16 Great Neck Road North Mashpee, Massachusetts 02649

Meeting of the Mashpee Planning Board Wednesday, August 21, 2019 Waquoit Meeting Room, 7:00 PM

MASHPEE TOWN CLERK

AUG 1 6 2019

Call Meeting to Order

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

Pledge of Allegiance

RECEIVED BY ______

Approval of Minutes

Review and approval of meeting minutes from July 17, 2019 and August 7, 2019

Public Hearings

7:10 PM - Best Buy Beverage

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 174-25 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.

7:20 PM - Modi LLC (Continued from 8/7/2019)

Modi, LLC has filed for 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 to reduce the required 100′ undisturbed naturally vegetated buffer adjacent to any residentially zoned parcel outside of the C-3 District to 50′. This waiver request is made pursuant to §174-25.1(4).

New Business

- Charles Rowley July invoice for Southport
- Request for Release of Open Space Parcel 1 from the Covenant-Evergreen Energy LLC

Old Business

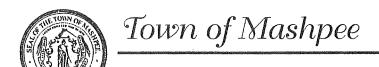
- Proposed Development Agreement with Mashpee Commons
 - Presentation by Cape Cod Commission

Chairman's Report

- October 2019 Town Meeting Warrant
- Employment of Outside Consultants

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..



16 Great Neck Road North Mashpee, Massachusetts 02649

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.
- Local Comprehensive Plan New Guidance from Cape Cod Commission

Additional Topics (not reasonably anticipated by Chair)

Adjournment

MASHPEE TOWN CLERK

AUG 1 6 2019

RECEIVED BY____

Mashpee Planning Board Minutes of Meeting July 17, 2019 at 7:00 p.m. Mashpee Town Hall-Waquoit Meeting Room 16 Great Neck Road North

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 7:00 p.m. on Wednesday, July 17, 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. The Chair announced that, with Public Hearings listed on the agenda, the public would have the opportunity to address the Board. The Chair noted that the 7:10 p.m. and 7:15 p.m. hearings would be continued.

APPROVAL OF MINUTES—July 3, 2019

MOTION: Mr. Balzarini made a motion to approve the minutes as presented. Mr. Callahan seconded the motion. All voted unanimously.

PUBLIC HEARINGS

7:10 p.m. Cape & Islands Engineering Application for Definitive Subdivision at 103 Meetinghouse Road, Assessor's Map and Block 45-50-0.

The appointed time having arrived, the Chair opened the Public Hearing and read for the record the Public Hearing Notice and request. The Chair read correspondence received from Matt Costa of Cape & Islands Engineering, dated July 16, 2019, requesting a continuance for another two weeks. The Chair noted that additional correspondence was received from The Trustees and Division of Fisheries & Wildlife. The Chair explained that ownership properties were being transferred and the State Legislature had been referenced in the letter requesting the continuance. As a result, the Board would be unable to accept public comment but could provide copies of the correspondence and recommended any comments be directed to the Town Planner.

MOTION: Mr. Balzarini made a motion to continue to August 7th at 7:20 p.m. Mr. Cummings seconded the motion. All voted unanimously.

The Chair provided correspondence to interested parties.

7:15 p.m. Cape & Islands Engineering Application for Special Permit for Cluster Subdivision to Create Three Building Lots and Two Open Space Parcels

The Chair opened the Public Hearing and read for the record the Public Hearing Notice and request.

MOTION: Mr. Balzarini made a motion to place on the agenda for 7:25 p.m. on August 7th. Mr. Cummings seconded the motion. All voted unanimously.

7:30 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 Chair opened the Public Hearing and read for the record the Public Hearing Notice and request from Modi, LLC. Jan Aggerbeck, owner of Modi, LLC/Cape Cod Coffee, summarized his business established in 1970, and its expansion to roasting. Mr. Aggerbeck wished to relocate to a new site where the business could grow and offer both roasting and coffee service. Richard Tabaczynski, civil engineer for the project, helped to develop the site plans and coordinated the lighting and landscape plans. Mr. Tabaczynski described the site plans, including the loading and parking areas, the above ground infiltration for ground water and the green space and landscape areas. Parking requirements were met, based on the use of the building, offering 50 spaces with a requirement of 34 spaces. Enclosed trash area, sidewalks and stop signs were also identified on the site plan. Mr. Tabaczynski stated that the building met all setback requirements, including a covered porch that would surround the building. Regarding the landscape plan, landscaping would be placed around the building with beds and trees as well as street trees with small planting beds. There would be a fire pit and outdoor seating, with landscaping located in those areas. Plantings would also be placed in the parking areas for aesthetic purposes. The basin would be grassed with no special plantings. There would be lawn areas and a fence along the southern lot line and split rail fence to enclose the front of the building for outdoor use. Utilities would be placed underground and the denitrification system would be located at the rear of the building. Two separate stormwater systems would be installed, one for roof runoff that would flow to underground chambers and the parking lot discharge through several catch basins, in accordance with requirements.

Mike Hillsinger, architect, discussed changes to include window detail changes and the addition of a decorative trellis, to break up the wall. Bollards were also added to the back of the building. A black roof was planned, along with grey board and batten siding with black window frames. The side of the building facing Route 130 (east elevation) would be a farmhouse style with the wrap around porch, whereas the rear (west elevation) would be more basic. The two sides facing roadways (Route 130 and Evergreen) would be more dressed up, because the building was located on a corner lot.

Mr. Balzarini inquired about the septic and leaching fields and potential overflows damaging the septic system. Mr. Rowley stated that the runoff would enter the surface disposal area, traveling away from the onsite sewer system.

Mr. Cummings inquired whether the Fire Department should have access to all four sides of the building. Mr. Phelan responded that, by code, 250 feet was needed from the parking area. Mr. Cummings inquired about the street sign and it exceeding the 20 square foot maximum. Mr. Aggerbeck responded that they would be relocating the existing sign, as it was already approved by the Town, replacing #348 with #10. The Chair indicated that the sign would be added to a list for potential relief. There was discussion regarding signage regulations and maximums. Mr. Lehrer would clarify the matter further.

The Chair inquired about the potential future industrial tenant and whether there was too much parking impacting buffers. Mr. Aggerbeck responded that Cape Cod Coffee would be occupying 8,500 square feet, with 1,500 potentially available to a potential tenant. The Chair inquired whether Mr. Aggerbeck would be willing to accept a condition that the use would be compatible with the current food use, to avoid such uses as toxic waste processing. Mr. Aggerbeck responded that he would want the tenant to be compatible, otherwise they would likely use the space themselves.

The Chair stated that not matching the landscaping plan and the site plan made it difficult to interpret and asked that dimensions be added to the landscaping plan. Additionally, the Chair noted that there was a modification to the Bylaw regarding the Overlay District, not yet approved by the Attorney General, and inquired whether or not it applied to this project. Mr. Aggerbeck confirmed that they would like to add outdoor seating, but that it was not necessary. The Chair responded that the eating place was allowed but that it needed to have vegetated visual screening due to the abutting residential area. In addition, the design needed to comply with the design guidelines of the Cape Cod Commission. Mr. Lehrer noted that some changes had been made to the design, based on the Cape Cod Commission design guidelines, such as the arbors or landscaping, to break up the long blank wall. Mr. Lehrer agreed to forward the guidelines to Planning Board members.

Mr. Phelan inquired about the rope barriers listed on the plan and Mr. Hillsinger responded that the rope barrier would be located only on the porch. The Chair inquired about the overhead doors and Mr. Hillsinger responded that they would be open during summer months, and not used for loading or unloading. Mr. Phelan inquired further about the egress flow of the area in case of an emergency, particularly with the location of the fire pits. Mr. Tabaczynski responded that there was a gate and stepping stones to access the parking area at the rear. The Chair suggested that the plan required more labels. Mr. Phelan suggested the addition of building dimensions and Mr. Hillsinger responded that the building was 162 feet by 60 feet.

