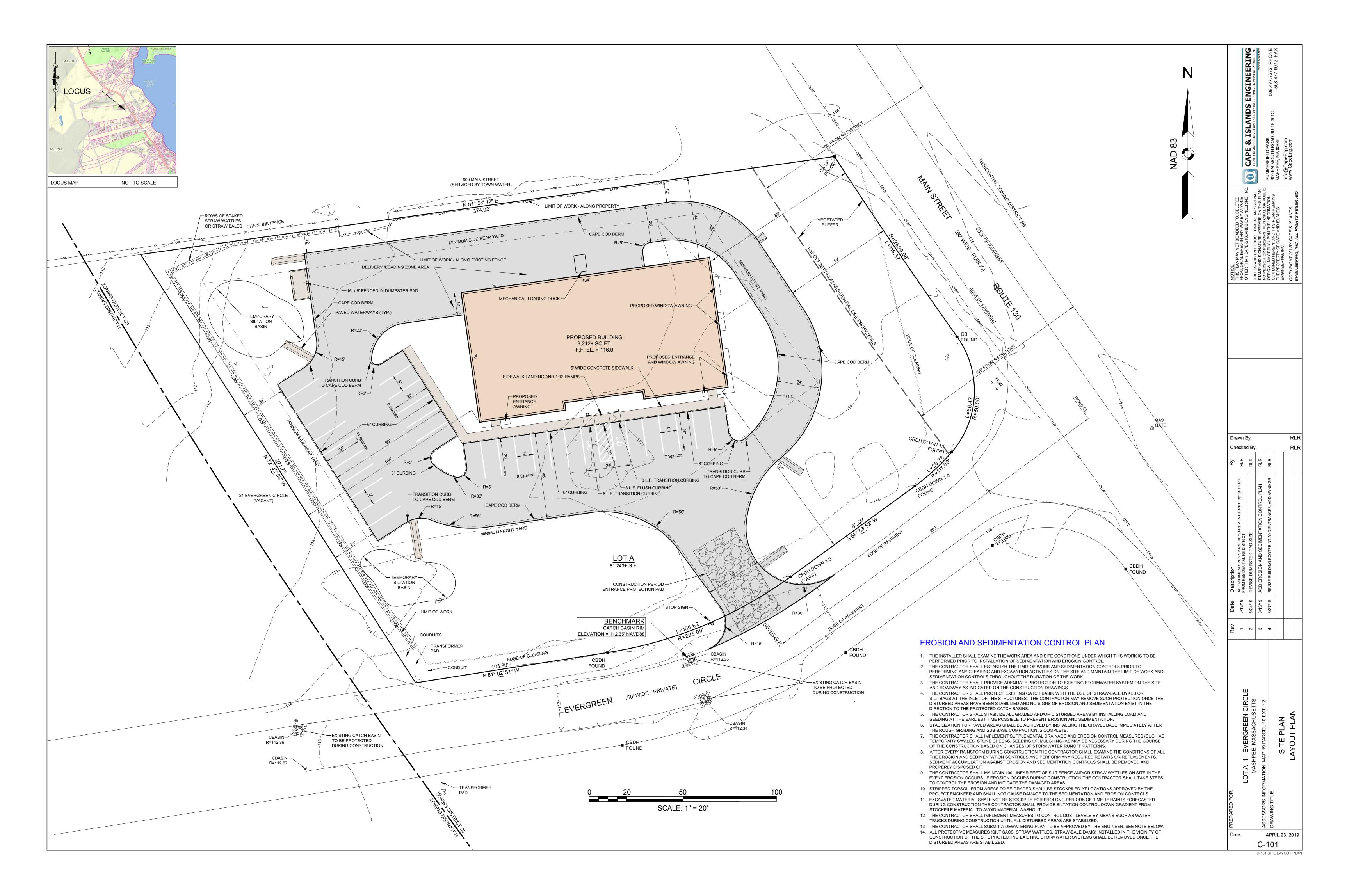
LOT COVERAGE: LOT AREA = 81,243+/- S.F.

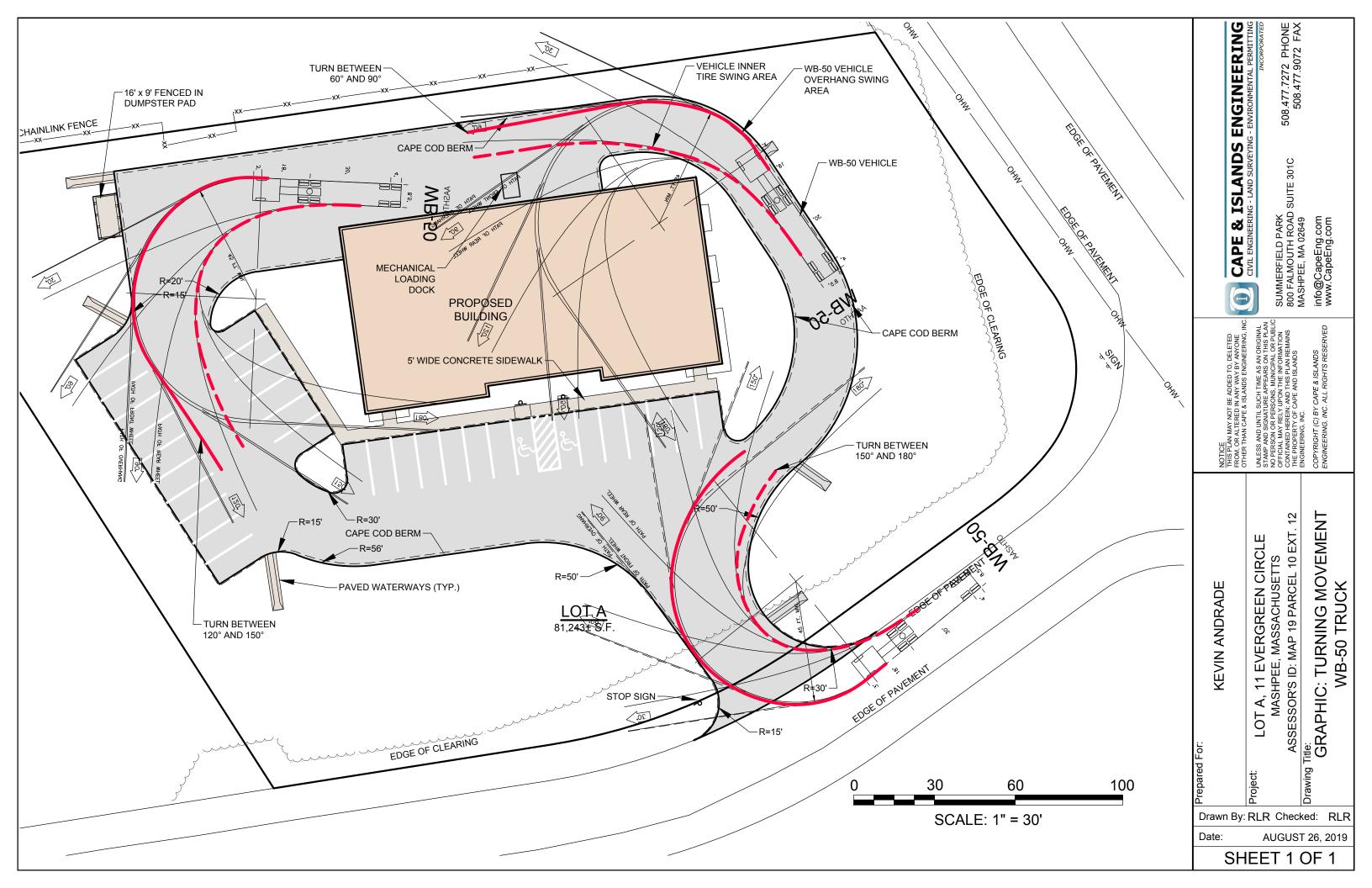
DEED REFERENCE: BOOK 29541-136 PLAN REFERENCE: BOOK 567 PAGE 75

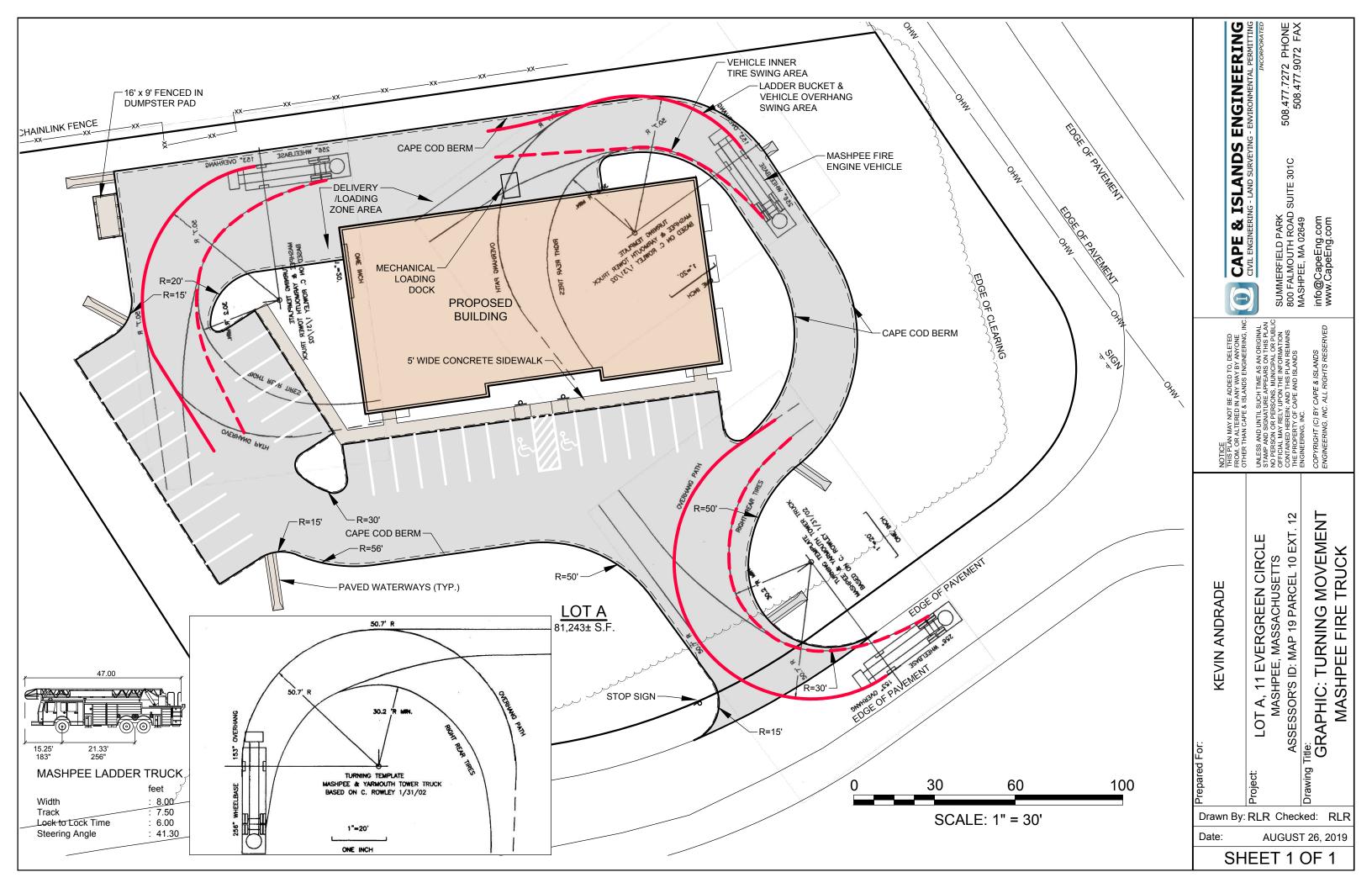
OWNER: EVERGREEN ENERGY, LLC 81 ECHO ROAD, MASHPEE, MA 02649

Sheet List Table						
Sheet Number	Sheet Title					
G-101	COVER SHEET					
C-101	LAYOUT PLAN					
C-121	GRADING & UTILITIES PLAN					
L-101	LANDSCAPE PLAN					
C-501	CONSTRUCTION DETAILS					
C-502	CONSTRUCTION DETAILS					

Da	PREPARED FOR:	Rev	Date	Description	By g		NOTICE	
te:	LOT A 11 EVED CIBEL	~	5/24/19	REVISE SHEETS C-101, C121 AND L-101	RLR	awn ecke		
	MASHPEF MASSACHUSETTS	2	6/13/19	REVISE SHEETS C-101	RLR RLR		<u>ن</u>	CAPE & ISLANI CIVIL ENGINEERING - LAND SUR
	ASSESSORS INFORMATION: MAD 19 DARCEI 10 EXT 12	က	8/27/19	REVISE SHEETS C-101		<u></u>	UNLESS AND ON IL SOCH IME AS AN ORIGINAL STAMP AND SIGMATURE APPEARS ON THIS PLAN NO PEPSONS MINICIPAL OP DI IRI IC	
APF	DRAWING TITLE:							SUMMERFIELD PARK
RIL 2	SITE PLAN							MASHPEE, MA 02649
23, 20							CAPE & ISLANDS	info@CapeEng.com www.CapeEng.com
019						RLI	ERVED	-







## WATER QUALITY REPORT

to accompany application to approve a Definitive Plan entitled

"DEFINITIVE SUBDIVISION PLAN EVERGREEN CIRCLE prepared for EVERGREEN INDUSTRIAL PARK #588 MAIN Street (Route 130)

(Assessors Map 19 Parcel 10 in Mashpee MA. Scale 1" = 100' date: Aug 14, 2017"

August 2017

Applicant:

Evergreen Energy LLC

81 Echo Road, Mashpee, MA 02649

Our Job No.: 217077

Prepared by:

holmes and mcgrath, inc.

civil engineers and land surveyors

205 worcester court · suite a4 · falmouth, ma · 02540 508-548-3564 · 800-874-7373 · fax 508-548-9672

mmcgrath@holmesandmcgrath.com

Michael B. McGrath,

Re: Water Quality Impacts

When an applicant files a definite subdivision plan with the Planning Board, the Town requires a Water Quality Report be filed with the Board of Health. In 2010, the Cape Cod Commission reviewed and approved with conditions a Preliminary Plan filed by the Cape Cod Cooperative Bank for the Rhiannon's Way commercial subdivision. The project was never developed. A definitive plan is now being filed by Evergreen Energy LLC. Figure 1 shows the location of the project. Figure 2 is a copy of the subdivision plan. This report will incorporate the information developed in the Cape Cod Commission Hardship Exemption Decision attached in Appendix A.

This project is required to file this assessment since it is filing a definitive plan. The project also lies partially in a Zone II and the parcel lies within a Recharge zone identified in a Massachusetts Estuary project. Figure 3 shows the Recharge Areas described in the MEP studies. The westerly portion of the site lies in a Zone II, or an area that drain to a municipal drinking water well.

The proposed plan being filed is entitled "DEFINITIVE SUBDIVISION PLAN EVERGREEN CIRCLE prepared for EVERGREEN INDUSTRIAL PARK #588 MAIN Street (Route 130) (Assessors Map 19 Parcel 10 in Mashpee MA. Scale 1"= 100' date: Aug 14, 2017". The Evergreen Industrial Park plan shows the same number of building lots as on the 2010 plans but the proposed road, now named Evergreen Circle, is relocated and shorter in length. The lots lie almost entirely out of the Zone II, or the area that may drain to a public drinking water well.

This report describes the nitrogen-loading assessments and assumptions that were the basis on the 2010 Cape Cod Commission approval. In 2010, the Commission found that, subject to certain conditions, that the proposed subdivision project meets the standards for impact on ground water quality as established in the Cape Cod Commissions (CCC) Nitrogen Loading document entitled "Technical Bulletin 91-001." The following narrative briefly describes the site and the nitrogen loading analysis.

