

November 15, 2018

Mr. Wes Sunderland, CEO
Town of Baldwin
534 Pequawket Trail
West Baldwin, ME 04091

Conditional Use Application: Nature's Wilderness Campground

Existing Property

On behalf of Mr. Scott Efron & Natures Wilderness, LLC, we are pleased to submit plans & materials in support of the Conditional Use Application (see Attachment 1) for the Nature's Wilderness Campground. The development parcel is several hundred acres in size and is shown as lot #22 on the Town of Baldwin Tax Map #7. It is located within the Rural Zoning District (R). The property is traversed by several existing roads. The site will be accessed off the Marstons Road and contains Upper Twain Road & a portion of Deacon Road. There is a 21 acre man-made pond (Lower Pond) located on the south side of Marstons Road that was created several decades ago with the installation of a dam in a stream channel. The area around the Lower Pond is zoned as Resource Protection (RP). No new development is proposed within 250' of the pond. Only structures and features permitted prior to March 2018 will be located within the Resource Protection Area. Upper Twain Road leads to a second, 2 acre man-made pond (Upper Pond) that is approximately a half-mile north Lower Pond. The property contained a house, several out buildings and an extensive system of trails prior to 2016.

Proposed Project

The applicant intends to open a campground on the portion of property that lies north of Marston's Road and west of Deacon Road. He proposes to develop the area between both ponds with a series of camp sites, a club house and a general store. There will be a mix of RV compatible sites, cabins, drive up tent sites & walk in tent sites. The campground will offer a wide variety of amenities to outdoor enthusiasts including swimming, fishing, hiking & mountain biking and use of miles of existing ATV trails. Our preliminary plans feature **190 camp sites**. Each of the campsites will have one parking space, fire pit & picnic table. The applicant has already cleared much of the proposed development area. No new development is proposed within 250' of Lower Pond due to the RP zone. Only structures and features that were permitted prior to the enacting of the RP Zone in March 2018 will be located within the Resource Protection Area. These include the swing sets at the beach, the permanent structures in the glamping area, guard house, entry gate, Marston's Roadway surface & associated utilities.

Project Utilities

The majority will be served by an electrical service that will be fed via underground electric lines. Group septic systems will be regionally located around the campground to service the sites. The large cabin sites are expected to have individual water and sewer connections, while the majority of the other sites will rely on regionally located bath houses and laundry houses. A dump station

will be centrally located to service clients with holding tanks. Jim Logan of Longview Partners evaluated test pits throughout the development area to ensure that the septic systems are located within suitable soils (see Attachment 5). He has provided HHE-200 forms for the systems (see Attachment 6).

The State of Maine Department of Health and Human Services (Department) requires that all sites have access to water carried sewage facilities. The Department stipulates that all water carried sewage effluent shall be disposed of by means of: a public system; or an approved sewage disposal system which is constructed and operated in conformance with applicable state and local laws, ordinances and regulations. Non-water carried sewage disposal facilities include pit privies, vault privies, chemical toilets, and composting toilets are only allowed if specifically permitted through the Department. By the State definition, the entirety of the campground will be serviced with conveniently located (within 500' of all camp sites) water carried sewage facilities. The Department defines sites without access to water or sanitary buildings as a primitive site. We believe that the density requirements of the Town Zoning Ordinances (5,000 SF per site vs. 20,000 SF per site) differentiate sites that have access to water carried sewer facilities vs. those that are classified as primitive sites. We have provided a basic site density exhibit for review (see Attachment 13)

Required State Permits & Project Consultants

This project will require a MDEP Site Location of Development Permit due to its scope. We've had a pair of onsite meetings with MDEP representatives and followed the latest meeting up with a scoping/pre-application meeting at the MDEP Portland Office. The project will also need a NRPA Wetland Alteration Permit.

The project will need a MDOT traffic movement permit. MDOT will evaluate the project impact to Route 113 and will require improvements if necessary. William Bray, P.E. of Traffic Solutions has prepared a traffic study. That study can be found in Attachment 7. The applicant has previously agreed to upgrade Marston's Road to the Town Road Standards from the intersection with Senator Black Road to the campground entrance.

The boundary information shown on the attached plans is based upon a boundary survey that was completed in 1996 and was recorded in the Cumberland County Registry of Deeds (see Attachment 12). Statewide Surveys, Inc. & Longview Partners, Inc combined to perform a wetland & stream delineation of the project area. Longview Partners performed a vernal pool assessment in the spring of 2018. A significant vernal pool was found on the backside of the lower pond that is located within the town Resource Protection District. Onsite topography of the developed area was provided by Statewide Surveys, Inc. Middle Branch Land Surveying provided an existing conditions plan of Marston's Road. The remaining topography was obtained from the State of Maine Office of GIS and is shown at a 2' contour interval.

Terradyn Consultants, LLC will assist the applicant with the local, state and federal permitting process.

Campground Rules

The campground will publish a series of rules & safety guidelines that its users will agree to adhere to. It will also operate under Department rules and regulations: Specific rules are discussed below:

- a. **Dates of Operation:** The campground will be open from May 1st through October 31st.
- b. **Hours of Entry:** The campground will generally open the gate each morning at 7 am and close the gate each evening at 8 pm.
- c. **Reservations & Rates:** The applicant has provided a sample rate sheet, see Attachment 9. Reservations will open February 1st of each year. Seasonal sites will need to reserve the site for the following year prior to the expiration of their rental term. After such time, the site will be offered via standard reservation on a first come, first serve basis.
- d. **Vehicular Access:** All campers will be given directions to the campground from both east & west of the campground access and will be directed to come down Senator Black Road via Marston's Road.
- e. **Emergency Preparedness:** Campground safety regulations are published by the American Camp Association (see www.acacamps.org for more information). The applicant is researching those guidelines and intends to enact them. Copies of the campground safety regulations will be provided once prepared. The Nature's Wilderness plan will –at a minimum- feature the following:
 - i. Campfires will be put out prior to bed time.
 - ii. Camp employees will be trained in emergency procedures including first aid and fire control procedures.
 - iii. All RV, Glamping and cabin sites will have water connections.
 - iv. The campground owns a functioning fire truck that will be available to respond to any fire related emergency.
 - v. A dry hydrant will be installed in the primary stormwater pond along the Marston's Road frontage. The connection will allow all area pumper trucks to connect to a large volume of water. As designed the stormwater/fire pond will contain more than 1,000,000 gallons of water.
- f. **Number of sites:** The park will not permit the placement of any R.V.'s or tents exceeding the number of sites approved by the Town of Baldwin & the State of Maine.
- g. **Primitive Recreation:** All hiking, biking & equestrian use will be limited to the campground property. Mounted maps will be posted at various points throughout the trail system and in the club house.

- h. **ATV use:** The applicant proposes to allow ATV use on his property. The property is approximately 300 acres and contains many existing trails. ATV's will be allowed to use the existing trail systems. The campground will display a series of maps located at various points along the trail system and will publish trail maps for the renters. Signs will be placed at the perimeter of the applicant's property signifying that ATV traffic must remain on the Nature's Wilderness Campground. ATVs will be prohibited from traveling along Marston's Road except at specified crossing locations. ATV use will be limited to the posted hours of entry. The campground reserves the right to impose additional restrictions on the ATV users.
- i. **Right of entry and inspection:** The Town of Baldwin Code Enforcement Officer (CEO) and any duly designated officer or employee of the State of Maine Department of Health and Human Services (Department) shall have the right, without an administrative inspection warrant, to enter upon and into the premises of the campground at any reasonable time in order to determine the state of compliance with this the permit and any rules in force pursuant thereto.
- j. **Register:** The proprietor shall keep and maintain or cause to be kept and maintained therein, a register of guests renting or occupying sites. The register may be a book or separate registration form or card. The register shall be signed by the person renting sites or by someone under their direction. The proprietor or their agent shall write opposite each name the number of sites assigned to and occupied by each guest, and the state and license number of any automobile then being used or operated by the registrant. The proprietor or their agent shall keep and preserve the record for 5 years showing the date of registration and duration of occupancy of each site. Said register shall be available to the CEO or any agent of the Department upon request.
- k. **Water analysis:** A copy of the current water analysis shall be at the park and in view of the public. A water sample shall be taken, tested and shown to be satisfactory before the campground opens for the season.
- l. **Dump Station:** A dump station will be provided consisting of at least a four inch (10 cm.) sewer riser pipe, connected to the R.V. sewage disposal system, surrounded at the inlet by a 3 foot by 3 foot concrete apron sloped to the drain, provided with a suitable hinged cover and/or screw cap; and a water outlet to permit periodic wash down of adjacent areas. This water outlet shall be protected with an anti-siphon backflow preventer. A sign shall be posted stating that the water from this outlet is not for drinking purposes.
- m. **Garbage & Rubbish Disposal:** Garbage and rubbish will be kept in durable insect proof containers that do not leak and do not absorb liquids. Plastic bags and wet-strength paper bags may be used to line these containers. All containers will be provided with tight-fitting lids. The campground will provide a sufficient number of containers to hold all of the garbage and rubbish which accumulates between periods of removal.

- n. **Swimming Pool:** The campground will contain a large swimming pool. It will be constructed and operated in accordance with all state rules applicable to swimming pools. A lifeguard will be stationed at the pool during operation.
- o. **Park Amenities & Services Limited to Paying Guests:** The park amenities, services & activities will be available only to campers & guests. The park is not open for use by the general public. The campground intends to offer a variety of amenities, services & activities including:
 - i. **Swimming:** A lifeguard will be on duty at the pool during operating hours. Swimming lessons will be offered to guests and taught by a certified instructor.
 - ii. **Archery:** an archery range may be established in a suitable location. If and when the range is open, a safety instructor will be on duty.
 - iii. **Canoes & Kayaks:** Canoes and Kayaks will be provided for free to campers and invited guests.

Note: ATV's will not be rented to the campers.

- p. **Multi-purpose Building:** The multi-purpose building will function as a community center, general store & restaurant. It will be open to campers and invited guests between the hours of 8 am to 9 pm.

The campground intends to sell only basic necessities for campers including; hoses, food, milk, juice, marsh mallows, graham crackers, charcoal briquettes. The intent is not to sell large ticket items.

The restaurant will offer breakfast, lunch and dinner menus to campers and invited guests.

The building will also contain games, TV's and other "rainy day" activities.

- q. **Primitive Sites Prohibited:** The Nature's Wilderness Campground will not contain any primitive sites.

Additional Information

The Planning Board requested information during the previous application process. That information is provided here for discussion purposes:

1. **Rental Cabins:** The Town Attorney suggested that cabins may be a regular part of campground, but additional proof should be offered to verify that position. Many campgrounds across Maine offer cabin rentals. These include several owned and operated by the State of Maine. We performed a brief search for campground rental cabins and have included the results in Attachment 10. Cabins are included in numerous campgrounds across the state.

2. **Liquor License:** Members of the planning board recommended that the Nature's Wilderness Campground seek a liquor license under the stated assumption that it would reduce traffic on Town Roads. The applicant generally agrees with this idea and will pursue a liquor license through the proper channels.
3. **List of Recent Campgrounds:** The board requested a list of campgrounds that had been recently approved. The Department provided us with a list of all campgrounds that were approved in 2018. See Attachment 11.
4. **Subdivision Regulations:** The Town Attorney concluded that a campground does not need to adhere to subdivision regulations if it was only open for a portion of the year and all renters had equal access to renting all site. The campground will be open from May 1st to October 31st each year. Sites will generally be offered in a first come, first serve basis.
5. **No Additional Development:** The attached plans represent the extent of the proposed development. The applicant understands that the campground will be limited to the campsites, service buildings and uses specifically approved within the conditional use permit and the Maine DEP Site Location of Development Permit. Any additional expansion of structure, services or operation would need to first be approved by the Town of Baldwin & the State of Maine.

Conditional Use Information

This information is offered in support of the conditional use application.

Section A: Basic Information

1: Applicant's Legal Name:

The applicant's name is Nature's Wilderness, LLC.

2: Applicants Mailing Address:

Nature's Wilderness, LLC
c/o Mr. Scott Efron
2 Upper Twain Road
Baldwin, ME 04091

3: Applicant's Phone Number:

Mr. Scott Efron can be reached at 207-787-6012

4: Owner of Record:

Nature's Wilderness, LLC is the legal owner of the property. Mr. Scott Efron is the president of Nature's Wilderness, LLC. See Attachment 2 for a copy of the property deed.

5: Right, Title or Interest:

Nature's Wilderness, LLC is the legal owner of the property per deed recorded in the Cumberland County Registry of Deeds in book 33066, page 317. See Attachment 2 for a copy of the property deed.

6: Property Owner's Name:

Nature's Wilderness, LLC is the legal owner of the property. Mr. Scott Efron is the president of Nature's Wilderness, LLC. See Attachment 2 for a copy of the property deed.

7: Owner of Record Address

Nature's Wilderness, LLC
17569 Middlebrook Way
Boca Raton, FL 33496

8: Location of Property:

The property is located at 2 Upper Twain Road.

9: Tax Map & Lot Number:

The development is part of the property shown as Lot 22 on Tax Map 7.

10: Zoning District:

The development is located in the Rural Zoning District. The area surrounding Marston's Pond is zoned Resource Protection.

11: Conditional Use:

The applicant seeks to permit a campground use for the property. We believe that the entirety of the proposed operation meets falls beneath the use of a campground. However the following uses will be accessory to the campground and available only for registered campers and invited guests:

- a. Primitive Recreation
- b. Retail Business
- c. Service Business
- d. Community Building
- e. Eating & Drinking Places
- f. Neighborhood Store

12: Required Items:

a. Location Map

A location map can be found in Attachment #3. A second location map is shown on the cover sheet of the attached plan set.

b. Written Description of the Proposed Use.

The applicant intends to open a campground on the property. He proposes to develop the area between both ponds with a series of camp sites, a club house and a general store. There will be a mix of RV compatible sites, cabins, tent sites & some upscale cabin sites. Our attached site plans feature 190 campsites.

c. Drawings of Proposed Activity

A plan set is attached that shows the proposed development. They show the location of existing & proposed buildings, structures, driveways, parking areas and natural features

Section B: Standards for Conditional Use Permit:

1. The Planning board shall consider impact of:

1a: Size of the proposed use compared to surrounding uses:

The campground is located on a large piece of property and is fairly isolated from other development. The proposed development area is approximately 300 acres and includes the area north of Marston's Road and west of Deacon Road. There are single family homes that front on the portion of Marstons Road that lies between Senator Black Road & the development. The single family lots located along Marstons Road appear to be between 5-10 acres. Other than the lots along Marstons Road, the property is surrounded by other large undeveloped properties. The ordinance requires that all campgrounds provide a 25' perimeter buffer. The proposed development is nowhere near an exterior property line.

1b: Intensity of the proposed use, including amount and type of traffic to be generated, hours of operation, expanse of pavement, and similar measures of intensity of use, compared with surrounding uses:

The campground will offer a variety of rental durations including daily, weekly, monthly & seasonal. The applicant intends to provide the necessary amenities & activities to allow the campers to remain onsite for the duration of their stay. Arrivals & departures do not typically coincide with the traditional heavy traffic times of the weekday A.M. & P.M. peak hour. The campground will serve recreational vehicles of all sizes as well as cars and trucks with & without pull behind campers. The applicants anticipate that the peak season will be from late spring to early fall. The campground will be open from May 1st through October 31st of any given year. Campers will be told that the entry gates will be open between 7 am & 9 pm every day.

The project will make use of the existing roads & trails to the maximum extent possible. Most of the access roads will be built over the existing trails. The area around the club house will

feature a large parking & maneuvering area to allow large vehicles to move safely & easily through the site. The expanded access roads, new access roads, parking lots & proposed buildings will create approximately 5 acres of new impervious areas. Each of the camp sites will have a stabilized grass parking area.

The applicant proposes to upgrade the portion of Marston's Road that lies between the intersection with Senator Black Road and Upper Twain Road.

We have submitted a traffic study and MDOT will review the impact to Route 113, at a minimum.

1c: The potential generation of noise, dust, odor, vibration, glare, smoke, litter and other nuisances:

Construction dust will be controlled as will the noise by controlling the hours of construction. Once completed, a campground is not a large generator of noise, dust, odor, vibration, glare, smoke or litter. Most of the campground development is located far from any exterior property line.

1d: Unusual physical characteristics of the site, including size of the lot, shape of the lot, topography, and soils, which may tend to aggravate adverse impacts upon surrounding properties:

The size of the property will help to control the impact to the surrounding properties. Most of the development is located far from any existing development.

1e: The degree to which landscaping, fencing, and other design elements have been incorporated to mitigate adverse impacts on surrounding properties:

The site will be able to maintain large undisturbed swaths of forest between the development & exterior property boundaries. All lighting will feature full cutoff fixtures to avoid excessive glare. There are no sites located around Marston's Pond due to the recent adoption of a resource protection district.

2. The Planning board shall consider facilities:

2a: The ability of traffic to safely move into and out of the site at the proposed location:

The applicant proposes to upgrade the portion of the road that lies between Senator Black Road & their property to allow for easy passage along the entire corridor. They have already upgraded the portion of the road that is located over their property. Upper Twain Road serves as the primary access between Lower & Upper Pond. It will be widened to support two direction traffic. Many of the camp site roads will designed to accommodate one way traffic. We have provided a large hammer-head turnaround behind the club house to allow large vehicles a convenient place to turn around.

Bill Bray, P.E. of Traffic Solutions, Inc. believes that this project will trigger a MDOT traffic movement permit due to the amount of expected traffic volume. His study can be found in Attachment 7.

2b: the presence of facilities to assure the safety of pedestrians passing by or through the site:

The site will be pedestrian friendly. The pedestrians will be camp site users in and around their camp sites and people using the club house. The club house features a large parking area featuring 60 standard sized spaces & good visibility. It has a walkway that leads to a large porch that is safely out of the way of vehicular traffic. The swimming pool & swimming pond are separated from vehicular traffic.