Mr. Lehrer stated that the request to waive the buffer requirements from the nearest residential parcel from 100 feet to 50 feet required notice to abutters for when the Board would be discussing the matter. The Chair stated that the Board could consider the possibility of the reduction on August 7 and Mr. Lehrer would then notice the abutters at least 14 days. The Chair inquired whether there were additional waivers. The Chair was unsure if the buffer was a waiver or variance and Mr. Lehrer read the Standards for C-3 Districts.

Mr. Phelan inquired whether there would be buffering along the 6 foot fence located on the south side, and it was confirmed that it would be the fence only. Due to the location of the abutting May Institute, who is providing on-site skills training, and the potential for sound and noise issues at Cape Cod Coffee, Mr. Phelan suggested that additional buffering may be preferable.

Mr. Hansen referenced the RAB and lighting details and inquired about the set of lights closest to the dumpsters that may not shed sufficient light for employee accessibility. Mr. Hillsinger suggested that the lighting could be adjusted by providing a different head style on the post and would not significantly the change the plan.

Mr. Lehrer noted that zoning in the C-3 district defined the front of the building as the side facing Route 130.

Copies of Mr. Rowley's letter were provided to the project proponent. Upon review of the site location, Mr. Rowley referenced the land space requirement and the necessity for a 10 foot natural buffer for the rear and side lines in the Commercial Zoning District. Site plan 5-4-4 showed the clearing limits to the boundary of the lot. If the area was to be cleared, landscaping would need to be enhanced to create a buffer. In addition, the buffer in front of Route 130, west of Great Neck Road, required a 50 foot undisturbed natural buffer. Sheet 4 or 5 showed contour line changes with grades from 6 feet to 2 feet, emphasizing that the natural buffer needed to remain and could not be made into a lawn as depicted, or relief granted from the Zoning Bylaw. The buffer located at the back line of the fence, and side line where drainage was located, required loam and seeding and could be considered a landscaped area.

Regarding the entrances to the parcels from Evergreen Circle, templates for the Fire Department's tower truck showed that navigation would not be possible without running over the curbs. Adjustments to the entrance closest to Route 130, with a wider island, may allow access for the fire truck. The more southerly entrance could have an increased radius in order to accommodate the apparatus, however, neither change would address the internal circulation challenges which could be addressed by the Fire Department. Mr. Aggerbeck stated that the Fire Chief had reviewed the plan and accepted the layout, but Mr. Phelan indicated that the Fire Chief likely was unaware of the turning radius. The Chair asked that Mr. Rowley follow up with the Fire Chief so that comments could be provided in writing.

Mr. Rowley referenced the front view of the building, and the possibility of parking being located elsewhere, but that the Bylaw provided the Board with the latitude to allow for the location of the parking in Section 174-37. There were some issues regarding curbing and grading matters that could be addressed directly with the project's engineer. There was consensus from Board members that Mr. Rowley work with the engineer on minor details.

Mr. Rowley noted that the project proponent planned to request a waiver from the Board of Health to install the reserve area at the time of the construction, which could impact the site construction. Mr. Rowley suggested that any necessary adjustments should be shared with the Planning Board.

Regarding the landscape plan, Mr. Rowley noted inconsistencies surrounding the patio area, with different shapes being shown on different plans. The Operations and Maintenance Plan included with the Stormwater Management Program should be incorporated by Board approval.

Evergreen Circle's water quality report and calculations of the square footage of the site plan exceeded the 10,000 square foot figure provided by Holmes McGrath. Including the porch and covered pavilion, Mr. Rowley calculated a figure of 11,784 square feet or 8,650 square feet without the porch and pavilion. A determination was needed to determine whether or not the plans were compliant or non-compliant with the nitrogen assumptions. Mr. Tabaczynski stated that they had been in receipt of a letter dated November 15, 2017 from Holmes McGrath that listed nitrate assumptions indicating that the building would occupy 20% of the land area, totaling 15,000 square feet. Mr. Rowley suggested

that further review would be needed if there were updates to the letter. The Chair inquired whether the subdivision had been reviewed by the Cape Cod Commission and Mr. Lehrer confirmed that he would provide the Board and Mr. Rowley with their decision. Mr. Tabaczynski stated that nitrogen loading from a roof top was significantly less than loading from paved areas, lawns and septic systems. Mr. Tabaczynski stated that the building calculations were 0.75 ppm loading rate, and would be negligible compared to 35 ppm loading rate for a septic system.

The Chair invited public comment and announced that the hearing would be continued to the first meeting in August, and also invited the public to submit comments through the Town Planner or Planning Department staff. There was no public comment.

Mr. Hansen inquired about the front building elevation and main entrance and Mr. Hillsinger responded that the main entrance was located on the side. Mr. Hansen inquired about a "fixed" door and Mr. Hillsinger responded that it was an unusable door placed to create symmetry and control traffic.

The Chair suggested a condition that a proposed tenant would be compatible with respect to health and safety, requested that the project proponent develop a list of waivers needed and Mr. Lehrer would confirm notifying abutters and inquire further about variances. Mr. Lehrer noted that the Zoning was clear that the Planning Board had discretion to make a determination regarding the variance. The Chair further added that the project proponent would add landscape elements to the site plan, particularly the buffers, add dimensions to the building and to the landscaping plan. The Chair advised reviewing Bylaw changes approved in May and how best to address those changes. The Chair would follow up with Town Counsel to confirm when those changes would take effect. Mr. Tabaczynski inquired whether their design was in compliance and the Chair responded that the guidebook highlighted areas such as architecture, landscaping, energy efficiency and recommended addressing the matter in a statement. Mr. Aggerbeck expressed his desire to remain in Mashpee and was seeking approval to move forward with a funding deadline in August. The Chair recommended converting the landscaping plan into colorized sketches for abutters, as well as reaching out to the abutters directly to share the information in advance of the next Planning Board meeting. Mr. Aggerbeck encouraged any interested parties to also reach out to him with any questions, adding that they had designed the structure in such a way that would be appealing to all, including the use of smokeless equipment. The Chair encouraged the project proponent's team to work with Mr. Rowley to address issues discussed. Mr. Rowley suggested reviewing footnote 14 under Section 174-31 regarding the 50 foot buffer, and that under certain conditions, the Planning Board could make modifications with careful consideration. Mr. Lehrer referenced Section 174-25.1, Subsection 4. Mr. Rowley referenced the project proponent's potential time crunch, offering his willingness to meet at Town Hall as convenient.

MOTION: Mr. Balzarini made a motion to continue this to August 7th at 7:45 p.m. Mr. Callahan seconded the motion. All voted unanimously.

APPROVAL NOT REQUIRED

Jonathan Pelloni, 28 Blue Castle Drive, Assessors Map and Block 104-11-0
Jonathan Pelloni, 20 Blue Castle Drive, Assessors Map and Block 104-1-0A-0-Jonathan
Pelloni, attorney for property owners Duco Associates at 28 Blue Castle Drive and Ellen Brady at 20

Blue Castle Drive, was present to request an Approval Not Required for the two properties. Blue Castle Drive was an unpaved private road and Mr. Pelloni was seeking a determination from the Planning Board as to whether the roadway provided adequate access to both lots. Mr. Pelloni stated that, through the approval of the Ockway Highlands Subdivision, determination had been made, by implication, acknowledging that the road would be sufficient for use for the development. Significant concerns included safe passage of the road, which were addressed through the permitting process. Mr. Pelloni was seeking approval from the Board that the road provided adequate access to the lots.

