

TOWN OF ELIOT, MAINE

PLANNING BOARD AGENDA

TYPE OF MEETING: REGULAR

PLACE: ELIOT TOWN HALL - 1333 STATE RD.

DATE:

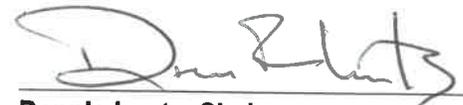
Tuesday, February 18, 2020

TIME:

7:00 P.M.

PLEASE NOTE: IT IS THE POLICY OF THE PLANNING BOARD THAT THE APPLICANT OR AN AGENT OF THE APPLICANT MUST BE PRESENT IN ORDER FOR REVIEW OF THE APPLICATION TO TAKE PLACE.

- 1) ROLL CALL
- 2) PLEDGE OF ALLEGIANCE
- 3) MOMENT OF SILENCE
- 4) 10-MINUTE PUBLIC INPUT SESSION
- 5) REVIEW AND APPROVE MINUTES
 - a) February 4, 2020
- 6) PUBLIC HEARING
 - a) **483 Harold L Dow Highway (Map 54 / Lot 2) PB19-19:** Request to amend a previously approved Site Plan by changing the use of two existing greenhouse structures from Wholesale Business Facility to Registered Primary Caregiver for the purpose of medical marijuana cultivation. Owner: Flower Company Properties Inc. Applicant: Sweet Dirt, INC.
 - b) **423 River Road (Map 33 / Lot 1) PB19-25:** Shoreland Zoning Permit Application – Application to add second floor above existing 28' x 26' first floor. Also convert 14' x 10'6" screened porch to new finished sunroom with deck above. Property is a small 2-bedroom home on narrow waterfront lot. Owner: Pamela Mijal Applicant: Pamela Mijal
 - c) Amendment to and existing Ordinance: Chapter 44 – Shoreland Zoning- Section 44-34. - Table of land uses
- 7) OLD BUSINESS
 - a) **43 Harold L Dow Highway (Map 23 / Lot 1) PB19-22:** Request to amend a previously approved Site Plan by converting the garage unit into a Restaurant, Take-out.
 - b) Ordinance Revision recommendations for presentation to the Select Board.
- 2) NEW BUSINESS
 - a) **0 Harold L Dow Highway (Map 29 / Lot 31) PB19-23:** Sketch Plan Application: Application for nine new commercial buildings with allowable commercial uses and four 30,000-gallon propane tanks.
- 3) CORRESPONDENCE
- 4) SET AGENDA AND DATE FOR NEXT MEETING
 - a) Next Planning Board Meeting is Scheduled for March 3, 2020 at 7:00pm
- 5) ADJOURN



Dennis Lentz, Chair

POSTED
2/6/20



TOWN OF ELIOT MAINE

PLANNING OFFICE
1333 State Road
Eliot ME, 03903

PUBLIC HEARING NOTICE

AUTHORITY: Eliot, Maine Planning Board
PLACE: Eliot Town Hall, 1333 State Road, Eliot, ME 03903
DATE OF HEARING: Tuesday, February 18, 2020
TIME: 7:00 PM

Notice is hereby given that the Planning Board of the Town of Eliot, Maine will hold a public hearing on Tuesday, February 18, 2020 at 7:00 PM for the following applications:

- **483 Harold L Dow Highway (Map 54 / Lot 2) #PB19-19:** Request to amend a previously approved Site Plan by changing the use of two existing greenhouse structures from Wholesale Business Facility to Registered Primary Caregiver for the purpose of medical marijuana cultivation. Applicant: Sweet Dirt, INC. Owner: Flower Company Properties, INC.
- **423 River Road (Map 33 / Lot 1) #PB19-25:** Shoreland Zoning Permit Application – Application to add second floor above existing 28' x 26' first floor. Also convert 14' x 10'6" screened porch to new finished sunroom with deck above. Property is a small 2 – bedroom home on narrow waterfront lot. Applicant: Pamela Mijal Owner: Pamela Mijal

Notice is hereby given that the Planning Board of the Town of Eliot, Maine will hold a public hearing on Tuesday, February 18, 2020 at 7:00 PM for the purpose of receiving public comment and input on the following proposed ordinance amendment:

- **Amendment to existing Ordinance:** Chapter 44 Shoreland Zoning – Section 44-34. – Table of land uses.

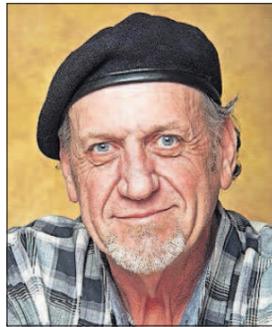
These proposed ordinance revisions are on file and available for review in draft format in the Land Use Department (during normal business hours).



OBITUARIES & NEWS

James F. Colbert

MAN-CHESTER — James F. “Jim” Colbert, 64, came rockin’ and rolling into this world on January 5, 1956 and entered Rock & Roll Heaven on



teamwork, building confidence, and demonstrating skill sets. Jim was born to the late James L. and Marilyn Colbert. Survivors include

Tuesday, January 28, 2020. He was happiest surrounded by family, friends and his beloved bandmates, The Stuck in Time Band.

Jim graduated from Portsmouth High School Class of 1974. Music was his passion from a very early age, and his family and friends were the notes of his life. For several years he was the Exeter Seahawks Youth Football Coach, instilling

siblings Kathy Anania, John Colbert and Bob Colbert; sisters-in law Terrie and Barbara Colbert; many beloved nephews, nieces, aunts, uncles and cousins; and his special lady, fiancé Beth Gates and cat Taffi.

SERVICES: A tribute and celebration of his life will take place at a later date. Arrangements under the direction of Farrell’s Funeral Home, 684 State St., Portsmouth.

Kathleen A. Kingston

HAMPTON — Kathleen Ann Kingston, 66 years old, passed away peacefully in Orlando, Florida on Thursday, January 30, 2020 while on a business trip.



and seven nieces; Arley Mosher, Alysha Mosher, Brianna Mosher, Megan Croteau, Molly Chesterton, Erin Chesterton

She was born to Winifred and William Kingston on October 19, 1953 in Montclair, New Jersey.

She graduated from Verona High School in Verona, New Jersey. She went on to earn a Bachelor Degree in Biology from Upsala College and a Master of Arts in Education from St. Louis University. In 1986, she graduated from Missouri Auction School. After a career in higher education leadership at St. Louis University and public service in the City of Anchorage, Kathy poured her heart and soul into the Kingston Auction Company, making her life-long passion central in her life. For over 28 years, Kathy helped nonprofit organizations across the country to maximize the impact of their work, raising millions of dollars for their missions.

Kathy is survived by her four sisters, Nancy Kingston, Carol Kingston, Patty Mosher and Sally Kingston and a nephew

Lexi Mucci, and Lindsey Mucci.

SERVICES: Visiting hours will be held on Sunday, February 9, 2020 from 1-4 p.m., at the Stockbridge Funeral Home, 141 Epping Rd., Exeter.

In lieu of flowers, memorials may be made to the Kingston Fund, a donor-advised fund of the Cape Code Foundation, created by Kathy in 2006 in loving memory of her parents William and Winifred Kingston. Her nephew and seven nieces, the Board of Advisors study proposals and make annual grant recommendations to fund nonprofit, educational and charitable organizations with an emphasis on helping children and families. For more information: <https://www.kingstonauction.com/about-us/the-kingston-fund>. The Kingston Fund Cape Cod Foundation, 261 Whites Path, #2, Yarmouth, MA 02664. Please visit www.stockbridgefh.com.

SENATE IMPEACHMENT TRIAL

Trump trial closing arguments aim at voters, history

By Lisa Mascaro and Eric Tucker
The Associated Press



WASHINGTON — Closing arguments Monday in President Donald Trump’s impeachment trial were directed more toward history than to sway the outcome, one final chance to influence public opinion and set the record ahead of his expected acquittal in the Republican-led Senate.

The House Democratic prosecutors drew on the Founding Fathers and common sense to urge senators — and Americans — to see that Trump’s actions are not isolated but a pattern of behavior that, left unchecked, will allow him to “cheat” in the 2020 election.

Democrat Rep. Adam Schiff implored those few Republican senators who have acknowledged Trump’s wrongdoing in the Ukraine matter to prevent a “run-away presidency” and stand up to say “enough.”

“For a man like Donald J. Trump, they gave you a remedy and meant for you to use it. They gave you an oath, and they meant for you to observe it,” Schiff said. “We have proven Donald Trump guilty. Now do impartial justice and convict him.”

The president’s defense countered the Democrats have been out to impeach Trump since the start of his presidency, nothing short of an effort to undo the 2016 election and to try to shape the next one, as early primary voting begins Monday in Iowa.

“Leave it to the voters to choose,” said White House counsel Pat Cipollone. He called for an end to the partisan “era of impeachment.”

All that’s left, as the Senate prepares to acquit Trump on charges that he abused power and obstructed Congress, is for Americans to decide now and in the November election, as the third presidential impeachment trial in the nation’s history comes to a close.

Most senators acknowledge the House Democratic managers have essentially proven their case. Trump was impeached in December on two charges: that he abused his power like no other president in history when he pushed Ukraine to investigate rival Democrats, and he then obstructed Congress by instructing aides to defy House subpoenas.

But key Republicans have

decided the president’s actions toward Ukraine do not rise to the level of impeachable offense that warrants the dramatic political upheaval of conviction and removal from office. His acquittal in Wednesday’s vote is all but assured.

GOP Sen. Lisa Murkowski of Alaska called the president’s actions “shameful and wrong,” but in a powerful speech late Monday she also derided the highly partisan process. “I cannot vote to convict,” she said.

Republican Sens. Lamar Alexander of Tennessee, Marco Rubio of Florida and Rob Portman of Ohio are among those who acknowledged the inappropriateness of Trump’s actions, but said they would not vote to hear more testimony or to convict.

“What message does that send?” asked Rep. Hakeem Jeffries, D-N.Y., a House prosecutor. He warned senators that for Trump, the “past is prologue.” He urged the Senate to realize its failure to convict will “allow the president’s misconduct to stand.”

The Senate proceedings are set against a sweeping political backdrop, as voters in Iowa on Monday are choosing presidential Democratic primary candidates and Trump is poised to deliver his State of the Union address Tuesday in his own victory lap before Congress.

It is unclear if any Republican or Democratic senators sworn to do “impartial justice” will break from party lines. One centrist Democrat, Sen. Joe Manchin, W-Va., said he was heavily weighing the vote ahead. He suggested censure may be a bipartisan alternative.

Candace J. Gigli

KITTERY, Maine — Candace J. Graham Gigli, 58, born January 28, 1961 in York, Maine daughter of Eunice-Anne (Marshall) Graham and the late John J. Graham, passed away Sunday, January 26, 2020.



SERVICES: Funeral services will be held privately in the First Parish Cemetery, York, Maine. For a full obituary, visit www.lucaseatonfuneral-home.com.

Study: Tap water treated with chlorine produces carcinogens

By Joshua Bote
USA TODAY

A new study from Johns Hopkins raises newfound concerns about the most common water treatment found in American tap water.

Researchers identified new toxic and carcinogenic byproducts that are produced when chlorine is added to regular drinking water. Their findings were published in the peer-reviewed journal Environmental Sciences & Technology.

The Centers for Disease Control and Prevention (CDC) suggests 4 milligrams of chlorine per liter of drinking water as a safe level.

Carsten Prasse, an assistant professor of environmental health and engineering at Johns Hopkins and the lead author of the study, wants to be clear that chlorination itself is not detrimental to human health.

Chlorine is frequently used because it’s effective, affordable and easy to administer, explained Ngai Yin Yip, an assistant professor of earth and environmental engineering at Columbia University.

Adding chlorine to drinking water, per the CDC, kills germs and bacteria — and significantly reduces waterborne diseases such as

cholera and typhoid.

Yip, who is unaffiliated with the study, also told USA TODAY that “it leaves a residue that keeps the bugs at bay while the water is traveling down distribution pipes to the consumer.”

When chlorine is combined with phenols, which are chemicals that are both naturally-occurring in water and exist in pharmaceuticals and personal care products, the mixture produces disinfection byproducts.

Some, such as chloroform, are already treated by most local water systems. Many others, however, are not being regulated at the local

or federal level.

“We regulate only a small number of byproducts, which have been regulated since the ‘80s,” Prasse said. “Unfortunately, despite all the advances that have been made over the last two or three decades, they haven’t found a way into regulation.”

More alarming, the study finds, is that other compounds that aren’t detected may be detrimental to long-term health.

This includes two forms of the toxic compound and known carcinogen BDA, which haven’t been discovered in drinking water until this study.

Legal Notice City of Portsmouth, NH Citizens Advisory Committee Public Hearing on the FY 2021-2025 Consolidated Plan & FY 2021-2022 Annual Action Plan

The Portsmouth Citizens Advisory Committee will hold a public hearing on Thursday, February 6, 2020 at 6:00 p.m. in Conference Room A at Portsmouth City Hall, 1 Junkins Avenue. The purpose of this public hearing is to solicit input on the Community Development Block Grant (CDBG) Consolidated Plan for FY 2021-2025 and the Annual Action Plan for FY 2021-2022. The Consolidated Plan describes the City’s housing and community development needs and provides a 5-year strategy for meeting those needs. It also includes a one year CDBG program action plan for the next fiscal year that begins July 1, 2020. In addition to the public hearing described above, City staff will review the status of the current fiscal year’s CDBG projects.

CDBG funds are provided to the City each year by the U.S. Department of Housing and Urban Development. The City must spend these funds to primarily 1) benefit individuals who earn very low, low or moderate incomes; and 2) benefit areas of the City in which more than 51% of the residents earn very low, low or moderate incomes. For more information, or if you are unable to attend the hearings and would like to provide input, please contact Elise Annunziata, Community Development Coordinator (603) 610-7281. PM-00474898

Legal Notice PUBLIC HEARING NOTICE

Rye Planning Board
Rye Zoning Board of Adjustment

The Rye Planning Board and the Rye Zoning Board of Adjustment (ZBA) will hold a joint public hearing on February 18, 2020 at 6:30 pm at the Rye Public Library on the applications of Cellco Partnership d/b/a Verizon Wireless to install a wireless telecommunications facility in the form of a 126 ft. monopole (cell tower) at 68 Port Way in Rye (Tax Map 23/Lot 1), which is owned by the Town of Rye Conservation Commission. The applications to the planning board are for Major Site Development approval and for a Special Use Permit. The applications to the ZBA are for: (1) a variance to Rye Zoning Ordinance (RZO) Section 505.6 (A)(4) to allow the cell tower to be setback less than 100 feet from wetlands; (2) to RZO Section 301.8 (B)(1) and 301.8 (B) (7) to allow the tower and tower compound within the wetlands buffer; (3) to RZO Section 301.8, B5.b2 for cutting of trees greater than 4.5” in diameter within the wetland buffer; and (4) a special exception pursuant to RZO Section 301.8 (B)(6) to allow the driveway access to the tower compound to be located within the wetlands buffer. The applications package submittals are available for inspection and copying from the planning department at the Rye Town Hall.

December 31, 2020
Patricia Losik, Chair
Rye Planning Board
Burt Dibble, Clerk
Rye ZBA

PM-00475088

LEGAL NOTICE

NOTICE IS HEREBY GIVEN that there are potential vacancies for the following Boards and Commissions:

- 1 Alternate Member to the Building Code Board of Appeals — The vacancy to be filled would need to be (1) electrical engineer or master electrician
- 1 Regular Member to the Citizens Advisory Committee
- 1 Alternate Member to the Conservation Commission
- 3 Regular Members to the Conservation Commission (Pending submission of renewal applications)
- 2 Regular Members to the Peirce Island Blue Ribbon Committee
- 2 Members to the Portsmouth Housing Authority, 1 residential representative (Pending submission of renewal applications)
- 3 Members to the Recreation Board, (Pending submission of renewal application)

Applications are available in the Office of the City Clerk and on the City’s Website at <http://www.cityofportsmouth.com/cityclerk/boardscommissions.htm>. If you should have any questions, please contact the Office of the City Clerk at 610-7208. PM-00475027

PUBLIC HEARING NOTICE

AUTHORITY: Eliot, Maine Planning Board
PLACE: Eliot Town Hall, 1333 State Road, Eliot, ME 03903
DATE OF HEARING: Tuesday, February 18, 2020
TIME: 7:00 PM

Notice is hereby given that the Planning Board of the Town of Eliot, Maine will hold a public hearing on Tuesday, February 18, 2020 at 7:00 PM for the following applications:

- 483 Harold L Dow Highway (Map 54 / Lot 2) #PB19-19: Request to amend a previously approved Site Plan by changing the use of two existing greenhouse structures from Wholesale Business Facility to Registered Primary Caregiver for the purpose of medical marijuana cultivation. Applicant: Sweet Dirt, INC. Owner: Flower Company Properties, INC.
- 423 River Road (Map 33 / Lot 1) #PB19-25: Shoreland Zoning Permit Application — Application to add second floor above existing 28’ x 26’ first floor. Also convert 14’ x 10’6” screened porch to new finished sunroom with deck above. Property is a small 2 – bedroom home on narrow waterfront lot. Applicant: Pamela Mijal Owner: Pamela Mijal

Notice is hereby given that the Planning Board of the Town of Eliot, Maine will hold a public hearing on Tuesday, February 18, 2020 at 7:00 PM for the purpose of receiving public comment and input on the following proposed ordinance amendment:

- Amendment to existing Ordinance: Chapter 44 Shoreland Zoning — Section 44-34. — Table of land uses.

These proposed ordinance revisions are on file and available for review in draft format in the Land Use Department (during normal business hours). PM-00475389

Oil & Propane Co.
Serving Portsmouth, Dover, Rochester & Surrounding Towns

FUEL OIL

2.54⁹ Per Gal.

Easy Pay Budget Plans Available

Now Delivering Propane

Portsmouth (603) 436-2005
Exeter (603) 778-3700

1-800-491-3194
Order online at www.fieldingsoil.com

Orders of 200 gallons or more receive an additional 2¢ off.
Price subject to change.



Abutters List Report

Eliot, ME
February 04, 2020

Subject Property:

Parcel Number: 054-002-000
CAMA Number: 054-002-000
Property Address: 483 HAROLD L DOW HWY

Mailing Address: FLOWER COMPANY PROPERTIES INC
9 ISLAND AVE
KITTERY, ME 03904

Abutters:

Parcel Number: 045-005-000
CAMA Number: 045-005-000
Property Address: 413 HAROLD L DOW HWY

Mailing Address: MARITIMES & NORTHEAST PIPELINE
C/O DUFF & PHELPS LLC
PO BOX 2629
ADDISON, TX 75001

Parcel Number: 053-006-000
CAMA Number: 053-006-000
Property Address: 495 HAROLD L DOW HWY

Mailing Address: FLOWER COMPANY PROPERTIES INC
9 ISLAND AVE
KITTERY, ME 03903

Parcel Number: 053-008-000
CAMA Number: 053-008-000
Property Address: 525 HAROLD L DOW HWY

Mailing Address: XNG MAINE LLC
300 BRICKSTONE SQUARE STE 1005
ANDOVER, MA 01810

Parcel Number: 054-005-000
CAMA Number: 054-005-000
Property Address: 496 HAROLD L DOW HWY

Mailing Address: CPN REALTY LLC
2028 STATE RD
ELIOT, ME 03903

Parcel Number: 054-006-000
CAMA Number: 054-006-000
Property Address: HAROLD L DOW HWY

Mailing Address: LAC REALTY LLC
31 CLARK RD
ELIOT, ME 03903

Parcel Number: 054-008-000
CAMA Number: 054-008-000
Property Address: 468 HAROLD L DOW HWY

Mailing Address: TOWN OF ELIOT TRANSFER STATION
1333 STATE RD
ELIOT, ME 03903



www.cai-tech.com

2/4/2020

Data shown on this report is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this report.

Page 1 of 1



TOWN OF ELIOT MAINE

PLANNING OFFICE
1333 State Road
Eliot ME, 03903

February 4, 2020

To:

Map 45 / Lot 5
MARITIMES & NORTHEAST PIPELINE
C/O DUFF & PHELPS LLC
PO BOX 2629
ADDISON, TX 75001

Certified Mail # 7190 1682 5150 0020 2331
Return Receipt Requested

Map 53 / Lot 6
FLOWER COMPANY PROPERTIES INC
9 ISLAND AVE
KITTERY, ME 03904

Certified Mail # 7190 1682 5150 0020 2287
Return Receipt Requested

Map 53 / Lot 8
XNG MAINE LLC
300 BRICKSTONE SQUARE STE 1005
ANDOVER, MA 01810

Certified Mail # 7190 1682 5150 0020 2294
Return Receipt Requested

Map 54 / Lot 5
CPN REALTY LLC
PO BOX 657
ELIOT, ME 03903

Certified Mail # 7190 1682 5150 0020 2300
Return Receipt Requested

Map 54 / Lot 6
LAC REALTY LLC
31 CLARK ROAD
ELIOT, ME 03903

Certified Mail # 7190 1682 5150 0020 2317
Return Receipt Requested

You are receiving this notification in conformance with the Town of Eliot's Ordinances, section 33-130. You are listed as the owner of property that has been identified as an abutter to an application for proposed work that was submitted to the Town of Eliot Planning Board for review. The Planning Board has scheduled a public hearing on the application at the date and time listed below for the purpose of receiving comments on the application. If you are interested in the specific details of the application, you may review the application and supporting documentation that has been submitted to the Planning Office during normal business hours (Monday 10:00-5:00; Tuesday and Thursday 8:00-4:00; Wednesday 8:00-12:00 and Friday 6:30-1:00).

Although an overview of the application will be presented at the public hearing, it is your responsibility to inform yourself as to the specific content and details of the proposal under consideration. During the public hearing, you will be allowed to ask questions, speak in favor of, and/or express concerns. If you cannot attend the public hearing, you may submit written comments to the Planning Office via email or in person.

This is the only notice you will receive via mail. If the application is continued to a future meeting, you will not be notified again. Please feel free to contact the Planning Office at 207-439-1813 with any questions.

PUBLIC HEARING NOTICE

AUTHORITY: Eliot, Maine Planning Board
PLACE: Eliot Town Hall, 1333 State Road, Eliot, ME 03903
DATE OF HEARING: Tuesday, February 18, 2020
TIME: 7:00 PM

Notice is hereby given that the Planning Board of the Town of Eliot, Maine will hold a public hearing on Tuesday, February 18, 2020 at 7:00 PM for the following applications:

- **483 Harold L Dow Highway (Map 54 / Lot 2) #PB19-19:** Request to amend a previously approved Site Plan by changing the use of two existing greenhouse structures from Wholesale Business Facility to Registered Primary Caregiver for the purpose of medical marijuana cultivation. Applicant: Sweet Dirt, INC. Owner: Flower Company Properties, INC.

Interested persons may be heard and written communication received regarding this application at this hearing. The application is on file and available for review in the Planning Office at Eliot Town Hall, 1333 State Road, Eliot, ME 03903



TOWN OF ELIOT MAINE

PLANNING OFFICE
1333 State Road
Eliot ME, 03903

To: Board of Appeals
Select Board
Cc: Town Manager Dana Lee
From: Kristina Goodwin – Land Use Administrative Assistant
Date: February 4, 2020
Re: Public Hearing Notification: *483 Harold L Dow Highway (Map 54 /Lot 2): PB19-19*

You are receiving this notification in conformance with section 33-130 of the Town's ordinances.

PUBLIC HEARING NOTICE

AUTHORITY: Eliot, Maine Planning Board
PLACE: Eliot Town Hall, 1333 State Road, Eliot, ME 03903
DATE OF HEARING: Tuesday, February 18, 2020
TIME: 7:00 PM

Notice is hereby given that the Planning Board of the Town of Eliot, Maine will hold a public hearing on Tuesday, February 18, 2020 at 7:00 PM for the following applications:

- **483 Harold L Dow Highway (Map 54 / Lot 2) #PB19-19:** Request to amend a previously approved Site Plan by changing the use of two existing greenhouse structures from Wholesale Business Facility to Registered Primary Caregiver for the purpose of medical marijuana cultivation. Applicant: Sweet Dirt, INC. Owner: Flower Company Properties, INC.

Interested persons may be heard and written communication received regarding this application at this hearing. The application is on file and available for review in the Planning Office at Eliot Town Hall, 1333 State Road, Eliot, ME 03903

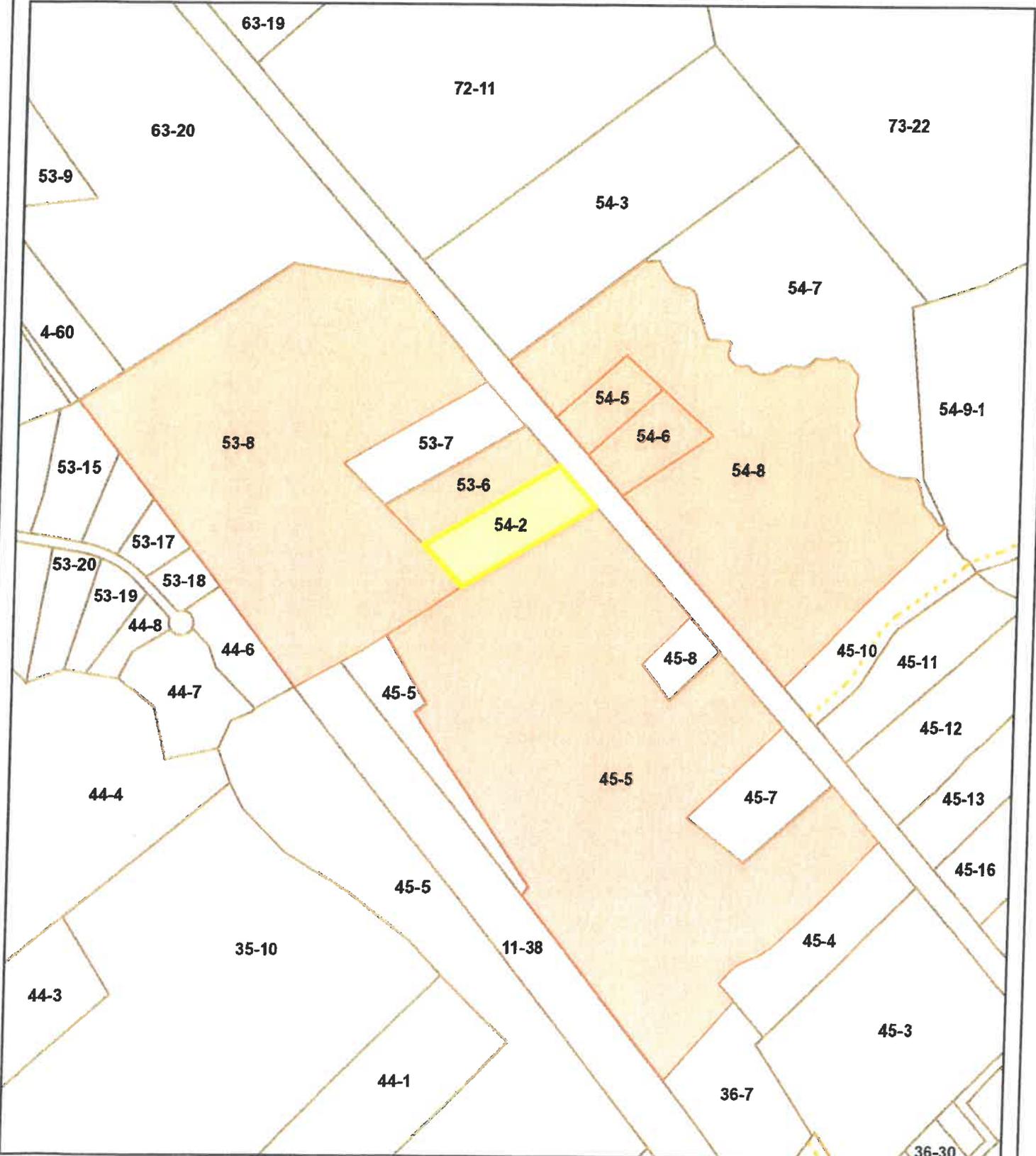


Eliot, ME

1 inch = 549 Feet



February 4, 2020



Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.



Abutters List Report

Eliot, ME
February 03, 2020

Subject Property:

Parcel Number: 033-001-000
CAMA Number: 033-001-000
Property Address: 423 RIVER RD

Mailing Address: SOMERS, DIANE MARIE HOTTEN
SOMERS, CLAYTON
51 OLD HENNIKER RD
HOPKINTON, NH 03229

Abutters:

Parcel Number: 025-007-000
CAMA Number: 025-007-000
Property Address: 419 RIVER RD

Mailing Address: WARREN, ANTHONY M WARRENT,
STEPHANIE
1020 SALEM ST
NORTH ANDOVER, MA 01845

Parcel Number: 025-008-000
CAMA Number: 025-008-000
Property Address: 402 RIVER RD

Mailing Address: WYMAN/WARBURG REALTY TRUST J
WARBURG/J WYMAN TRTS
402 RIVER RD
ELIOT, ME 03903

Parcel Number: 033-002-000
CAMA Number: 033-002-000
Property Address: 437 RIVER RD

Mailing Address: COHEN, JOY E REVOCABLE TRUST JOY
E COHEN TRUSTEE
437 RIVER RD
ELIOT, ME 03903



www.cai-tech.com

Data shown on this report is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this report.

2/3/2020

Page 1 of 1



TOWN OF ELIOT MAINE

PLANNING OFFICE

1333 State Road

Eliot ME, 03903

February 4, 2020

To:

Map 25 / Lot 7
WARREN, ANTHONY
WARREN, STEPHANIE
1020 SALEM ST.
NORTH ANDOVER, MA 01845

Certified Mail # 7112 4369 4680 2177 4200
Return Receipt Requested

Map 25 / Lot 8
WYMAN / WARBURG REALTY TRUST
J WARBURG / J WYMAN TRTS
402 RIVER ROAD
ELIOT, ME 03903

Certified Mail # 7112 4369 4680 2177 4217
Return Receipt Requested

Map 33 / Lot 2
COHEN, JOY E REVOCABLE TRUST
JOY E COHEN TRUSTEE
437 RIVER ROAD
ELIOT, ME 03903

Certified Mail # 7112 4369 4680 2177 4224
Return Receipt Requested

You are receiving this notification in conformance with the Town of Eliot's Ordinances, section 33-130. You are listed as the owner of property that has been identified as an abutter to an application for proposed work that was submitted to the Town of Eliot Planning Board for review. The Planning Board has scheduled a public hearing on the application at the date and time listed below for the purpose of receiving comments on the application. If you are interested in the specific details of the application, you may review the application and supporting documentation that has been submitted to the Planning Office during normal business hours (Monday 10:00-5:00; Tuesday and Thursday 8:00-4:00; Wednesday 8:00-12:00 and Friday 6:30-1:00).

Although an overview of the application will be presented at the public hearing, it is your responsibility to inform yourself as to the specific content and details of the proposal under consideration. During the public hearing, you will be allowed to ask questions, speak in favor of, and/or express concerns. If you cannot attend the public hearing, you may submit written comments to the Planning Office via email or in person.

This is the only notice you will receive via mail. If the application is continued to a future meeting, you will not be notified again. Please feel free to contact the Planning Office at 207-439-1813 with any questions.

PUBLIC HEARING NOTICE

AUTHORITY: Eliot, Maine Planning Board
PLACE: Eliot Town Hall, 1333 State Road, Eliot, ME 03903
DATE OF HEARING: Tuesday, February 18, 2020
TIME: 7:00 PM

Notice is hereby given that the Planning Board of the Town of Eliot, Maine will hold a public hearing on Tuesday, February 18, 2020 at 7:00 PM for the following application:

- **423 River Road (Map 33 / Lot 1) #PB19-25:** Shoreland Zoning Permit Application – Application to add second floor above existing 28' x 26' first floor. Also convert 14' x 10'6" screened porch to new finished sunroom with deck above. Property is a small 2 – bedroom home on narrow waterfront lot. Applicant: Pamela Mijal Owner: Pamela Mijal

Interested persons may be heard and written communication received regarding this application at this hearing. The application is on file and available for review in the Planning Office at Eliot Town Hall, 1333 State Road, Eliot, ME 03903



TOWN OF ELIOT MAINE

PLANNING OFFICE

1333 State Road

Eliot ME, 03903

To: Board of Appeals
Select Board
Cc: Town Manager Dana Lee
From: Kristina Goodwin – Land Use Administrative Assistant
Date: February 4, 2020
Re: Public Hearing Notification: 423 River Road (Map 33 / Lot 1) #PB19-25
You are receiving this notification in conformance with section 33-130 of the Town's ordinances.

PUBLIC HEARING NOTICE

AUTHORITY: Eliot, Maine Planning Board
PLACE: Eliot Town Hall, 1333 State Road, Eliot, ME 03903
DATE OF HEARING: Tuesday, February 18, 2020
TIME: 7:00 PM

Notice is hereby given that the Planning Board of the Town of Eliot, Maine will hold a public hearing on Tuesday, February 18, 2020 at 7:00 PM for the following applications:

- **423 River Road (Map 33 / Lot 1) #PB19-25:** Shoreland Zoning Permit Application – Application to add second floor above existing 28' x 26' first floor. Also convert 14' x 10'6" screened porch to new finished sunroom with deck above. Property is a small 2 – bedroom home on narrow waterfront lot. Applicant: Pamela Mijal Owner: Pamela Mijal

Interested persons may be heard and written communication received regarding this application at this hearing. The application is on file and available for review in the Planning Office at Eliot Town Hall, 1333 State Road, Eliot, ME 03903

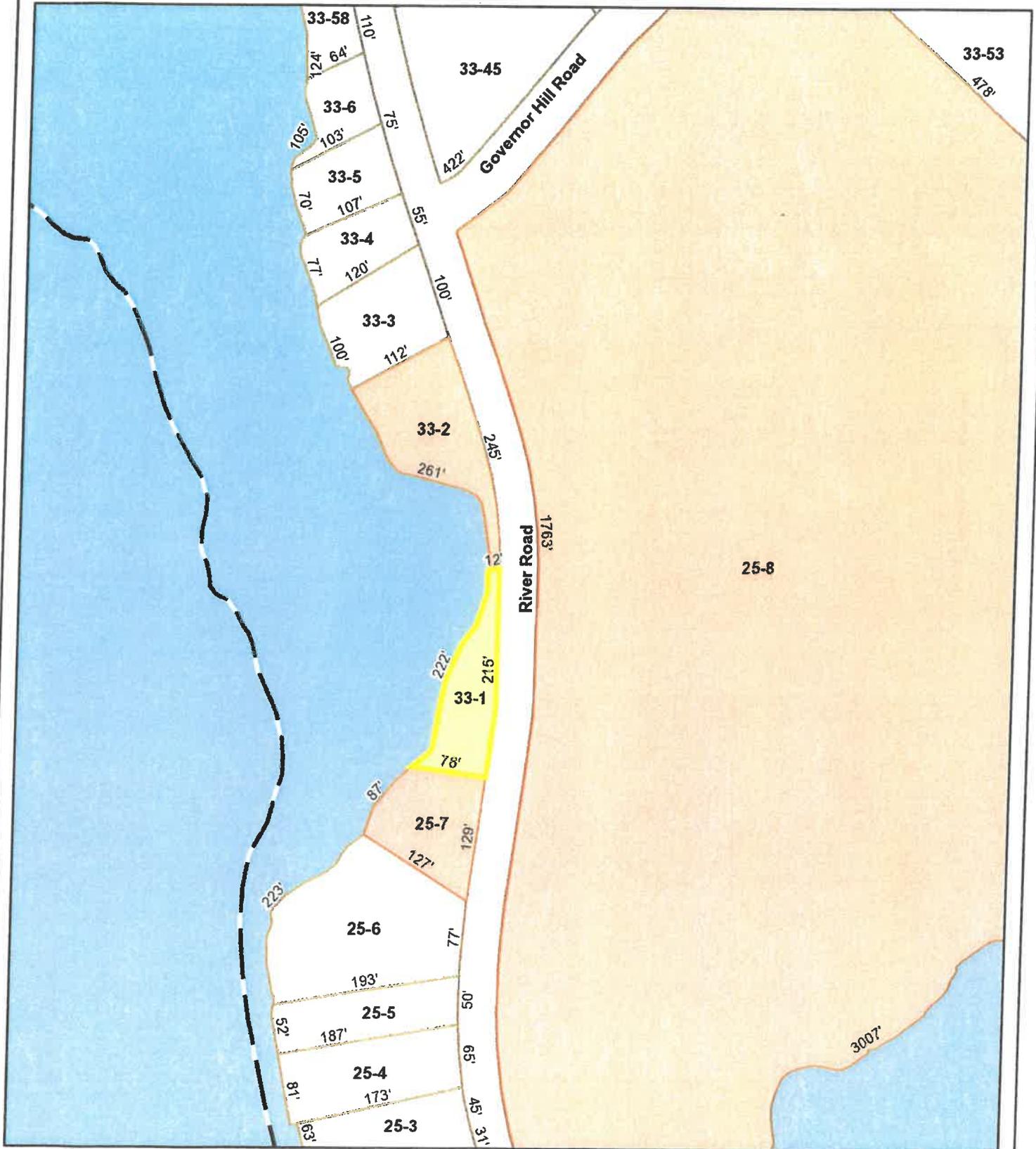


Eliot, ME

1 inch = 137 Feet



February 4, 2020



Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.

January 26, 2020

Shelly Bishop
Building Inspector, Local Plumbing Inspector & E911 Addressing Officer
Town of Eliot, 1333 State Road, Eliot, Maine 03903
207-439-1813 ext. 110

RE: 423 River Road February 18, 2020 – Public Hearing

Dear Shelly and Members of the Board,

On January 21, 2020 my architect Michelle Shields, my sister Judi Letourneau and I, met with the board and my plan was approved pending providing three additional items.

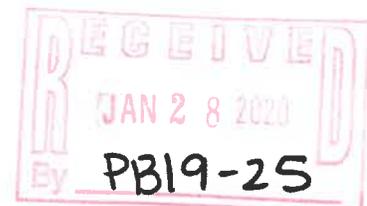
1. Plans re-submitted, prepared by Pamela Mijal and Michelle Shields (Designs) to DEP via Shelly Bishop and David Galbraith to determine correct zoning from board
 - a. Images of before photos to be provided
2. Identification of Well and Septic placement on plan
3. Add the highwater mark on the plan. As well as clarification of the law Section 44-32-c regarding a non-conforming structure

I'm writing to confirm that this is all the additional information that will be needed for the February 18th meeting as I would like to move forward with the construction of my home as soon as possible. This is the first home I have ever purchased after renting in New York City for 22 years. I decided to leave the city and move closer to my family and a quieter way of life.

I've been living with my sister and her children for the past 3 months and, although I enjoy my family, I'm eager to make a home of my own and find a quiet place to work – I am a freelance graphic artist and not having a home base has become a hardship.

I also have a few concerns that do not affect me directly. I've hired a local contractor that I may lose if your approval is delayed beyond February 18th. If he could start then, the construction would be complete before my neighbors return for the summer and they wouldn't have to deal with the noise.

I understand your concerns to follow the DEP's regulation. And I understand that the purpose of their regulations, as defined in Section 44-1: to further the maintenance of a safe and healthful condition; to protect wildlife habitat; protect buildings and lands from flooding and erosion; to protect freshwater and coastal wetlands; to protect wetlands, to conserve shore cover; and to conserve natural beauty and open space. I feel like I am honoring all the DEP's requests and even adding to the quality of the landscape.



I would like you and the board to know that this will indeed be my home. I don't intend to turn it around and sell it, nor rent or airbnb the property. I've searched for this home on the water for a very long time. I am really looking forward to becoming part of the community.

Please let me know if you anticipate any additional information needed to approve my proposal.

Also, due to my work travel situation, unfortunately, I will not be available for the February 18th meeting. My sister Judi Letourneau and Architect, Michelle Shields will be representing my proposal. Please contact me prior to the 18th if you have any additional needs.

Thank you for your time.

Kind Regards,

Pamela A Mijal

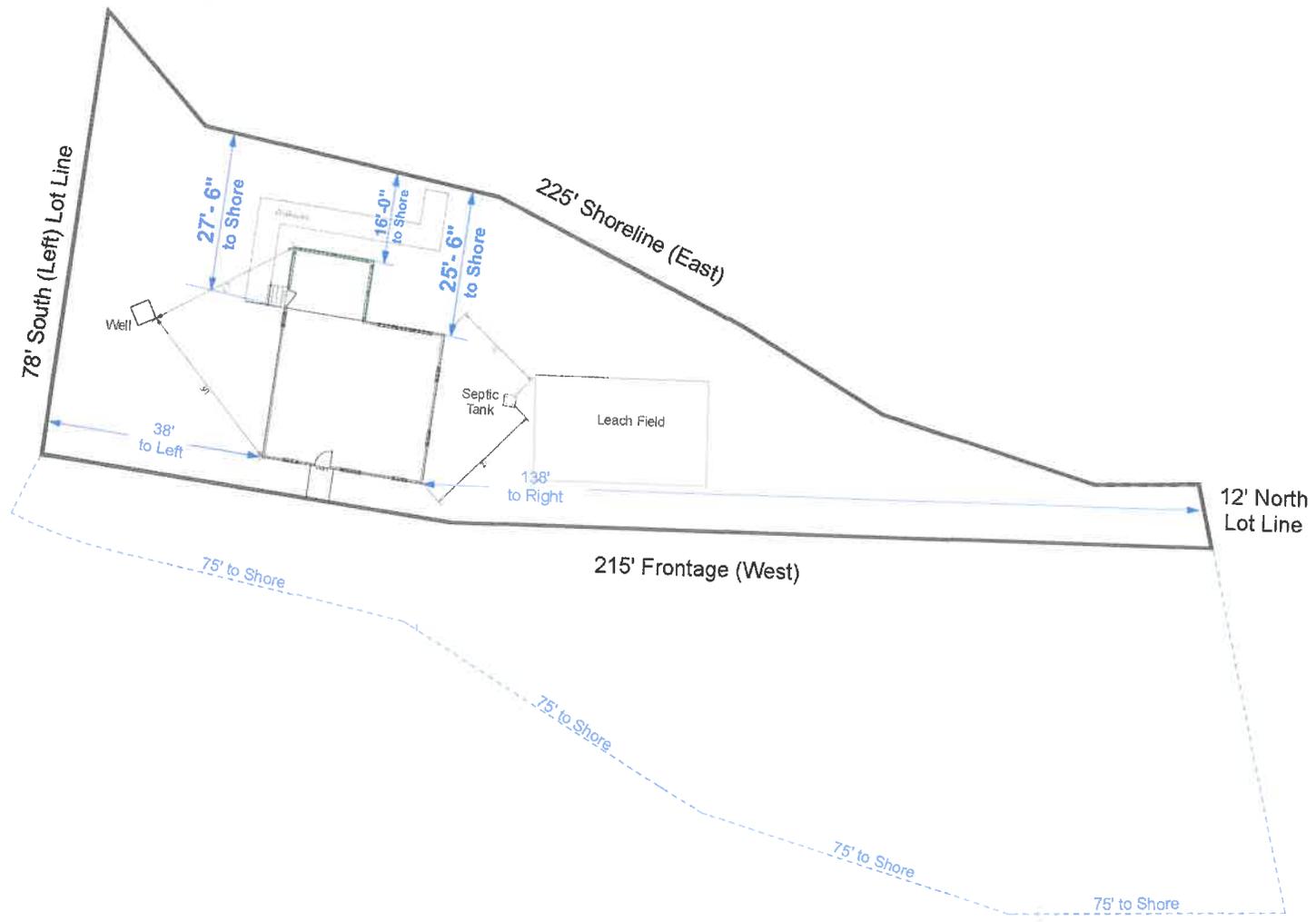
Pamela Mijal
423 River Road
Eliot ME, 03903
(917) 854-2467

cc:

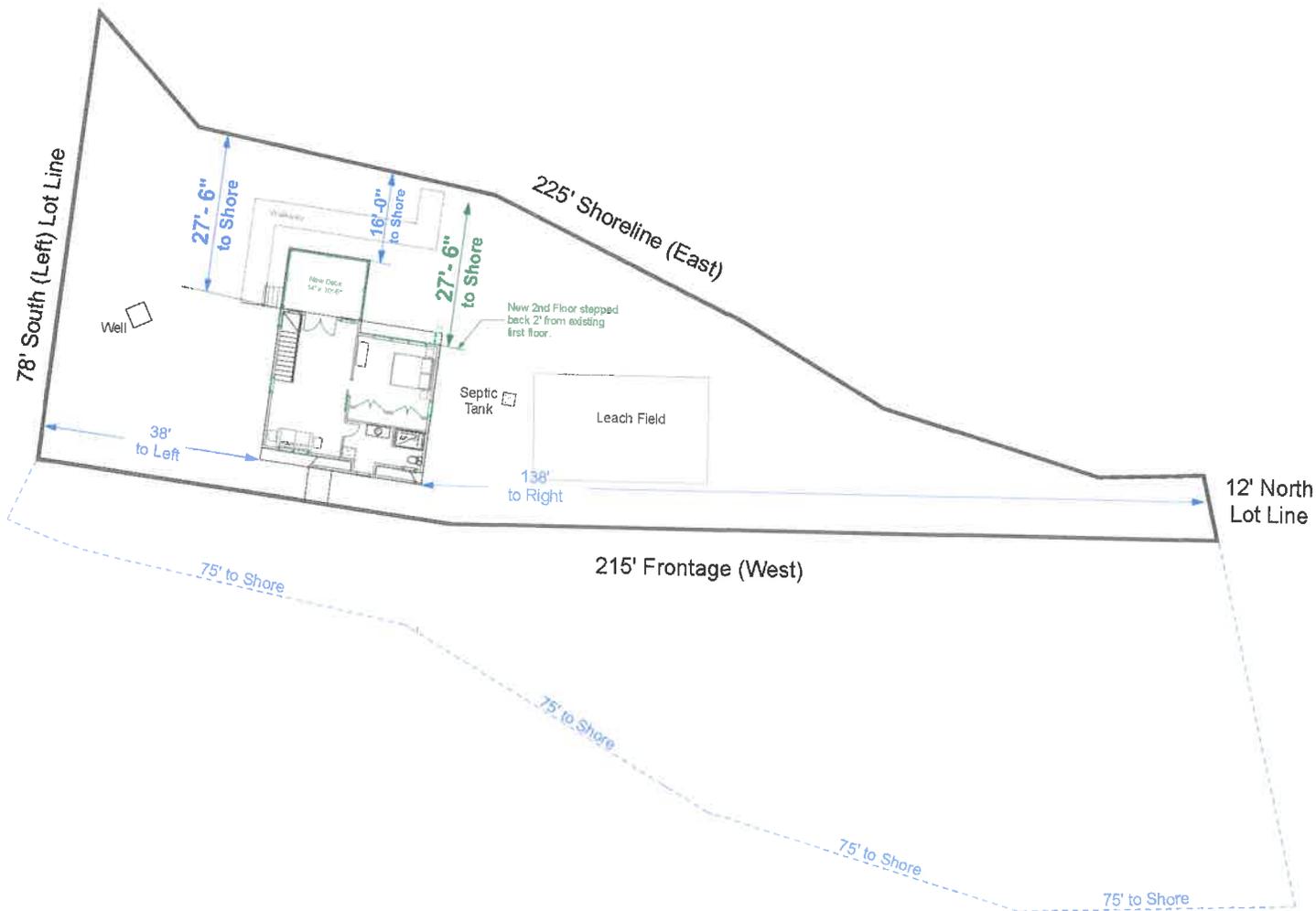
Town of Eliot Planning Board:
Kristina Goodwin, Land Use Assistant
David C.M. Galbraith, Contract planner
Dennis Lentz, Chairman
Christine Bennett, Vice Chairman
Edward Cieleszko, Secretary
Melissa Magdziasz Horner, Member
Carmela Braun, Member
William Olsen, Jr., Alternate



Michelle Shields Design Smart Creative Architecture www.MichelleShieldsDesign.com	6 Rudolph Avenue Kittery, Maine 03904 207-438-9829 Cell: 207-752-7623	PROJECT: Pamela Mijal Residence	SITE: 423 River Road Eliot, Maine 03903	ISSUED FOR: Review	SCALE: None (Letter)	TITLE: Existing Photos	SHEET: E
				DATE: January 22, 2020			



Michelle Shields Design Smart Creative Architecture www.MichelleShieldsDesign.com	6 Rudolph Avenue Kittery, Maine 03904 207-438-9829 Cell: 207-752-7623	PROJECT: Pamela Mijal Residence	SITE: 423 River Road Eliot, Maine 03903	ISSUED FOR: Review	SCALE: 1" = 30'-0"	TITLE: Existing Site Plan	SHEET: ES
				ISSUE DATE: January 22, 2020			



Michelle Shields Design
 Smart Creative Architecture
www.MichelleShieldsDesign.com

6 Rudolph Avenue
 Kittery, Maine 03904
 207-438-9829
 Cell: 207-752-7623

PROJECT:

Pamela Mijal
 Residence

SITE:

423 River Road
 Eliot, Maine 03903

ISSUED FOR:

Review

ISSUE DATE:

January 22, 2020

SCALE:

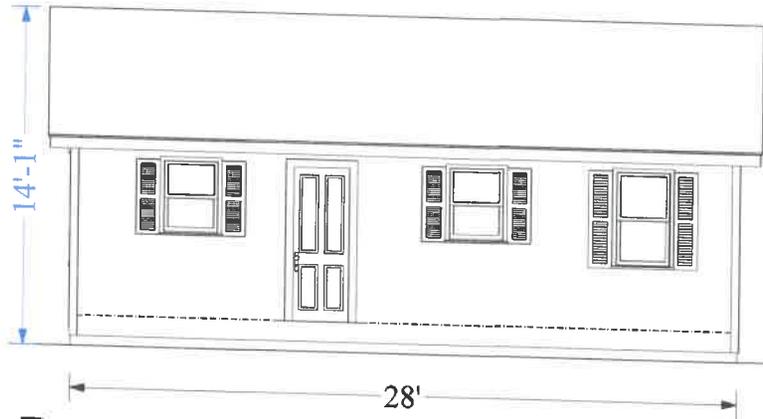
1" = 30'-0"