#### SITE DESCRIPTION

The existing site is a vacant parcel of land located on Route 130 (Main Street) in Mashpee. The site is approximately 48 acres in area and it is adjacent to Otis Air National Guard Base to the west, commercial and industrial land to the north and south, and Route 130 to the east. The existing site is currently vegetated with pine trees and oak trees dominating the vegetation. A portion of the site has been mapped as part of the Groundwater Protection Overlay District as shown on the Zoning Map of the Town of Mashpee, also corresponding to the DEP Zone II. The site is also located within the Potential Public Water Supply Area (PLAPP) as shown on the latest Cape Cod

Significant Natural Resource Area Map. However, the Mashpee Water District has stated that they have no intention of developing any drinking water wells in this area.

#### PROPOSED SITE CONDITIONS

Evergreen Energy LLC is filing the subdivision plan. The plan shows that 25.3 acres of the westerly portion of the site will be set aside as Open Space. The proposed subdivision is eleven lots on a dead end road entitled Evergreen Circle. The project has two proposed lots along Route 130, on either side of Evergreen Circle, that lie in a Commercial 3 Zoning District. In the Industrial 1 Zoning District there are nine proposed lots. There are six Lots 1 through 3 and Lots 7 through 9 that are conforming lots on both sides of the proposed Evergreen Circle. At the end of the cul-de-sac, there are three large lots, Lots 4, 5 and 6. These lots range in area from 2.54 acres to 4.03 acres.

Open Space "Parcel 1" is the dedicated parcel for open space and is located on the back half of the property coinciding with the DEP Zone II and Groundwater Protection Overlay District. Since Evergreen Energy, LLC is selling the lots, there are no exact and precise proposed developments for each lot. The impact of the future development can be assessed by assuming that each lot will serve one 10,000 square foot building. This is the maximum footprint that can be proposed without the new buildings being referred to the Cape Cod Commission. When the individual lots are developed, additional town zoning requirements will require additional mitigation. Further the Town Board of Health Regulations require that new buildings with a design flow over 600 gallons per day must have advanced innovative wastewater treatment and the final effluent must have final concentration of Total Nitrogen below 10 milligrams per liter of Total Nitrogen. When those lots are developed in the future the Town of Mashpee regulations require the developments to provide stormwater treatment facilities on-site Evergreen Circle will be serviced by stormwater treatment systems that include vegetated basins for storm runoff quality treatment.

Graded areas along the roadway are proposed to be loam and seeded. As is typical for road routine maintenance, this road will not include fertilizer application on the road shoulders. Also, the Town of Mashpee regulations require a 75-foot front yard for structures and parking areas and this yards shall be preserved in a natural state as much possible. This requirement renders most of the land adjacent to the proposed road to be in a natural state. Therefore the potential nitrogen sources for the road development will not include fertilizer application. By averaging existing commercial and industrial developed sites in town the proposed parking and paved driveway areas can be estimated to be 340% of the building footprint for each site. Most of the nitrogen source will be from the paved surface at a rate of 1.5 milligrams per liter as indicated by the Cape Cod Commission Technical bulletin. Drainage runoff from the road will be collected, treated and leached into the ground within the site in a vegetate drainage basin. Surface runoff within the developed area is conveyed into a closed drainage system that discharges into a vegetated drainage basin and eventually into a subsurface leaching system. As in

previous projects the use of a vegetated basin as treatment to stormwater is assigned a nitrogen reduction credit of 25%.

For the purpose of nitrogen loading the analysis is based following the Cape Cod Commission Technical Bulleting 91-001 and considers the "proposed subdivision build-out conditions" with two commercial sites and nine industrial sites. In addition, the analysis is compared with the potential nitrogen loading resulting from the "previously approved subdivision/residential project build-out conditions" on this site.

For the potential build-out conditions we assume that the building footprint will be 10,000 square feet in area. The driveway and parking area is calculated as 34,000 square feet per lot. Landscaping and lawn area is calculated at 5,000 square feet per lot. These same assumptions for the industrial and commercial lots are used for the current proposed subdivision and for the previously approved 40B project on this site. It is important to note that the presumptions noted here are conservative in nature. The residential development, as previously approved, included a total of 240 bedrooms (2 bedrooms per unit) and a wastewater treatment system subject to a DEP groundwater discharge permit (10-ppm-N loading). A series of driveways and parking areas was proposed to service the development covering approximately 110,000 sq. ft. The main road as proposed then was approximately 2,600 lineal feet and 22-feet wide. The development areas for the previously approved project were obtained from plans of record at the Town of Mashpee.

The previously approved proposal on the site included two commercial lots, two industrial lots and the 40B residential development. The calculations for nitrogen loading will consider the limitations to the wastewater from commercial and industrial developments with design flows not to exceed 600 gpd since the Town of Mashpee requires enhanced treatment to flows oved 600 gpd with a effluent nitrogen concentration of 35 mg/l. The analysis incorporates a treatment level equal to 10 ppm-N for septic technologies for the residential use as required by the Town. The overall nitrogen loading is about 3.9 mg/l or 32.6 pounds per year per acre. The following section describes the presumptions for the proposed build-out condition of the site.

#### **NITROGEN LOADING RESULTS**

Nitrogen loading calculations are described as what is the overall average concentration of Total Nitrogen in the groundwater. There may be certain areas in the water table downstream from the project that might have higher concentrations of dissolved Total Nitrogen, than predicted. This estimation tool does not assess the mixing and diffusion of the dissolved nitrogen in the ground water. The assessment also assumes that the nitrogen does attenuate over time. Attenuation is the microbial uptake and denitrification or loss of dissolved nitrogen caused by the soil micro-organisms in the groundwater as the groundwater moves down stream.

Similarly comparing the Nitrogen calculation for the proposed definitive subdivision for eleven lots (9 industrial and 2 commercial) in the Evergreen Circle project we obtain an overall average concentration of Total Nitrogen of 3.01 mg/l or 21.4 pounds per year per acre. Should all the proposed eleven lots include sanitary design flows of 1,000 gpd which due to being in excess of 600 gpd requires enhanced nitrogen removal systems, the expected overall average concentration of Total Nitrogen of the current project is 3.3 mg/l or 24.7 pounds per year per acre. This project then has an estimated nitrogen impact of about 76% to 65% of the formerly approved impacts from the 40B project. Furthermore, should the proposed Evergreen Circle development include enhanced nitrogen removal systems with 10 mg/l effluent concentration similar to the approved for the 40B residential project the nitrogen impact is 1.6 mg/l or 12.2 pounds per year per acre or 37% of the impacts approved for the 40B project.

#### 1. <u>Development location in relation to Zone II and other regulated areas?</u>

As noted above, the property is partially located within a DEP approved Zone II however the subdivision project is concentrated outside the Zone II mapped area. The property is not located within 300-feet of the rivers or streams. The property is located within the watershed of two rivers: Quashnet River and Mashpee River.

#### 2. Will the Project discharge any hazardous or toxic materials?

Since Evergreen Energy, LLC is selling the lots, there are no exact and precise proposed developments for each lot. Each development will have to meet the standards in the Sanitary Code, the Town of Mashpee regulations and the DEP standards for the handling of hazardous waste. There should be no discharge of these substances on site. In addition, though the Cape Cod Commission Development of Regional Impact (DRI) the project was reviewed for Hazardous Waste Management and conditions are in place under their approved permit (Decision DRI/HDEX-11008). Refer to enclosed Cape Cod Commission decision sheet 49 of 50 attached conditions

#### 3. Will the project discharge runoff or siltation into any wetland?

There are no wetlands on site nor within on-hundred feet of the site. Storm runoff will be collected and discharged into the ground on site.

#### 4. What are the pound on nitrogen and phosphorous discharged onto the site;

The estimated nitrogen load in pounds is between 12.1 to 24.7 pounds of nitrogen per year per acre. According to the Cape Cod Commission approved decision DRI/HDEX-11008, there will be a Nitrogen offset fee for nitrogen loading for the loading exceeding 0.74 kg TN per acre per year. The fee is calculated as \$1,550 per kilogram TN

per year. The nitrogen loading offset fee is available to the Town to reduce dissolved Total Nitrogen.

The dissolved phosphorous generated on site will be chemically adsorbed to the sand particles in the soils. Since there is about 50 feet to the groundwater from the bottom of the soil absorption system to the groundwater, and since we find that when we dose wastewater onto three vertical feet of sands in RUCK filters, that the dissolved phosphorous is stored for seven years, that there is over one hundred years of phosphorous storage in the intervening vertical sands above the water table. In the water table, there are also capture sites on the sand particles. Therefore phosphorous will not leave the site for many years.

#### 5. The existing condition of the receiving waters.

The MEP studies identify that both the Upper Mashpee River and the Upper Quashnet River as stressed from excessive dissolved nitrogen draining into those estuaries.

# 6. What is the expected change in the condition of the water body as a result of the proposed development?

There are many existing houses and other land uses discharging nitrogen into the ground in the areas that drain to the Upper Quashnet River and the Upper Mashpee River. The project is far enough away that there should be some attenuation or microbially driven loss of dissolved nitrogen in the environment as the discharged effluent travels vertically through the vadose zone and then travels horizontally in the groundwater. In 2009, the Water Environment Research Foundation (WERF) published a report entitled "Influent Constituent Characteristics of the Modern Waste Stream from Single Sources" by Kathryn Lowe et al. (The 2009 Septic Tank Study). This 2009 Septic Tank Study studied the constituents in septic tank effluent in three different states: Florida, Colorado and Minnesota. As described in Table B-19 in that report, the dissolved Total Nitrogen in Septic Tank Effluent had a mean concentration value of 64 mg/l.

More importantly, this study characterized the source of Total Nitrogen in the septic tank effluent. I enclose a copy of Figure D19 and D-20. From 25% to 35% of the mass of Total Nitrogen came from Laundry and Dishwater. The basis of the Massachusetts models is an estimate of mass loading of what nitrogen humans excrete divided by the average water usage. So the actual nitrogen loading is more from actual septic tank effluent than assumed over twenty years ago.

If we use the WERF concentration of 63 mg/l of Total Nitrogen being discharged from a septic tank then the expected concentration of dissolved Total Nitrogen in the ground water will be 44 mg/l (or a 30% loss in the vadose zone). This value, based on

real data, is over 180% more Total Nitrogen being discharged than assumed in the MEP studies.

If the Town arranges for significant removal of the dissolved Total Nitrogen in the septic system discharge in the intervening houses and other buildings, the actual removal of Total Nitrogen from each house or facility will be much greater than assumed. Then, the Total Nitrogen discharged on site will have no measurable impact on the Quashnet River or on the Upper Mashpee River watershed.

# 7. The comparison of a Total Kilograms and Total Kilograms per Acre established by the MEP studies.

According to the MEP studies, the project will have impacts on Waquoit Bay through the Upper Quashnet River and also impacts on Popponesset Bay through the Mashpee River. Neither report describes an acceptable loading per acre. The MEP studies identify that both the Waquoit Bay and Popponesset Bay as stressed from excessive dissolved nitrogen draining into those estuaries.

The project is beyond the ten year travel time before the groundwater enters the Quashnet River. The MEP Study for Waquoit Bay identifies two different scenarios for nitrogen reduction for the Quashnet River. The target reduction of Total Nitrogen has to be between 36% to 53% of the total expected loading (67% septic loading reduction). The MEP study assumes that the project land is developed. So some nitrogen loading is included from the project. The reduction of Total Nitrogen by the use of innovative and alternative denitrifying septic systems is an appropriate and reasonable step to protect the upper Quashnet River and Waquoit Bay.

The project is beyond the ten year travel time before the groundwater enters the Mashpee River. The MEP Study for Popponesset Bay identifies a total septic reduction of the Mashpee River, in one alternative as 100% reduction. However, the reduction is 41% of the Total Nitrogen in the river waters an all the water that rains into the river. The MEP study assumes that the project land is developed. So some nitrogen loading is included from the project. The reduction of Total Nitrogen by the use of innovative and alternative denitrifying septic systems is an appropriate and reasonable step to protect the Popponesset Bay.

#### 8. Monitoring wells

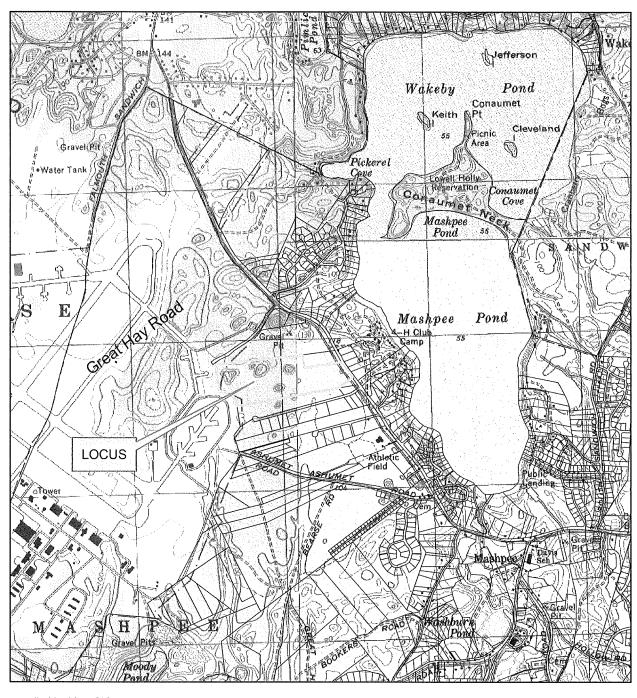
No monitoring wells exist. We ask the Town to waive that requirement.

If you need additional information or have any questions or comments, do not hesitate to call our office.

#### **Enclosures:**

- 1 Display Plan USGS
- 2 Display Plan MEP Watershed Regulated Areas
- 3 Definitive Subdivision Overall Plan
- 4 Hazardous Waste Management Conditions from Cape Cod Commission Decision (page 49 of 50)
- 5 Table B-19, Figure D19 and Figure D20
- 6 Nitrogen Calculations (Proposed at 35, 25 and 10 mg/l sanitary concentrations) and Previously approved 40B development at 10 mg/l for residential sanitary concentration and 25 mg/l for commercial sanitary concentration)
- 7 Preliminary Plans for formerly Rhiannon's Way (sheets 1, 2 and 3)
- 8 Previously Approved Subdivision Plans for 40B development (sheets 1, 2, 3 and 11)
- 9 Definitive Subdivision Plan Evergreen Circle.





Planimetric data was supplied by MassGIS.

Note: This information is intended for reference purposes only. No responsibility is assumed for damages or other liabilities due to the accuracy, availability, use or misuse of the information herein provided.

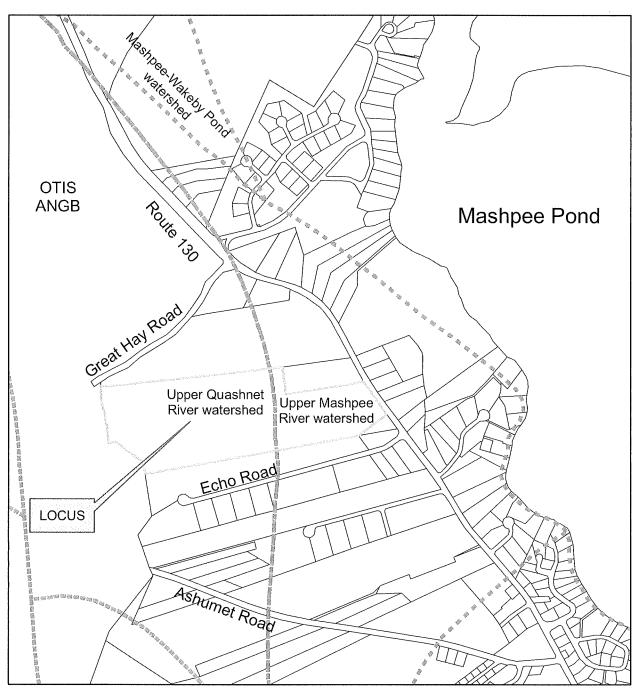
Display Plan - USGS in Mashpee, MA Scale: 1:25,000



civil engineers and land surveyors 205 worcester court-suite a4-falmouth, ma-02540 508-548-3564 · 800-874-7373 · fax 508-548-9678 rhivera@holmesandmograth.com

0 1,041.5 2,083 4,166 6,249 Feet





Planimetric data was supplied by MassGIS.