Mr. Balzarini stated that the road had been in use for 25-30 years and its condition had been improved with the recent site preparations for the approved development.

Mr. Rowley referenced Section 81-L, confirming that the Board would need to determine if the frontage met one of three categories: 1) shown on a subdivision plan approved by the Planning Board, which it did not; 2) a way certified as a Town way, which it was not; or 3) a way in existence before the adoption of Subdivision Control but provided suitable access with grade or construction for the purposes of the lots being constructed. Mr. Rowley stated that the Planning Board's decision did not negate the requirement to satisfy the Zoning Bylaw by acquiring a building permit with the Zoning Board of Appeals or the Building Commissioner.

There were no additional questions.

MOTION: Mr. Balzarini made a motion to endorse the ANR for 28 Blue Castle Drive dated May 9, 2019. Mr. Callahan seconded the motion. All voted unanimously.

MOTION: Mr. Balzarini made a motion to endorse the ANR for 20 Blue Castle Drive dated May 9, 2019. Mr. Callahan seconded the motion. All voted unanimously.

The Plans were signed by Planning Board members.

NEW BUSINESS

Set Public Hearing Date for Special Permit Application for Kevin Andrade-Mr. Lehrer confirmed that there were not yet any Public Hearings scheduled for the proposed meeting. Mr. Phelan inquired whether he could submit comments if he were in receipt of the plans, but absent from the meeting and the Chair confirmed that he could miss one Public Hearing session, and follow up by reviewing the documents and testimony and signing a letter certifying his review of the meeting. Mr. Hansen confirmed that he would be in attendance.

MOTION: Mr. Balzarini made a motion to schedule the Public Hearing for August 21st at 7:10 p.m. Mr. Callahan seconded the motion. All voted unanimously.

October Town Meeting, Submitted Warrant Articles-The Chair confirmed that the Bylaw Review Committee would be putting forth 31 amendments to the Town's Bylaw. The Chair confirmed that one of the amendments would adjust the deadline for Zoning Bylaws, moving it from July to August. Within the packet, there were two proposed amendments to the Zoning Bylaws, Temporary Seasonal Sign Bylaw and the Accessory Dwelling Unit Bylaw. The Chair had been in Contact with

Selectman Sherman regarding waiting on the Temporary Seasonal Sign Bylaw. Regarding the ADU, Mr. Balzarini suggested that abutters should be notified of an ADU separate from the primary residence. Mr. Lehrer stated that the by right use was intended to simplify the process for the owners and to create more rental units, but noted that the Board could consider making a detached accessory apartment a separate use in the table to be reviewed by Plan Review or through the Special Permit process. Mr. Phelan stated that there would only be a single apartment with 1-2 bedrooms. Mr. Balzarini stated his preference that new construction of a detached accessory apartment require notification of abutters. Mr. Lehrer stated that the design criteria for the unit would continue to be restrictive, including being limited to 40% of gross floor coverage of the principal residence. The Chair was in agreement with Mr. Balzarini, and suggested developing a compromise. The Chair suggested a workshop to allow comments and further discussion. Mr. Phelan agreed that there could be language added about new construction, but that it should not be overcomplicated. The Chair noted that concern had been expressed about the one month requirement from residents attending the previous meeting and suggested opening the matter for public comment. Mr. Lehrer indicated that a three month minimum would be a compromise but anything more could restrict the seasonal workforce. There was consensus to add the matter to the next agenda on August 7, to accept public comment. The Chair would follow up with Selectman Gottlieb to confirm the plans of the Board, and the item would remain on the agenda.

Mashpee Commons Intent to Apply for Development Agreement-The matter was discussed at a joint meeting with the Board of Selectmen and Mr. Phelan reported that the Planning Board would serve as the lead, but that other parties would be involved to develop a mutual discussion. It was suggested that the Planning Board begin their meeting one hour earlier to enable group discussion about Mashpee Commons. There was discussion about the needs of the Town and the needs of Mashpee Commons. The Chair requested that Mr. Lehrer distribute the local Bylaw for the Development Agreement identifying the Planning Board as the lead, though Mr. Phelan indicated that everyone was already aware of the Bylaw. There was consensus to begin meeting with Mashpee Commons before the proposal was submitted to the Cape Cod Commission. The Chair stated that all matters for consideration in the Development Agreement included all chapters in the Local Comprehensive Plan and all of the Technical Bulletins, and asked that Mr. Lehrer develop a list.

Mr. Lehrer stated that it was a proposed agreement among three parties and Selectman Gottlieb had inquired as to who would lead the meetings. Selectman Gottlieb planned to speak with Kristy Senatori and the Chair confirmed that she would communicate Chair to Chair to clarify the information. Mr. Balzarini stated that the Cape Cod Commission should be working for the Town. The Chair stated that the Development Agreement would be written, but final approval would be by the Board of Selectmen. The Chair asked for Mr. Lehrer's technical assistance, as well as assistance identifying any necessary consultants to research or review plans or prior research. Previously, Mashpee Commons funded consultants for review of their work. Mr. Balzarini suggested inviting Mashpee interested Committees/Boards to the first meeting and Mr. Phelan recommended establishing ground rules at the first meeting. The Chair inquired about other Development Agreements and Mr. Balzarini believed that Yarmouth was the only other Agreement. Mr. Phelan added that no more than 2 members of a Committee should attend. The Chair would follow up with Selectman Gottlieb.

One Cape Registration-Mr. Lehrer stated that 4 members had confirmed attendance and the invoice was ready for signature and \$360 (\$90 each) had been authorized for payment. Mr. Balzarini may sign up under a separate registration.

MOTION: Mr. Balzarini made a motion to make the payment. Mr. Phelan seconded the motion. All voted unanimously.

OLD BUSINESS

CHAIRMAN'S REPORT

The Chair reported that she had attended the Mashpee EDIC meeting, noting that efforts to utilize Town-owned land for a hotel may instead be utilized for housing. The Chair offered to share model Zoning Bylaws with Selectman Sherman to develop local action units, to adjust setbacks and develop affordable housing and gave the Town more control over the type of housing developed.

At a recent Board of Selectmen meeting, there was discussion regarding noise attenuation efforts for the pickle ball courts. There was also discussion about a possible proposal reducing Community Preservations funds to 2% and adding 2% for wastewater.

BOARD MEMBER COMMITTEE UPDATES

Cape Cod Commission-No update

Community Preservation Committee-As discussed above

Design Review Committee-Mr. Callahan reported that the Committee reviewed a 7,000 square foot warehouse on Evergreen Circle, as well as an application for a proposed 9,993 commercial building on Route 151 for a Dollar Tree. Interest was expressed in ensuring a more Cape Cod design for the Dollar Tree. Both matters were in the early stages and would be reviewed again.

Plan Review-Mr. Lehrer reported that he had voted against the Dollar Tree proposal because the applicant was creating their own hardship due to its size and today's restrictions, and requesting a lengthy list of relief and variances. Mr. Lehrer suggested a smaller building or other location may be better suited for the proposal.

Environmental Oversight Committee-Mr. Cummings reported that the helium balloon bylaw would be considered at October Town Meeting. Mr. Cummings also reported that Solar Bee would be donating an additional Solar Bee for one year. Sampling for July and August would occur in Santuit and Ashumet Ponds and 4 ½ million quahogs would be placed in Mashpee River. Efforts would also be made to clean up Johns Pond.