2c: The capacity of the street network to accommodate the proposed use:

The existing street network will be upgraded to accommodate the proposed use. The internal circulation will be constructed to a level that allows for easy maneuvering & access throughout the site.

2d: The capacity of the storm drainage system to accommodate the proposed use:

The project will require a MDEP Site Location of Development Permit. A large portion of this application revolves around the transport & treatment of stormwater. We have provide sizing calculations for each culvert, swale, stormwater pond and erosion control measure to ensure that all components of the stormwater & erosion control system are properly sized to handle the 25 year/24 hour storm event. MDEP will review the drainage & erosion control design & calculations.

Water quality treatment for much of the site will be provided with a new treatment pond that will receive runoff from most of Upper Twain Road, the RV camping areas around Roads "A" & "B", the clubhouse area, approximately half of the glamping area and a portion of Marsten's Road. The treatment pond will remove sediment from the runoff before it enters the Lower Pond. The Lower Pond will be outfitted with an under-drained gravel bench at the outlet to provide cooling to water as it enters the stream below the dam. The remainder of the site will receive treatment from localized stormwater buffers. Water quantity control will be done by modifying the outlet to the dam. The stormwater report can be found in Attachment 4.

2e: The ability of the town of provide necessary fire protection services to the site & development:

The improvements to Marston's Road will allow for safe and easy access to the site for emergency vehicles. We have proposed a fire pond with a dry hydrant near the entrance to the site. The existing ponds are too shallow to support a standard dry hydrant installation. They are also protected natural resources. The proposed stormwater/fire pond will offer more than one million gallons as currently designed. Additionally, the campground will have park rules limiting the use of camp fires and will operate a fire truck to assist with fire protection.

3. The Planning board shall consider natural characteristics:

The natural characteristics of the site, including topography, drainage, and relationship to ground and surface waters and flood plains, shall not be such that the proposed use when placed in the site will cause undue harm to the environment or to neighboring properties.

The project will require a MDEP Site Location of Development Permit. The applicant will follow all MDEP regulations regarding surface waters, flood plains, ground water, stormwater & site stabilization. A water quality treatment/sediment pond will be constructed at the downstream end of the project. The pond will flow into the existing stream where it will flow into Marston's Pond. Modifications will be made to the downstream end of Marston's Pond to provide for cooling of runoff & water quality treatment for the stream as it leaves the property. Much of the site will be retained in its natural state for enjoyment by the campers.

Section C: Shoreland Standards:

This section may be applicable since a stream flows from the upper pond to & through the lower pond. Some of the existing & proposed development may be located within 75 of that stream. Additionally, the area around Marston's Pond is zoned Resource Protection. There is no proposed development around the pond (south of Marston's Road).

a: Will not result in unreasonable damage to spawning grounds, Fish aquatic life, bird and other wildlife habitat:

The Maine Department of Environmental Protection & the Maine Department of Inland Fisheries & Wildlife will be reviewing the project for its impact to all fish & wildlife. The site is not considered to be a high value wading bird or waterfowl habitat. The stream below Lower Pond may be a trout habitat. Our proposed modifications to the downstream end of Lower Pond will improve the water quality & temperature of the stream flow.

b: Will reasonably conserve shoreland vegetation:

The MDEP has established a 75' no disturbance buffer along the stream. The Department of Inland Fisheries & Wildlife has suggested that the buffer be increased to 100'. . As such, they will be requiring that a 75' to 100' undisturbed buffer be left along the stream & pond edges. A permit by rule will be submitted for all camp sites that are proposed within the buffer.

There will be no campsites adjacent to Marston's Pond. All areas surrounding Marston's pond – except the areas surrounding Marston's Road and the recreational areas already permitted – will be left in its natural state. Any previous disturbance will be revegetated per MDEP criteria.

c: Will reasonably conserve visual points of access to waters as viewed from public facilities:

The view of Marston's Pond is one of the highlights of the proposed design. It will be preserved. Access to Upper Pond will be improved and the view preserved.

d: Will conserve actual points of public access to waters:

Marstons Road & Upper Twain Road will be improved & will provide easy access throughout the site.

e: Will reasonably conserve natural beauty:

Much of the site will be preserved in its natural state. The applicant sees the properties natural beauty as the main attraction for this campground. It will be preserved & improved wherever possible.

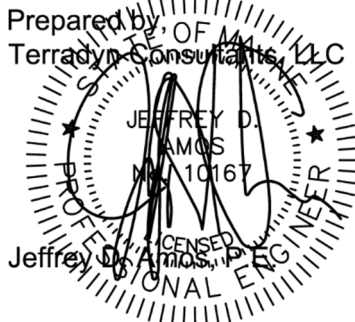
f: Will reasonably avoid problems associated with floodplain development or use:

There is not a floodplain associated with the stream outside of the existing banks.

The following items are attached as required by the Conditional Use Application procedures:

- Attachment 1: Conditional Use Application
- Attachment 2: Property Deeds
- Attachment 3: Location Map
- Attachment 4: Stormwater Management Report
- Attachment 5: Septic Test Pit Logs
- Attachment 6: HHE-200 forms
- Attachment 7: Traffic Study
- Attachment 8: Response Letter from Unusual & Natural Areas Program
- Attachment 9: Sample Reservations & Rate Sheet
- Attachment 10: Examples of Campgrounds with Rental Cabins
- Attachment 11: List of Campgrounds approved by the State in 2018
- Attachment 12: Recorded Boundary Survey
- Attachment 13: Site Density Exhibit
- Attachment 14: Preliminary Plans

We look forward to discussing this information with the Planning Board at an upcoming Planning Board Meeting. Thank you for your consideration, and please call me if you have any questions as you review the enclosed plans and information.



6. Property Owner's Name _____

7. Property Owner's Address _____

8. Location of property for
Which the permit is sought? 2 Upper Twain Road

9. Indicate the Map and Lot number for the
Property from the Town's assessment records Map 7 Lot 22

10. Indicate Zoning District in which the
Property is located (check as many as apply)

☒ Natural Resource Protection

☐ Highlands

☒ Rural

☐ Village Commercial

11. List the use for which a Conditional Use Permit is being sought. Please refer to Article 6, District Regulations. The proposed use must be specifically listed as conditional use in the District in which it is located.

Primary Use: Campground. The following uses are accessory: Primitive Recreation, Retail Business, Service Business, Community Building, Eating & Drinking Place & Neighborhood Store

12. Attach the following information to this application as outlined in Article 8, Conditional Uses. For each item, please indicate by checking ☒ that item that it has been included with your application.

☒ a. A location map showing the location of the property with respect to Roadways and major natural features. This map should allow the Board to locate the parcel in the field and on the Town's zoning and tax maps.

- ☒ b. A written description of the proposed use of the property. This statement shall describe the exact nature of the proposed use.
- ☒ c. An accurate, scale drawing of the lot showing the location of any existing or proposed buildings, structures, and natural features, driveways and parking areas.

Section B. Standards for Conditional Use Permit
(The full text appears in Article 8.3).

1. The Planning Board shall consider impact:

- ☒ a. the size of the proposed use compared with surrounding uses;
- ☒ b. the intensity of the proposed use, including amount and type of traffic to be generated, hours of operation, expanse of pavement, and similar measures of intensity of use, compared with surrounding uses;
- ☒ c. the potential generation of noise, dust, odor, vibration, glare, smoke, litter and other nuisances;
- ☒ d. unusual physical characteristics of the site, including size of the lot, shape of the lot, topography, and soils, which may tend to aggravate adverse impacts upon surrounding properties.
- ☒ e. the degree to which landscaping, fencing, and other design elements have been incorporated to mitigate adverse impacts on surrounding properties.

2. The Planning Board shall consider facilities:

- ☒ a. the ability of traffic to safely move into and out of the site at the proposed location;
- ☒ b. the presence of facilities to assure the safety of pedestrians passing by or through the site;
- ☒ c. the capacity of the street network to accommodate the proposed use;
- ☒ d. the capacity of the storm drainage system to accommodate the proposed use;
- ☒ e. the ability of the Town to provide necessary fire protection services to the site and development.

3. The Planning Board shall consider natural characteristics:

- ☒ The natural characteristics of the site, including topography, drainage, and relationship to ground and surface waters and flood plains, shall not be such that the proposed use when placed on the site will cause undue harm to the environment or to neighboring properties.

Section C. Shoreland Standards

Section to be completed only if any portion of the property is located within 250 feet of the normal high water mark of Ingalls Pond, Sand Pond, Southeast Pond, Adams Pond or the Saco River or within 75 feet of any stream. For each standard, attach a written statement demonstrating how the proposed use complies with that standard. For each item, please indicate by checking that item that it has been included with your application. Each standard must be addressed in your submission.

- ☒ a. will not result in unreasonable damage to spawning grounds. Fish aquatic life, bird and other wildlife habitat;
- ☒ b. will reasonably conserve shoreland vegetation;
- ☒ c. will reasonably conserve visual points of access to waters as viewed from public facilities;
- ☒ d. will conserve actual points of public access to waters;
- ☒ e. will reasonably conserve natural beauty;
- ☒ f. will reasonably avoid problems associated with floodplain development or use.

Section D. Certification (to be completed by all applicants)

I/we Scott Efron of Nature's Wilderness, LLC, certify that I/we are the legal applicants for the Conditional Use Permit requested by this application, that I/we are the owners of the property covered by this application or have the property owner's consent to the filing of this application and have legal interest in the property and that the information contained in this application and supporting material is accurate and true.

I/we further certify that I/we have read the standards for granting of Conditional Use Permits contained in the Land Use Ordinance.

Signature of Applicant Date

Signature of Applicant Date

For Planning Board Use Only

Date Received by Baldwin Planning Board:

Received by:

Public Hearing Date:

Conditional Use Permit Application of:

Permit Denied (date):

Explanation of Denial:

Permit Approved (date):

Conditions to Permit if any,

APPLICATION DATE: _____ SUBSTANTIAL START DATE: _____

TOWN OF BALDWIN BUILDING PERMIT APPLICATION #

ZONE

MAP#

LOT #

Owner _____ Phone _____
Address _____
LOCATION OF CONSTRUCTION _____
Contractor _____ Phone _____
Address _____
Est Construction Cost _____
Proposed Use _____ Lot Size _____

Building Dimensions: L _____ W _____ Total Sq. Ft. _____
No. of Stories _____ No. of Bedrooms _____ No. of Baths _____
Foundation: _____

Foundation ☐ 8' ☐ 4' ☐ Slab ☐ Pier ☐ Other
Description: _____

Floor: _____
Sill Size _____ Sills must be anchored
Girder Type _____ Size _____
Lally Column Spacing _____ Size _____
Joists Type & Size _____ Spacing _____ O.C.
Bridging Type & Size _____ Spacing _____ O.C.
Floor Sheathing Type _____ Size _____
Other Material _____

Exterior Walls: _____
Studding Type & Size _____ Spacing _____ O.C.
No. of Windows _____ No. of Doors _____
Header Sizes _____ Span _____
Bracing: ☐ Yes ☐ No _____ Corner Posts Size _____
Insulation Type _____ Size _____
Siding Type _____ Weather Exposure _____
Masonry Materials _____
Metal Materials _____

Interior Walls: _____
Studding Type & Size _____ Spacing _____ O.C.
Header Sizes _____ Span _____
Fire Wall if Required _____
Other Materials _____

Ceiling: _____
Joists Type & Size _____ Height _____
Strapping Size _____ Spacing _____
Insulation Type _____

Roof: _____
Type _____ Span _____
Sheathing Type _____ Pitch _____
Roof Covering Type _____
Chimneys: _____
Type _____ No. of Fire Places _____
Heating: _____
Type of Heat _____
Electrical: _____
Service Entrance Size _____ Smoke Detector Required ☐ Yes ☐ No
Swimming Pools: _____
Type _____ Square Footage _____
Pool Size _____
Must conform to National Electrical Code and State Law.

Code Enforcement Officer _____ Date _____
Signature of Applicant _____ Date _____

WORK TO COMMENCE WITHIN SIX MONTHS OF PERMIT APPROVAL.

FOR OFFICIAL USE ONLY

Flood Zone ☐ Yes ☐ No _____
Zoning Board Approval: ☐ Yes ☐ No Date _____
Planning Board Approval: ☐ Yes ☐ No Date _____
FEES: _____ Totals _____

Alterations _____
Late Fee _____ X2 _____
Total _____

Notes _____

DLN# 1001640007215

MAINE REAL ESTATE TAX-Paid

WARRANTY DEED

We, CAMP TWAIN, INC., a Maine Corporation, whose mailing address is 3 Bickford Street, Scarborough, Maine 04074, and MARY M. WAYE, now of 10 Bay Street, Scarborough, Maine 04074, for consideration paid, grant to NATURE'S WILDERNESS, LLC, a Florida Limited Liability Company with a mailing address of 17569 Middlebrook Way, Boca Raton, Florida 33496, with WARRANTY COVENANTS, the land in Baldwin, Cumberland County, Maine, more particularly described in EXHIBIT A attached hereto.

Being the same premises conveyed to Camp Twain, Inc. by Quitclaim Deed from Marianne G. Fenton, Cynthia J. Garner, Dana A. Garner, John W. Garner, Jr., and Suzanne G. Smith, dated December 28, 2001 and recorded in the Cumberland County Registry of Deeds in Book 17172, Page 120.

Also being the same premises conveyed to Mary M. Waye by deed from Sylvia B. Marston dated January 24, 1989 and recorded in the Cumberland County Registry of Deeds in Book 8638, Page 87.

WITNESS our hands and seals this 26 day of April, 2016.

CAMP TWAIN, INC.

Marianne G. Fenton
By: Marianne G. Fenton, President

Mary M. Waye
MARY M. WAYE

STATE OF MAINE
Cumberland, ss:

Date: 4/26/16

Personally appeared before me the above-named MARIANNE G. FENTON, duly authorized President of Camp Twain, Inc., and acknowledged the foregoing to be her free act and deed, individually and in her said capacity.

Jane L. Barriault
Notary Public Attorney at Law

Please type or print name of Notary:

Jane L. Barriault
Attorney at Law

AGE

STATE OF MAINE
Cumberland, ss:

Date: 4/26/16

Personally appeared before me the above-named MARY M. WAYE and acknowledged the foregoing to be her free act and deed.


Notary Public/Attorney at Law

Please type or print name of Notary:

Jane L. Barriault
Attorney at Law

m m w
MBF

AGE

EXHIBIT A

Certain lots or parcels of real property located in Baldwin, County of Cumberland and State of Maine, together with all buildings and other improvements thereon, bounded and described as follows:

Parcel 1:

A certain lot or parcel of land situated in said Baldwin, bounded and described as follows: To the North by the town road leading from West Baldwin to East Baldwin by way of the so-called Flint neighborhood; to the East by land now or formerly of John F. Flint and land now or formerly of Foresti Sandborn; to the South by land now or formerly of Foresti Sandborn, land now or formerly of Jeremiah B. Yates, and land now or formerly of Sylvanus R. Yates; and to the West by land now or formerly of Sylvanus R. Yates. Known as the "meadow lot", so-called, formerly owned by the late Joseph Harding, Jr.

Parcel 2:

A certain lot or parcel of land in said Baldwin, bounded and described as follows: Commencing at a concrete post on the north side of the road leading from West Baldwin to East Baldwin, by way of the so-called Flint neighborhood, North $1^{\circ} 10'$ East, 251 feet to a stone and iron axle, bounded on the East by land now or formerly of D. T. Flint; from the stone and iron axle, South $51^{\circ} 33'$ West 673 feet to a concrete post, and South on the same line 810 feet to a stake, bounded on the Northwest by land now formerly of D. T. Flint. From the stake, North $71^{\circ} 48'$ East 995 feet to a second stake, bounded on the South by land now or formerly of Wilson Burnell and Mary H. Burnell. From the second stake, 400 feet North $30^{\circ} 15'$ East to the concrete post at which measurement commenced, bounded on the East by land now or formerly of said Wilson Burnell and Mary H. Burnell.

Parcel 3:

A certain lot or parcel of land situated in said Baldwin and bounded and described as follows: To the West by the line running from the second stake referred to hereinabove in description of Parcel 2, North $30^{\circ} 15'$ East to the concrete post at which measurement was commenced in said Parcel 2, being all of the land lying between said line and Parcel 1.

Parcel 4:

Also a certain lot or parcel of land situated in said Baldwin, now or formerly known as the Gore Lot, bounded and described as follows: To the North by land now or formerly of Scribner and Rankin; East by the land now or formerly known as the Binford Lot; South by land now or formerly of Wilson and Mary H. Burnell, and the now or formerly so-called Deacon's Fountain Road; west by land now or formerly of Walter Flint.

Subject to an easement granted to Dwight R. Mills, Incorporated, under deed dated November 7, 1979 recorded at Book 4524, Page 278 of said Deeds.

Parcel 5:

A certain lot or parcel of situated in said Baldwin and bounded and described as follows: On west by land now or formerly of Paul C. Marston and said John W. Garner; on the North by land now or formerly of the Paul C. Marston and said John W. Garner; on the East by the road leading to the now or formerly so-called "Jack Flint Place"; and on the South by the road leading from West Baldwin to the now or formerly so-called "Jack Flint Road".

Subject to the right reserved by Wilson Burnell and Mary H. Burnell to cut firewood on said lot, and a right of way to the Burnell family burial ground and around said ground to repair its fence as set forth in the deed at Book 1923, page 167 of said Deeds.