Note: This information is intended for reference purposes only. No responsibility is assumed for damages or other liabilities due to the accuracy, availability, use or misuse of the information herein provided.

Display Plan -MEP Watersheds Regulated Areas in

Mashpee, MA Scale: 1:12,000



205 worcester court suite a4 falmouth, ma 02540 508-548-3564 800-874-7373 fax 508-548-9672 mmcgrath@holmesandmcgrath.com

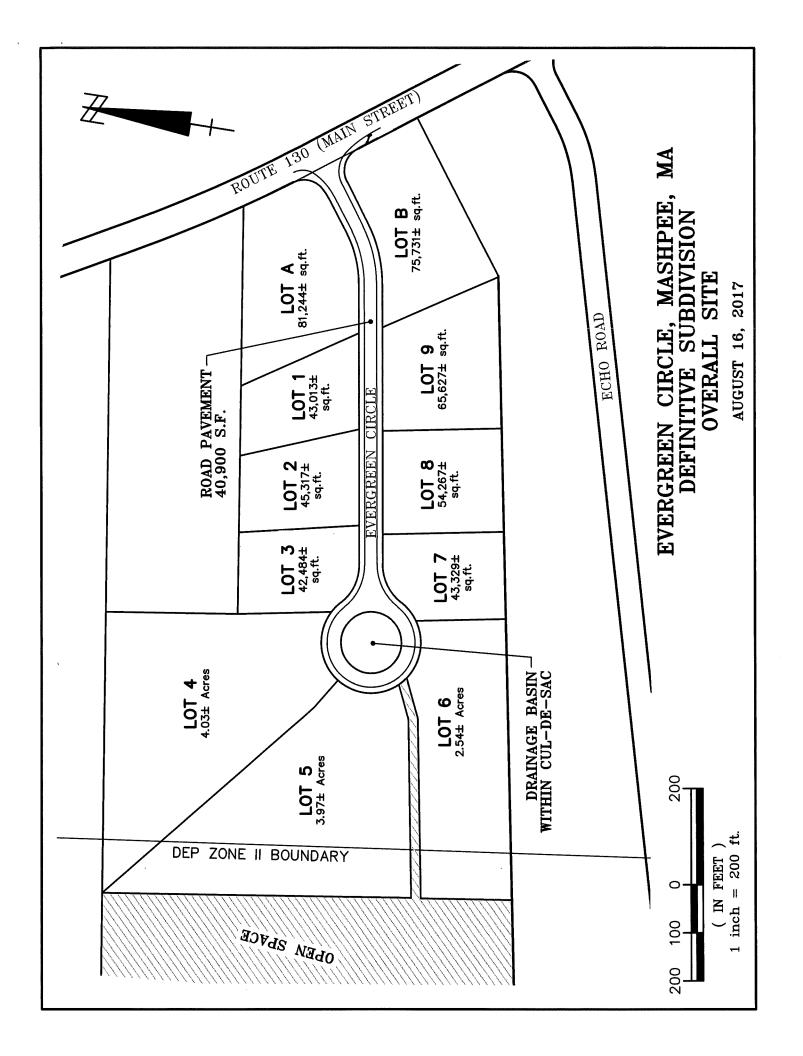
2,000

3,000

Legend 0 500 1,000

MEP BOUNDARY - EASTERN WAQUOIT BAY

MEP BOUNDARY - POPPONNESET BAY



shall submit for Commission staff review the proposed building type and size, the peak hour trips based on the Institute of Transportation Engineers *Trip Generation* manual or its equivalency.

TC2. Prior to issuance by the Commission of a Final Certificate of Compliance for any lot and prior to issuance of Certificate of Use/Occupancy for any lot by the Town of Mashpee, the Applicant shall pay fair-share mitigation costs based on the number of peak hour trips estimated in condition TC1 and the following schedule:

Proposed Development	Cost Per Peak Hour Trip
Restaurant	\$2,137
Specialty Retail	\$1,675
Medical Office	\$2,583
Industrial	\$3,147

**Hazardous Waste Management Conditions** 

HAZWC1. Development and redevelopment on those portions of Lot 5 and Lot 6 that is located in the Wellhead Protection District that involves the use, treatment, generation, handling, storage, or disposal of Hazardous Wastes, with the exception of Household Quantities or less of Hazardous Waste, as defined by the RPP, shall not be allowed on site. For the purposes of this condition, Hazardous Waste shall be defined as any Hazardous Waste, Universal Waste or Waste as defined in the Massachusetts Hazardous Waste Regulations, 310 CMR 30.000. Hazardous Wastes shall not include Hazardous Materials and bio-medical wastes regulated by 105 CMR 480.000. For the purposes of this condition, a Household Quantity shall be defined as a quantity of Hazardous Waste generated at the Very Small Quantity Generator level as defined in the Massachusetts Hazardous Waste Regulations, 310 CMR 30.000 and which is accumulated or stored in 55 gallons or less at any time on the site.

HAZWFC2. Prior to issuance by the Commission of a Final Certificate of Compliance for any development or redevelopment on Lot 5 and/or Lot 6 that that uses, handles, generates, treats, or stores Hazardous Waste as defined in the Massachusetts Hazardous Waste Regulations, 310 CMR 30.000, and prior to issuance of a Certificate of Use/Occupancy for any development or redevelopment on Lot 5 and/or Lot 6, the Applicant shall provide for Commission staff review and approval:

- (a) a registration with or notification to the Massachusetts Department of Environmental Protection as a generator of Hazardous Waste;
- (b) a written plan or protocol to manage the Hazardous Waste prior to disposal; and(c) a signed contract with a registered, licensed company to dispose of the Hazardous Waste.

Table B-18. Descriptive Statistics for Total Nitrogen in Raw Wastewater.

		Total Nitrogen								
						mg	g/L			
						1st		3rd		
		n	Mean	SD	Min	Quartile	Median	Quartile	Max	IQR
All Sites		63	71	43	9	41	60	92	240	50
Region	Colorado	20	63	35	9	43	59	77	148	34
	Florida	24	73	50	11	36	71	90	240	54
	Minnesota	19	76	43	10	42	57	124	150	82
Season	Fall	16	68	52	10	29	51	116	155	87
	Winter	15	63	28	22	38	60	81	120	44
	Spring	16	67	33	9	48	70	85	139	37
	Summer	16	83	56	23	44	70	119	240	75
Age	<65	39	64	45	9	32	54	81	240	49
	>65	24	82	39	23	52	76	110	155	58
Mines Par	k	6	46	13	24	41	47	52	63	11
Lit Review	,	11	87	45	44	62	63	120	189	58

Table B-19. Descriptive Statistics for Total Nitrogen in STE. Septic Tank Effkient

						Total N	itrogen			
						mg	g/L			
		n	Mean	SD	Min	1st Quartile	Median	3rd Quartile	Max	IQR
All Sites		61	64	21	27	47	63	78	119	31
Region	Colorado	20	69	26	27	50	71	87	119	38
	Florida	24	61	14	38	47	65	72	86	25
	Minnesota	17	62	25	30	46	52	82	118	36
Season	Fall	15	62	26	27	42	59	74	118	32
	Winter	14	70	22	42	51	71	80	119	29
	Spring	16	57	18	27	44	58	70	89	26
	Summer	16	68	20	38	51	67	81	109	30
Age	<65	39	58	20	27	44	52	71	119	27
	>65	22	74	20	27	61	75	86	118	25
Mines Park	Tank 1	6	55	11	45	49	52	61	73	12
	Tank 2	6	51	15	33	43	45	60	74	17
Lit Review		40	58	17	26	46	54	65	124	19

Mean - Average

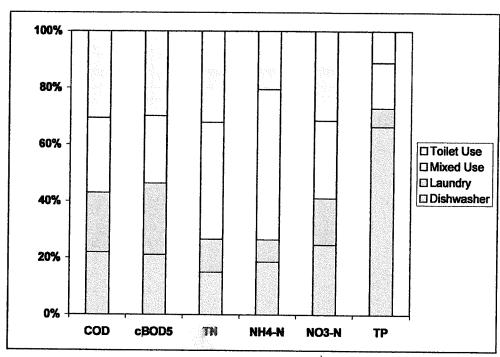


Figure D-19. Percent of Constituent Contributed from Various Water Use Activities during Daily Trend Sampling (Colorado, Three Sites).

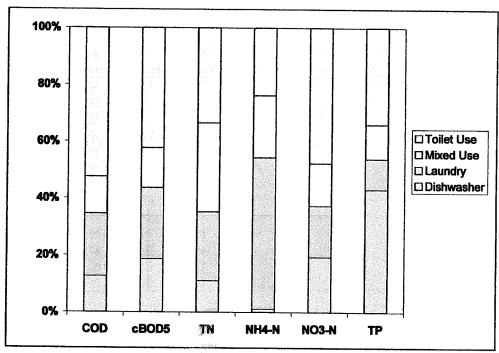


Figure D-20. Percent of Constituent Contributed from Various Water Use Activities during Daily Trend Sampling (Minnesota, Three Sites).

civil engineers and land surveyors 205 worcester court, unit A4 falmouth, ma 02540 Date: 8/17/2017 Job No: 217077

# NITROGEN LOADING CALCULATIONS Evergreen Circle, Mashpee

#### PROPOSED SUBDIVISION BUILD-OUT CONDITIONS

Conversions: 1 year = 365 days, d; 1 c.f. = 28.31685 liters, L; 1 lbs = 454,000 milligram, mg 1 gallon = 3.7854 liters; 1 kg = 1,000,000 mg

#### A) OVERALL DEVELOPMENT FINAL NITROGEN LOAD (ppm) 3.01

#### A1. Overall Development Wastewater Flows

Nitrogen Concentration (NC), flow at 600 gpd =

35 mg/liter

	WF	WRR		
	(gpd)	(L/day)	(mg/day)	
Assumed wastewater flow	6,600	24,984	874,427	

Wastewater Nitrogen Content, WNC = Design Flow \* Nitrogen Concentration

#### A2. Overall Development Impervious Surfaces

Buildings assumed to be one level and just below 10,000 sq.ft. in size

Driveway and parking area as percentage of building size = 340%

Recharge rate, Ri (for impervious) = 40 inches/year Roof nitrogen concentration (RNC) = 0.75 mg/liter Pavement nitrogen concentration (PNC) = 1.5 mg/liter

Vegetated Basin: Reduction Credit (RC) = 25% for all impervious per Mashpee regulations

	Area	SRR	SNC	
Surface	(s.f.)	(L/d)	(mg/d)	
Roofs	110,000	28,449.3	16,003	5.84
Parking & Driveways	374,000	96,727.7	108,819	39.72
Road Pavement	40,900	10,578.0	11,900	4.34 kg/year
	-	135,755	136,722	49.90 kg/year

Surface Recharge Rate, SRR (L/d) = Surface Area \* Recharge Rate

Surface Nitrogen Content, SNC = Surface Recharge Rate \* Nitrogen Concentration

\* (1 - Reduction Credit)

## A3. Overall Development Maintained Lawn & Planting Areas

Planting and lawn area assumed to be in average 5,000 sq.ft. on each property

Fertilizer rate, FR = 3 lbs/1,000 s.f. of lawn per year

Leached percentage, L =

3 108/1,000 s.i. of lawn per ye 25%

	Area	FNC		
Surface	(sq.ft.)	(lbs/d)	(mg/d)	
Lawn & Plantings Areas	55,000	0.1130	51,308	

18.73 kg/year

Nitrogen Content by Fertilizer, FNC = Lawn Area \* Fertilizer Rate \* Leached Percentage

## **A4.** Overall Development Natural Surface

civil engineers and land surveyors 205 worcester court, unit A4 falmouth, ma 02540 Date: 8/17/2017 Job No: 217077

# NITROGEN LOADING CALCULATIONS Evergreen Circle, Mashpee

Recharge Rate, Rn (natural areas - Mashpee) =

19 inches/year

Surface	Area (sq.ft.)	SRR (L/d)
Natural Condition Areas	1,565,980	192,380

Surface Recharge Rate, SRR (L/d) = Surface Area \* Recharge Rate

#### **A5.** Overall Development Summary

Total Recharge Rate,  $RR = WRR + \Sigma SRR =$ 

353,118 L/day

Total Nitrogen Content, NC = WNC+ $\Sigma$  SNC+FNC= 1,062,457 mg/day = 388 kg/year

Total Nitrogen Load in pounds (lbs.) = 854.18 lb/year = 21.35 lbs/year/acre

civil engineers and land surveyors 205 worcester court, unit A4 falmouth, ma 02540 Date: 8/17/2017 Job No: 217077

# NITROGEN LOADING CALCULATIONS Evergreen Circle, Mashpee

**PROPOSED SUBDIVISION BUILD-OUT CONDITIONS** (Alternative sanitary final effluent is 25 mg/l)

Conversions: 1 year = 365 days, d; 1 c.f. = 28.31685 liters, L; 1 lbs = 454,000 milligram, mg 1 gallon = 3.7854 liters; 1 kg = 1,000,000 mg

#### A) OVERALL DEVELOPMENT FINAL NITROGEN LOAD (ppm) 3.32

#### A1. Overall Development Wastewater Flows

Nitrogen Concentration (NC), flow at 1,000 gpd =

25 mg/liter

	WF	WRR			
	(gpd)	(L/day)	(mg/day)		
Assumed wastewater flow	11,000	41,639	1,040,985		

Wastewater Nitrogen Content, WNC = Design Flow \* Nitrogen Concentration

#### A2. Overall Development Impervious Surfaces

Buildings assumed to be one level and just below 10,000 sq.ft. in size

Driveway and parking area as percentage of building size = 340%

Recharge rate, Ri (for impervious) = 40 inches/year Roof nitrogen concentration (RNC) = 0.75 mg/liter

Pavement nitrogen concentration (PNC) = 1.5 mg/liter

Vegetated Basin: Reduction Credit (RC) = 25% for all impervious per Mashpee regulations

	Area	SRR	SNC	
Surface	(s.f.)	(L/d)	(mg/d)	
Roofs	110,000	28,449.3	16,003	5.84
Parking & Driveways	374,000	96,727.7	108,819	39.72
Road Pavement	40,900	10,578.0	11,900	4.34 kg/year
		135,755	136,722	49.90 kg/year

Surface Recharge Rate, SRR (L/d) = Surface Area \* Recharge Rate

Surface Nitrogen Content, SNC = Surface Recharge Rate \* Nitrogen Concentration

\* (1 - Reduction Credit)

## A3. Overall Development Maintained Lawn & Planting Areas

Area

(sq.ft.)