Greenway Project & Quashnet Footbridge-No update

Historic District Commission- No meeting

MMR Military Civilian Community Council-MMR Joint Land Use Study-Mr. Phelan reported that the name had changed to Community Advisory Council and required an appointment from the Governor. Mr. Phelan was awaiting confirmation from the Town Manager regarding his appointment. The Council would meet twice per year. Mr. Lehrer will correct the Council name on the agenda.

UPDATES FROM TOWN PLANNER

Mr. Lehrer reported that he would be presenting Form Based Codes at the One Cape Summit.

ADDITIONAL TOPICS

ADJOURNMENT

MOTION: Mr. Balzarini made a motion to adjourn. Mr. Callahan seconded the motion. All voted unanimously. The meeting adjourned at 9:14 p.m.

Respectfully submitted,

Jennifer M. Clifford Board Secretary

LIST OF DOCUMENTS PROVIDED

Additional documentation may be available in the Planning Department

- -Application Approval Not Required and Accompanying Documentation, 28 Blue Castle Drive
- -Application Approval Not Required and Accompanying Documentation, 28 Blue Castle Drive
- -Public Hearing Notice, Special Permit, 103 Meetinghouse Road
- -7/16/19 Matt Costa, Cape & Islands Engineering, Letter Requesting Continuance for 103 Meetinghouse Road
- -7/17/19 Letter from Robert Warren of The Trustees, Referencing 103 Meetinghouse Road
- -7/17/19 Letter Division of Fisheries & Wildlife, Referencing 103 Meetinghouse Road
- -Public Hearing Notice, Definitive Subdivision of Land, 103 Meetinghouse Road
- -Public Hearing Notice, Special Permit Application, Modi, LLC
- -Modi, LLC Application for Special Permit and Accompanying Documentation
- -Site Plans, Cape Cod Coffee
- -Lighting Layout, Cape Cod Coffee
- -Landscape Design, Cape Cod Coffee
- -7/12/19 Charles Rowley Letter Regarding Cape Cod Coffee Site Plan Review
- -Article 27 Bylaw Amendment



Planning Board

16 Great Neck Road North Mashpee, Massachusetts 02649

APPLICATION FOR SPECIAL PERMIT

Date
The undersigned hereby applies for a Special Permit from the Planning Board.
Name of Applicant Kevin Andrade Phone
P.O. Box 956, East Falmouth, MA 02536 Address
Owner, if different Evergreen Energy, LLC. Phone 508-477-7272
81 Echo Road, Mashpee, MA 02649
Address
Deed of property recorded in Barnstable County Registry Book 29541 Page or Land Court Certificate of Title No.
Location and description of property Lot A, 11 Evergreen 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)Map 19 Parcel 10 Ext 12
Zoning District(s) in which property is located
How long have you owned the propertyMarch 29, 2016
Section(s) of the Zoning Bylaw which require the permit you seek174 - 24 C. 1.
Present use of propertyVacant land
Proposed use of property Proposed new building and site construction to provide retail use with office space 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 abutters list.
Signature of Owner or Authorized Representative MASHPEE TOWN CLERK
Attach written authorization signed Flacourner By
much whiteh authorization signed His CENTED 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

MP

M-S Partch

7 8 0 MEMO

#O13927# #O11301798# O6 OO458657#



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

TABLE OF CONTENTS

1.	0 Overview	. 1
	1.1 Introduction	. 1
	1.2 Applicable Regulations	. 1
2.	0 Background	. 2
	2.1 Existing Conditions	. 2
	2.2 Property History	. 2
	2.3 Site Characteristics	. 2
3.	0 Proposed Project	
	3.1 Scope of Work	. 2
	3.2 Construction Methodology	
	3.3. Proposed Drainage	. 3
4.	.0 MassDEP Standard Compliance	
	4.1 Standard #1: No untreated discharge or erosion to wetlands	4
	4.2 Standard #2: Peak rate attenuation	4
	4.3 Standard #3: Stormwater recharge	4
	4.4 Standard #4: Water Quality	5
	4.5 Standard #5: Land uses with higher potential pollutant loads (LUHPPL)	5
	4.6 Standard #6: Critical areas	5
	4.7 Standard #7: Redevelopment	
	4.8 Standard #8: Construction period controls	
	4.9 Standard #9: Operation and Maintenance Plan	6
	4.10 Standard #10: Prohibition of Illicit Discharges	7
5	.0 Stormwater Design Calculations	
	5.1 Stormwater Quality and Quantity Volume	7
	5.2 Total Suspended Solid Analysis	8
	5.3 Overall Stormwater Design for High Intensity Design Storms	9
6	.0 Summary	9
	6.1 Conclusion	9
	6.2 Contact Information	
7	.0 Appendixes	.11
	7.1 Appendix A – Development Drainage Basin Areas	11
	7.2 Appendix B – Drainage Calculations (HydroCAD analysis)	11

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	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.

Danasasasas	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		Contributin	g Drain Area	3
	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)

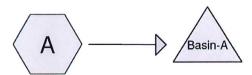
raul@capeeng.com

7.0 APPENDIXES

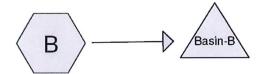
7.1 Appendix A – Development Drainage Basin Areas

&

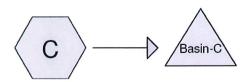
7.2 Appendix B – Drainage Calculations (HydroCAD analysis)



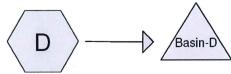
Front Right Underground Detention & Infiltration



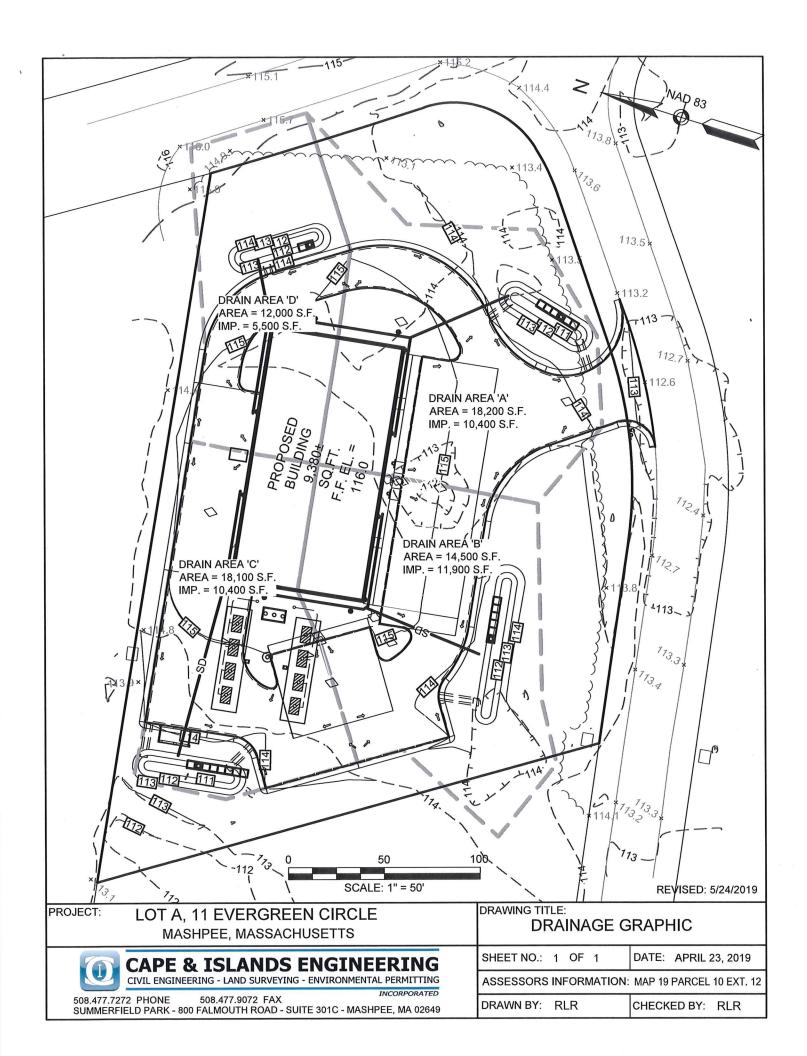
Front Left Underground Detention & Infiltration