Parcel 6:

A certain lot or parcel of land situated in said Baldwin, bounded and described as follows: On the West by the road leading to the now or formerly so-called "Jack Flint place; on the North by land now or formerly of Paul C. Marston and said John W. Garner; on the East by land now or formerly of Paul C. Marston and said Garner; and on the South by the town road leading to East Baldwin;

Parcel 7:

A certain lot or parcel of land situated in said Baldwin, on the southerly side of the road leading from East Baldwin to West Baldwin, bounded and described as follows: Beginning on said road at a stone and hemlock tree at land now or formerly of S. W. Noyes, formerly known as Kennard's land; and South by land now or formerly of S. W. Noyes to an iron pipe driven in the ground at the land now or formerly of Harold H. Hawkes; West by land now or formerly of said Hawkes to a concrete post at land now or formerly of Wilson Burnell; North by land now or formerly of said Burnell to an iron pipe driven in the ground by said road to the point begun at.

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Parcel 8:

A certain lot or parcel of land situated in said Baldwin, on the North side of the road leading from East Baldwin to West Baldwin, bounded and described as follows: Beginning on said road at the stone wall at the land now or formerly of Paul C. Marston and said John W. Garner, North by the stone wall and land now or formerly of Paul C. Marston and said Garner to a corner in said stone wall at the land now or formerly of Milliken; East by the stone wall with the land now or formerly of Milliken to the now or formerly so-called Milliken Road; Southeast by the now or formerly so-called Milliken Road to the first mentioned road; West by the first mentioned road to the point begun at.

Parcel 9:

A certain lot or parcel of land situated in said Baldwin, bounded and described as follows: Beginning at a point on the West side of the road leading across the now or formerly so-called "Jack Flint farm" at the Southeast corner of the portion of said farm which lies West of said road; North by said road to a stone wall; West by said stone wall by a line extended from said wall across a brook to the east line of an old farm road; South by the east side of said old farm road and by its East line extended from the point where it makes a substantial turn to the South line of said farm; East by the south line of said farm to the point beginning.

Excepting and reserving to Delmont R. Hawkes, his heirs and assigns, a right of way on foot and with vehicles, from the road first mentioned across said parcel to land belonging to said Hawkes adjoining said parcel on the West, said right of way to coincide as nearly as may be with the old farm road above referenced to.

Parcel 10:

A certain lot or parcel of land situated in said Baldwin, adjoining Parcel 9 on the North, bounded and described as follows: Beginning at a point on the North line of said Parcel 9, 300 feet East from the brook aforementioned; West along said North line a distance of 600 feet and from these two points extending to the north, embracing a tract 300 feet in width on either side of said brook to the North line of land now or formerly of Loren B. Burnell.

Excepting and reserving to Delmont R. Hawkes, his heirs and assigns, the right of way to cross said parcel on foot or with vehicles, at any convenient point or points for the purposes of accessing to the land of said Hawkes lying west of said parcel, but not to the injury of any erection or structure thereon.

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Parcel 11:

A certain lot or parcel of land situated in said Baldwin, bounded and described as follows: Northeast by the Town Road leading from West to East Baldwin through the now or formerly so-called "Flint neighborhood"; Southeast by land now or formerly of Paul C. Marston and said John W. Garner and by Pigeon Brook; Southwest by land now or formerly of Wilson and Mary H. Burnell and land now or formerly of Henry W. and Nellie M. Black; Northwest by land now or formerly of Paul C. Marston and said Garner, and by land now or formerly of the heirs of Arthur P. Yates;

Parcel 12:

Also a certain lot or parcel of land situated in said Baldwin, bounded and described as follows: South by the land now or formerly of the heirs of Henry H. Pierce; Southeast by Pigeon Brook; Southwest by land now or formerly of Henry W. and Nellie M. Black; North by the parcel described hereinabove as Parcel 11.

Parcel 13:

A certain lot or parcel of land situated in Baldwin, bounded and described as follows: Measuring from the center of the Central Maine Power tower, 28 feet to a line running parallel to the center of the line of said tower, this line being the south boundary; bounded Northwest by land now or formerly of Donald T. Flint; Southeast by the land now or formerly of the heirs of Arthur P. Yates; East by the land now or formerly of Paul C. Marston and said John W. Garner.

Parcel 14:

A certain lot or parcel of land situated in said Baldwin on the Southwest side of a pond now or formerly called Burnell's Pond, bounded and described as follows: Beginning in the Northwest side line of land now or formerly of Ralph Yates and Lillie E. Hefler, Southwest from said Pond, at a spotted hemlock tree situated Northeast of a large double white pine tree, and running in a straight line South 55° 45' East to the Southeast side line land now or formerly of said Yates and Hefler, at a spotted beach tree on land now or formerly of Paul C. Marston, said spotted beach tree being located approximately ten feet East of a large white pine tree; Northeast along the division line between land now or formerly of said Yates and Hefler, and land now or formerly of Paul C. Marston to said pond; West or Northwest along the shore of said pond to the division line between land now or formerly of said Yates and Hefler and other land of Paul C. Marston; Southwest along said last named division line to the point of beginning;

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Parcel 15:

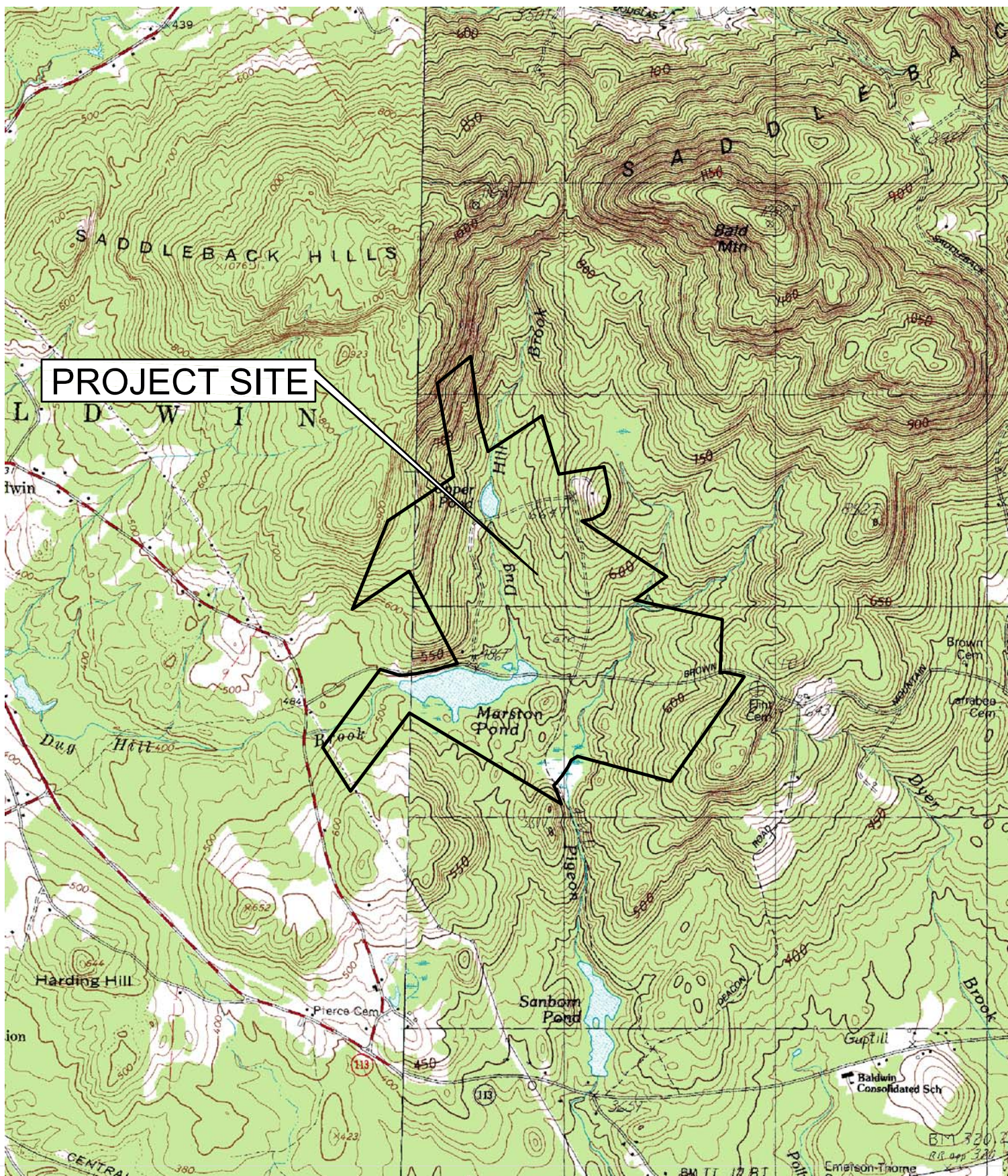
A certain lot or parcel of land situated in said Baldwin, on the easterly side of the now or formerly so-called Deacon Road, leading from Route No. 113 past the "Jack Flint place," and bounded and described as follows: Beginning on said Deacon Road at a point in the above described Parcel 4, said point of beginning marked by a pipe set in the ground; North by said Deacon Road and land of Paul C. Marston past the cellar of the dwelling formerly of the late Jack Flint a distance of 677 feet, more or less, to the first stone wall on land formerly of Delmont R. Hawkes, now or formerly Dwight R. Mills, Incorporated; East by the stone wall at land formerly of said Hawkes, now or formerly of Dwight R. Mills, Incorporated, a distance of 690 feet, more or less, to an intersection with a stone wall running southerly at other land now or formerly of Dwight R. Mills, Incorporated; South by said stone wall and land now or formerly of Dwight R. Mills, Incorporated, formerly of said Hawkes, a distance of 1070 feet, more or less, to a stone wall on land of the Decedent; West by said stone wall and land of Paul C. Marston a distance of 300 feet, more or less, to the point of beginning;

Parcel 16:

A certain lot or parcel of land situated in said Baldwin, lying South and East of the two lines hereinafter described: The first line begins on the West side of the Deacon Road at the second stone wall which is 1000 feet North from Parcel 4 hereinabove described, opposite the iron pipe being the point of beginning for Parcel 15 hereinabove described, said line running West a distance of 1200 feet, more or less, to a brook and continuing the same course across the brook 900 feet, more or less, to the East line of an old farm road marked by a line of iron posts. The second line begins at the West end of the first line of the East side of said farm road and runs South by said road and the line of iron posts a distance of 650 feet, more or less, to a point where the farm road turns at the East, and then continues on the extension of said farm road South an additional distance of 530 feet, more or less, to Parcel 4 hereinabove described.

Reference may be made to "Boundary Survey for Mary M. Waye and Pauline Garner, Baldwin, Maine" dated 12/28/1995, scale 1"=300', prepared by Lester Hammond, Jr. and duly recorded in Plan Book 196, Page 84 in the Cumberland County Registry, which shows most of the above described premises.

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SHEET DESCRIPTION

U.S.G.S. QUADRANGLE MAP
NATURES WILDERNESS

PREPARED FOR

MR. SCOTT EFRON
2 UPPER TWAIN ROAD
BALDWIN ME 04091



Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

P.O. Box 339
111 Elderberry Lane
New Gloucester, ME 04260
Office: (207) 926-5111
Fax: (207) 221-1317
www.terradynconsultants.com

JOB NO.

1640

DATE

9/28/2017

SCALE

1"=2000'

FIGURE

1

OF

1

STORMWATER MANAGEMENT PLAN

Nature's Wilderness Campground

Baldwin, Maine

The following Stormwater Management Plan has been prepared for Nature's Wilderness Campground, LLC to evaluate stormwater runoff and erosion control for the proposed campground consisting of approximately 190 mixed use lots: recreational vehicles, tents, and cabins off Senator Black Road and Marston Road, in Baldwin, Maine.

Site Calculations

Total Property Area	117 Ac (+/-)
Existing Impervious Area	2.00 Ac
Total New Impervious Area	22.5 Ac
Total Landscaped Area	22.5 Ac
Total Developed Area	45.0 Ac

Assumptions

Each campsite will include a level area for the camping vehicle or tent, at least one parking space, an area for a picnic table and an area for gathering around the fire ring. These are all requirements of the State of Maine and the Town of Baldwin for any campground. Additionally, the Town of Baldwin requires that 5,000 square feet of land area be available for each campsite. Utilizing these requirements, we assume the following areas for each category of campsite:

- Walk-In Tent site: 600 square feet of impervious area, 4,400 square feet of green space.
- Drive-In Tent site: 1,750 square feet of impervious area, 3,250 square feet of green space.
- Recreational vehicle lots without on-site sewer disposal: 2,950 square feet of impervious area, 2,050 square feet of green space
- Recreational vehicle lots with on-site sewer disposal: 3,050 impervious area, 1,950 square feet of green space
- Cabin lot: 1,000 square feet of impervious area, 4,000 square feet of green space

Clearing will be limited to meet the requirements discussed above for most campsites. There are some areas that will not have trees in between each site. Overall grading of the site will retain the overall natural slopes of the site, while creating relatively level sites for users.

Existing Conditions

The development parcel is located on the easterly side of Route 113 in Baldwin, approximately 6 miles to the west of Sebago Lake. The property is approximately 1,000 acres and is accessed by Marston Road. The site is bounded to the west by large residential lots along Senator Black Road, while undeveloped properties are adjacent to the north, east and south. The property is mostly wooded and undeveloped. There is an existing gravel roadway leading into the property from the Brown Road, with multiple multi-use trails located throughout the property.

The development area is located within the Marston Pond watershed. Marston Pond then outlets to Dug Hill Brook, which ultimately terminates in the Saco River. None of these watersheds are listed as a protected watershed by the MDEP.

The project area features topography that contains significant hills and steep banks surrounding the water bodies on the site. Dug Hill Brook is located in the valley. The site generally falls from elevation 1032 feet to the west, and 714 feet to the east, to an elevation of 496 at the surface of Marston Pond. This results in an average grade of approximately 6% to the east of Dug hill Brook, and 18% to the west. The central portion development area has flatter slopes and low areas that contain wetland areas, Upper Pond and a stream channel that is the major inlet of Marston Pond.

Proposed Development

Nature's Wilderness Campground is a proposed approximately 190 lot campground. The development will include the construction of gravel roadways, driveway and parking lots to access individual gravel campsites. Support buildings and infrastructure such as a clubhouse, cabins, swimming pool, bathroom and recreation buildings will be constructed as well. This will add a significant amount of new impervious area to the property.

The project stormwater management system will feature a combination of forested buffer areas, vegetated and riprap swales, culverts and a large treatment pond/fire pond before utilizing the existing Marston Pond for flood control. A gravel bench outlet will be added to Marston Pond to control water temperatures prior to release to Dug Hill Brook, downstream. a forest buffer between the new lots and Dug Hill Brook, to slow down the flow from the new development, prior to reaching the stormwater management pond proposed for the north side of Marston Road. The outlet of the new pond will pass under Marston Road to Marston Pond for channel protection, and a gravel bench will be constructed at the western end of Marston Pond, along with a fixed elevation dam for flooding control to meet the Maine DEP Chapter 500 standards.

Description	Number of Sites
Tent site	83
Recreational vehicle lots without on-site sewer disposal	44
Recreational vehicle lots with on-site sewer disposal	43
Cabin lot	20

Drainage Pattern

Runoff from the new development will be directed to the stormwater management/fire pond proposed for the north side of Marston Road. The outlet of the new fire pond will pass under Marston Road to Marston Pond for channel protection, and a gravel bench will be constructed at the western end of Marston Pond, along with a fixed elevation dam for flooding control to meet the Maine DEP Chapter 500 standards. This outlet is modeled as Study Point 1 in the attached stormwater analysis.

The proposed stormwater management system will be designed to preserve the general pre-development flow patterns.

Flooding

The development area is not located within an area of flood hazard according to the Federal Insurance Rate Map 230200005B, 9B&10B, effective on 07/02/1980. Maps attached to application.

Modeling Assumptions

The onsite stormwater facilities were sized utilizing the USDA Soil Conservation Service (SCS) TR-20 Runoff Simulation Model, as contained in the HydroCAD computer software program (Version 9.0). Runoff curve numbers were determined for each direct watershed by measuring the area of each hydrologic soil group within each type of land cover. Weighted curve numbers were then calculated using curve numbers for various cover types and hydrologic soil groups, assuming "good" conditions as defined in U.S Soil Conservation Service (SCS) publications. Times of concentration and travel times were determined from site topographic maps in accordance with SCS procedures. A maximum length of 150 feet was used for sheet flow.

All of the watersheds' peak runoff rates were analyzed for the 2, 10, and 25-year frequency, 24-hour duration storm events. A Type III rainfall distribution was applied to these storms. The rainfall amounts for Cumberland County (North Windham Area) are as follows:

Storm Frequency Precipitation (in./24 hr)	
2-year	3.1
10-year	4.6
25-year	5.8

The Town of Baldwin Zoning Ordinance only requires analysis for the 25-year, 24-hour storm event, so we have limited our report to this storm event.

Soils

The soils within the project area were delineated by Statewide Surveys, Inc. and are shown on the attached High Intensity Soil Survey. The soil survey reports that the watershed soils are as summarized below:

Soil Type Summary Table		
Soil Symbol	Soil Name	HSG
Hg	Hermon	A
Hr	Lyman-Tunbridge	D
Hs	Lyman-Abram	D
Pf	Paxton	C
Pk	Peru	C/D
Rb	Ridgebury	C/D
Wr	Woodbridge	C
Tu	Tunbridge	C
Ud	Filled Land	D

The soils outside of the project area are from the Cumberland County Medium Intensity Soil Survey as shown on the Soil Data Viewer on the NRCS website (See attached map).

Water Quantity (Flooding Standard)

The following table summarizes the results of stormwater calculations for the design storm events for the project area. Calculations and computer modeling sheets are provided with this report.