TITLE:

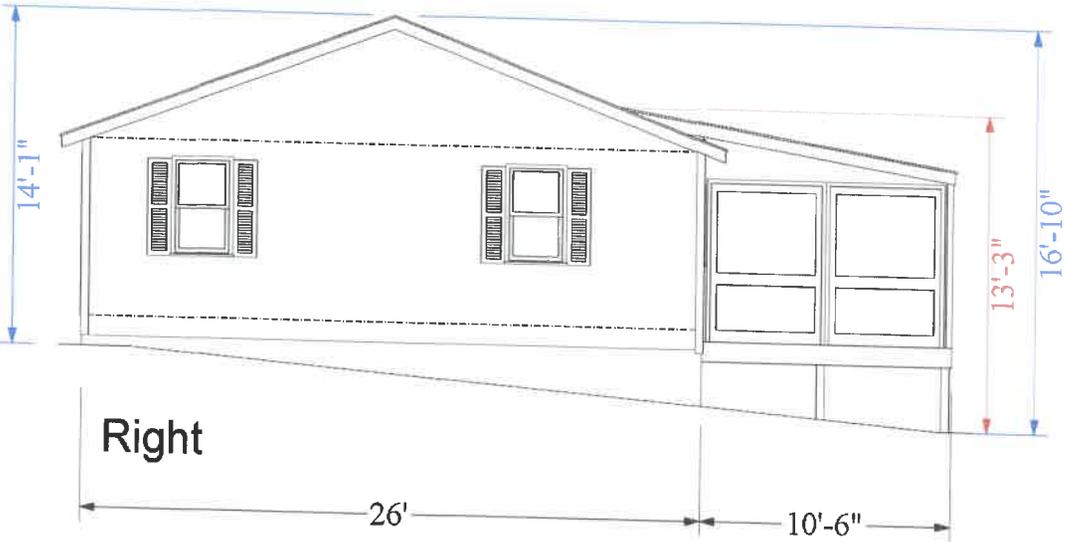
Proposed
 Site Plan

SHEET:

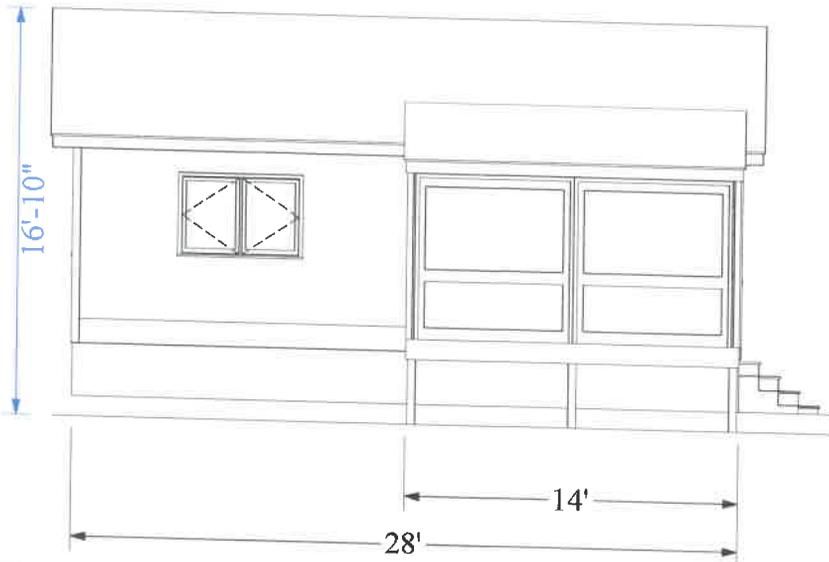
PS



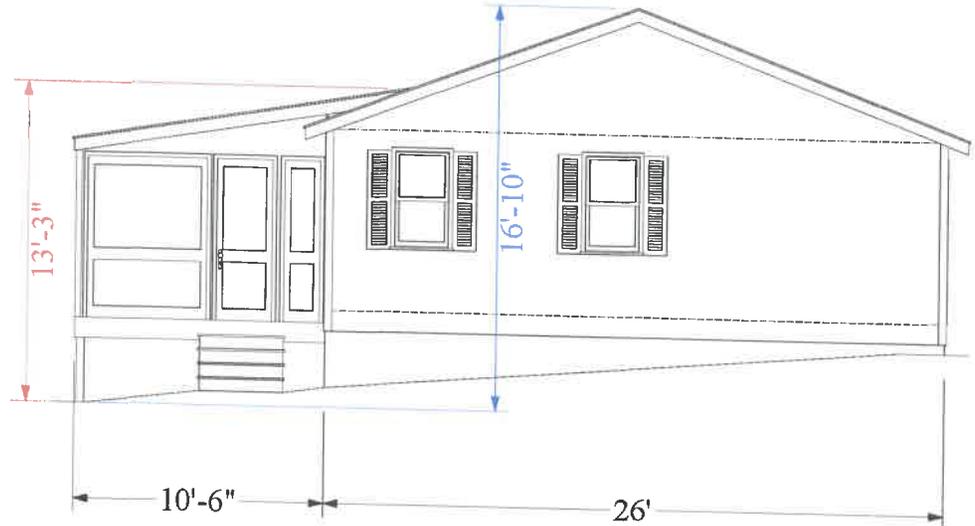
Front



Right



Rear



Left

Michelle Shields Design Smart Creative Architecture www.MichelleShieldsDesign.com	6 Rudolph Avenue Kittery, Maine 03904 207-438-9829 Cell: 207-752-7623	PROJECT: Pamela Mijal Residence	SITE: 423 River Road Eliot, Maine 03903	ISSUED FOR: Review	SCALE: 1/8" = 1'-0" (Letter)	TITLE: Existing Elevations	SHEET: E2
				DATE: January 22, 2020			



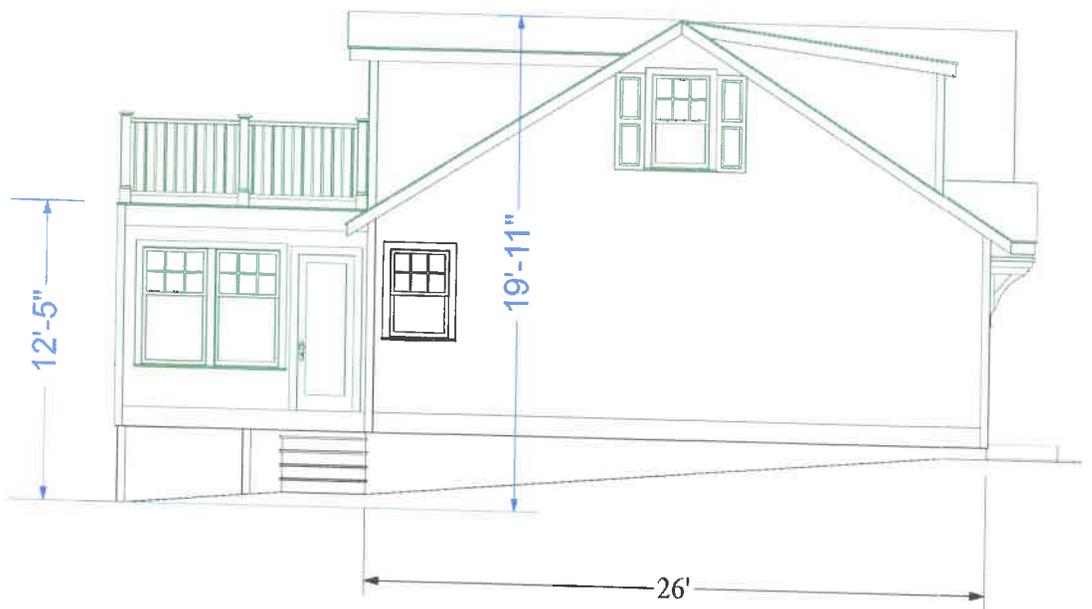
Front



Right



Rear



Left

Michelle Shields Design Smart Creative Architecture www.MichelleShieldsDesign.com	6 Rudolph Avenue Kittery, Maine 03904 207-438-9829 Cell: 207-752-7623	PROJECT: Pamela Mijal Residence	SITE: 423 River Road Eliot, Maine 03903	ISSUED FOR: Review	SCALE: 1/8" = 1'-0" (Letter)	TITLE: Proposed Elevations	SHEET: P2
				DATE: January 22, 2020			

ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1-9.

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

SECTION A - PROPERTY INFORMATION		FOR INSURANCE COMPANY USE
A1. Building Owner's Name THOMAS L. GOSSELIN RESIDUARY TRUST U/T/A, ROBERTA J. GOSSELIN TRUSTEE		Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 423 RIVER ROAD		Company NAIC Number:
City ELIOT	State Maine	ZIP Code 03903
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) TAX MAP 33 LOT 1		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <u>RESIDENTIAL</u>		
A5. Latitude/Longitude: Lat. <u>43.133308</u> Long. <u>-70.822661</u> Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> NAD 1983		
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.		
A7. Building Diagram Number <u>9</u>		
A8. For a building with a crawlspace or enclosure(s):		
a) Square footage of crawlspace or enclosure(s) <u>742</u> sq ft		
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <u>0</u>		
c) Total net area of flood openings in A8.b <u>0</u> sq in		
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
A9. For a building with an attached garage:		
a) Square footage of attached garage <u>N/A</u> sq ft		
b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade _____		
c) Total net area of flood openings in A9.b _____ sq in		
d) Engineered flood openings? <input type="checkbox"/> Yes <input type="checkbox"/> No		

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number TOWN OF ELIOT 230149		B2. County Name YORK		B3. State Maine	
B4. Map/Panel Number 0010	B5. Suffix B	B6. FIRM Index Date JUNE 5, 1989	B7. FIRM Panel Effective/Revised Date 06/05/1989	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth) 9.0

- B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9:
 FIS Profile FIRM Community Determined Other/Source: _____
- B11. Indicate elevation datum used for BFE in Item B9: NGVD 1929 NAVD 1988 Other/Source: _____
- B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? Yes No
 Designation Date: _____ CBRS OPA

ELEVATION CERTIFICATE

OMB No. 1660-0008
Expiration Date: November 30, 2018

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 423 RIVER ROAD			Policy Number:
City ELIOT	State Maine	ZIP Code 03903	Company NAIC Number

SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: Construction Drawings* Building Under Construction* Finished Construction

*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: Leica SmartNET RTK GPS Survey Vertical Datum: _____

Indicate elevation datum used for the elevations in items a) through h) below.

NGVD 1929 NAVD 1988 Other/Source: _____

Datum used for building elevations must be the same as that used for the BFE.

Check the measurement used.

- | | | |
|---|-------------|--|
| a) Top of bottom floor (including basement, crawlspace, or enclosure floor) | <u>10.3</u> | <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters |
| b) Top of the next higher floor | <u>15.3</u> | <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters |
| c) Bottom of the lowest horizontal structural member (V Zones only) | <u>N/A</u> | <input type="checkbox"/> feet <input type="checkbox"/> meters |
| d) Attached garage (top of slab) | <u>N/A</u> | <input type="checkbox"/> feet <input type="checkbox"/> meters |
| e) Lowest elevation of machinery or equipment servicing the building
(Describe type of equipment and location in Comments) | <u>10.6</u> | <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters |
| f) Lowest adjacent (finished) grade next to building (LAG) | <u>11.3</u> | <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters |
| g) Highest adjacent (finished) grade next to building (HAG) | <u>14.8</u> | <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters |
| h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support | <u>9.8</u> | <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters |

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

Were latitude and longitude in Section A provided by a licensed land surveyor? Yes No Check here if attachments.

Certifier's Name
Ryan M. McCarthy, P.E., P.L.S.

License Number
ME P.E. #12895 / ME P.L.S. #2515

Title
MANAGER

Company Name
TIDEWATER ENGINEERING & SURVEYING, PLLC

Address
37 ROUTE 236 SUITE 201

City
KITTERY

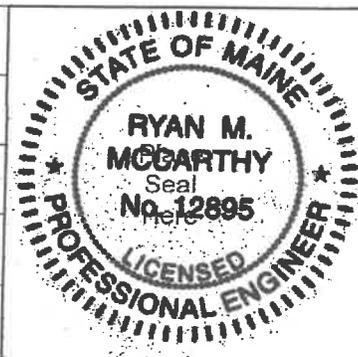
State
Maine

ZIP Code
03904

Signature


Date
07/24/2017

Telephone
(207) 439-2222



Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments (including type of equipment and location, per C2(e), if applicable)

- LATITUDE AND LONGITUDE SOURCE = GOOGLE EARTH
- MACHINERY IS SECTION C2.e. ABOVE IS FOR A HOT WATER HEATER LOCATED ON BLOCKS IN THE CRAWLSPACE.
- THERE IS NO LIVING SPACE IN THE CRAWLSPACE. CRAWLSPACE HAS AN EARTHEN FLOOR.



Federal Emergency Management Agency
Washington, D.C. 20472

MR. RYAN MCCARTHY
TIDEWATER ENGINEERING & SURVEYING,
PLLC
37 ROUTE 236 SUITE 201
KITTERY, ME 03904

CASE NO.: 17-01-2228A
COMMUNITY: TOWN OF ELIOT, YORK COUNTY,
MAINE
COMMUNITY NO.: 230149

DEAR MR. MCCARTHY:

This is in reference to a request that the Federal Emergency Management Agency (FEMA) determine if the property described in the enclosed document is located within an identified Special Flood Hazard Area, the area that would be inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood), on the effective National Flood Insurance Program (NFIP) map. Using the information submitted and the effective NFIP map, our determination is shown on the attached Letter of Map Amendment (LOMA) Determination Document. This determination document provides additional information regarding the effective NFIP map, the legal description of the property and our determination.

Additional documents are enclosed which provide information regarding the subject property and LOMAs. Please see the List of Enclosures below to determine which documents are enclosed. Other attachments specific to this request may be included as referenced in the Determination/Comment document. If you have any questions about this letter or any of the enclosures, please contact the FEMA Map Information eXchange (FMIX) toll free at (877) 336-2627 (877-FEMA MAP) or by letter addressed to the Federal Emergency Management Agency, Attn: North Wind Resource Partners (NWRP) eLOMA Coordinator, NWRP eLOMA Coordinator, 3601 Eisenhower Ave., Alexandria, VA 22304-6439, Fax: 703-751-7415.

Sincerely,

Luis V. Rodriguez, P.E., Director
Engineering and Modeling Division
Federal Insurance and Mitigation Administration

LIST OF ENCLOSURES:

LOMA DETERMINATION DOCUMENT (REMOVAL)

cc: State/Commonwealth NFIP Coordinator
Community Map Repository
Region

11/01/2019

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
PERMIT BY RULE NOTIFICATION FORM**
(For use with DEP Regulation, Natural Resources Protection Act- Permit by Rule Standards, Chapter 305)
PLEASE TYPE OR PRINT IN BLACK INK ONLY

APPLICANT INFORMATION (Owner)		AGENT INFORMATION (If Applying on Behalf of Owner)	
Name:	Pam M JAL	Name:	JUOI LETOURNEAU
Mailing Address:	PO Box 96	Mailing Address:	21 OLD STONMILL RD
Town:	ELIOT	Town:	BEDFORD
State and Zip Code:	ME	State and Zip Code:	NH 03110
Daytime Phone #:	1-917-854-2467	Daytime Phone #:	603-472-252
Email Address:	pantwestory@mac.com	Email Address:	jiletourneau@comcast.net

PROJECT INFORMATION			
Part of a larger project? (check one):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	After the Fact? (check one):	<input type="checkbox"/> Yes <input type="checkbox"/> No
Project Town:	ELIOT	Town Email Address:	
Brief Project Description:	Trying to build up on a small camp (currently 700 sq ft.)		
Project Location & Brief Directions to Site:	423 LIVER RD., ELIOT ME		

PERMIT BY RULE (PBR) SECTIONS (Check at least one): I am filing notice of my intent to carry out work which meets the requirements for Permit By Rule (PBR) under DEP Rules, Chapter 305. I and my agents, if any, have read and will comply with all of the standards in the Sections checked below.

<input checked="" type="checkbox"/> Sec. (2) Act Adj. to Protected Natural Res.	<input type="checkbox"/> Sec. (10) Stream Crossing	<input type="checkbox"/> Sec. (17) Transfers/Permit Extension
<input type="checkbox"/> Sec. (3) Intake Pipes	<input type="checkbox"/> Sec. (11) State Transportation Facil.	<input type="checkbox"/> Sec. (18) Maintenance Dredging
<input type="checkbox"/> Sec. (4) Replacement of Structures	<input type="checkbox"/> Sec. (12) Restoration of Natural Areas	<input type="checkbox"/> Sec. (19) Activities in/on/over significant vernal pool habitat
<input type="checkbox"/> Sec. (5) REPEALED	<input type="checkbox"/> Sec. (13) F&W Creation/Enhance/Water Quality Improvement	<input checked="" type="checkbox"/> Sec. (20) Activities located in/on/over high or moderate value inland waterfowl & wading bird habitat or shorebird feeding & roosting areas
<input type="checkbox"/> Sec. (6) Movement of Rocks or Vegetation	<input type="checkbox"/> Sec. (14) REPEALED	
<input type="checkbox"/> Sec. (7) Outfall Pipes	<input type="checkbox"/> Sec. (15) Public Boat Ramps	
<input type="checkbox"/> Sec. (8) Shoreline Stabilization	<input type="checkbox"/> Sec. (16) Coastal Sand Dune Projects	
<input type="checkbox"/> Sec. (9) Utility Crossing		

NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS

- Attach** all required submissions for the PBR Section(s) checked above. The required submissions for each PBR Section are outlined in Chapter 305 and may differ depending on the Section you are submitting under.
- Attach** a check for the correct fee made payable to: "Treasurer, State of Maine". The current fee for NRPA PBR Notifications can be found at the Department's website: <http://www.maine.gov/dep/feeschedule.pdf>
- Attach** a location map that clearly identifies the site (U.S.G.S. topo map, Maine Atlas & Gazetteer, or similar).
- Attach** Proof of Legal Name if applicant is a corporation, LLC, or other legal entity. Provide a copy of Secretary of State's registration information (available at <http://licrs.informe.org/nei-sos-icrs/ICRS?MainPage=x>)

Individuals and municipalities are not required to provide any proof of identity.

I authorize staff of the Departments of Environmental Protection, Inland Fisheries & Wildlife, and Marine Resources to access the project site for the purpose of determining compliance with the rules.

I also understand that this PBR becomes effective 14 calendar days after receipt by the Department unless the Department approves or denies the PBR prior to that date.

By signing this Notification Form, I represent that the project meets all applicability requirements and standards in the rule and that the applicant has sufficient title, right, or interest in the property where the activity takes place.

Signature of Agent or Applicant:	<i>[Signature]</i>	Date:	1/22/20
----------------------------------	--------------------	-------	---------

Keep a copy as a record of permit. Send the form with attachments via certified mail or hand deliver to the Maine Dept. of Environmental Protection at the appropriate regional office listed below. The DEP will send a copy to the Town Office as evidence of the DEP's receipt of notification. No further authorization by DEP will be issued after receipt of notice. Permits are valid for two years. Work carried out in violation of any standard is subject to enforcement action.

OFFICE USE ONLY	Case #	Date	Staff	Staff	After Photos
UNR # 69315	CC 250.00	01/27/20	CB		
			Acc Date 1/27/20	Def Date	

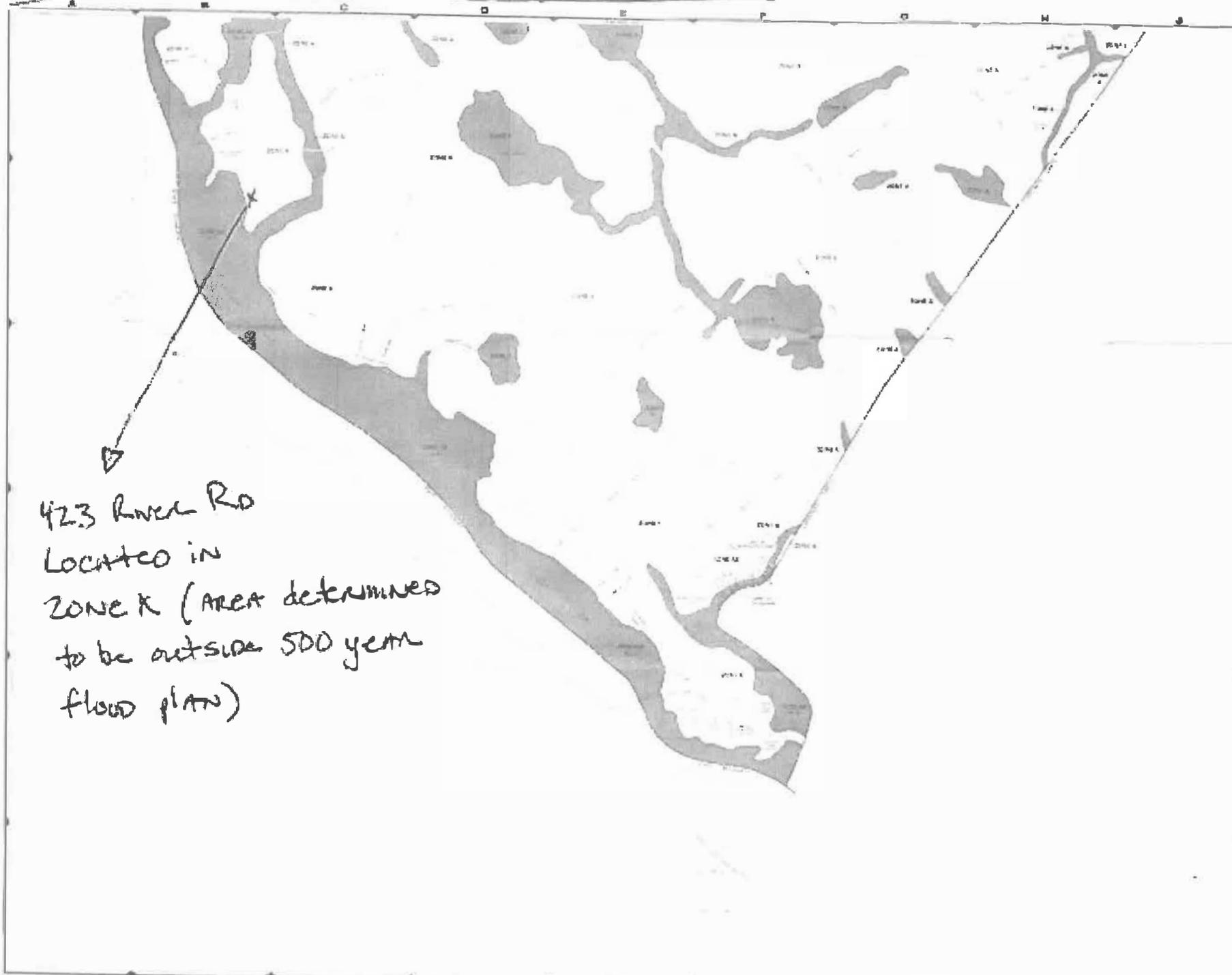
AUGUSTA DEP
17 STATE HOUSE STATION
AUGUSTA ME 04333-0017
(207)287-1288

PORTLAND DEP
312 CANCO ROAD
PORTLAND ME 04103
(207)822-6300

BANGOR DEP
105 HICKMAN ROAD
BANGOR ME 04401
(207)941-4570

PRESQUE ISLE DEP
1735 (2-N) HWY 134-VI
PRESQUE ISLE ME 04763
(207)784-9477

FLOOD FLOOD MAP



423 River Rd
Located in
Zone K (Area determined
to be outside 500 year
flood plain)

Legend

Scale

Notes

1. This map was prepared by the Maine Department of Environmental Protection, Office of Water Resources, in cooperation with the Maine Department of Transportation, Bureau of Planning and Design.

2. The map shows the 500-year flood plain for the River Road area. The flood plain is shown in gray. The 100-year flood plain is shown in white.

3. The map is based on data provided by the Maine Department of Transportation, Bureau of Planning and Design.

4. The map is for informational purposes only and should not be used for any other purpose.

5. The map is subject to change without notice.

6. The map is the property of the Maine Department of Environmental Protection and should not be reproduced without permission.

7. The map is available for sale at a cost of \$10.00 per copy.

8. The map is available for sale at a cost of \$20.00 per copy.

9. The map is available for sale at a cost of \$30.00 per copy.

10. The map is available for sale at a cost of \$40.00 per copy.

11. The map is available for sale at a cost of \$50.00 per copy.

12. The map is available for sale at a cost of \$60.00 per copy.

13. The map is available for sale at a cost of \$70.00 per copy.

14. The map is available for sale at a cost of \$80.00 per copy.

15. The map is available for sale at a cost of \$90.00 per copy.

FORM
FLOOD INSURANCE RATE

STATE OF
MAINE
PLANNING
AND DESIGN

NO. 10-1

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF WATER RESOURCES

1987

Prepared by Chris Guggs DEP, State of Maine, Environmental Specialist.

Sec. 44-34. - Table of land uses.

Table 1. Land Uses in the Shoreland Zone

		Districts				
Land Uses		SP	RP	LR	LC	GD
Uses or Activities Without Structures						
(1)	Clearing of vegetation for activities other than timber harvesting	CEO	CEO ¹	CEO	CEO	CEO
(2)	>Emergency operations	yes	yes	yes	yes	yes
(3)	Fire prevention activities	yes	yes	yes	yes	yes
(4)	Forest management activities, except for timber harvesting and land management roads	yes	yes	yes	yes	yes
(5)	Mineral exploration	no	no	no	yes ²	yes ²
(6)	Mineral extraction, including sand and gravel extraction	no	no	no	SPR	SPR
(7)	Motorized vehicular traffic on existing roads and trails	yes	yes	yes	yes	yes

(8)	Nonintensive recreational uses not requiring structures such as hunting, fishing and hiking		yes	yes	yes	yes	yes
			Districts				
Land Uses			SP	RP	LR	LC	GD
(9)	Soil and water conservation practices		yes	yes	yes	yes	yes
(10)	Surveying and resource analysis		yes	yes	yes	yes	yes
(11)	Wildlife management practices		yes	yes	yes	yes	yes
Principal Structures or Uses							
(12)	Principal structures and uses:						
	a.	One- and two-family residential	SPR ⁴	SPR ⁹	CEO	CEO	CEO
	b.	<u>Multifamily Dwelling</u>	<u>no</u>	<u>no</u>	<u>SPR</u>	<u>SPR</u>	<u>SPR</u>
-	b.	Multiunit residential	no	no	SPR	SPR	SPR

	c.	Commercial (not listed elsewhere)	no ¹³	no ¹³	no ¹³	SPR	SPR ⁵
	d.	Industrial	no	no	no	no	SPR
	e.	Governmental and institutional	no	no	no	SPR	SPR
			Districts				
Land Uses			SP	RP	LR	LC	GD
	f.	Small nonresidential facilities for educational, scientific or nature interpretation purposes	SPR ⁴	SPR	CEO	CEO	CEO
(13)	Agriculture		CEO	SPR	CEO	CEO	CEO
(14)	Aquaculture		SPR ¹⁰	SPR ¹⁰	SPR ¹⁰	SPR	Yes
(15)	Bed and breakfast		no	no	SPR ¹⁰	SPR ¹⁰	SPR
(16)	Boardinghouse		no	no	SPR ¹⁰	SPR	SPR
(17)	Campgrounds		no	no ⁷	no	no	SPR
(18)	Conversions of seasonal residences to year-round residences		LPI	LPI	LPI	LPI	LPI

(19)	Fireworks sales		no ¹⁷				
(20)	Gambling Casino		no	no	no	no	no
(21)	Marinas						
	a.	Full service	no	no	no	no	SPR
			Districts				
Land Uses			SP	RP	LR	LC	GD
	b.	Limited	no	no	no	SPR	SPR
(22)	Nonprofit medical marijuana dispensary		no	no	no	no	no
(23)	Off-site parking		no	no ⁷	no	no	no
(24)	Public and private recreational areas involving minimal structural development		SPR	SPR	SPR	SPR	CEO
Accessory Structures or Uses							
(25)	Structures accessory to allowed uses, not otherwise listed		SPR ⁴	SPR	CEO	CEO	CEO

(26)	Essential services		SPR ⁶	SPR ⁶	SPR	SPR	SPR
	a.	Roadside distribution lines (34.5kV and lower)	CEO ⁶	CEO ⁶	yes ¹²	yes ¹²	yes ¹²
	b.	Non-roadside or cross-country distribution lines involving ten poles or less in the shoreland zone	SPR ⁶	SPR ⁶	CEO	CEO	CEO
			Districts				
Land Uses			SP	RP	LR	LC	GD
	c.	Non-roadside or cross-country distribution lines involving 11 or more poles in the shoreland zone	SPR ⁶	SPR ⁶	SPR	SPR	SPR
	d.	Other essential services	SPR ⁶	SPR ⁶	SPR	SPR	SPR
(27)	Fences		yes ^{11A}				
(28)	Filling and earthmoving of ;lt; 10 cubic yards		CEO	CEO	yes	yes	yes

(29)	Filling and earthmoving of > 10 cubic yards	SPR	SPR	CEO	CEO	CEO
(30)	Home business	no ^{12A}	no ^{12A}	SPR ^{10A}	SPR ^{10A}	no
(31)	Home occupations; regular and water-dependent	no	no	no	no	no
(32)	Home Office	CEO	no	CEO	CEO	CEO
(33)	Individual, private campsites	CEO	CEO	CEO	CEO	CEO
(34)	Land management roads	yes	SPR	yes	yes	yes
		Districts				
Land Uses		SP	RP	LR	LC	GD
(35)	Piers, docks, wharves, bridges and other structures and uses extending over or below the normal high-water line or within a wetland:					
	a. Temporary	CEO ¹¹	CEO ₁₁	CEO ¹¹	CEO ¹¹	CEO ¹¹
	b. Permanent residential	SPR	SPR	SPR	SPR	SPR

	C.	Permanent commercial	SPR ¹⁴	SPR ₁₄	SPR ¹⁴	SPR	SPR
	d.	Limited commercial	SPR ⁵	SPR ⁵	SPR ⁵	SPR	no
(36)		Private sewage disposal systems for allowed uses	LPI	LPI	LPI	LPI	LPI
(37)		Road and driveway construction	SPR	no ⁸	SPR	SPR	SPR
(38)		Service drops, as defined, to allowed uses	yes	yes	yes	yes	yes
(39)		Signs.	yes ^{9A}				
(40)		Solar energy system	CEO ¹⁵	CEO ₁₅	CEO ¹⁵	CEO ¹⁵	CEO ¹⁵
			Districts				
Land Uses			SP	RP	LR	LC	GD
{41}		Small wind energy system	SPR ¹⁶	SPR ₁₆	SPR ¹⁶	SPR ¹⁶	SPR ¹⁶
{42}		Uses similar to allowed uses	CEO	CEO	CEO	CEO	CEO
{43}		Uses similar to uses requiring a CEO permit	CEO	CEO	CEO	CEO	CEO
{44}		Uses similar to uses requiring a SPR permit	SPR	SPR	SPR	SPR	SPR

(45)	Waste containers	CEO ^{5A}	CEO _{5A}	CEO ^{5A}	CEO ^{5A}	CEO ^{5A}
------	------------------	-------------------	-------------------	-------------------	-------------------	-------------------

DRAFT



1/28/20

Dear Eliot Planning Board,

As requested, I have submitted the following updates and changes to better assist you in considering a proposed "Restaurant – Takeout" coffee shop at 43 Harold Dow Highway, Eliot, Maine.

Site Plan Updates:

- Indicate setback requirements *and* building distances from property line.
- Proposed parking, which includes the intent to use "wheel stop" curbs to delineate parking spaces since our lot is mostly gravel. Parking layout updated to insure all spots safely accessible.
- Designated "Restaurant Takeout" Parking and designated Office Parking. The current site plan includes a proposed "Lighted Multi-Sign 6' w x 12' h" location within the property boundary.

Building Exterior Modifications:

- Front of garage/office building shown with mockup that proposes removing the existing front left garage door and framing double entry/exit doors within the existing garage door space (no cutting into building)
- Includes mockup that proposes removing the existing front right garage door and replacing it with windows fit within existing garage door space (no cutting into building)
- Shows proposed wall mounted White Heron building sign (2.5' H x 12' W = 30 Square feet), and indicates where side mounted sign lighting would be located

Free Standing Sign:

- Site plan shows updated proposed location for proposed free standing "Lighted Sign Post 6'W x 12' H). A mockup of proposed free-standing sign post has also been included.

Proposed "Restaurant-Takeout" Layout:

- Includes all proposed equipment and layout, 6 proposed customer seats (at counter behind proposed R front window). Layout could change in minor ways based on Fire Chief, Code Enforcement and/or Health Department request. Proposed "Restaurant-Takeout" hours are Mon-Fri, 7am-6pm, Sat 7am-5pm, Sun, 9am-4pm.

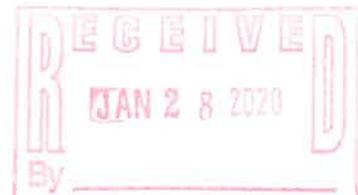
Fire Chief Initial Meeting:

- Met with Fire Chief to discuss overall concept of proposed "Restaurant-Takeout"

Thank you for your time and consideration,

Jonathan Blakeslee

Owner



Site Plan Review Submissions Checklist

Applicant Name: White Heron Tea & Coffee Maine LLC
 Address & Map/Lot: 43 Harold Dow Highway, Tax Map #23, Lot #1

This is a working document, to be used with applicants and staff to ensure information provided is consistent and complete. It should be used as a guide in assembling the information necessary for a site plan review. Once the checklist is completed, applicable waivers indicated, and the information provided, it should be submitted with the application materials.

Instructions for Applicants:

1. Indicate if the information has been submitted by checking the appropriate box in column 1.
2. The Planner and Board will use this checklist with the applicant to determine if the application presented is complete.
3. If you believe that a required submission is not applicable to your proposed project, please discuss this matter with the Planner. If the staff agrees the submission to be not applicable, the staff member will check the appropriate category and indicate the reason the item is not applicable.
4. If a staff member denies a waiver request, that staff member will check the box in column 4 and the Planning Board will make the determination at the meeting.
5. The developer shall submit two originals of a site plan, drawn at a scale of not smaller than one inch equals 20 feet, and ten copies reduced to 11 inches by 17 inches, and showing the following information unless the Planning Board waives these requirements, upon written request of the applicant.

Section Number of Ordinances	Item Description from Ordinances	1 Submitted by the Applicant	2 Submission Determined to be Sufficient by the Planning Board	3 Submission Determined Not Applicable by the Planner	4 Applicant Requests Waiver of Submission Requirement
33-127(1)	Development name or identifying title and name of the Town	Yes, see attached			
33-127(2)	Name & Address of Record Owners, Developer and Designer	Yes, see attached			
33-127(3)	Names & Addresses of All Abutters and Their Present Land Use	Yes, see attached			
33-127(4)	Perimeter Survey of the Parcel Made and Certified by a State-Registered Land Surveyor, Relating to Reference Points, Showing True North Point, Graphic Scale, Corners of the Parcel, Date of Survey, Total	Yes			

	Acreage, Existing Easements, Buildings, Watercourses & Other Essential Existing Physical Features				
33-127(5)	The Location of Temporary Markers Adequate to Enable the Planning Board to locate readily and appraise the basic layout in the field	Request Waive			
33-127(6)	Contour lines at intervals of not more than five feet or at such intervals as the Planning Board may require, based on U.S. Geological Survey topographical map datum of existing grades where change of existing ground elevation will be five feet or more	Request Waive			
33-127(7)	Provisions of Chapter 45 of this Code applicable to the area to be developed and any zoning district boundaries affecting the development	Request Waive			
33-127(8)	Provisions for collecting and discharging storm drainage, in the form of a drainage plan	Yes, see site plan			
33-127(9)	Preliminary designs of any bridges or culverts which may be required	Request Waiver. No proposed bridges or culverts			
33-127(10)	The location of all natural features or site elements to be preserved	Request Waiver. No changes to site			
33-127(11)	A soil erosion and sediment control plan	Req Waiver, No change			
33-127(12)	A high intensity soils report identifying the soils boundaries and names in the proposed development, with the soils information superimposed upon the plot plan. Such soils survey shall account for the water table in wet and dry seasons, slope, soil quality, etc.; and planning board approval will be conditioned upon	Request Waiver. No proposed changes to site.			

	compliance with any recommendations included in such report				
33-127(13)	The locations & size of any existing sewers & water mains, culverts & drains on the property to be developed	No changes, please see site plan for details			
33-127(14)	Connection with existing water supply or alternative means of providing water supply to the proposed development	On site well, please see site plan			
33-127(15)	Connection with existing sanitary sewerage system or alternative means of treatment & disposal proposed	Existing driveable 1000 gallon septic system			
33-127(16)	If a private sewage disposal system is proposed, location & results of tests to ascertain subsurface soil & groundwater conditions, depth to maximum groundwater level, location & results of soil testing	Existing system			
33-127(17)	An estimated progress schedule	45-90 days			
33-127(18)	Construction drawings sufficient to enable the Code Enforcement Officer to verify the following information:	Yes, see site plan			
a.	Total floor area, ground coverage & location of each proposed building, structure or addition	Yes, see site plan			
b.	All existing & proposed setback dimensions	Yes, see site plan			
c.	The size, location, direction & intensity of illumination of all major outdoor lighting apparatus & signs	Yes, see site plan, bldg + sign drawings			
d.	The type, size & location of all incineration devices	None			
e.	The type, size & location of all machinery likely to generate appreciable noise beyond the lot lines	None			
f.	The amount & type of any raw, finished or waste	None			

	materials to be stored outside of roofed buildings, including their physical & chemical properties, if appropriate				
g.	The location, type & size of all curbs, sidewalks, driveways, fences, retaining walls, parking space areas & the layouts together with all dimensions	See site plan			
h.	All landscaped areas, fencing & size & type of plant material proposed to be retained or replanted	No changes			
i.	A site plan for a telecommunication structure must provide a description and construction detail of the telecommunication structure, including plot plan identifying location of the structure on the property; dimensions of the structure; structural supports, if any; lighting; color; and equipment located on the structure, if any. This description shall also identify any accessory structures that are proposed in connection with the operation of the telecommunication structure.	None			
j.	Applications for subdivisions shall include all applicable submission requirements above, in addition to those required by chapter 41 of this code. If these submission requirements conflict with the requirements of chapter 41, the stricter standards shall apply.	None			
33-127(19)	Site plans and construction drawings for new and existing structures listed as SPR in section 45-290 shall	Yes			

	be submitted to the Eliot Fire Chief for review and comment prior to final approval by the Planning Board				
--	---	--	--	--	--

In addition to the above, when applicable, the Planning Board may require detailed interior plans including dimensional measurements and uses of all interior spaces, placement of equipment, counters, etc. and when applicable, seating charts indicating table/chair arrangements and the number of requested tables and seats.

The Planner will work with the applicant to ensure this checklist is complete before a Site Plan Review application is scheduled for review by the Planning Board.

Town Planner

Date

Staff Section Only:

Address:	
Map/Lot:	
PB Case #:	
Zoning District:	
Shoreland Zoning:	
Owner Name:	
Applicant Name:	
Proposed Project:	
Application Received by Staff:	
Application Fee Paid and Date:	
Application Received/Found Complete by PB:	
Site Walk Date:	
Public Hearing Date:	
Public Hearing Publication Date:	
Reason for PB Review:	

Date: 01/28/20

Address: 43 Harold Dow Highway, Eliot, Maine

Applicant: Blakeslee McElroy LLC

Site Proposal: Keep existing office/warehouse use of building, but convert garage (bottom floor) into a White Heron Tea & Coffee shop (Restaurant, Takeout). Also seeking approval for new lighted multi-sign post and lighted building-mounted sign.

Site Plan Review Submissions Checklist:

- 1) **Development Name / Town:** Blakeslee McElroy LLC, Eliot, ME
- 2) **Name and Address of Record Owners, Developer and Designer:**

Jonathan Blakeslee, 14 Cove Rd, Eliot, ME (Managing Member, LLC)

Marc McElroy, 11 Bayview Ln, Kittery, ME (Member LLC)
- 3) **Abutters and Land Use:**

2 Sunrise Street (Terrance Chick / residential)
5 Sunrise Street (David Damon / residential)
25 Harold Dow Highway (Modernist Pantry / commercial)
6 Seeley Lane / Seeley LLC (Natural Care Wellness / commercial)
- 4) **Perimeter Survey of Parcel Made and Cert by State Registered Land Surveyor:**

Yes, included.
- 5) **Location of Temp Markers on Site:**

Request waiver. Previously developed site. Permanent markers in place.
- 6) **Contour Lines / Change of Existing Ground Elevation?**

Request waiver, no changes to existing site.
- 7) **Provisions of Chapter 45 of Code applicable to area to be developed:**

Request waiver. No change to existing grounds or structure of the building.

8) **Provisions for Collecting and Discharging Storm Drainage, Drainage plan:**

Existing drainage indicated on site plan. No proposed changes.

9) **Preliminary designs of any bridges or culverts which may be required:**

Request waiver. No proposed changes.

10) **Location of all natural features or site elements to be preserved:**

Request waiver. No proposed changes.

11) **Soil erosion and sediment control plan:**

Request waiver. No proposed changes, existing drainage system is adequate.

12) **High intensity soils report identifying soils, boundaries and names in proposed development:**

Request waiver, no proposed changes to existing grounds/property.

13) **Locations and size of any existing sewers, water mains, culverts & drains on property to be developed:**

See site plan for locations of septic tank, well and drainage.

14) **Connection with existing water supply:**

On site well, please see site plan for location.

15) **Connection with existing sanitary sewerage system:**

Previously approved driveable 1000 gallon septic system. Please see site plan.

16) **If private sewerage system is proposed:**

Approved septic system exists. Please see site plan.

17) **Estimated Progress Schedule:**

Timeline to open Tea & Coffee shop is 45-90 days from site plan approval.

18) **Construction drawings sufficient to enable Code Enforcement Officer to verify:**

a) Total floor area, ground coverage, location of each proposed building, structure

Please see site plan. No additional buildings proposed.

b) All existing and proposed setback dimensions

Please see site plan, No proposed changes.

c) Size, location, direction & intensity of illumination of outdoor lighting apparatus & signs

Please see proposed/attached sign mockups. Sign lighting will be building mounted or Proposed sign post mounted, respectively. 80 watt flood lights.

d) Type, size & location of all incineration devices

No incineration devices.

e) Type, size, location, of machinery likely to generate appreciable noise beyond lot lines:

No machinery or equipment likely to generate appreciable noise beyond lot lines.

f) Amount & type of raw/finished waste materials to be stored outside of roofed buildings:

None.

g) Location, type & size of curbs, sidewalks, driveways, fences, retaining walls, parking space areas & layouts together with all dimensions:

No changes to existing site. Driveway and parking space details included on site plan.

h) All landscaped areas, fencing, size and type of plant material proposed to be retained or replanted.

No changes to existing site.

i) Site plan for telecommunication structure:

No proposed telecommunication structure.

j) Applications for subdivisions:

No.

19) Site plans and construction drawings for new and existing structures listed as SPR in section 45-290 shall be submitted to Eliot Fire Chief for review and comment prior to final approval by the Planning Board:

Yes

Exterior Halogen Lights between windows are existing on building.
Proposed building mounted sign is 2.5' H x 12' W = 30 square ft

* Proposed sign to be lighted on each side by wall mounted halogen flood lights (80 lumens each bulb) *



Proposed Double Entry/Exit Doors framed within Existing Garage Door space

Proposed Windows to be framed within Existing Garage Door space



Left Hand side of Existing Garage with existing upstairs office. **No** proposed changes to existing garage door, windows or exterior lighting (at top between windows)



Please see site plan for proposed free-standing sign post location
Proposed "Restaurant-Takeout" hours: Mon-Fri, 7am-6pm, Sat, 7am-5pm, Sun, 9am-4pm

ARGONAUT DESIGN AND DEVELOPMENT

Brian Rene Bergeron
OFFICE & MAILING:
BLEND.603
82 Fleet Street
Portsmouth, NH 03801
Cell: (603) 969-7867
Email: info@blend603.com



SCALE: (SEE SCALE BAR)

No.	Description	Date
01-BB	White Heron Revisions	12/01/19
02-BB	White Heron Revisions	01/26/20
03-BB	White Heron Revisions	01/28/20



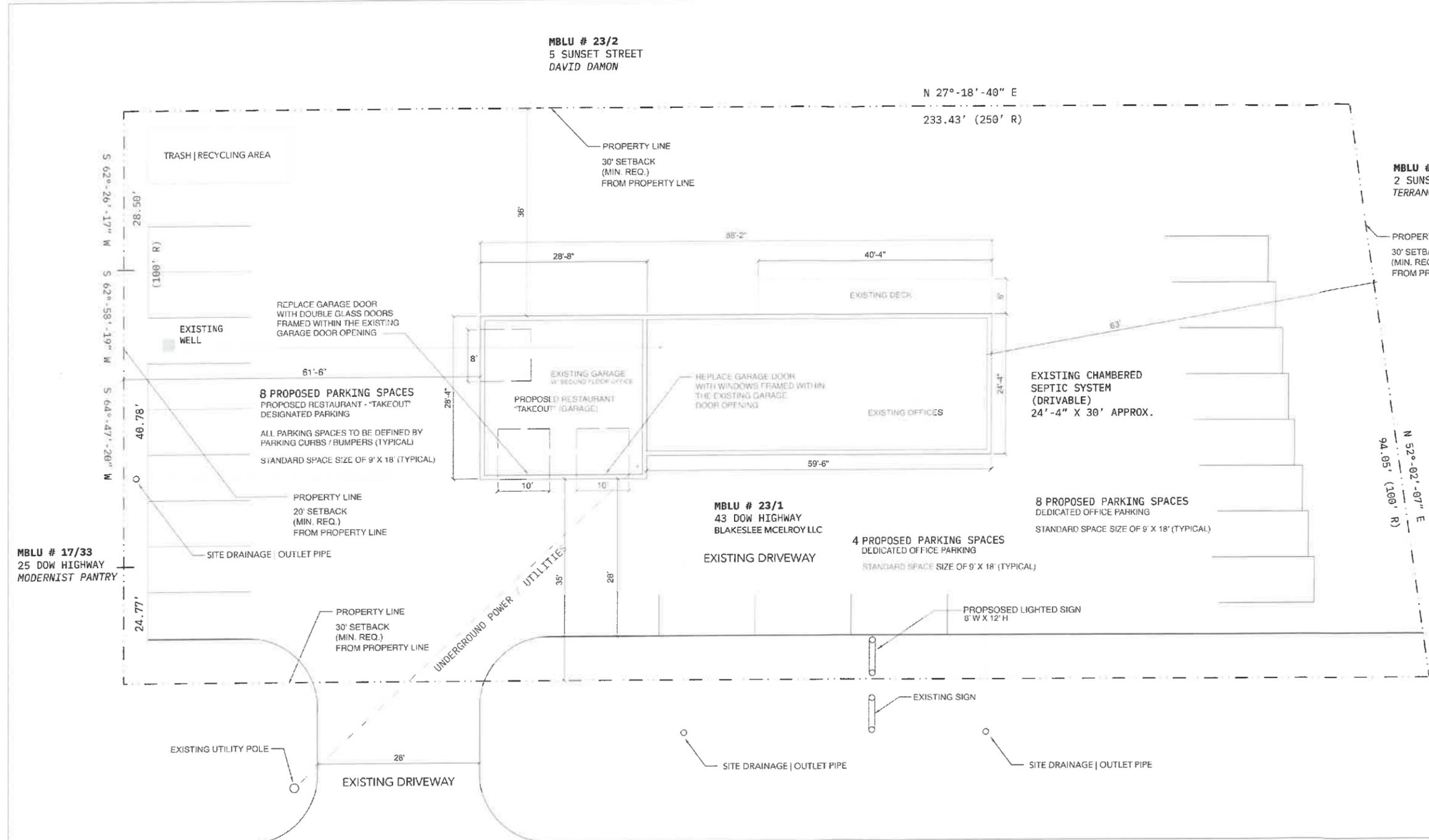
Blakeslee McElroy LLC
43 Dow Highway Route 236
Eliot, ME 03903
Cell: 603-702-1581
Email: jonathanblakeslee@gmail.com

ZONING / SITE PLAN

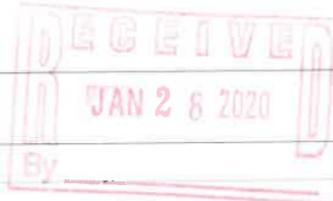
Project Number: FF - 001
Date: 01/28/20
Drawn By: BRB
Checked By: BRB

ZONING / SITE PLAN

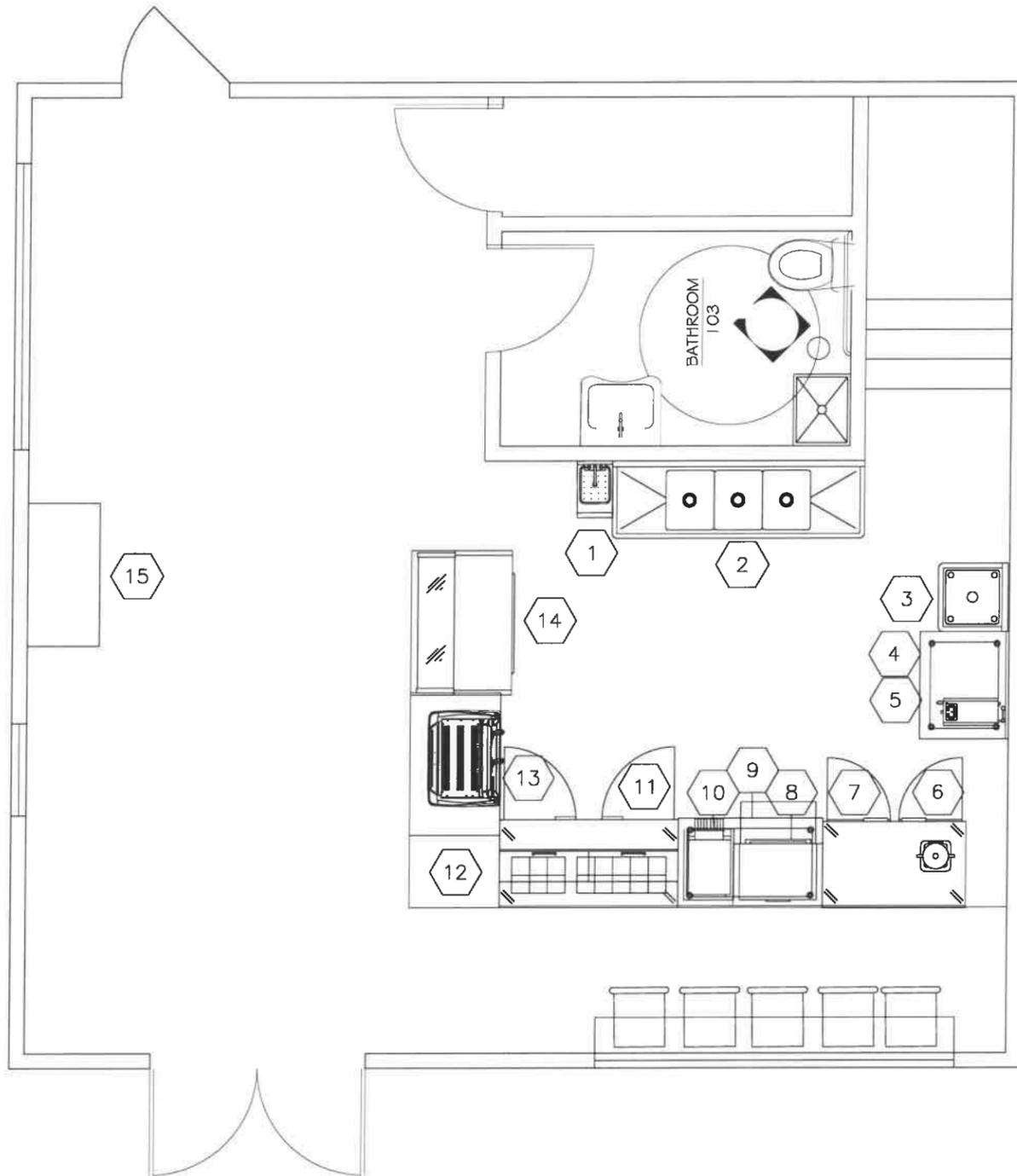
SCALE: (SEE SCALE BAR)



RT. 236



Seeley LLC / Natural Care Wellness Center - 6 Seely Ln, Eliot, ME 03903



ITEM NUMBER	QUANTITY	DESCRIPTION	WATER		WASTE		GAS		ELECTRICAL					REMARKS				
			CUT SHEET	COLD	HOT 140 F	HOT 180 F	NUMBER	DIRECT	INDIRECT	SIZE	BTUS	VOLTS	PHASE		AMPS	KW	HP	CORD & PLUG
1	1	HAND SINK																
2	1	J COMP SINK																
3	1	PREP SINK																
4	1	WORK TABLE SS																
5	1	COFFEE MAKER																
6	1	BLENDER																
7	1	WORK TOP REFRIGERATOR																
8	1	MICROWAVE																
9	1	WORK TABLE SS																
10	1	ROTARY TOASTER																
11	1	SANDWICH PREP																
12	1	PICK UP AREA																
13	1	ESPRESSO MACHINE																
14	1	BAKERY CASE																
15	1	TRASH CONDIMENT STATION																

DATE	No	REVISIONS

DRAWING TITLE		
WHITE HERON TEA		
SCALE	DATE	DRAWN BY
1/2"	1-27-20	Glen Madore
DRAWING NUMBER		
CM07607		

NORTHSHORE MARKET PLACE
 6 BOURBON STREET
 PEABODY, MA 01960

GLEN MADORE
 603-235-9059

www.nswmarketplace.com

Sec. 45-290. - Table of permitted and prohibited uses.