Rear Left Underground Detention & Infiltration



Rear Right Underground Detention & Infiltration



11 Evergreen - Area A-B

Prepared by {enter your company name here} HydroCAD® 8.00 s/n 004521 © 2006 HydroCAD Software Solutions LLC Page 2

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% Grass - Landscape Area				
	18,200	3,200 73 Weighted Average					
	7,800 Pervious Area						
	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% Grass - Landscape 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

Prepared by {enter your company name here}

Page 3

HydroCAD® 8.00 s/n 004521 © 2006 HydroCAD Software Solutions LLC

4/23/2019

Volume	Invert	Avail.Storage	Storage Description
#1	111.00'	2,077 cf	Drain basin (Irregular) Listed below (Recalc) -Impervious
#2	105.00'		4.00'W x 4.00'L x 4.00'H 4'x4'x4' galley x 6 Inside #3
#3	104.00'	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
		-	

2,908 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 11 11 00:00 = 11 0:00 11 = 1100:100:10 11 0:00:10
			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

Prepared by {enter your company name here} HydroCAD® 8.00 s/n 004521 © 2006 HydroCAD Software Solutions LLC Page 2

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"

Ar	ea (sf)	CN	N Description			
	10,400	98	Roofs & pai	king area		
	7,700	39	>75% Gras	s - Landsca	ape Area	
1	18,100	73	Weighted A	verage		
	7,700 Pervious Area			ea		
1	10,400		Impervious	Area		
Tc (min)	Length (feet)	Slope (ft/ft)	•	Capacity (cfs)	Description	
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 Ar	ea	
	5,500		Impervious	Area	
		01	Mala di	0	Description
	c Length	Slope	•	Capacity	·
<u>(mir</u>	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)

Invert

111.00'

106.00'

105.00'

Volume

#1 #2

#3

HydroCAD® 8.00 s/n 004521 © 2006 HydroCAD Software Solutions LLC

Avail.Storage	Storage Description
1,103 cf	Drain basin (Irregular) Listed below (Recalc) -Impervious
	4.00'W x 4.00'L x 4.00'H 4'x4'x4' galley x 8 Inside #3
	512 cf Overall x 80.0% Voids
555 cf	10.00'W x 38.00'L x 5.00'H Excavation w/stone backfill

1,900 cf Overall - 512 cf Embedded = 1,388 cf \times 40.0% Voids

2,068 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	255	110.0	0	0	255
111.50	426	119.0	168	168	429
112.00	617	129.0	259	428	636
112.50	542	138.0	290	717	838
113.00	1,026	147.0	386	1,103	1,054

Device Routing Invert Outlet Devices

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

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 = 1.01 cfs @ 12.03 hrs, Volume= 3,362 cf

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

Discarded = 0.14 cfs @ 12.00 hrs, Volume= 3,362 cf

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)

Volume	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

1,322 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
Davisa Pouting	n lov	ort Outlot	Dovince		

Device Routing Invert Outlet 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: 19-10-0

Certified by: Surew & Device

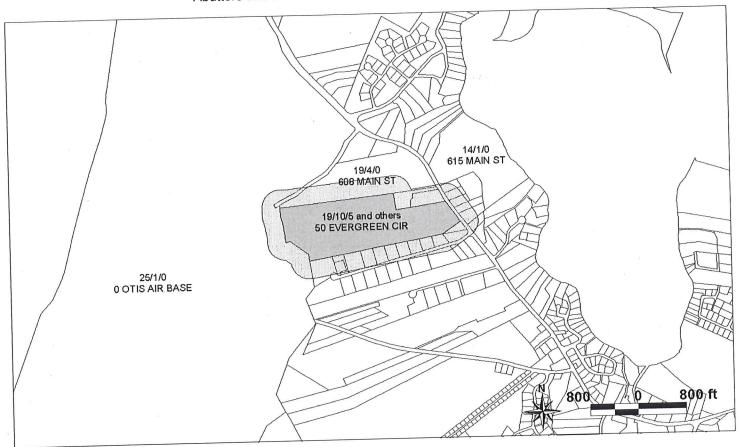
TOWN OF MASHPEE, MA BOARD OF ASSESSORS 16 Great Neck Rd., North, Mashpee, MA (126)

June 13, 2019

588 Main St

Number of Abutters: 47

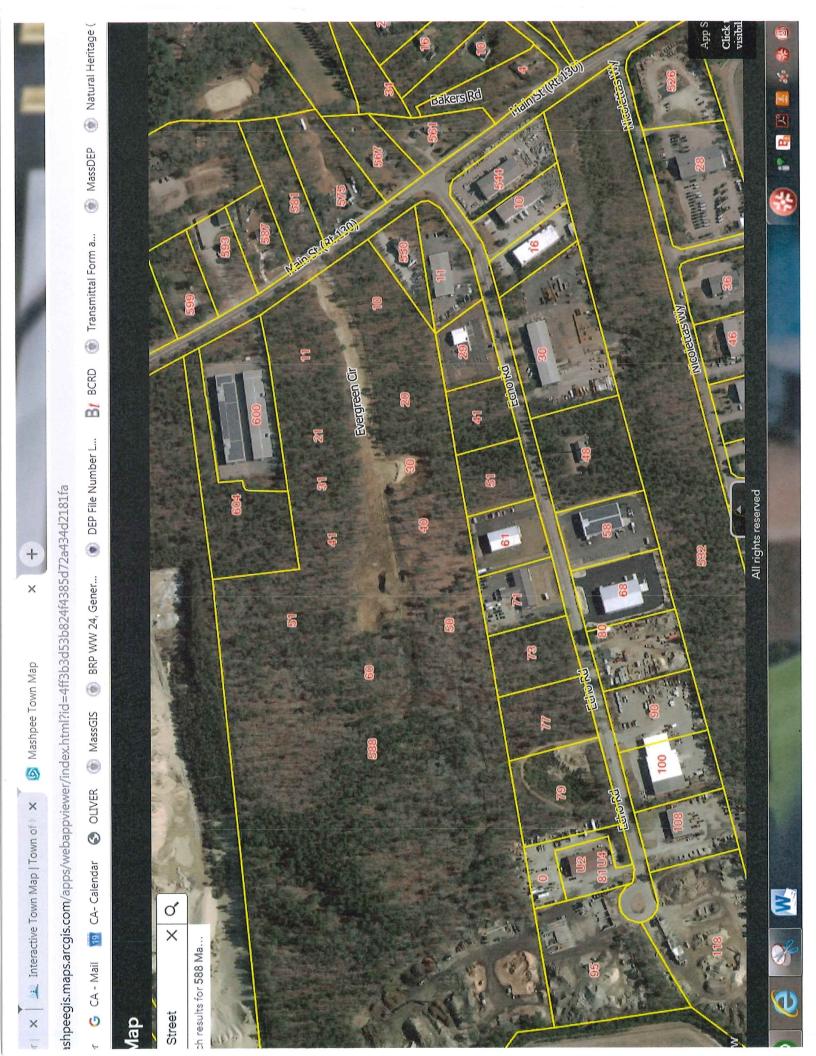
Abutters List Within 300 feet of Parcel 19/10/5 and others