Table 1 - Stormwater Runoff Summary Table						
Pre-Development vs. Post-Development						
Study Point #	2Yr/24Hr (cfs)		10Yr/24Hr (cfs)		25Yr/24Hr (cfs)	
	Pre	Post	Pre	Pre	Pre	Post
1	N/A	N/A	N/A	N/A	15.76	17.50

As the above result table shows, the post-development flow rate for the 25-year/24-hour design storm events are nearly equal to the pre-development condition. The temporary volume of storage available within the existing Marston Pond adequately stores the Post-

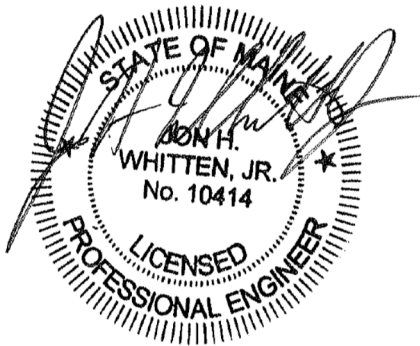
Development volumes, meeting the MDEP standards for temporary storage for channel protection volume.

Summary

Based on the results of this evaluation, the proposed stormwater design is not expected to cause flooding, erosion or other significant adverse effects downstream of the site.

Prepared by:

PLYMOUTH ENGINEERING, INC.



Dated: 11-15-2018

Jon H. Whitten, Jr., P.E.

Senior Project Manager



Soil Suitability Report

prepared for
Nature's Wilderness Campground
(Terradyn Consultants, LLC)
Marston Road
Baldwin, Maine
February 2018

Soil test pits observed January 30, and February 6, 2018

Maps prepared for proposed campground utilizing private water supplies and on-site subsurface wastewater disposal

Map scaled 1" = 120', base map provided by Terradyn Consultants, LLC

Longview Partners was contracted by Terradyn Consulting, LLC to evaluate soils for a proposed campground and recreation facility. The campground, as we understand it, will include campsites with full sewer hook-ups, primitive tenting sites which will have access to public restrooms and showers, a full-service restaurant serving three meals per day, and multiple free-standing cabins.

Soils were evaluated at pre-selected locations as shown on a plan provided by Terradyn Consulting, LLC. Some locations were adjusted while on-site, as needed, to accommodate existing topographic features and to take advantage of soils suitable for siting *first-time* subsurface wastewater disposal fields per the standards of the *State of Maine Subsurface Wastewater Disposal Rules* (the *Rules*). All soils evaluated consist of stony, glacial till soils that generally exhibit 'perched' water tables above a restrictive substrata (hardpan). These soils require *medium-large* size ratings per the *Rules*, or 3.3 sq. ft. of suitable soil area per gallon of wastewater generated per day.

Design flows for some of the proposed uses are as follows:

Campsites with full sewer & water hook-up: 75 gallons per day (gpd) per site

Free-standing cabins (minimum 2 bedrooms/unit): 180 gpd per cabin (90 gpd per bedroom)

Full-service restaurant serving 3 meals per day with china (non-paper) service: 45 gpd/seat and 12 gpd/employee (a grease trap will also be required and a multiplier of 1.8 x base design flow will be utilized to account for increased strength of restaurant wastewater flows)

A recreation hall is also shown on the plan, which includes space for limited café-style food preparation and a small bar service for individuals staying in the campground. This design flow (bar/tavern/cocktail lounge w/ limited food per the *Rules*) will be assessed at either 15 gallons per seat or 13 gallons per patron.

Since it is uncertain where vehicular traffic/parking may be needed in the vicinity of the proposed disposal fields, we recommend installation of H-20 rated concrete chambers which can withstand heavy loads. Due to shallow water tables and existing topography in certain locations, pump stations are likely to be needed to convey wastewater collected to final disposal field locations.

Please take note that *public water supplies* (i.e. 25 or more users per day) require 300' setbacks to all disposal fields. Disposal fields less than 1,000 gpd must be located 100' to the ponds located on site and the stream identified. Disposal fields of 1,000 to 1,999 gpd must maintain setbacks of 200' to ponds and streams. Fields designed for more than 2,000 gpd require 300' setbacks and must be stamped by a Professional Engineer. Fields of this size also require additional review and approval by the State of Maine Division of Environmental Health. Nitrate and mounding analysis are also required for disposal fields designed for 2,000 gpd or more.

The project site has significant areas of suitable soils available for final placement of wastewater disposal fields, or reserve areas if engineered designs are required. Longview Partners can return to the site, if necessary, to provide additional soil test pit data for final designs. Please note that additional field work is required to complete full subsurface wastewater design applications (form HHE-200) for final review and permitting once wastewater design flows have been quantified.

Town, City, Plantation

BALDWIN

Street, Road Subdivision

NATURE'S WILDERNESS
C.G.

(FOR)

Owner's Name

TERRADYN CONSULTANTS

TP'S BY EXCAVATION

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

Observation Hole TP1 ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
SANDY LOAM	FROZEN	VARIABLE	
LOAMY SAND		BROWN	
(FILL)			
STONY	FRILABLE	DARK	
SANDY LOAM		YELLOWISH BROWN	
STONY	SOMEWHAT LOAMY	OLIVE BROWN	FEW FAINT
SAND	FIRM TO FIRM		COMMON, DISTINCT

FOR WASTEWATER DISPOSAL **FILL OVER 3**
FOR SOILS MAPPING **SKERRY**
Soil Classification: **3 C**
Slope: **30%**
Limiting Factor: **30"**
Ground Water: **X**
Restrictive Layer: **X**
Bedrock: **X**
Pit Depth: **X**
Drainage Class: **MND**
Hydrologic Group: **C**

Observation Hole TP2 ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
SANDY LOAM	FROZEN	VARIABLE	
LOAMY SAND		BROWN	
(FILL)			
STONY	FRILABLE	DARK	
FINE SANDY LOAM		YELLOWISH BROWN	
		YELL. BROWN	

FOR WASTEWATER DISPOSAL **FILL OVER 3**
FOR SOILS MAPPING **SKERRY**
Soil Classification: **3 C**
Slope: **48%**
Limiting Factor: **48"**
Ground Water: **X**
Restrictive Layer: **X**
Bedrock: **X**
Pit Depth: **X**
Drainage Class: **MND**
Hydrologic Group: **C**

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

Observation Hole TP3 ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
LOAMY SAND	FROZEN	LIGHT	
		OLIVE	
SAND		BROWN	
(FILL)			
	FRILABLE		
STONY		DK. BH.	
F.S.L.		DK. YELL.	
	FIRM @ 54"	BROWN	COMMON @ 54"

FOR WASTEWATER DISPOSAL **FILL OVER 3**
FOR SOILS MAPPING **SKERRY**
Soil Classification: **3 C**
Slope: **57%**
Limiting Factor: **57"**
Ground Water: **X**
Restrictive Layer: **X**
Bedrock: **X**
Pit Depth: **X**
Drainage Class: **MND**
Hydrologic Group: **C**

Observation Hole TP4 ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY SANDY LOAM		LT GRAY (ALBIC)	
		DK. YELL. BROWN	
LOAMY SAND	FRILABLE	YELLOWISH BROWN	
		LIGHT OLIVE BROWN	FEW, FAINT
STONY			COMMON, FAINT
	SOMEWHAT FIRM TO FIRM	OLIVE	SATURATED

FOR WASTEWATER DISPOSAL **FILL OVER 3**
FOR SOILS MAPPING **SKERRY**
Soil Classification: **3 C**
Slope: **20%**
Limiting Factor: **20"**
Ground Water: **X**
Restrictive Layer: **X**
Bedrock: **X**
Pit Depth: **X**
Drainage Class: **MND**
Hydrologic Group: **C**

Site Evaluator / Soil Scientist Signature

237/213

11/30/18

SE/CSS

Date

Town, City, Plantation
BALDWIN

Street, Road, Subdivision
NATURE'S WILDERNESS C.G.

(For) Owner's Name
TERRADYN CONSULTANTS

TP'S BY EXCAVATOR

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

Observation Hole **TP 5** ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY		DARK	
SANDY		YELLOWISH	
LOAM	FRIABLE	BROWN	
		LIGHT OL. BROWN	FEW FAINT
STONY	SOMEWHAT	OLIVE	COMMON
LOAMY	FIRM		DISTINCT
SAND	TO		
SAND	FIRM		
LIMIT OF EXCAVATION @ 62"			
Soil Classification	Slope	Limiting Factor	Ground Water
3 C		17"	<input checked="" type="checkbox"/> Restrictive Layer
Profile	Condition	%	Pit Depth
SKERRY			
Soil Series Name	Drainage Class	Hydrologic Group	
	MWD	C	

FOR WASTEWATER DISPOSAL

FOR SOILS MAPPING

Observation Hole **TP 6** ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY		LT. GRAY (ALBID)	
FINE SANDY LOAM	FRIABLE	DARK YELLOWISH BROWN	
		YELL. BR.	
STONY		MIXED	COM. FAINT
LOAMY SAND	FIRM	OLIVE BROWN	COMMON, DISTINCT
SAND			
SAND			
LIMIT OF EXCAVATION			
Soil Classification	Slope	Limiting Factor	Ground Water
3 D		13"	<input checked="" type="checkbox"/> Restrictive Layer
Profile	Condition	%	Pit Depth
COLONEL			
Soil Series Name	Drainage Class	Hydrologic Group	
	SWP	C	

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

Observation Hole **TP 7** ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY		DARK BROWN	
FINE SANDY LOAM	FRIABLE	DARK YELLOWISH BROWN	
		OLIVE BROWN	COMMON, FAINT
STONY		OLIVE	COMMON
LOAMY SAND	FIRM	GRAY	DISTINCT
SAND			FREE H ₂ O
LIMIT OF EXCAVATION			
Soil Classification	Slope	Limiting Factor	Ground Water
3 D		12"	<input checked="" type="checkbox"/> Restrictive Layer
Profile	Condition	%	Pit Depth
COLONEL			
Soil Series Name	Drainage Class	Hydrologic Group	
	SWP	C	

FOR WASTEWATER DISPOSAL

FOR SOILS MAPPING

Observation Hole **TP 8** ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY		DARK	
FINE SANDY LOAM	FRIABLE	YELLOWISH BROWN	
		BROWN	NONE EVIDENT
REFUSAL			
LIMIT OF EXCAVATION			
Soil Classification	Slope	Limiting Factor	Ground Water
2 A		15-18"	<input checked="" type="checkbox"/> Restrictive Layer
Profile	Condition	%	Pit Depth
LYMAN			
Soil Series Name	Drainage Class	Hydrologic Group	
	EWD	D	

Site Evaluator / Soil Scientist Signature

237/213

1/30/18

SE/CSS

Date

Town, City, Plantation
BALDWIN

Street, Road Subdivision
NATURE'S WILDERNESS C.G.

(FOR) Owner's Name
TERRADYN CONSULTANTS

TP's BY EXCAVATOR

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

Observation Hole **TP 9** ☒ Test Pit ☐ Boring
Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
FINE SANDY LOAM	FRIABLE	DARK YELLOWISH BROWN	NONE
EVIDENT			
BEDROCK			

Soil Classification: **2 A**
Profile: **LYMAN**
Slope: **10-16%**
Limiting Factor: **END**
Ground Water: **D**
Restrictive Layer: **END**
Bedrock: **END**
Pit Depth: **END**
Drainage Class: **END**
Hydrologic Group: **D**

Observation Hole **TP 10** ☒ Test Pit ☐ Boring
Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY FINE SANDY LOAM	FRIABLE	DARK YELLOWISH BROWN	NONE
STONY LOAMY SAND & SAND	FIRM	OLIVE BROWN GRAY	COMMON, FAINT

Soil Classification: **3 C**
Profile: **SKERRY**
Slope: **15%**
Limiting Factor: **MWD**
Ground Water: **C**
Restrictive Layer: **C**
Bedrock: **C**
Pit Depth: **C**
Drainage Class: **MWD**
Hydrologic Group: **C**

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

Observation Hole **TP 11** ☒ Test Pit ☐ Boring
Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY FINE SANDY LOAM	FRIABLE	DK. BROWN	NONE
STONY LOAMY SAND & SAND	SOMewhat FIRM TO FIRM	DARK YELL. BR. YELLOWISH BROWN OL. BROWN	FEW, FAINT

Soil Classification: **3 C**
Profile: **SKERRY**
Slope: **16%**
Limiting Factor: **MWD**
Ground Water: **C**
Restrictive Layer: **C**
Bedrock: **C**
Pit Depth: **C**
Drainage Class: **MWD**
Hydrologic Group: **C**

Observation Hole **TP 12** ☒ Test Pit ☐ Boring
Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY FINE SANDY LOAM	FRIABLE	DARK BROWN	NONE
STONY LOAMY SAND & SAND	SOMewhat FIRM TO FIRM	DARK YELLOWISH BROWN YELL. BR. OLIVE BROWN	FEW, FAINT

Soil Classification: **3 C**
Profile: **SKERRY**
Slope: **20%**
Limiting Factor: **MWD**
Ground Water: **C**
Restrictive Layer: **C**
Bedrock: **C**
Pit Depth: **C**
Drainage Class: **MWD**
Hydrologic Group: **C**

Site Evaluator / Soil Scientist Signature

237/213

1/30/18

SE/CSS

Date

Town, City, Plantation
BALDWIN

Street, Road, Subdivision
NATURE'S WILDERNESS C.G.

(For) Owner's Name
TERRADYN CONSULTANTS

TP'S BY EXCAVATOR

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

Observation Hole **TP13** ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY		DK. BROWN	
FINE		DARK	
SANDY	FRIABLE	YELLOWISH BROWN	
LOAM		YELL. BR. - FEW FAINT	
STONY	FIRM	OLIVE	COMMON, DISTINCT
LOAMY			
SAND			
SAND			
SAND			
LIMIT OF EXCAVATION			
Soil Classification	Slope	Limiting Factor	Ground Water
3 C	%	16"	<input checked="" type="checkbox"/> Restrictive Layer
Profile Condition	Drainage Class	Hydrologic Group	
SKERRY	MWD	C	

Observation Hole **TP14** ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY		DARK BROWN	
FINE		DARK	
SANDY	FRIABLE	YELLOWISH BROWN	
LOAM		FEW FAINT	
STONY		OLIVE	COMMON, DISTINCT
LOAMY	FIRM	GRAY	
SAND			
SAND			
SAND		OLIVE	Δ Δ Δ
LIMIT OF EXCAVATION @ 53"			
Soil Classification	Slope	Limiting Factor	Ground Water
3 D	%	11"	<input checked="" type="checkbox"/> Restrictive Layer
Profile Condition	Drainage Class	Hydrologic Group	
COLONEL	SWP	C	

FOR WASTEWATER DISPOSAL

FOR SOILS MAPPING

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

Observation Hole **TP15** ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY		DARK BROWN	
FINE		DK. YELL. BROWN	
SANDY	FRIABLE	YELLOWISH BROWN	
LOAM		OLIVE GRAY	FEW FAINT
STONY	FIRM	OLIVE BROWN	COMMON, DISTINCT
LOAMY			
SAND			
SAND			
LIMIT OF EXCAVATION			
Soil Classification	Slope	Limiting Factor	Ground Water
3 C	%	18"	<input checked="" type="checkbox"/> Restrictive Layer
Profile Condition	Drainage Class	Hydrologic Group	
SKERRY	MWD	C	

Observation Hole **TP16** ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY		DK. BROWN	
FINE		DARK YELLOWISH BROWN	
SANDY	FRIABLE	YELLOWISH BROWN	
LOAM		OLIVE BROWN	FEW FAINT
STONY	FIRM		COMMON, DISTINCT
LOAMY			
SAND			
SAND			
LIMIT OF EXCAVATION			
Soil Classification	Slope	Limiting Factor	Ground Water
3 C	%	19"	<input checked="" type="checkbox"/> Restrictive Layer
Profile Condition	Drainage Class	Hydrologic Group	
SKERRY	MWD	C	

FOR WASTEWATER DISPOSAL

FOR SOILS MAPPING

Site Evaluator / Soil Scientist Signature

237/213
SE/CSS

1/30/18 + 2/12/18
Date

Town, City, Plantation
BALDWIN

Street, Road, Subdivision
NATURE'S WILDERNESS C.G.

(For) Owner's Name
TERRADYN CONSULTANTS

TP'S BY EXCAVATOR

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

Observation Hole **TP17** ☒ Test Pit ☐ Boring
Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY		LT. GRAY (ALBIC)	
FINE		DARK	
SANDY		YELLOWISH	
LOAM	FRILABLE	BROWN	
STONY		OLIVE	FEW, FAINT
SANDY		BROWN	
LOAM			
STONY		OLIVE	COMMON, DISTINCT
LOAMY	FIRM		
SAND			
SAND			

LIMIT OF EXCAVATION

Soil Classification: **3 C**
Profile: **C** Condition: **18"**
Soil Series Name: **SKERRY**
Drainage Class: **MUD** Hydrologic Group: **C**

FOR WASTEWATER DISPOSAL
FOR SOILS MAPPING

Observation Hole **TP18** ☒ Test Pit ☐ Boring
Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY		LT. GRAY (ALBIC)	
SANDY	FRILABLE	MIXED	
LOAM		DK. YELL. BR.	
STONY	FIRM	OLIVE	COMMON, DISTINCT
LOAMY			
SAND			
SAND			

LIMIT OF EXCAVATION

Soil Classification: **3 E**
Profile: **E** Condition: **18"**
Soil Series Name: **BRAYTON**
Drainage Class: **P.D.** Hydrologic Group: **D**

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

Observation Hole **TP19** ☒ Test Pit ☐ Boring
Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY		DK. BROWN	
FINE		DARK	
SANDY		YELLOWISH	
LOAM	FRILABLE	BROWN	
STONY		MIXED	FEW, FAINT
LOAMY	FIRM	Y. BROWN	
SAND		OLIVE	COMMON, DISTINCT
SAND		BROWN	

LIMIT OF EXCAVATION

Soil Classification: **3 C**
Profile: **C** Condition: **18"**
Soil Series Name: **SKERRY**
Drainage Class: **MUD** Hydrologic Group: **C**

FOR WASTEWATER DISPOSAL
FOR SOILS MAPPING

Observation Hole **TP20** ☒ Test Pit ☐ Boring
Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
STONY		DARK BROWN	
FINE		DARK	
SANDY	FRILABLE	YELLOWISH	
LOAM		BROWN	
STONY		YELLOWISH	FEW, FAINT
LOAMY	FIRM	BROWN	
SAND	SOMewhat	MIXED	COMMON, DISTINCT
SAND	FIRM	OLIVE	
SAND	FIRM	BROWN	

LIMIT OF EXCAVATION

Soil Classification: **3 C**
Profile: **C** Condition: **18"**
Soil Series Name: **SKERRY**
Drainage Class: **MUD** Hydrologic Group: **C**

237/213 2/12/18
SE/CSS Date

Site Evaluator / Soil Scientist Signature

Town, City, Place
BALDWIN

Street, Road Subdivision
NATURE'S WILDERNESS

(FDR) Owner's Name
TERRADYN CONSULTANTS, LLC

TP'S BY EXCAVATOR C.G.