55,000

Planting and lawn area assumed to be in average 5,000 sq.ft. on each property

Fertilizer rate, FR = 3 lbs/1,000 s.f. of lawn per year

Leached percentage, L =

Surface

Lawn & Plantings Areas

25%

FNC (lbs/d) (mg/d)

51,308

18.73 kg/year

Nitrogen Content by Fertilizer, FNC = Lawn Area \* Fertilizer Rate \* Leached Percentage

0.1130

## A4. Overall Development Natural Surface

civil engineers and land surveyors 205 worcester court, unit A4 falmouth, ma 02540 Date: 8/17/2017 Job No: 217077

449 kg/year

#### NITROGEN LOADING CALCULATIONS Evergreen Circle, Mashpee

Recharge Rate, Rn (natural areas - Mashpee) =

19 inches/year

	Area	SRR
Surface	(sq.ft.)	(L/d)
Natural Condition Areas	1,565,980	192,380

Surface Recharge Rate, SRR (L/d) = Surface Area \* Recharge Rate

#### **A5.** Overall Development Summary

Total Recharge Rate,  $RR = WRR + \Sigma SRR =$ 

369,774 L/day

Total Nitrogen Content, NC =WNC+ $\Sigma$  SNC+FNC= 1,229,015 mg/day =

Total Nitrogen Load in pounds (lbs.) = 988.08 lb/year = 24.70 lbs/year/acre

civil engineers and land surveyors 205 worcester court, unit A4 falmouth, ma 02540 Date: 8/17/2017 Job No: 217077

# NITROGEN LOADING CALCULATIONS Evergreen Circle, Mashpee

**PROPOSED SUBDIVISION BUILD-OUT CONDITIONS** (Alternative sanitary final effluent is 10 mg/l)

Conversions: 1 year = 365 days, d; 1 c.f. = 28.31685 liters, L; 1 lbs = 454,000 milligram, mg 1 gallon = 3.7854 liters; 1 kg = 1,000,000 mg

#### A) OVERALL DEVELOPMENT FINAL NITROGEN LOAD (ppm) 1.63

#### A1. Overall Development Wastewater Flows

Nitrogen Concentration (NC), flow at 1,000 gpd =

mg/liter

10

	WRR		WNC
	(gpd)	(L/day)	(mg/day)
Assumed wastewater flow	11,000	41,639	416,394

Wastewater Nitrogen Content, WNC = Design Flow \* Nitrogen Concentration

#### A2. Overall Development Impervious Surfaces

Buildings assumed to be one level and just below 10,000 sq.ft. in size

Driveway and parking area as percentage of building size = 340%

Recharge rate, Ri (for impervious) = 40 inches/year
Roof nitrogen concentration (RNC) = 0.75 mg/liter
Pavement nitrogen concentration (PNC) = 1.5 mg/liter

Vegetated Basin: Reduction Credit (RC) = 25% for all impervious per Mashpee regulations

	Area	SRR	SNC	
Surface	(s.f.)	(L/d)	(mg/d)	
Roofs	110,000	28,449.3	16,003	5.84
Parking & Driveways	374,000	96,727.7	108,819	39.72
Road Pavement	40,900	10,578.0	11,900	4.34 kg/year
		135,755	136,722	49.90 kg/year

Surface Recharge Rate, SRR (L/d) = Surface Area \* Recharge Rate

Surface Nitrogen Content, SNC = Surface Recharge Rate \* Nitrogen Concentration

\* (1 - Reduction Credit)

#### A3. Overall Development Maintained Lawn & Planting Areas

Planting and lawn area assumed to be in average 5,000 sq.ft. on each property

Fertilizer rate, FR = 3 lbs/1,000 s.f. of lawn

Leached percentage, L = 2

3 lbs/1,000 s.f. of lawn per year 25%

 Surface
 Area (sq.ft.)
 FNC (lbs/d)
 (mg/d)

 Lawn & Plantings Areas
 55,000
 0.1130
 51,308

18.73 kg/year

Nitrogen Content by Fertilizer, FNC = Lawn Area \* Fertilizer Rate \* Leached Percentage

## A4. Overall Development Natural Surface

civil engineers and land surveyors 205 worcester court, unit A4 falmouth, ma 02540 Date: 8/17/2017 Job No: 217077

# NITROGEN LOADING CALCULATIONS Evergreen Circle, Mashpee

Recharge Rate, Rn (natural areas - Mashpee) =

19 inches/year

Surface	Area (sq.ft.)	SRR (L/d)
Natural Condition Areas	1,565,980	192,380

Surface Recharge Rate, SRR (L/d) = Surface Area \* Recharge Rate

#### **A5.** Overall Development Summary

Total Recharge Rate,  $RR = WRR + \Sigma SRR =$ 

369,774 L/day

Total Nitrogen Content, NC =WNC+Σ SNC+FNC=

604,424 mg/day =

221 kg/year

Total Nitrogen Load in pounds (lbs.) =

485.94 lb/year =

12.15 lbs/year/acre

civil engineers and land surveyors 205 worcester court, unit A4 falmouth, ma 02540 Date: 8/17/2017 Job No: 217077

# NITROGEN LOADING CALCULATIONS Evergreen Circle, Mashpee

#### PREVIOUSLY APPROVED SUBDIVISION/RESIDENTIAL PROJECT BUILD-OUT CONDITIONS

**Descri** This report addresses nitrogen-loading concerns associated with Rhiannon's Way subdivision in These calculations are based on the Cape Cod Commission Nitrogen Loading Calculations Convert year = 365 days, d; 1 c.f. = 28.31685 liters, L; 1 lbs = 454,000 milligram, mg

#### FINAL NITROGEN LOADING (ppm) : 3.85

#### 1. Wastewater Flows

**Comm** refer to written report for build-out condition assumptions.

#### Wastewater Recharge Rate, WRR

Wastewater flows, Title 5 design flows: (310 CMR 15)

\*\*one person per 500 sq.ft.

Nitrogen Concentration (N	C), flow at 600	gpd =	35	_mg/liter
	Lot size	Building	flow	] ,
	sq.ft.	sq.ft.	gpd	
Lot 1 (commercial)	80,150	10,000	600	
Lot 5 (commercial)	92,783	10,000	600	
Lot 2 (industrial)	261,360	10,000	600	
Lot 4 (industrial)	267,458	10,000	600	
= 2 IATOT	701 752	40 000	2.400	_

Residential (40B) land =	110	gpd per be	edroom
Nitrogen Concentration (NC	), GWDP =	10	mg/liter

` .	, , ,		
	No. of	No. of	flow
	units	bedrooms	gpd
Residential (buildings 1-5)	120	240	26,400
TOTALS =	120	240	26,400

	WRR	WNC
	(L/d)	(mg/d)
Wastewater	109,008	1,317,180

Wastewater Recharge Rate, WRR =  $\Sigma$  Design Flow

Wastewater Nitrogen Content, WNC =  $\Sigma$  Design Flow \* Nitrogen Concentration

#### 2. Impervious Surfaces

**Comm** refer to written report for build-out condition assumptions.

Except for Residential II building are single story, therefore roof area = building size

Commercial driveway and parking area as percentage of building siz 340%

Recharge rate, Ri (for impervious) = 40 inches/year

Roof nitrogen concentration (RNC) = 0.75 mg/liter

civil engineers and land surveyors 205 worcester court, unit A4 falmouth, ma 02540 Date: 8/17/2017 Job No: 217077

# NITROGEN LOADING CALCULATIONS Evergreen Circle, Mashpee

25%

Pavement nitrogen concentration (PNC) =

1.5 mg/liter

Vegetated Basin: Reduction Credit (RC) =

	Area S		RR	SNC	
Surface	(s.f.)	(c.f./d)	(L/d)	(mg/d)	
Roofs	98,000	895.0	25,346	19,009	
Parking & Driveways	246,000	2,246.6	63,623	71,576	
Road Pavement	57,200	522.4	14,794	16,643	
			103,762	107,228	

Surface Recharge Rate, SRR (L/d) = Surface Area \* Recharge Rate

Surface Nitrogen Content, SNC = Surface Recharge Rate \* Nitrogen Concentration

\* (1 - Reduction Credit)

#### 3. Maintained Lawn & Planting Areas

Comm refer to written report for build-out condition assumptions.

Planting and lawn area estimated as 5,000 s.f. for commercial lot size

Fertilizer rate, FR =

3

lbs/1,000 s.f. of lawn per year

Leached percentage, L = 25%

	Area FNC			
Surface	(sq.ft.)	(lbs/d)	(mg/d)	
Lawn & Plantings Areas	210,000	0.4315	195,904.1	

Nitrogen Content by Fertilizer, FNC = Lawn Area \* Fertilizer Rate \* Leached Percentage

#### 4. Natural Surface

Source: CCC WRO Technical Bulletin 91-001

Recharge Rate, Rn (natural areas - Mashpee) =

	Area	SRR
Surface	(sq.ft.)	(L/d)
Natural Condition Areas	1,689,680	207,576

Surface Recharge Rate, SRR (L/d) = Surface Area \* Recharge Rate

#### 5. Summary

Combined Recharge Rate,  $RR = WRR + \Sigma SRR = 420,346$  (L/d)

Total Nitrogen Content, NC = WNC+ $\Sigma$  SNC+FNC= 1,620,312 (mg/d)

Final Nitrogen Loading, NL = NC / RR = 3.85 mg/L (ppm)

Total Nitrogen Load in pounds (lbs.) = 1302.67 lb/year = 32.57 lbs/year/acre

SUMMERFIELD PARK 800 FALMOUTH ROAD, SUITE 301C MASHPEE, MA 02649 (508) 477-7272 FAX (508) 477-9072 email: info@CapeEng.com

August 29, 2019

Mr. Evan Lehrer, Town Planner Mashpee Planning Board 16 Great Neck Road North Mashpee, MA 02649

RE: 11 Evergreen Circle, Mashpee, MA – Map 19 ~ Parcel 10-12 Additional information and revisions requested

Dear Mr. Lehrer and Mashpee Planning Board:

On behalf of the Applicant, Kevin Andrade, please accept the enclosed information following the requests during the public Planning Board hearing on August 22, 2019 for the above referenced property. The enclosed information includes:

- 1. Proposed Building Elevation Plan
  - a. This plan shows revisions to include some typical "Cape Cod" construction materials (barn boards and cedar shingles) and provide aesthetic features (awnings) following Cape Cod Commission guidelines.
  - b. The elevation plan also shows the location for placement of business signs to only be on the Evergreen Circle facing wall. This revision reduces concerns from neighbors of Main Street facing signage as expressed during the hearing.
- 2. Revised Site Plan: sheet G-101 Cover Sheet and sheet C-101 Layout Plan
  - a. These plans were revised to depict the site located within the Light Industrial Overlay District and to incorporate the architectural changes to the building. No other material changes resulted to the other sheets of the Site Plan.
- 3. Turning movement graphic plans
  - a. Two turning movement graphics are provided for the Mashpee Ladder Truck and the AASHTO WB-50 design vehicle which was the target vehicle behind the driveway designs.
- 4. Provide Water Quality Report previously submitted with the approval of the Evergreen Circle subdivision.
  - a. The parameters contributing nitrogen load within the subdivision Water Quality Report included a built-out condition for this locus of a 10,000 s.f. building, with a 34,000 s.f. pavement area, a 600 gpd septic design flow and 5,000 s.f. of lawn.
  - b. The applicant proposed a 9,212 s.f. building, 28,470 s.f. pavement area, 585 gpd septic design flow and no lawn area.
  - c. All of the proposed development nitrogen loading parameters are less than those included in the built-out analysis included in the subdivision Water Quality Report resulting in less nitrogen loading impacts than estimated in that report.

If you have any questions please feel free to call.

Sincerely,

Raúl Lizardi-Rivera, P.E. *Director of Engineering* 

## Request for Legal Services Town of Mashpee

Date: 8/22/2019

Name:	Evan Lehrer	Title:	Town Planner
Committ	tee or Department: Plan	ning Boa	rd
Did you try to find the answer to your question in the statutes, or by calling a state agency, or by talking to your counterpart in another community? Yes No			
Description of Request (Include such information as "Request for Legal Opinion" or "Relates to pending litigation". Is this request from a committee, or is it an individual committee member's concern? Is the request of high or low priority, and why? Please attach all relevant documentation.)			
Please see the attached public hearing notification. This legal advertisement has a scrivener's error. The notice cites Sec. 174-25 (C)1 of the Zoning Bylaw but should read Sec. 174-24 (C)1. Would this error result in the notice not satisfying the notice requirements under Massachusetts General Laws?			
Time Frame By what date is a response needed? August 28, 2019 Please explain. One week prior to date this matter will be taken up by Planning Board.			
Submit completed request form to the Office of the Town Manager for processing.			
The above request for legal services is:  APPROVEDDENIED Reason:			
Town M			
Forw by 1	arded to Town Counsel on (date)	8/22	12019



## Town of Mashpee

16 Great Neck Road North Mashpee, Massachusetts 02649

# Mashpee Planning Board Public Hearing Notice

Pursuant to Massachusetts General Laws, Chapter 40A Section 9, the Mashpee Planning Board will hold a public hearing on Wednesday, August 21, 2019 at 7:10 PM in the Waquoit Meeting Room, Mashpee Town Hall, 1st Floor, 16 Great Neck Road North, Mashpee, MA 02649 to consider an application made by Kevin Andrade to construct a commercial building to be used for retail use, redemption center and office space to be located at 11 Evergreen Circle, Mashpee, MA 02649 currently identified as Lot A on the plan titled definitive Subdivision Plan, Evergreen Circle, prepared for Evergreen Industrial Park, #588 Main Street (Route 130) in Mashpee, MA approved on 11-20-17 by Mashpee Planning Board and recorded at the Barnstable County Registry of Deeds under Plan Book 674, Page 38. This application is made pursuant to Sections 174-25 C (1) and under Section 174-25 E (12).

Submitted by:

Mary Waygan, Chair Mashpee Planning Board

Publication dates:

Friday, July 26, 2019 Friday, August 2, 2019

Submitted by:

Mashpee Planning Board Public Hearing Notice



Pursuant to Massachusetts General Laws, Chapter AdA Section 9, the Mastipee Planning Board will hold applic hearing on Wednesday August 21, 2019 at 7:10 PM, in the Maguori Meeting Room, Mastipee Town Hall, 1st Floor, 16 Great Neck Road North, Mashpee, MA, 02649 to consider an application made by Kenin Andrade to constituct a commercial building to be used for retail use, redemption center and office space to be located at 11 Evergreen and office space to be located at 11 Evergreen Circle, Mashpee, MA, 02649 currently dentified as paperoved on 11-20-17 by Mashpee Plaining Board approved on 11-20-17 by Mashpee Plaining Board application is made pursuant to Sections 174-25 (1) and under Section 174-25 E(12).



Mashpee
Planning
Board
Public Hearing Notice

Pursuant to Massachusetts General Laws, Chapter 40A Section 9, the Mashpee Planning Board will hold a public hearing on Wednesday August 21, 2019 at 7:10 PM in the Waquolt Meeting Room, Mashpee Town Hall, 1st Floor, 16 Great Neck Road North, Mashpee, MA 02649 to consider an application made by Kevin Andrade to construct a commercial building to be used for retail use redemption center and office space to be located at 11 Evergreen Circle, Mashpee, MA 02649 currently identified as Lot A on the plan titled definitive Subdivision Plan, Evergreen Circle, prepared for Evergreen Industrial Park #588 Main Street (Route 130) in Mashpee, MA approved on 11-20-17 by Mashpee Planning Board and recorded at the Barnstable County Registry of Deeds under Plan Book 674, Page 38. This application is made pursuant to Sections 174-25 C (1) and under Section 174-25 E (12).

Submitted by:

Mary Waygan, Chair Mashpee Planning Board

Julý 26, 2019 August 2, 2019



Planning Board

16 Great Neck Road North Mashpee, Massachusetts 02649

#### Mashpee Planning Board Notice of Decision

September 5, 2019

You are hereby notified that the Mashpee Planning Board has filed its decision with the Town Clerk on September 5, 2019 at the Town Hall, Mashpee, Massachusetts on the petition of Mr. Kevin Andrade for approval of a Special Permit to construct a commercial building to be used for retail use, redemption center and office space to be located at 11 Evergreen Circle, Mashpee, MA 02649 currently identified as Lot A on the plan titled definitive Subdivision Plan, Evergreen Circle, prepared for Evergreen Industrial Park, #588 Main Street (Route 130) in Mashpee, MA approved on 11-20-17 by Mashpee Planning Board and recorded at the Barnstable County Registry of Deeds under Plan Book 674, Page 38. This application is made pursuant to Sections 174-24 C (1) and under Section 174-25 E (12) of the Mashpee Zoning Bylaw.