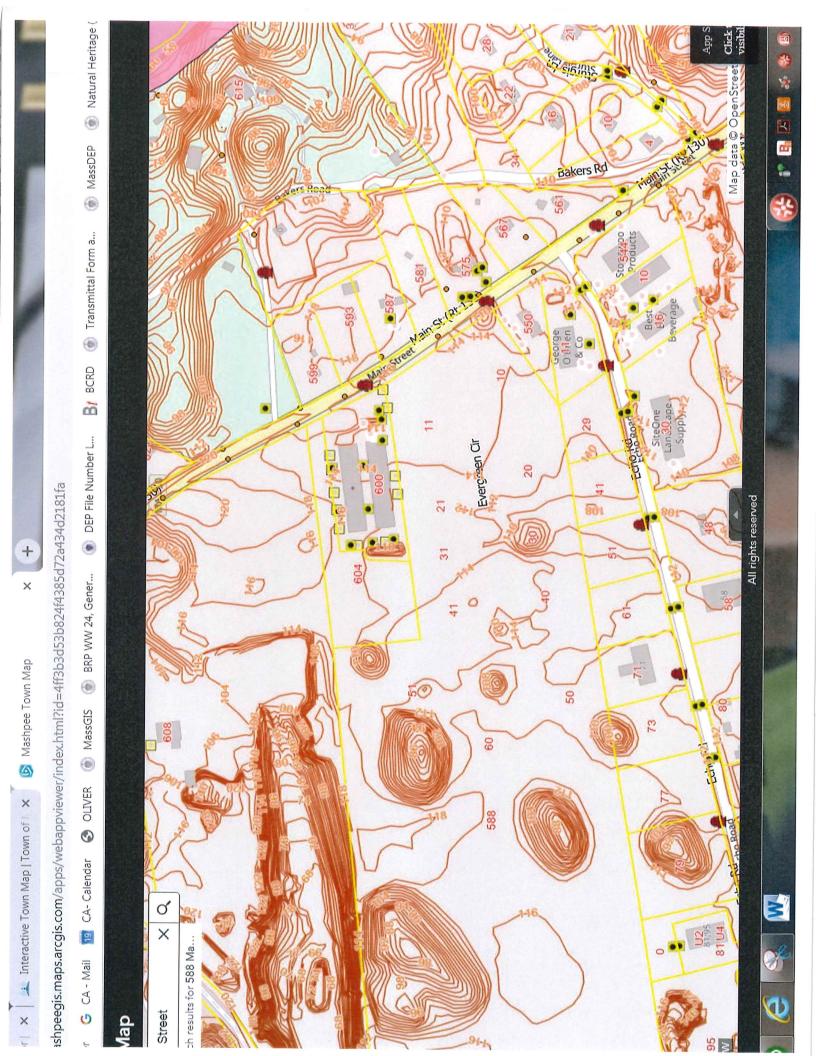


				Mailing Street	Mailing City	ST	ZipCd/Country
Key	Parcel ID	Owner	Location	615 MAIN STREET	MASHPEE	MA	02649
	14-1-0-E	CAPE COD CAMP CORPORATION	615 MAIN ST		MASHPEE	MA	02649
507	19-1-0-R	MIKUTOWICZ JOHN F TRUSTEE 30 ECHO ROAD REALTY TRUST	30 ECHO RD	30 ECHO ROAD		MA	02649
509	19-3-0-R	CABRAL, MANUEL TRUSTEE LIMITED REALTY TRUST	95 ECHO RD	81 ECHO RD - UNIT 1	MASHPEE		
18758	19-3-1-E	CANGEMI PAMELA M TRS	81 ECHO RD	21 PEBBLE PATH	MARSTONS MILLS	MA	02648
10.00	19-3-2-R	THE 81 ECHO ROAD REALTY TRUST ORCUTT, PATRICK &	0 ECHO RD	37 LADYS SLIPPER LANE	MASHPEE	MA	02649
		CABRAL, MANUEL TR GANGEMI, PAMELA M TRS	79 ECHO RD	21 PEBBLE PATH	MARSTONS MILLS	MA	02648
21896	19-3-3-R	81 ECHO ROAD REALTY TRUST	77 ECHO RD	21 PEBBLE PATH	MARSTONS MILLS	MA	02648
21892	19-3-4-R	GANGEMI, PAMELA M TRS 81 ECHO ROAD REALTY TRUST		2 SPINNAKER CIRCLE	NANTUCKET	MA	02553
21891	19-3-5-R	DECH LLC			MEDFORD	MA	02155
21890	19-3-6-R	DRISCOLL CAPE 1969 LLC	61 ECHO RD	83 NEWBERN AVENUE			
21880	19-3-7-R	VICTURINE, PAMELA M	51 ECHO RD	21 PEBBLE PATH	MARSTONS MILLS	MA	02648
		GANGEMI, RONALD P	41 ECHO RD	20 WHEELER ROAD	MASHPEE	MA	02649
21888	19-3-8-R	2001 00 1000 1001	29 ECHO RD	9 COLLINS AVE	PLYMOUTH	MA	02362
21887	19-3-9-R	TRIPLE M MANAGEMENT CO LLC % JONATHAN HERLIHY	81-U1 ECHO RD		MASHPEE	MA	02649
18753	19-3-A-R	CABRAL, MANUEL			SANDWICH	MA	02563
18754	19-3-B-R	EARLE, DENNIS A	81-U2 ECHO RD			MA	02649
18756	19-3-C-R	ORCUTT, PATRICK	81-U3 ECHO RE	37 LADYS SLIPPER LANE	MASHPEE	IVIA	02040
10700	, , , , , , , , , , , , , , , , , , , ,						

3	
D.	
X	
9	
-	
d	
0	-
2	
2	
2	
w	
1	

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







16 Great Neck Road North Mashpee, Massachusetts 02649

August 15, 2019

Buff Chace Mashpee Commons Limited Partnership P.O. Box 1530 Mashpee, MA 02649

Dear Mr. Chace,

Thank you for your recent letter regarding the expansion of Mashpee Commons and the proposal to use the Development Agreement review process as available through the Cape Cod Commission. On August 7, 2019, at their regular meeting, the Planning Board voted and agreed unanimously that the use of the Development Agreement process would be advantageous to all parties involved.

Sincerely,

Mary E. Waygan, Chair

cc: Andrew R. Gottlieb, Chair, Town of Mashpee Board of Selectmen Kristi Senatori, Executive Director, Cape Cod Commission Rodney Collins, Town Manager, Town of Mashpee Evan Lehrer, Town Planner, Town of Mashpee

16 Great Neck Road North Mashpee, Massachusetts 02649

MEMORANDUM

TO: Andrew R. Gottlieb, Chair

Board of Selectmen

FROM: Mary E. Waygan, Chair

Planning Board

DATE: August 15, 2019

RE: Proposed Development Agreement by Mashpee Commons

Thank you for your letter dated July 31, 2019 regarding the intent of Mashpee Commons to apply for a Development Agreement with the Cape Cod Commission and the Town of Mashpee.

On August 7, 2019, at their regular meeting, the Planning Board voted unanimously to respond to Mashpee Commons that a Development Agreement for the proposed expansion of Mashpee Commons would be advantageous to all parties involved.

The Planning Board further discussed the desire to solicit comments from Town Boards and Committees regarding the proposed expansion once the Mashpee Commons Development Agreement Application is available and Mashpee Commons can provide a comprehensive presentation to the Town. It is hoped that comments accepted by the Planning Board from other Boards and Committees will become part of the negotiation process, if indeed negotiations are necessary.