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

Observation Hole TP21 ☒ Test Pit ☐ Boring
Depth of Organic Horizon Above Mineral Soil _____

Observation Hole TP 22 ☒ Test Pit ☐ Boring
Depth of Organic Horizon Above Mineral Soil _____

DEPTH BELOW SURFACE	Texture	Consistency	Color	Matting
0	ORGANIC		REDDISH BROWN	
10		FRIABLE		
20	FINE SANDY LOAM		BLACK	Δ Δ Δ
30	STONY LOAMY SAND	FIRM	OLIVE GRAY	FREE H ₂ O
40				
50				

FOR
WASTEWATER
DISPOSAL

FOR
SOILS
MAPPING

Soil Classification	Slope	Limiting	<input checked="" type="checkbox"/> Ground Water <input checked="" type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
3 E		<input checked="" type="checkbox"/>	
Profile	Condition	X	
Soil Series Name:	Drainage Class:	Hydrologic Group:	
PEACHAM	V.P.D.	D	

	Texture	Consistency	Color	Mottling
0	STONY		DK BROWN	
	FINE		DARK	
10	SANDY	FILEABLE	YELLOWISH	
	LOAM		BROWN	
20	STONY		Y. BROWN	FELDY, FAINOT
	LOAMY	KRM	OLIVE	COMMON,
30	SAND		BROWN	DISTINCT
	SAND			
40				
50				

Soil Classification		Slope	Limiting Factor	<input checked="" type="checkbox"/> Ground Water
3	C			<input checked="" type="checkbox"/> Restrictive Layer
Profile	Condition	X	15	<input type="checkbox"/> Bedrock
Soil Series Name:		Drainage Class:		<input type="checkbox"/> Pit Depth
SKERRY		MID		Hydrologic Group:

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

Observation Hole TP23 ☒ Test Pit ☐ Boring
Depth of Organic Horizon Above Mineral Soil

Observation Hole ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

	Texture	Consistency	Color	Vegeting
0	STONY		DK. BROWN	
10	FINE		DARK	
	SANDY	FRIABLE	YELLOWISH BROWN	
20	LOAM		YELLOWISH BROWN	FAN FAINT
30	STONY LOAMY SAND	FIRM	OLIVE BROWN	COMMON DISTINCT
40	SAND			
50	LIMIT OF EXCAVATION			

FOR
WASTEWATER
DISPOSAL

FOR
SOILS
MAPPING

Soil Classification 3 C		Slope 16	Limiting Factor 16	<input checked="" type="checkbox"/> Ground Water <input checked="" type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
Profile: _____ Condition: _____		Drainage Class: MND		Hydrologic Group: C
Soil Series Name: SHERMAN				

DEPTH IN CM	Organic Horizon Above Mineral Soil			
	Texture	Consistency	Color	Mottling
0				
10				
20				
30				
40				

Soil Classification		Slope	Limiting Factor	<input type="checkbox"/> Ground Water
Profile	Condition	%	"	<input type="checkbox"/> Restrictive Layer
Soil Series Name:		Drainage Class:		<input type="checkbox"/> Bedrock
				<input type="checkbox"/> Pit Depth
				Hydrologic Group:

Site Evaluator / Soil Scientist Signature _____

237/213

2/12/18

5/25

Date _____

JAMES LOGAN - LONGVIEW PARTNERS, LLC - 6 SECOND STREET - BUXTON, ME 04093 - longviewpartners213@gmail.com

04093 - longviewpartners213@gmail.com

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

City, Town, or Plantation	BALDWIN
Street or Road	2 UPPER TWAIN ROAD
Subdivision, Lot #	

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City _____ Permit # _____
Date Permit Issued ____/____/____ Fee: \$ _____ Double Fee Charged

OWNER/APPLICANT INFORMATION

Name (last, first, MI)	Owner NATURE'S WILDERNESS RESORT	Applicant
Mailing Address of Owner/Applicant	c/o SCOTT EFRON 2 UPPER TWAIN ROAD BALDWIN, ME 04091	
Daytime Tel. #	207-787-6012	

Local Plumbing Inspector Signature _____

LPI # _____
☐ Owner ☐ Town ☐ State

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.

Municipal Tax Map # **7** Lot # **22**

OWNER OR APPLICANT STATEMENT

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.

Signature of Owner or Applicant _____ Date _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.

(1st) date approved _____

Local Plumbing Inspector Signature _____

(2nd) date approved _____

PERMIT INFORMATION

TYPE OF APPLICATION

- First Time System
- Replacement System
Type replaced: _____
Year installed: _____
- Expanded System
a. <25% Expansion
b. >25% Expansion
- Experimental System
- Seasonal Conversion

THIS APPLICATION REQUIRES

- No Rule Variance
- First Time System Variance
a. Local Plumbing Inspector Approval
b. State & Local Plumbing Inspector Approval
- Replacement System Variance
a. Local Plumbing Inspector Approval
b. State & Local Plumbing Inspector Approval
- Minimum Lot Size Variance
- Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

- Complete Non-engineered System
- Primitive System (graywater & alt. toilet)
- Alternative Toilet, specify: _____
- Non-engineered Treatment Tank (only)
- Holding Tank, _____ gallons
- Non-engineered Disposal Field (only)
- Separated Laundry System
- Complete Engineered System (2000 gpd or more)
- Engineered Treatment Tank (only)
- Engineered Disposal Field (only)
- Pre-treatment, specify: _____
- Miscellaneous Components

SIZE OF PROPERTY

301.08+/- SQ. FT.
ACRES

SHORELAND ZONING

Yes ☐ No ☐

DISPOSAL SYSTEM TO SERVE

- Single Family Dwelling Unit, No. of Bedrooms: _____
- Multiple Family Dwelling, No. of Units: _____
- Other: **CAMPGROUND-14 SITES**
(specify)

Current Use Seasonal Year Round **Undeveloped**

PROPOSED TYPE OF WATER SUPPLY

- Drilled Well
- Dug Well
- Private
- Public
- Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANKS

- Concrete **H-20 RATED**
a. Regular
b. Low Profile
- Plastic
- Other: _____
CAPACITY: **1500** GAL.

DISPOSAL FIELD TYPE & SIZE

- Stone Bed
- Stone Trench
- Proprietary Device
a. cluster array c. Linear
b. regular load d. H-20 load
- Other: _____
SIZE: **3328** sq. ft. lin. ft.

52 CONCRETE CHAMBERS

GARBAGE DISPOSAL UNIT

- No
 - Yes
 - Maybe
- If Yes or Maybe, specify one below:
- multi-compartment tank
 - _____ tanks in series
 - increase in tank capacity
 - Filter on Tank Outlet

DESIGN FLOW

840 gallons per day

BASED ON:

- Table 4A (dwelling unit(s))
 - Table 4C (other facilities)
- SHOW CALCULATIONS for other facilities
**-CAMPGROUND-
14 SITES AT 60 GALLONS PER DAY/SITE
14 X 60 = 840 GPD
SHARED RESTROOM WITH SHOWERS**

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
3 / D
at Observation Hole # **TP 6**
Depth **13** "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

- Medium---2.6 sq. ft. / gpd
- Medium---Large 3.3 sq. ft. / gpd
- Large---4.1 sq. ft. / gpd
- Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

- Not Required
 - May Be Required
 - Required
- Specify only for engineered systems:
DOSE: _____ gallons

**SEE NOTE
ON PAGE 3**

- Section 4G (meter readings)
ATTACH WATER METER DATA

LATITUDE AND LONGITUDE

at center of disposal area
Lat. **43** d **38** m **09** s
Lon. **70** d **20** m **48** s
if g.p.s, state margin of error: _____

SITE EVALUATOR STATEMENT

I certify that on **8/30/18** (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).

Site Evaluator Signature _____

237

SE #

Date **9/24/18**

JAMES LOGAN

Site Evaluator Name Printed

207-693-8799

Telephone Number

longviewpartners213@gmail.com

E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

HHE-200 Rev. 08/2011

Page 1 of 3

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

BALDWIN

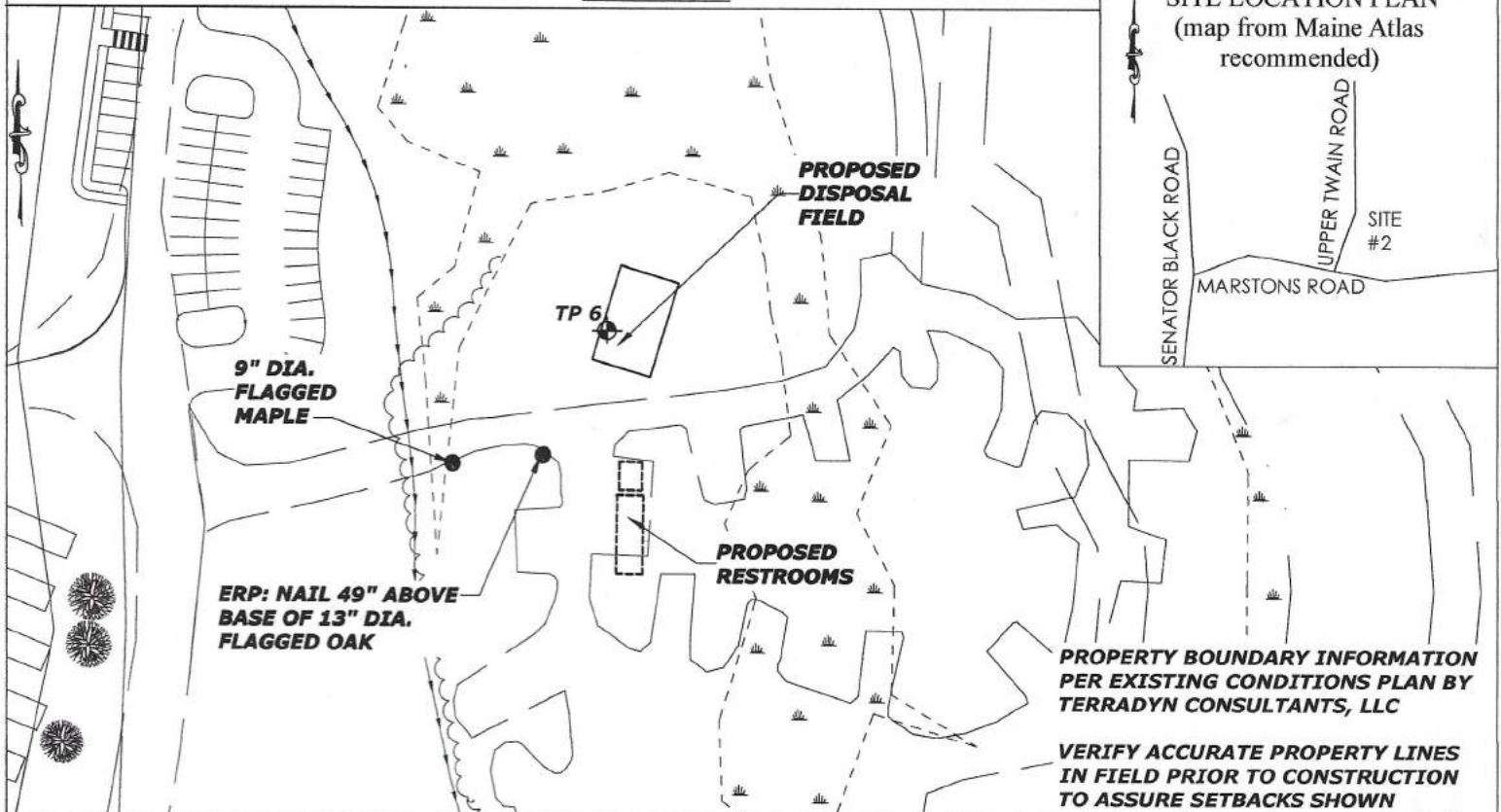
2 UPPER TWAIN ROAD

NATURE'S WILDERNESS RESORT

SITE PLAN

Scale 1" = **100** ft. or as shown

SITE LOCATION PLAN
(map from Maine Atlas recommended)



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

Observation Hole TP 6 ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
0		LIGHT GRAY (ALBIC)	
STONY FINE SANDY LOAM	FRIABLE	DARK YELLOWISH BROWN	
		YELLOWISH BROWN	
		MIXED OLIVE BROWN	COMMON FAINT
STONY LOAMY SAND & SAND	FIRM		COMMON DISTINCT
30			
40			
50			
LIMIT OF EXCAVATION @ 51"			

Observation Hole ☐ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
0			
10			
20			
30			
40			
50			

Soil Classification	Slope	Limiting Factor	<input checked="" type="checkbox"/> Ground Water
3 D	3-4 %	13 "	<input type="checkbox"/> Restrictive Layer
Profile Condition			<input type="checkbox"/> Bedrock
			<input type="checkbox"/> Pit Depth

Soil Classification	Slope	Limiting Factor	<input type="checkbox"/> Ground Water
Profile Condition	%	"	<input type="checkbox"/> Restrictive Layer
			<input type="checkbox"/> Bedrock
			<input type="checkbox"/> Pit Depth

Site Evaluator Signature

SE #

Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

BALDWIN

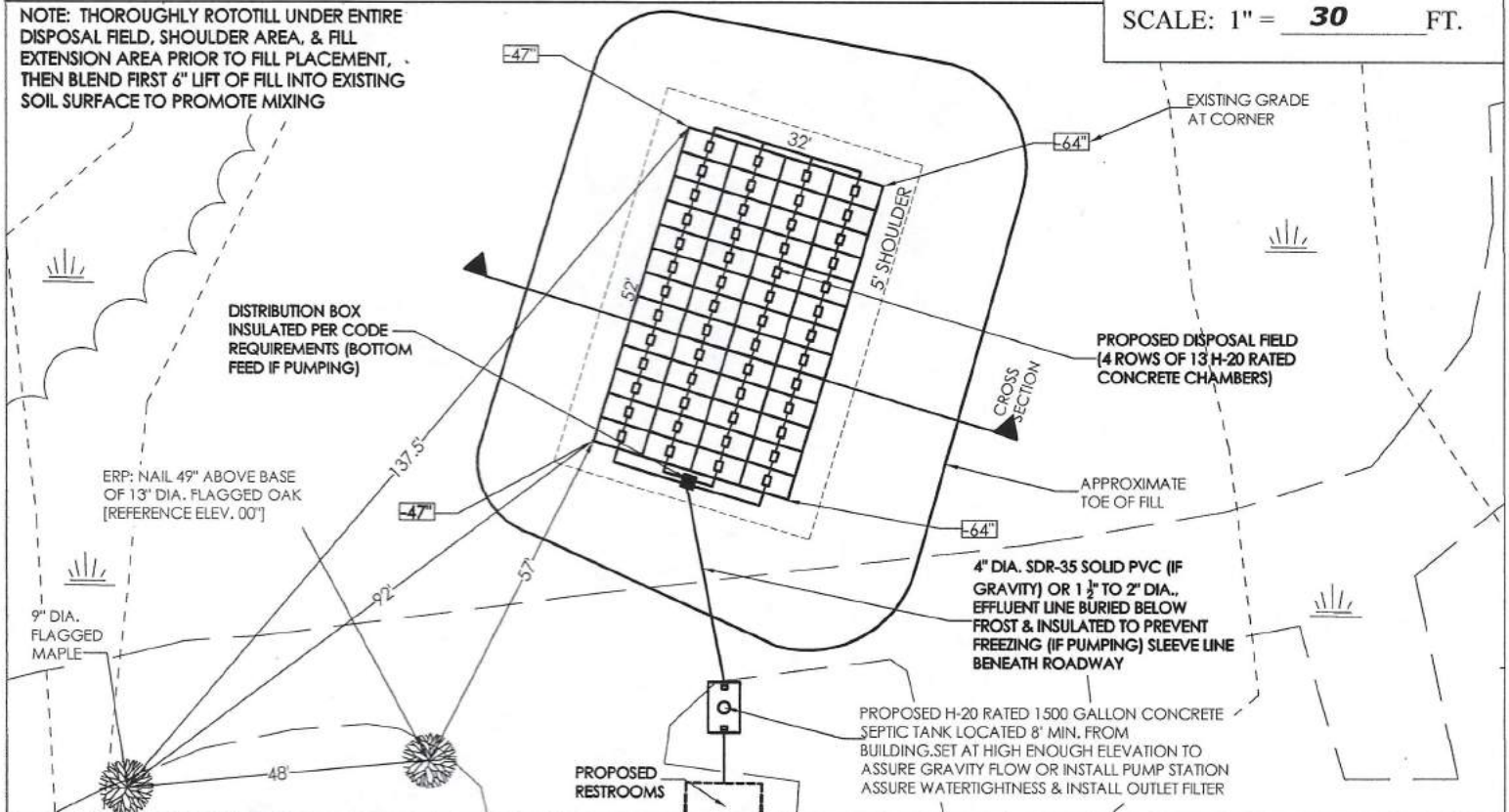
2 UPPER TWAIN ROAD

NATURE'S WILDERNESS RESORT

SUBSURFACE WASTEWATER DISPOSAL PLAN

NOTE: THOROUGHLY ROTOTILL UNDER ENTIRE DISPOSAL FIELD, SHOULDER AREA, & FILL EXTENSION AREA PRIOR TO FILL PLACEMENT, THEN BLEND FIRST 6" LIFT OF FILL INTO EXISTING SOIL SURFACE TO PROMOTE MIXING

SCALE: 1" = **30** FT.