The petition has been granted with conditions/modifications. The Planning Board's decision and project plans may be viewed at the office of the Town Clerk. Appeals, if any, may be made pursuant to Chapter 40A, Section 17 of Massachusetts General Laws within 20 days of the date of filing with the Town Clerk indicated herein.

 Deborah Dami
Town Clerk

## Charles L. Rowley, PE, PLS

### Consulting Engineer and Land Surveyor

5 Carver Road PO Box 9 West Wareham, MA 02576 Tel: 508-295-1881 Cell: 508-295-0545 E-mail: <u>crsr63@verizon.net</u>

September 30, 2019

Town of Mashpee Planning Board Town Hall 16 Great Neck Road North Mashpee, MA 02649

Re: Services for month of September, 2019.

Attendance at two regular meetings of the Planning Board \$300.00

16 Great Neck Road North Mashpee, Massachusetts 02649

August 9, 2019

Harold Mitchell, Chairman Cape Cod Commission P. O. Box 226 3225 Main Street Barnstable, MA 02630

RE: Referral of the Special Permit Application for a Personal Wireless Service Facility at 101 Redbrook Road, Mashpee MA by Blue Sky Towers II, LLC dated August 2, 2019

Dear Commission:

On August 7, 2019, at their Regular Meeting, the Mashpee Planning Board voted to refer the above referenced application to the Cape Cod Commission. During its review, we pray the Cape Cod Commission reviews the project with respect to the following section of the Cape Cod Commission Act

"Section 13 (d) (3) the proposed development is consistent with municipal development bylaws, or if it is inconsistent, the inconsistency is necessary to enable a substantial segment of the population to secure adequate opportunities for housing, conservation, environmental protection, education, recreation or balanced economic growth;"

using the correct version of the Town of Mashpee Zoning Bylaw which, until December 2018, contained a scrivener's error with respect to the Wireless Service Overlay District. The corrected version now clearly reflects the vote by the Mashpee 1998 Town Meeting which established said district and excludes the R3 and R5 Zoning Districts from the Wireless Service Overlay District.

The Planning Board has scheduled a Public Hearing to hear this matter on September 4, 2019. Kindly let us know by that date if the Commission has completed its review of this matter or if the Planning Board should suspend all local activity during the Commission's review.

Sincerely,

Mary Waygan, Chair

Planning Board

cc: Kristi Senatori, Executive Director, Cape Cod Commission

1. Mashpee Zoning Bylaw with scrivener's error highlighted

# ZONING BYLAWS OF THE TOWN OF MASHPEE 2018



Updated as of 10-15-2018

Scrivener's error in \$174-5 C.2 not corrected Until 12/20/2018 Otis A.N.G.B. Accident Prevention Zone

Popponesset Overlay District Wireless Facility Overlay District

History: Added 10-5-1998 ATM, Article 35, approved by Attorney General 1-4-1999.

IC Overlay District

History: Deleted 10-19-2009 ATM Article 12, approved by Attorney General 1-26-2010.

Mashpee Center Overlay District

History: Added 10-4-1999, ATM, Article 29, approved by Attorney General 1-11-2000.

#### §174-5 Establishment of Zoning Map:

- A. Except for Floodplain, Mashpee and Quashnet River Protective Districts, Primary and Secondary Conservation Areas as shown on the Open Space Incentive Plan, Groundwater Protective Districts, Areas of Critical Environmental Concern and the Otis A.N.G. B. Accident Prevention Zone, the location and boundaries of these districts are hereby established as shown on the most recently dated version of a map entitled "Zoning Map of the Town of Mashpee," bearing the signatures of the members of the Planning Board and on file in the office of the Town Clerk, which map, with all explanatory matter thereon, in declared to be a part of this chapter.
- B. The boundaries of the Popponesset Overlay District shall be as follows:

Beginning at the northwest corner of Map 123, Block 162, as shown on the 1992 Mashpee Assessors' Maps, thence southeasterly to the shoreline of Nantucket Sound; thence following said shoreline northeasterly to the northeastern corner of Map 118, Block 14; thence northwesterly and northeasterly along the eastern property line of said parcel and of Map 112, Block 59B to the shoreline of Popponesset Creek: thence following the shoreline of Popponesset Creek to the southeastern corner of Map 112. Block 44; thence westerly along the southern property line of said lot to Shore Drive; thence northerly along Shore Drive and westerly along Strawberry Lane to the southeastern corner of Map 112, Block 100; thence northwesterly to the northeastern corner of said lot; thence southwesterly to the southwestern corner of Map 111, Block 139; thence northwesterly along the property line of said lot to Spoondrift Way; thence southwesterly along Spoondrift Way, northwesterly along Wading Place Road and southwesterly along Alma Road to the northern corner of Map 111, Block 187; thence southwesterly along a straight line to the western corner of Map 117, Block 236; thence, southeasterly along Nicks Trail and southwesterly along Uncle Percy's Road to the northeastern corner of Map 123, Block 187; thence generally southerly and easterly along the eastern property line of said parcel to the northern shoreline of Dean's Pond; thence following said shoreline northeasterly to the northeastern corner of Map 123, Block 54: thence following a straight line to the point of beginning.

<u>History: Added 5-3-1993 ATM, Article 12, approved by Attorney General 7-19-1993.</u> <u>History: Amended 5-6-1997, ATM, Article 46, approved by Attorney General 9-25-1997.</u>

- C. The Wireless Facility Overlay District shall include:
  - 1. the area within the two hundred ten (210') foot wide Commonwealth Electric Company transmission line easement running generally east-west between the Falmouth town line and the Barnstable town line, except that portion within the boundaries of the Otis A.N.G.B. Accident Prevention Zone;
  - 2. all other lands in the Town which are not located within the boundaries of the Mashpee National Wildlife Refuge, within one thousand (1000') feet of the mean high water line of a Great Pond or a tidal water body, within Historic Districts, within one thousand (1000') feet of a Historic District or of structures or places

listed in the Massachusetts State Register of Historic Places, within the Otis A.N.G.B. Accident Prevention Zone R-3 or R-5 Zoning Districts or within three hundred (300') feet of the right of way of any designated scenic roadway.

History: Added 10-5-1998 ATM, Article 35, approved by Attorney General 1-5-1999.

History: Amended 10-16-2006 ATM, Article 30, approved by Attorney General 2-13-2007.

D. The Mashpee Center Overlay District shall include those parcels shown on the 1998 Mashpee Assessors' Maps as Map 27, Block 46, Map 28, Blocks 3 through 12, Map 35, Blocks 30 and 31, and Map 36, Blocks 1 through 20, 5A, 5B, 41 through 45, 47 and 49 through 52.

History: Added 10-4-1999 ATM, Article 29, approved by Attorney General 1-11-2000.

E. The IC Overlay District shall include those parcels shown on the 1999 Mashpee Assessors' Maps as Map 81, Blocks 18 and 21, and Map 88, Blocks 2, 19, 20, 23, 34, 36, 37, 41, 42, 80, 81, 82 and 89, as well as those portions of May 81, Blocks 17 and 19 which are located in the I-1 Industrial Zone and that portion of Map 54, Block 5 lying within six hundred twenty five (625') feet of the center line of Route 28.

History: Added 10-4-1999 ATM, Article 27, approved by Attorney General 1-11-2000. History: Amended 5-1-2000 ATM, Article 34, approved by Attorney General 8-7-2000. History: Amended 10-2-2000 ATM, Article 32, approved by Attorney General 1-12-2001.

History: Amended 10-1-2001 ATM, Article 14, approved by Attorney General 1-16-2002.

The Floodplain District includes all special flood hazard areas within the Town of Mashpee Designated as Zone EA or VE on the Barnstable County Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency (FEMA) for the administration of the National Flood Insurance Program. The map panels of the Barnstable County FIRM that are wholly or partially within the Town of Mashpee are panel numbers 25001C0517J, 25001C051, 25001C0519J, 25001C0536J. 25001C0537J. 25001C0538J, 25001C0539J. 25001C1731J. 25001C0732J. 25001C0734J, 25001C0742J, 25001751J, 25001C0752J, 25001C0753J, 25001C0754J, and 25001C0761J dated July 16, 2104. The exact boundaries of the District may be defined by the one hundred (100) year base flood elevations shown on the FIRM and further defined by the Barnstable County Flood Insurance Study (FIS) report dated July 16, 2014. The FIRM and FIS report are incorporated herein by reference and are on file with the Town Clerk, Planning Board, and Building Inspector.

History: Added 5-5-2014 ATM, Article 14, approved by Attorney General 6-11-2014

#### **§174-6** Amendments to Zoning Map:

Any changes or amendments shall be indicated by the alteration of such map, and the map thus altered is declared to be a part of this chapter thus amended.

#### §174-7 Construal of Boundaries:

Where a district boundary is indicated as within or parallel to a street, highway, railroad rightof-way, watercourse or town municipal boundary, such district boundary shall be construed as the center line or as being parallel to the center line of such street, highway, railroad right-ofway, watercourse or town municipal boundary.

#### **§174-8** Determination of Boundaries by Building:

Whenever any uncertainty exists as to the exact location of a boundary line, the location of such line shall be determined from the scale of the map by the Building Inspector.

2. Mashpee Zoning Bylaw with scrivener's corrected

# ZONING BYLAWS OF THE TOWN OF MASHPEE 2018



Updated as of 10-15-2018

following said shoreline northeasterly to the northeastern corner of Map 123, Block 54; thence following a straight line to the point of beginning.

History: Added 5-3-1993 ATM, Article 12, approved by Attorney General 7-19-1993 History: Amended 5-6-1997, ATM, Article 46, approved by Attorney General 9-25-1997

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  - 2. all other lands in the Town which are not located within the boundaries of the Mashpee National Wildlife Refuge, within one thousand (1000') feet of the mean high water line of a Great Pond or a tidal water body, within Historic Districts, within one thousand (1000') feet of a Historic District or of structures or places listed in the Massachusetts State Register of Historic Places, within the Otis A.N.G.B. Accident Prevention Zone, within the R-3 or R-5 Zoning Districts or within three hundred (300') feet of the right of way of any designated scenic roadway.

History: Added 10-5-1998 ATM, Article 35, approved by Attorney General 1-5-1999 History: Amended 10-16-2006 ATM, Article 30, approved by Attorney General 2-13-2007

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History: Added 10-4-1999 ATM, Article 27, approved by Attorney General 1-11-2000 History: Amended 5-1-2000 ATM, Article 34, approved by Attorney General 8-7-2000 History: Amended 10-2-2000 ATM, Article 32, approved by Attorney General 1-12-2001 History: Amended 10-1-2001 ATM, Article 14, approved by Attorney General 1-16-2002

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History: Added 5-5-2014 ATM, Article 14, approved by Attorney General 6-11-2014

3. Mashpee 1996 Town Meeting Vote

#### **Call for Mashpee Zoning Bylaw Correction**

#### Mary Mary

Wed 12/19/2018 6:23 PM

To: Rodney C. Collins < rccollins@mashpeema.gov>

Cc: Evan Lehrer < ELehrer@mashpeema.gov>; Wayne E. Taylor < wtaylor@mashpeema.gov>;

David Kooharian <davidkoo@comcast.net>; David Weeden <David.Weeden@mwtribe-nsn.gov>;

Joseph P. Cummings (cummingsj3@msn.com) < cummingsj3@msn.com>; Dennis Balzarini < dhbalz@yahoo.com>;

robhansen00@msn.com <robhansen00@msn.com>; Charles Rowley <crsr63@verizon.net>; Jen EOC <capecodjcliff@aol.com>;

Debbie Dami <ddami@mashpeema.gov>; Mary Waygan <waygan@hotmail.com>

Bcc Mo Fahd <mohamadf@hotmail.com>

0 5 attachments (4 MB)

1998 Mashpee Annual Report.pdf; AG Letters.pdf; Email TF September 24 2018.pdf; PB Minutes September 16 1998.pdf; Wireless Facility Overlay District.pdf;

#### Dear Rodney,

Thank you for your time on the phone today.

I formally call for the currently published Town of Mashpee Zoning Bylaw to be corrected in order to properly reflect the vote by October 5, 1998 Town Meeting which approved Article 35 as amended on the floor. Article 35 as amended excludes the R-3 and R-5 Zoning Districts from the Wireless Facility Overlay District. The following portion of the amendment is not correctly incorporated into the Zoning Bylaw:

add the phrase ", within the R-3 or R-5 Zoning Districts" after the phase "Otis A.N.G.B. Accident Prevention Zone" in Subsection 174-5.C.

#### Attached please find the following:

- 1. The Wireless Facility Overlay District map approved by the Attorney General on Jan 7, 1999;
- 2. Letters from the Massachusetts Attorney General's Office approving zoning article 35 as amended;
- 3. Town of Mashpee Annual Report for the year 1998 documenting the October 5, 1998 Town Meeting vote on Article 35 as amended;
- 4. Planning Board Minutes of Meeting for September 16, 1998 (the discussion on Article 35 and amendment starts on page 4 and ends on page 7);
- 5. Email from Mr. Thomas Fudala dated September 24, 2018 re: Wireless Overlay District Article etc. (as way of background).

I respectfully request the corrected Zoning Bylaw is forwarded to all Planning Board members and all current petitioners and applicants to the Planning Board as soon as possible, but in no case later than Thursday December 27, 2018.

I apologize for the timing of this request. I had hope to submit this to you sooner, but there have been some unexpected matters which have dominated my time.

Yours.

Mary Waygan, Chair



Form 1 (revised 3/98)		Town:	Mashpee, Massachusetts			
		Date:	October 7, 1998			
Munici 436 Dv Spring TEL: ( E-MAI	ey General Scott Harshbarg ipal Law Unit wight Street, Rm 109 field, Massachusetts 01103- (413) 784-1240, FAX: (413 IL: bylawyer @ yahoo.co	1317 3) 784-1244 m	OCT 13 1998  OFFICE OF THE AXA  OFFICE OFFICE OF THE AXA  OFFICE OF THE AXA  OFFICE OF THE AXA  OFFICE			
laws.	Pursuant to G.L. c. 40, § 3	2, I hereby requ	est approval of the enclosed amendments to town by-			
1.	Town Meeting (check only	∠one): An	nual [] Special [] Fall Annual [_x_]			
2.	Date Town Meeting (TM) First Convened: October 5, 1998					
3.	Date (s) of Adjourned Sessions: October 6, 1998					
4.						
	(a) Zoning: Articles	26, 27, 2	9, 31, 32, 33, <b>3</b> 4, 35, 37			
	(b) Historical District:					
	(c) General: Article	s 17, 18, 25				
	(d) Charter Amendment:					
5.	Maps: Warrant Articles (numbers) with maps to be approved:  Article 33 (Open Space Incentive Plan)					
6.	Town Counsel: Kope	lman & Paige	, P.C.			
	Address: 31 S	t James Aven	ue, 7th Floor			
	Bost	on, MA 0211	6-4102			
	Phone: (800 )	548-3522				
7.	Town Clerk: Deob	rah F. Dami				
	Signature: Signature:	al fil	au-			
Busine	ess Address: 16 G	reat Neck Ro	ad North			
	Mash	pee, MA 026	49			
	Phone: (508) 5:					

Mashpee Fall Annual Town Meeting October 5<sup>th</sup> and 6<sup>th</sup>, 1998 Quorum required-0

#### Article 35

To see if the Town will vote to amend the zoning bylaw by adding the following new sections and subsections:

Add the following to the listing of zoning districts contained in Section 174-4:

"Wireless Facility Overlay District".