The following table of land uses designates permitted uses by a yes and prohibited uses by a no. Any use not listed is a prohibited use. The letters CEO, SPR, and SD are explained in [section 45-402](#).

Table of Land Uses

Land uses	R	S	V	C/I
Accessory dwelling unit	CEO	CEO	CEO	CEO
Agriculture, except animal breeding and care	yes	yes	yes	no
Animal breeding and care	yes ¹	12	SPR ^{1&8}	no
<u>Animal husbandry</u>	<u>yes</u> ¹	<u>yes</u> ¹	<u>yes</u> ¹	<u>no</u>
Apartment house, see multiple-family dwelling	-	-	-	-
Apartment, see single-family dwellings	-	-	-	-
Aquaculture	13	13	SPR ⁸	no
Assembly places	no	9	no	SPR
Assisted living facility	no	SPR/SD	SPR/SD	SPR/SD
Auto graveyards	SPR	no	no	no
Auto junkyard	no	no	no	no
Auto recycling business	9	9	no	SPR

Auto recycling operation	9	no	no	SPR
Auto recycling operation, limited	9	9	no	SPR
Auto repair garages	14	14	SPR ⁸	SPR
Auto service stations	no	9	no	SPR
Banks	no	no	SPR	SPR
Bathhouse	11	11	no	no
Bathing beach	yes	yes	yes	no
Bed and breakfasts	14	14	SPR ⁸	SPR
Boarding homes, see lodging businesses	-	-	-	-
Boarding kennel	no	no	no	SPR
Bulk oil fuel tanks	no	no	no	SPR ²
Business office	14	14	SPR ⁸	SPR
Campgrounds	SPR	no	no	no
Cemeteries	SPR	SPR	SPR	no
Churches	SPR	SPR	SPR	SPR
Clearing	yes	yes	yes	yes

Clinics	no	no	no	SPR
Clustered housing	SPR	no	no	no
Commercial adult enterprise	no	no	no	SPR
Commercial establishment, 2 or more where allowed	-	9	no	SPR
Day nurseries	SPR	16	SPR ⁸	SPR
Earth material removal, less than 100 cubic yards 100 cubic yards or greater	yes SPR	yes SPR	yes SPR	yes SPR
Elderly housing	no	SPR/SD	SPR/SD	SPR/SD
Emergency operations	yes	yes	yes	yes
Equipment storage, trucks, 3 or more	no	no	no	yes
Essential services	yes	yes	yes	yes
Expansion of an existing telecommunication structure or collocation of antenna on a existing telecommunication structure or alternate tower structure	CEO	CEO	CEO	CEO
Farm equipment stores	SPR	10	no	SPR

Fences	yes ⁵	yes ⁵	yes ⁵	yes ⁵
Firewood sales	yes	13	SPR ⁸	no
Fireworks sales	NO ²⁰	NO ²⁰	NO ²⁰	NO ²⁰
Forest management, except timber harvesting	yes	yes	yes	yes
Funeral homes	no	no	SPR	SPR
<u>Funeral Establishment</u>	<u>no</u>	<u>no</u>	<u>SPR</u>	<u>SPR</u>
Gambling casino	no	no	no	no
Gardening	yes	yes	yes	yes
Gasoline stations	no	9	no	SPR
Governmental buildings or uses	SPR	SPR	SPR	SPR
Grain or feed stores	SPR	10	no	SPR
Harvesting wild crops	yes	yes	yes	yes
Home business	PR	SPR ⁸	SPR ⁸	no
Home occupations	10	10	no	no
Home office	CEO	CEO	CEO	CEO
Hospitals	no	no	no	SPR

Indoor commercial, recreational and amusement facilities	no	no	no	SPR
Industrial and business research laboratory	no	no	no	SPR
Industrial establishments and uses	no	no	no	SPR
Institutional buildings and uses, indoor	no	9	no	no
Junkyards	no	no	no	no
Landfill, dump	no	no	no	no
Libraries	SPR	SPR	SPR	SPR
Life care facility	no	SPR/SD	SPR/SD	SPR/SD
Lodging businesses, including bed and breakfasts, boarding homes or houses, hotels, inns, lodginghouses, rooming homes, and the like	14	14	SPR ⁸	SPR
Manufacturing	PR	SPR ⁸	SPR ⁸	SPR
Marijuana establishment*	no	no	no	SPR ²¹

Mobile home parks	SPR/ SD ⁷	SPR/SD	SPR/SD	no
Motel	no	no	no	SPR
Motorized vehicular traffic	yes	yes	yes	yes
Multiple-family dwelling	no	SPR	SPR	no
Museums	SPR	SPR	SPR	SPR
New construction of telecommunication structure 70 feet and higher	9	9	no	SPR
New construction of telecommunication structure less than 70 feet high	CEO	CEO	CEO	CEO
Nonprofit medical marijuana dispensary	no	no	no	SPR ¹⁹
Nurseries, plants	CEO	17	SPR ⁸	no
Nursing facility	no	SPR	SPR	SPR
Off-site parking	no	no	no	no
Parks	SPR	SPR	SPR	no
<u>Places of Worship</u>	<u>SPR</u>	<u>SPR</u>	<u>SPR</u>	<u>SPR</u>
Playgrounds	SPR	SPR	SPR	no

Printing plant	14	14	SPR ⁸	SPR
Produce and plants raised locally, seasonal sales	yes	yes	yes	no
Professional offices	14	14	SPR ⁸	SPR
Public utility facilities	SPR	SPR	SPR	SPR
Recreational facilities, nonintensive	SPR	SPR	SPR	no
Recreational use not requiring structures	SPR	yes	yes	no
Restaurant	9	9	SPR ⁸	SPR
Restaurant, takeout	no	no	no	SPR
Retail stores, local, other	18	18	SPR ⁸	SPR
Road construction	CEO	CEO	CEO	SPR
Schools	SPR	SPR	SPR	SPR
Sewage disposal systems, private	CEO	CEO	CEO	CEO
Signs, 6 square feet	CEO	CEO	CEO	CEO
Signs, other	CEO	CEO	CEO	CEO
Single-family dwellings	CEO	CEO	CEO	no ⁶
Small wind energy system	SPR	SPR	SPR	SPR

Solar energy system	CEO	CEO	CEO	CEO
Surveying and resource analysis	yes	yes	yes	yes
Timber harvesting	yes	yes	yes	yes
Truck terminals and storage	no	no	no	SPR
Two-family dwellings	CEO	CEO	CEO	no ⁶
Veterinary hospital	15	15	No	SPR
Warehouse	no	no	no	SPR
Waste containers	CEO ³	CEO ³	CEO ³	CEO ³
Wholesale	no	no	no	SPR
Wholesale business facilities	no	no	no	SPR
Uses similar to allowed uses	CEO	CEO	CEO	CEO
Uses similar to uses requiring a CEO permit	CEO	CEO	CEO	CEO
Uses similar to uses requiring a planning board permit	SPR	SPR	SPR	SPR

*Marijuana Establishment is defined in section 11-3 of this Code

Notes:

1. Buildings housing animals shall be no less than 100 feet from property lines.

2. Each bulk oil fuel tank shall not exceed 50,000 gallons in size and use shall be limited to local use only.
3. Only as an accessory to an allowed principal use on the lot. Must conform to the requirements of 45-422. Waste containers.
4. Individual stores shall not have more than 2,500 square feet of gross floor area, except stores located on Route 236 may have up to 5,000 square feet. Customer sales areas shall be confined to one floor.
5. Must conform to the requirements of section 45-42 3.
6. See section 45-192(b) for an exception on accessory uses and structures.
7. See division 2 of article V of chapter 41 of this Code for specific areas where mobile home parks are allowed.
8. Must conform to the requirements of section 45-456.1 Home business.
9. Use is prohibited unless property abuts Route 236. If property abuts Route 236, use is "SPR" and must be visually screened from abutting (same street side) non-commercial properties.
10. Use is prohibited unless property abuts Route 236. If property abuts Route 236, use is "SPR" and must be visually screened from abutting (same street side) non-commercial properties.
11. Use is prohibited unless property abuts Route 236. If property abuts Route 236, use is "CEO" and must be visually screened from abutting (same street side) non-commercial properties.
12. Use is "SPR 1 & 8" unless property abuts Route 236. If property abuts Route 236, use is "SPR 1" and must be visually screened from abutting (same street side) non-commercial properties.
13. Use is "SPR 8" unless property abuts Route 236. If property abuts Route 236, use is "yes" and must be visually screened from abutting (same street side) non-commercial properties.
14. Use is "SPR 8" unless property abuts Route 236. If property abuts Route 236, use is "SPR" and must be visually screened from abutting (same street side) non-commercial properties.
15. Use is prohibited unless property abuts Route 236. If property abuts Route 236, use is "SPR" and must be visually screened from abutting (same street side) non-commercial properties in accordance with [Sec. 33-175\(a\)](#). Overnight boarding and outdoor kenneling of animals is prohibited in the rural and suburban zoning districts.
16. Use is "SPR 8" unless property abuts Route 236. If property abuts Route 236, use is "SPR" and must be visually screened from abutting (same street side) noncommercial properties.
17. Use is "SPR 8" unless property abuts Route 236. If property abuts Route 236, use is "CEO" and must be visually screened from abutting (same street side) noncommercial properties.
18. Use is "SPR 8" unless property abuts Route 236. If property abuts Route 236, use is "SPR 4" and must be visually screened from abutting (same street side) noncommercial properties.
19. Must conform to the requirements of [section 33-189](#).

20. See [chapter 12](#) for additional regulations pertaining to the sale and use of fireworks.
21. Must conform to the requirements of [section 33-190](#).

DRAFT



ATTAR

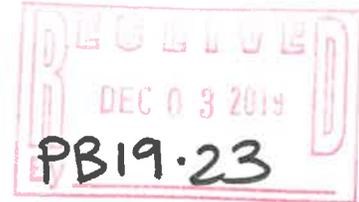
ENGINEERING, INC

CIVIL • STRUCTURAL • MARINE

Mr. Dennis Lentz, Chairman, Planning Board
Ms. Kristina Goodwin, Land Use Assistant
Town of Eliot, Maine
1333 State Road
Eliot, Maine 03903

December 3, 2019
Project No. C179-19

**RE: Commercial / Industrial Development
H.L. Dow Highway (Route 236)
Site Plan Application**



Dear Chairman Lentz and Ms. Goodwin:

On behalf of M & T Realty, LLC, I have enclosed, for your review and consideration, a Site Plan Application for a proposed commercial / industrial development. The project consists of (10) buildings to contain units for commercial and industrial uses allowed in the C/I Zone and (4) 30,000 gallon propane storage tanks. A summary of the buildings and associated uses can be found on the Site Plan (General Note 3).

The parcel is located on H.L. Dow Highway (Route 236) and Passamaquoddy Lane. It is identified on the Town of Eliot Tax Map 29 as Lot 31 and is located in the Commercial/ Industrial District. The total lot size is approximately 11.6 acres. A portion the lot is located in the Shoreland Limited Commercial District.

The proposed development will be served by public water (Kittery Water District) and an on-site subsurface wastewater disposal system.

The Planning Board previously reviewed a sketch plan for this project for the previous owner (Lady Slipper Properties, LLC) in 2015. A reduced size copy of that sketch plan is included in this application.

The previous owner was also granted a Site Location of Development (SLD) permit by the Maine Department of Environmental Protection (MDEP) in 2018. A copy of the permit and a reduced size copy of the associated site plan is included in this application. The current project will require an Amendment to the existing SLD permit.

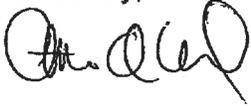
Enclosed, please find the following attachments:

- 1) Letter of Agent Authorization
- 2) Deed for the parcel
- 3) Location Map
- 4) Request for Planning Board Action Form
- 5) Application for Site Plan Review
- 6) Traffic Trip Generation Analysis
- 7) Maine Department of Transportation Entrance Permit
- 8) HHE-200 Form
- 9) Previously reviewed sketch plan
- 10) MDEP SLD permit and associated site plan for Lady Slipper Properties, LLC.
- 11) Plan set for current project.

Please schedule this project for site plan review at the next available Planning Board Meeting. I look forward to further discussing this project at the meeting.

Please contact me for any additional information or clarifications required.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kenneth Wood', written in a cursive style.

Kenneth Wood, P.E.

cc: M & T Realty, LLC

C179-19_Town Application Cover.doc

M & T Realty, LLC
519 US Route 1
York, ME 03909

Ms. Christine Woodruff
Department of Environmental Protection
312 Canco Road
Portland, Maine 04103

December 3, 2019

Town of Eliot
Ms. Kristina Goodwin, Land Use Assistant
1333 State Road
Eliot, ME 03903

Dear Ms. Woodruff and Ms. Goodwin,

Please be informed that personnel from Attar Engineering, Inc. (Kenneth A. Wood, P.E.; Lewis Chamberlain, P.E.; Brian Nielsen, E.I.T.) will be acting as my agents for the Maine Department of Environmental Protection permitting and Town of Eliot Site Plan application for the Commercial / Industrial Development on H.L. Dow Highway (Route 236), Eliot, Maine.

Please contact me if I can provide any additional information.

Sincerely,

Michael Estes
M & T Realty, LLC

cc: Attar Engineering, Inc.



QUIT-CLAIM DEED
WITH COVENANT

Know All By These Present that ESTES OIL BURNER SERVICE, INC., a Maine corporation, with a mailing address of 519 US Route 1, York, Maine 03909, for consideration paid, Grants to M & T REALTY, LLC, a Maine limited liability company with a mailing address of 519 US Route 1, York, Maine 03909 with *Quit-Claim Covenant*, a certain parcel of land situate on the westerly side of the Harold L. Dow Highway, also known as Route 236, in the Town of Eliot, County of York and State of Maine and depicted on a plan entitled, "*Boundary Survey & Topographic Plan, Pine Tree Business Park, Route 236, Eliot, Maine For: Lady Slipper Properties, LLC*" prepared by Attar Engineering, Inc. dated February 15, 2018 and more particularly bounded and described as follows:

Beginning at a 1 1/4" iron pipe found 12" above ground, said point being the northeasterly corner of the premises herein described and being the southeasterly corner of land now or formerly of Prime Eliot, LLC as shown on the above-referenced plan;

Thence running South 25° 54' 19" East along the southwesterly sideline of Harold L. Dow Highway, also known as Route 236, a distance of 300.00 feet to a granite or concrete monument to be set;

Thence turning and running South 59° 08' 55" West along land now or formerly of Anthony C. Denault and Michelle K. Denault and land now or formerly of Peter B. and Annette M. Cantrell a distance of 992.09 feet to a point;

Thence turning and running North 40° 36' 41" West along land now or formerly of Nichole M. Pracaccini a distance of 3156 feet to a 1 1/4" iron pipe found 22" above ground;

Thence turning and running North 26° 24' 50" West along said land now or formerly of Pracaccini a distance of 199.37 feet to a 2" iron pipe found 12" above ground;

Thence turning and running North 29° 25' 45" West along said land now or formerly of Pracaccini a distance of 70.80 feet to a 1 1/4" iron pipe found 18" above ground;

Thence turning and running South 60° 39' 07" West along said land now or formerly of Pracaccini a distance of 197.21 feet to a 1" iron rod found 10" above ground;

Thence turning and running North 27° 31' 11" West along land now or formerly of John E. Pollard a distance of 138.82 feet to a point;

Thence turning and running North 30° 10' 48" West along said land now or formerly of Pollard a distance of 51.81 feet to a 5/8" rebar found 5" above ground with cap #1322;

No R.E Transfer Tax Paid

Thence continuing North 30° 10' 48" West along said land now or formerly of Lena L. Grover a distance of 125.00 feet to a drill hole found;

Thence turning and running North 60° 34' 30" East along said land now or formerly of Grover a distance of 391.12 feet to a point;

Thence continuing North 60° 34' 30" East along said land now or formerly of Grover a distance of 378.91 feet to a 1 1/4" iron rod found;

Thence turning and running South 25° 46' 29" East along said land now or formerly of Prime Eliot, LLC a distance of 300.00 feet to a rebar with cap to be set;

Thence turning and running North 59° 26' 48" East along said land now or formerly of Prime Eliot, LLC a distance of 450.00 feet to the point of beginning.

Containing 509,428 square feet (11.69 acres), more or less.

Also conveying, with quitclaim covenant, all of the grantor's right, title and interest in a certain forty (40) foot wide right of way as set forth in a certain Easement Deed from Ray K. Grover and Lena L. Grover to Wilbur H. Place and Harriet L. Place dated May 19, 1998 and recorded in the York County Registry of Deeds in Book 8831, Page 345.

Together with an easement for the installation and maintenance of a sign reserved by William C. Morgridge and Raymah M. Morgridge in a deed to Dover Industrial, L.L.C. dated January 14, 2000 and recorded in the York County Registry of Deeds in Book 9868, Page 346.

Subject to an easement for a parking lot described in a Deed from William C. Morgridge and Raymah M. Morgridge in a deed to Dover Industrial, L.L.C. dated January 14, 2000 and recorded in the York County Registry of Deeds in Book 9868, Page 346.

Also conveying, with quitclaim covenant, all of the grantor's right, title and interest in a certain forty (40) foot wide right of way as set forth in a certain Easement Deed from Raymond D. and Ruth O. Grover to William C. and Raymah M. Morgridge dated March 8, 2002 and recorded in Book 11723, Page 158 in the York County Registry of Deeds.

Also conveying, with quitclaim covenant, all of the grantor's right, title and interest in a certain access easement over a triangular parcel of property located on the westerly sideline of Route 236 as set forth in a certain Easement Deed from Ray N. Grover and Lena L. Grover to William C. Morgridge, Raymah M. Morgridge, Raymond D. Grover and Ruth O. Grover dated March 8, 2002 and recorded in Book 11723, Page 162 in the York County Registry of Deeds.

Meaning and intending to convey to same premises conveyed to the Grantor by deed Lady Slipper Properties, LLC dated January 24, 2019 and recorded in York County Registry of Deeds Book 17884, Page 137.

WITNESS my hand this 6 day of February, 2019

ESTES OIL BURNER SERVICE, INC.

[Signature]
Witness

By: [Signature]
Michael Estes
Its: President

STATE OF MAINE
County of York

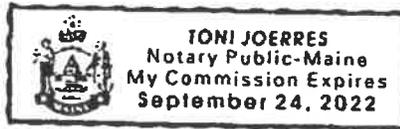
February 6, 2019

Then personally appeared the above-named, Michael Estes, President of ESTES OIL BURNER SERVICE, INC, and acknowledged the foregoing instrument to be his free act and deed,

Before me,

[Signature]
Notary Public

Toni Joerres
Print Name



SEAL

CLARK & HOWELL
16A Woodbridge Road
P.O. Box 545
York, Maine 03909

32 →



After recording return to:
Bergen & Parkinson, LLC
62 Portland Road, Suite 25
Kennebunk, ME 04043

Space Above This Line For Recording Data

QUITCLAIM DEED

KNOW ALL PERSONS BY THESE PRESENTS, that **LADY SLIPPER PROPERTIES, LLC**, a Maine limited liability company, FOR CONSIDERATION PAID, hereby grants to **ESTES OIL BURNER SERVICE, INC.**, a Maine corporation whose mailing address is 519 US Route 1, York, Maine 03909, with **QUITCLAIM COVENANT**, a certain lot or parcel of land, located in the Town of Eliot, York County, Maine; being more particularly described as follows:

SEE EXHIBIT A ATTACHED HERETO AND
INCORPORATED HEREIN BY REFERENCE

IN WITNESS WHEREOF, Lady Slipper Properties, LLC has caused this instrument to be executed by Ann F. Roberge, Personal Representative of the Estate of Richard D. Johnson (York County Probate Court Docket #2018-0808), its sole Member, thereunto duly authorized as of this 24 day of January, 2019.

Maine R.E. Transfer Tax Paid


WITNESS

LADY SLIPPER PROPERTIES, LLC

By: ESTATE OF RICHARD D. JOHNSON
Its Sole Member

By: 
Ann F. Roberge, its Personal Representative
Thereunto duly authorized

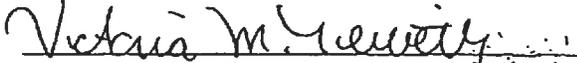
STATE OF MAINE
York County, ss.

January 24, 2019

Personally appeared the above-named Ann F. Roberge, Personal Representative of the Estate of Richard D. Johnson, sole Member of Lady Slipper Properties, LLC and acknowledged the foregoing instrument to be her free act and deed duly authorized in said capacity.

Before me,

Seal


Attorney at Law/Notary Public

VICTORIA M. TIBBETTS
Notary Public
State of Maine
My Commission Expires
August 19, 2023



Exhibit A

A certain tract or parcel of land situate on the westerly side of the Harold L. Dow Highway, also known as Route 236, so-called, in the Town of Eliot, County of York and State of Maine and depicted on a plan entitled "Boundary Survey & Topographic Plan, Pine Tree Business Park, Route 236, Eliot, Maine For: Lady Slipper Properties, LLC" prepared by Attar Engineering, Inc. dated February 15, 2018 and more particularly bounded and described as follows:

Beginning at a 1 ¼" iron pipe found 12" above ground, said point being the northeasterly corner of the premises herein described and being the southeasterly corner of land now or formerly of Prime Eliot, LLC as shown on the above-referenced plan;

Thence running South 25° 54' 19" East along the southwesterly sideline of Harold L. Dow Highway, also known as Route 236, a distance of 300.00 feet to a granite or concrete monument to be set;

Thence turning and running South 59° 08' 55" West along land now or formerly of Anthony C. Denault and Michelle K. Denault and land now or formerly of Peter B. and Annette M. Cantrell a distance of 992.09 feet to a point;

Thence turning and running North 40° 36' 41" West along land now or formerly of Nichole M. Pracaccini a distance of 31.56 feet to a 1 ¼" iron pipe found 22" above ground;

Thence turning and running North 26° 24' 50" West along said land now or formerly of Pracaccini a distance of 199.37 feet to a 2" iron pipe found 12" above ground;

Thence turning and running North 29° 25' 45" West along said land now or formerly of Pracaccini a distance of 70.80 feet to a 1 ¼" iron pipe found 18" above ground;

Thence turning and running South 60° 39' 07" West along said land now or formerly of Pracaccini a distance of 197.21 feet to a 1" iron rod found 10" above ground;

Thence turning and running North 27° 31' 11" West along land now or formerly of John E. Pollard a distance of 138.82 feet to a point;

Thence turning and running North 30° 10' 48" West along said land now or formerly of Pollard a distance of 51.81 feet to a 5/8" rebar found 5" above ground with cap #1322;

Thence continuing North 30° 10' 48" West along said land now or formerly of Lena L. Grover a distance of 125.00 feet to a drill hole found;

Thence turning and running North 60° 34' 30" East along said land now or formerly of Grover a distance of 391.12 feet to a point;

Thence continuing North 60° 34' 30" East along said land now or formerly of Grover a distance of 378.91 feet to a 1 ¼" iron rod found;

Thence turning and running South 25° 46' 29" East along said land now or formerly of Prime Eliot, LLC a distance of 300.00 feet to a rebar with cap to be set;

Thence turning and running North 59° 26' 48" East along said land now or formerly of Prime Eliot, LLC a distance of 450.00 feet to the point of beginning.

Containing 509,428 square feet (11.69 acres), more or less.

Also conveying, with quitclaim covenant, all of the grantor's right, title and interest in a certain forty (40) foot wide right of way as set forth in a certain Easement Deed from Ray K. Grover and Lena L. Grover to Wilbur H. Place and Harriet L. Place dated May 19, 1998 and recorded in the York County Registry of Deeds in Book 8831, Page 345.

Together with an easement for the installation and maintenance of a sign reserved by William C. Morgridge and Raymah M. Morgridge in a deed to Dover Industrial, L.L.C. dated January 14, 2000 and recorded in the York County Registry of Deeds in Book 9868, Page 346.

Subject to an easement for a parking lot described in a Deed from William C. Morgridge and Raymah M. Morgridge in a deed to Dover Industrial, L.L.C. dated January 14, 2000 and recorded in the York County Registry of Deeds in Book 9868, Page 346.

Also conveying, with quitclaim covenant, all of the grantor's right, title and interest in a certain forty (40) foot wide right of way as set forth in a certain Easement Deed from Raymond D. and Ruth O. Grover to William C. and Raymah M. Morgridge dated March 8, 2002 and recorded in Book 11723, Page 158 in the York County Registry of Deeds.

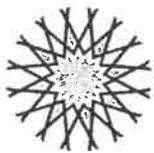
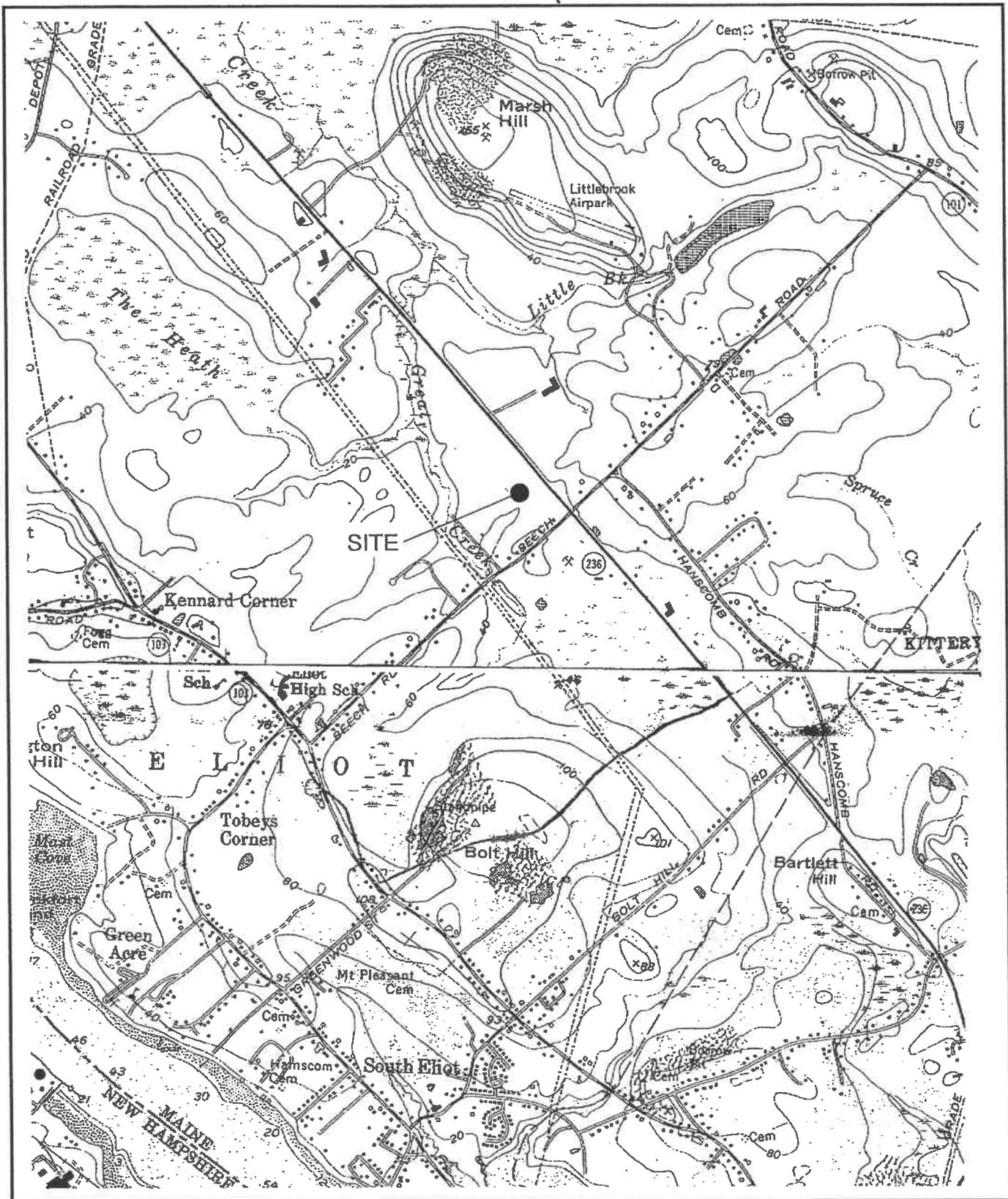
Also conveying, with quitclaim covenant, all of the grantor's right, title and interest in a certain access easement over a triangular parcel of property located on the westerly sideline of Route 236 as set forth in a certain Easement Deed from Ray N. Grover and Lena L. Grover to William C. Morgridge, Raymah M. Morgridge, Raymond D. Grover and Ruth O. Grover dated March 8, 2002 and recorded in Book 11723, Page 162 in the York County Registry of Deeds.

Title reference is made to a Warranty Deed from Richard D. Johnson to Lady Slipper Properties, LLC dated May 23, 2012 and recorded in Book 16333, Page 486 with the York County Registry of Deeds.

E

3 pgs

Return to
Estes Oil Burner Services Inc
519 US Route 1
York, ME 03909



ATTAR

ENGINEERING, INC

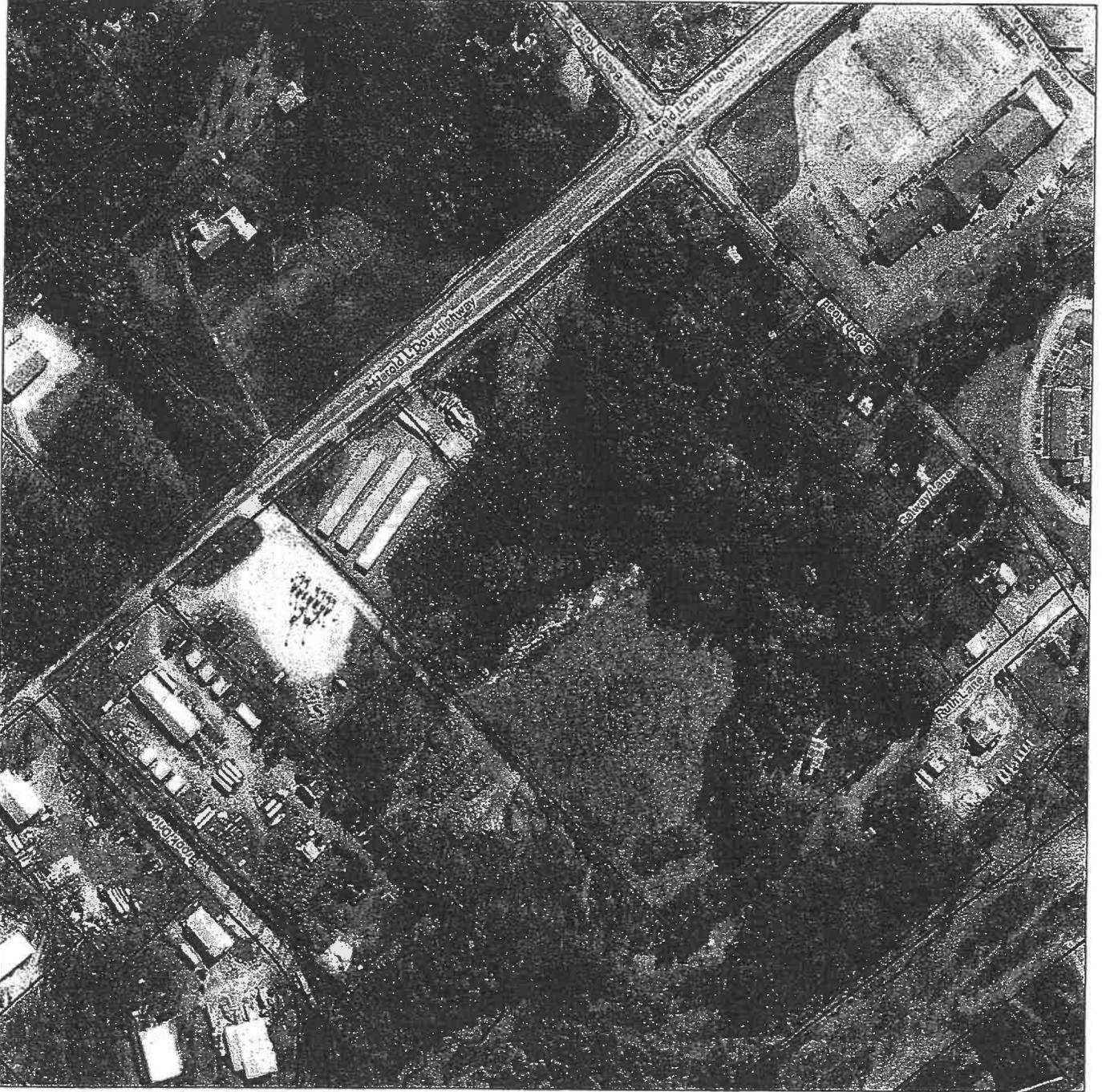
CIVIL · STRUCTURAL · MARINE

1284 STATE ROAD, ELIOT ME 03903

LOCATION MAP
COMMERCIAL / INDUSTRIAL DEVELOPMENT
H.L. DOW HIGHWAY (Route 236), ELIOT, ME
USGS MAP, DOVER EAST, NH - ME QUADRANT
APPROX. SCALE: 1:24,000
PROJECT NO. C034-15

Eliot, Maine

Route 236 C/I Development



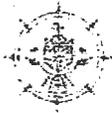
Legend

-  Selected Parcels
-  Parcels



This map was generated by the Town of Eliot's online GIS. This information has been compiled from various public and private sources. While every attempt has been made to provide accurate information, neither the municipality nor the service host guarantees the accuracy of information provided herein.

Map generated on: 3/17/2015



TOWN OF ELIOT

1333 STATE RD. , ELIOT, ME 03903

REQUEST FOR PLANNING BOARD ACTION

(FOR MISCELLANEOUS USES OR CHANGES)

Applicant M & T Realty, LLC

Mailing Address PO Box 125 City York State ME Zip 03909

Telephone # (207) 363-4172 Email address ken@attarengineering.com ; mlestesoil@aol.com
(TO RECEIVE MEETING NOTICES)

Property Owner Same as Applicant

Mailing Address _____ City _____ State _____ Zip _____

Property address Harold L Dow Highway (Route 236) Tax Map # 29 Lot # 31

Size (acres) 11.6 Zoning District Commercial/ Industrial Shoreland Overlay District? Limited Commercial

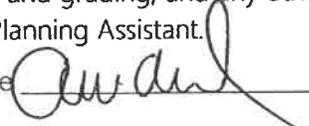
Conforming Lot? (YES)NO Conforming Use? (YES)NO Conforming Structure? (YES)NO

- Legal interest in property identified by applicant by:
- Owner (copy of deed &/or tax records)
 - Pending Owner (copy of purchase & sale agreement)
 - Lease (copy of lease agreement with owners & applicants signature)
 - Corporate Officer (letter from corporation)
 - Other (identify: _____)

Nature of action requested:
 (Example: *Request to amend a a previously approved site plan by adding a 10' x 20' addition*)

See attached cover letter

Attach ten (10) copies of sketch plan of property showing in approximate dimensions, all zoning districts, existing/proposed structures, parking areas, streets, entrances, existing and proposed setbacks, proposed lot divisions, proposed open space to be preserved, common areas, site & public improvements and facilities, any areas of excavation and grading, and any other criteria needed to evaluate request. Sketch plan is not required if so advised by the Planning Assistant.

Applicants signature  ,Agent _____ Date 9/3/19

Property owners signature _____ Date _____

TO BE COMPLETED BY PLANNING ASSISTANT	
Date application received by PA _____	PA signature _____
Sketch plan required? YES NO	
FEE AMOUNT \$ _____	DATE PAID: _____ FORM OF PAYMENT: _____

Case No. _____
Site review? Yes No

**APPLICATION FOR SITE PLAN REVIEW
TOWN OF ELIOT PLANNING BOARD**

Step 1. (Fill in all blocks below - See the Planning Assistant if you don't understand.)

Tax Map 29 Lot# 31 Lot Size 11.6 Acres Zoning District: Commercial / Industrial (C/I)
Shoreland (Limited Commercial)

Your Name M & T Realty, LLC Your mailing address P.O. Box 125

City/Town York State: ME Zip: 03909 Telephone: (207) 363-4172

Who owns the property now? M & T Realty, LLC

Address (Location) of the property Harold L Dow Highway (Route 236)

Property located in a flood zone? Yes X No
(If yes, please complete the attached Flood Hazard Development Application and return it with your completed application)

Step 2 (establish your legal interest in the property)

Attach a copy of the Purchase and Sales Agreement, Deed, Tax records, Signed Lease, or other documents to the satisfaction of the Planning Assistant. If you are representing a corporation, provide documentation that you have authority to speak for the corporation.

Step 3 (Go to the Zoning Ordinance Section 45-290, Table of Land uses)

What SPECIFIC land use are you applying for? Warehouse, Industrial Establishment, Retail Store,
Business Office, Professional Office
(You MUST make this selection from Section 45-290 of the Zoning Ordinance)

Having entered the SPECIFIC land use above now provide a more detailed description of what you want to do:

See cover letter, provided with this Application.

Case No. _____ Site review? Yes No

- Step 4 Attach ten (10) copies of a sketch plan, showing in approximate dimensions the following:**
 - All zoning districts
 - The location of all existing and/or proposed buildings
 - The setbacks of all existing and proposed structures or uses.

 - The location of proposed signs, their size, and direction of illumination.

 - The location of all existing and/or proposed entrances and exits.

 - All existing and/or proposed parking areas (parking is permitted in the front, rear and side of the premises, so long as it does not violate setback requirements.)

 - Plans of buildings, sewage disposal facilities, and location of water supply.

Step 5 Sign the application (both owner and applicant must sign and date the application) and submit fee with preliminary plans (\$100 per acre for first 5 acres and \$50 per acre after five plus \$150 for advertising and public hearing fees)

Applicant *[Signature]*, Agent _____ Date 12/3/19

Property Owner *[Signature]* Date 12/3/2019
AGENT

Step 6 Application received by Planning Assistant
Date received by the PA _____ PA initials _____

Step 7 The Planning Assistant will review the application and if complete, will place your application on a future Planning Board agenda

Step 8 The applicant or representative of the applicant must attend the Planning Board meeting

PART 1 - THE PROCEDURE

Case No. _____
Site review? Yes No

(STEP 1) Meet with the Planning Assistant to assure that Site Review is required. Obtain application forms and assemble data for submission.

(STEP 2) Sketch Plan Stage Application submission. Include 10 copies of the sketch plan, survey map, location map, and affidavit of ownership or legal interest. (Section 33-63)

(STEP 3) Applicant attends first meeting with Planning Board, describes project, and answers questions (*Board may review checklist for the Site Plan at this time or act on waivers requested for submission of data*)

(STEP 4) Board sets up site visit with applicant (Section 33-64).

(STEP 5) Board visits site with applicant.

(STEP 6) Applicant attends succeeding meetings. Board does preliminary review of the Ordinance requirements for applicability to the Site Plan. Board and notifies applicant of changes required to Sketch Plan after site inspection (Section 33-103).

(STEP 7) Applicant revises the "Sketch Plan" as needed, submits the Site Plan, and pays non-refundable fees prior to the second Planning Board meeting. (Sections 33-126 & 33-128).

(STEP 8) Site Plan Stage Applicant attends succeeding meetings with Planning Board and discusses Site Plan (Section 33-129) until Board votes to accept the Site Plan (Section 33-126) *Board schedules public hearing for future meeting when all requirements have been or will be met.*

(STEP 9) Board conducts Public Hearing (Section 33-130).

(STEP 10) Approval stage Board approves / approves with conditions / disapproves applicants application within 30 days of the close of the final Public Hearing or 75 days from date Board accepted completed application and Site Plan (Section 33-131). If more than one public hearing is held, the 30-day period begins after the last public hearing.

(STEP 11) Board issues a Notice of Decision, which contains findings certifying compliance with ordinance, reasons for conditional approval or reasons for disapproval (Section 33-131). The Notice of decision and signing of the final plan is for documentation purposes and does not determine the beginning of the appeal period.

(STEP 12) Appeal Period A 30-day appeal period begins from the date the Board makes a decision on the application. (Section 45-50) The applicant may begin work on the project during this period, but does so at his or her own risk.

PART 2

Case No. _____

Site review? Yes No

DETAILED ORDINANCE REFERENCES FOR EACH SITE REVIEW EVENT

1. Submit application. (Section 33-63) Include 10 copies of all submissions that show:

- Sketch Plan- (See Section 33-105) showing:
 - All zoning districts
 - Existing and proposed structures
 - Existing and proposed parking areas (parking is permitted in the front, rear and side of the premises, so long as it does not violate setback requirements.)
 - Existing and proposed Streets and entrances
 - Existing and proposed setbacks
 - Other site dimensions and area
 - Site and public improvements and facilities
 - Areas of excavation and grading
 - Any other site changes
 - Location Map-This is to be submitted along with or as part of the Sketch Plan (See Section 33-104) and includes:
 - Scale of 500 ft to the inch
 - Show all area within 2000 ft of property lines
 - All surrounding existing streets within 500 ft
 - Abutters lots and names within 500 ft of property boundary
 - Zoning districts within 500 ft
 - Outline of proposed development showing internal streets and entrances

2. Site inspection (Section 33-64) The Board and Applicant conduct site inspection. Applicant shall stake the lot corners, the location of all proposed structures, parking and the centerlines of all proposed streets and entrances in development. Verify that parking meets applicable setbacks

3. Board notifies applicant of changes required to Sketch Plan after site inspection such as contour interval, street classification, etc. (Section 33-103) and determines:

- If other Local, State or Federal agencies or officers (Section 33-102) should review Sketch Plan.
- If applicable, MaineDOT driveway permit is **required** prior to local approval for anyone installing, physically changing or changing the use of a driveway on state highway.
- If review by Eliot Fire Chief ____, Police Chief ____, or Road Commissioner ____ is required.

Case No. _____
Site review? Yes No

4. Applicant converts Sketch Plan into a "Site Plan" (Sections 33-126). The following requirements are considered by the Planning Board

Chapter 33 required information

4.1. Applicant shall provide one original and 10 copies of Site Plan drawn at a scale not smaller than 1-inch equals 20 feet showing the following information:

- 4.1.1. Development name, owner, developer, designer name and address and names and addresses of all abutters and abutters land use.
- 4.1.2. Certified perimeter survey showing a north arrow, graphic scale, corners of parcel, total acreage, etc. This means a survey of the property using the standards of practice established by the State of Maine Board of Licensure for Professional Land surveyors, MRSA Chapter 121.
- 4.1.3. Temporary markers.
- 4.1.4. Contour lines at 5-ft intervals or as Board decides.
- 4.1.5. A list of the provisions of Chapter 45 (Zoning) which are applicable to this area and identification of any zoning district boundaries affecting the development.
- 4.1.6. Storm water Drainage Plan. (50 year storm)
- 4.1.7. Required bridges or culverts.
- 4.1.8. Location of natural features or site elements to be preserved.
- 4.1.9. Soil Erosion and Sediment Control Plan.
- 4.1.10. High Intensity Soils Report.
- 4.1.11. Locations of sewers, water mains, culverts and drains.
- 4.1.12. Water supply information.
- 4.1.13. Sewerage System Plan.
- 4.1.14. Septic System Survey.
- 4.1.15. Estimated progress schedule.
- 4.1.16. Construction drawings for CEO which show floor areas, ground coverage, location of all structures, setbacks, lighting, signs, incineration devices, noise generating machinery likely to generate appreciable noise beyond the lot lines, waste materials, curbs, sidewalks, driveways, fences, retaining walls, etc.
- 4.1.17. Telecommunication tower details as required.

4.2. Additional requirements made by Board (Section 33-126).

Other Chapter 33 Site Review Ordinance Requirements.

- 4.4. Traffic data if applicable (Section 33-153)
- 4.5. Campground requirements if applicable (33-172)
- 4.6. Commercial Industrial requirements if applicable
 - 4.6.1. Landscaping (Section 33-175)

	Case No. _____		
	Site review?	Yes	No

- 4.6.2. Vibration (33-176)
- 4.6.3. Site Improvements (33-177)
- 4.6.4. Electromagnetic Interference (33-178)
- 4.6.5. Parking and Loading Areas (33-179, 45-487, 45-495)
- 4.6.6. Glare (33-180)

- 4.7. Motel requirements if applicable (Section 33-182)
- 4.8. Multi-family dwelling requirements if applicable (Section 33-183)

Chapter 35 Post-Construction Stormwater Management

Disturbance of more than one acre of land or less than one acre if the development is part of a larger common plan for development must comply with Chapter 35 Post – Construction Stormwater Management.

Chapter 45 Zoning Ordinance Requirements. compliance includes the following Article VIII Performance Standards:

- 4.9. Dimensional Standards (Section 45-405)
- 4.10. Traffic (Section 45-406)
- 4.11. Noise (Section 45-407)
- 4.12. Dust, Fumes, Vapors and Gases (Section 45-408)
- 4.13. Odor (Section 45-409)
- 4.14. Glare (Section 45-410)
- 4.15. Storm-water run-off for a 50 year storm. (Section 45-411)
- 4.16. Erosion Control (Section 45-412)
- 4.18. Preservation of Landscape (Section 45-413)
- 4.19. Relation of Buildings to Environment (Section 45-414)
- 4.20. Soil Suitability for Construction (Section 45-415)
- 4.21. Sanitary Standards for Sewage (Section 45-416)
- 4.22. Buffers and Screening (Section 45-417)
- 4.23. Explosive Materials (Section 45-418)
- 4.24. Water Quality (Section 45-419)
- 4.25. Refuse Disposal (Section 45-421)

- 4.26. Specific Activities (Article IX) which include:
 - 4.26.1. Accessory Use or Structure (Section 45-452)
 - 4.26.2. Home Occupation (Section 45-455)
 - 4.26.3. Mobile Homes (Section 45-457)
 - 4.26.4. Off-street Parking and Loading (Article X)
 - 4.26.5. Signs (Article XI)

- 4.27. In addition the Board may make other conditions for approval that will insure such compliance and would mitigate any adverse affects on adjoining or neighboring properties which might otherwise result from any proposed use (Section 33-131).