FILL REQUIREMENTS

CONSTRUCTION ELEVATIONS

ELEVATION REFERENCE POINT

Depth of Fill (Upslope) **36"**

Finished Grade Elevation

-11"

Location & Description:

Depth of Fill (Downslope) **50" - 53"**

Top of Distribution Pipe or Proprietary Device

-23"

NAIL 49" ABOVE BASE OF 13" DIA. FLAGGED OAK

Bottom of Disposal Area

-42"

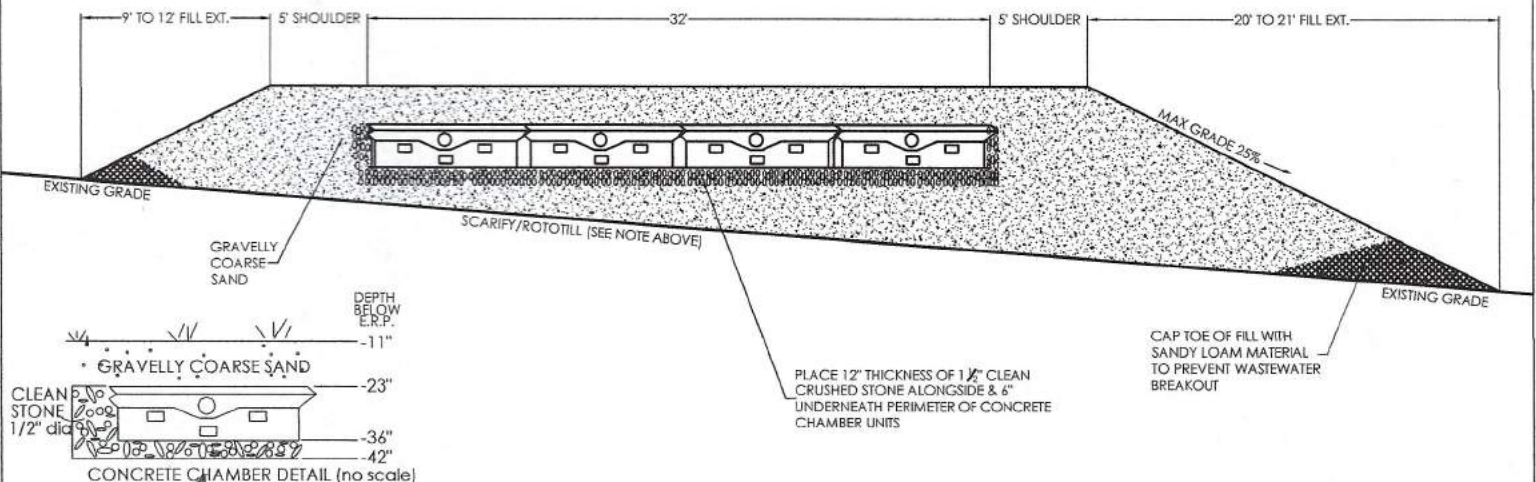
Reference Elevation: **00"**

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = **10** ft.

Vertical 1" = **5** ft.



Site Evaluator Signature

237

SE #

Date

Page 3 of 3
HHE-200 Rev. 8/01

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

City, Town, or Plantation	BALDWIN
Street or Road	2 UPPER TWAIN ROAD
Subdivision, Lot #	

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City _____ Permit # _____
Date Permit Issued ____/____/____ Fee: \$ _____ Double Fee Charged ☐

Local Plumbing Inspector Signature _____

LPI # _____
☐ Owner ☐ Town ☐ State

OWNER/APPLICANT INFORMATION

Name (last, first, MI)	Owner NATURE'S WILDERNESS RESORT	Applicant
Mailing Address of Owner/Applicant	c/o SCOTT EFRON 2 UPPER TWAIN ROAD BALDWIN, ME 04091	
Daytime Tel. #	207-787-6012	

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.

Municipal Tax Map # **7** Lot # **22**

OWNER OR APPLICANT STATEMENT

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.

Signature of Owner or Applicant _____ Date _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.

(1st) date approved _____

Local Plumbing Inspector Signature _____ (2nd) date approved _____

PERMIT INFORMATION

TYPE OF APPLICATION

1. First Time System ☐

2. Replacement System

Type replaced: _____

Year installed: _____

3. Expanded System

a. <25% Expansion

b. >25% Expansion

4. Experimental System

5. Seasonal Conversion

THIS APPLICATION REQUIRES

1. No Rule Variance ☐

2. First Time System Variance

a. Local Plumbing Inspector Approval

b. State & Local Plumbing Inspector Approval

3. Replacement System Variance

a. Local Plumbing Inspector Approval

b. State & Local Plumbing Inspector Approval

4. Minimum Lot Size Variance

5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

1. Complete Non-engineered System ☐

2. Primitive System (graywater & alt. toilet)

3. Alternative Toilet, specify: _____

4. Non-engineered Treatment Tank (only)

5. Holding Tank, _____ gallons

6. Non-engineered Disposal Field (only)

7. Separated Laundry System

8. Complete Engineered System (2000 gpd or more)

9. Engineered Treatment Tank (only)

10. Engineered Disposal Field (only)

11. Pre-treatment, specify: _____

12. Miscellaneous Components

SIZE OF PROPERTY

301.08+/- SQ. FT.
ACRES

SHORELAND ZONING

Yes ☐ No ☐

DISPOSAL SYSTEM TO SERVE

1. Single Family Dwelling Unit, No. of Bedrooms: _____

2. Multiple Family Dwelling, No. of Units: _____

3. Other: **CAMPGROUND-12 RV SITES**

(specify)

Current Use Seasonal Year Round **Undeveloped**

PROPOSED TYPE OF WATER SUPPLY

1. Drilled Well 2. Dug Well 3. Private

4. Public 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANKS

1. Concrete ☒ **H-20**

a. Regular

b. Low Profile

2. Plastic

3. Other: _____

CAPACITY: **1500** GAL.

(OR 2-1000's IN SERIES)

DISPOSAL FIELD TYPE & SIZE

1. Stone Bed 2. Stone Trench

3. Proprietary Device

a. cluster array

c. Linear

b. regular load

d. H-20 load

4. Other: _____

SIZE: **3264** sq. ft. lin. ft.

51 CONCRETE CHAMBERS

GARBAGE DISPOSAL UNIT

1. No 2. Yes 3. Maybe

If Yes or Maybe, specify one below:

a. multi-compartment tank

b. _____ tanks in series

c. increase in tank capacity

d. Filter on Tank Outlet

DESIGN FLOW

900 gallons per day

BASED ON:

1. Table 4A (dwelling unit(s))

2. Table 4C (other facilities)

SHOW CALCULATIONS for other facilities

**-CAMPGROUND-
12 RV SITES (WITH WATER & SEWER AT
EACH SITE) AT 75 GALLONS PER DAY/SITE
12 X 75 = 900 GPD**

3. Section 4G (meter readings)
ATTACH WATER METER DATA

LATITUDE AND LONGITUDE

at center of disposal area

Lat. **43** d **49** m **41** s

Lon. **70** d **44** m **33** s

if g.p.s, state margin of error: _____

SOIL DATA & DESIGN CLASS

PROFILE CONDITION

3 / C

at Observation Hole # **TP 2**

Depth **48** "

of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

1. Medium---2.6 sq. ft. / gpd

2. Medium---Large 3.3 sq. ft. / gpd

3. Large---4.1 sq. ft. / gpd

4. Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

1. Not Required

2. May Be Required

3. Required

Specify only for engineered systems:

DOSE: _____ gallons

**SEE NOTE
ON PAGE 3**

SITE EVALUATOR STATEMENT

I certify that on **8/30/18** (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).

Site Evaluator Signature _____

237

SE #

Date

JAMES LOGAN

Site Evaluator Name Printed

207-693-8799

Telephone Number

longviewpartners213@gmail.com

E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

Page 1 of 3

HHE-200 Rev. 08/2011

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

BALDWIN

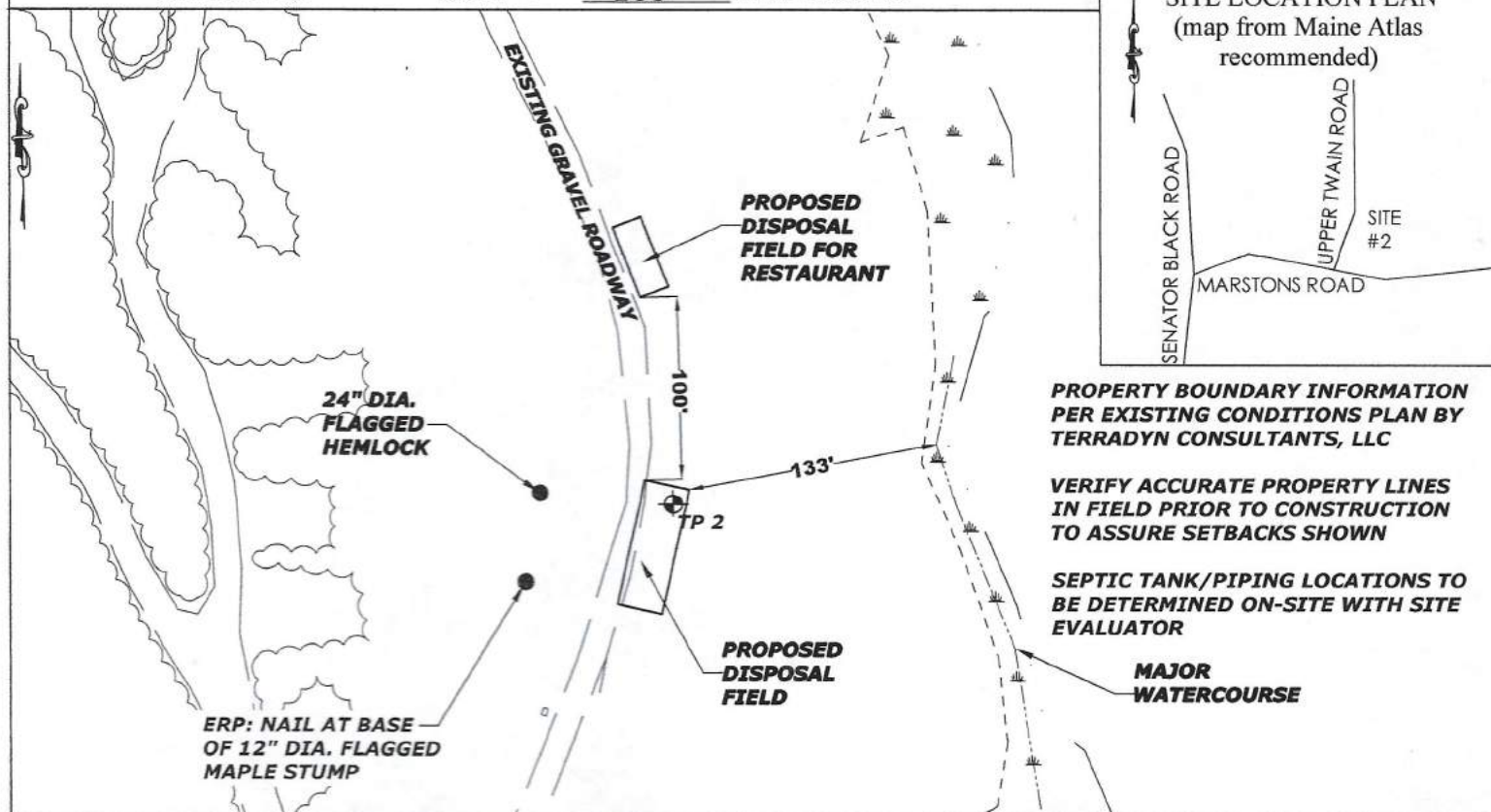
2 UPPER TWAIN ROAD

NATURE'S WILDERNESS RESORT

SITE PLAN

Scale 1" = **100** ft. or as shown

SITE LOCATION PLAN
(map from Maine Atlas recommended)



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

Observation Hole TP 2 ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE

Texture	Consistency	Color	Mottling
0			
10			
20			
30			
40			
50			

Observation Hole ☐ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
0			
10			
20			
30			
40			
50			

Soil Classification 3 C	Slope 0-1 %	Limiting Factor 48 "	<input checked="" type="checkbox"/> Ground Water <input checked="" type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
Profile	Condition		

Soil Classification	Slope	Limiting Factor	<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
Profile	Condition		

Site Evaluator Signature

SE #

Date

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

NATURE'S WILDERNESS RESORT

SCALE: 1" = **30** FT.

4" DIA. SDR-35 SOLID PVC

6" ON FILL

56'

PROPOSED H-20 RATED 1500 GALLON (OR 2-1000 GALLON) CONCRETE SEPTIC TANK LOCATED 8' MIN. FROM BUILDING. SET AT HIGH ENOUGH ELEVATION TO ASSURE GRAVITY FLOW OR INSTALL PUMP STATION ASSURE WATERTIGHTNESS & INSTALL OUTLET FILTER

6" ON FILL

PROPOSED DISPOSAL FIELD (3 ROWS OF 17 H-20 RATED CONCRETE CHAMBERS)

72'

68'

24'

5' SHOULDER

CROSS SECTION

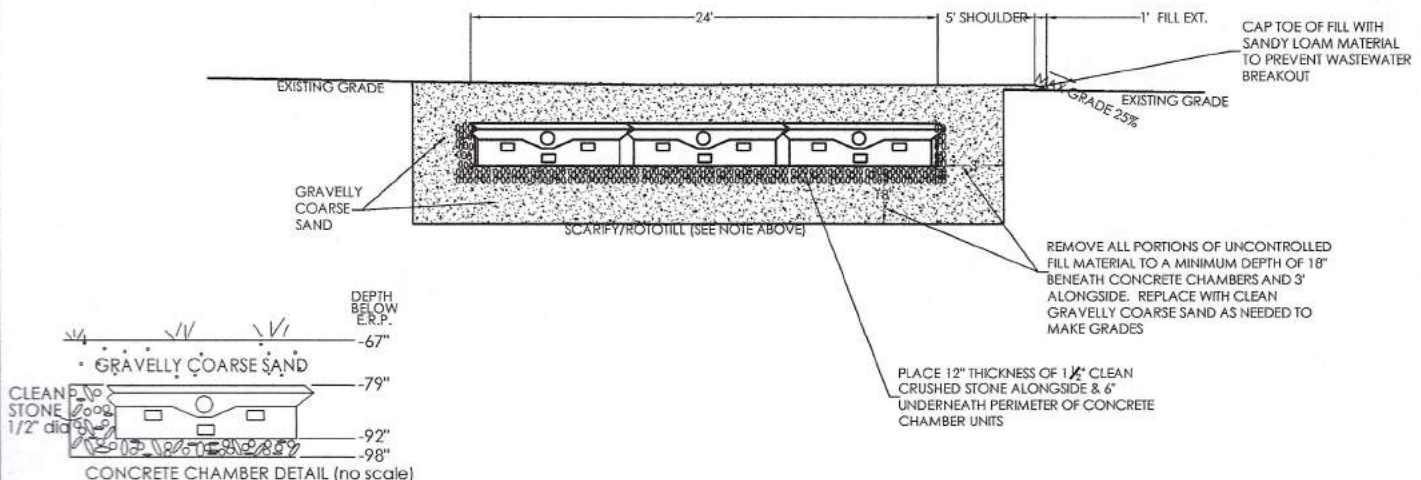
6" ON FILL

EXISTING GRADE AT CORNER

APPROXIMATE TOE OF FILL

Location & Description:
NAIL AT BASE OF 12" DIA. FLAGGED MAPLE STUMP
Reference Elevation: 00"

Horizontal 1" = **10** ft.
Vertical 1" = **5** ft.

Page 3 of 3
HHE-200 Rev. 8/01

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	BALDWIN
Street or Road	2 UPPER TWAIN ROAD
Subdivision, Lot #	

Town/City _____ Permit # _____
Date Permit Issued ____/____/____ Fee: \$ _____ Double Fee Charged ☒

Local Plumbing Inspector Signature _____

LPI # _____
☐ Owner ☐ Town ☐ State

OWNER/APPLICANT INFORMATION

Name (last, first, MI)	Owner NATURE'S WILDERNESS RESORT	Applicant
Mailing Address of Owner/Applicant	c/o SCOTT EFRON 2 UPPER TWAIN ROAD BALDWIN, ME 04091	
Daytime Tel. #	207-787-6012	

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.

Municipal Tax Map # **7** Lot # **22**

OWNER OR APPLICANT STATEMENT

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.

Signature of Owner or Applicant _____ Date _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.