Add the following new Subsection C. to Section 174-5 Establishment of Zoning Map:

"C. The Wireless Facility Overlay District shall include 1) the area within the 210 foot wide Commonwealth Electric Company transmission line easement running generally east-west between the Falmouth town line and the Barnstable town line, 2) all other lands in the Town which are not located within the boundaries of the Mashpee National Wildlife Refuge, within 1000 feet of the mean high water line of a Great Pond or a tidal water body, within Historic Districts, within 1000 feet of a Historic District or of structures or places listed in the 1997 Massachusetts State Register of Historic Places, within the Otis A.N.G.B. Accident Prevention Zone or within 300 feet of the right of way of any designated scenic roadway."

Add the following new Subsection H.(8) to Section 174-25. Table of Use Regulations:

"(8) Personal wireless service facilities, subject to the provisions of Section 174-45.2."

and indicate by inserting the letters "SP" in all columns of the Table of Use Regulations that such use is allowed by special permit in all zoning districts.

Add the following new Section 174-45.2:

#### "174-45.2. Personal Wireless Service Facilities.

#### A. Purpose and intent.

For the purpose of minimizing the visual and environmental impacts, as well as any potential deleterious impact on property values, of personal wireless service facilities, no personal wireless service facility shall be placed, constructed or modified within the town except in conformance with the requirements of this section, in conjunction with other regulations adopted by the Town, including historic district regulations, design review and other bylaws and regulations designed to encourage appropriate land use, environmental protection, and provision of adequate infrastructure development.

The regulation of personal wireless service facilities is consistent with the purposes of the Mashpee zoning bylaw and the planning efforts of the town through its comprehensive plan, including those intended to further the conservation and preservation of developed, natural and undeveloped areas, wildlife, flora and habitats for endangered species, the preservation of coastal resources, protection of natural resources, balanced economic growth, the provision of adequate capital facilities, the coordination of the provision of adequate capital facilities with the achievement of other goals and the preservation of historical, cultural, archaeological, architectural and recreational values.

In accordance with the requirements of 47 U.S.C. s332(c)(7)(B), and until these requirements are modified, amended or repealed, in regulating the placement, construction and modification of personal wireless service facilities, the administration of this bylaw shall not be undertaken in a manner which unreasonably discriminates among providers of functionally equivalent services or prohibits, or has the effect of prohibiting, the provision of personal wireless services. Any decision to deny a request to place, construct or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record. Furthermore, this bylaw may not regulate the placement, construction and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Federal Communications Commission's regulations concerning such emissions.

#### B. Definitions.

In addition to the definitions contained in Section 174-3, the following shall apply to Personal Wireless Service Facilities:

ABOVE GROUND LEVEL (AGL) - A measurement of height from the natural grade of a site to the highest point of a structure.

ANTENNA - The surface from which wireless radio signals are sent and received by a personal wireless service facility.

CAMOUGLAGED - A personal wireless service facility that is disguised, hidden, part of an existing or proposed structure or placed within an existing or proposed structure is considered "camouflaged."

CARRIER - A company that provides wireless services.

CO-LOCATION - The use of a single mount on the ground by more than one carrier (vertical co-location) and/or several mounts on an existing building or structure by more than one carrier.

CROSS-POLARIZED (OR DUAL-POLARIZED) ANTENNA - A low mount that has three panels flush mounted or attached very close to the shaft.

ELEVATION - The measurement of height above mean sea level.

ENVIRONMENTAL ASSESSMENT (EA) - An EA is the document required by the Federal Communications Commission (FCC) and the National Environmental Policy Act (NEPA) when a personal wireless service facility is placed in certain designated areas.

EQUIPMENT SHELTER - An enclosed structure, cabinet, shed or box at the base of the mount within which are housed batteries and electrical equipment.

FALL ZONE - The area on the ground within a prescribed radius from the base of a personal wireless service facility. The fall zone is the area within which there is a potential hazard from falling debris (such as ice) or collapsing material.

FUNCTIONALLY EQUIVALENT SERVICES - Cellular, Personal Communication Services (PCS), Enhanced Specialized Mobile Radio, Specialized Mobile Radio and Paging.

GUYED TOWER - A monopole or lattice tower that is tied to the ground or other surface by diagonal cables.

LATTICE TOWER - A type of mount that is self-supporting with multiple legs and cross-bracing of structural steel.

LICENSED CARRIER - A company authorized by the FCC to construct and operate a commercial mobile radio services system.

MONOPOLE - The type of mount that is self-supporting with a single shaft of wood, steel or concrete and a platform (or racks) for panel antennas arrayed at the top and/or along its length.

MOUNT - The structure or surface upon which antennas are mounted, including the following four types of mounts:

- (1) Roof-mounted. Mounted on the roof of a building.
- (2) Side-mounted. Mounted on the side of a building.
- (3) Ground-mounted. Mounted on the ground.
- (4) Structure-mounted. Mounted on a structure other than a building.

OMNIDIRECTIONAL (WHIP) ANTENNA - A thin rod that beams and receives a signal in all directions.

PANEL ANTENNA - A flat surface antenna, usually developed in multiples.

PERSONAL WIRELESS SERVICE FACILITY - Facility for the provision of personal wireless services, as defined by the Telecommunications Act, including towers, poles, antennae and appurtenant structures.

PERSONAL WIRELESS SERVICES - The three types of services regulated by this bylaw: commercial mobile radio services, unlicensed wireless services and common carrier wireless exchange access services.

RADIOFREQUENCY (RF) ENGINEER - An engineer specializing in electrical or microwave engineering, especially the study of radiofrequencies.

RADIOFREQUENCY RADIATION (RFR) - The emissions from personal wireless service facilities. (Regulated by the FCC "Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation").

SECURITY BARRIER - A locked, impenetrable wall, fence or berm that completely seals an area from unauthorized entry or trespass.

SEPARATION -The distance between one carrier's array of antennas and another carrier's array.

#### C. Permit process.

A personal wireless service facility shall require a building permit in all cases and may be permitted as follows:

- (1) A personal wireless service facility may be located on any existing guyed tower, lattice tower, monopole, electric utility transmission tower, fire tower or water tower, provided that the installation of the new facility does not increase the height of the existing structure except as provided in Subsection E.(5) below. Such installations shall not require a special permit but shall require plan review (PR) approval by the town under the provisions of Subsection 174-24B.
- (2) Otherwise, no personal wireless service facility involving construction of one or more ground or building (roof or side) mounts shall be located in the town except upon issuance of a special permit by the Planning Board under the provisions of Subsection 174-24(C) and of this section.
- (3) A personal wireless service facility that exceeds the height restrictions of Subsections E.(1) through (5) may be permitted by special permit, as specified in Subsection C.(2), in a designated Wireless Service Overlay District provided that the proposed facility complies with the height restrictions of Section E.(6), and all of the setback and other regulations set forth in this section.
- (4) Any applicant must demonstrate that the proposed facility is necessary in order to provide adequate service to the public.

#### D. Location.

Applicants seeking approval for personal wireless service facilities shall comply with the following:

- (1) If feasible, personal wireless service facilities shall be located on existing structures, including but not limited to buildings, water towers, existing telecommunications facilities, utility poles and towers, and related facilities, provided that such installation preserves the character and integrity of those structures. In particular, applicants are urged to consider use of existing telephone and electric utility structures as sites for one or more personal wireless service facilities. The applicant shall have the burden of proving that there are no feasible existing structures upon which to locate.
- (2) If the applicant demonstrates that it is not feasible to locate on an existing structure, personal wireless service facilities shall be designed so as to be camouflaged to the greatest extent possible, including but not limited to: use of compatible building materials and colors, screening, landscaping and placement within trees.
- (3) The applicant shall submit documentation of the legal right to install and use the proposed facility mount at the time of application for plan review or special permit.
- E. Dimensional requirements.

Personal wireless service facilities shall comply with the following requirements:

- (1) Height, General: Regardless of the type of mount, personal wireless service facilities shall be no higher than ten feet above the average height of buildings within 300 feet of the proposed facility. In addition, the height of a personal wireless service facility shall not exceed by more than ten feet the height limits of the zoning district in which the facility is proposed to be located, unless the facility is completely camouflaged such as within a flagpole, steeple, chimney, or similar structure. Personal wireless service facilities may be located on a building that is legally non-conforming with respect to height, or has received a height variance, provided that the facilities do not project above the existing building height.
- (2) Height, Ground-Mounted Facilities: Ground-mounted personal wireless service facilities shall not project higher than ten feet above the average building height or, if there are no buildings within 300 feet, these facilities shall not project higher than ten feet above the average tree canopy height, measured from ground level (AGL). If there are no buildings within 300 feet of the proposed site of the facility, all ground-mounted personal wireless service facilities shall be surrounded by dense tree growth to screen views of the facility in all directions. These trees may be existing on the subject property or planted on site.
- (3) Height, Side- and Roof-Mounted Facilities: Side- and roof-mounted personal wireless service facilities shall not project more than ten feet above the height of an existing building nor project more than ten feet above the height limit of the zoning district within which the facility is located. Personal wireless service facilities may be located on an existing building that is legally nonconforming with respect to height,

- or has received a height variance, provided that the facilities do not project above the existing building height.
- (4) Height, Existing Structures: New antennas located on any of the following structures existing on the effective date of this bylaw shall be exempt from the height restrictions of this bylaw provided that there is no increase in height of the existing structure as a result of the installation of a personal wireless service facility: water towers, guyed towers, lattice towers, fire towers and monopoles.
- (5) Height, Existing Structures, (Utility): New antennas located on any of the following existing structures shall be exempt from the height restrictions of this bylaw, provided that there is no more than a twenty (20) foot increase in the height of the existing structure as a result of the installation of a personal wireless service facility: electric transmission and distribution towers, telephone poles and similar existing utility structures. This exemption shall not apply in Historic Districts, within 300 feet of structures or places listed in the Massachusetts State Register of Historic Places, within 150 feet of the right-of-way of any designated scenic roadway, or within 300 feet of any Great Pond or tidal water body.
- (6) Height, Wireless Facility Overlay District: Within the Wireless Facility Overlay District (as described in Subsection 174-5.C.), personal wireless service facilities of up to 100 feet in height may be permitted by Special Permit, except that the Planning Board may grant a waiver to allow a height of up to 200 feet where circumstances warrant (e.g. no serious impact on neighboring properties, residential areas, historic districts, historic places or scenic vistas, along with the opportunity to eliminate a larger number of towers of lower height which might result in such impacts). Monopoles are the preferred type of mount for such taller structures. Such structures shall comply with all setback and Special Permit Regulations set forth in this Bylaw.
- (7) Setbacks: All personal wireless service facilities and their equipment shelters shall comply with the building setback provisions of the zoning district in which the facilities are located. In addition, the following setbacks shall be observed:
  - (a) In order to ensure public safety and prevent hazards to people and neighboring property from potential facility collapse or falling ice or other debris, the minimum distance from the base of any ground-mounted personal wireless service facility to any property line, road, habitable dwelling, business or institutional use, or public recreational area shall be the height of the facility/mount, including any antennas or other appurtenances. This setback is considered a "fall zone".

- (b) In the event that an existing structure is proposed as a mount for a personal wireless service facility, a fall zone shall not be required, but the setback provisions of the zoning district shall apply. In the case of pre-existing
  - non-conforming structures, personal wireless service facilities and their equipment shelters shall not increase any non-conformities, except as provided in Subsection (8) below.
- (8) Flexibility: In reviewing a special permit application for a personal wireless service facility, the Planning Board may reduce the required fall zone and/or setback distance of the zoning district by as much as 50% of the required distance if it finds that a substantially better design will result from such reduction. In making such a finding, the Planning Board shall consider both the visual and safety impacts of the proposed use.

#### F. Design standards.

The design of a personal wireless service facility determines its visibility and its impact on community character. Height and fall zone/setback standards will have an impact on the visibility of personal wireless service facilities, but they may still be visible from public areas and surrounding residential properties. All personal wireless service facilities shall comply with the following design standards in order to limit negative visual impacts from these facilities through effective design:

- (1) Visibility/Camouflage: Personal wireless service facilities shall be camouflaged as follows:
  - (a) Camouflage by Existing Buildings or Structures:

When a personal wireless service facility extends above the roof height of a building on which it is mounted, every effort shall be made to conceal the facility within or behind existing architectural features to limit its visibility from public ways. Facilities mounted on a roof shall be stepped back from the front facade in order to limit their impact on the building's silhouette.

- (b) Personal wireless service facilities that are side mounted shall blend with the existing building's architecture and, if over 5 square feet, shall be painted or shielded with material which is consistent with the design features and materials of the building.
- (c) Camouflage by Vegetation:

If personal wireless service facilities are not camouflaged from public viewing areas by existing buildings or structures, or are not located on existing structures or along a high tension power line right of way, they shall be surrounded by buffers of dense tree growth and understory vegetation in all directions to create an effective year-round visual buffer. Ground-mounted personal wireless service facilities shall have a vegetated buffer of 50 feet or more, and of sufficient height

to effectively screen the facility. Trees and vegetation may be existing on the subject property or installed as part of the proposed facility or a combination of both. The Planning Board shall determine the types of trees and plant materials and depth of the needed buffer based on site conditions and the height of the proposed tower.

#### (d) Color:

Personal wireless service facilities that are side-mounted on buildings shall be painted or constructed of materials to match the color of the building material directly behind them.

To the extent that any personal wireless service facility extends above the height of the vegetation immediately surrounding it, it shall be painted in a light gray or light blue hue that blends with sky and clouds.

- (2) Equipment Shelters: Equipment shelters for personal wireless service facilities shall be designed consistent with one of the following design standards:
  - (a) Equipment shelters shall be located in underground vaults; or
  - (b) Equipment shelters shall be designed consistent with traditional Cape Cod architectural styles and materials, with a roof pitch of at least 10/12 and wood clapboard or shingle siding; or
  - (c) Equipment shelters shall be camouflaged behind an effective year-round landscape buffer, equal to the height of the proposed building, and/or wooden fence. The Planning Board shall determine if the style of fencing and/or landscape buffer proposed is compatible with the neighborhood.

#### (3) Lighting and signage.

- (a) Personal wireless service facilities shall be lighted only if required by the Federal Aviation Administration (FAA). Lighting of equipment shelters and any other facilities on site shall be shielded from abutting properties. There shall be total cutoff of all light at the property lines of the parcel to be developed, and footcandle measurements at the property line shall be 0.0 initial footcandles when measured at grade.
- (b) Signs shall be limited to those needed to identify the property and the owner and warn of any danger. All signs shall comply with the requirements of Article X of this bylaw.
- (c) All ground mounted personal wireless service facilities shall be surrounded by a security barrier.
- (4) Historic buildings and districts.

- (a) Any personal wireless service facilities located on or within an historic structure shall not alter the character-defining features, distinctive construction methods, or original historic materials of the building.
- (b) Any alteration made to an historic structure to accommodate a personal wireless service facility shall be fully reversible.
- (c) Personal wireless service facilities within an historic district shall be concealed within or behind existing architectural features, such as towers, cupolas or spires, or shall be located so that they are not visible from public roads and viewing areas within the district.
- (d) Copies of all plans for any personal wireless service facility proposed in a historic district, or within 1000 feet of a historic district or a structure or place listed on the Massachusetts State Register of Historic Places, shall be provided to the Mashpee Historical Commission before or at the same time that they are submitted to the Town for approval, in order to facilitate their review and comment on the proposal. Applicants are encouraged to meet with the Commission to solicit their input and advice prior to seeking permit approvals.

#### (5) Scenic roads and vistas.

- (a) Except along an existing cleared high tension power line right-of-way, personal wireless service facilities shall not be located within open areas that are visible from public roads, recreational areas or residential development. As required in Section F.(1) above, all ground-mounted personal wireless service facilities that are not camouflaged by existing buildings or structures shall be surrounded by a buffer of dense tree growth.
- (b) Any personal wireless service facility that is located within 300 feet of a scenic road as designated by the town shall not exceed the height of vegetation at the proposed location. If the facility is located farther than 300 feet from the scenic road, the height regulations described elsewhere in this bylaw will apply.