	Case No. _____	
	Site review?	Yes No

5. Board discussion of Site Plan (Section 33-126).

5.1. Board discusses Site Plan with applicant.

6. Public Hearing (Section 33-129 & 130).

- 6.1. Conducted within 30 days of Boards acceptance of Site Plan.
- 6.2. Three notices posted 10 days prior to the Public Hearing.
- 6.3. Notices advertised in two newspapers 10 days prior to Public Hearing.
- 6.4. Other Towns notified 10 days prior to if within 500 feet of applicant's lot.
- 6.5. Abutters notified 10 days prior to by certified mail, return receipt requested. \$150.00 paid by applicant to cover the cost of advertising and abutter notification (Sec. 1-25)
- 6.6. Selectmen, CEO, and Board of Appeals shall be notified 10 days prior to the Public Hearing.

7. Board approves / approves with conditions / disapproves applicants Application within 30 days of Public Hearing or 75 days from date Board accepted completed Application and Site Plan (Section 33-131).

Note: Computation of time shall be in accordance with Section 1-2 as follows:
 "In computing any period of time prescribed or allowed by this Code, the day of the act, event or default from which the designated period of time begins to run shall not be included. The last day of the period so computed shall be included unless it is a Saturday, Sunday or legal holiday, in which event the period shall run until the end of the next day which is neither a Saturday, Sunday or legal holiday. When the period of time prescribed or allowed is less than seven days, intermediate Saturdays, Sundays and legal holidays shall be excluded in the computation."

8. Notice of Decision issued which contains findings certifying compliance with ordinance, reasons for conditional approval or reasons for disapproval (Section 33-131).

Site Plan Review Submissions Checklist

Applicant Name: M & T Realty, LLC
 Address & Map/Lot: Harold L. Dow Highway (Route 236) Map 29, Lot 31

This is a working document, to be used with applicants and staff to ensure information provided is consistent and complete. It should be used as a guide in assembling the information necessary for a site plan review. Once the checklist is completed, applicable waivers indicated, and the information provided, it should be submitted with the application materials.

Instructions for Applicants:

1. Indicate if the information has been submitted by checking the appropriate box in column 1.
2. The Planner and Board will use this checklist with the applicant to determine if the application presented is complete.
3. If you believe that a required submission is not applicable to your proposed project, please discuss this matter with the Planner. If the staff agrees the submission to be not applicable, the staff member will check the appropriate category and indicate the reason the item is not applicable.
4. If a staff member denies a waiver request, that staff member will check the box in column 4 and the Planning Board will make the determination at the meeting.
5. The developer shall submit two originals of a site plan, drawn at a scale of not smaller than one inch equals 20 feet, and ten copies reduced to 11 inches by 17 inches, and showing the following information unless the Planning Board waives these requirements, upon written request of the applicant.

Section Number of Ordinances	Item Description from Ordinances	1 Submitted by the Applicant	2 Submission Determined to be Sufficient by the Planning Board	3 Submission Determined Not Applicable by the Planner	4 Applicant Requests Waiver of Submission Requirement
33-127(1)	Development name or identifying title and name of the Town	X			
33-127(2)	Name & Address of Record Owners, Developer and Designer	X			
33-127(3)	Names & Addresses of All Abutters and Their Present Land Use	X			
33-127(4)	Perimeter Survey of the Parcel Made and Certified by a State-Registered Land Surveyor, Relating to Reference Points, Showing True North Point, Graphic Scale, Corners of the Parcel, Date of Survey, Total	X			

	Acreage, Existing Easements, Buildings, Watercourses & Other Essential Existing Physical Features	X			
33-127(5)	The Location of Temporary Markers Adequate to Enable the Planning Board to locate readily and appraise the basic layout in the field	TBD			
33-127(6)	Contour lines at intervals of not more than five feet or at such intervals as the Planning Board may require, based on U.S. Geological Survey topographical map datum of existing grades where change of existing ground elevation will be five feet or more	X			
33-127(7)	Provisions of Chapter 45 of this Code applicable to the area to be developed and any zoning district boundaries affecting the development	X			
33-127(8)	Provisions for collecting and discharging storm drainage, in the form of a drainage plan	X			
33-127(9)	Preliminary designs of any bridges or culverts which may be required	X			
33-127(10)	The location of all natural features or site elements to be preserved	X			
33-127(11)	A soil erosion and sediment control plan	X			
33-127(12)	A high intensity soils report identifying the soils boundaries and names in the proposed development, with the soils information superimposed upon the plot plan. Such soils survey shall account for the water table in wet and dry seasons, slope, soil quality, etc.; and planning board approval will be conditioned upon	X			

	compliance with any recommendations included in such report				
33-127(13)	The locations & size of any existing sewers & water mains, culverts & drains on the property to be developed	X			
33-127(14)	Connection with existing water supply or alternative means of providing water supply to the proposed development	X			
33-127(15)	Connection with existing sanitary sewerage system or alternative means of treatment & disposal proposed				
33-127(16)	If a private sewage disposal system is proposed, location & results of tests to ascertain subsurface soil & groundwater conditions, depth to maximum groundwater level, location & results of soil testing	X			
33-127(17)	An estimated progress schedule	X			
33-127(18)	Construction drawings sufficient to enable the Code Enforcement Officer to verify the following information:	X			
a.	Total floor area, ground coverage & location of each proposed building, structure or addition	X			
b.	All existing & proposed setback dimensions	X			
c.	The size, location, direction & intensity of illumination of all major outdoor lighting apparatus & signs	X			
d.	The type, size & location of all incineration devices				
e.	The type, size & location of all machinery likely to generate appreciable noise beyond the lot lines				
f.	The amount & type of any raw, finished or waste				

	materials to be stored outside of roofed buildings, including their physical & chemical properties, if appropriate				
g.	The location, type & size of all curbs, sidewalks, driveways, fences, retaining walls, parking space areas & the layouts together with all dimensions	X			
h.	All landscaped areas, fencing & size & type of plant material proposed to be retained or replanted	X			
i.	A site plan for a telecommunication structure must provide a description and construction detail of the telecommunication structure, including plot plan identifying location of the structure on the property; dimensions of the structure; structural supports, if any; lighting; color; and equipment located on the structure, if any. This description shall also identify any accessory structures that are proposed in connection with the operation of the telecommunication structure.				
j.	Applications for subdivisions shall include all applicable submission requirements above, in addition to those required by chapter 41 of this code. If these submission requirements conflict with the requirements of chapter 41, the stricter standards shall apply.				
33-127(19)	Site plans and construction drawings for new and existing structures listed as SPR in section 45-290 shall	X			

	be submitted to the Eliot Fire Chief for review and comment prior to final approval by the Planning Board				
--	---	--	--	--	--

In addition to the above, when applicable, the Planning Board may require detailed interior plans including dimensional measurements and uses of all interior spaces, placement of equipment, counters, etc. and when applicable, seating charts indicating table/chair arrangements and the number of requested tables and seats.

The Planner will work with the applicant to ensure this checklist is complete before a Site Plan Review application is scheduled for review by the Planning Board.

Town Planner

Date

Staff Section Only:

Address:	
Map/Lot:	
PB Case #:	
Zoning District:	
Shoreland Zoning:	
Owner Name:	
Applicant Name:	
Proposed Project:	
Application Received by Staff:	
Application Fee Paid and Date:	
Application Received/Found Complete by PB:	
Site Walk Date:	
Public Hearing Date:	
Public Hearing Publication Date:	
Reason for PB Review:	

Pine Tree Business Park, Eliot

7/25/2019

The average rate for the industrial uses was utilized for the analysis since specific uses are unknown. The overall trip generation results, based upon 6,000 S.F. of retail space, 5,000 S.F. of office space and 44,600 S.F. of mixed industrial uses are summarized below:

<u>Time Period</u>	Projected Trip Generation (trips)			
	<u>Retail</u>	<u>Office</u>	<u>Industrial</u>	<u>Total</u>
AM Peak Hour – Generators	41	8	36	85
PM Peak Hour – Generators	30	8	37	75

As seen above, the proposed business park could be expected to generate 85 AM peak hour trips and 75 PM peak hour trips. This analysis is expected to be highly conservative since it is based upon the peaks of the generators and not all of these uses will peak within the same hour.

Since the preceding analysis is based upon trips, the trips must be converted to passenger car equivalents (PCEs) to determine if a TMP will be required. It is assumed that the offices will have negligible truck traffic. It was assumed that the retail and industrial uses would generate 15 % trucks during the peak hours, which is a high peak hour estimate since employee trips are highest then and truck trips for industrial uses tend to be evenly distributed over the course of the day. This results in the following PCE estimate:

<u>Time Period</u>	Projected Trip Generation (PCEs)			
	<u>Retail</u>	<u>Office</u>	<u>Industrial</u>	<u>Total</u>
AM Peak Hour – Generators	47	8	41	96
PM Peak Hour – Generators	34	8	43	85

As seen above, the business park is expected to generate a maximum of 96 PCEs, which is expected to occur during the AM peak hour. Again, this analysis is expected to be highly conservative since the uses, and even buildings with the same uses, are not expected to peak within the exact same hours. Additionally, there may potentially be a few shared trips between uses in the park.

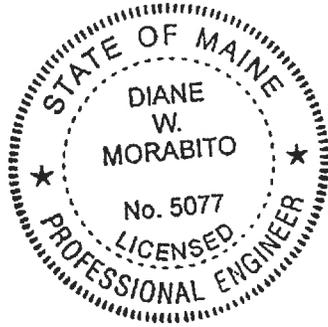
While the estimate is assumed to be conservative it appears the park could potentially approach the 100-trip (PCE) threshold. Hence, it is recommended that actual trip generation counts and analysis be performed when the park is at 50 – 75 % occupancy to confirm the uses and assumptions utilized in the preceding analysis.



Pine Tree Business Park, Eliot

7/25/2019

As always, do not hesitate to contact me if you, the Town of Eliot or MaineDOT have any questions regarding my analysis, findings or recommendation



Sincerely,

Diane W. Morabito, P.E. PTOE
Vice President Traffic Engineering



Maine Department of Transportation

Janet T. Mills
Governor

Driveway/Entrance Permit

Bruce A. Van Note
Commissioner

LOCATION

Permit Number: 27122 - Entrance ID: 1

OWNER
Name: M&T Realty, LLC
Address: 519 US Route 1
York, ME 03909
Telephone: (207)439-7547

Date Printed: September 05, 2019

Route: 0236X, Harold Dow Highway
Municipality: Eliot
County: York
Tax Map: 29 Lot Number: 31
Culvert Size: inches
Culvert Type: N/R
Culvert Length: feet
Date of Permit: September 05, 2019
Approved Entrance Width: 42 feet

In accordance with rules promulgated under 23 M.R.S.A., Chapter 13, Subchapter I, Section 704, the Maine Department of Transportation (MaineDOT) approves a permit and grants permission to perform the necessary grading to construct, in accordance with sketch or attached plan, **an Entrance to Commercial Industrial** at a point 1149 feet North from **Beech Road**, subject to the Chapter 299 Highway Driveway and Entrance Rules, standard conditions and special conditions (if any) listed below.

Conditions of Approval:

This Permittee acknowledges and agrees to comply with the Standard Conditions and Approval attached hereto and to any Specific Conditions of Approval shown here.

(G = GPS Location; W = Waiver; S = Special Condition)

G - THE ENTRANCE SHALL BE LOCATED AT GPS COORDINATES: 43.133640N, -70.775450W.

S - In the town of Eliot on the southwesterly side of Route 236 / Harold Dow Highway, the centerline being approximately 1149 feet northwesterly of the centerline of Beech Road and approximately 52 feet northwesterly of utility pole 26.

S - The entrance shall be constructed in general conformance with a plan titled "Site Plan, Pine Tree Business Park, Route 236, Eliot, Maine" drawn by Attar Engineering, Inc. and revised 8/20/19.

Approved by:

Anthony Fontana

Date:

9-05-2019



Maine Department of Transportation

Janet T. Mills
Governor

Driveway/Entrance Permit

Bruce A. Van Note
Commissioner

Permit Number: 27121 - Entrance ID: 1

OWNER
Name: M&T Realty, LLC
Address: 519 US Route 1
York, ME 03909
Telephone: (207)439-7547

Date Printed: September 05, 2019

LOCATION
Route: 0236X, Harold Dow Highway
Municipality: Eliot
County: York
Tax Map: 29 Lot Number: 31
Culvert Size: 24 inches
Culvert Type: plastic
Culvert Length: feet
Date of Permit: September 05, 2019
Approved Entrance Width: 30 feet

In accordance with rules promulgated under 23 M.R.S.A., Chapter 13, Subchapter I, Section 704, the Maine Department of Transportation (MaineDOT) approves a permit and grants permission to perform the necessary grading to construct, in accordance with sketch or attached plan, an **Entrance to Retail Space** at a point **749 feet North** from **Beech Road**, subject to the Chapter 299 Highway Driveway and Entrance Rules, standard conditions and special conditions (if any) listed below.

Conditions of Approval:

This Permittee acknowledges and agrees to comply with the Standard Conditions and Approval attached hereto and to any Specific Conditions of Approval shown here.

(G = GPS Location; W = Waiver; S = Special Condition)

G - THE ENTRANCE SHALL BE LOCATED AT GPS COORDINATES: 43.132770N, -70.774560W.

S - In the town of Eliot on the southwesterly side of Route 236 / Harold Dow Highway, the centerline being approximately 749 feet northwesterly of the centerline of Beech Road and approximately 87 feet northwesterly of utility pole 24.

S - The existing corrugated metal pipe shall be removed and replaced with a HDPE smoothbore plastic pipe. Culvert replacement shall be in general conformance with the site grading and utility plan submitted with the permit application. The Property Owner must contact MaineDOT at (207) 676-9981 prior to entrance and culvert installation to arrange for an inspection.

S - The entrance shall be constructed in general conformance with a plan titled "Site Plan, Pine Tree Business Park, Route 236, Eliot, Maine" drawn by Attar Engineering, Inc. and revised 8/20/19.

Approved by:

Anthony Fontaine

Date:

9-05-2019

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. Health & Human Services
Div of Environmental Health, 11 SHS
(207) 287-5672 Fax: (207) 287-4172

PROPERTY LOCATION		>> CAUTION: LPI APPROVAL REQUIRED <<	
City, Town, or Plantation	<u>ELIST</u>	Town/City _____	Permit # _____
Street or Road	<u>PASSAMAQUODDY LN. + RT 236</u>	Date Permit Issued ___/___/___	Fee: \$ _____ Double Fee Charged []
Subdivision, Lot #		L.P.I. # _____	
OWNER/APPLICANT INFORMATION		Local Plumbing Inspector Signature _____	
Name (last, first, MI) <input checked="" type="checkbox"/> Owner <input type="checkbox"/> Applicant		The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.	
<u>LADY SLIPPER PROP. LLC</u>			
Mailing Address of	<u>37 RT. 236 SUITE 105</u>		
Owner/Applicant	<u>KETTER'S W&E 03904</u>		
Daytime Tel. #	<u>207 439 7547</u>	Municipal Tax Map # <u>29</u>	Lot # <u>31</u>
OWNER OR APPLICANT STATEMENT		CAUTION: INSPECTION REQUIRED	
I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.		I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.	
Signature of Owner or Applicant _____ Date _____		Local Plumbing Inspector Signature _____ (1st) date approved _____ _____ (2nd) date approved _____	

PERMIT INFORMATION		
TYPE OF APPLICATION <input checked="" type="checkbox"/> 1. First Time System <input type="checkbox"/> 2. Replacement System Type replaced: _____ Year installed: _____ <input type="checkbox"/> 3. Expanded System <input type="checkbox"/> a. <25% Expansion <input type="checkbox"/> b. >25% Expansion <input type="checkbox"/> 4. Experimental System <input type="checkbox"/> 5. Seasonal Conversion	THIS APPLICATION REQUIRES <input checked="" type="checkbox"/> 1. No Rule Variance <input type="checkbox"/> 2. First Time System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 3. Replacement System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 4. Minimum Lot Size Variance <input type="checkbox"/> 5. Seasonal Conversion Permit	DISPOSAL SYSTEM COMPONENTS <input checked="" type="checkbox"/> 1. Complete Non-engineered System <input type="checkbox"/> 2. Primitive System (graywater & alt. toilet) <input type="checkbox"/> 3. Alternative Toilet, specify: _____ <input type="checkbox"/> 4. Non-engineered Treatment Tank (only) <input type="checkbox"/> 5. Holding Tank, _____ gallons <input type="checkbox"/> 6. Non-engineered Disposal Field (only) <input type="checkbox"/> 7. Separated Laundry System <input type="checkbox"/> 8. Complete Engineered System (2000 gpd or more) <input type="checkbox"/> 9. Engineered Treatment Tank (only) <input type="checkbox"/> 10. Engineered Disposal Field (only) <input checked="" type="checkbox"/> 11. Pre-treatment, specify: <u>(6) CLEAN BOWLER</u> <input type="checkbox"/> 12. Miscellaneous Components <u>MODEL 250</u>
SIZE OF PROPERTY <u>116</u> <input type="checkbox"/> SQ. FT. <input checked="" type="checkbox"/> ACRES	DISPOSAL SYSTEM TO SERVE <input type="checkbox"/> 1. Single Family Dwelling Unit, No. of Bedrooms: _____ <input type="checkbox"/> 2. Multiple Family Dwelling, No. of Units: _____ <input checked="" type="checkbox"/> 3. Other: <u>COMMERCIAL, INDUSTRIAL, RETAIL</u> (specify) Current Use <input type="checkbox"/> Seasonal <input type="checkbox"/> Year Round <input checked="" type="checkbox"/> Undeveloped	TYPE OF WATER SUPPLY <input checked="" type="checkbox"/> 1. Drilled Well <input type="checkbox"/> 2. Dug Well <input type="checkbox"/> 3. Private <input type="checkbox"/> 4. Public <input type="checkbox"/> 5. Other
SHORELAND ZONING <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

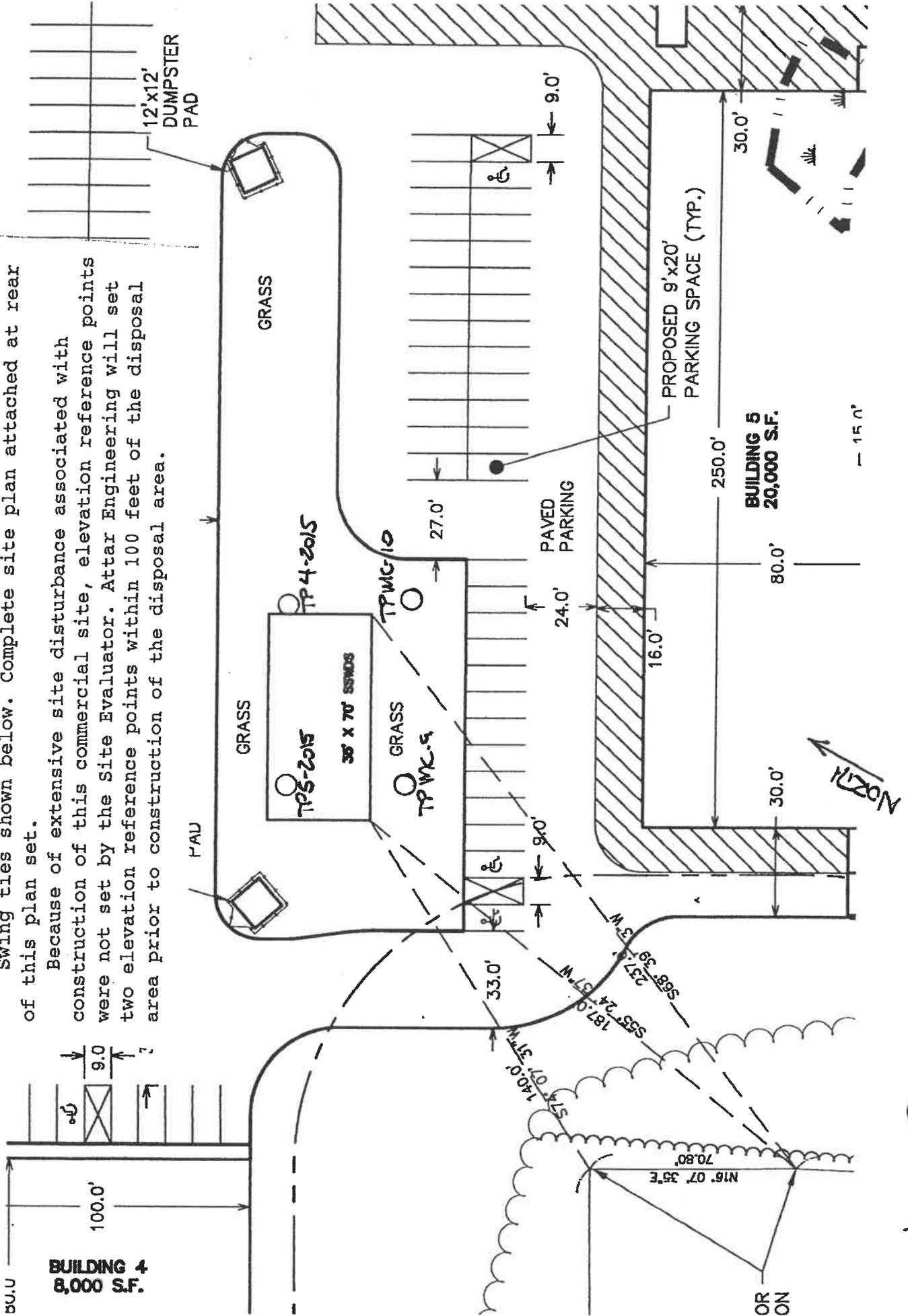
DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)			
TREATMENT TANK <input checked="" type="checkbox"/> 1. Concrete <u>HS-25</u> <input type="checkbox"/> a. Regular <input type="checkbox"/> b. Low Profile <input type="checkbox"/> 2. Plastic <input type="checkbox"/> 3. Other: CAPACITY: <u>(6) 1000 GAL.</u> <u>PLUS PUMP CHAMBER</u>	DISPOSAL FIELD TYPE & SIZE <input checked="" type="checkbox"/> 1. Stone Bed <input type="checkbox"/> 2. Stone Trench <input type="checkbox"/> 3. Proprietary Device <input type="checkbox"/> a. cluster array <input type="checkbox"/> c. Linear <input type="checkbox"/> b. regular load <input type="checkbox"/> d. H-20 load <input type="checkbox"/> 4. Other: <u>35x70</u> SIZE: <u>2450</u> <input checked="" type="checkbox"/> sq. ft. <input type="checkbox"/> lin. ft.	GARBAGE DISPOSAL UNIT <input checked="" type="checkbox"/> 1. No <input type="checkbox"/> 2. Yes <input type="checkbox"/> 3. Maybe If Yes or Maybe, specify one below: <input type="checkbox"/> a. multi-compartment tank <input type="checkbox"/> b. _____ tanks in series <input type="checkbox"/> c. increase in tank capacity <input type="checkbox"/> d. Filter on Tank Outlet	DESIGN FLOW <u>1945</u> gallons per day BASED ON: <input type="checkbox"/> 1. Table 4A (dwelling unit(s)) <input checked="" type="checkbox"/> 2. Table 4C (other facilities) SHOW CALCULATIONS for other facilities <u>SEE ATTACHED</u> <input type="checkbox"/> 3. Section 4G (meter readings) ATTACH WATER METER DATA
SOIL DATA & DESIGN CLASS PROFILE <u>91D</u> CONDITION _____ at Observation Hole # <u>5</u> Depth <u>13"</u> of Most Limiting Soil Factor	DISPOSAL FIELD SIZING <input type="checkbox"/> 1. Medium---2.6 sq. ft. / gpd <input type="checkbox"/> 2. Medium---Large 3.3 sq. ft. / gpd <input type="checkbox"/> 3. Large---4.1 sq. ft. / gpd <input checked="" type="checkbox"/> 4. Extra Large---5.0 sq. ft. / gpd	EFFLUENT/EJECTOR PUMP <input type="checkbox"/> 1. Not Required <input type="checkbox"/> 2. May Be Required <input checked="" type="checkbox"/> 3. Required Specify only for engineered systems: DOSE: _____ gallons	LATITUDE AND LONGITUDE at center of disposal area Lat. <u>43</u> d <u>7</u> m <u>53.6</u> s Lon. <u>70</u> d <u>46</u> m <u>36.9</u> s if g.p.s, state margin of error:

SITE EVALUATOR STATEMENT		
I certify that on <u>25 SEP 17</u> (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).		
<u>Michael Cuomo</u> Site Evaluator Signature	211 SE #	<u>17 OCT 17</u> Date
Michael Cuomo Site Evaluator Name Printed	(207) 363-4532 Telephone Number	mcuomosoil@gmail.com E-mail Address
Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.		

**ELIOT Route 236 map 29, lot 31 Lady Slipper Properties LLC
PARTIAL SITE PLAN**

Swing ties shown below. Complete site plan attached at rear of this plan set.

Because of extensive site disturbance associated with construction of this commercial site, elevation reference points were not set by the Site Evaluator. Attar Engineering will set two elevation reference points within 100 feet of the disposal area prior to construction of the disposal area.



Michael Curran

SE#211 17 OCT 17

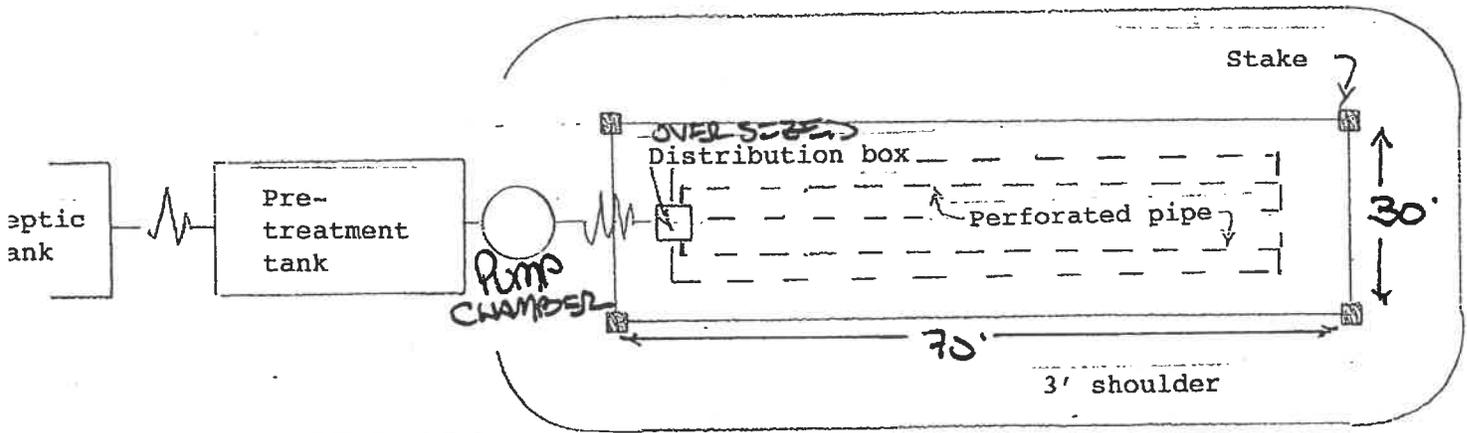
PAGE 2 OF 7

Town: FLEET

Street: RT. 236 WARZA/LOT 31

Owner: LADY SLIPPER PROPERTIES LLC.

PLAN VIEW
This bed is 30 x 70 feet

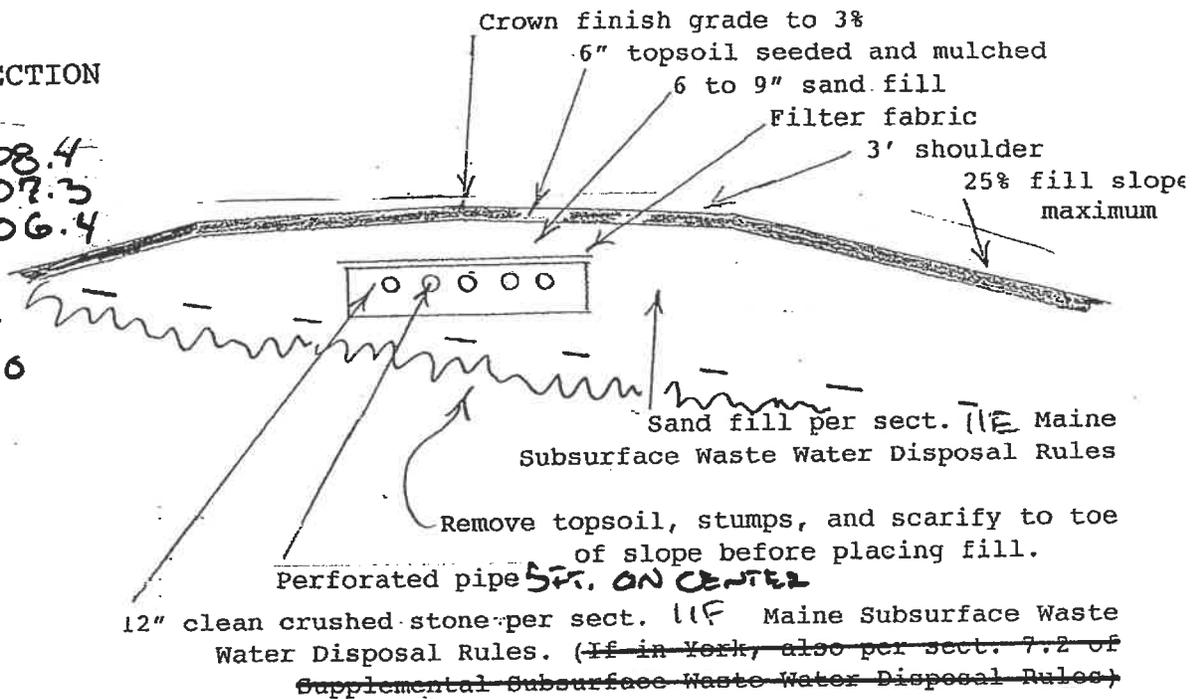


Pre-treatment model: CLEAN SOLUTION MODEL 250
 Manufacturer: ADVANCED ON-SITE SOLUTIONS
 Contact phone #: 603 783 8042

CROSS SECTION

FINISH GRADE 108.4
 TOP OF PIPE 107.3
 BOTTOM STONE 106.4

EXISTING GRADE
 HIGH POINT 106.0

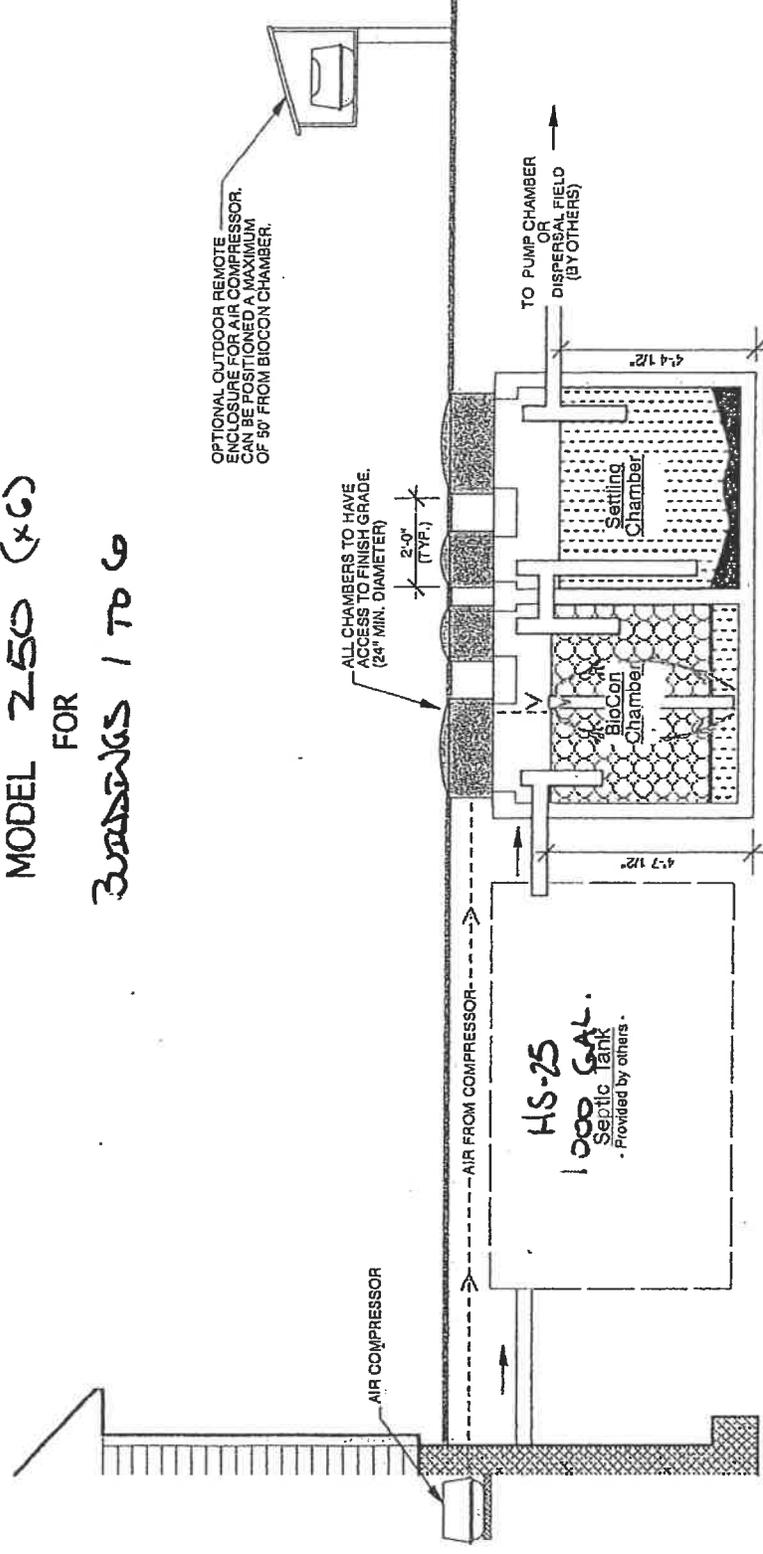


SE# 211 Date: 17 Oct 17
 Page 3 of 7

Michael Corino

Town Floor Location RT 236 WAP 29 LOT 31 Owner LINDY SLIPPER PROP. LLC

THE CLEAN SOLUTION™ ALTERNATIVE SEPTIC SYSTEM
 MODEL Z-50 (x6)
 FOR BUILDINGS 1 TO 6



BioCon/Settling Tank
 - Provided by A.O.S.
 1000 GAL 2-Compartment Tank HS-25

NOTES:

1. Septic Tank & Settling Compartment must be pumped every 2 years. More frequent pumping may be required depending on use.
2. Tank is not suitable for drive on use. Heavy Duty and H-20 models available.
3. Contractor to verify tank dimensions prior to setting.
4. Plastic risers will be provided to suite site (up to 24" depth). Contractor to provide additional risers to finish grade if cover over tank exceeds 24".

Advanced Onsite Solutions LLC
innovative wastewater solutions with sustainable results
 P.O. Box 248
 Canterbury, NH 03224
 Phone 603.783.8042



ELIOT Route 236 map 29, lot 31 Lady Slipper Properties LLC

DESIGN FLOW CALCULATIONS

<u>Use</u>	<u>GPD</u>
6000sf Retail Bldg.	
public toilet	325
5 employees@12gpd	60
58000 commercial/industrial use	
130 employees@12gpd	1560
	Total: 1945 gpd

TANK & PRETREATMENT SCHEDULE

<u>Building#</u>	<u>Est. gal/day</u>	<u>HS-25 Septic Tank</u>	<u>HS-25 Clean Solution</u>
1	385	1000	Model 250
2	264	1000	Model 250
3	264	1000	Model 250
4	240	1000	Model 250
5	528	1000	Model 250
6	264	1000	Model 250
	=1945gpd		

DISPOSAL AREA SIZE

1945gpd / 1.75gal/sf (Clean Solution) = 1112 sf stone bed req'd
35 x 70 = 2450 stone bed provided

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole 4 Test Pit Boring

1 " Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
VERY FINE SANDY LOAM	FRIABLE	DARK BROWN YELLOWISH BROWN	NONE
SILT LOAM	FIRM	OLIVE	COMMON FAINT FEW DISTINCT

L.O.E. @ 36"

Soil Classification <u>9</u> <u>C</u> Profile Condition	Slope _____%	Limiting Factor <u>16</u> "	<input checked="" type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
---	-----------------	--------------------------------	--

Observation Hole 5 Test Pit Boring

1 " Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
VERY FINE SANDY LOAM	FRIABLE	VERY DARK BROWN DARK YELLOWISH BROWN	NONE
SILT LOAM	VERY FIRM	OLIVE	COMMON DISTINCT

L.O.E. @ 36"

Soil Classification <u>9</u> <u>D</u> Profile Condition	Slope _____%	Limiting Factor <u>13</u> "	<input checked="" type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
---	-----------------	--------------------------------	--

TEST PITS 4-2015 + 5-2015 BY JCS. NDEL SE# 221

Observation Hole MC-9 Test Pit Boring

0 " Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
VERY FINE SANDY LOAM	FRIABLE	DK. BR. Y. BR.	
SILT LOAM		L. GY	
SILTY LOAM	FIRM	OLIVE	
CLAY		BROWN	
LOAM			

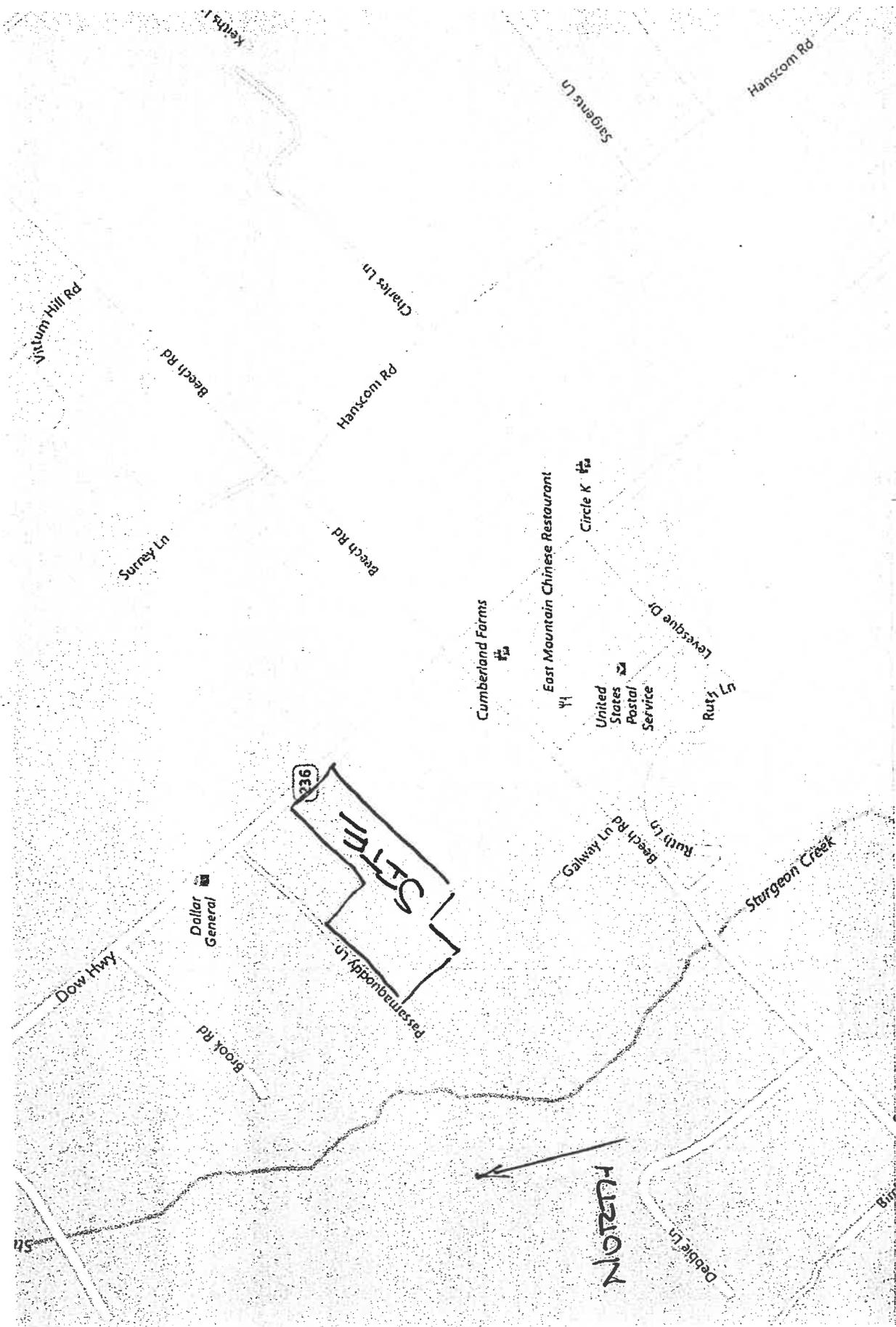
Soil Classification <u>9</u> <u>D</u> Profile Condition	Slope _____%	Limiting Factor <u>8</u> "	<input checked="" type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
---	-----------------	-------------------------------	--

Observation Hole MC-10 Test Pit Boring

0 " Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
VERY FINE SANDY LOAM	FRIABLE	DK. BR. Y. BR.	No
SILT LOAM		L. GY	
SILTY LOAM		OLIVE	
CLAY	FIRM	BROWN	YES
LOAM			

Soil Classification <u>9</u> <u>D</u> Profile Condition	Slope _____%	Limiting Factor <u>11</u> "	<input checked="" type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
---	-----------------	--------------------------------	--



500 feet
100 m
© 2017 HERE

ELIOT Route 236 map 29, lot 31 Lady slipper Properties LLC
LOCUS MAP

PAGE 7 OF 7

17 OCT 17

WhitakerCarmo SE # 211



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

LADY SLIPPER PROPERTIES LLC) SITE LOCATION OF DEVELOPMENT ACT
Eliot, York County) NATURAL RESOURCES PROTECTION ACT
PINE TREE BUSINESS PARK) FRESHWATER WETLAND ALTERATION
L-27840-26-A-N (approval)) WATER QUALITY CERTIFICATION
L-27840-TC-B-N (approval)) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S. §§ 481–489-E and §§ 480-A–480-JJ, Section 401 of the Federal Water Pollution Control Act (33 U. S. C. § 1341), and Chapters 310, 375, and 500 of Department rules, the Department of Environmental Protection has considered the application of LADY SLIPPER PROPERTIES LLC with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. Summary: The applicant owns an 11.7-acre lot with frontage on Harold L. Dow Highway (Route 236) and Passamaquoddy Lane. The applicant proposes to construct a 6,000-square foot retail and commercial building with a parking lot with 24 spaces and an access drive off Route 236. The applicant also proposes to construct an 8,000-square foot building, three 10,000-square foot buildings, and a 20,000-square foot building for industrial and commercial uses with approximately 134 parking spaces and a driveway off Passamaquoddy Lane. The project is shown on a set of plans, the first of which is titled “Site Plan, Pine Tree Business Park, Route 236, Eliot, Maine for Lady Slipper Properties LLC, 37 Route 236, Suite 105, Kittery, Maine 03904,” prepared by Attar Engineering, and dated February 15, 2018, with a last revision date on any of the plans of July 23, 2018. The project site is located on the west side of Harold Dow Highway in the Town of Eliot.

The applicant is also seeking approval under the Natural Resources Protection Act to alter 14,035 square feet of forested wetland. The Department accepted a Natural Resources Protection Act (NRPA) Permit by Rule Notification Form (PBR #65358) on February 27, 2018, for a utility crossing associated with the proposed project that will be constructed in accordance with Chapter 305, Permit by Rule Section 9 Standards.

B. Current Use of Site: The approximate west half of the lot was forested and was clear cut circa 2002; this area has regrown and is now vegetated with saplings. Approximately 0.60 acres of the middle of the site was cleared and grubbed and is being used for storage of a variety of waste materials including scrap metal, appliances, concrete, plastics, several 55-gallon drums, demolition debris, scrap wood, and a wooden boat. Adjacent to Route 236 there is an area of approximately 0.36 acres that has been

stripped, graded, and partially paved that appears to be used for a storage using storage containers. The middle of the site is forested wetland.

2. FINANCIAL CAPACITY:

The cost of the project site work is estimated to be \$1.5 million. The applicant submitted a letter from Kennebunk Savings Bank, dated February 15, 2018 that states that Richard Johnson of Lady Slipper Properties has a proven track record through many of commercial and residential projects with the bank and the letter included a short list of completed projects. The letter serves to confirm that Kennebunk Savings Bank desires to provide financing for the Pine Tree Business Park in Eliot Maine. Prior to the start of construction, the applicant must submit evidence that it has been granted a line of credit or a loan by a financial institution authorized to do business in this State or evidence of any other form of financial assurance determined by Department Rules, Chapter 373(1), to be adequate to the Bureau of Land Resources for review and approval.

The Department finds that the applicant has demonstrated adequate financial capacity to comply with Department standards provided that the applicant must submit evidence of financial capacity to the Department prior to the start of construction for review and approval.

3. TECHNICAL ABILITY:

The applicant provided a list of projects successfully constructed by the applicant. The applicant also retained the services of Attar Engineering, a professional engineering firm, to assist in the design and engineering of the project.

The Department finds that the applicant has demonstrated adequate technical ability to comply with Department standards.

4. NOISE:

The commercial and industrial activities will be contained within the proposed buildings. The tenants of the building are unknown at this time. The tenants of the project are required to operate within the sound level limits of the Town of Eliot's Land Use Ordinance (section 45-407). This section has sound pressure level limits that are more restrictive than the Department's. The applicant proposes to limit construction to between the hours of 7 a.m. and 7 p.m. or until 8 p.m. if it is still light outside.

The Department finds that the applicant has made adequate provision for the control of excessive environmental noise from the proposed project.

5. SCENIC CHARACTER:

The project is bordered on the east side by an existing self-storage facility and Route 236. The existing use across Route 236 is the Eliot United Methodist Church. Existing uses to

the south are residential lots; the applicant proposes to maintain an 80-foot-wide forested buffer along this side of the project. The project is bordered on the west by residential uses: a forested buffer and meadow between thirty and sixty feet wide will be maintained along this side of the project. On the north side of the project is a gravel road and across that road is forested area and also a cleared and regraded lot that appears to be used for processing land clearing debris; this side of the project will have a twenty-foot-wide area that will be planted with grass.

Based on the project's location and design, the Department finds that the proposed project will not have an unreasonable adverse effect on the scenic character of the surrounding area.

6. WILDLIFE AND FISHERIES:

The Maine Department of Inland Fisheries and Wildlife (MDIFW) reviewed the proposed project. In its comments, MDIFW stated that occurrences of New England Cottontail, a State Endangered species, have been documented within the search area for the project. A biologist from the MDIFW visited the site in May of 2016 to assess the presence of New England Cottontail. The site walk resulted in recommendations to provide undeveloped corridors within the site. An eighty-foot-wide forested buffer will remain along the southern property line. An approximately fifty-foot-wide forested and meadow buffer will remain along the western property line; the meadow portion of this area will be limited to mowing once per year to a minimum height of twelve inches. No fisheries concerns were identified. A field survey by wetland scientist Joseph Noel did not find any vernal pools.

The Department finds that the applicant has made adequate provision for the protection of wildlife and fisheries.

7. HISTORIC SITES AND UNUSUAL NATURAL AREAS:

The Maine Historic Preservation Commission reviewed the proposed project and stated that there will be no historic properties affected by the proposed undertaking, as defined by Section 106 of the National Historic Preservation Act of 1966.

The Maine Natural Areas Program database does not contain any records documenting the existence of rare or unique botanical features on the project site.

The Department finds that the proposed development will not have an adverse effect on the preservation of any historic sites or unusual natural areas either on or near the development site.

8. BUFFER STRIPS:

The applicant proposes to maintain an 80-foot-wide forested buffer along the south property line of the project. The applicant proposes to maintain a forested buffer and

meadow between thirty and sixty feet wide along the west side of the project; the meadow portion of this area will be limited to mowing once per year to a minimum height of twelve inches. A forested wetland in the center of the property will remain and will provide a visual buffer between Route 236 and the proposed commercial and industrial buildings. The 6,000-square foot retail and commercial building will be located adjacent to Route 236 and will be landscaped along the Route 236 frontage.

The Department finds that the applicant has made adequate provision for buffer strips.

9. SOILS:

The applicant submitted a Class A high intensity soil survey map and report based on the soils found at the project site. This report was prepared by certified soils scientist Michael Cuomo and reviewed by staff from the Division of Environmental Assessment (DEA) of the Bureau of Water Quality (BWQ).

The Department finds that, based on this report, and DEA's review, the soils on the project site present no limitations to the proposed project that cannot be overcome through standard engineering practices.