(1st) date approved _____

Local Plumbing Inspector Signature _____

(2nd) date approved _____

PERMIT INFORMATION

TYPE OF APPLICATION

☒ 1. First Time System

☐ 2. Replacement System

Type replaced: _____

Year installed: _____

☒ 3. Expanded System

a. <25% Expansion

b. >25% Expansion

☐ 4. Experimental System

☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☒ 1. No Rule Variance

☐ 2. First Time System Variance

a. Local Plumbing Inspector Approval

b. State & Local Plumbing Inspector Approval

☐ 3. Replacement System Variance

a. Local Plumbing Inspector Approval

b. State & Local Plumbing Inspector Approval

☐ 4. Minimum Lot Size Variance

☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☒ 1. Complete Non-engineered System

☐ 2. Primitive System (graywater & alt. toilet)

☐ 3. Alternative Toilet, specify: _____

☐ 4. Non-engineered Treatment Tank (only)

☐ 5. Holding Tank, _____ gallons

☐ 6. Non-engineered Disposal Field (only)

☐ 7. Separated Laundry System

☐ 8. Complete Engineered System (2000 gpd or more)

☐ 9. Engineered Treatment Tank (only)

☐ 10. Engineered Disposal Field (only)

☐ 11. Pre-treatment, specify: _____

☐ 12. Miscellaneous Components **750 GALLON GREASE TRAP**

SIZE OF PROPERTY

301.08+/- SQ. FT.
ACRES

SHORELAND ZONING

Yes ☐ No ☒

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: _____

☐ 2. Multiple Family Dwelling, No. of Units: _____

☒ 3. Other: **25 SEAT RESTAURANT**

(specify)

Current Use Seasonal Year Round ☒ Undeveloped

PROPOSED TYPE OF WATER SUPPLY

☒ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private

☐ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANKS

☒ 1. Concrete **H-20**

a. Regular **RATED**

b. Low Profile

☐ 2. Plastic

☐ 3. Other: _____

CAPACITY: **1000** GAL.

& 750 GAL. GREASE TRAP

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench

☒ 3. Proprietary Device

a. cluster array c. Linear

b. regular load d. H-20 load

☐ 4. Other: _____

SIZE: **1280** sq. ft. lin. ft.

20 CONCRETE CHAMBERS

GARBAGE DISPOSAL UNIT

☐ 1. No ☐ 2. Yes ☐ 3. Maybe

If Yes or Maybe, specify one below:

a. multi-compartment tank

b. _____ tanks in series

c. increase in tank capacity

d. Filter on Tank Outlet

& GREASE FILTER ON GREASE TRAP

DESIGN FLOW

351 gallons per day

BASED ON:

☒ 1. Table 4A (dwelling unit(s))

☐ 2. Table 4C (other facilities)

SHOW CALCULATIONS for other facilities

-25 SEAT RESTAURANT-

3 MEALS PER DAY, PAPER SERVICE

7 GPD/SEAT (USING 1.8 MULTIPLIER) = 315 GPD

3 EMPLOYEES AT 12 GPD/EMPLOYEE

315 + 36 = 351 GPD

☐ 3. Section 4G (meter readings)

ATTACH WATER METER DATA

LATITUDE AND LONGITUDE

at center of disposal area

Lat. **43** d **49** m **43** s

Lon. **70** d **44** m **43** s

If g.p.s., state margin of error: _____

SOIL DATA & DESIGN CLASS

PROFILE CONDITION

3 / C

at Observation Hole # **TP 1**

Depth **30** "

of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Medium--2.6 sq. ft. / gpd

☐ 2. Medium--Large 3.3 sq. ft. / gpd

☐ 3. Large--4.1 sq. ft. / gpd

☐ 4. Extra Large--5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ 1. Not Required

☐ 2. May Be Required

☐ 3. Required

Specify only for engineered systems:

DOSE: _____ gallons

SEE NOTE
ON PAGE 3

SITE EVALUATOR STATEMENT

I certify that on **8/30/18** (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).

Site Evaluator Signature _____

237

SE #

Date

JAMES LOGAN

Site Evaluator Name Printed

207-693-8799

Telephone Number

longviewpartners213@gmail.com

E-mail Address

Note : Changes to or deviations from the design should be confirmed with the Site Evaluator.

Page 1 of 3

HHE-200 Rev. 08/2011

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

BALDWIN

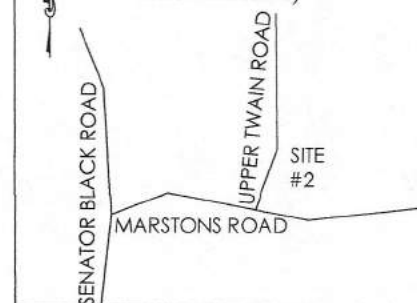
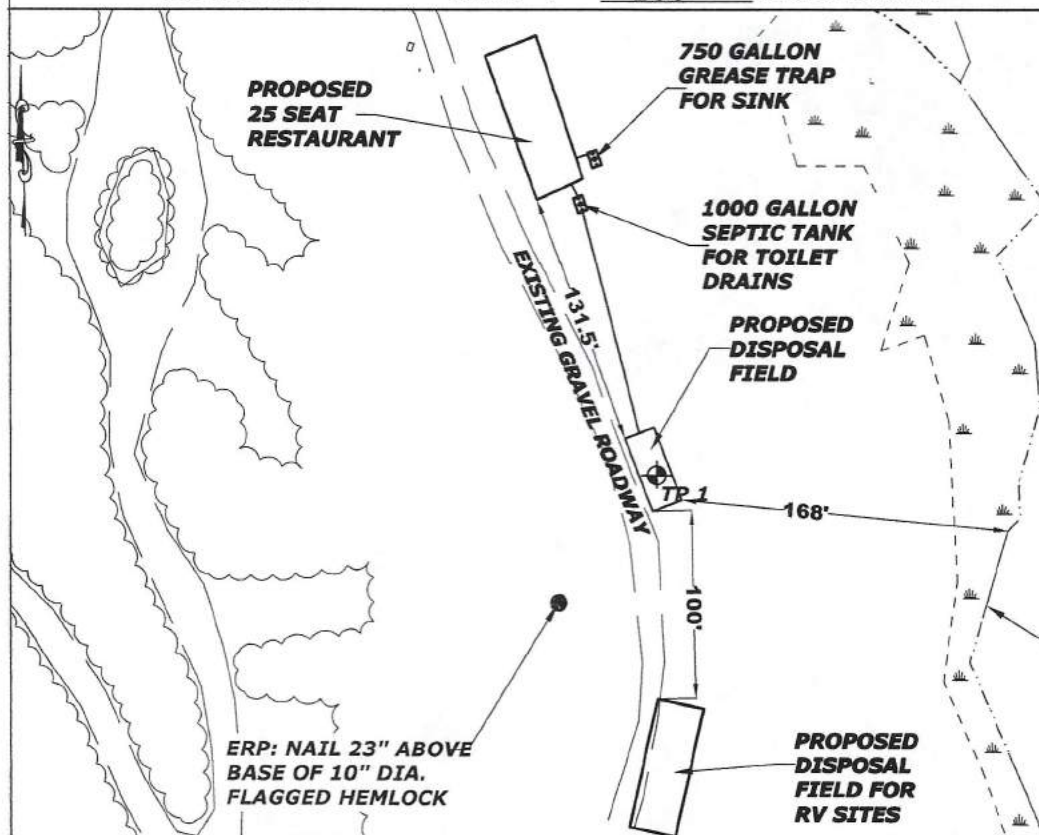
2 UPPER TWAIN ROAD

NATURE'S WILDERNESS RESORT

SITE PLAN

Scale 1" = **100** ft. or as shown

SITE LOCATION PLAN
(map from Maine Atlas recommended)



PROPERTY BOUNDARY INFORMATION PER EXISTING CONDITIONS PLAN BY TERRADYN CONSULTANTS, LLC

VERIFY ACCURATE PROPERTY LINES IN FIELD PRIOR TO CONSTRUCTION TO ASSURE SETBACKS SHOWN

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

Observation Hole **TP 1** ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE

Texture	Consistency	Color	Mottling
0			
SANDY LOAM & LOAMY SAND (FILL)		VARIABLE BROWN DARK	
20	FRIABLE	YELLOWISH BROWN	
STONY SANDY LOAM			COMMON FAINT
30	SOMEWHAT FIRM TO FIRM	OLIVE BROWN	COMMON DISTINCT
40			
50			

Observation Hole ☐ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
0			
10			
20			
30			
40			
50			

Soil Classification 3 C	Slope 1-2 %	Limiting Factor 30 "	<input checked="" type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
Profile	Condition		

Soil Classification	Slope	Limiting Factor	<input type="checkbox"/> Ground Water <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth
Profile	Condition		

Site Evaluator Signature

SE #

Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

BALDWIN

2 UPPER TWAIN ROAD

NATURE'S WILDERNESS RESORT

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = **30** FT.

PROPOSED H-20 RATED 1000 GALLON CONCRETE SEPTIC TANK LOCATED 8' MIN. FROM BUILDING. SET AT HIGH ENOUGH ELEVATION TO ASSURE GRAVITY FLOW OR INSTALL PUMP STATION ASSURE WATERTIGHTNESS & INSTALL OUTLET FILTER

PROPOSED 750 GALLON GREASE TRAP LOCATED 8' MIN. FROM BUILDING. INSTALL GREASE FILTER

4" DIA. SDR-35 SOLID PVC (IF GRAVITY) OR 1 1/2" TO 2" DIA., EFFLUENT LINE BURIED BELOW FROST & INSULATED TO PREVENT FREEZING (IF PUMPING) SLEEVE LINE BENEATH ROADWAY

DISTRIBUTION BOX INSULATED PER CODE REQUIREMENTS (BOTTOM FEED IF PUMPING)

PROPOSED DISPOSAL FIELD (2 ROWS OF 10 H-20 RATED CONCRETE CHAMBERS)

EXISTING GRADE AT CORNER

NOTE: THOROUGHLY ROTOTILL UNDER ENTIRE DISPOSAL FIELD, SHOULDER AREA, & FILL EXTENSION AREA PRIOR TO FILL PLACEMENT, THEN BLEND FIRST 6" LIFT OF FILL INTO EXISTING SOIL SURFACE TO PROMOTE MIXING

ERP: NAIL 23" ABOVE BASE OF 10" DIA. FLAGGED HEMLOCK [REFERENCE ELEV. 00']

FILL REQUIREMENTS

CONSTRUCTION ELEVATIONS

ELEVATION REFERENCE POINT

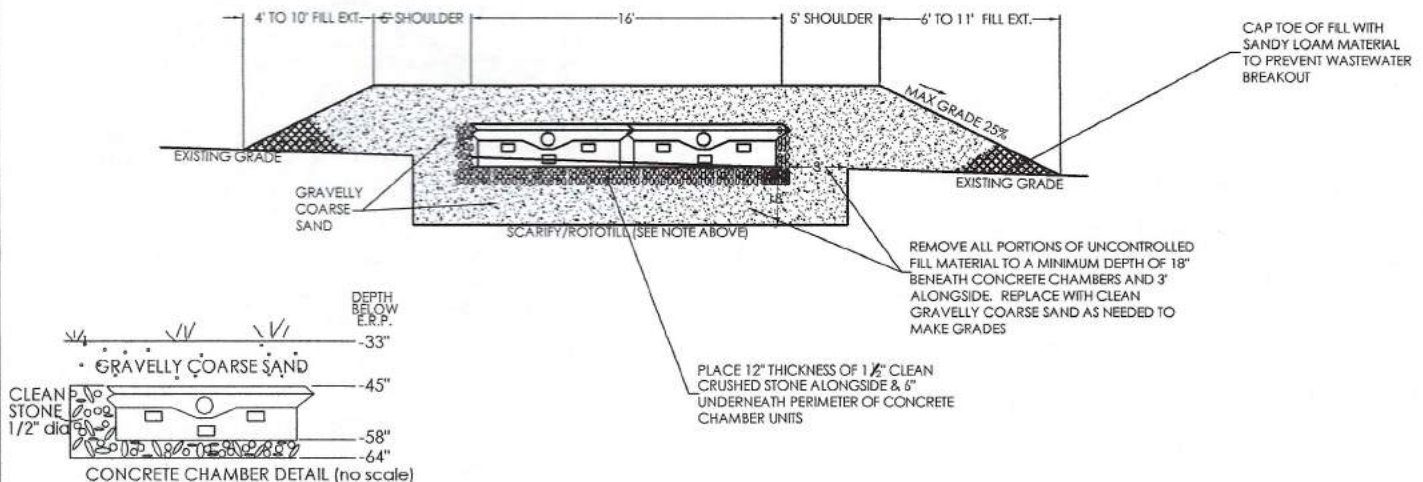
Depth of Fill (Upslope)	13" - 32"	Finished Grade Elevation	-33"
		Top of Distribution Pipe or Proprietary Device	-45"
Depth of Fill (Downslope)	17" - 34"	Bottom of Disposal Area	-64"

Location & Description:
NAIL 23" ABOVE BASE OF 10" DIA. FLAGGED HEMLOCK
Reference Elevation: **00"**

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = **10** ft.
Vertical 1" = **5** ft.



Site Evaluator Signature

237

SE #

Date

Page 3 of 3
HHE-200 Rev. 8/01

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

City, Town, or Plantation	BALDWIN
Street or Road	2 UPPER TWAIN ROAD
Subdivision, Lot #	

>> CAUTION: LPI APPROVAL REQUIRED <<

Town/City _____ Permit # _____
Date Permit issued ____/____/____ Fee: \$ _____ Double Fee Charged _____

Local Plumbing Inspector Signature _____

LPI # _____
☐ Owner ☐ Town ☐ State

OWNER/APPLICANT INFORMATION

Name (last, first, MI)	NATURE'S WILDERNESS RESORT	Owner Applicant
Mailing Address of Owner/Applicant	c/o SCOTT EFRON 2 UPPER TWAIN ROAD BALDWIN, ME 04091	
Daytime Tel. #	207-787-6012	

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.

Municipal Tax Map # **7** Lot # **22**

OWNER OR APPLICANT STATEMENT

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.

Signature of Owner or Applicant _____ Date _____

CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.
(1st) date approved _____

Local Plumbing Inspector Signature _____ (2nd) date approved _____

PERMIT INFORMATION

TYPE OF APPLICATION

- First Time System
- Replacement System
Type replaced: _____
Year installed: _____
- Expanded System
a. <25% Expansion
b. >25% Expansion
- Experimental System
- Seasonal Conversion

THIS APPLICATION REQUIRES

- No Rule Variance
- First Time System Variance
a. Local Plumbing Inspector Approval
b. State & Local Plumbing Inspector Approval
- Replacement System Variance
a. Local Plumbing Inspector Approval
b. State & Local Plumbing Inspector Approval
- Minimum Lot Size Variance
- Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

- Complete Non-engineered System
- Primitive System (graywater & alt. toilet)
- Alternative Toilet, specify: _____
- Non-engineered Treatment Tank (only)
- Holding Tank, _____ gallons
- Non-engineered Disposal Field (only)
- Separated Laundry System
- Complete Engineered System (2000 gpd or more)
- Engineered Treatment Tank (only)
- Engineered Disposal Field (only)
- Pre-treatment, specify: _____
- Miscellaneous Components

SIZE OF PROPERTY

301.08+/- SQ. FT.
ACRES

SHORELAND ZONING

Yes ☐ No ☐

DISPOSAL SYSTEM TO SERVE

- Single Family Dwelling Unit, No. of Bedrooms: _____
- Multiple Family Dwelling, No. of Units: _____
- Other: **CAMPGROUND-14 RV SITES**
(specify)
Current Use Seasonal Year Round **Undeveloped**

PROPOSED TYPE OF WATER SUPPLY

- Drilled Well
- Dug Well
- Private
- Public
- Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANKS

- Concrete **H-20 RATED**
a. Regular
b. Low Profile
- Plastic
- Other: _____
CAPACITY: **2000** GAL.
(OR 2-1000's)

DISPOSAL FIELD TYPE & SIZE

- Stone Bed
- Stone Trench
- Proprietary Device
a. cluster array b. regular load c. Linear d. H-20 load
- Other: _____
SIZE: **3840** sq. ft. lin. ft.
60 CONCRETE CHAMBERS

GARBAGE DISPOSAL UNIT

- No
 - Yes
 - Maybe
- If Yes or Maybe, specify one below:
- multi-compartment tank
 - tanks in series
 - increase in tank capacity
 - Filter on Tank Outlet

1050 DESIGN FLOW
gallons per day

BASED ON:

- Table 4A (dwelling unit(s))
 - Table 4C (other facilities)
- SHOW CALCULATIONS for other facilities
**-CAMPGROUND-
14 RV SITES (WITH WATER & SEWER AT
EACH SITE) AT 75 GALLONS PER DAY/SITE
14 X 75 = 1050 GPD**

SOIL DATA & DESIGN CLASS

PROFILE CONDITION
3 / D
at Observation Hole # **TP 14**
Depth **11** "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

- Medium---2.6 sq. ft. / gpd
- Medium---Large 3.3 sq. ft. / gpd
- Large---4.1 sq. ft. / gpd
- Extra Large---5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

- Not Required
- May Be Required
- Required

Specify only for engineered systems:
DOSE: _____ gallons

- Section 4G (meter readings)
ATTACH WATER METER DATA

LATITUDE AND LONGITUDE

at center of disposal area
Lat. **43** d **49** m **53** s
Lon. **70** d **44** m **39** s
if g.p.s., state margin of error: _____

SITE EVALUATOR STATEMENT

I certify that on **8/30/18** (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).

Site Evaluator Signature _____

237

SE #

Date

JAMES LOGAN

Site Evaluator Name Printed

207-693-8799

Telephone Number

longviewpartners213@gmail.com

E-mail Address

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.