#### G. Environmental standards.

- (1) Personal wireless service facilities shall not be located in wetlands, within 100 feet of wetlands or within 200 feet of rivers.
- (2) No hazardous waste shall be discharged on the site of any personal wireless service facility. If any hazardous materials are to be used on site, there shall be provisions for full containment of such materials. An enclosed containment area shall be provided with a sealed floor, designed to contain at least 110% of the volume of the hazardous materials stored or used on the site.
- (3) Stormwater run-off shall be contained on-site.

- (4) Ground-mounted equipment for personal wireless service facilities shall not generate noise in excess of 50 db at the property line.
- (5) Roof-mounted or side-mounted equipment for personal wireless service facilities shall not generate noise in excess of 50 db at ground level at the base of the building closest to the antenna.

#### H. Radiofrequency Radiation (RFR) Standards.

All equipment proposed for a personal wireless service facility shall be authorized per the FCC Guidelines for Evaluating the Environmental Effects of Radioireguency Radiation (FCC Guidelines). Any application for approval of a personal wireless service facility shall include documentation that the FCC Guidelines are being met and a copy of the letter of approval by the Massachusetts Department of Public Health required by 105 CMR 122.000. The Planning Board may require that the applicant fund the services of an RF Engineer to review the documentation regarding the FCC Guidelines.

#### I. Application procedures.

#### (1) Pre-application conference.

Prior to the submission of an application for a special permit under this regulation, the applicant is strongly encouraged to meet with the Planning Board at a public meeting to discuss the proposed personal wireless service facility in general terms and to clarify the filing requirements.

The purpose of the conference is to inform the Board as to the preliminary nature of the proposed personal wireless service facility. As such, no formal filings are required for the pre-application conference. However, the applicant is encouraged to prepare sufficient preliminary architectural and/or engineering drawings to inform the Board of the location of the proposed facility, as well as its scale and overall design.

#### (2) Application filing requirements.

In addition to those items required by Subsection 174-24C.(5), other applicable portions of this chapter or the regulations of the Planning Board, the following shall be included in any special permit application for personal wireless service facilities:

- (a) Name, address and telephone number of the landowner of the property and of the applicant and any co-applicants as well as any agents for the applicant or co-applicants. Co-applicants may include licensed carriers and tenants for the personal wireless service facility. A licensed carrier shall either be an applicant or a co-applicant.
- (b) Original signatures for the landowner, applicant and all co-applicants applying for the Special Permit. If the landowner, applicant or co-applicant will be

represented by an agent, original signature authorizing the agent to represent the applicant and/or co-applicant. Photo reproductions of signatures will not be accepted.

- (c) Location of the subject property, including the name of the nearest road or roads, the property's location relative to those roads, the street address, if any, and the Tax map and block number of the subject property.
- (d) Zoning district designation for the subject parcel.
- (e) A line map to scale showing the lot lines of the subject property and all properties within 300 feet and the location of all buildings, including accessory structures, on all properties shown.
- (f) A town-wide map showing the other existing personal wireless service facilities in the Town and outside the Town within one mile of its corporate limits.
- (g) The proposed locations of all future personal wireless service facilities in the Town on a Town-wide map for this carrier.
- (h) A one-inch-equals-40 feet vicinity plan showing the following:
  - 1) Property lines for the subject property.
  - 2) Property lines of all properties adjacent to the subject property within 300 feet.
  - 3) Tree cover on the subject property and adjacent properties within 300 feet, by dominant species and average height, as measured by or available from a verifiable source.
  - 4) Outline of all existing buildings, including purpose (e.g. residential buildings, garages, accessory structures, etc.) on subject property and all adjacent properties within 300 feet.
  - 5) Proposed location of antenna, mount and equipment shelter(s).
  - 6) Proposed security barrier, indicating type and extent as well as point of controlled entry.
  - 7) Location of all roads, public and private, on the subject property and on all adjacent properties within 300 feet including driveways proposed to serve the personal wireless service facility.
  - 8) Distances, at grade, from the proposed personal wireless service facility to each building on the vicinity plan.

- 9) Contours, at each two feet AMSL, for the subject property and adjacent properties within 300 feet.
- 10) All proposed changes to the existing property, including grading, vegetation removal and temporary or permanent roads and driveways.
- 11) Representations, dimensioned and to scale, of the proposed mount, antennas, equipment shelters, cable runs, parking areas and any other construction or development attendant to the personal wireless service facility.
- 12) Lines representing the sight line showing viewpoint (point from which view is taken) and visible point (point being viewed) from "Sight Lines" subsection below.
- (i) Sight lines and photographs as described below:
  - 1) Sight line representation. A sight line representation shall be drawn from any public road within 300 feet and the closest facade of each residential building (viewpoint) within 300 feet to the highest point (visible point) of the personal wireless service facility. Each sight line shall be depicted in profile, drawn at one-inch equals 40 feet. The profiles shall show all intervening trees and buildings. In the event there is only one (or more) residential building within 300 feet there shall be at least two sight lines from the closest habitable structures or public roads, if any.
  - 2) Existing (before condition) photographs. Each sight line shall be illustrated by one four-inch by six-inch color photograph of what can currently be seen from any public road within 300 feet.
  - 3) Proposed (after condition). Each of the existing condition photographs shall have the proposed personal wireless service facility superimposed on it to show what will be seen from public roads if the proposed personal wireless service facility is built.
- (j) Siting elevations, or views at-grade from the north, south, east and west for a 50-foot radius around the proposed personal wireless service facility plus from all existing public and private roads that serve the subject property. Elevations shall be at either one-quarter inch equals one foot or one-eighth inch equals one foot scale and show the following:
  - 1) Antennas, mounts and equipment shelter(s), with total elevation dimensions and AGL of the highest point.
  - 2) Security barrier. If the security barrier will block views of the personal wireless service facility, the barrier drawing shall be cut away to show the view behind the barrier.

- 3) Any and all structures on the subject property.
- 4) Existing trees and shrubs at current height and proposed trees and shrubs at proposed height at time of installation, with approximate elevations dimensioned.
- 5) Grade changes, or cuts and fills, to be shown as original grade and new grade line, with two-foot contours above mean sea level.
- (k) Equipment brochures for the proposed personal wireless service facility, such as manufacturer's specifications or trade journal reprints, shall be provided for the antennas, mounts, equipment shelters, cables as well as cable runs and security barrier, if any.
- (l) Materials of the proposed personal wireless service facility specified by generic type and specific treatment (e.g., anodized aluminum, stained wood, painted fiberglass, etc.). These shall be provided for the antennas, mounts, equipment shelters, cables as well as cable runs, and security barrier, if any.
- (m) Colors of the proposed personal wireless service facility represented by a color board showing actual colors proposed. Colors shall be provided for the antennas, mounts, equipment shelters, cables as well as cable runs, and security barrier, if any.
- (n) Dimensions of the personal wireless service facility specified for all three directions: height, width and breadth. These shall be provided for the antennas, mounts, equipment shelters and security barrier, if any.
- (o) Appearance shown by at least two photographic superimpositions of the personal wireless service facility within the subject property. The photographic superimpositions shall be provided for the antennas, mounts, equipment shelters, cables as well as cable runs, and security barrier, if any, for the total height, width and breadth.
- (p) Landscape plan including existing trees and shrubs and those proposed to be added, identified by size of specimen at installation and species.
- (q) If lighting of the site is proposed, the applicant shall submit a manufacturer's computer-generated point-to-point printout, indicating the horizontal footcandle levels at grade, within the property to be developed and twenty-five (25) feet beyond the property lines. The printout shall indicate the location and types of luminaires proposed.
- (r) The applicant shall list location, type and amount (including trace elements) of any materials proposed for use within the personal wireless service facility that are considered hazardous by the federal, state or local government.
- (s) Noise filing requirements.

The applicant shall provide a statement listing the existing and maximum future projected measurements of noise from the proposed personal wireless service facilities, measured in decibels Ldn (logarithmic scale, accounting for greater sensitivity at night), for the following: 1) Existing, or ambient: the measurements of existing noise. 2) Existing plus proposed personal wireless service facilities: maximum estimate of noise from the proposed personal wireless service facility plus the existing noise environment.

Such statement shall be certified and signed by an acoustical engineer, stating that noise measurements are accurate and meet the Noise Standards of this Bylaw.

#### (t) Radiofrequency Radiation (RFR) filing requirements.

The applicant shall provide a statement listing the existing and maximum future projected measurements of RFR from the proposed personal wireless service facility, for the following situations: 1) Existing, or ambient: the measurements of existing RFR. 2) Existing plus proposed personal wireless service facilities: maximum estimate of RFR from the proposed personal wireless service facility plus the existing RFR environment.

The applicant shall also provide a certification, signed by a RF engineer, stating that RFR measurements are accurate and meet FCC Guidelines as specified in the Radiofrequency Radiation Standards sub-section of this Bylaw.

#### (u) Federal environmental filing requirements.

The National Environmental Policy Act (NEPA) applies to all applications for personal wireless service facilities. NEPA is administered by the FCC via procedures adopted as Subpart 1, Section 1.1301 et seq. (47 Ch. I). The FCC requires that an environmental assessment (EA) be filed with the FCC prior to beginning operations for any personal wireless service facility proposed in, or involving any of, the following: a) wilderness areas, b) wildlife preserves, c) endangered species habitat, d) historical site, e) Native American religious site, f) flood plain, g) wetlands, h) high intensity white lights in residential neighborhoods or i) excessive radiofrequency radiation exposure.

At the time of application filing, an EA that meets FCC requirements shall be submitted to the Town for each personal wireless service facility site that requires such an EA to be submitted to the FCC.

#### (3) Balloon or crane test.

Within 30 days of the pre-application conference, or within 21 days of filing an application for a Special Permit, the applicant shall arrange for a balloon or crane test at the proposed site to illustrate the height of the proposed facility. The date, time and

location of such test shall be advertised in a newspaper of general circulation in the Town at least 14 days, but not more than 21 days prior to the test.

(4) Waiver of filing requirements.

The Board may waive one or more of the application filing requirements of this section if it finds that such information is not needed for a thorough review of the proposed personal wireless service facility.

#### J. Co-location.

- (1) Licensed carriers shall share personal wireless service facilities and sites where feasible and appropriate, thereby reducing the number of personal wireless service facilities that are stand-alone facilities. All applicants for a special permit for a personal wireless service facility shall demonstrate a good faith effort to co-locate with other carriers. Such good faith effort includes:
  - (a) A survey of all existing structures that may be feasible sites for co-locating personal wireless service facilities;
  - (b) Contact with all the other licensed carriers for commercial mobile radio services operating in Mashpee and each of the adjoining towns; and
  - (c) Sharing information necessary to determine if co-location is feasible under the design configuration most accommodating to co-location.
- (2) In the event that co-location is found to be not feasible, a written statement of the reasons for the infeasibility shall be submitted to the Board. The Board may retain a technical expert in the field of RF engineering to verify if co-location at the site is not feasible or is feasible given the design configuration most accommodating to co-location. The cost for such a technical expert will be at the expense of the applicant. The Board may deny a special permit to an applicant that has not demonstrated a good faith effort to provide for co-location.
- (3) If the applicant does intend to co-locate or to permit co-location, the Board shall request drawings and studies that show the ultimate appearance and operation of the personal wireless service facility at full build-out.
- (4) If the Board approves co-location for a personal wireless service facility site, the special permit shall indicate how many facilities of what type shall be permitted on that site. Facilities specified in the special permit approval shall require no further zoning approval. However, the addition of any facilities not specified in the approved special permit shall require a new special permit. Estimates of RFR emissions will be required for all facilities, including proposed and future facilities.

#### K. Modifications.

A modification of a personal wireless service facility will be considered equivalent to an application for a new personal wireless service facility and will require a special permit when the following events apply:

- (1) The applicant and/or co-applicant wants to alter the terms of the special permit by changing the personal wireless service facility in one or more of the following ways: a change in the number of facilities permitted on the site or a change in technology used for the personal wireless service facility.
- (2) The applicant and/or co-applicant wants to add any equipment or additional height not specified in the original design filing.
- L. Monitoring and maintenance.
- (1) After the personal wireless service facility is operational, the applicant shall submit, within 90 days of beginning operations, and at annual intervals from the date of issuance of the special permit, existing measurements of RFR from the personal wireless service facility. Such measurements shall be signed and certified by a RF engineer, stating that RFR measurements are accurate and meet FCC Guidelines as specified in Section H. of this bylaw.
- (2) After the personal wireless service facility is operational, the applicant shall submit, within 90 days of the issuance of the Special Permit, and at annual intervals from the date of issuance of the Special Permit, existing measurements of noise from the personal wireless service facility. Such measurements shall be signed by an acoustical engineer, stating that noise measurements are accurate and meet the Noise Standards sub-section of this Bylaw.
- (3) The applicant and co-applicant shall maintain the personal wireless service facility in good condition. Such maintenance shall include, but shall not be limited to, painting, structural integrity of the mount and security barrier and maintenance of the buffer areas and landscaping.
- M. Abandonment or discontinuation of use.
- (1) At such time that a licensed carrier plans to abandon or discontinue operation of a personal wireless service facility, such carrier will notify the Town by certified U.S. mail of the proposed date of abandonment or discontinuation of operations. Such notice shall be given no less than 30 days prior to abandonment or discontinuation of operations. In the event that a licensed carrier fails to give such notice, the personal wireless service facility shall be considered abandoned upon such discontinuation of operations.
- (2) Upon abandonment or discontinuation of use, the carrier shall physically remove the personal wireless service facility within 90 days from the date of abandonment or discontinuation of use. "Physically remove" shall include, but not be limited to:

- (a) Removal of abandoned antennas, mount, equipment shelters and security barriers from the subject property.
- (b) Proper disposal of the waste materials from the site in accordance with local and state solid waste disposal regulations.
- (c) Restoring the location of the personal wireless service facility to its natural or original condition, except that any landscaping and grading shall remain as-is.
- (3) If a carrier fails to remove a personal wireless service facility in accordance with this section of this Bylaw, the Town shall have the authority to enter the subject property and physically remove the facility. The Planning Board may require the applicant to post a bond at the time of construction in an appropriate amount to cover all costs for the removal of the personal wireless service facility in the event the Town must remove the facility.

#### N. Reconstruction or replacement of existing towers and monopoles.

Guyed towers, lattice towers, utility towers and monopoles in existence at the time of adoption of this bylaw may be reconstructed, altered, extended or replaced on the same site by special permit, provided that the Planning Board finds that such reconstruction, alteration, extension or replacement will not be substantially more detrimental to the neighborhood and/or the Town than the existing structure. In making such a determination, the Planning Board shall consider whether the proposed reconstruction, alteration, extension or replacement will create public benefits such as opportunities for co-location, improvements in public safety, and/or reduction in visual and environmental impacts. No reconstruction, alteration, extension or replacement shall exceed the height of the existing facility by more than twenty (20) feet.

#### O. Term of special permit.

A Special Permit issued for any personal wireless service facility over fifty (50) feet in height shall be valid for fifteen (15) years. At the end of that time period, the personal wireless service facility shall be removed by the carrier or a new special permit shall be required."

or take any other action relating thereto.

#### Submitted by Planning Board

Explanation: This article would establish regulations and a special permit process for "personal wireless service facilities" (wireless phone services, etc., usually involving towers), whose providers have recently been determined to be public service corporations (public utilities) by the Massachusetts Department of Telecommunications and Energy and which were the subject of specific land use control restraints enacted by the U.S. Congress as part of the Telecommunications Act passed in 1996. The Town may not

prohibit their development under the Telecommunications Act but may adopt reasonable guidelines on their location and other characteristics. The article is based on a model bylaw prepared for the Cape Cod Commission in response to the provisions of the Telecommunications Act, along with recommendations and copies of bylaws from other Massachusetts towns provided by Town Counsel.