10. STORMWATER MANAGEMENT:

The proposed project includes approximately 6.8 acres of developed area of which 4.0 acres is impervious area. It lies within the watershed of Great Creek which is a tributary to the Piscataqua River. The applicant submitted a stormwater management plan based on the Basic, General, and Flooding Standards contained in Chapter 500 Stormwater Management rules (06-096 C.M.R. Chapter 500, effective August 12, 2015). The proposed stormwater management system consists of a wet pond and an underdrained soil filter.

A. Basic Standards:

(1) Erosion and Sedimentation Control: The applicant submitted an Erosion and Sedimentation Control Plan that is based on the performance standards contained in Appendix A of Chapter 500 and the Best Management Practices outlined in the Maine Erosion and Sediment Control BMPs, which were developed by the Department. This plan and plan sheets containing erosion control details were reviewed by, and revised in response to the comments of, the Bureau of Land Resources (BLR).

Erosion control details will be included on the final construction plans and the erosion control narrative will be included in the project specifications to be provided to the construction contractor.

(2) Inspection and Maintenance: The applicant submitted a maintenance plan that addresses both short and long-term maintenance requirements. The maintenance plan is based on the standards contained in Appendix B of Chapter 500. This plan was reviewed

by, and revised in response to the comments of the BLR. The applicant will be responsible for the maintenance of all common facilities including the stormwater management system.

Grit and sediment materials removed from stormwater structures during maintenance activities must be disposed of in compliance with the Maine Solid Waste Management Rules.

(3) Housekeeping: The proposed project will comply with the performance standards outlined in Appendix C of Chapter 500.

Based on BLR's review of the erosion and sedimentation control plan and the maintenance plan, the Department finds that the proposed project meets the Basic Standards contained in Chapter 500(4)(B) provided that grit and sediment materials that are removed from the stormwater structures during maintenance activities is disposed of in compliance with the Maine Solid Waste Management Rules.

B. General Standards:

The applicant's stormwater management plan includes general treatment measures that will mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential thermal impacts. This mitigation is being achieved by using Best Management Practices (BMPs) that will control runoff from 96% of the impervious area and 86% of the developed area.

The stormwater management system proposed by the applicant was reviewed by, and revised in response to comments from, BLR. After a final review, BLR commented that the proposed stormwater management system is designed in accordance with the General Standards contained in Chapter 500(4)(C) and recommended that the design engineer or other qualified professional oversees the construction of the stormwater management structures in accordance with the details and notes specified on the approved plans. Within 30 days of completion of the entire system or if the project takes more than one year to complete, at least once per year, the applicants shall submit a log of inspection reports detailing the items inspected, photographs taken, and dates of each inspection to the BLR for review.

Based on the stormwater system's design and BLR's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the General Standards contained in Chapter 500(4)(C) provided that construction of the stormwater management system is overseen, documented, and reported as described above.

C. Flooding Standard:

The applicant is proposing to utilize a stormwater management system based on estimates of pre- and post-development stormwater runoff flows obtained by using Hydrocad, a stormwater modeling software that utilizes the methodologies outlined in Technical Releases #55 and #20 from the U.S.D.A. Soil Conservation Service and detains stormwater from 24-hour storms of 2-, 10-, and 25-year frequency in the wet pond and the underdrained soil filter. The post-development peak flow from the site will not exceed the pre-development peak flow from the site and the peak flow of the receiving waters will not be increased as a result of stormwater runoff from the development site.

BLR commented that the proposed system is designed in accordance with the Flooding Standard contained in Chapter 500(4)(F).

Based on the system's design and BLR's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the Flooding Standard contained in Chapter 500(4)(F) for peak flow from the project site, and channel limits and runoff areas.

11. GROUNDWATER:

The project site is not located over a mapped sand and gravel aquifer. Water for the proposed project will be withdrawn from the groundwater. Wastewater will be disposed of using a subsurface wastewater disposal system. The tenants for the proposed buildings are unknown at this time. If any of the tenants will store or handle hazardous materials, solvents, cleaners, or other chemicals on-site in amounts greater than normal household quantities that could contaminate groundwater then a groundwater protection plan shall be submitted to the Department for review and approval with a condition compliance application. The buildings should be designed with containment areas and no floor drains so that any spilled materials are not released outside of the building.

The Department finds that the proposed project will not have an unreasonable adverse effect on ground water quality provided that any tenant that will store or handle hazardous materials, solvents, cleaners, or other chemicals on-site in amounts greater than normal household quantities that could contaminate groundwater must submit a groundwater protection plan to the Department for review and approval.

12. WATER SUPPLY:

Water for the development will be supplied by a well for each building. Each well is anticipated to serve less than 25 people therefore the wells are not considered public water supplies. The estimated water usage for the entire project is 1,945 gallons per day. The applicant submitted an assessment of groundwater supplies that are available on the project site. This assessment was prepared by a certified geologist and was reviewed by, and revised in response to comments from, the DEA.

The Department finds that the applicant has made adequate provision for securing and maintaining a sufficient and healthful water supply.

13. WASTEWATER DISPOSAL:

Wastewater will be disposed of by a common subsurface wastewater disposal system to be located in the approximate middle of the industrial and commercial buildings with a design flow of 1,920 gallons per day based on 160 employees at a rate of 12 gallons per person per day. The applicant submitted the soil survey map and report discussed in Finding 9. The applicant submitted a Subsurface Wastewater Disposal System Application (HHE-200 form) that was completed and signed by a site evaluator. This information was reviewed by, and revised in response to comments from, DEA.

Based on DEA's comments, the Department finds that the proposed wastewater disposal system will be built on suitable soil types.

14. SOLID WASTE:

The property currently contains a variety of wastes including scrap metal, appliances, concrete, plastics, several 55-gallon drums, demolition wood (including untreated and pressure treated wood), and a wooden boat. The applicant states that these wastes will be removed prior to the start of construction or disposed of as construction waste. Department staff have been in contact with Mike Lewis of York Woods Tree; Mr. Lewis indicated he would be hauling this material to scrap metal recyclers or to a facility that accepts construction and demolition debris such as Aggregate Recycling Corp in Eliot. This method of disposal is acceptable to the Department provided that the debris is removed prior to the start of construction of the site, and provided that the waste hauler is licensed as a Maine non-hazardous waste transporter. As of July 31, 2018, York Woods Tree does not hold a transporter license, and must obtain one prior to waste hauling.

When completed, the proposed project is estimated to generate approximately five cubic yards of office waste and ten cubic yards of commercial waste per week, but this amount will be dependent on the occupation of the eventual tenants. The applicant stated that the commercial solid wastes from the proposed project will be either taken to the Eliot transfer station or be picked up by a private hauler. This method of disposal is acceptable provided that the hauler of the waste is either exempt from or licensed in accordance with Chapter 411 of the Department's Rules.

The proposed project will clear approximately six acres that had been cleared of trees circa 2002 and is currently vegetated with small diameter trees. This will create a small amount of land clearing woody debris that will be chipped and used on site for mulch or in erosion control mix. This type of disposal is in compliance with the Maine Solid Waste Management Rules.

The proposed project will generate approximately 660 cubic yards of construction debris. The construction debris will be hauled by a licensed non-hazardous waste transporter such as Oceanside Rubbish of Wells, Maine. This material will be hauled to either Jeffrey Simpson in Sanford or Aggregate Recycling Corp in Eliot. This method of disposal is currently in substantial compliance with the Maine Solid Waste Management Rules.

Based on the above information, the Department finds that the applicant has made adequate provision for solid waste disposal provided that the existing waste on the site must be removed prior to the start of construction and the hauler of that waste must be licensed as a Maine non-hazardous waste transporter, and provided that the commercial waste hauler for the project must be either exempt from or licensed in accordance with Chapter 411 of the Department's Rules.

15. FLOODING:

The proposed project is not located within the 100-year flood plain of any river or stream.

The Department finds that the proposed project is unlikely to cause or increase flooding or cause an unreasonable flood hazard to any structure.

16. WETLAND IMPACTS:

The applicant proposes to alter 14,035 square feet of forested wetland to construct the retail and commercial building, the entrance driveway to the business park, the 8,000-square foot industrial and commercial building, and the 20,000-square foot industrial and commercial building. The applicant avoided wetland impacts by focusing the development layout on the uplands and by constructing the access to the business park via Passamaquoddy Lane. The applicant minimized wetland impacts to the extent practicable by designing the project to avoid the large wetland in the middle of the property and by using a vertical retaining wall adjacent to wetland fill areas instead of two to one side slopes to reduce wetland impacts caused by filled slope extensions.

The Department finds that the applicant has avoided and minimized freshwater wetland impacts to the extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S. §§ 480-A-480-JJ and Section 401 of the Federal Water Pollution Control Act:

- A. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life.

- B. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S. §§ 481–489-E:

- A. The applicant has provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards provided that the applicant submits evidence of financial capacity to the Department prior to the start of construction for review and approval.
- B. The applicant has made adequate provision for fitting the development harmoniously into the existing natural environment and the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities.
- C. The proposed development will be built on soil types which are suitable to the nature of the undertaking and will not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil.
- D. The proposed development meets the standards for storm water management in 38 M.R.S. § 420-D and the standard for erosion and sedimentation control in 38 M.R.S. § 420-C provided that grit and sediment materials that are removed from the stormwater structures during maintenance activities is disposed of in compliance with the Maine Solid Waste Management Rules, provided that construction of the stormwater management system is overseen, documented, and reported as described in Finding 10.B
- E. The proposed development will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur provided that any tenant that will store or handle hazardous materials, solvents, cleaners, or other chemicals on-site in amounts greater than normal household quantities that could contaminate groundwater shall submit a groundwater protection plan to the Department for review and approval.
- F. The applicant has made adequate provision of utilities, including water supplies, sewerage facilities and solid waste disposal required for the development and the development will not have an unreasonable adverse effect on the existing or proposed utilities in the municipality or area served by those services provided that the existing waste on the site is removed prior to the start of construction and the hauler of that waste is licensed as a Maine non-hazardous waste transporter, and provided that the commercial waste hauler for the project is either exempt from or licensed in accordance with Chapter 411 of the Department's Rules.
- G. The activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure.

THEREFORE, the Department APPROVES the application of LADY SLIPPER PROPERTIES LLC to construct a project known as Pine Tree Business Park and alter wetlands as described herein, SUBJECT TO THE FOLLOWING CONDITIONS and all applicable standards and regulations:

1. The Standard Conditions of Approval, a copy attached.
2. In addition to any specific erosion control measures described in this or previous orders, the applicant shall take all necessary actions to ensure that its activities or those of its agents do not result in noticeable erosion of soils or fugitive dust emissions on the site during the construction and operation of the project covered by this approval.
3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.
4. Prior to the start of construction, the applicant shall submit evidence of financial capacity to the Bureau of Land Resources for review and approval.
5. The existing waste on the site shall be removed prior to the start of construction and the hauler of that waste shall be licensed as a Maine non-hazardous waste transporter. The commercial waste transporter for the project shall be either exempt from, or licensed in accordance with, Chapter 411 of the Department's Rules.
6. Any tenant that will store or handle hazardous materials, solvents, cleaners, or other chemicals on-site in amounts greater than normal household quantities that could contaminate groundwater shall submit a groundwater protection plan to the Department for review and approval.
7. Grit and sediment materials that are removed from the stormwater structures during maintenance activities shall be disposed of in compliance with the Maine Solid Waste Management Rules.

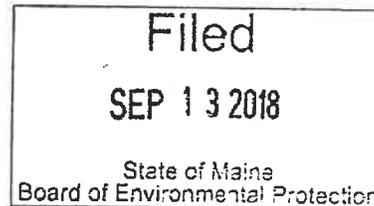
- 8. The applicant shall retain the design engineer, or other qualified professional, to oversee the construction of the stormwater management structures in accordance with the details and notes specified on the approved plans. Within 30 days of completion of the entire system or if the project takes more than one year to complete, at least once per year, the applicant shall submit a log of inspection reports detailing the items inspected, photographs taken, and dates of each inspection to the BLR for review.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED IN AUGUSTA, MAINE, THIS 13TH DAY OF SEPTEMBER, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Paul Mercer*
For: Paul Mercer, Commissioner



PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

CGW/L27840ANBN/ATS#82825, 82828

Department of Environmental Protection
SITE LOCATION OF DEVELOPMENT (SITE)
STANDARD CONDITIONS

- A. Approval of Variations from Plans.** The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited without prior approval of the Board, and the applicant shall include deed restrictions to that effect.
- B. Compliance with All Applicable Laws.** The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. Compliance with All Terms and Conditions of Approval.** The applicant shall submit all reports and information requested by the Board or the Department demonstrating that the applicant has complied or will comply with all preconstruction terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
- D. Advertising.** Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.
- E. Transfer of Development.** Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.
- F. Time frame for approvals.** If the construction or operation of the activity is not begun within four years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- G. Approval Included in Contract Bids.** A copy of this approval must be included in or attached to all contract bid specifications for the development.
- H. Approval Shown to Contractors.** Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.

(2/81)/Revised December 27, 2011



Natural Resources Protection Act (NRPA) Standard Conditions

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCES PROTECTION ACT, 38 M.R.S. § 480-A ET SEQ., UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

- A. Approval of Variations From Plans. The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.
- B. Compliance With All Applicable Laws. The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. Erosion Control. The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soils on the site during the construction and operation of the project covered by this Approval.
- D. Compliance With Conditions. Should the project be found, at any time, not to be in compliance with any of the Conditions of this Approval, or should the applicant construct or operate this development in any way other the specified in the Application or Supporting Documents, as modified by the Conditions of this Approval, then the terms of this Approval shall be considered to have been violated.
- E. Time frame for approvals. If construction or operation of the activity is not begun within four years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- F. No Construction Equipment Below High Water. No construction equipment used in the undertaking of an approved activity is allowed below the mean high water line unless otherwise specified by this permit.
- G. Permit Included In Contract Bids. A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.
- H. Permit Shown To Contractor. Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

STORMWATER STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL

Standard conditions of approval. Unless otherwise specifically stated in the approval, a department approval is subject to the following standard conditions pursuant to Chapter 500 Stormwater Management Law.

- (1) Approval of variations from plans. The granting of this approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the permittee. Any variation from these plans, proposals, and supporting documents must be reviewed and approved by the department prior to implementation. Any variation undertaken without approval of the department is in violation of 38 M.R.S. §420-D(8) and is subject to penalties under 38 M.R.S.. §349.
- (2) Compliance with all terms and conditions of approval. The applicant shall submit all reports and information requested by the department demonstrating that the applicant has complied or will comply with all terms and conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
- (3) Advertising. Advertising relating to matters included in this application may not refer to this approval unless it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.
- (4) Transfer of project. Unless otherwise provided in this approval, the applicant may not sell, lease, assign, or otherwise transfer the project or any portion thereof without written approval by the department where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval may only be granted if the applicant or transferee demonstrates to the department that the transferee agrees to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant. Approval of a transfer of the permit must be applied for no later than two weeks after any transfer of property subject to the license.
- (5) Time frame for approvals. If the construction or operation of the activity is not begun within four years, this approval shall lapse and the applicant shall reapply to the department for a new approval. The applicant may not begin construction or operation of the project until a new approval is granted. A reapplication for approval may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- (6) Certification. Contracts must specify that "all work is to comply with the conditions of the Stormwater Permit." Work done by a contractor or subcontractor pursuant to this approval may not begin before the contractor and any subcontractors have been shown a copy of this approval with the conditions by the permittee, and the permittee and each contractor and subcontractor has certified, on a form provided by the department, that the approval and conditions have been received and read, and that the work will be carried out in accordance with the approval and conditions. Completed certification forms must be forwarded to the department.

- (7) Maintenance. The components of the stormwater management system must be adequately maintained to ensure that the system operates as designed, and as approved by the Department. If maintenance responsibility is to be transferred from the permittee to another entity, a transfer request must be filed with the Department which includes the name and contact information for the person or entity responsible for this maintenance. The form must be signed by the responsible person or agent of the responsible entity.
- (8) Recertification requirement. Within three months of the expiration of each five-year interval from the date of issuance of the permit, the permittee shall certify the following to the department.
- (a) All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
 - (b) All aspects of the stormwater control system are operating as approved, have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system, as necessary.
 - (c) The stormwater maintenance plan for the site is being implemented as approved by the Department, and the maintenance log is being maintained.
 - (d) All proprietary systems have been maintained according to the manufacturer's recommendations. Where required by the Department, the permittee shall execute a 5-year maintenance contract with a qualified professional for the coming 5-year interval. The maintenance contract must include provisions for routine inspections, cleaning and general maintenance.
 - (e) The Department may waive some or all of these recertification requirements on a case-by-case basis for permittees subject to the Department's Multi-Sector General Permit ("MSGP") and/or Maine Pollutant Discharge Elimination System ("MEPDES") programs where it is demonstrated that these programs are providing stormwater control that is at least as effective as required pursuant to this Chapter.
- (9) Transfer of property subject to the license. If any portion of the property subject to the license containing areas of flow or areas that are flooded are transferred to a new property owner, restrictive covenants protecting these areas must be included in any deeds or leases, and recorded at the appropriate county registry of deeds. Also, in all transfers of such areas and areas containing parts of the stormwater management system, deed restrictions must be included making the property transfer subject to all applicable terms and conditions of the permit. These terms and conditions must be incorporated by specific and prominent reference to the permit in the deed. All transfers must include in the restrictions the requirement that any subsequent transfer must specifically include the same restrictions unless their removal or modification is approved by the Department. These restrictions must be written to be enforceable by the Department, and must reference the permit number.
- (10) Severability. The invalidity or unenforceability of any provision, or part thereof, of this permit shall not affect the remainder of the provision or any other provisions. This permit shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: March 2012

Contact: (207) 287-2811

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's ("DEP") Commissioner: (1) in an administrative process before the Board of Environmental Protection ("Board"); or (2) in a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S.A. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S.A. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S.A. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This INFORMATION SHEET, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's *Organization and Powers*, 38 M.R.S.A. §§ 341-D(4) & 346, the *Maine Administrative Procedure Act*, 5 M.R.S.A. § 11001, and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 CMR 2 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days of the date on which the Commissioner's decision was filed with the Board will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by the Board's receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner a copy of the appeal documents and if the person appealing is not the applicant in the license proceeding at issue the applicant must also be sent a copy of the appeal documents. All of the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time submitted:

1. *Aggrieved Status.* The appeal must explain how the person filing the appeal has standing to maintain an appeal. This requires an explanation of how the person filing the appeal may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing on the appeal is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
7. *New or additional evidence to be offered.* The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered by the Board in an appeal only when the evidence is relevant and material and that the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.
2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.
3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed the license normally remains in effect pending the processing of the appeal. A license holder may proceed with a project pending the outcome of an appeal but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge receipt of an appeal, including the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, and any materials submitted in response to the appeal will be sent to Board members with a recommendation from DEP staff. Persons filing appeals and interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, a license holder, and interested persons of its decision.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2; 5 M.R.S.A. § 11001; & M.R. Civ. P 80C. A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. Failure to file a timely appeal will result in the Board's or the Commissioner's decision becoming final.

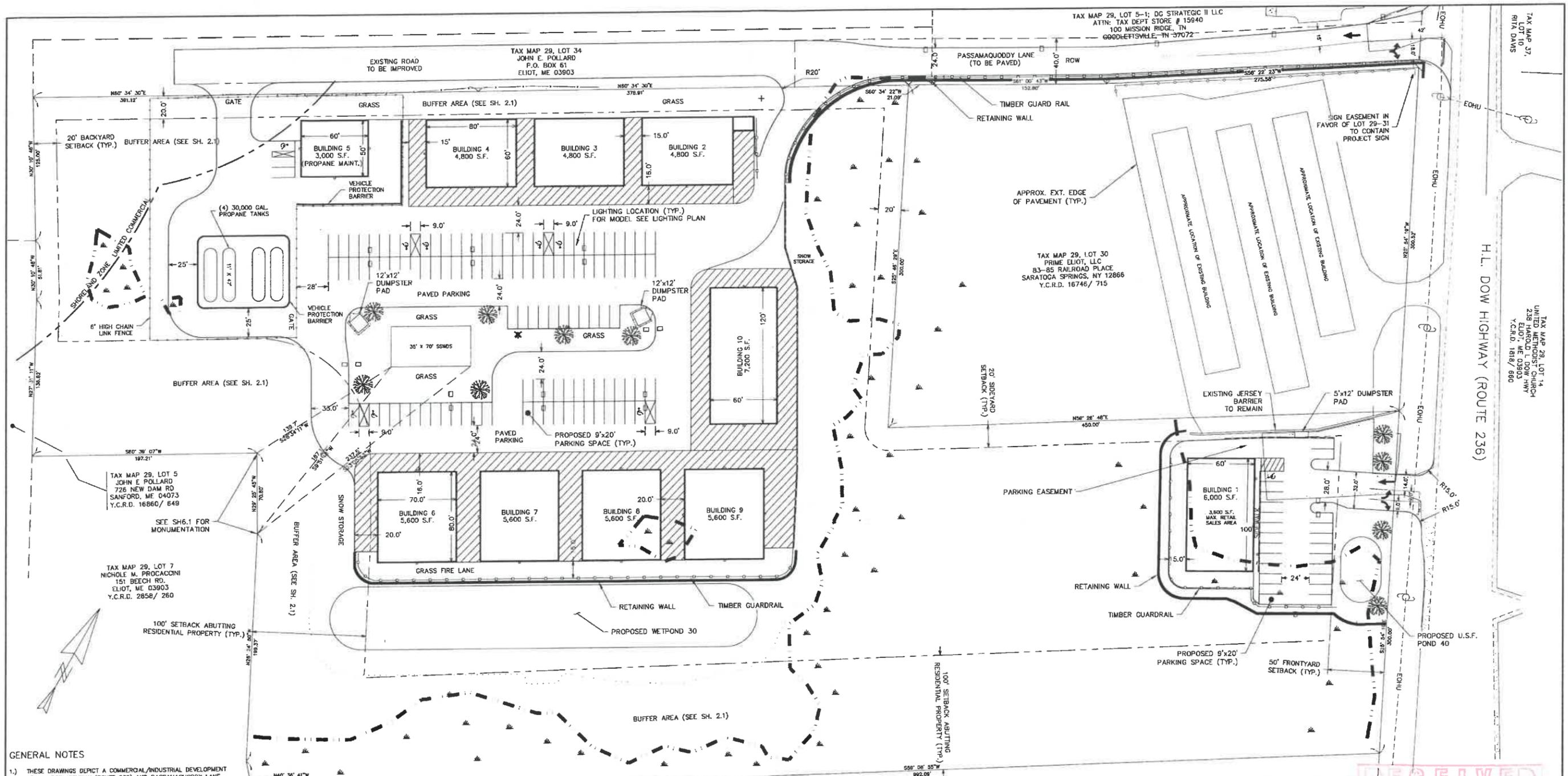
An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S.A. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452 or for judicial appeals contact the court clerk's office in which your appeal will be filed.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.



GENERAL NOTES

- 1.) THESE DRAWINGS DEPICT A COMMERCIAL/INDUSTRIAL DEVELOPMENT AT H.L. DOW HIGHWAY (ROUTE 236) AND PASSAMAQUODDY LANE. TEN BUILDINGS WITH A TOTAL OF 53,000 S.F. ARE PROPOSED. BUILDING 1 WILL CONTAIN RETAIL USES. BUILDING 5 WILL BE AN OFFICE/MAINTENANCE BUILDING FOR THE PROPANE STORAGE USE. BUILDINGS 2-4 AND 6-10 WILL CONTAIN COMMERCIAL AND INDUSTRIAL RENTAL SPACES FOR USES ALLOWED IN THE ZONE. THE PARCEL IS IDENTIFIED ON THE TOWN OF ELIOT TAX MAP 29 AS LOT 31. THE PARCEL IS APPROXIMATELY 11.6 ACRES IN AREA.
- 2.) THE PROPOSED LOT IS IN THE COMMERCIAL/INDUSTRIAL (C/I) DISTRICT AND A PORTION OF THE PARCEL IS IN THE LIMITED COMMERCIAL SHORELAND OVERLAY DISTRICT. THE LOT WILL BE SERVED BY PUBLIC WATER AND ON-SITE WASTEWATER. REQUIREMENTS FOR THE C/I ZONE ARE AS FOLLOWS:
 MIN STREET FRONTAGE = 300'
 MIN LOT SIZE = 3 ACRES
 MIN FRONT YARD (ABUTTING A STATE ROAD) = 50'
 MIN SIDE AND REAR YARD = 20' OR 100' IF ABUTTING A RESIDENTIAL USE
 MAX HEIGHT = 55'
 MAX LOT COVERAGE = 50% WITH 25% FLOOR & 50% PARKING EXPANSION
 MAX SIGN AREA = 100 S.F.
- 3.) PARKING CALCULATION
 RETAIL SALES = 1 SPACE / 150 S.F. OF FLOOR AREA
 PROFESSIONAL OFFICES = 1 SPACE/200 S.F. OF FLOOR AREA, EXCLUSIVE OF BULK STORAGE AREAS
 COMMERCIAL AND INDUSTRIAL USES = 1 SPACE / EMPLOYEE ON THE LARGEST SHIFT (*ASSUMPTION 1 EMPLOYEE/500 S.F. C/I USE)
 PROPANE MAINTENANCE: 1 SPACE PER EMPLOYEE.
 BUILDING 1 RETAIL FLOOR AREA = 3,600 S.F.
 REQUIRED PARKING:
 3,600 S.F. * 1 SPACE / 150 S.F. = 24 SPACES
 24 SPACES PROVIDED, 1 OF WHICH ARE ADA ACCESSIBLE (4.2%)
 BUILDING 5
 REQUIRED PARKING:
 2 EMPLOYEES = 2 SPACES, 3 PROVIDED, 1 OF WHICH IS ADA ACCESSIBLE (33.3%)

GENERAL NOTES (CONT.)

- 4.) LOT COVERAGE CALCULATIONS (BUILDING AREA / LOT AREA) ARE AS FOLLOWS:
 LOT AREA: 12.8 ACRES = 557,568 S.F. LOT PROPOSED:
 53,000 S.F. BUILDINGS + 900 S.F. LOADING DOCKS = 53,900 S.F.
 53,900 S.F. / 557,568 S.F. LOT AREA = 9.5% LOT COVERAGE
- 5.) NON-VEGETATED COVERAGE IN THE SHORELAND ZONE IS CALCULATED AS FOLLOWS:
 TOTAL SITE = 174,835 S.F. (31.3%)
 SHORELAND ZONE = 25,265 S.F. (PER ZONING MAP, AS SHOWN ON PLAN)
 DEVELOPED SHORELAND ZONE COVERAGE = 0 S.F. (0.0% WHICH IS LESS THAN THE 20% ALLOWED COVERAGE).
- 6.) THE CONTRACTOR MUST CONTACT DIG SAFE AND ALL LOCAL UTILITIES PRIOR TO THE START OF CONSTRUCTION TO VERIFY THE LOCATION OF EXISTING SUBSURFACE UTILITIES AND CONDITIONS. LOCATING AND PROTECTING ANY UNDERGROUND OR ABOVE-GROUND UTILITY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 7.) ALL SIGNS SHALL MEET THE REQUIREMENTS OF THE MUNICIPAL CODE OF ORDINANCES OF THE TOWN OF ELIOT, MAINE, CHAPTER 45, ARTICLE XI.
- 8.) ALL PROPOSED LIGHTS ON THE SITE SHALL MEET THE REQUIREMENTS OF SECTION 33-180 OF THE MUNICIPAL CODE OF ORDINANCES OF THE TOWN OF ELIOT, MAINE.

TAX MAP 29, LOT 33
 PETER B & ANNETTE M. CANTRELL
 11 GALWAY LN
 ELIOT, ME 03903
 Y.C.R.D. 10184 / 348

LEGEND

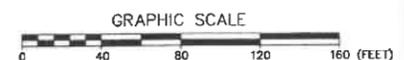
EXISTING CONTOUR	---
FINAL CONTOUR	---
WETLAND BOUNDARY	---
UTILITY POLE	---
EXT. WATER	EW
EXT. SEWER	ES
EXT. OVERHEAD UTIL.	EOHU
EXT. UNDERGROUND UTIL.	EUU
PRP. WATER	PW
PRP. SEWER	PS
PRP. FORCE MAIN	FM
PRP. UTILITY	P UG/OHU
WATER VALVE	EXT. ⊕ PRP. ⊗
WATER SHUTOFF	⊕
SEWER MANHOLE	⊙

LEGEND

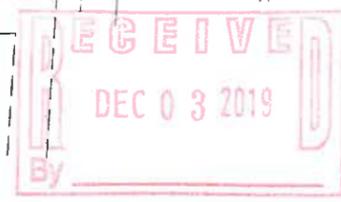
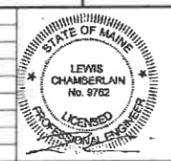
LIGHT POLE	EXT. ⊙ PRP. ⊗
SILTATION FENCE	---
PROPOSED FENCE	---
EXISTING FENCE	---
ASPHALT CURB	---
EXISTING CURB	---
PROPOSED GUARDRAIL	---
BOLLARD	○
FIRE HYDRANT	EXT. ⊙ PRP. ⊗
DRAINAGE EASEMENT	---
DRAINAGE / ACCESS EASEMENT	---
DIRECTION OF DRAINAGE	---
TEST PIT	⊕
PROPOSED WELL	⊙

INDEX OF SHEETS

- 1.1 SITE PLAN
- 2.1 GRADING & UTILITY PLAN
- 3.1 ROAD PLAN AND PROFILE
- 4.1 EXISTING CONDITIONS PLAN & HISS
- 5.1 SITE DETAILS PLAN
- 5.2 SITE DETAILS PLAN
- 5.3 SITE DETAILS PLAN
- 6.1 BOUNDARY SURVEY
- 7.1 STORMWATER: EXISTING CONDITIONS
- 7.2 STORMWATER: DEVELOPED CONDITIONS
- 8.1 PHOTOMETRIC LIGHTING PLAN



1.1



SITE PLAN
 PINE TREE BUSINESS PARK
 ROUTE 236, ELIOT, MAINE

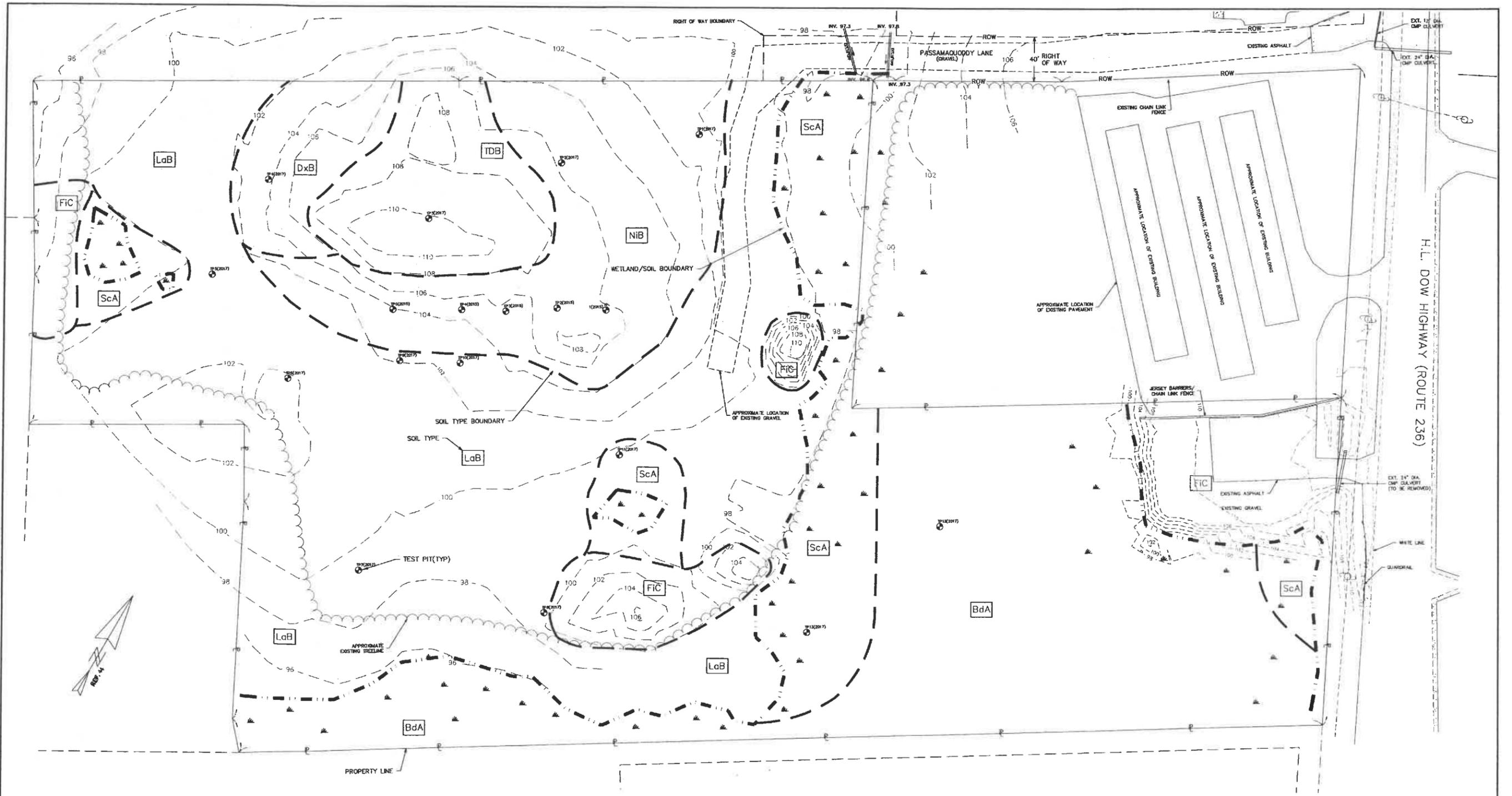
FOR: MICHAEL ESTES
 P.O. BOX 125
 YORK, ME 03909

ATTAR ENGINEERING, INC.
 CIVIL • STRUCTURAL • MARINE
 1284 STATE ROAD - ELIOT, MAINE 03903
 PHONE: (207)439-6023 FAX: (207)439-2128

SCALE: 1" = 40'
 DATE: 12/03/19
 JOB NO: C179-19 CAD FILE: ESTES RTE236 BASE SHEET 1.1

APPROVED BY: [Signature]
 12/3/19

DRAWN BY: BRN
 REVISION: DATE



HIGH INTENSITY SOIL MAP LEGEND

SYMBOL	SOIL SERIES NAME	SLOPE RANGE	DRAINAGE CLASS	HYDROLOGIC SOIL GROUP
BdA	Biddeford mucky silt loam	0-3%	Very Poorly Drained*	D
DxB	Dixfield fine sandy loam	3-8%	Moderately Well Drained	C
FIC	Fill	3-15%	Undetermined	Undetermined
LaB	Lamoine silt loam	3-8%	Somewhat Poorly Drained	D
NIB	Nicholsville fine sandy loam	3-8%	Somewhat Poorly Drained	C
ScA	Scoutic silt loam	0-3%	Poorly Drained*	D
TDB	Tunbridge-Dixfield variant	3-8%	Moderately Well Drained	C

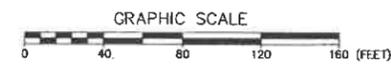
* These are wetland soils

This soil survey complies with Class A standards as defined by the Maine Association of Professional Soil Scientists. See report dated July 2017 for complete description of methods, soils and results.

Michael Cuomo
Maine Soil Scientist #211

HISS NOTES

- 1.) THE WETLAND BOUNDARY AS DEPICTED ON THIS PLAN WAS DELINEATED/FLAGGED BY MICHAEL CUOMO, MAINE CERTIFIED SOIL SCIENTIST #211, ON JUNE 18, 2016. THE FLAGS WERE LOCATED BY ATTAR ENGINEERING INC. IN NOVEMBER, 2016.



4.1

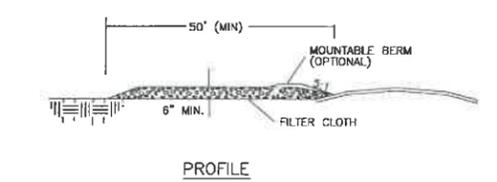
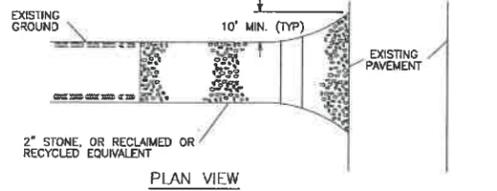
CLASS A HIGH INTENSITY SOIL SURVEY
PINE TREE BUSINESS PARK
ROUTE 236, ELIOT, MAINE

FOR: LADY SLIPPER PROPERTIES, LLC
37 ROUTE 236, SUITE 105
KITTERY, ME 03904

ATTAR ENGINEERING, INC.
CIVIL • STRUCTURAL • MARINE
1284 STATE ROAD - ELIOT, MAINE 03903
PHONE: (207) 439-6023 FAX: (207) 439-2128

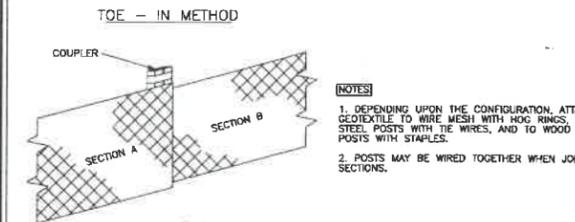
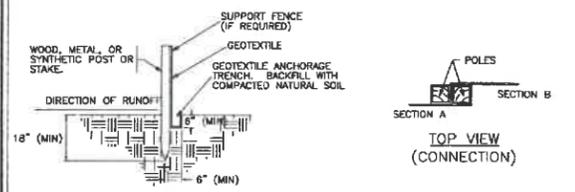
SCALE: 1" = 40'	APPROVED BY:	DRAWN BY: MJS
DATE: 01/15/2018		REVISION : DATE
JOB NO: C034-18	CAD FILE: PINEBROOK RTE236 BASE	SHEET 4.1

NO.	DESCRIPTION	DATE



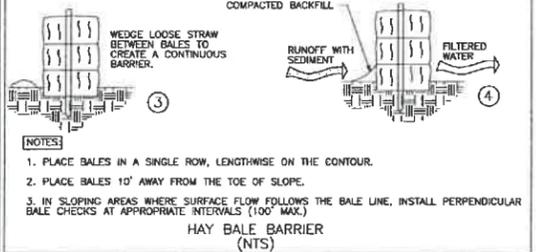
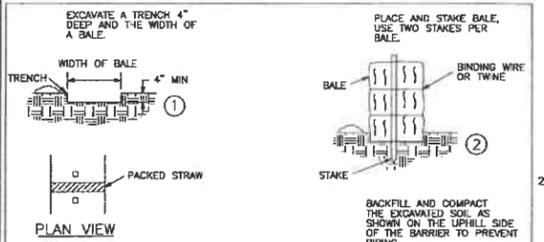
- NOTES**
1. GEOTEXTILE: PLACE FILTER CLOTH OVER ENTIRE AREA TO BE COVERED WITH AGGREGATE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENTIAL LOT.
 2. PIPING OF SURFACE WATER UNDER ENTRANCE SHALL BE PROVIDED AS REQUIRED. IF PIPING IS IMPOSSIBLE, A MOUNTABLE BERM WITH A 5:1 SLOPE WILL BE PERMITTED.

STABILIZED CONSTRUCTION ENTRANCE



- NOTES**
1. DEPENDING UPON THE CONFIGURATION, ATTACH GEOTEXTILE TO WIRE MESH WITH HOG RINGS TO STEEL POSTS WITH TIRES, AND TO WOOD POSTS WITH STAPLES.
 2. POSTS MAY BE WIRED TOGETHER WHEN JOINING SECTIONS.

TEMPORARY SILT FENCE - NTS



- NOTES**
1. PLACE BALES IN A SINGLE ROW, LENGTHWISE ON THE CONTOUR.
 2. PLACE BALES 10' AWAY FROM THE TOE OF SLOPE.
 3. IN SLOPING AREAS WHERE SURFACE FLOW FOLLOWS THE BALE LINE, INSTALL PERPENDICULAR BALE CHECKS AT APPROPRIATE INTERVALS (100' MAX.)

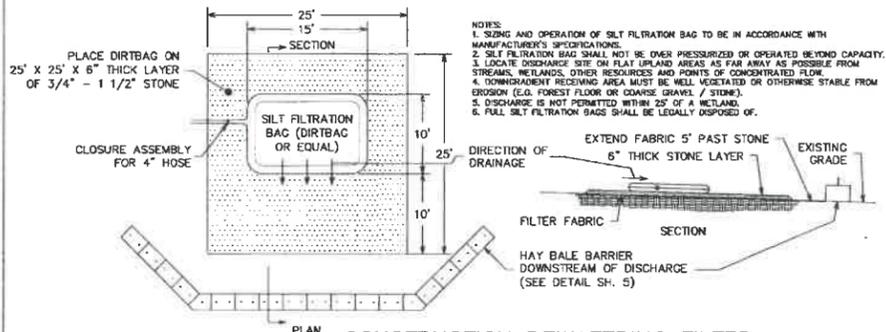
HAY BALE BARRIER (NTS)

EROSION AND SEDIMENTATION CONTROL NOTES

1. SILTATION FENCE OR HAY BALE BARRIERS WILL BE INSTALLED DOWNSLOPE OF ALL STRIPPING OR CONSTRUCTION OPERATIONS. A DOUBLE SILT FENCE BARRIER SHALL BE INSTALLED DOWNSTREAM OF ANY SOIL MATERIAL STOCKPILES. SILT FENCES SHALL BE INSPECTED AFTER EACH RAIN EVENT AND DAILY DURING PROLONGED RAIN. SILT AND SOIL PARTICLES ACCUMULATING BEHIND THE FENCE SHALL BE REMOVED AFTER EACH SIGNIFICANT RAIN EVENT AND IN NO INSTANCE SHOULD ACCUMULATION EXCEED 1/2 THE HEIGHT OF THE FENCE. TORN OR DAMAGED AREAS SHALL BE REPAIRED.
2. TEMPORARY AND PERMANENT VEGETATION AND MULCHING IS AN INTEGRAL COMPONENT OF THE EROSION AND SEDIMENTATION CONTROL PLAN. ALL AREAS SHALL BE INSPECTED AND MAINTAINED UNTIL THE DESIRED VEGETATIVE COVER IS ESTABLISHED. THESE CONTROL MEASURES ARE ESSENTIAL TO EROSION PREVENTION AND ALSO REDUCE COSTLY REWORK OF GRADED AND SHAPED AREAS.
3. SEEDING, FERTILIZER AND LIME RATES AND TIME OF APPLICATION WILL BE DEPENDENT ON SOIL REQUIREMENTS. TEMPORARY VEGETATION SHALL BE MAINTAINED IN THESE AREAS UNTIL PERMANENT SEEDING IS APPLIED. ADDITIONALLY, EROSION AND SEDIMENTATION MEASURES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED.
4. ALL LAWN AREA, OUTER POND SIDE SLOPES AND SWALES SHALL BE PERMANENTLY SEEDED WITH THE FOLLOWING MIXTURE: 20 LB/ACRE CREEPING RED FESCUE, 2 LB/ACRE REDTOP AND 20 LB/ACRE TALL FESCUE FOR A TOTAL OF 42 LB/ACRE. FERTILIZER AND LIME RATES SHALL BE DEPENDENT ON SOIL TESTING. IN THE ABSENCE OF SOIL TESTS, FERTILIZE WITH 10-20-20 (N-P205-K20) AT 800 LB/ACRE AND LIME AT 3 TONS/ACRE. MULCH WITH HAY AT 70-90 LB/1000 S.F. 4" OF LOAM SHALL BE APPLIED PRIOR TO SEEDING.
5. POND BOTTOMS AND INNER POND SIDESLOPES SHALL BE PERMANENTLY SEEDED WITH THE FOLLOWING MIXTURE: 20 LB/ACRE CREEPING RED FESCUE, 8 LB/ACRE BIRDSFOOT TREFLOID AND 20 LB/ACRE TALL FESCUE FOR A TOTAL OF 48 LB/ACRE. SEE THE ABOVE NOTE FOR FERTILIZER, LIME AND MULCHING RATES.
6. TEMPORARY VEGETATION OF ALL DISTURBED AREAS, MATERIAL STOCKPILES AND OTHER SUCH AREAS SHALL BE ESTABLISHED BY SEEDING WITH EITHER WINTER RYE AT A RATE OF 112 LB/ACRE OR ANNUAL RYEGRASS AT A RATE OF 40 LB/ACRE. WINTER RYE SHALL BE USED FOR FALL SEEDING AND ANNUAL RYEGRASS FOR SHORT DURATION SEEDING. SEEDING SHALL BE ACCOMPLISHED BEFORE OCTOBER 1. TEMPORARY STABILIZATION WITH MULCH OF DISTURBED AREAS SHALL TAKE PLACE WITHIN 7 DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES IN AN AREA THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS. AREAS WITHIN 75 FEET OF A WETLAND OR WATERBODY SHALL BE TEMPORARILY STABILIZED WITH MULCH WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.
7. TEMPORARY SEEDING OF DISTURBED AREAS SHALL BE ACCOMPLISHED BEFORE OCTOBER 1. PERMANENT SEEDING SHALL BE ACCOMPLISHED BEFORE SEPTEMBER 15.
8. ALL SEEDED AREAS SHALL BE MULCHED WITH HAY AT A RATE OF 2 BALES (70-90 LB) PER 1000 S.F. OF SEEDED AREA.
9. ALL DISTURBED AREAS ON THE SITE SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING OR TEMPORARILY STABILIZED PER E&S NOTE 9. PERMANENT STABILIZATION MEANS SORE COVER WITH MATURE, HEALTHY PLANTS FOR PLANTED AREAS AND FOR SODDED AREAS. COMPLETE BINDING OF SOO ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOO OR DIE-OFF.
10. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT ALL ACCESSES TO PUBLIC ROADS (SEE PLAN). TEMPORARY CULVERTS SHALL BE PROVIDED AS REQUIRED.
11. SLOPES 2:1 OR STEEPER SHALL BE TREATED WITH POLYJUTE OPEN WEAVE GEOTEXTILE (OR EQUIVALENT) AFTER SEEDING. JUTE MATS SHALL BE ANCHORED PER MANUFACTURER'S SPECIFICATIONS.
12. EXCESSIVE DUST CAUSED BY CONSTRUCTION OPERATIONS SHALL BE CONTROLLED BY APPLICATION OF WATER OR CALCIUM CHLORIDE.
13. THE CONTRACTOR MAY OPT TO USE EROSION CONTROL MIX BERM AS A SEDIMENT BARRIER IN LIEU OF SILTATION FENCE OR HAY BALE BARRIERS WITH APPROVAL FROM THE INSPECTING ENGINEER.
14. SEDIMENT BARRIERS SHALL BE DOUBLED WITH 75' OF WETLANDS OR OTHER PROTECTED NATURAL RESOURCES.
15. TEMPORARY E&S CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS OF PERMANENT STABILIZATION. ACCUMULATED SEDIMENTS SHALL BE REMOVED AND THE AREA STABILIZED.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATE HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT. THESE STANDARDS CAN BE FOUND IN THE FOLLOWING DOCUMENT: MDEP CHAPTER 500 (STORMWATER MANAGEMENT), APPENDIX C, HOUSEKEEPING. HOUSEKEEPING PRACTICES INCLUDE, BUT ARE NOT LIMITED TO, SPILL PREVENTION, FUGITIVE FUGITIVE SEDIMENT AND DUST, DEBRIS AND OTHER MATERIALS, EXCAVATION DEWATERING, AUTHORIZED NON-STORMWATER DISCHARGES AND UNAUTHORIZED NON-STORMWATER DISCHARGES.
17. WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FEET OF ANY PROTECTED NATURAL RESOURCE. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.

E&S INSPECTION/MAINTENANCE DURING CONSTRUCTION

- A. INSPECTION AND CORRECTIVE ACTION.** INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM (RAINFALL), AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS.
- B. MAINTENANCE.** IF BEST MANAGEMENT PRACTICES (BMPs) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF ADDITIONAL BMPs OR SIGNIFICANT REPAIR OF BMPs ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.
- C. DOCUMENTATION.** KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPs THAT NEED MAINTENANCE, BMPs THAT FAILED TO OPERATE, AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPs ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPs, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN. THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.