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>

August 1, 2019

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

Re: Southport Services for month of July, 2019

7/8/19

Inspection of Atlantic Court driveway material for quality and compaction prior to paving, 2 driveways, Stony Brook, 2 driveways, material quality and compaction.

1.0 hr. \$ 100.00

16 Great Neck Road North Mashpee, Massachusetts 02649

RELEASE OF COVENANT AGREEMENT

FORM E

sh	lown on a plan
provisions of a covenant	agreement dated
wner as of 29 March 2017	1.4.
	date
of owner	
day of	, 20
S	
	the undersigned notary, proved to me
ion, which were be the person whose nam	e is signed on the
be the person whose nam	e is signed on the she signed it voluntarily for
	provisions of a covenant where as of 29 March 2017 of owner day of S , 20, before me,





Town of Mashpee

Planning Board

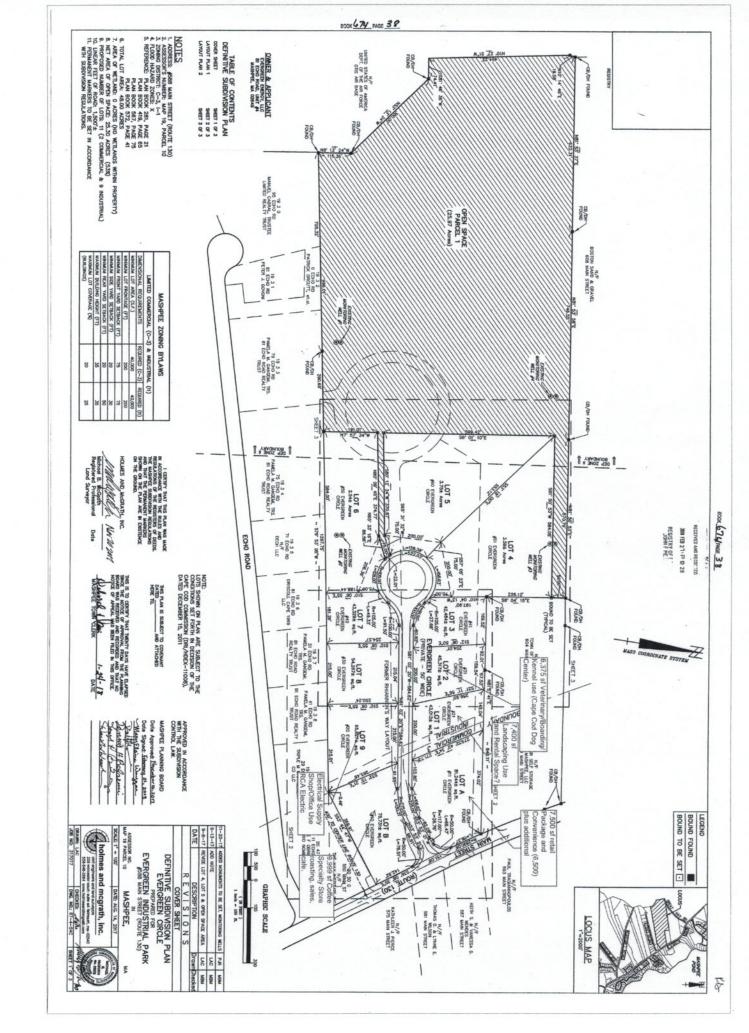
16 Great Neck Road North Mashpee, Massachusetts 02649

RELEASE OF COVENANT AGREEMENT

FORM E

Barnstable County, Mas	a majority of the Planning Board of the Tov ssachusetts, hereby releases	
Lot(s) A. B. 1, 2, 3, 4, 5, 6, 7, 8, 9	sh	own on a plan
entitled Definitive Subdivision F		
entitled Delinitive Subdivision	Idil Evergreen en de	
dated August 14, 2017 (revised 9/8/2017 9/13/2	oi7,11/20/2017), from the provisions of a covenant	agreement dated
	Record owner as of 29 N	larch 2017
Evergreen Energy LLC	name of owner	
Executed as a sealed in	strument this 5th day of June	, 20 19
Chairman Joseph	H Bagarin	
COMMONWEALTH OF	MASSACHUSETTS	
County of Barnstable	*	
SPANN THOMBER OPESON	dence of identification, which were the about the whole the person whose name ocument, and acknowledged to me that he/sl	, proved to me we-Signed Hauking is signed on the
My Commission expires	, 20	

BARNSTABLE REGISTRY OF DEEDS John F. Meade, Register





Town of Mashpee

Planning Board

Mashpee, Massachusells 12049 ERK

JUN 1 7 2019

APPLICATION FOR SPECIAL PERMIT RECEIVED BY_____

Date	the same of the same of the same and the same of the s	HEOCIVED DI
The undersigned h	ereby applies for a Specia	l Permit from the Planning Board.
Name of Applicant	Modi, LLC	Phone (508) 477-2400
Address	348 Main Street, Mashpee, M	A 02649
Owner, if different	Evergreen Energy LLC	Phone (508) 962-5022
Attach copies of (a) Deed of property re		d and (b) tax bill or Assessors' certification. Inty Registry Book 29541 Page 136 or
		green Circle, Lot B - Evergreen Industrial Park Subdivision
	s Map(s) and Block(s) <u>Ma</u> n	
How long have you	owned the property <u>Und</u>	er Agreement
Section(s) of the Zo	ning Bylaw which require	the permit you seek <u>174-25 Table of Use Regulation</u>
Present use of prop	perty Vacant	
Check one:A receipt	Applicant will send notice to Mashpee Planning Board policant requests that Planting Board policant reques	lities for processing and packaging coffee along with a lit. to abutters via certified mail, with return ard, and will provide certified abutters list. anning Department send notice to parties in ill provide labels and certified abutters list.
Signature of Owner	r or Authorized Represent	ative
KEUN A. PEPE PROPERTY MAR O	Attach written author	rization signed by owner,

MASHPEE ZONING BOARD OF APPEALS DECISION FOR A VARIANCE

Petitioner, Modi, LLC
(Owner of Record: Evergreen Energy, LLC)
588 Main St. (10 Evergreen Circle)
Mashpee, MA 02649
V-2019-45

The initial plan depicted that there would be 0% of the undisturbed natural area. It was intended that the entire area around the site would be landscaped and improved. However, after the applicant consulted with Attorney Kirrane, he suggested that would not be received well by any Board who has the authority to grant relief under this particular section of the bylaw. The request before the Board is now 26% of undisturbed open space on this project, seeking 14% Variance relief from the Zoning Board of Appeals.

Attorney Kirrane said his client, Cape Cod Coffee does not own the building on they currently occupy on Main Street. He said his client is proposing to expand his business and provide more venues for the public. There are two lots in the front of this development that are situated in the C-3 Zoning District. This particular lot consists of almost 76,000 sq. ft., and has the appropriate frontage along Evergreen Circle and Rte. 130. This particular lot is also under the Light Industrial Overlay District which is listed in the Table Of Uses under §174-31, and the accessory uses that are referenced in the Light Industrial Overlay District under §174-45.6. These are the types of uses that can be combined with an industrial use and other miscellaneous types of uses whether they are commercial in connection with the development in this particular overlay district.

Attorney Kirrane mentioned that Evan Lehrer, Town Planner authored the bylaw for this particular Light Industrial District which invites some of the types of businesses that are coming into Town, and are being adopted by other Towns along Cape Cod. Attorney Kirrane listed some of the specific purposes and intent of this zoning district in his written remarks. In order to accommodate those types of uses which are multifaceted, there is a built-in conflict between the C-3 Zoning District 40% natural undisturbed areas. The intent of the bylaw for uses within the Light Industrial Zone is difficult to develop viable projects that meet the objectives of the Light Industrial Zoning District, and still be tied by that 40% requirement that only relates to the two front lots as discussed earlier. Everything behind those two lots do not have any kind of requirement to this undisturbed open space.