It would restrict the height of such facilities to approximately 45 feet except within a Wireless Facility Overlay District, within which towers of 100 to 200 feet would be allowed. That overlay district includes the land within the Commonwealth Electric high tension power line easement as well as all other parts of the town except lands within the National Wildlife Refuge boundaries, within 1000 feet of the mean high water line of a Great Pond or tidal water body, within a Historic District, within 1000 feet of a Historic District or of a place listed in the 1997 Massachusetts State register of Historic places, within the Otis A.N.G.B. Accident Prevention Zone or within 300 feet of the right of way of any designated scenic roadway. Co-location and location of such facilities on existing towers, water towers, steeples etc. is encouraged. Visual buffers, camouflage techniques and setbacks ("fall zone") are required and noise and lighting are restricted in order to minimize impacts on neighboring properties.

#### Motion made by David Leveille.

Motion: I move that Article 35 be approved as printed in the warrant, except to delete the date "1997" before the phrase "Massachusetts State Register of Historic Places" in Subsection 174-5.C:

Add the phrase ", within the R-3 or R-5 Zoning Districts" after the phrase "Otis A.N.G.B. Accident Prevention Zone" in Subsection 174-5.C.;

Replace the phrase "Subsection H.(8)" with "Subsection H.(9)" and replace "(8)" with "(9)" in said Subsection;

Replace "174-45.2" with "174-45.3" where it appears;

Amend the definition of "ABOVE GROUND LEVEL (AGL)" in Subsection 174-45.3B by replacing it with the following: "A measurement of height from the natural grade at the structure location to the highest point of the structure;"

Delete the last sentence of Subsection 174-45.3(7)(a);

Replace the acronym "AML" with the acronym "MSL" in Subsection 174-45.3.I.(2)(h)(9);

Replace the third sentence in Subsection 174-45.3.I.(2)(i)(1) with the following: "The profiles shall show the building façade, all the intervening trees buildings and the the personal wireless service facility.";



Mashpee Annual Town Meeting October 5<sup>th</sup> and 6<sup>th</sup>, 1998 Quorum 0

Replace the reference "(47 Ch.I)" with the reference "(47 CFR Ch. I)"

And the delete the phrase "or take any action relating thereto".

Planning Board voted at the Public Hearing held on September 16, 1998 4 to 0 for approval.

Motion passes 151 to 2 at 9:19pm.

A TRUE COPY, ATTEST

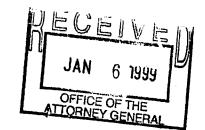
TOWN CLERK OF MASHPEF, MA



# The Commonwealth of Massachusetts Office of the Attorney General One Ashburton Place Boston. MA 02108-1698

FILE COPY

January 4, 1999



Deborah F. Dami, Town Clerk 16 Great Neck Road North Mashpee MA 02649

Re:

General Articles 17, 18 and 25 and Zoning Articles 26, 27, 29, 31, 32, 33,

34, 35 and 37, Mashpee Fall Annual Town Meeting 10/5/98, # 347

Dear Ms. Dami:

I return the amendments to the general by-laws adopted under articles 17, 18 and 25, as well as the amendments to the zoning by-laws adopted under articles 26, 27, 29, 31, 32, 34 and 37, all of the warrant for the "fall annual" town meeting, which first convened on October 5, 1998, with our approval.

In so approving the aforementioned articles, I would like to also warn the Town that the town meeting which took place on October 5 and 6, according to our records, was not an "annual" meeting under G.L. c. 39, § 9, but, rather, was actually a special town meeting. This is because the "fall annual" town meeting was created by by-law amendment instead of by special legislation or change to the town charter. While it appears that no harm was done this time in calling the town meeting an "annual" (with regard to the length of the notice, etc.), this should be cause for concern for future "fall annual" town meetings. In addition, in approving general article 18, I would like to remind the Town that, while, under G.L. c. 40, § 21D, certain of the "enforcing person's" administerial duties may be delegated to the Town Clerk, all notices issued pursuant to this statute must be "signed by the enforcing person" and not the Town Clerk.

Zoning articles 33 and 35 were also submitted with the same warrant. However, I have

been in contact with the Town Clerk, and I am awaiting receipt of maps with regard to those two articles before commencing our review of them.

Sincerely,

Kathryn B. Palmer

Assistant Attorney General

Coordinator, Municipal Law Unit

One Ashburton Place, Room 2019

Boston, MA 02108

Encl.

cc: Kopelman and Paige, P.C., 31 St. James Ave., Boston, MA 02116



# The Commonwealth of Massachusetts Office of the Attorney General One Ashburton Place Boston, MA 02108-1698

FILE COPY

January 7, 1999

Deborah F. Dami, Town Clerk 16 Great Neck Road North Mashpee MA 02649

Re:

Zoning Articles 33 and 35

Mashpee Fall Annual Town Meeting 10/5/98, # 347

Dear Ms. Dami:

I return the amendments to the zoning by-laws adopted under articles 33 and 35 of the warrant for the "fall annual" town meeting, which first convened on October 5, 1998, and the maps that pertain to each of those articles, with the approval of this Office.

Sincerely, Lattryn B. Talmer

Kathryn B. Palmer Assistant Attorney General Coordinator, Municipal Law Unit

One Ashburton Place, Room 2019

Boston, MA 02108

Encl.

cc: Kopelman and Paige, P.C., 31 St. James Ave., Boston, MA 02116

#### Boston, Massachusetts

The foregoing amendments to the general by-laws adopted under articles 17, 18 and 25, and the amendments to the zoning by-laws adopted under articles 26, 27, 29, 31, 32, 34 and 37, all of the warrant for the fall annual town meeting of October 5, 1998, are approved.

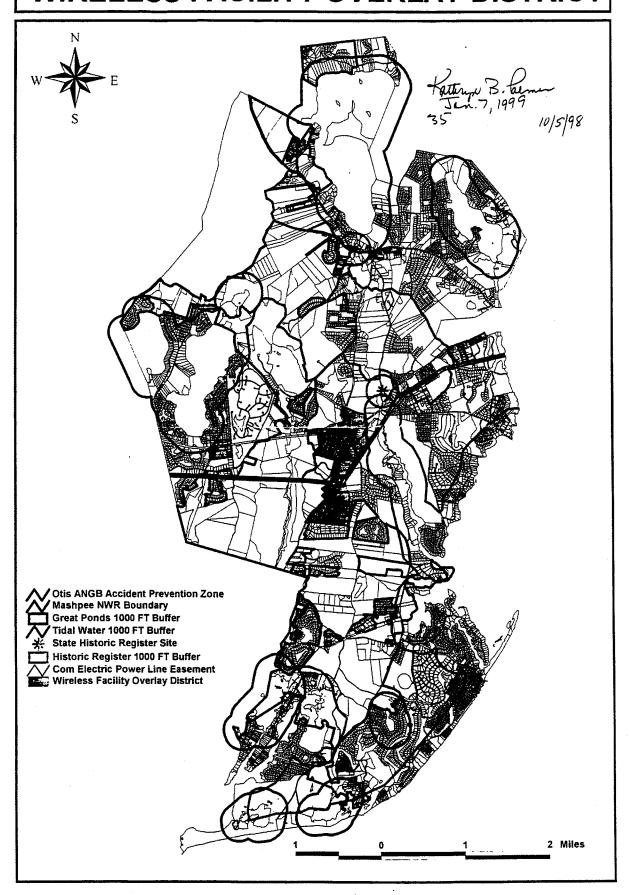
SCOTT HARSHBARGER ATTORNEY GENERAL

By: Kathryn B. Palmer

**Assistant Attorney General** 

Dated: January 4, 1999

## **WIRELESS FACILITY OVERLAY DISTRICT**





16 Great Neck Road North Mashpee, Massachusetts 02649

August 16, 2019

Applicant:

Blue Sky Towers II, LLC

**Property Owner:** 

Town of Mashpee

**Subject Property:** 

101 Red Brook Road, Assessors Map 104 Lot 2

Dear Mashpee Property Owner,

As the registered owner of a property located within 300' of the subject property named above, you are being notified that the Mashpee Planning Board is holding a public hearing on <u>Wednesday, September</u> 4, 2019 at 7:10 PM in the Waquoit Meeting Room, Mashpee Town Hall, 1st Floor, 16 Great Neck Road North, Mashpee, MA 02649 to solicit comments regarding the following case:

Blue Sky Towers II, LLC has filed an Application for a Special Permit to erect a personal wireless service facility as required by Section 174-25 (H)(9); 174-45.3 of the Mashpee Zoning By-Law. This project has been reviewed and approved as a Development of Regional Impact by the Cape Cod Commission. The applicant proposes to construct a 150' monopole within a 70'x70' fenced area on a 100' x 100' leased area from the Town of Mashpee adjacent to the Mashpee Fire Station #2.

If you wish to provide comment but you are unable to appear before the Board you may submit comments to me in writing via the contact information provided below or by emailing the Planning Board at <a href="mailto:PlanningBoard@mashpeema.gov">PlanningBoard@mashpeema.gov</a>. Your comments will be entered into the public record for the Board's consideration.

If you require any accommodations please submit requests to me via email prior to the specified date and time of the public hearing indicated herein, in legal advertisements in the Mashpee Enterprise, and posted in Town Hall.

Please do not hesitate to contact me by phone, email, or in person should you have questions about why you are receiving this notification.

Sincerely

Evan R. Lehrer, Town Planner elenrer@mashpeema.gov (508) 539-1400 x. 8521



—— 16 Great Neck Road North Mashpec, Massachusens 02649

### APPLICATION FOR SPECIAL PERMIT

Date
The undersigned hereby applies for a Special Permit from the Planning Board.  Name of Applicant Blue Sky Towers II, LLC Phone 781-873-0022
Name of ApplicantPhone
Owner, if different Town of Mashpee Phone 508-539-1401
Address 101 Red Brook Road, Mashpee, MA 02649  Attach copies of (a) most recent recorded deed and (b) tax bill or Assessors' certification.
Attach copies of (a) most recent recorded deed and (b) tax bill or Assessors' certification.
Deed of property recorded in Barnstable County Registry Book $\frac{830}{\text{and Book 262 Page 355}}$ or Land Court Certificate of Title No
Location and description of property The proposed personal wireless service facility will be
located at 101 Red Brook Road, Mashpee Fire Station #2. This parcel is approximately 36 acres.
Mashpee Assessors Map(s) and Block(s) Map 104, Lot 2
Zoning District(s) in which property is located R-3
How long have you owned the property See attached Letter of Authorization.  The Applicant has entered into a lease with the property owner.  174-25(H)(9); 174-45.3
See attached Letter of Authorization.  Section(s) of the Zoning Bylaw which require the permit you seek 174-25(H)(9); 174-45.3
Present use of property Town of Mashpee Fire Station
Present use of property
Proposed use of property Personal Wireless Service Facility
Check one: Applicant will send notice to abutters via certified mail, with return receipt to Mashpee Planning Board, and will provide certified abutters list.
Applicant requests that Planning Department send notice to parties in interest via certified mail, and will provide labels and certified abouters list MASHPEE TOWN CLERK
Signature of Owner or Authorized Representative  AUG - 2 2019
See attached Letter of Authorization  Attach written guthorization signed by office BY
Attach written authorization signed by owner.

Mashpee Board of Selectmen Mashpee Planning Board Mashpee Town Hall 16 Great Neck Road North Mashpee, MA 02649

#### To my town government officials:

We have owned our home in New Seabury since 2004, paying our taxes on time and following the local news from our condo in CT that was our full time residence while we were working. We were aware of the poor cell signal in our home but simply relied on our "land line" to have a clear conversation.

Upon retirement in 2010 we moved into our Mashpee home full time. That is when we began to deal with the constant reality that our cell phones won't work here. It has been frustrating at times but we have found some solutions by getting a booster for a while from Verizon and then when that stopped working with our newer phones, wi fi calling became our saving technology. Cell phones are the norm these days. Everyone we know has our cell phone number, not our land line number.

On Tuesday, July 23<sup>rd</sup> when we experienced that record breaking storm, we lost power for about 6 hours. I realize that some people were without power for longer but for us, the issue became the group of 8 friends who were staying with us. All of them are over 70 years old and one has fairly severe Parkinson's Disease. Suddenly I realized that if we had an emergency, we had no means of communication to get help! Our land line was non functional because Comcast (our carrier) was not working and of course without wi fi our cell phones were completely useless. If my friend fell (as he often does) I could not get an ambulance for him. This was a very frightening (albeit thankfully short-lived) situation.

This is a dangerous issue. Are we going to wait until someone dies because we have no cell signal in order to do something about it?! I realize that some townspeople have said "It's a New Seabury Problem, let New Seabury figure it out" – the fact is that all of the residents of New Seabury pay taxes to the town of Mashpee without incurring any expense for the town – why don't we get the smallest consideration for safety by the placement of a cell tower that will provide us a cell signal?

Please share this letter with all members of the Board of Selectmen and of the Planning Board. I look forward to the next town election – I vote here and plan to vote only for candidates who will promise to take care of this issue.

Yours truly,

Nancy M. Noonan



16 Great Neck Road North Mashpee, Massachusetts 02649

## MASHPEE PLANNING BOARD PUBLIC HEARING NOTICE

Pursuant to Massachusetts General Laws, Chapter 40A, the Mashpee Planning Board will hold a public hearing on Wednesday, September 4, 2019 at 7:10 P.M. at the Mashpee Town Hall, 16 Great Neck Road North, to consider an application by Blue Sky Towers II, LLC for a Special Permit to erect a personal wireless service facility as required by Section 174-25 (H)(9); 174-45.3 of the Mashpee Zoning By-Law. The property is located at 101 Red Brook Road, Mashpee Fire Station #2, identified on the Mashpee Assessors Maps as Map 104, Lot 2.

Submitted by:

Mary Waygan, Chair Mashpee Planning Board

Publication dates: Friday, August 16, 2019

Friday, August 23, 2019

To: Planning Board

From: Evan Lehrer, Town Planner

Date: August 30, 2019

Re: Proposed amendment to special footnote 14

<sup>14</sup>No building may be located within 75 feet of Routes 28 and 151, Great Neck Road South and North or Route 130 west of Great Neck Road (except within the Mashpee Center Overlay District) and, except for permitted signs and one (1) access driveway involving clearance of a path no more than forty (40') feet in width, any land within fifty (50') feet of said roads shall be left as a wooded buffer area in its natural state or in accordance with a landscape plan approved by the Design Review Committee except that Said area may be reduced by the Planning Board as part of its decision on a Special Permit approved under Section 174-45, Section 174-45.1 or Section 174-46. Where such area is not naturally wooded, it shall be suitably planted in accordance with a landscape plan approved by the Design Review Committee with sufficient trees and understory vegetation, of a type common in natural areas of Mashpee, to replicate a naturally wooded and to constitute a visual barrier between the proposed development and the roadway. Under no circumstances will parking, retention ponds, or any other development involving natural vegetation be permitted within said area. Limited, appropriate treesurgery or similar limited maintenance required to protect the health of vegetation in this area may be allowed with the approval of the Special Permit authority which originally authorized the project which included said area or, if no Special Permit was required, with the approval of a majority of the Planning Board. In commercial and industrial districts, any land within the side and rear lot lines shall have at a minimum a ten (10) foot vegetated buffer, either in its natural state or in accordance with a landscape plan approved by the Design Review Committee, with the recommendation made to the Zoning Board of Appeals or the Planning Board. Said buffer may be waived, as part of a Special Permit decision, where the Special Permit granting authority determines that such buffer would be inappropriate for the area and where there is a written agreement to said waiver by the abutting property owner. Any proposed landscape plan shall be consistent with the Cape Cod Commission's Recommended Plants for Low Impact Design approved 04/05/06.