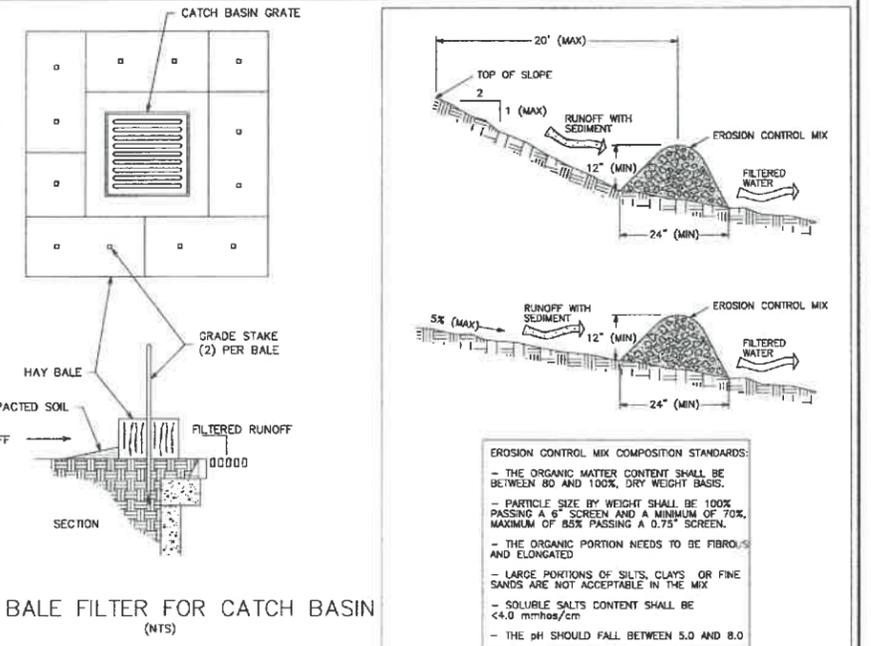
CONSTRUCTION DEWATERING FILTER DETAIL FOR PUMPED DISCHARGE (NTS)

ROAD & DRIVEWAY CONSTRUCTION NOTES

1. ROADS & DRIVEWAYS TO BE CONSTRUCTED IN ACCORDANCE WITH THE APPROPRIATE CROSS SECTION DETAIL. GRAVEL FILL TO BE COMPACTED TO 95% MODIFIED PROCTOR IN ACCORDANCE WITH ASTM D 1557. LIFT THICKNESSES TO BE A MAXIMUM OF 6".
2. ALL STUMPS, ORGANIC MATERIAL, ROCKS AND BOULDERS TO BE REMOVED TO A MINIMUM DEPTH OF 24" BELOW SUBBASE.
3. ALL STUMPS, LEDGE AND LARGE BOULDERS TO BE REMOVED FROM THE CONSTRUCTION AREA. THE CONSTRUCTION AREA SHALL BE CLEARED AND ROUGH GRADED.
4. ALL CULVERTS TO BE ADS N-12 (HDPE) OR APPROVED EQUAL. CULVERT INLETS AND OUTLETS TO BE PROTECTED IN ACCORDANCE WITH THE CULVERT INLET/OUTLET PROTECTION DETAIL.
5. THE CONTRACTOR MUST CONTACT DIG SAFE AND ALL LOCAL UTILITIES PRIOR TO THE START OF CONSTRUCTION TO VERIFY THE LOCATION OF EXISTING SUBSURFACE UTILITIES AND CONDITIONS. LOCATING AND PROTECTING ANY UNDERGROUND OR ABOVE GROUND UTILITY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

WINTER CONSTRUCTION NOTES

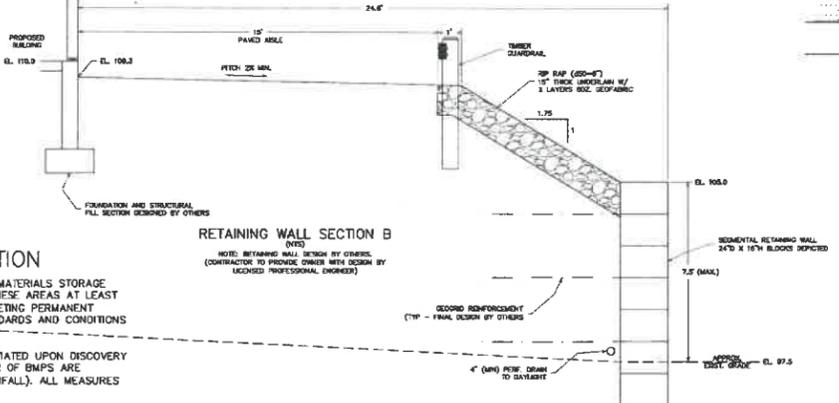
- NOVEMBER 1 - APRIL 15
1. AN AREA SHALL BE CONSIDERED STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH HAY AT A RATE OF 100 LB/1000 S.F. OR DORMANT SEEDED, MULCHED AND PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL PERMANENT SEEDING CAN BE APPLIED. AFTER NOVEMBER 1, DISTURBED AREAS MAY BE LOAMED, FINE GRADED AND DORMANT SEEDED AT A RATE 200-300% HIGHER THAN THE SPECIFIED PERMANENT SEEDING RATE. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, DISTURBED AREAS SHALL BE GRADED BEFORE FREEZING AND TEMPORARILY STABILIZED WITH MULCH. DISTURBED AREAS SHALL NOT BE LEFT OVER THE WINTER OR FOR ANY OTHER EXTENDED PERIOD OF TIME UNLESS STABILIZED WITH MULCH.
 2. FROM OCTOBER 15 TO APRIL 1, LOAM AND SEED WILL NOT BE REQUIRED. DURING PERIODS OF TEMPERATURES ABOVE FREEZING, DISTURBED AREAS SHALL BE FINE GRADED AND PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL PERMANENT SEEDING CAN BE APPLIED. AFTER NOVEMBER 1, DISTURBED AREAS MAY BE LOAMED, FINE GRADED AND DORMANT SEEDED AT A RATE 200-300% HIGHER THAN THE SPECIFIED PERMANENT SEEDING RATE. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, DISTURBED AREAS SHALL BE GRADED BEFORE FREEZING AND TEMPORARILY STABILIZED WITH MULCH. DISTURBED AREAS SHALL NOT BE LEFT OVER THE WINTER OR FOR ANY OTHER EXTENDED PERIOD OF TIME UNLESS STABILIZED WITH MULCH.
 3. FROM NOVEMBER 1 TO APRIL 15 ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL, TRACK OR WOOD CELLULOSE FIBER. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH SLOPES GREATER THAN 3%, SLOPES EXPOSED TO DIRECT WINDS AND FOR SLOPES GREATER THAN 8%. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1, THE SAME APPLIES TO ALL SLOPES GREATER THAN 8%.
 4. SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.
 5. FOR WINTER STABILIZATION, HAY MULCH SHALL BE APPLIED AT TWICE THE STANDARD TEMPORARY STABILIZATION RATE. TEMPORARILY STABILIZED AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE SHALL BE STABILIZED. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW.
 6. ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE SHALL BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS.
 7. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, SHALL BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE MDEP.
 8. MULCH NETTING SHALL BE USED TO ANCHOR MULCH ON ALL SLOPES GREATER THAN 8% UNLESS EROSION CONTROL BLANKETS OR EROSION CONTROL MIX IS BEING USED ON SUCH SLOPES.



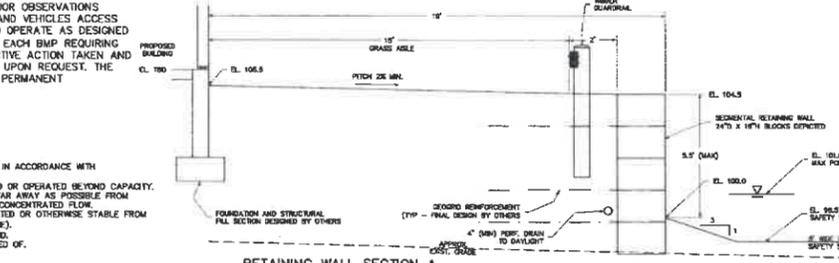
HAY BALE FILTER FOR CATCH BASIN (NTS)

- EROSION CONTROL MIX COMPOSITION STANDARDS:**
- THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 80 AND 100%, DRY WEIGHT BASIS.
 - PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN AND A MINIMUM OF 70% MAXIMUM OF 85% PASSING A 0.75" SCREEN.
 - THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.
 - LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.
 - SOLUBLE SALTS CONTENT SHALL BE <4.0 mmhos/cm
 - THE PH SHOULD FALL BETWEEN 5.0 AND 8.0

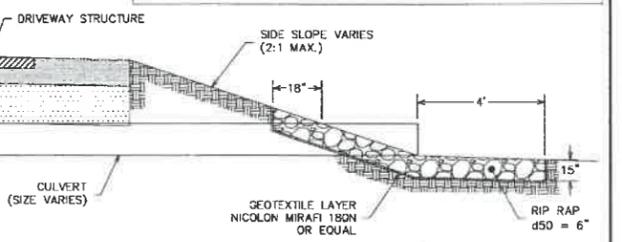
EROSION CONTROL MIX BERM (NTS)



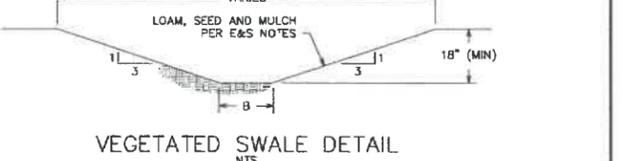
RETAINING WALL SECTION B (NTS)



RETAINING WALL SECTION A (NTS)



CULVERT INLET/OUTLET PROTECTION DETAIL (NTS)



VEGETATED SWALE DETAIL (NTS)

B (BOTTOM WIDTH) SHALL BE 2' FOR TYPE 1 SWALES AND 5' FOR TYPE 2 SWALES.

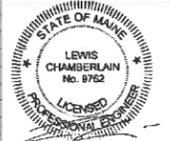
5.2

SITE DETAILS
PINE TREE BUSINESS PARK
ROUTE 236, ELIOT, MAINE

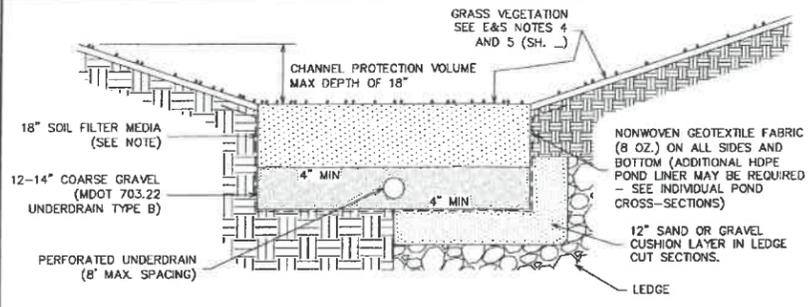
FOR: MICHAEL ESTES
P.O. BOX 125
YORK, ME 03909

ATTAR ENGINEERING, INC.
CIVIL • STRUCTURAL • MARINE
1284 STATE ROAD - ELIOT, MAINE 03903
PHONE: (207) 439-8023 FAX: (207) 439-2128

SCALE: AS NOTED APPROVED BY: 12/3/19 DRAWN BY: BRN
DATE: 12/03/19 REVISION: DATE
JOB NO: C179-19 CAD FILE: ESTES RTE236 BASE SHEET 5.2



NO.	DESCRIPTION	DATE



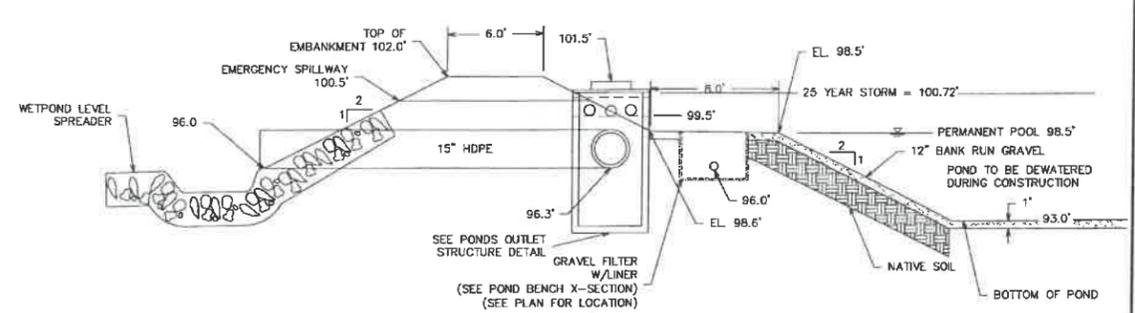
VEGETATED UNDERDRAINED SOIL FILTER FIELD CROSS SECTION
(APPLIES TO POND 40)
(NTS)

SOIL FILTER MEDIA NOTE:

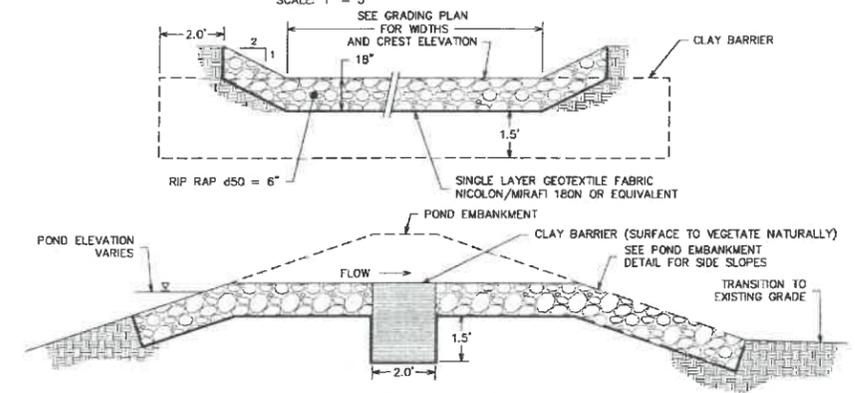
THE SOIL FILTER MEDIA SHALL CONSIST OF A SILTY SAND OR SOIL MIXTURE COMBINED WITH 20% - 25% FINE SHREDDED BARK OR WOOD FIBER MULCH. THE MIXTURE MUST HAVE NO LESS THAN 8% PASSING THE 200 SIEVE, AND A CLAY CONTENT OF LESS THAN 2% PRIOR TO CONSTRUCTION. THE CONTRACTOR MUST CHECK WITH THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR UPDATED SOIL FILTER MEDIA SPECIFICATIONS.

CONSTRUCTION OVERSIGHT REQUIRED:

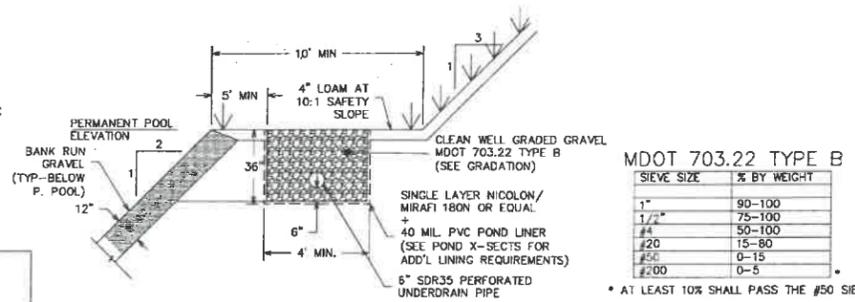
- INSPECTION OF THE FILTER BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER WITH REQUIRED REPORTING TO THE DEP. AT A MINIMUM, INSPECTIONS WILL OCCUR:
 - AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED;
 - AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA;
 - AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDING;
 - AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS; AND
 - ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN WILL BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.
- CONTRACTOR SHALL COORDINATE INSPECTION SCHEDULE WITH INSPECTING ENGINEER PRIOR TO CONSTRUCTION.



WETPOND (POND 30) EMBANKMENT DETAIL
SCALE: 1" = 5"



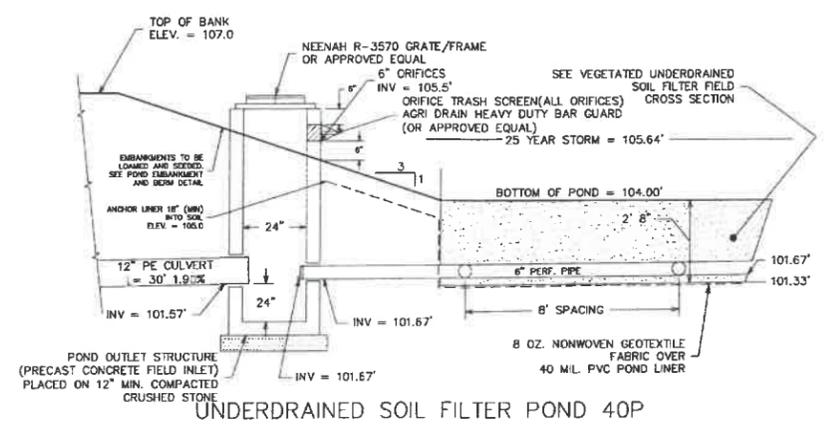
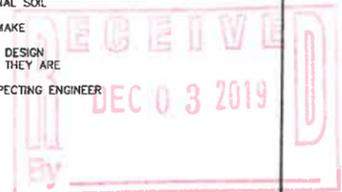
EMERGENCY SPILLWAY DETAIL
(NTS)



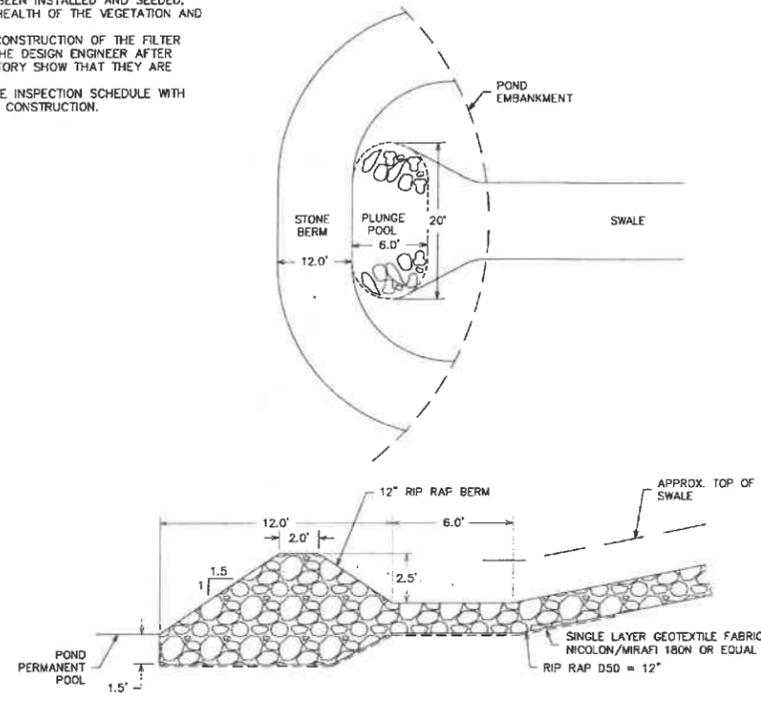
POND 11 AND 40 (WETPOND) BENCH CROSS-SECTION
(NTS)

CONSTRUCTION OVERSIGHT REQUIRED (WETPOND):

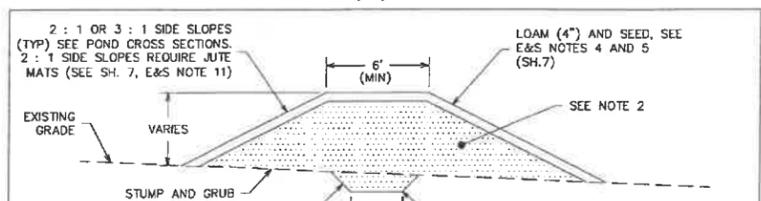
- INSPECTION OF THE WETPOND SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER WITH REQUIRED REPORTING TO THE DEP. AT A MINIMUM, INSPECTIONS WILL OCCUR:
 - WHEN POND EMBANKMENT SUBGRADE IS PREPARED;
 - DURING INSTALLATION OF THE GRAVEL TRENCH FILTER;
 - AFTER INLET/OUTLET STRUCTURES HAVE BEEN INSTALLED AND FINAL SOIL STABILIZATION MEASURES ARE IN PLACE;
 - AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS;
 - ALL THE GRAVEL TRENCH MATERIAL SHALL BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.
- CONTRACTOR SHALL COORDINATE INSPECTION SCHEDULE WITH INSPECTING ENGINEER PRIOR TO CONSTRUCTION.



UNDERDRAINED SOIL FILTER POND 40P



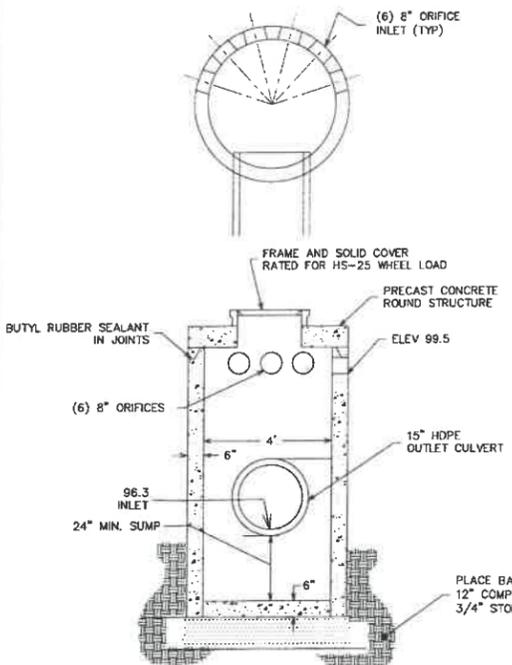
WETPOND FOREBAY
(NTS)



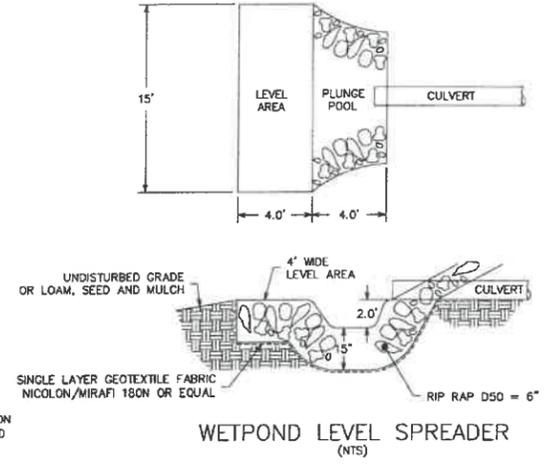
POND EMBANKMENT AND BERM DETAIL
SCALE: 1" = 5"

EMBANKMENT CONSTRUCTION NOTES

- ALL ORGANIC MATERIAL, STUMPS, ROCKS AND BOULDERS SHALL BE REMOVED TO A MINIMUM DEPTH OF 24" BELOW SUBGRADE OF THE BASIN EMBANKMENT. ALL EXCAVATIONS BELOW THE BASIN EMBANKMENT SHALL HAVE A MINIMUM SLOPE OF 1H : 1V.
- ALL BASIN EMBANKMENT FILL MATERIAL SHALL BE WELL GRADED BORROW WITH A MINIMUM OF 20% FINES CONTENT. EMBANKMENT FILL SHALL BE PLACED IN 12" (MAX.) LIFTS AND BE COMPACTED TO 95% MODIFIED PROCTOR. A CUTOFF TRENCH SHALL BE EXCAVATED AS SHOWN PRIOR TO CONSTRUCTION OF EMBANKMENT.
- DETENTION BASIN AND ALL EXCAVATIONS SHALL BE KEPT FREE OF WATER DURING CONSTRUCTION.



POND 30 OUTLET STRUCTURE DETAIL
(NTS)



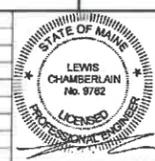
WETPOND LEVEL SPREADER
(NTS)

5.3

SITE DETAILS
PINE TREE BUSINESS PARK
ROUTE 236, ELIOT, MAINE

FOR: MICHAEL ESTES
P.O. BOX 125
YORK, ME 03909

ATTAR ENGINEERING, INC.
CIVIL • STRUCTURAL • MARINE
1284 STATE ROAD - ELIOT, MAINE 03903
PHONE: (207)439-6023 FAX: (207)439-2128



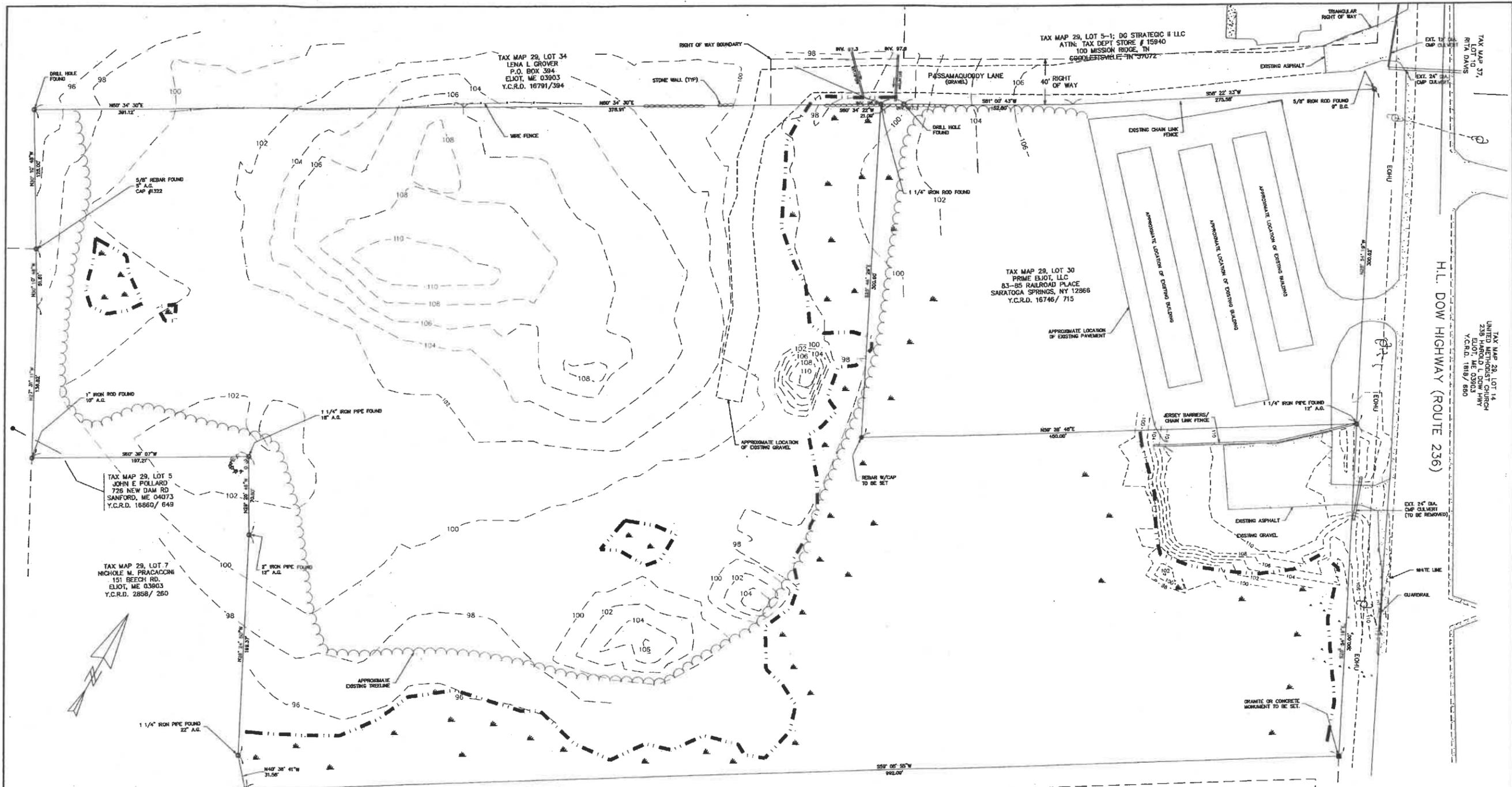
SCALE: AS NOTED
DATE: 12/03/19
JOB NO: C179-19

APPROVED BY: [Signature]
DATE: 12/3/19
CAD FILE: ESTES RTE236 BASE

DRAWN BY:
REVISION: DATE

SHEET 5.3

NO.	DESCRIPTION REVISIONS	DATE



SURVEY NOTES

- 1.) THE BEARINGS DEPICTED HEREON ARE BASED ON REFERENCE PLAN 4.
- 2.) THE WETLAND BOUNDARY AS DEPICTED ON THIS PLAN WAS DELINEATED/PLACED BY JOSEPH W. NOEL, MAINE CERTIFIED SOIL SCIENTIST #204, ON JUNE 18, 2016. THE FLAGS WERE LOCATED BY ATTAR ENGINEERING INC. IN NOVEMBER, 2016. THE DELINEATION WAS CONDUCTED IN ACCORDANCE WITH THE U.S. ARMY CORPS OF ENGINEERS DOCUMENT "CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL" (1987) ALONG WITH THE REQUIRED "REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION," (VERSION 2, JANUARY 2012).
- 3.) A VERNAL POOL INVESTIGATION WAS CONDUCTED BY JOSEPH W. NOEL ON APRIL 18, 2016. NO VERNAL POOLS WERE DOCUMENTED ON THE SITE.
- 4.) THIS PLAN IS THE RESULT OF AN ON THE GROUND SURVEY BY CHRISTEN B. WILBER SURVEY & CONSULTING, LLC IN FEBRUARY 2015 AND COMPILED BOUNDARY INFORMATION FROM THE LISTED PLAN REFERENCES.
- 5.) ELEVATION INFORMATION DEPICTED HEREON IS BASED ON AN ASSUMED DATUM. EXISTING TOPOGRAPHY WAS PROVIDED BY CINC WESTERY OF THE WETLAND (REF: WORKSHEET DATED 2/11/05). EXISTING TOPOGRAPHY AND EXISTING CONDITIONS EASTERLY OF THE WETLAND AND ALONG PASSAMAQUODDY LANE WAS PROVIDED BY ATTAR ENGINEERING INC. IN 2015 AND 2016.

REFERENCE PLANS

- 1) "PLAN OF PROPERTY OF WILLIAM C. & RAYMAH M. MORGRIDGE" Dated April-Sept 1989, Revised & Approved by Eliot Planning Board 03/08/2001 By J.C. Rogers, PLS YCRD Plan Bk 260 Pg.12
- 2) "STANDARD BOUNDARY SURVEY & PROPOSED LOT CONSOLIDATION" For Property of R1236, Eliot, York County, ME Owned by Roy K. Grover & Lena L. Grover. Dated 03/07/2014 by Easterly Surveying, Inc. YCRD Plan Book 366 Pg 30
- 3) "STANDARD BOUNDARY SURVEY" For Property at 151 Beech Road, Eliot, York County, ME Owned by Roy K. & Lena L. Grover, Date 10/03/2014 by Easterly Surveying, Inc. YCRD Plan Book 371 Pg 47
- 4) "STANDARD BOUNDARY SURVEY, LOT LINE ADJUSTMENT & SITE PLAN" For Property at 148 & 155 Beech Road, Eliot, York County, ME Owned by Estate of Raymond D. Grover Dated 12/15/2010 by Easterly Surveying, Inc. YCRD Plan Book 348 Pg. 24
- 5) "ALTA/ACSM LAND TITLE SURVEY OF THE LAND OF RAY K. & LENA GROVER" Harold L. Dow Highway Eliot, ME Dated Sept 18, 2014 By Richard D. Bartlett & Assoc. YCRD Plan Book 376 Pg. 17
- 6) "STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP STATE HIGHWAY "J" ELIOT YORK COUNTY FEDERAL AID PROJECT HES-03-(5)" Dated April 1989, YCRD Plan Book 191 Pgs 26,27 & 28

TAX MAP 29, LOT 33
 PETER B. & ANNETTE M. CANTRELL
 11 GALWAY LN
 ELIOT, ME 03903
 Y.C.R.D. 10184/ 348

LOCUS INFORMATION

OWNER OF RECORD: LADY SLIPPER PROPERTIES, LLC.
 37 ROUTE 236, SUITE 105
 KITTERY, MAINE 03904

RECORD REFERENCE: YORK COUNTY REGISTRY OF DEEDS, BOOK 16333, PAGE 406.

MUNICIPAL REFERENCE: ELIOT TAX MAP 29, LOT 31

AREA: 509,426 SQ. FT. +/- (11.69 ACRES +/-)

FLOOD ZONE: X - OUTSIDE OF 500 YEAR FLOOD PLAN PER FLOOD INSURANCE RATE MAP, TOWN OF ELIOT, MAINE, YORK COUNTY; COMMUNITY PANEL #230149 00106; REVISED JUNE 05, 1989

LAND USE ZONE: COMMERCIAL/INDUSTRIAL DISTRICT (C/I) SHORELAND OVERLAY (LIMITED COMMERCIAL)

LEGEND

EXISTING CONTOUR	---XXX---
FINAL CONTOUR	---XXXX---
WETLAND BOUNDARY	---WETLAND---
UTILITY POLE	EXT. ---TP---PP---MB---
EXT. OVERHEAD UTIL.	---EOHU---
PROPERTY LINE	---P.L.---
TEST PIT	---TP---
CATCH BASIN	---CB---
LIGHT POLE	---LP---
EXT. FIRE HYDRANT	---FH---
WIRE FENCE	---WF---
TREELINE	---TL---
STONE WALL	---SW---



6.1

BOUNDARY SURVEY & TOPOGRAPHIC PLAN
 PINE TREE BUSINESS PARK
 ROUTE 236, ELIOT, MAINE

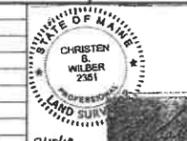
FOR: LADY SLIPPER PROPERTIES, LLC
 37 ROUTE 236, SUITE 105
 KITTERY, ME 03904

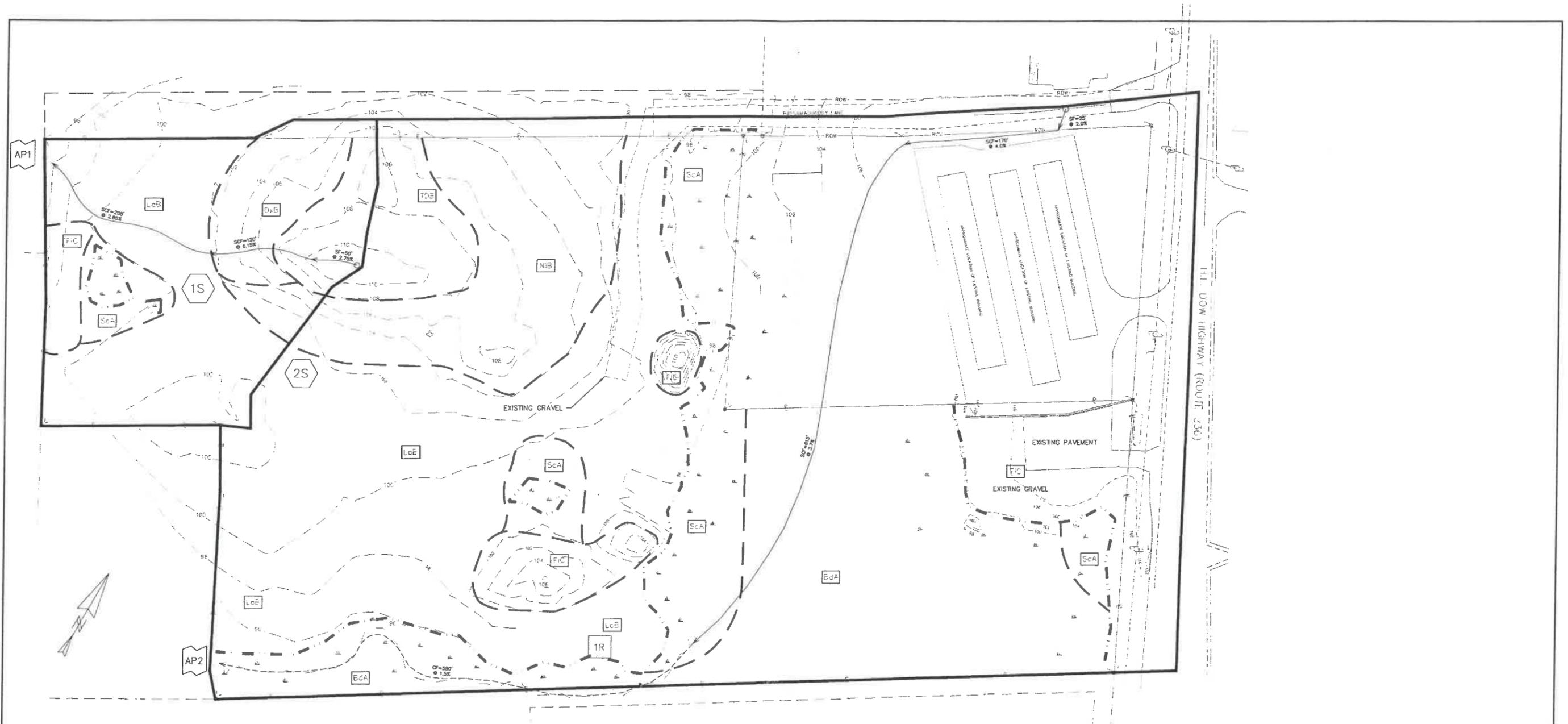
ATTAR ENGINEERING, INC.
 CIVIL • STRUCTURAL • MARINE
 1284 STATE ROAD - ELIOT, MAINE 03903
 PHONE: (207)438-6023 FAX: (207)439-2128

SCALE: 1" = 40'
 DATE: 2/15/2018
 JOB NO: C034-18 CAD FILE: PINEBROOK RTE236 BASE SHEET 6.1

APPROVED BY: [Signature]
 DRAWN BY: MUS
 REVISION: DATE

NO.	DESCRIPTION	DATE





HILL DOW HIGHWAY (ROUTE 236)

LEGEND

WETLAND/SOIL BNDY.	UPLAND
EXT. CONTOUR	---XXX---
PRP. CONTOUR	---XXX---
SUBCATCHMENT BNDY.	—————
SOIL TYPE BOUNDARY	—————
Tc PATH	FLOW TYPE/LENGTH →
SUBCATCHMENT	1S
REACH	1R
POND	1P
ANALYSIS POINT	1L

FLOW TYPES

- SF - SHEET FLOW
- SCF - SHALLOW CONCENTRATED FLOW
- CF - CHANNEL FLOW

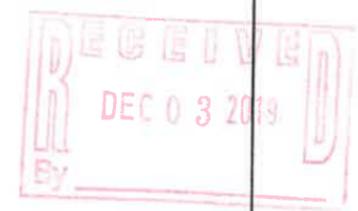
SOILS LEGEND

- Bm - BIDDEFORD MUCKY PEAT, 0% TO 3% SLOPES, HSG D
- BdA - BIDDEFORD MULTI SILT LOAM, 0%-3% SLOPES, HSG D
- DxB - DIXFIELD FINE SANDY LOAM, 3% TO 8% SLOPES, HSG C
- FIC - FILL
- LoB - LAMOINE SILT LOAM, 3% TO 8% SLOPES, HSG D
- NiB - NICHOLVILLE FINE SANDY LOAM, 3% TO 8% SLOPES, HSG C
- ScA - SCANTIC SILT LOAM, 0% TO 3% SLOPES, HSG D
- TDB - TUNBRIDGE-DIXFIELD VARIANT, 3% TO 8% SLOPES, HSG C

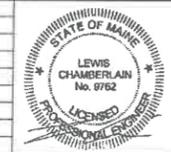
NOTE: ON-SITE SOILS INFORMATION IS TAKEN FROM CLASS A HIGH INTENSITY SOIL SURVEY PREPARED BY MICHAEL CUOMO, ME CSS #211 (SOIL REPORT DATED JULY 2017). ELSEWHERE, SOILS INFORMATION IS TAKEN FROM THE YORK COUNTY SOIL SURVEY.



7.1



NO.	DESCRIPTION	DATE



STORMWATER: EXISTING CONDITIONS
PINE TREE BUSINESS PARK
ROUTE 236, ELIOT, MAINE

FOR: MICHAEL ESTES
P.O. BOX 125
YORK, ME 03909

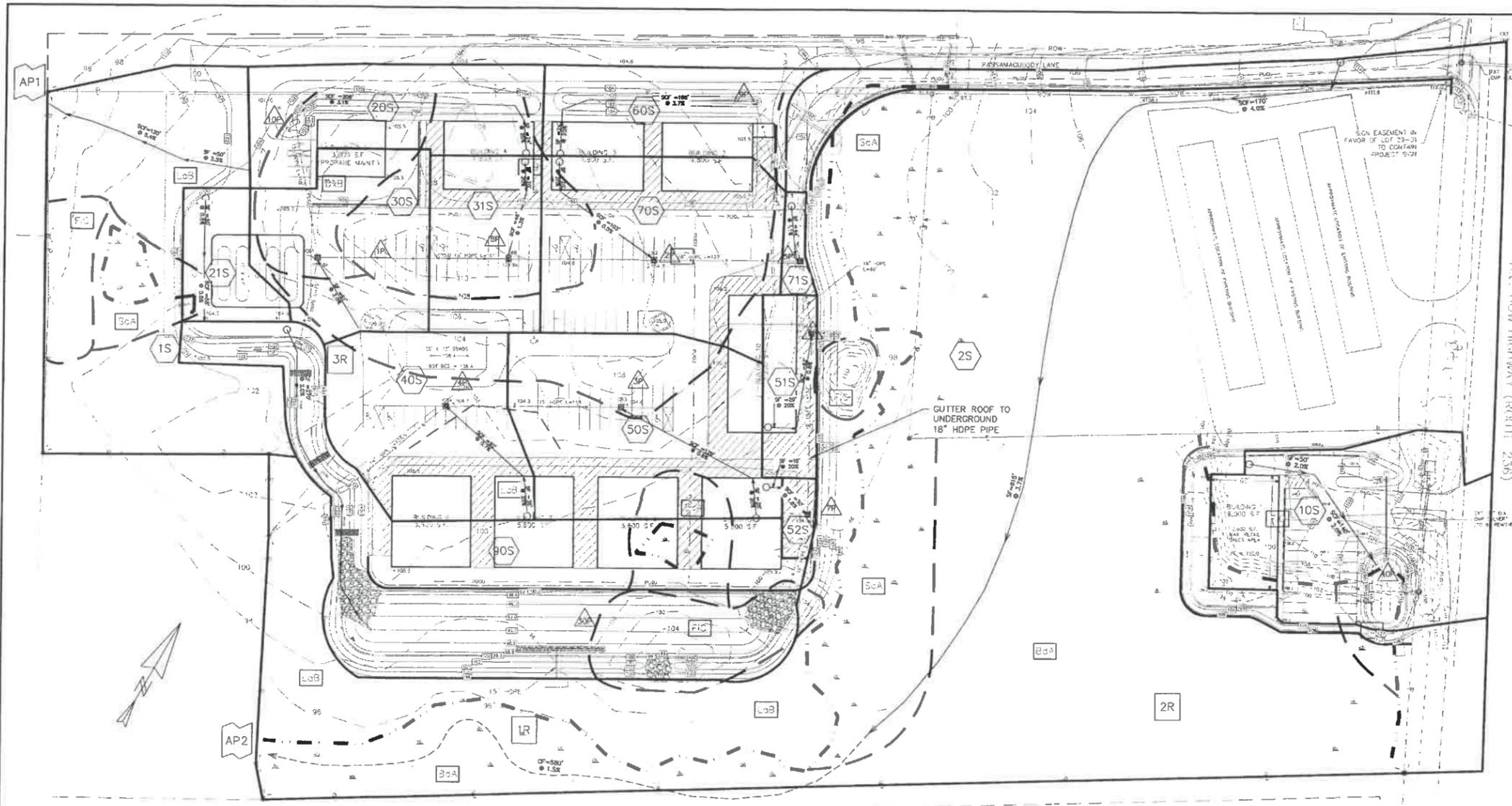
ATTAR ENGINEERING, INC.
CIVIL • STRUCTURAL • MARINE
1284 STATE ROAD - ELIOT, MAINE 03903
PHONE: (207)439-6023 FAX: (207)439-2128

SCALE: 1" = 50'
DATE: 12/03/19
JOB NO: C179-19 CAD FILE: ESTES RTE236 BASE

APPROVED BY: [Signature]
DATE: 12/3/19

DRAWN BY: BRN
REVISION : DATE

SHEET 7.1



FLOW TYPES

- SF - SHEET FLOW
- SCF - SHALLOW CONCENTRATED FLOW
- CF - CHANNEL FLOW

SOILS LEGEND

- Bm - BIDDEFORD MUCKY PEAT, 0% TO 3% SLOPES, HSG D
- BdA - BIDDEFORD MULTI SILT LOAM, 0%-3% SLOPES, HSG D
- DxB - DIXFIELD FINE SANDY LOAM, 3% TO 8% SLOPES, HSG C
- FIC - FILL
- LoB - LAMOINE SILT LOAM, 3% TO 8% SLOPES, HSG D
- NIB - NICHOLVILLE FINE SANDY LOAM, 3% TO 8% HSG C
- ScA - SCANTIC SILT LOAM, 0% TO 3% SLOPES, HSG D
- TDB - TUNBRIDGE-DIXFIELD VARIANT, 3% TO 8% SLOPES, HSG C

NOTE: ON-SITE SOILS INFORMATION IS TAKEN FROM CLASS A HIGH INTENSITY SOIL SURVEY PREPARED BY MICHAEL CUOMO, ME CSS #211 (SOIL REPORT DATED JULY 2017). ELSEWHERE, SOILS INFORMATION IS TAKEN FROM THE YORK COUNTY SOIL SURVEY.

LEGEND

- WETLAND/SOIL BNDY.
- EXT. CONTOUR
- PRP. CONTOUR
- SUBCATCHMENT BNDY.
- SOIL TYPE BOUNDARY
- Tc PATH
- SUBCATCHMENT
- REACH
- POND
- ANALYSIS POINT

POUND - BMP CALCULATIONS
BMP, CPV in
C204-17

POUND SIZING CALCULATIONS

AREA	BMP (in)	LA (sq ft)	RA (sq ft)	CPV (ft³)	P. POOL (ft³)	CHECK
Parcel 1	8,820	8,710				
21S	7,577	361		1,026	2052	
30S	20,322	1,141		1,732	3463	
31S	13,422	1,800		1,892	3385	
60S	17,081	8,148		2,857	5333	
70S	30,819	2,205		800	1400	
51S	1,371	100		2,650	5301	
52S	1,869	88		189	378	
60S	6,104	7,689		3,699	7392	
71S	11,571	562		11,802	23244	
10S	1,880	21		42,965	85,930	OK
10R	16,827	44,616		3,110	6,220	OK
Total	164,066	79,280		19,847	39,694	OK

Provided Permanent Pools = 42,965
Mean Depth(ft) = 3.10
Provided Area = 3,805
Required CPV = 19,847
Required Trench Length = 41

Parcel 2

AREA	BMP (in)	LA (sq ft)	RA (sq ft)	CPV (ft³)	P. POOL (ft³)	CHECK
10S	18,982	9,223		1,881	N/A	
Total	18,982	9,223		1,881	N/A	0.00

5% Impervious + 2% Remaining Area = 1,120
Provided CPV = 3,505
Required CPV = 1,320
OK

BMP - IMPERVIOUS AREA
RA - REMAINING SUBCATCHMENT AREA
BMP - BEST MANAGEMENT PRACTICE
CPV - CHANNEL PROTECTION VOLUME
LA - LANDSCAPED AREA, AREAS THAT WILL BE REPLANTED WITH SHRUBS OR GRASS

TREATMENT CALCULATIONS

New Impervious Area to be Treated (80%) 191,314 sq ft
New Developed Area to be Treated (80%) 250,947 sq ft

4.38 Acres
6.78 Acres

AMENDED DEVELOPED CONDITIONS:

AREA	Created Requires to Treat	Not Treated	Created Requires to Treat	Not Treated	Ext.	Created Requires to Treat	DEV. (in)	Total (Hydro CAD)	Treated	Not Treated
1S	0	1,881	2,262	0	1,881	2,860	1,881	4,741	0	4,741
2S	0	6,715	80,651	0	6,715	15,976	6,715	22,691	0	22,691
3R	0	18,625	23,951	14,462	0	9,223	18,625	27,848	14,462	13,386
40S	0	8,839	12,513	8,839	0	17,678	8,839	26,517	8,839	17,678
50S	0	2,672	2,672	2,672	0	5,344	2,672	8,016	2,672	5,344
51S	0	20,322	20,322	20,322	0	40,644	20,322	61,366	20,322	41,044
52S	0	13,422	13,422	13,422	0	26,844	13,422	40,266	13,422	26,844
60S	0	17,081	17,081	17,081	0	34,162	17,081	51,243	17,081	34,162
70S	0	30,819	30,819	30,819	0	61,638	30,819	92,457	30,819	61,638
71S	0	2,205	2,205	2,205	0	4,410	2,205	6,615	2,205	4,410
10S	0	1,881	1,881	1,881	0	3,762	1,881	5,643	1,881	3,762
10R	0	6,504	6,504	6,504	0	13,008	6,504	19,512	6,504	13,008
10S	0	21,571	11,071	31,642	0	63,284	21,571	84,855	31,642	53,213
71S	0	1,800	1,800	1,800	0	3,600	1,800	5,400	1,800	3,600
60S	0	16,827	16,827	16,827	0	33,654	16,827	50,481	16,827	33,654
TOTAL	0	161,114	178,793	182,948	0	365,891	161,114	527,005	182,948	344,057

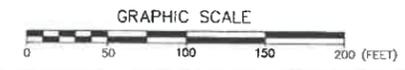
NEW:

AREA	BMP (in)	DEV (in)
Total Area	18,982	28,643
Total Acres	4.38	6.46
% Treated	0.0%	10.0%

30% BMP AND 80% DEV IS REQUIRED
"NO RETENTION" - MAX 1 ACRE SUBCATCHMENT, 500-2000 S.F.

TABLE 1 - QUANTITY CALCULATIONS

EXISTING	AP 1	AP 2	15	20	30	(cfs)
AP 1	3.21	5.56	8.25	10.21	12.21	
AP 2	23.68	43.77	62.60	74.94	88.94	
DEVELOPED	AP 1	1.64	3.27	4.67	5.97	(cfs)
AP 2	14.11	33.48	47.07	62.75		
CHANGE	AP 1	-1.57	-2.68	-3.58	-4.34	(cfs)
AP 2	-9.57	-10.31	-13.33	-12.19		



7.2

STORMWATER: DEVELOPED CONDITIONS AND TREATMENT PLAN
PINE TREE BUSINESS PARK
ROUTE 236, ELIOT, MAINE

FOR: MICHAEL ESTES
P.O. BOX 125
YORK, ME 03909

ATTAR ENGINEERING, INC.
CIVIL • STRUCTURAL • MARINE
1284 STATE ROAD - ELIOT, MAINE 03903
PHONE: (207)439-6023 FAX: (207)439-2128

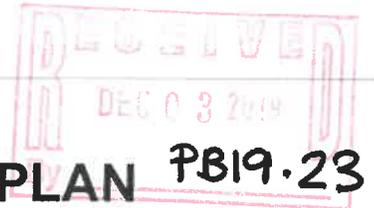
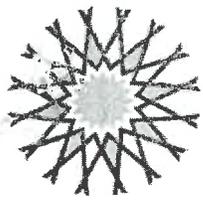
SCALE: 1" = 50'
DATE: 12/03/19

APPROVED BY: [Signature]
12/3/19

DRAWN BY: BRN
REVISION: DATE

JOB NO: C179-19 CAD FILE: ESTES RTE236 BASE SHEET 7.2

NO.	DESCRIPTION	DATE



STORMWATER MANAGEMENT PLAN
PINE TREE BUSINESS PARK
PASSAMAQUODDY LANE AND H.L. DOW HIGHWAY (RT. 236)
ELIOT, MAINE

Project No.: C179-19

December 3, 2019

◆ **Scope**

This stormwater management plan has been prepared for the proposed commercial / industrial development located at the above reference address in Eliot, Maine. The project consists of two sections, a westerly section and an easterly section the two sections are separated by a wetland/ stream complex.