As Attorney Kirrane mentioned to the Board his client is seeking relief to allow 26% of this lot as undisturbed open space. The topography on the site plan shows a significant hole in the right front corner of the lot facing Rte. 130. His client wants to fill and landscape that topographical feature by removing the undisturbed vegetation. There will be people in and about the proposed building, and the outdoor seating, etc. Jan is concerned that if anyone wondered over to that area they could find themselves at the bottom of that hole. So as far as a safety and liability point of view, he is seeking to fill in that hole, and after he fills it in, he will landscape it in a tasteful fashion that will be compatible with other indigenous growth that exists.

MASHPEE ZONING BOARD OF APPEALS DECISION FOR A VARIANCE

Petitioner, Modi, LLC (Owner of Record: Evergreen Energy, LLC) 588 Main St. (10 Evergreen Circle) Mashpee, MA 02649 V-2019-45

The second item that was discussed earlier is the vegetative drainage basins and swales. The plan that has been provided depicts a vegetative drainage and swale on the site which represents about 6% of the naturally vegetative area on the project. So between the hole in the front, and the natural vegetative area where the drainage basin and swale will be, there is 14% undisturbed area. In addition, there will be more parking spaces requested than what the bylaw requires. This is also a concern because the applicant feels that the minimum required parking bylaw is not sufficient to address the needs of his business. That area will cut a little into the naturally undisturbed area of the lot. There is a public safety basis for allowing this parking because people will end up in the street.

Attorney Kirrane said that this parking is necessary, and is a significant safety and liability requirement. In his written remarks, he attached a copy of the subdivision plan that shows the 25 acres of open space which will be deeded to the Town of Mashpee pursuant to the requirements of the Cape Cod Commission. Even though the 26% request as opposed to 40% on this particular lot, there is 25 acres of open space that will be controlled by the Town, so the purpose and intent of the bylaw is protected, and that 25 acres more than adequately provides the type of protection that would ordinarily be available if 40% of the lot retained in its natural state. He would like move the project forward to the Planning Board and present a plan to them that shows 26% undisturbed naturally vegetative area on this lot as opposed to 40%, and a Variance of 14% from that 40% requirement. The building is attractive and would be a very welcoming addition to the Town.

There were two abutters present that were opposed to the Variance request.

There were no written comments from the Town Departments.

Evan Lehrer, Town Planner addressed the Board stating that the depression on the site is a natural depression not created by man-made activity, and as such when the DPW put in a drainage infrastructure on Main Street, they took advantage of that natural depression and used it as a water discharge onto the site over Main Street. The DPW is aware of the situation with the applicant, and his intention of filling this area. The perception could be that any private property owner will not grant the ability to use this section of the site and the Town continues to use this area as discharge without an easement. That is an issue with the applicant that the Town needs to work out.

Attorney Kirrane said that the property will retain a significant portion of the area as undisturbed as shown on the plan, and if there is any activity outdoors in front of the building, it requires a screen, and his client will be more than willing to provide screening on those areas of concern.

There were no more comments from the Board or audience.

MASHPEE ZONING BOARD OF APPEALS DECISION FOR A VARIANCE

Petitioner, Modi, LLC
(Owner of Record: Evergreen Energy, LLC)
588 Main St. (10 Evergreen Circle)
Mashpee, MA 02649
V-2019-45

In view of the foregoing, the Board determined the Petitioner met the criteria for a Variance. Upon motion duly made and seconded at the Public Hearings on Wednesday, August 14, 2019, the Zoning Board of Appeals voted unanimously to issue a Variance to Modi, LLC of 10 Evergreen Circle under §174-25.1 (1) of the Zoning Bylaws to allow for relief from the minimum forty percent (40%) of the site shall be left in its undisturbed natural state on property located in a C-3 Zoning District, Map 19 Parcel 10, Mashpee, MA. (Owner of Record: Evergreen Energy, LLC), with the following conditions;

- 1. The Board has determined that the applicant meets all the conditions of a Variance under Mass General Law 40A Section 10.
- 2. <u>Site Plan:</u> Cape Cod Coffee, Located at #10 Evergreen Circle, Mashpee, MA. Owner: Evergreen Energy LLC, 81 Echo Rd., Mashpee, MA. Applicant: Modi, Inc., 348 Main St., Mashpee, MA. Engineer: Atlantic Design Engineers, Inc., Sheet 1 of 6, Sheet #1: Cover Sheet, Sheet #2: Existing Conditions Plan, Sheet #3: Site Layout Plan, Sheet #4: Utility, Grading, Drainage & Erosion Control Plan, Sheet #5: Septic Design Plan, Sheet #6, Details Plan.
- 3. The Board issues a Variance in the amount of: 14%. That calculation is based on 40% required, 26% provided, leaving 14% request for a Variance.
- 4. The applicant should submit a rain garden infiltration basin maintenance plan to the Building Inspector. A landscape plan should be submitted and approved by the Planning Board when they submit their application.

MASHPEE ZONING BOARD OF APPEALS DECISION FOR A VARIANCE

Name: Petitioner, Modi, LLC (Owner of Record: Evergreen Energy, LLC) Address: 10 Evergreen Circle (Map 19 Parcel 10-1), Mashpee, MA 02649

Case: V-2019-45 IN FAVOR TO DENY MASHPEE ZONING BOARD OF APPEALS PUBLIC HEARINGS NOTICE William A. Blaisdell AUGUST 14, 2019 The Mashpee Zoning Board of Appeals will hold Public Hearings on Wednesday, August 14, 2019 at 6:00 p.m. in the Waquoit Meeting Room at the Mashpee Town Hall, Ronald Bonvie 16 Great Neck Road North, on the following: **NEW HEARINGS** 10 Evergreen Circle: Petitioner, Modi, LLC requests a Variance under §174-25.1 (1) of the Zoning Bylaws to allow for relief from the Scott Goldstein minimum forty percent (40%) of the site shall be left in its undisturbed natural state on property located in an C-3 Zoning District, Map 19 Parcel 10, Mashpee, MA. (Owner of Record: Evergreen Energy, LLC). Norman/J. Gould Plans may be viewed prior to the hearings in the ZBA office and the Town Clerk's office. Per Order of: Jonathan D. Furbush, Chairman Mashpee Zoning Board of Appeals Sharon Sangeleer uly 26, 2019 lugust 2, 2019 George Ganzenmuller MASHPEE TOWN CLERK James Reiffarth RECEIVED BY

This Decision has been duly filed on August 21, 2019 with the Town Clerk of Mashpee. Any Appeals shall be made pursuant to Section 17 of the Massachusetts General Laws Chapter 40A within Twenty days after the date of said filing.

This Decision is effective when a Certified Copy is filed at the Barnstable County Registry of Deeds. A Certified Copy may be obtained from the Town Clerk the next business day after the expiration of the 20-day Appeal phase, which lasts through September 10, 2019 . Special Permits shall lapse three years after date of grant. Written Findings shall lapse two years after date of grant. Appeals shall lapse one year after date of grant. If the rights authorized by a Variance are not exercised within one year of date of grant of such Variance, such rights shall lapse unless: (1) substantial use or construction has commenced, or (2) a Petition for a six-month extension has been filed prior to the expiration date, or (3) the property that is the subject of the Variance has been conveyed in reliance on said Variance prior to the expiration date of such one year period.

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