The easterly section will contain one commercial building and small parking lot intended to support a retail or office use. This section is adjacent to Rt. 236 and will have direct access.

The westerly section a series of building supporting commercial / industrial uses with associated parking and infrastructure improvements, including a wetpond for stormwater detention and treatment. This section will be accessed from Passamaquoddy Lane, which will be improved from an existing gravel to a paved surface.

The project requires a Maine Department of Environmental Protection (MDEP) Site Location of Development Permit, therefore, it must meet the Basic Standards, General Standards and Flooding Standards described in the MDEP publication, *Chapter 500, Stormwater Management*. The project must also meet the stormwater management requirements outlined in the Town of Eliot Municipal Code of Ordinances Section 45-411 (Stormwater runoff).

The project will create approximately 6.5 acres of developed area and 4.0 acres of impervious area.

The site will be accessed by Passamaquoddy Lane, an existing gravel road, which will be paved as part of the development. The paving is considered maintenance, therefore the impervious and developed areas of Passamaquoddy Lane are not included in areas required to meet the General Standard.

◆ **Site and Watershed Description**

The project site is located on near the intersection of Route 236 and Beech Road in Eliot, Maine. A 7½ minute series U.S.G.S. map of the project area is attached. A wetland / stream complex divides the parcel into a westerly section and an easterly section. The westerly section is mostly undeveloped with scrub vegetation. This part of the site has been previously partially cleared and grubbed; existing vegetation is secondary growth. A small part of this section is currently used for storage of various materials. The easterly section of the site, adjacent to Route 236 consists of a previously developed paved and gravel exterior storage area. The wetland / stream complex drains, in general, from northeast to southwest.

The site is located in the Great Creek watershed (source: USGS 7 ½ minute series, Dover East Quadrangle; and Soil Survey of York County, Maine). Great Creek is tributary to Sturgeon Creek, the Piscataqua River and the Atlantic Ocean.

The topography of the site is near level to gently rolling (existing grades from 2% to 8%, with some steeper side slopes in the easterly area along Rt. 236). On-site elevations (datum is NGVD 1929) range from approximately 114' along Rt. 236, a high point of approximately 110' in the westerly section to a low point of approximately 96' at the southwesterly property corner.

No areas of the site are located within a 100-Year Special Flood Hazard Area as determined by the Federal Emergency Management Agency (FEMA).

Proposed cuts and fills are mostly between 0 and 8 feet. One wetpond is proposed; with associated cuts up to 15 feet.

◆ **Soils/Hydrologic Soil Groups**

Soil types and their respective Hydrologic Soil Groups (HSG) were taken from a Class A High Intensity Soil Survey prepared by Michael Cuomo, soil scientist. Further description of the soils and their respective HSG's appears on the drainage plans and High Intensity Soil Survey report.

◆ **Methodology**

The stormwater quantity analysis was conducted using the HydroCAD Stormwater Modeling System by Applied Microcomputer Systems. The analysis was accomplished to determine the "Existing Condition" and "Developed Condition" stormwater flows. Both cases were analyzed for the 2, 10, 25 and 50 year, 24-hour frequency storm events. The Existing Condition analyzes the site as it currently exists (wooded and undeveloped) and the Developed Condition models the site with the proposed development described above.

◆ **Water Quantity Analysis and Results**

Existing Condition

The site was modeled as two subcatchments (SC) for the Existing Condition analysis. SC 2 includes on and off-site areas.

Analysis Points (AP) were selected at two locations, downstream of the SC's. The Analysis Points are located downstream of the proposed developed areas and provide convenient locations to compare Existing Condition flows to Developed Condition flows.

SC 1 (tributary to AP 1) includes a small portion of the site that drains in a non-channelized fashion, to the westerly property line.

SC 2 (tributary to AP 2) includes a majority of the project site as well as off-site areas to the north, including the east end of Passamaquoddy Lane. This SC drains to a wooded wetland complex throughout the interior of the site and is tributary to the westerly property line via the wooded wetland. This wetland represents the lowest point of elevation on the site.

Developed Condition

The Developed Condition analysis consists of twelve subcatchments. SC's 1 and 2 contain mostly undeveloped on-site areas and developed and undeveloped off-site areas; SC's 10-90 contain mostly on-site developed areas. Other features such as ponds and reaches were added to account for on-site routing, detention and treatment of stormwater. One wetpond (Pond 30) and one underdrained soil filter pond (USF) (Pond 40) are proposed. These Best Management Practices (BMP's) provide both retention and treatment of stormwater. Calculations are provided to show the relevant Channel Protection Volume (CPV) and other sizing requirements, for each BMP. All Developed Condition flows are routed to AP 1 and AP 2, described above.

Tables showing Existing Condition peak flows, Developed Condition peak flows and the change in peak flow from Existing Condition to Developed Condition are presented on a separate page.

The analysis indicates decreases in peak flow at AP 1 and AP 2 for all storm events, thus meeting the MDEP Flooding Standard described above.

Runoff from the wetponds will be routed through an outlet structure, pipe and level spreader prior to discharge to undisturbed, on-site, areas.

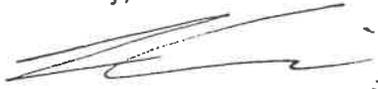
◆ **Water Quality**

In accordance with the MDEP *Chapter 500* General Standards, runoff from developed areas on the site will receive treatment in two wetponds and a wooded buffer prior to being discharged from the site. Approximately 95.6% of the impervious area and 90.8% of the developed area will be treated, exceeding the MDEP General Standards requirements of 95% and 80%, respectively. Treatment calculations and wetpond / USF sizing calculations are included in this report.

◆ **Summary**

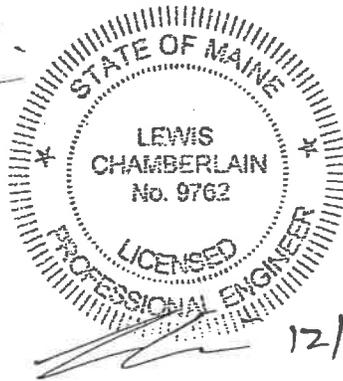
The use of a wetpond and an underdrained soil filter pond to attenuate peak flows results in no significant increase in peak runoff quantity from the proposed development. No adverse effects are anticipated on any downstream properties or drainage structures for the analyzed storm events. Runoff quality is addressed by the use of BMP's, including a wetpond with gravel trench outlet and an underdrained soil filter pond.

Sincerely;

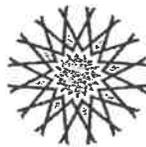
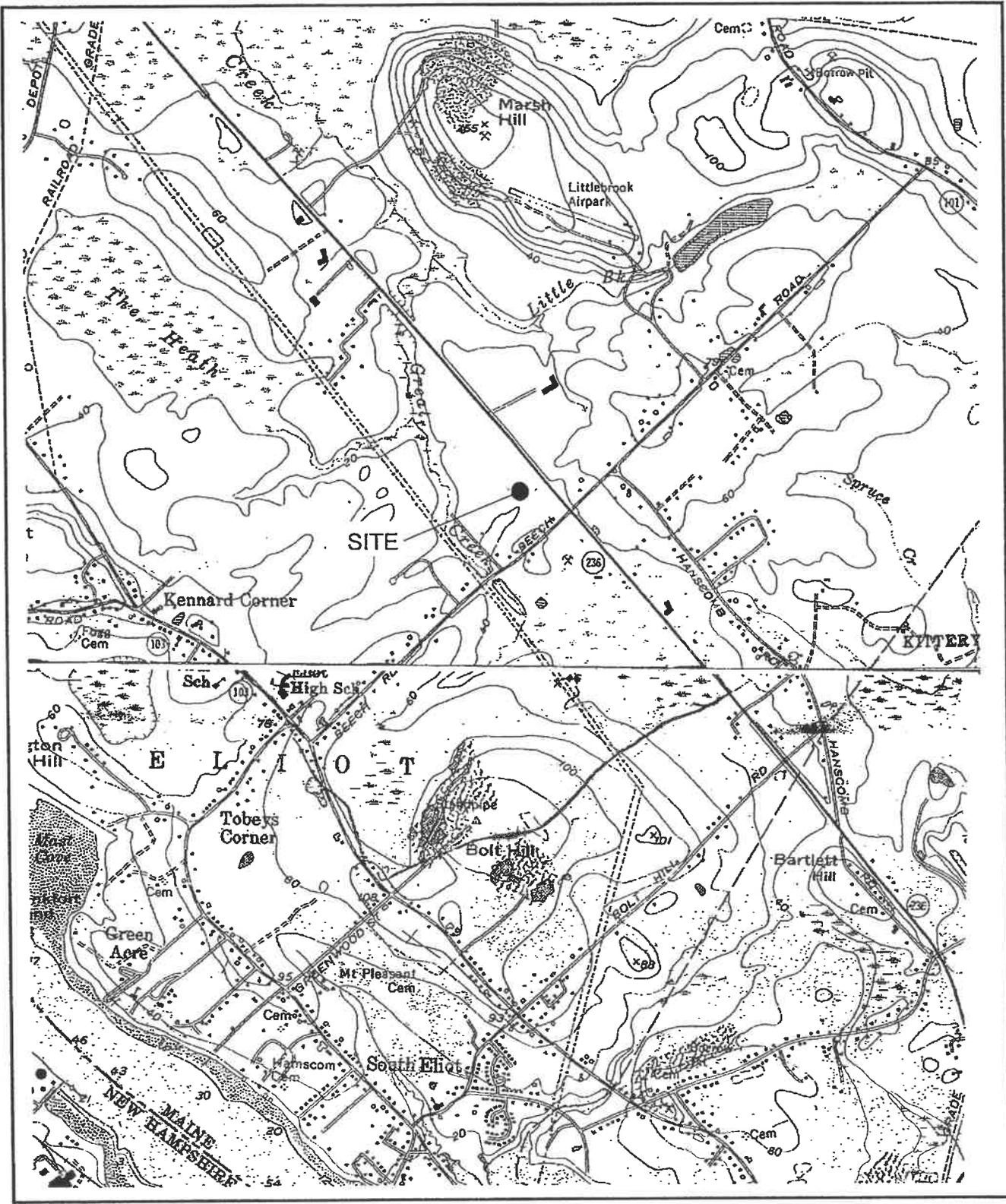


Lewis Chamberlain, P.E.

C179-19_SW.doc



12/3/19

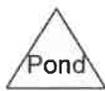
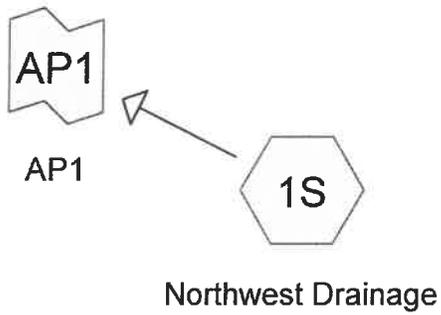


ATTAR
ENGINEERING, INC
CIVIL - STRUCTURAL - MARINE

1284 STATE ROAD, ELIOT ME 03903

LOCATION MAP
COMMERCIAL / INDUSTRIAL DEVELOPMENT
H.L. DOW HIGHWAY (Route 236), ELIOT, ME
USGS MAP, DOVER EAST, NH - ME QUADRANT
APPROX. SCALE: 1:24,000
PROJECT NO. C034-15

EXISTING CONDITION CALCULATIONS



Pine Brook SWA EXT(check)

Prepared by Hewlett-Packard Company
HydroCAD® 10.00 s/n 01988 © 2011 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.457	79	50-75% Grass cover, Fair, HSG C (1S, 2S)
5.943	79	Woods, Fair, HSG D (1S, 2S)
6.324	84	50-75% Grass cover, Fair, HSG D (1S, 2S)
1.989	98	Unconnected pavement, HSG D (2S)
16.713	83	TOTAL AREA

Pine Brook SWA EXT(check)

Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Prepared by Hewlett-Packard Company

Printed 7/20/2018

HydroCAD® 10.00 s/n 01988 © 2011 HydroCAD Software Solutions LLC

Page 3

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Northwest Drainage

Runoff Area=99,881 sf 0.00% Impervious Runoff Depth>3.91"
Flow Length=378' Tc=15.7 min CN=82 Runoff=8.25 cfs 0.747 af

Subcatchment 2S: Wetland Drainage to

Runoff Area=628,144 sf 13.79% Impervious Runoff Depth>3.92"
Flow Length=1,390' Tc=9.8 min UI Adjusted CN=82 Runoff=60.60 cfs 4.706 af

Link AP1: AP1

Inflow=8.25 cfs 0.747 af
Primary=8.25 cfs 0.747 af

Link AP2: AP2

Inflow=60.60 cfs 4.706 af
Primary=60.60 cfs 4.706 af

Total Runoff Area = 16.713 ac Runoff Volume = 5.453 af Average Runoff Depth = 3.92"
88.10% Pervious = 14.724 ac 11.90% Impervious = 1.989 ac

Summary for Subcatchment 1S: Northwest Drainage

Runoff = 8.25 cfs @ 12.21 hrs, Volume= 0.747 af, Depth> 3.91"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
16,248	79	Woods, Fair, HSG D
55,037	84	50-75% Grass cover, Fair, HSG D
17,665	79	50-75% Grass cover, Fair, HSG C
10,931	79	50-75% Grass cover, Fair, HSG C
99,881	82	Weighted Average
99,881		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.2	50	0.0275	0.07		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.00"
1.6	120	0.0615	1.24		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.9	208	0.0285	1.18		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
15.7	378	Total			

Summary for Subcatchment 2S: Wetland Drainage to Stream

Runoff = 60.60 cfs @ 12.14 hrs, Volume= 4.706 af, Depth> 3.92"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
86,644	98	Unconnected pavement, HSG D
242,621	79	Woods, Fair, HSG D
220,442	84	50-75% Grass cover, Fair, HSG D
60,051	79	50-75% Grass cover, Fair, HSG C
18,386	79	50-75% Grass cover, Fair, HSG C
628,144	83	Weighted Average, UI Adjusted CN = 82
541,500		86.21% Pervious Area
86,644		13.79% Impervious Area
86,644		100.00% Unconnected

Pine Brook SWA EXT(check)

Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Prepared by Hewlett-Packard Company

Printed 7/20/2018

HydroCAD® 10.00 s/n 01988 © 2011 HydroCAD Software Solutions LLC

Page 5

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	25	0.0200	1.01		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.00"
0.7	170	0.0400	4.06		Shallow Concentrated Flow, Paved Kv= 20.3 fps
7.6	615	0.0370	1.35		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.1	580	0.0150	8.90	213.67	Channel Flow, Area= 24.0 sf Perim= 13.5' r= 1.78' n= 0.030 Earth, grassed & winding
9.8	1,390	Total			

Summary for Link AP1: AP1

Inflow Area = 2.293 ac, 0.00% Impervious, Inflow Depth > 3.91" for 25-YEAR STORM event
 Inflow = 8.25 cfs @ 12.21 hrs, Volume= 0.747 af
 Primary = 8.25 cfs @ 12.21 hrs, Volume= 0.747 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Summary for Link AP2: AP2

Inflow Area = 14.420 ac, 13.79% Impervious, Inflow Depth > 3.92" for 25-YEAR STORM event
 Inflow = 60.60 cfs @ 12.14 hrs, Volume= 4.706 af
 Primary = 60.60 cfs @ 12.14 hrs, Volume= 4.706 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Pine Brook SWA EXT(check)

Type III 24-hr 2-YEAR STORM Rainfall=3.30"

Prepared by Hewlett-Packard Company

Printed 7/20/2018

HydroCAD® 10.00 s/n 01988 © 2011 HydroCAD Software Solutions LLC

Page 1

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Northwest Drainage

Runoff Area=99,881 sf 0.00% Impervious Runoff Depth>1.50"
Flow Length=378' Tc=15.7 min CN=82 Runoff=3.21 cfs 0.286 af

Subcatchment 2S: Wetland Drainage to

Runoff Area=628,144 sf 13.79% Impervious Runoff Depth>1.50"
Flow Length=1,390' Tc=9.8 min UI Adjusted CN=82 Runoff=23.68 cfs 1.803 af

Link AP1: AP1

Inflow=3.21 cfs 0.286 af
Primary=3.21 cfs 0.286 af

Link AP2: AP2

Inflow=23.68 cfs 1.803 af
Primary=23.68 cfs 1.803 af

Total Runoff Area = 16.713 ac Runoff Volume = 2.089 af Average Runoff Depth = 1.50"
88.10% Pervious = 14.724 ac 11.90% Impervious = 1.989 ac

Pine Brook SWA EXT(check)

Type III 24-hr 10-YEAR STORM Rainfall=4.90"

Prepared by Hewlett-Packard Company

Printed 7/20/2018

HydroCAD® 10.00 s/n 01988 © 2011 HydroCAD Software Solutions LLC

Page 2

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Northwest Drainage

Runoff Area=99,881 sf 0.00% Impervious Runoff Depth>2.79"
Flow Length=378' Tc=15.7 min CN=82 Runoff=5.95 cfs 0.533 af

Subcatchment 2S: Wetland Drainage to

Runoff Area=628,144 sf 13.79% Impervious Runoff Depth>2.80"
Flow Length=1,390' Tc=9.8 min UI Adjusted CN=82 Runoff=43.77 cfs 3.359 af

Link AP1: AP1

Inflow=5.95 cfs 0.533 af
Primary=5.95 cfs 0.533 af

Link AP2: AP2

Inflow=43.77 cfs 3.359 af
Primary=43.77 cfs 3.359 af

Total Runoff Area = 16.713 ac Runoff Volume = 3.893 af Average Runoff Depth = 2.79"
88.10% Pervious = 14.724 ac 11.90% Impervious = 1.989 ac

Pine Brook SWA EXT(check)

Type III 24-hr 50-YEAR STORM Rainfall=7.30"

Prepared by Hewlett-Packard Company

Printed 7/20/2018

HydroCAD® 10.00 s/n 01988 © 2011 HydroCAD Software Solutions LLC

Page 3

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Northwest Drainage

Runoff Area=99,881 sf 0.00% Impervious Runoff Depth>4.88"
Flow Length=378' Tc=15.7 min CN=82 Runoff=10.21 cfs 0.933 af

Subcatchment 2S: Wetland Drainage to

Runoff Area=628,144 sf 13.79% Impervious Runoff Depth>4.89"
Flow Length=1,390' Tc=9.8 min UI Adjusted CN=82 Runoff=74.94 cfs 5.878 af

Link AP1: AP1

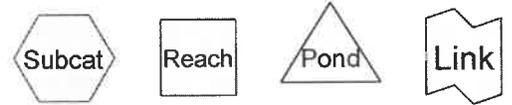
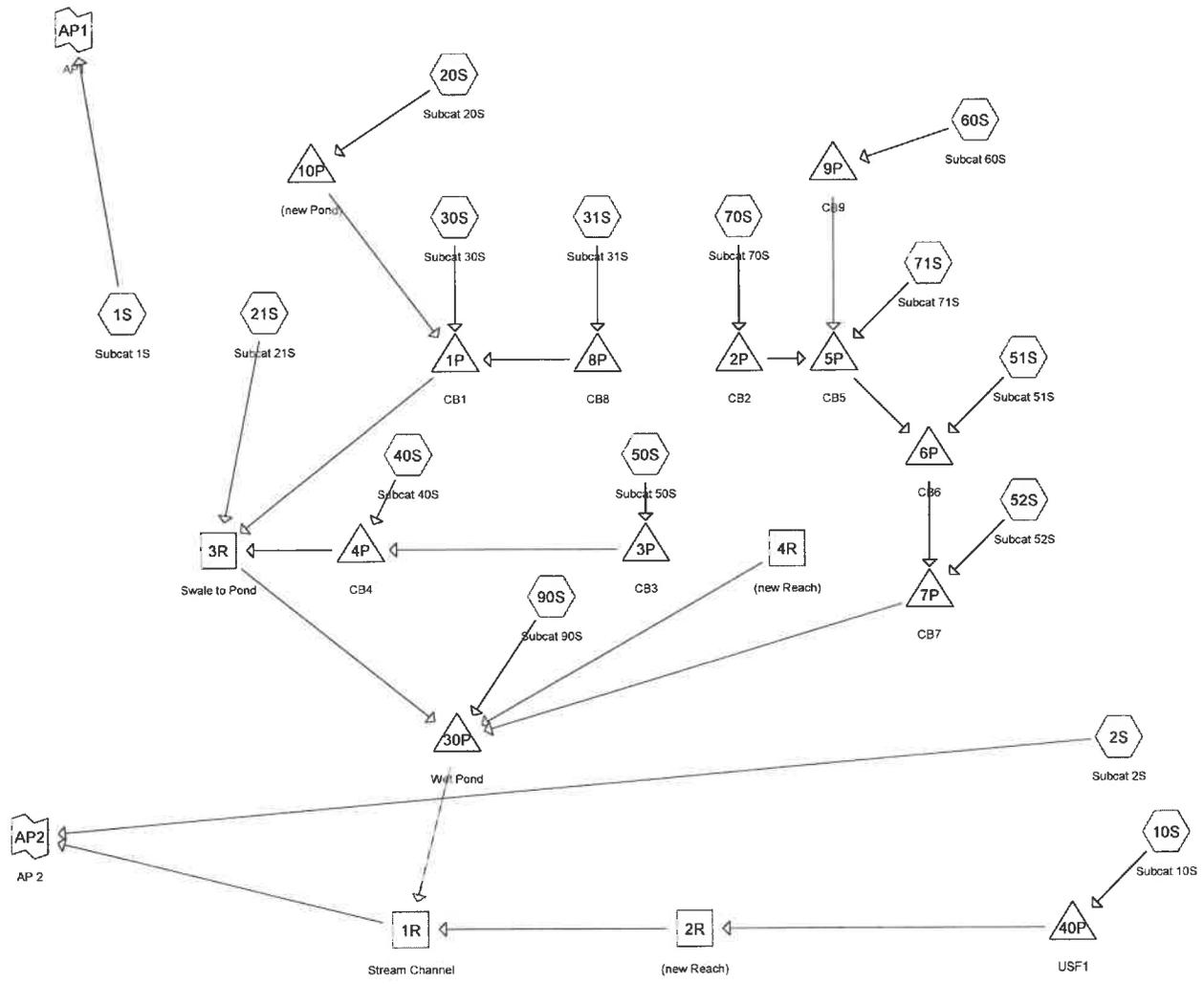
Inflow=10.21 cfs 0.933 af
Primary=10.21 cfs 0.933 af

Link AP2: AP2

Inflow=74.94 cfs 5.878 af
Primary=74.94 cfs 5.878 af

Total Runoff Area = 16.713 ac Runoff Volume = 6.812 af Average Runoff Depth = 4.89"
88.10% Pervious = 14.724 ac 11.90% Impervious = 1.989 ac

DEVELOPED CONDITION CALCULATIONS



Routing Diagram for Pine Brook SWA DEV(check)
 Prepared by Attar Engineering, Printed 12/3/2019
 HydroCAD® 10.00-24 s/n 01988 © 2018 HydroCAD Software Solutions LLC

Pine Brook SWA DEV(check)

Prepared by Attar Engineering

HydroCAD® 10.00-24 s/n 01988 © 2018 HydroCAD Software Solutions LLC

Printed 12/3/2019

Page 2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
100,508	80	>75% Grass cover, Good, HSG D (1S, 2S, 10S, 20S, 21S, 30S, 31S, 40S, 50S, 51S, 52S, 60S, 70S, 71S, 90S)
191,361	98	Paved parking, HSG D (1S, 2S, 10S, 20S, 21S, 30S, 31S, 40S, 50S, 51S, 52S, 60S, 70S, 71S, 90S)
88,470	98	Unconnected pavement, HSG D (1S, 2S, 10S, 20S, 60S)
354,343	77	Woods, Good, HSG D (1S, 2S, 10S, 52S, 60S, 90S)
734,681	85	TOTAL AREA

Time span=0.00-26.00 hrs, dt=0.01 hrs, 2601 points x 2
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: Subcat 1S	Runoff Area=52,197 sf 4.48% Impervious Runoff Depth=3.76" Flow Length=180' Tc=9.6 min CN=78 Runoff=4.67 cfs 16,338 cf
Subcatchment2S: Subcat 2S	Runoff Area=396,542 sf 21.09% Impervious Runoff Depth=3.96" Flow Length=1,390' Tc=10.0 min UI Adjusted CN=80 Runoff=36.80 cfs 130,932 cf
Subcatchment10S: Subcat 10S	Runoff Area=35,294 sf 65.42% Impervious Runoff Depth=5.27" Flow Length=190' Slope=0.0200 '/ Tc=1.5 min CN=92 Runoff=5.50 cfs 15,489 cf
Subcatchment20S: Subcat 20S	Runoff Area=21,222 sf 58.96% Impervious Runoff Depth=5.15" Flow Length=226' Tc=2.8 min CN=91 Runoff=3.12 cfs 9,113 cf
Subcatchment21S: Subcat 21S	Runoff Area=7,933 sf 95.44% Impervious Runoff Depth=5.84" Flow Length=105' Slope=0.0050 '/ Tc=1.9 min CN=97 Runoff=1.27 cfs 3,863 cf
Subcatchment30S: Subcat 30S	Runoff Area=21,463 sf 94.68% Impervious Runoff Depth=5.84" Flow Length=61' Slope=0.0200 '/ Tc=0.8 min CN=97 Runoff=3.58 cfs 10,452 cf
Subcatchment31S: Subcat 31S	Runoff Area=15,082 sf 88.99% Impervious Runoff Depth=5.73" Flow Length=66' Tc=0.4 min CN=96 Runoff=2.51 cfs 7,197 cf
Subcatchment40S: Subcat 40S	Runoff Area=25,198 sf 67.67% Impervious Runoff Depth=5.27" Flow Length=127' Tc=1.1 min CN=92 Runoff=3.97 cfs 11,058 cf
Subcatchment50S: Subcat 50S	Runoff Area=33,774 sf 91.25% Impervious Runoff Depth=5.73" Flow Length=164' Tc=0.6 min CN=96 Runoff=5.63 cfs 16,117 cf
Subcatchment51S: Subcat 51S	Runoff Area=7,471 sf 98.66% Impervious Runoff Depth=5.96" Flow Length=111' Tc=1.0 min CN=98 Runoff=1.24 cfs 3,712 cf
Subcatchment52S: Subcat 52S	Runoff Area=1,948 sf 95.46% Impervious Runoff Depth=5.84" Flow Length=48' Tc=0.3 min CN=97 Runoff=0.33 cfs 949 cf
Subcatchment60S: Subcat 60S	Runoff Area=17,214 sf 55.33% Impervious Runoff Depth=5.04" Flow Length=190' Tc=2.1 min CN=90 Runoff=2.56 cfs 7,231 cf
Subcatchment70S: Subcat 70S	Runoff Area=32,153 sf 98.19% Impervious Runoff Depth=5.96" Flow Length=123' Tc=1.3 min CN=98 Runoff=5.30 cfs 15,974 cf
Subcatchment71S: Subcat 71S	Runoff Area=1,920 sf 98.93% Impervious Runoff Depth=5.96" Flow Length=44' Slope=0.0110 '/ Tc=0.8 min CN=98 Runoff=0.32 cfs 954 cf
Subcatchment90S: Subcat 90S	Runoff Area=65,270 sf 25.78% Impervious Runoff Depth=4.38" Flow Length=270' Slope=0.0200 '/ Tc=2.1 min CN=84 Runoff=8.72 cfs 23,846 cf
Reach 1R: Stream Channel	Avg. Flow Depth=0.89' Max Vel=2.75 fps Inflow=14.70 cfs 103,410 cf n=0.025 L=580.0' S=0.0034 '/ Capacity=123.02 cfs Outflow=14.50 cfs 103,239 cf

Reach 2R: (new Reach) Avg. Flow Depth=0.75' Max Vel=0.39 fps Inflow=4.23 cfs 13,288 cf
n=0.080 L=450.0' S=0.0011 '/ Capacity=132.09 cfs Outflow=2.28 cfs 13,100 cf

Reach 3R: Swale to Pond Avg. Flow Depth=0.66' Max Vel=2.11 fps Inflow=17.66 cfs 57,444 cf
n=0.035 L=280.0' S=0.0054 '/ Capacity=125.21 cfs Outflow=16.83 cfs 57,441 cf

Reach 4R: (new Reach) Avg. Flow Depth=0.00' Max Vel=0.00 fps
n=0.013 L=200.0' S=0.0025 '/ Capacity=0.63 cfs Outflow=0.00 cfs 0 cf

Pond 1P: CB1 Peak Elev=102.43' Storage=45 cf Inflow=7.34 cfs 26,504 cf
18.0" Round Culvert n=0.013 L=75.0' S=0.0067 '/ Outflow=7.34 cfs 26,478 cf

Pond 2P: CB2 Peak Elev=102.79' Storage=36 cf Inflow=5.30 cfs 15,974 cf
18.0" Round Culvert n=0.013 L=122.0' S=0.0049 '/ Outflow=5.22 cfs 15,962 cf

Pond 3P: CB3 Peak Elev=104.49' Storage=175 cf Inflow=5.63 cfs 16,117 cf
15.0" Round Culvert n=0.013 L=148.0' S=0.0054 '/ Outflow=5.26 cfs 16,083 cf

Pond 4P: CB4 Peak Elev=103.09' Storage=66 cf Inflow=9.14 cfs 27,141 cf
18.0" Round Culvert n=0.013 L=108.5' S=0.0055 '/ Outflow=9.13 cfs 27,103 cf

Pond 5P: CB5 Peak Elev=102.33' Storage=43 cf Inflow=5.63 cfs 24,146 cf
18.0" Round Culvert n=0.013 L=60.0' S=0.0067 '/ Outflow=5.57 cfs 24,130 cf

Pond 6P: CB6 Peak Elev=101.92' Storage=38 cf Inflow=6.73 cfs 27,842 cf
18.0" Round Culvert n=0.013 L=151.5' S=0.0046 '/ Outflow=6.73 cfs 27,833 cf

Pond 7P: CB7 Peak Elev=101.05' Storage=40 cf Inflow=7.03 cfs 28,781 cf
18.0" Round Culvert n=0.013 L=70.0' S=0.0050 '/ Outflow=7.02 cfs 28,761 cf

Pond 8P: CB8 Peak Elev=102.80' Storage=36 cf Inflow=2.51 cfs 7,197 cf
15.0" Round Culvert n=0.013 L=161.0' S=0.0053 '/ Outflow=2.47 cfs 7,181 cf

Pond 9P: CB9 Peak Elev=102.31' Storage=1,170 cf Inflow=2.56 cfs 7,231 cf
15.0" Round Culvert n=0.013 L=142.1' S=0.0049 '/ Outflow=2.41 cfs 7,230 cf

Pond 10P: (new Pond) Peak Elev=102.88' Storage=1,081 cf Inflow=3.12 cfs 9,113 cf
15.0" Round Culvert n=0.020 L=110.6' S=0.0054 '/ Outflow=3.04 cfs 8,871 cf

Pond 30P: Wet Pond Peak Elev=100.72' Storage=89,807 cf Inflow=31.99 cfs 110,048 cf
Primary=7.66 cfs 83,870 cf Secondary=4.99 cfs 6,439 cf Outflow=12.48 cfs 90,309 cf

Pond 40P: USF1 Peak Elev=106.28' Storage=4,283 cf Inflow=5.50 cfs 15,489 cf
Outflow=4.23 cfs 13,288 cf

Link AP1: AP1 Inflow=4.67 cfs 16,338 cf
Primary=4.67 cfs 16,338 cf

Link AP2: AP 2 Inflow=47.07 cfs 234,170 cf
Primary=47.07 cfs 234,170 cf

Total Runoff Area = 734,681 sf Runoff Volume = 273,224 cf Average Runoff Depth = 4.46"
61.91% Pervious = 454,851 sf 38.09% Impervious = 279,831 sf

Summary for Subcatchment 1S: Subcat 1S

Runoff = 4.67 cfs @ 12.13 hrs, Volume= 16,338 cf, Depth= 3.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
1,983	80	>75% Grass cover, Good, HSG D
1,696	98	Paved parking, HSG D
643	98	Unconnected pavement, HSG D
47,874	77	Woods, Good, HSG D
52,197	78	Weighted Average
49,857		95.52% Pervious Area
2,339		4.48% Impervious Area
643		27.49% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	50	0.0250	0.11		Sheet Flow, Grass: Dense n= 0.240 P2= 3.00"
1.9	130	0.0540	1.16		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
9.6	180	Total			

Summary for Subcatchment 2S: Subcat 2S

Runoff = 36.80 cfs @ 12.14 hrs, Volume= 130,932 cf, Depth= 3.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Adj	Description
13,048	80		>75% Grass cover, Good, HSG D
6,715	98		Paved parking, HSG D
76,935	98		Unconnected pavement, HSG D
299,844	77		Woods, Good, HSG D
396,542	82	80	Weighted Average, UI Adjusted
312,892			78.91% Pervious Area
83,651			21.09% Impervious Area
76,935			91.97% Unconnected

Pine Brook SWA DEV(check)

Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Prepared by Attar Engineering

Printed 12/3/2019

HydroCAD® 10.00-24 s/n 01988 © 2018 HydroCAD Software Solutions LLC

Page 6

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	25	0.0200	1.01		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.00"
0.9	170	0.0400	3.22		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
7.6	615	0.0370	1.35		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.1	580	0.0150	8.90	213.67	Channel Flow, Area= 24.0 sf Perim= 13.5' r= 1.78' n= 0.030 Stream, clean & straight
10.0	1,390	Total			

Summary for Subcatchment 10S: Subcat 10S

Runoff = 5.50 cfs @ 12.02 hrs, Volume= 15,489 cf, Depth= 5.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
9,223	80	>75% Grass cover, Good, HSG D
18,882	98	Paved parking, HSG D
4,209	98	Unconnected pavement, HSG D
2,980	77	Woods, Good, HSG D
35,294	92	Weighted Average
12,203		34.58% Pervious Area
23,091		65.42% Impervious Area
4,209		18.23% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	50	0.0200	1.16		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.00"
0.8	140	0.0200	2.87		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.5	190	Total			

Summary for Subcatchment 20S: Subcat 20S

Runoff = 3.12 cfs @ 12.04 hrs, Volume= 9,113 cf, Depth= 5.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
8,710	80	>75% Grass cover, Good, HSG D
8,829	98	Paved parking, HSG D
3,683	98	Unconnected pavement, HSG D
21,222	91	Weighted Average
8,710		41.04% Pervious Area
12,511		58.96% Impervious Area
3,683		29.43% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.0	20	0.2000	9.08		Shallow Concentrated Flow, Paved Kv= 20.3 fps
2.8	206	0.0310	1.23		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.8	226	Total			

Summary for Subcatchment 21S: Subcat 21S

Runoff = 1.27 cfs @ 12.03 hrs, Volume= 3,863 cf, Depth= 5.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
361	80	>75% Grass cover, Good, HSG D
7,572	98	Paved parking, HSG D
7,933	97	Weighted Average
361		4.56% Pervious Area
7,572		95.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	50	0.0050	0.67		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.00"
0.6	55	0.0050	1.44		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.9	105	Total			

Summary for Subcatchment 30S: Subcat 30S

Runoff = 3.58 cfs @ 12.01 hrs, Volume= 10,452 cf, Depth= 5.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
1,141	80	>75% Grass cover, Good, HSG D
20,322	98	Paved parking, HSG D
21,463	97	Weighted Average
1,141		5.32% Pervious Area
20,322		94.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	61	0.0200	1.21		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.00"

Summary for Subcatchment 31S: Subcat 31S

Runoff = 2.51 cfs @ 12.01 hrs, Volume= 7,197 cf, Depth= 5.73"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
1,660	80	>75% Grass cover, Good, HSG D
13,422	98	Paved parking, HSG D
15,082	96	Weighted Average
1,660		11.01% Pervious Area
13,422		88.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	20	0.2000	2.42		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.00"
0.3	46	0.0130	2.31		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.4	66	Total			

Summary for Subcatchment 40S: Subcat 40S

Runoff = 3.97 cfs @ 12.02 hrs, Volume= 11,058 cf, Depth= 5.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
8,146	80	>75% Grass cover, Good, HSG D
17,051	98	Paved parking, HSG D
25,198	92	Weighted Average
8,146		32.33% Pervious Area
17,051		67.67% Impervious Area

Pine Brook SWA DEV(check)

Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Prepared by Attar Engineering

Printed 12/3/2019

HydroCAD® 10.00-24 s/n 01988 © 2018 HydroCAD Software Solutions LLC

Page 9

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	35	0.2000	2.71		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.00"
0.9	92	0.0070	1.70		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.1	127	Total			

Summary for Subcatchment 50S: Subcat 50S

Runoff = 5.63 cfs @ 12.01 hrs, Volume= 16,117 cf, Depth= 5.73"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
2,955	80	>75% Grass cover, Good, HSG D
30,818	98	Paved parking, HSG D
33,774	96	Weighted Average
2,955		8.75% Pervious Area
30,818		91.25% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	35	0.2000	2.71		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.00"
0.4	129	0.0600	4.97		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.6	164	Total			

Summary for Subcatchment 51S: Subcat 51S

Runoff = 1.24 cfs @ 12.01 hrs, Volume= 3,712 cf, Depth= 5.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
100	80	>75% Grass cover, Good, HSG D
7,371	98	Paved parking, HSG D
7,471	98	Weighted Average
100		1.34% Pervious Area
7,371		98.66% Impervious Area

Pine Brook SWA DEV(check)

Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Prepared by Attar Engineering

Printed 12/3/2019

HydroCAD® 10.00-24 s/n 01988 © 2018 HydroCAD Software Solutions LLC

Page 10

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	29	0.2000	2.61		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.00"
0.8	82	0.0080	1.82		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.0	111	Total			

Summary for Subcatchment 52S: Subcat 52S

Runoff = 0.33 cfs @ 12.00 hrs, Volume= 949 cf, Depth= 5.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
71	80	>75% Grass cover, Good, HSG D
1,859	98	Paved parking, HSG D
18	77	Woods, Good, HSG D
1,948	97	Weighted Average
88		4.54% Pervious Area
1,859		95.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	18	0.2000	2.37		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.00"
0.2	30	0.0160	2.57		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.3	48	Total			

Summary for Subcatchment 60S: Subcat 60S

Runoff = 2.56 cfs @ 12.03 hrs, Volume= 7,231 cf, Depth= 5.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
7,689	80	>75% Grass cover, Good, HSG D
6,524	98	Paved parking, HSG D
3,001	98	Unconnected pavement, HSG D
0	77	Woods, Good, HSG D
17,214	90	Weighted Average
7,689		44.67% Pervious Area
9,525		55.33% Impervious Area
3,001		31.50% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.0	24	0.2000	9.08		Shallow Concentrated Flow, Paved Kv= 20.3 fps
2.1	166	0.0370	1.35		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.1	190	Total			

Summary for Subcatchment 70S: Subcat 70S

Runoff = 5.30 cfs @ 12.02 hrs, Volume= 15,974 cf, Depth= 5.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
582	80	>75% Grass cover, Good, HSG D
31,571	98	Paved parking, HSG D
32,153	98	Weighted Average
582		1.81% Pervious Area
31,571		98.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	20	0.2000	2.42		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.00"
1.2	103	0.0050	1.44		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.3	123	Total			

Summary for Subcatchment 71S: Subcat 71S

Runoff = 0.32 cfs @ 12.01 hrs, Volume= 954 cf, Depth= 5.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
21	80	>75% Grass cover, Good, HSG D
1,900	98	Paved parking, HSG D
1,920	98	Weighted Average
21		1.07% Pervious Area
1,900		98.93% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	44	0.0110	0.89		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.00"

Summary for Subcatchment 90S: Subcat 90S

Runoff = 8.72 cfs @ 12.03 hrs, Volume= 23,846 cf, Depth= 4.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Area (sf)	CN	Description
44,816	80	>75% Grass cover, Good, HSG D
16,827	98	Paved parking, HSG D
3,628	77	Woods, Good, HSG D
65,270	84	Weighted Average
48,443		74.22% Pervious Area
16,827		25.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.1	270	0.0200	2.12		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps

Summary for Reach 1R: Stream Channel

Inflow Area = 285,943 sf, 67.79% Impervious, Inflow Depth > 4.34" for 25-YEAR STORM event
Inflow = 14.70 cfs @ 12.28 hrs, Volume= 103,410 cf
Outflow = 14.50 cfs @ 12.33 hrs, Volume= 103,239 cf, Atten= 1%, Lag= 2.8 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2
Max. Velocity= 2.75 fps, Min. Travel Time= 3.5 min
Avg. Velocity= 0.79 fps, Avg. Travel Time= 12.2 min

Peak Storage= 3,056 cf @ 12.33 hrs
Average Depth at Peak Storage= 0.89'
Bank-Full Depth= 3.00' Flow Area= 24.0 sf, Capacity= 123.02 cfs

5.00' x 3.00' deep channel, n= 0.025 Earth, clean & winding
Side Slope Z-value= 1.0 ' / Top Width= 11.00'
Length= 580.0' Slope= 0.0034 ' /'
Inlet Invert= 98.00', Outlet Invert= 96.00'



Summary for Reach 2R: (new Reach)

Inflow Area = 35,294 sf, 65.42% Impervious, Inflow Depth > 4.52" for 25-YEAR STORM event
Inflow = 4.23 cfs @ 12.07 hrs, Volume= 13,288 cf
Outflow = 2.28 cfs @ 12.24 hrs, Volume= 13,100 cf, Atten= 46%, Lag= 10.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2
Max. Velocity= 0.39 fps, Min. Travel Time= 19.3 min
Avg. Velocity = 0.14 fps, Avg. Travel Time= 52.3 min

Peak Storage= 2,640 cf @ 12.24 hrs
Average Depth at Peak Storage= 0.75'
Bank-Full Depth= 5.00' Flow Area= 100.0 sf, Capacity= 132.09 cfs

30.00' x 5.00' deep Parabolic Channel, n= 0.080
Length= 450.0' Slope= 0.0011 '/
Inlet Invert= 98.50', Outlet Invert= 98.00'



Summary for Reach 3R: Swale to Pond

Inflow Area = 124,672 sf, 81.57% Impervious, Inflow Depth = 5.53" for 25-YEAR STORM event
Inflow = 17.66 cfs @ 12.03 hrs, Volume= 57,444 cf
Outflow = 16.83 cfs @ 12.05 hrs, Volume= 57,441 cf, Atten= 5%, Lag= 1.4 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2
Max. Velocity= 2.11 fps, Min. Travel Time= 2.2 min
Avg. Velocity = 0.51 fps, Avg. Travel Time= 9.1 min

Peak Storage= 2,230 cf @ 12.05 hrs
Average Depth at Peak Storage= 0.66'
Bank-Full Depth= 2.00' Flow Area= 32.0 sf, Capacity= 125.21 cfs

10.00' x 2.00' deep channel, n= 0.035 Earth, dense weeds
Side Slope Z-value= 3.0 '/ Top Width= 22.00'
Length= 280.0' Slope= 0.0054 '/
Inlet Invert= 101.00', Outlet Invert= 99.50'



Summary for Reach 4R: (new Reach)

Bank-Full Depth= 0.10' Flow Area= 0.5 sf, Capacity= 0.63 cfs

5.00' x 0.10' deep channel, n= 0.013 Asphalt, smooth

Side Slope Z-value= 3.0 ' Top Width= 5.60'

Length= 200.0' Slope= 0.0025 ' /'

Inlet Invert= 105.00', Outlet Invert= 104.50'



Summary for Pond 1P: CB1

Inflow Area = 57,767 sf, 80.07% Impervious, Inflow Depth > 5.51" for 25-YEAR STORM event
 Inflow = 7.34 cfs @ 12.04 hrs, Volume= 26,504 cf
 Outflow = 7.34 cfs @ 12.04 hrs, Volume= 26,478 cf, Atten= 0%, Lag= 0.1 min
 Primary = 7.34 cfs @ 12.04 hrs, Volume= 26,478 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 102.43' @ 12.04 hrs Surf.Area= 13 sf Storage= 45 cf

Flood Elev= 105.00' Surf.Area= 13 sf Storage= 75 cf

Plug-Flow detention time= 1.4 min calculated for 26,478 cf (100% of inflow)

Center-of-Mass det. time= 0.7 min (766.5 - 765.8)

Volume	Invert	Avail.Storage	Storage Description
#1	99.00'	75 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
99.00	13	0	0
100.00	13	13	13
102.00	13	26	39
103.00	13	13	52
104.80	13	23	75

Device	Routing	Invert	Outlet Devices
#1	Primary	100.40'	18.0" Round Culvert L= 75.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 100.40' / 99.90' S= 0.0067 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=7.33 cfs @ 12.04 hrs HW=102.43' TW=101.66' (Dynamic Tailwater)

1=Culvert (Outlet Controls 7.33 cfs @ 4.15 fps)

Summary for Pond 2P: CB2

Inflow Area = 32,153 sf, 98.19% Impervious, Inflow Depth = 5.96" for 25-YEAR STORM event
 Inflow = 5.30 cfs @ 12.02 hrs, Volume= 15,974 cf
 Outflow = 5.22 cfs @ 12.02 hrs, Volume= 15,962 cf, Atten= 1%, Lag= 0.1 min
 Primary = 5.22 cfs @ 12.02 hrs, Volume= 15,962 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 102.79' @ 12.03 hrs Surf.Area= 13 sf Storage= 36 cf
 Flood Elev= 104.90' Surf.Area= 550 sf Storage= 99 cf

Plug-Flow detention time= 1.2 min calculated for 15,956 cf (100% of inflow)
 Center-of-Mass det. time= 0.7 min (741.0 - 740.3)

Volume	Invert	Avail.Storage	Storage Description
#1	100.00'	177 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
100.00	13	0	0
102.00	13	26	26
104.70	13	35	61
104.80	100	6	67
105.00	1,000	110	177

Device	Routing	Invert	Outlet Devices
#1	Primary	100.90'	18.0" Round Culvert L= 122.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 100.90' / 100.30' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=4.88 cfs @ 12.02 hrs HW=102.73' TW=102.31' (Dynamic Tailwater)
 ←1=Culvert (Outlet Controls 4.88 cfs @ 2.88 fps)

Summary for Pond 3P: CB3

Inflow Area = 33,774 sf, 91.25% Impervious, Inflow Depth = 5.73" for 25-YEAR STORM event
 Inflow = 5.63 cfs @ 12.01 hrs, Volume= 16,117 cf
 Outflow = 5.26 cfs @ 12.03 hrs, Volume= 16,083 cf, Atten= 6%, Lag= 1.3 min
 Primary = 5.26 cfs @ 12.03 hrs, Volume= 16,083 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 104.49' @ 12.03 hrs Surf.Area= 96 sf Storage= 175 cf
 Flood Elev= 104.80' Surf.Area= 550 sf Storage= 251 cf

Plug-Flow detention time= 3.0 min calculated for 16,077 cf (100% of inflow)
 Center-of-Mass det. time= 1.6 min (754.1 - 752.5)

Pine Brook SWA DEV(check)

Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Prepared by Attar Engineering

Printed 12/3/2019

HydroCAD® 10.00-24 s/n 01988 © 2018 HydroCAD Software Solutions LLC

Page 16

Volume	Invert	Avail.Storage	Storage Description
#1	99.00'	406 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
99.00	13	0	0
100.00	13	13	13
102.00	13	26	39
104.60	100	147	186
105.00	1,000	220	406

Device	Routing	Invert	Outlet Devices
#1	Primary	101.60'	15.0" Round CMP_Round 15" L= 148.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 101.60' / 100.80' S= 0.0054 ' / Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=5.21 cfs @ 12.03 hrs HW=104.46' TW=103.07' (Dynamic Tailwater)
 ↳1=CMP_Round 15" (Outlet Controls 5.21 cfs @ 4.25 fps)

Summary for Pond 4P: CB4

Inflow Area = 58,971 sf, 81.17% Impervious, Inflow Depth = 5.52" for 25-YEAR STORM event
 Inflow = 9.14 cfs @ 12.02 hrs, Volume= 27,141 cf
 Outflow = 9.13 cfs @ 12.02 hrs, Volume= 27,103 cf, Atten= 0%, Lag= 0.1 min
 Primary = 9.13 cfs @ 12.02 hrs, Volume= 27,103 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 103.09' @ 12.03 hrs Surf.Area= 13 sf Storage= 66 cf
 Flood Elev= 104.00' Surf.Area= 13 sf Storage= 78 cf

Plug-Flow detention time= 1.9 min calculated for 27,103 cf (100% of inflow)
 Center-of-Mass det. time= 0.9 min (762.2 - 761.2)

Volume	Invert	Avail.Storage	Storage Description
#1	98.00'	87 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
98.00	13	0	0
100.00	13	26	26
102.00	13	26	52
104.70	13	35	87

Device	Routing	Invert	Outlet Devices
#1	Primary	100.40'	18.0" Round Culvert L= 108.5' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 100.40' / 99.80' S= 0.0055 ' / Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=9.11 cfs @ 12.02 hrs HW=103.08' TW=101.64' (Dynamic Tailwater)
 ↖1=Culvert (Outlet Controls 9.11 cfs @ 5.15 fps)

Summary for Pond 5P: CB5

Inflow Area = 51,288 sf, 83.83% Impervious, Inflow Depth = 5.65" for 25-YEAR STORM event
 Inflow = 5.63 cfs @ 12.05 hrs, Volume= 24,146 cf
 Outflow = 5.57 cfs @ 12.05 hrs, Volume= 24,130 cf, Atten= 1%, Lag= 0.0 min
 Primary = 5.57 cfs @ 12.05 hrs, Volume= 24,130 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 102.33' @ 12.03 hrs Surf.Area= 13 sf Storage= 43 cf
 Flood Elev= 104.00' Surf.Area= 13 sf Storage= 65 cf

Plug-Flow detention time= 1.1 min calculated for 24,121 cf (100% of inflow)
 Center-of-Mass det. time= 0.6 min (755.7 - 755.1)

Volume	Invert	Avail.Storage	Storage Description
#1	99.00'	72 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
99.00	13	0	0
100.00	13	13	13
102.00	13	26	39
104.50	13	33	72

Device	Routing	Invert	Outlet Devices
#1	Primary	100.20'	18.0" Round Culvert L= 60.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 100.20' / 99.80' S= 0.0067 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=5.32 cfs @ 12.05 hrs HW=102.22' TW=101.83' (Dynamic Tailwater)
 ↖1=Culvert (Inlet Controls 5.32 cfs @ 3.01 fps)

Summary for Pond 6P: CB6

Inflow Area = 58,759 sf, 85.72% Impervious, Inflow Depth = 5.69" for 25-YEAR STORM event
 Inflow = 6.73 cfs @ 12.02 hrs, Volume= 27,842 cf
 Outflow = 6.73 cfs @ 12.02 hrs, Volume= 27,833 cf, Atten= 0%, Lag= 0.1 min
 Primary = 6.73 cfs @ 12.02 hrs, Volume= 27,833 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 101.92' @ 12.02 hrs Surf.Area= 13 sf Storage= 38 cf
 Flood Elev= 104.00' Surf.Area= 13 sf Storage= 65 cf

Plug-Flow detention time= 0.7 min calculated for 27,833 cf (100% of inflow)
 Center-of-Mass det. time= 0.4 min (754.1 - 753.7)

Pine Brook SWA DEV(check)

Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Prepared by Attar Engineering

Printed 12/3/2019

HydroCAD® 10.00-24 s/n 01988 © 2018 HydroCAD Software Solutions LLC

Page 18

Volume	Invert	Avail.Storage	Storage Description
#1	99.00'	241 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
99.00	13	0	0
100.00	13	13	13
104.00	13	52	65
104.10	100	6	71
104.50	750	170	241

Device	Routing	Invert	Outlet Devices
#1	Primary	99.70'	18.0" Round Culvert L= 151.5' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 99.70' / 99.00' S= 0.0046 ' S= 0.0046 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=6.65 cfs @ 12.02 hrs HW=101.91' TW=100.97' (Dynamic Tailwater)
 ↑1=Culvert (Outlet Controls 6.65 cfs @ 3.77 fps)

Summary for Pond 7P: CB7

Inflow Area = 60,707 sf, 86.03% Impervious, Inflow Depth = 5.69" for 25-YEAR STORM event
 Inflow = 7.03 cfs @ 12.02 hrs, Volume= 28,781 cf
 Outflow = 7.02 cfs @ 12.02 hrs, Volume= 28,761 cf, Atten= 0%, Lag= 0.0 min
 Primary = 7.02 cfs @ 12.02 hrs, Volume= 28,761 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 101.05' @ 12.09 hrs Surf.Area= 13 sf Storage= 40 cf
 Flood Elev= 103.00' Surf.Area= 13 sf Storage= 65 cf

Plug-Flow detention time= 0.9 min calculated for 28,761 cf (100% of inflow)
 Center-of-Mass det. time= 0.4 min (754.3 - 753.8)

Volume	Invert	Avail.Storage	Storage Description
#1	98.00'	90 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
98.00	13	0	0
100.00	13	26	26
102.00	13	26	52
104.90	13	38	90

Device	Routing	Invert	Outlet Devices
#1	Primary	98.90'	18.0" Round Culvert L= 70.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 98.90' / 98.55' S= 0.0050 ' S= 0.0050 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=7.00 cfs @ 12.02 hrs HW=100.97' TW=100.29' (Dynamic Tailwater)

↳1=Culvert (Outlet Controls 7.00 cfs @ 3.96 fps)

Summary for Pond 8P: CB8

Inflow Area = 15,082 sf, 88.99% Impervious, Inflow Depth = 5.73" for 25-YEAR STORM event
 Inflow = 2.51 cfs @ 12.01 hrs, Volume= 7,197 cf
 Outflow = 2.47 cfs @ 12.01 hrs, Volume= 7,181 cf, Atten= 2%, Lag= 0.1 min
 Primary = 2.47 cfs @ 12.01 hrs, Volume= 7,181 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 102.80' @ 12.02 hrs Surf.Area= 13 sf Storage= 36 cf
 Flood Elev= 105.00' Surf.Area= 13 sf Storage= 64 cf

Plug-Flow detention time= 3.5 min calculated for 7,181 cf (100% of inflow)
 Center-of-Mass det. time= 1.9 min (754.2 - 752.3)

Volume	Invert	Avail.Storage	Storage Description
#1	100.00'	64 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
100.00	13	0	0
102.00	13	26	26
104.90	13	38	64

Device	Routing	Invert	Outlet Devices
#1	Primary	101.30'	15.0" Round CMP_Round 15" L= 161.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 101.30' / 100.45' S= 0.0053 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.95 cfs @ 12.01 hrs HW=102.75' TW=102.29' (Dynamic Tailwater)

↳1=CMP_Round 15" (Outlet Controls 2.95 cfs @ 2.60 fps)

Summary for Pond 9P: CB9

Inflow Area = 17,214 sf, 55.33% Impervious, Inflow Depth = 5.04" for 25-YEAR STORM event
 Inflow = 2.56 cfs @ 12.03 hrs, Volume= 7,231 cf
 Outflow = 2.41 cfs @ 12.12 hrs, Volume= 7,230 cf, Atten= 6%, Lag= 5.4 min
 Primary = 2.41 cfs @ 12.12 hrs, Volume= 7,230 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 102.31' @ 12.09 hrs Surf.Area= 1,442 sf Storage= 1,170 cf
 Flood Elev= 104.00' Surf.Area= 2,050 sf Storage= 4,126 cf

Plug-Flow detention time= 8.4 min calculated for 7,230 cf (100% of inflow)
 Center-of-Mass det. time= 8.3 min (788.3 - 780.0)

Pine Brook SWA DEV(check)

Type III 24-hr 25-YEAR STORM Rainfall=6.20"

Prepared by Attar Engineering

Printed 12/3/2019

HydroCAD® 10.00-24 s/n 01988 © 2018 HydroCAD Software Solutions LLC

Page 20

Volume	Invert	Avail.Storage	Storage Description
#1	101.00'	4,126 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
101.00	155	0	0
102.00	1,332	744	744
104.00	2,050	3,382	4,126

Device	Routing	Invert	Outlet Devices
#1	Primary	101.00'	15.0" Round Culvert L= 142.1' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 101.00' / 100.30' S= 0.0049 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.43 cfs @ 12.12 hrs HW=102.26' TW=101.88' (Dynamic Tailwater)
 ↖1=Culvert (Outlet Controls 2.43 cfs @ 2.44 fps)

Summary for Pond 10P: (new Pond)

Inflow Area = 21,222 sf, 58.96% Impervious, Inflow Depth = 5.15" for 25-YEAR STORM event
 Inflow = 3.12 cfs @ 12.04 hrs, Volume= 9,113 cf
 Outflow = 3.04 cfs @ 12.11 hrs, Volume= 8,871 cf, Atten= 3%, Lag= 4.4 min
 Primary = 3.04 cfs @ 12.11 hrs, Volume= 8,871 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 102.88' @ 12.07 hrs Surf.Area= 588 sf Storage= 1,081 cf

Plug-Flow detention time= 36.7 min calculated for 8,868 cf (97% of inflow)
 Center-of-Mass det. time= 20.6 min (797.7 - 777.1)

Volume	Invert	Avail.Storage	Storage Description
#1	100.00'	1,950 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
100.00	100	0	0
102.00	500	600	600
103.00	600	550	1,150
104.00	1,000	800	1,950

Device	Routing	Invert	Outlet Devices
#1	Primary	101.10'	15.0" Round Culvert L= 110.6' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 101.10' / 100.50' S= 0.0054 ' /' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.07 cfs @ 12.11 hrs HW=102.73' TW=102.06' (Dynamic Tailwater)
 ↖1=Culvert (Outlet Controls 3.07 cfs @ 2.51 fps)

Summary for Pond 30P: Wet Pond

Inflow Area = 250,649 sf, 68.12% Impervious, Inflow Depth = 5.27" for 25-YEAR STORM event
 Inflow = 31.99 cfs @ 12.04 hrs, Volume= 110,048 cf
 Outflow = 12.48 cfs @ 12.29 hrs, Volume= 90,309 cf, Atten= 61%, Lag= 15.2 min
 Primary = 7.66 cfs @ 12.13 hrs, Volume= 83,870 cf
 Secondary = 4.99 cfs @ 12.29 hrs, Volume= 6,439 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2
 Starting Elev= 98.50' Surf.Area= 135 sf Storage= 42,965 cf
 Peak Elev= 100.72' @ 12.29 hrs Surf.Area= 135 sf Storage= 89,807 cf (46,842 cf above start)

Plug-Flow detention time= 333.4 min calculated for 47,326 cf (43% of inflow)
 Center-of-Mass det. time= 91.0 min (862.5 - 771.5)

Volume	Invert	Avail.Storage	Storage Description
#1	93.00'	124,404 cf	Custom Stage Data (Prismatic) Listed below (Recalc) -Impervious
#2	98.50'	13 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
		124,418 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
93.00	3,953	0	0
94.00	5,321	4,637	4,637
96.00	8,132	13,453	18,090
97.50	10,307	13,829	31,919
98.00	11,044	5,338	37,257
98.50	11,788	5,708	42,965
98.60	17,963	1,488	44,453
99.50	20,139	17,146	61,598
100.00	23,276	10,854	72,452
102.00	28,676	51,952	124,404

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
98.50	135	0	0
98.60	135	13	13

Device	Routing	Invert	Outlet Devices
#1	Primary	96.30'	15.0" Round Culvert L= 30.0' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 96.30' / 96.00' S= 0.0100 ' / ' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 1.23 sf
#2	Device 1	96.50'	6.0" Round Culvert L= 45.0' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 96.50' / 96.00' S= 0.0111 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Device 2	98.50'	2.400 in/hr Exfiltration over Surface area
#4	Device 1	99.50'	8.0" Vert. Orifice/Grate X 8.00 C= 0.600
#5	Secondary	100.50'	20.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=7.66 cfs @ 12.13 hrs HW=100.61' TW=98.70' (Dynamic Tailwater)

- 1=Culvert (Outlet Controls 7.66 cfs @ 6.24 fps)
- 2=Culvert (Passes < 0.97 cfs potential flow)
- 3=Exfiltration (Passes < 0.01 cfs potential flow)
- 4=Orifice/Grate (Passes < 11.84 cfs potential flow)

Secondary OutFlow Max=4.99 cfs @ 12.29 hrs HW=100.72' TW=98.89' (Dynamic Tailwater)

- 5=Broad-Crested Rectangular Weir (Weir Controls 4.99 cfs @ 1.16 fps)

Summary for Pond 40P: USF1

Inflow Area = 35,294 sf, 65.42% Impervious, Inflow Depth = 5.27" for 25-YEAR STORM event
 Inflow = 5.50 cfs @ 12.02 hrs, Volume= 15,489 cf
 Outflow = 4.23 cfs @ 12.07 hrs, Volume= 13,288 cf, Atten= 23%, Lag= 2.8 min
 Primary = 4.23 cfs @ 12.07 hrs, Volume= 13,288 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 106.28' @ 12.07 hrs Surf.Area= 2,462 sf Storage= 4,283 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 68.0 min (840.1 - 772.0)

Volume	Invert	Avail.Storage	Storage Description
#1	104.00'	6,195 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
104.00	1,329	0	0
105.50	2,037	2,525	2,525
106.00	2,301	1,085	3,609
107.00	2,871	2,586	6,195

Device	Routing	Invert	Outlet Devices
#1	Primary	101.57'	12.0" Round Culvert L= 10.0' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 101.57' / 101.00' S= 0.0570 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	101.25'	1.0" Vert. Orifice/Grate C= 0.600
#3	Device 2	101.67'	6.0" Round Culvert L= 10.0' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 101.67' / 101.57' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#4	Device 1	105.50'	6.0" Vert. Orifice/Grate C= 0.600
#5	Device 1	106.00'	2.0" x 2.0" Horiz. Orifice/Grate X 7.00 columns X 7 rows C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=4.23 cfs @ 12.07 hrs HW=106.28' TW=99.09' (Dynamic Tailwater)

- 1=Culvert (Passes 4.23 cfs of 7.76 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.06 cfs @ 10.45 fps)
- 3=Culvert (Passes 0.06 cfs of 1.97 cfs potential flow)
- 4=Orifice/Grate (Orifice Controls 0.69 cfs @ 3.51 fps)
- 5=Orifice/Grate (Orifice Controls 3.48 cfs @ 2.56 fps)

Summary for Link AP1: AP1

Inflow Area = 52,197 sf, 4.48% Impervious, Inflow Depth = 3.76" for 25-YEAR STORM event
 Inflow = 4.67 cfs @ 12.13 hrs, Volume= 16,338 cf
 Primary = 4.67 cfs @ 12.13 hrs, Volume= 16,338 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs

Summary for Link AP2: AP 2

Inflow Area = 682,485 sf, 40.66% Impervious, Inflow Depth > 4.12" for 25-YEAR STORM event
 Inflow = 47.07 cfs @ 12.15 hrs, Volume= 234,170 cf
 Primary = 47.07 cfs @ 12.15 hrs, Volume= 234,170 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-26.00 hrs, dt= 0.01 hrs

Time span=0.00-26.00 hrs, dt=0.01 hrs, 2601 points x 2
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Subcat 1S	Runoff Area=52,197 sf 4.48% Impervious Runoff Depth=1.35" Flow Length=180' Tc=9.6 min CN=78 Runoff=1.64 cfs 5,860 cf
Subcatchment 2S: Subcat 2S	Runoff Area=396,542 sf 21.09% Impervious Runoff Depth=1.48" Flow Length=1,390' Tc=10.0 min UI Adjusted CN=80 Runoff=13.65 cfs 48,882 cf
Subcatchment 10S: Subcat 10S	Runoff Area=35,294 sf 65.42% Impervious Runoff Depth=2.45" Flow Length=190' Slope=0.0200 '/' Tc=1.5 min CN=92 Runoff=2.66 cfs 7,193 cf
Subcatchment 20S: Subcat 20S	Runoff Area=21,222 sf 58.96% Impervious Runoff Depth=2.35" Flow Length=226' Tc=2.8 min CN=91 Runoff=1.48 cfs 4,160 cf
Subcatchment 21S: Subcat 21S	Runoff Area=7,933 sf 95.44% Impervious Runoff Depth=2.96" Flow Length=105' Slope=0.0050 '/' Tc=1.9 min CN=97 Runoff=0.67 cfs 1,954 cf
Subcatchment 30S: Subcat 30S	Runoff Area=21,463 sf 94.68% Impervious Runoff Depth=2.96" Flow Length=61' Slope=0.0200 '/' Tc=0.8 min CN=97 Runoff=1.87 cfs 5,287 cf
Subcatchment 31S: Subcat 31S	Runoff Area=15,082 sf 88.99% Impervious Runoff Depth=2.85" Flow Length=66' Tc=0.4 min CN=96 Runoff=1.30 cfs 3,579 cf
Subcatchment 40S: Subcat 40S	Runoff Area=25,198 sf 67.67% Impervious Runoff Depth=2.45" Flow Length=127' Tc=1.1 min CN=92 Runoff=1.92 cfs 5,136 cf
Subcatchment 50S: Subcat 50S	Runoff Area=33,774 sf 91.25% Impervious Runoff Depth=2.85" Flow Length=164' Tc=0.6 min CN=96 Runoff=2.91 cfs 8,015 cf
Subcatchment 51S: Subcat 51S	Runoff Area=7,471 sf 98.66% Impervious Runoff Depth=3.07" Flow Length=111' Tc=1.0 min CN=98 Runoff=0.66 cfs 1,910 cf
Subcatchment 52S: Subcat 52S	Runoff Area=1,948 sf 95.46% Impervious Runoff Depth=2.96" Flow Length=48' Tc=0.3 min CN=97 Runoff=0.17 cfs 480 cf
Subcatchment 60S: Subcat 60S	Runoff Area=17,214 sf 55.33% Impervious Runoff Depth=2.26" Flow Length=190' Tc=2.1 min CN=90 Runoff=1.19 cfs 3,244 cf
Subcatchment 70S: Subcat 70S	Runoff Area=32,153 sf 98.19% Impervious Runoff Depth=3.07" Flow Length=123' Tc=1.3 min CN=98 Runoff=2.80 cfs 8,218 cf
Subcatchment 71S: Subcat 71S	Runoff Area=1,920 sf 98.93% Impervious Runoff Depth=3.07" Flow Length=44' Slope=0.0110 '/' Tc=0.8 min CN=98 Runoff=0.17 cfs 491 cf
Subcatchment 90S: Subcat 90S	Runoff Area=65,270 sf 25.78% Impervious Runoff Depth=1.77" Flow Length=270' Slope=0.0200 '/' Tc=2.1 min CN=84 Runoff=3.58 cfs 9,608 cf
Reach 1R: Stream Channel	Avg. Flow Depth=0.40' Max Vel=1.75 fps Inflow=3.92 cfs 37,328 cf n=0.025 L=580.0' S=0.0034 '/' Capacity=123.02 cfs Outflow=3.84 cfs 37,182 cf

Reach 2R: (new Reach)	Avg. Flow Depth=0.29' Max Vel=0.21 fps Inflow=0.40 cfs 5,397 cf n=0.080 L=450.0' S=0.0011 '/ Capacity=132.09 cfs Outflow=0.28 cfs 5,213 cf
Reach 3R: Swale to Pond	Avg. Flow Depth=0.45' Max Vel=1.67 fps Inflow=9.32 cfs 27,774 cf n=0.035 L=280.0' S=0.0054 '/ Capacity=125.21 cfs Outflow=8.46 cfs 27,772 cf
Reach 4R: (new Reach)	Avg. Flow Depth=0.00' Max Vel=0.00 fps n=0.013 L=200.0' S=0.0025 '/ Capacity=0.63 cfs Outflow=0.00 cfs 0 cf
Pond 1P: CB1	Peak Elev=101.79' Storage=36 cf Inflow=3.89 cfs 12,768 cf 18.0" Round Culvert n=0.013 L=75.0' S=0.0067 '/ Outflow=3.89 cfs 12,741 cf
Pond 2P: CB2	Peak Elev=101.91' Storage=25 cf Inflow=2.80 cfs 8,218 cf 18.0" Round Culvert n=0.013 L=122.0' S=0.0049 '/ Outflow=2.79 cfs 8,206 cf
Pond 3P: CB3	Peak Elev=102.69' Storage=56 cf Inflow=2.91 cfs 8,015 cf 15.0" Round Culvert n=0.013 L=148.0' S=0.0054 '/ Outflow=2.88 cfs 7,981 cf
Pond 4P: CB4	Peak Elev=101.94' Storage=51 cf Inflow=4.80 cfs 13,117 cf 18.0" Round Culvert n=0.013 L=108.5' S=0.0055 '/ Outflow=4.79 cfs 13,078 cf
Pond 5P: CB5	Peak Elev=101.34' Storage=30 cf Inflow=3.50 cfs 11,940 cf 18.0" Round Culvert n=0.013 L=60.0' S=0.0067 '/ Outflow=3.50 cfs 11,924 cf
Pond 6P: CB6	Peak Elev=100.91' Storage=25 cf Inflow=4.14 cfs 13,834 cf 18.0" Round Culvert n=0.013 L=151.5' S=0.0046 '/ Outflow=4.14 cfs 13,824 cf
Pond 7P: CB7	Peak Elev=100.10' Storage=27 cf Inflow=4.29 cfs 14,304 cf 18.0" Round Culvert n=0.013 L=70.0' S=0.0050 '/ Outflow=4.29 cfs 14,285 cf
Pond 8P: CB8	Peak Elev=102.13' Storage=28 cf Inflow=1.30 cfs 3,579 cf 15.0" Round Culvert n=0.013 L=161.0' S=0.0053 '/ Outflow=1.29 cfs 3,562 cf
Pond 9P: CB9	Peak Elev=101.64' Storage=342 cf Inflow=1.19 cfs 3,244 cf 15.0" Round Culvert n=0.013 L=142.1' S=0.0049 '/ Outflow=0.99 cfs 3,243 cf
Pond 10P: (new Pond)	Peak Elev=102.08' Storage=640 cf Inflow=1.48 cfs 4,160 cf 15.0" Round Culvert n=0.020 L=110.6' S=0.0054 '/ Outflow=1.38 cfs 3,918 cf
Pond 30P: Wet Pond	Peak Elev=99.90' Storage=70,157 cf Inflow=16.16 cfs 51,664 cf Primary=3.77 cfs 32,114 cf Secondary=0.00 cfs 0 cf Outflow=3.77 cfs 32,114 cf
Pond 40P: USF1	Peak Elev=105.88' Storage=3,347 cf Inflow=2.66 cfs 7,193 cf Outflow=0.40 cfs 5,397 cf
Link AP1: AP1	Inflow=1.64 cfs 5,860 cf Primary=1.64 cfs 5,860 cf
Link AP2: AP 2	Inflow=14.11 cfs 86,064 cf Primary=14.11 cfs 86,064 cf

Total Runoff Area = 734,681 sf Runoff Volume = 114,016 cf Average Runoff Depth = 1.86"
61.91% Pervious = 454,851 sf 38.09% Impervious = 279,831 sf

Time span=0.00-26.00 hrs, dt=0.01 hrs, 2601 points x 2
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Subcat 1S	Runoff Area=52,197 sf 4.48% Impervious Runoff Depth=2.63" Flow Length=180' Tc=9.6 min CN=78 Runoff=3.27 cfs 11,427 cf
Subcatchment 2S: Subcat 2S	Runoff Area=396,542 sf 21.09% Impervious Runoff Depth=2.81" Flow Length=1,390' Tc=10.0 min UI Adjusted CN=80 Runoff=26.17 cfs 92,718 cf
Subcatchment 10S: Subcat 10S	Runoff Area=35,294 sf 65.42% Impervious Runoff Depth=3.99" Flow Length=190' Slope=0.0200 '/ Tc=1.5 min CN=92 Runoff=4.24 cfs 11,740 cf
Subcatchment 20S: Subcat 20S	Runoff Area=21,222 sf 58.96% Impervious Runoff Depth=3.89" Flow Length=226' Tc=2.8 min CN=91 Runoff=2.39 cfs 6,871 cf
Subcatchment 21S: Subcat 21S	Runoff Area=7,933 sf 95.44% Impervious Runoff Depth=4.55" Flow Length=105' Slope=0.0050 '/ Tc=1.9 min CN=97 Runoff=1.00 cfs 3,006 cf
Subcatchment 30S: Subcat 30S	Runoff Area=21,463 sf 94.68% Impervious Runoff Depth=4.55" Flow Length=61' Slope=0.0200 '/ Tc=0.8 min CN=97 Runoff=2.82 cfs 8,134 cf
Subcatchment 31S: Subcat 31S	Runoff Area=15,082 sf 88.99% Impervious Runoff Depth=4.43" Flow Length=66' Tc=0.4 min CN=96 Runoff=1.97 cfs 5,572 cf
Subcatchment 40S: Subcat 40S	Runoff Area=25,198 sf 67.67% Impervious Runoff Depth=3.99" Flow Length=127' Tc=1.1 min CN=92 Runoff=3.06 cfs 8,382 cf
Subcatchment 50S: Subcat 50S	Runoff Area=33,774 sf 91.25% Impervious Runoff Depth=4.43" Flow Length=164' Tc=0.6 min CN=96 Runoff=4.41 cfs 12,477 cf
Subcatchment 51S: Subcat 51S	Runoff Area=7,471 sf 98.66% Impervious Runoff Depth=4.66" Flow Length=111' Tc=1.0 min CN=98 Runoff=0.98 cfs 2,903 cf
Subcatchment 52S: Subcat 52S	Runoff Area=1,948 sf 95.46% Impervious Runoff Depth=4.55" Flow Length=48' Tc=0.3 min CN=97 Runoff=0.26 cfs 738 cf
Subcatchment 60S: Subcat 60S	Runoff Area=17,214 sf 55.33% Impervious Runoff Depth=3.78" Flow Length=190' Tc=2.1 min CN=90 Runoff=1.95 cfs 5,422 cf
Subcatchment 70S: Subcat 70S	Runoff Area=32,153 sf 98.19% Impervious Runoff Depth=4.66" Flow Length=123' Tc=1.3 min CN=98 Runoff=4.18 cfs 12,495 cf
Subcatchment 71S: Subcat 71S	Runoff Area=1,920 sf 98.93% Impervious Runoff Depth=4.66" Flow Length=44' Slope=0.0110 '/ Tc=0.8 min CN=98 Runoff=0.25 cfs 746 cf
Subcatchment 90S: Subcat 90S	Runoff Area=65,270 sf 25.78% Impervious Runoff Depth=3.18" Flow Length=270' Slope=0.0200 '/ Tc=2.1 min CN=84 Runoff=6.39 cfs 17,292 cf
Reach 1R: Stream Channel	Avg. Flow Depth=0.65' Max Vel=2.31 fps Inflow=8.49 cfs 73,417 cf n=0.025 L=580.0' S=0.0034 '/ Capacity=123.02 cfs Outflow=8.47 cfs 73,255 cf

Reach 2R: (new Reach) Avg. Flow Depth=0.55' Max Vel=0.32 fps Inflow=3.05 cfs 9,651 cf
n=0.080 L=450.0' S=0.0011 '/ Capacity=132.09 cfs Outflow=1.16 cfs 9,465 cf

Reach 3R: Swale to Pond Avg. Flow Depth=0.58' Max Vel=1.95 fps Inflow=14.21 cfs 44,084 cf
n=0.035 L=280.0' S=0.0054 '/ Capacity=125.21 cfs Outflow=13.33 cfs 44,082 cf

Reach 4R: (new Reach) Avg. Flow Depth=0.00' Max Vel=0.00 fps
n=0.013 L=200.0' S=0.0025 '/ Capacity=0.63 cfs Outflow=0.00 cfs 0 cf

Pond 1P: CB1 Peak Elev=102.12' Storage=40 cf Inflow=6.00 cfs 20,317 cf
18.0" Round Culvert n=0.013 L=75.0' S=0.0067 '/ Outflow=5.99 cfs 20,291 cf

Pond 2P: CB2 Peak Elev=102.28' Storage=30 cf Inflow=4.18 cfs 12,495 cf
18.0" Round Culvert n=0.013 L=122.0' S=0.0049 '/ Outflow=4.17 cfs 12,483 cf

Pond 3P: CB3 Peak Elev=103.39' Storage=90 cf Inflow=4.41 cfs 12,477 cf
15.0" Round Culvert n=0.013 L=148.0' S=0.0054 '/ Outflow=4.24 cfs 12,443 cf

Pond 4P: CB4 Peak Elev=102.47' Storage=58 cf Inflow=7.28 cfs 20,825 cf
18.0" Round Culvert n=0.013 L=108.5' S=0.0055 '/ Outflow=7.22 cfs 20,786 cf

Pond 5P: CB5 Peak Elev=101.77' Storage=36 cf Inflow=4.93 cfs 18,651 cf
18.0" Round Culvert n=0.013 L=60.0' S=0.0067 '/ Outflow=4.93 cfs 18,635 cf

Pond 6P: CB6 Peak Elev=101.37' Storage=31 cf Inflow=5.87 cfs 21,538 cf
18.0" Round Culvert n=0.013 L=151.5' S=0.0046 '/ Outflow=5.86 cfs 21,529 cf

Pond 7P: CB7 Peak Elev=100.61' Storage=34 cf Inflow=6.10 cfs 22,267 cf
18.0" Round Culvert n=0.013 L=70.0' S=0.0050 '/ Outflow=6.09 cfs 22,247 cf

Pond 8P: CB8 Peak Elev=102.44' Storage=32 cf Inflow=1.97 cfs 5,572 cf
15.0" Round Culvert n=0.013 L=161.0' S=0.0053 '/ Outflow=1.96 cfs 5,555 cf

Pond 9P: CB9 Peak Elev=101.94' Storage=671 cf Inflow=1.95 cfs 5,422 cf
15.0" Round Culvert n=0.013 L=142.1' S=0.0049 '/ Outflow=1.69 cfs 5,421 cf

Pond 10P: (new Pond) Peak Elev=102.46' Storage=838 cf Inflow=2.39 cfs 6,871 cf
15.0" Round Culvert n=0.020 L=110.6' S=0.0054 '/ Outflow=2.30 cfs 6,629 cf

Pond 30P: Wet Pond Peak Elev=100.40' Storage=81,994 cf Inflow=25.61 cfs 83,621 cf
Primary=7.33 cfs 63,952 cf Secondary=0.00 cfs 0 cf Outflow=7.33 cfs 63,952 cf

Pond 40P: USF1 Peak Elev=106.14' Storage=3,926 cf Inflow=4.24 cfs 11,740 cf
Outflow=3.05 cfs 9,651 cf

Link AP1: AP1 Inflow=3.27 cfs 11,427 cf
Primary=3.27 cfs 11,427 cf

Link AP2: AP 2 Inflow=33.46 cfs 165,974 cf
Primary=33.46 cfs 165,974 cf

Total Runoff Area = 734,681 sf Runoff Volume = 199,923 cf Average Runoff Depth = 3.27"
61.91% Pervious = 454,851 sf 38.09% Impervious = 279,831 sf

Time span=0.00-26.00 hrs, dt=0.01 hrs, 2601 points x 2
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Subcat 1S	Runoff Area=52,197 sf 4.48% Impervious Runoff Depth=4.75" Flow Length=180' Tc=9.6 min CN=78 Runoff=5.87 cfs 20,652 cf
Subcatchment 2S: Subcat 2S	Runoff Area=396,542 sf 21.09% Impervious Runoff Depth=4.97" Flow Length=1,390' Tc=10.0 min UI Adjusted CN=80 Runoff=45.90 cfs 164,302 cf
Subcatchment 10S: Subcat 10S	Runoff Area=35,294 sf 65.42% Impervious Runoff Depth=6.35" Flow Length=190' Slope=0.0200 '/' Tc=1.5 min CN=92 Runoff=6.56 cfs 18,679 cf
Subcatchment 20S: Subcat 20S	Runoff Area=21,222 sf 58.96% Impervious Runoff Depth=6.23" Flow Length=226' Tc=2.8 min CN=91 Runoff=3.73 cfs 11,025 cf
Subcatchment 21S: Subcat 21S	Runoff Area=7,933 sf 95.44% Impervious Runoff Depth=6.94" Flow Length=105' Slope=0.0050 '/' Tc=1.9 min CN=97 Runoff=1.50 cfs 4,589 cf
Subcatchment 30S: Subcat 30S	Runoff Area=21,463 sf 94.68% Impervious Runoff Depth=6.94" Flow Length=61' Slope=0.0200 '/' Tc=0.8 min CN=97 Runoff=4.22 cfs 12,416 cf
Subcatchment 31S: Subcat 31S	Runoff Area=15,082 sf 88.99% Impervious Runoff Depth=6.82" Flow Length=66' Tc=0.4 min CN=96 Runoff=2.97 cfs 8,575 cf
Subcatchment 40S: Subcat 40S	Runoff Area=25,198 sf 67.67% Impervious Runoff Depth=6.35" Flow Length=127' Tc=1.1 min CN=92 Runoff=4.74 cfs 13,336 cf
Subcatchment 50S: Subcat 50S	Runoff Area=33,774 sf 91.25% Impervious Runoff Depth=6.82" Flow Length=164' Tc=0.6 min CN=96 Runoff=6.65 cfs 19,202 cf
Subcatchment 51S: Subcat 51S	Runoff Area=7,471 sf 98.66% Impervious Runoff Depth=7.06" Flow Length=111' Tc=1.0 min CN=98 Runoff=1.46 cfs 4,396 cf
Subcatchment 52S: Subcat 52S	Runoff Area=1,948 sf 95.46% Impervious Runoff Depth=6.94" Flow Length=48' Tc=0.3 min CN=97 Runoff=0.39 cfs 1,127 cf
Subcatchment 60S: Subcat 60S	Runoff Area=17,214 sf 55.33% Impervious Runoff Depth=6.12" Flow Length=190' Tc=2.1 min CN=90 Runoff=3.07 cfs 8,776 cf
Subcatchment 70S: Subcat 70S	Runoff Area=32,153 sf 98.19% Impervious Runoff Depth=7.06" Flow Length=123' Tc=1.3 min CN=98 Runoff=6.25 cfs 18,919 cf
Subcatchment 71S: Subcat 71S	Runoff Area=1,920 sf 98.93% Impervious Runoff Depth=7.06" Flow Length=44' Slope=0.0110 '/' Tc=0.8 min CN=98 Runoff=0.38 cfs 1,130 cf
Subcatchment 90S: Subcat 90S	Runoff Area=65,270 sf 25.78% Impervious Runoff Depth=5.43" Flow Length=270' Slope=0.0200 '/' Tc=2.1 min CN=84 Runoff=10.69 cfs 29,510 cf
Reach 1R: Stream Channel	Avg. Flow Depth=1.11' Max Vel=3.09 fps Inflow=21.20 cfs 129,138 cf n=0.025 L=580.0' S=0.0034 '/' Capacity=123.02 cfs Outflow=20.90 cfs 128,961 cf

Reach 2R: (new Reach) Avg. Flow Depth=0.87' Max Vel=0.43 fps Inflow=4.86 cfs 16,430 cf
n=0.080 L=450.0' S=0.0011 '/ Capacity=132.09 cfs Outflow=3.08 cfs 16,240 cf

Reach 3R: Swale to Pond Avg. Flow Depth=0.72' Max Vel=2.22 fps Inflow=20.17 cfs 68,869 cf
n=0.035 L=280.0' S=0.0054 '/ Capacity=125.21 cfs Outflow=19.42 cfs 68,867 cf

Reach 4R: (new Reach) Avg. Flow Depth=0.00' Max Vel=0.00 fps
n=0.013 L=200.0' S=0.0025 '/ Capacity=0.63 cfs Outflow=0.00 cfs 0 cf

Pond 1P: CB1 Peak Elev=102.79' Storage=49 cf Inflow=9.25 cfs 31,840 cf
18.0" Round Culvert n=0.013 L=75.0' S=0.0067 '/ Outflow=9.03 cfs 31,814 cf

Pond 2P: CB2 Peak Elev=103.97' Storage=52 cf Inflow=6.25 cfs 18,919 cf
18.0" Round Culvert n=0.013 L=122.0' S=0.0049 '/ Outflow=6.16 cfs 18,907 cf

Pond 3P: CB3 Peak Elev=104.93' Storage=343 cf Inflow=6.65 cfs 19,202 cf
15.0" Round Culvert n=0.013 L=148.0' S=0.0054 '/ Outflow=5.77 cfs 19,169 cf

Pond 4P: CB4 Peak Elev=103.43' Storage=71 cf Inflow=10.01 cfs 32,505 cf
18.0" Round Culvert n=0.013 L=108.5' S=0.0055 '/ Outflow=10.00 cfs 32,466 cf

Pond 5P: CB5 Peak Elev=103.29' Storage=56 cf Inflow=6.53 cfs 28,830 cf
18.0" Round Culvert n=0.013 L=60.0' S=0.0067 '/ Outflow=6.49 cfs 28,815 cf

Pond 6P: CB6 Peak Elev=102.74' Storage=49 cf Inflow=7.93 cfs 33,211 cf
18.0" Round Culvert n=0.013 L=151.5' S=0.0046 '/ Outflow=7.91 cfs 33,201 cf

Pond 7P: CB7 Peak Elev=101.44' Storage=45 cf Inflow=8.26 cfs 34,328 cf
18.0" Round Culvert n=0.013 L=70.0' S=0.0050 '/ Outflow=8.24 cfs 34,308 cf

Pond 8P: CB8 Peak Elev=103.30' Storage=43 cf Inflow=2.97 cfs 8,575 cf
15.0" Round Culvert n=0.013 L=161.0' S=0.0053 '/ Outflow=3.05 cfs 8,558 cf

Pond 9P: CB9 Peak Elev=102.62' Storage=1,640 cf Inflow=3.07 cfs 8,776 cf
15.0" Round Culvert n=0.013 L=142.1' S=0.0049 '/ Outflow=2.99 cfs 8,774 cf

Pond 10P: (new Pond) Peak Elev=103.30' Storage=1,350 cf Inflow=3.73 cfs 11,025 cf
15.0" Round Culvert n=0.020 L=110.6' S=0.0054 '/ Outflow=3.55 cfs 10,783 cf

Pond 30P: Wet Pond Peak Elev=100.86' Storage=93,356 cf Inflow=37.90 cfs 132,685 cf
Primary=7.72 cfs 97,039 cf Secondary=10.77 cfs 15,859 cf Outflow=18.12 cfs 112,898 cf

Pond 40P: USF1 Peak Elev=106.38' Storage=4,530 cf Inflow=6.56 cfs 18,679 cf
Outflow=4.86 cfs 16,430 cf

Link AP1: AP1 Inflow=5.87 cfs 20,652 cf
Primary=5.87 cfs 20,652 cf

Link AP2: AP 2 Inflow=62.75 cfs 293,264 cf
Primary=62.75 cfs 293,264 cf

Total Runoff Area = 734,681 sf Runoff Volume = 336,633 cf Average Runoff Depth = 5.50"
61.91% Pervious = 454,851 sf 38.09% Impervious = 279,831 sf

BMP CALCULATIONS

TABLE 1 - QUANTITY CALCULATIONS

STORM EVENT

		<u>2</u>	<u>10</u>	<u>25</u>	<u>50</u>	
EXISTING	AP 1	3.21	5.95	8.25	10.21	(cfs)
	AP 2	23.68	43.77	60.60	74.94	
DEVELOPED	AP 1	1.64	3.27	4.67	5.87	(cfs)
	AP 2	14.11	33.46	47.07	62.75	
CHANGE	AP 1	-1.57	-2.68	-3.58	-4.34	(cfs)
	AP 2	-9.57	-10.31	-13.53	-12.19	

Pinebrook - BMP Calculations

BMPs_WPV.xls
C204-17

11/25/19

POND SIZING CALCULATIONS

AREA	IMP. (ft ²)	LA. (ft ²)	RA. (ft ²)	BMP	CPV (ft ³)	P. POOL (ft ³)	CHECK
Pond 1				Wet Pond			
20S	8,829	8,710			1,026	2052	
21S	7,572	361					
30S	20,322	1,141			1,732	3463	
31S	13,422	1,660					
40S	17,051	8,146			1,692	3385	
50S	30,818	2,955			2,667	5333	
51S	7,371	100					
52S	1,859	88					
60S	6,524	7,689			800	1600	
70S	31,571	582			2,650	5301	
71S	1,900	21			159	318	
90S	16,827	44,816			2,896	5792	
Total	164,066	76,269			13,622	27244	
				Provided Permanent Pool(ft3) =	42,965		OK
				Mean Depth(ft) =	3.10		OK
				Provided Area =	3,953		
				Provided CPV =	19,947		OK
				Required Trench Length =	41		
Pond 2				Soil Filter			
10S	18,882	9,223			1,881	N/A	
Total	18,882	9,223	0		1,881	N/A	0.00
				5% Impervious + 2% Remaining Area =	1,129		
				Provided CPV =	2,525		OK
				Provided Area =	1,329		OK

IMP - IMPERVIOUS AREA
 RA - REMAINING SUBCATCHMENT AREA
 BMP - BEST MANAGEMENT PRACTICE
 CPV - CHANNEL PROTECTION VOLUME
 LA - LANDSCAPED AREA, AREAS THAT WILL BE REPLANTED WITH SHRUBS OR GRASS
 DEV - DEVELOPED AREA, THE SUM OF THE IMPERVIOUS AREA AND LANDSCAPED AREA.

*BIORETENTION - MAX 1 ACRE SUBCATCHMENT, BOP<2000 S.F.

TREATMENT CALCULATIONS

New Impervious Area to be Treated @95% 191,314 sf
 New Developed Area to be Treated @80% 295,642 sf

4.39 Acres
 6.79 Acres

AMENDED DEVELOPED CONDITIONS:

AREA	IMP. (ft ²)					LA. (ft ²)					DEV. (ft ²)				
	Ext.	Created Require to Treat	Total (Hydro CAD)	Treated	Not Treated	Ext. (HCAD)	Created Require to Treat	Total (Hydro CAD)	Treated	Not Treated	Ext.	Created Require to Treat	Total (Hydro CAD)	Treated	Not Treated
1S	0	1,651	2,293	0	1,651	0	2,860	51,292	0	2,860	1,651	4,511	53,585	0	4,511
2S	0	6,715	83,651	0	6,715	0	15,976	331,646	0	15,976	6,715	22,691	415,297	0	22,691
10S	0	18,882	23,091	18,882	0	0	9,223	9,223	9,223	0	18,882	28,105	32,314	28,105	0
20S	0	8,829	12,511	8,829	0	0	8,710	8,710	8,710	0		17,539	21,221	17,539	0
21S	0	7,572	7,572	7,572	0		361	361	361	0		7,933	7,933	7,933	0
30S	0	20,322	20,322	20,322	0	0	1,141	1,141	1,141	0		21,463	21,463	21,463	0
31S		13,422	13,422	13,422	0	0	1,660	1,660	1,660	0		15,082	15,082	15,082	0
40S	0	17,051	17,051	17,051	0	0	8,146	8,146	8,146	0		25,197	25,197	25,197	0
50S	0	30,818	30,818	30,818	0	0	2,955	2,955	2,955	0		33,773	33,773	33,773	0
51S	0	7,371	7,371	7,371	0		100	100	100	0		7,471	7,471	7,471	0
52S	0	1,859	1,859	1,859	0	0	88	88	88	0		1,947	1,947	1,947	0
60S	0	6,524	6,524	6,524	0	0	7,689	7,689	7,689	0		14,213	17,118	14,213	0
70S	0	31,571	31,571	31,571	0	0	582	582	582	0		32,153	32,153	32,153	0
71S	0	1,900	1,900	1,900	0	0	21	21	21	0		1,921	1,921	1,921	0
90S	0	16,827	16,827	16,827	0	0	44,816	44,816	44,816	0		61,643	61,643	61,643	0
TOTAL	0	191,314	276,783	182,948	8,366	0	104,328	468,430	85,492	18,836	0	295,642	745,213	268,440	27,202

NEW

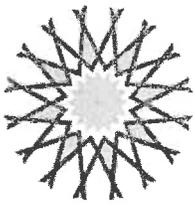
AREA	IMP. (ft ²)	DEV (ft ²)
Total Area	182948	268440
Total Acres	4.20	6.16
% Treated=	95.6%	90.8%

95% IMP. AND 80% DEV IS REQUIRED

*BIORETENTION - MAX 1 ACRE SUBCATCHMENT, BOP<2000 S.F.

Required Area= 181748 236514
Area Needed= -1200 -31926

OPERATION AND MAINTENANCE PROGRAM



**PINE TREE BUSINESS PARK
PASSAMAQUODDY LANE AND H.L. DOW HIGHWAY (RT. 236)
ELIOT, MAINE**

**OPERATION AND MAINTENANCE PROGRAM
STORMWATER MANAGEMENT BMP's**

This project contains specific Best Management Practices (BMP's) for the conveyance, storage, and treatment of stormwater and the prevention of erosion. These BMP's consist of swales, underdrained soil filter ponds, catchbasins and culverts. All components should be inspected quarterly, and after every significant rain event of 1" in any 24-hour period. Additional inspection intervals are specified for certain BMP's, specifically, underdrained soil filters.

The party responsible for implementing this Operation and Maintenance Program (O & M Program) shall be the property owner.

Swales

All swales should be inspected for accumulation of debris, which could adversely affect the function of this BMP. These areas should also be maintained to have gradual slopes, which prevent channeling of stormwater and erosion of the bottom and sides of the swales.

Catch Basins

All catch basin grates, sumps, and inlets/outlets should be inspected for accumulation of debris, which could adversely affect the function of this BMP. Additionally, the basin inverts shall be inspected for clogging and material soundness. Sumps shall always be clear to a depth of 1' below the outlet invert. Inlet structures shall be inspected and cleaned of debris at least twice annually, once in the spring following snow melt and once in the autumn after leaf fall.

Culverts

Culvert inlets and outlets should be inspected for debris, which could clog the BMP. Additionally, the placement of rip-rap should be inspected to ensure that all areas remain smooth and no areas exhibit erosion in the form of rills or gullies.

Detention Ponds

Detention ponds shall be inspected to ensure that there is no channeling of stormwater and that no debris accumulates within the detention areas. The vegetative cover conditions shall be maintained. The inlets and outlets shall be inspected for erosion and any evidence of debris that could clog the outlet structures and culverts. Emergency spillways and level spreaders shall be inspected for any evidence of rilling and channeling and shall be maintained to promote a level, sheet-flow discharge. Pond embankments and side slopes shall be inspected for erosion, destabilization of side slopes and evidence of embankment settling; corrective action shall be taken immediately to correct such issues. The height of grass shall be maintained at a maximum of 12"; mowing shall be limited to no more than two times during the growing season.

Wetponds

The wetpond is a very effective BMP, however, long term maintenance is essential to its operation. The gravel trench outlet should be inspected after every major storm event during the first year after construction to ensure proper function and at least twice-annually, thereafter. The inspection should ensure that the filter drains within 12 - 24 hours after a storm and that potentially clogging material (leaves, etc.) is not preventing discharge through the gravel. The top several inches of gravel in the trench should be replaced with fresh material when water ponds above the permanent pool for longer than 72 hours after a storm. Debris and sediment that builds up should be removed from the pre-treatment structure and outlet structure, at least annually. Additionally, procedures for inspecting Detention Ponds (above) shall also be followed when inspecting Wetponds.

Underdrained Soil Filters

These underdrained soil filters area is are very effective BMP's, however, long term maintenance is essential to proper operation. The soil filter should be inspected after every major storm event during the first year to ensure proper function and at least twice-annually, thereafter. The inspection should ensure that the filter drains within 24 - 48 hours. The top several inches of the filter should be replaced with fresh filter material, when water ponds for longer than 72 hours. Debris and sediment that builds up should be removed from the pre-treatment structure at least annually. Outlet structures shall be inspected and cleaned of debris at least twice annually, once in the spring following snow melt and once in the autumn after leaf fall. The height of grass shall be maintained at a maximum of 12"; mowing shall be limited to no more than two times during the growing season.

Snow Removal

Snow shall be stockpiled only in the approved snow storage areas. Plowing of snow into wetland areas or detention ponds shall be avoided. Additionally, a mostly sand mix (reduced salt) shall be applied during winter months to prevent excessive salt from leaching into wetland areas. Excess sand shall be removed from the storage areas, all paved surfaces and adjacent areas each spring.

Seeding, Fertilizing and Mulching

All exposed soil materials and stockpiles must be either temporarily or permanently seeded, fertilized and mulched in accordance with plan specifications. This is one of the most important features of the Erosion Control Plan, which will provide both temporary and permanent stabilization. Eroded or damaged lawn areas must be repaired until a 75% effective growth of vegetation is established and permanently maintained.

Record Keeping

Routine maintenance and inspections will be accomplished by the property owner [current owner is: M&T Realty, LLC; 519 U.S. Route 1, York, ME 03909, (207)-363-4172], or third party contracted by the property owner. All inspections accomplished in accordance with this program shall be documented on the attached Inspection & Maintenance Log. Copies of the Log shall be kept by the property owner or condominium association, and be made available to the Department (Maine Department of Environmental Protection), upon request.



ATTAR

ENGINEERING, INC

CIVIL • STRUCTURAL • MARINE

Received 1/17/20

Mr. Dennis Lentz, Chairman, Planning Board
Ms. Kristina Goodwin, Land Use Assistant
Town of Eliot, Maine
1333 State Road
Eliot, Maine 03903

January 17, 2020
Project No. C179-20

**RE: Commercial / Industrial Development
H.L. Dow Highway (Route 236)
Site Plan Application**

Dear Chairman Lentz and Ms. Goodwin:

On behalf of M & T Realty, LLC, I have enclosed, for your review and consideration, a revised Site Plan for the proposed commercial / industrial development. The revised plan includes the following revisions to the propane storage use in response to input from the applicant's fire safety engineer, Town of Eliot Fire Chief and 1/16/20 meeting with Town Staff:

- The floor area of Building 1 has been clarified on the plan.
- Building 5 has been removed from the plan.
- The propane tanks have been rotated and relocated slightly to improve delivery truck and emergency vehicle circulation. The propane storage area has independent vehicular access to Passamaquoddy Lane.
- An emergency gate has been added for access to the commercial / industrial parking lot.

We understand that this project will be placed on the February 18, 2020 for sketch plan review and we look forward to further discussing this project at the meeting. We respectfully request that once the sketch plan process requirements have been met the project review be allowed to continue full application re-submittal, based on the 12/3/19 application submittal.

Please contact me for any additional information or clarifications required.

Sincerely,

Lewis Chamberlain, P.E.

cc: M & T Realty, LLC

C179-20_Town Application LTR1.doc