Page 1 of 3

HHE-200 Rev. 08/2011

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

BALDWIN

2 UPPER TWAIN ROAD

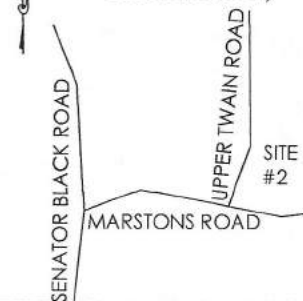
NATURE'S WILDERNESS RESORT

SITE PLAN

Scale 1" = **100** ft. or as shown

SITE LOCATION PLAN

(map from Maine Atlas recommended)



MAN-MADE POND

**PROPOSED RV SITES ON
OPPOSITE SIDE OF POND
(NOT SHOWN)**

**ASSURE WATERTIGHTNESS
ON SEPTIC TANK(S) &
PUMP STATION**

**ERP: NAIL 42" ABOVE
BASE OF 13" DIA.
FLAGGED HEMLOCK**

**10" DIA.
FLAGGED
OAK**

**PROPOSED
DISPOSAL
FIELD**

**PROPERTY BOUNDARY INFORMATION
PER EXISTING CONDITIONS PLAN BY
TERRADYN CONSULTANTS, LLC**

**VERIFY ACCURATE PROPERTY LINES
IN FIELD PRIOR TO CONSTRUCTION
TO ASSURE SETBACKS SHOWN**

**SEPTIC TANK/PIPING LOCATIONS TO
BE DETERMINED ON-SITE WITH SITE
EVALUATOR**

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

Observation Hole **TP 14** ■ Test Pit □ Boring
" Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE

Texture	Consistency	Color	Mottling
0		DARK BROWN	
STONY FINE SANDY LOAM	FRIABLE	DARK YELLOWISH BROWN	FEW FAINT
20	FIRM	OLIVE GRAY	COMMON DISTINCT
STONY LOAMY SAND & SAND		OLIVE	FREE WATER
30			
40			
50			

LIMIT OF EXCAVATION @ 53"

Observation Hole **TP 15** ■ Test Pit □ Boring
" Depth of Organic Horizon Above Mineral Soil

SOIL TEST PIT BY BACKHOE

Texture	Consistency	Color	Mottling
0		DARK BROWN	
10		DARK YELLOWISH BROWN	
STONY FINE SANDY LOAM	FRIABLE	YELLOWISH BROWN	FEW FAINT
20		OLIVE GRAY	
STONY LOAMY SAND & SAND	FIRM	OLIVE BROWN	COMMON DISTINCT
30			
40			
50			

LIMIT OF EXCAVATION @ 48"

Soil Classification	Slope	Limiting Factor	<input checked="" type="checkbox"/> Ground Water
3 D	2-3 %	11 "	<input type="checkbox"/> Restrictive Layer
Profile Condition			<input type="checkbox"/> Bedrock
			<input type="checkbox"/> Pit Depth

Soil Classification	Slope	Limiting Factor	<input checked="" type="checkbox"/> Ground Water
3 C	2-3 %	18 "	<input type="checkbox"/> Restrictive Layer
Profile Condition			<input type="checkbox"/> Bedrock
			<input type="checkbox"/> Pit Depth

Site Evaluator Signature

SE #

Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
Division of Health Engineering
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

BALDWIN

2 UPPER TWAIN ROAD

NATURE'S WILDERNESS RESORT

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = **30** FT.

NOTE: THOROUGHLY ROTOTILL UNDER ENTIRE DISPOSAL FIELD, SHOULDER AREA, & FILL EXTENSION AREA PRIOR TO FILL PLACEMENT, THEN BLEND FIRST 6" LIFT OF FILL INTO EXISTING SOIL SURFACE TO PROMOTE MIXING

BOTTOM FEED DISTRIBUTION BOX INSULATED PER CODE REQUIREMENTS

PUMP STATION SIZED PER MANUFACTURER'S REQUIREMENTS FOR FRICTION/HEAD LOSS WITH RISER & COVER... ASSURE WATERTIGHTNESS.

PROPOSED H-20 RATED 2000 GALLON CONCRETE SEPTIC TANK (OR 2-1000 GALLON TANKS) LOCATED 8' MIN. FROM BUILDING. ASSURE WATERTIGHTNESS & INSTALL OUTLET FILTER

10" DIA. FLAGGED OAK

PROPOSED DISPOSAL FIELD (3 ROWS OF 20 H-20 RATED CONCRETE CHAMBERS)

ERP: NAIL 42" ABOVE BASE OF 13" DIA. FLAGGED HEMLOCK [REFERENCE ELEV. 00"]

4" DIA. SDR-35 SOLID PVC

EXISTING GRADE AT CORNER

APPROXIMATE TOE OF FILL

FILL REQUIREMENTS

CONSTRUCTION ELEVATIONS

ELEVATION REFERENCE POINT

Depth of Fill (Upslope)	38" - 39"	Finished Grade Elevation	-08"
		Top of Distribution Pipe or Proprietary Device	-20"
Depth of Fill (Downslope)	47"	Bottom of Disposal Area	-39"

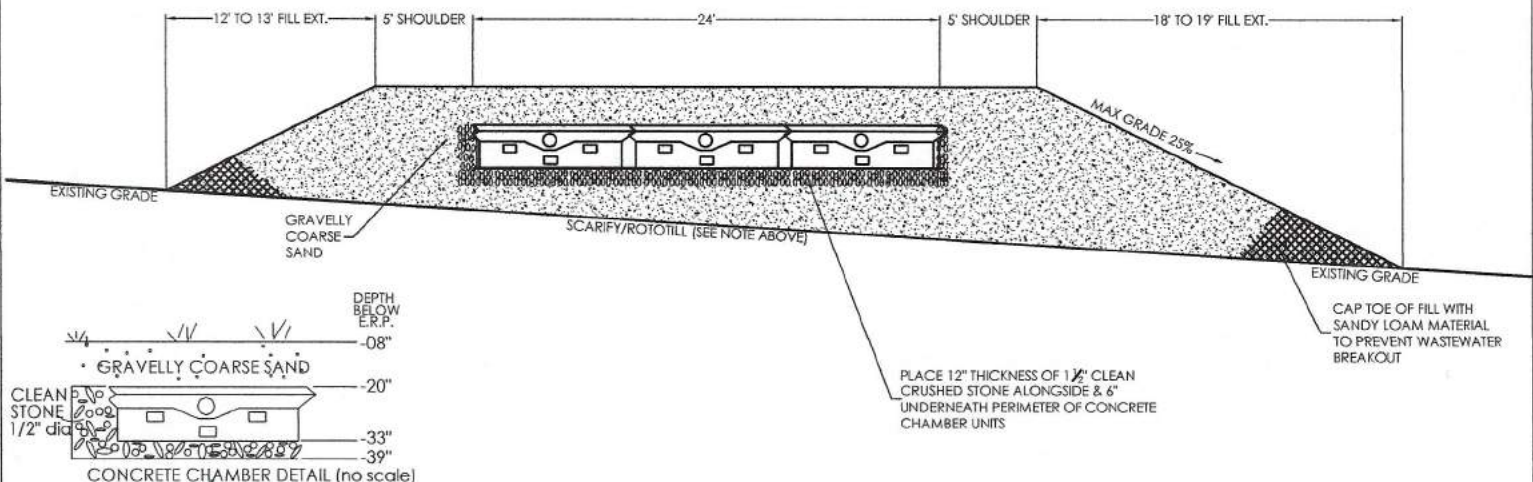
Location & Description:
NAIL 42" ABOVE BASE OF 13" DIA. FLAGGED HEMLOCK

Reference Elevation: **00"**

DISPOSAL AREA CROSS SECTION

Scale

Horizontal 1" = **10** ft.
Vertical 1" = **5** ft.



Site Evaluator Signature

237

SE #

Date

Page 3 of 3
HHE-200 Rev. 8/01

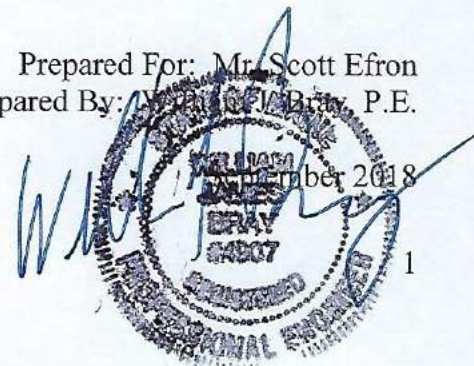
TRAFFIC IMPACT STUDY

FOR

PROPOSED

Nature's Wilderness Campground

Prepared For: Mr. Scott Efron
Prepared By: [Signature] P.E.



INTRODUCTION

Mr. Scott Efron is proposing to develop a 250-site campground on several hundred acres of land located in the general vicinity of Lower and Upper Ponds in the Town of Baldwin. The proposed project, Nature's Wilderness Campground, will include a mix of RV, tent, cabins and "glamping" sites. Proposed amenities include: swimming, fishing, hiking, mountain biking, etc. The campground is directly accessed from Marstons Road and other local gravel roads including Upper Twain Road and a portion of Deacon Road.

The purpose of this study is to examine existing traffic conditions in the general vicinity of the proposed project, estimate the total number of site trips generated by the project and, make a determination as to whether the existing transportation system can safely accommodate the added traffic demand generated by the project.

EXISTING CONDITIONS

Existing Design Hour Traffic: Manual turning movement counts were conducted at the following intersections during the month of October 2017 in the afternoon of a weekday and mid-day on Saturday:

- Senator Black Road (N) @ SR 113 - (Saturday, October 14 & Monday, October 16)
- Senator Black Road (S) @ SR 113 (Saturday, October 21 & Monday, October 23)
- SR 113 @ SR 5/117 (aka Depot Road) - (Saturday, October 28 & Wednesday, October 25)
- Senator Black Road @ Marstons Road - (Saturday, October 21 & Tuesday, October 24)

All traffic entering and exiting each intersection were recorded in 15-minute intervals between 2:00 and 6:00 PM weekdays and, again, between 11:00 AM and 3:00PM on Saturday (A copy of the traffic data is attached as an appendix to the report). From a summary of the data, peak hour times were established for each location and day of week. Generally, the weekday afternoon peak hour occurred between 4:30 and 5:30 PM at each intersection except Senator Black Road @ Marstons Road, which occurred much earlier in the day between 2:45 and 3:45 PM. The Saturday peak hour falls between 11:00 AM and 12:00 PM at both Senator Black Road/ME 113 intersections; 11:15 AM – 12:15 PM at Marstons Road and Senator Black Road and between 12:45 and 1:45 PM at the SR. 113 @ SR. 5/117 intersection.

Traffic data collected during time periods other than the summer months of July and August require adjustment to reflect "peak" travel conditions. MaineDOT provides factors for adjusting traffic data collected during other periods of time. MaineDOT utilizes highway classifications of I, II, or III for all State and Local roadways. Group I roadways are defined as urban roadways or those roads that typically see commuter traffic and experience little fluctuation from week to week throughout the year. Group II roadways or arterial roads are those that see a combination of commuter and recreational traffic and, therefore, experience moderate fluctuations during the year. Group III roads or recreational roadways are typically used for recreational purposes and experience significant seasonal fluctuations. MaineDOT has designated the noted sections of both SR 113 and SR 5/117 Group II roadways and Senator Black Road a Group I roadway. MaineDOT's standards for a Group II roadway requires a seasonal adjustment of 1.22 to approximate "peak" summer travel conditions. The 2017 design hour traffic forecast for the study intersections are illustratively presented on Figure 1.

Roadway Safety Conditions: MaineDOT's Accident Records Section provided the latest three-year (2015 through 2017) crash data for the sections of SR 113 (aka Pequawket Trail) between both ends of Senator Black Road and the section of Marstons Road between Senator Black Road and Brown Road. MaineDOT's report is presented as follows:

2015 -2017 Traffic Accident Summary

<u>Location</u>	<u>Total Crashes</u>	<u>Critical Rate Factor</u>
1. Pequawket Trail @ Depot Road	6	2.15
2. Pequawket Trail @ Senator Black Road (N)	0	0
3. Pequawket Trail @ Senator Black Road (S)	0	0
4. Pequawket Trail btw. Senator Black Road (S) and Rocky Dunn Road	3	0.44
5. Pequawket Trail btw. Rocky Dunn Road and Depot Road	6	0.49
6. Pequawket Trail btw. Depot Road and Chase Road	3	0.29
7. Pequawket Trail btw. Chase Road and Senator Black Road (N) and Hamlin Road	3	0.30
8. Senator Black Road btw. both ends of Pequawket Trail	0	0
9. Marstons Road btw. Senator Black Road and Brown Road	0	0

The MaineDOT considers any roadway intersection or segment a high crash location if both of the following criteria are met:

- **8 or more accidents**
- **A Critical Rate Factor greater than 1.00**

As the data presented in the table shows, the incidence of traffic crashes does not meet MaineDOT's threshold criteria for identification of a high crash location.

SITE TRAFFIC

Site Trip Generation: Trip generation was determined for the proposed Nature's Wilderness Campground project based upon trip tables presented in the seventh edition of the Institute of Transportation Engineers (ITE) "TRIP GENERATION" handbook. The following trip rates were used in that effort:

Land-Use Code 416 – Campground/Recreational Vehicle Park

<i>Weekday Street Peak Hour – AM Peak</i>	<i>= 0.20 trips/campsite</i>
<i>Weekday Street Peak Hour – PM Peak</i>	<i>= 0.37 trips/campsite</i>
<i>Weekday Peak Hour of Site – AM Peak</i>	<i>= 0.22 trips/campsite</i>
<i>Weekday Peak Hour of Site – PM Peak</i>	<i>= 0.41 trips/campsite</i>
<i>Saturday Peak Hour</i>	<i>= 0.55 trips/campsite ⁽¹⁾</i>

(1) NOTE: Saturday peak hour trip rate estimated based upon comparative trips rates presented for Land-Use Code #417 Regional Park. The trip rate for a typical Saturday peak hour for the noted regional park land-use is approximately 35% greater than the trip rate provided for the weekday PM peak hour of the site.

Accordingly, the proposed 250 campsite Nature's Wilderness Campground project can be expected to generate a total of 50 trips in the weekday morning peak hour of the street; 93 trips in the weekday evening peak hour of the street; 55 and 103 trips during the weekday morning and evening peak hours of the site, respectively, and approximately 139 trips on a typical summer Saturday peak hour.

NOTE: all further analysis was completed for the weekday PM peak hour of the site and Saturday peak hour conditions, which represent the two time periods with the highest volumes of site trip generation.

Site Trip Distribution: The Institute of Transportation Engineers handbook provides the following directional distribution rates for a Campground/Recreational Vehicle Park for both the weekday PM peak hour of the site and Saturday peak hour time periods:

Land-Use Code 416 – Campground/Recreational Vehicle Park

Weekday Peak Hour of Campground– PM Peak

= 62% enter site/38% exit site

Saturday Peak Hour

= 48% enter site/52% exit site ⁽¹⁾

(1) NOTE: Saturday peak hour trip distribution percentages derived from Land-Use Code # 417 Regional Park.

Based upon the noted directional distribution patterns, 64 trips during the weekday PM peak hour of the site and 67 trips in the Saturday peak hour will enter the site and the remaining trips (39 Weekday PM Peak Hour trips and 72 Saturday peak hour trips) will exit the site.

Vehicle Trip Composition: This report has assumed all vehicle trips generated by the proposed project are “primary” or “new” vehicle trips to the area street network.

Vehicle Trip Assignment: Peak hour site trips generated by the proposed Nature’s Wilderness Campground project were assigned to the adjacent roadway system based upon existing directional travel patterns as follows:

Depot Road = 25%

SR 113 South = 40%

SR 113 North = 35%

Figure 2 is a “stick” diagram that presents the assignment of the site trips to the study intersections.

FUTURE TRAFFIC

Annual Growth: Mr. Scott Efron anticipates the proposed Nature’s Wilderness Campground project will be fully developed by 2021. MaineDOT’s historical traffic data for three traffic count stations on State Route 113 (#35908, 36304, and 36308) in the general vicinity of Senator Black Road show a relative robust growth of average annual daily traffic (AADT) volume between the years of 2013 and 2016. The combined AADT volume of the three count stations in 2013 was 10,380 vehicles and the estimated AADT volumes in 2016 were 11,860 vehicles, an increase of 14.3%. To conservatively estimate future travel conditions at the study intersections, the 2017 design hour traffic volumes were increased by an annual growth rate of 1.048 per year to project 2021 travel conditions.

2021 Pre-Development Traffic for the study intersections are presented on Figure 3.

2021 Post-Development Traffic: 2021 Post-Development traffic forecasts were prepared for the study intersections by combining the 2021 pre-development travel forecasts illustrated on Figure 3 with the estimated site generated trips highlighted on Figure 2. Figure 4 presents the estimated 2021 post-development traffic forecasts for the proposed Nature’s Wilderness Campground project.

MOBILITY ANALYSIS

Capacity analyses of both 2021 Pre- and Post-Development traffic conditions were performed utilizing the Synchro and SimTraffic computer models. Level of Service rankings are similar to the academic grading system, where an “A” is very good with little delay and “F” represents very poor conditions. The following table summarizes the relationship between delay and Level of Service for an unsignalized intersection:

Level of Service Criteria for Unsignalized Intersections

<u>Level of Service</u>	<u>Total Control Delay (sec/veh)</u>
A	Up to 10.0
B	10.1 to 15.0
C	15.1 to 25.0
D	25.1 to 35.0
E	35.1 to 50.0
F	Greater than 50.0

The results of the capacity analyses are presented in the following table:

Level of Service Summary 2021 Pre- and Post-Development Conditions

<u>Intersection/Approach</u>	<u>2021 Pre-Development</u>				<u>2021 Post-Development</u>			
	<u>Weekday PM Peak Hour</u>		<u>Saturday Peak Hour</u>		<u>Weekday PM Peak Hour</u>		<u>Saturday Peak Hour</u>	
	<u>Delay (sec.)</u>	<u>LOS</u>	<u>Delay (sec.)</u>	<u>LOS</u>	<u>Delay (sec.)</u>	<u>LOS</u>	<u>Delay (sec.)</u>	<u>LOS</u>
SR 113 @ Senator Black Rd. (N)								
- SR 113 NB	1 sec.	A	1 sec.	A	1 sec.	A	1 sec.	A
- SR 113 SB	1 sec.	A	1 sec.	A	1 sec.	A	1 sec.	A
- Senator Black Road WB	5 sec.	A	6 sec.	A	5 sec.	A	6 sec.	A
- Overall Intersection	1 sec.	A	1 sec.	A	1 sec.	A	1 sec.	A
SR 113 @ Senator Black Rd. (S)								
- SR 113 NB	1 sec.	A	1 sec.	A	1 sec.	A	1 sec.	A
- SR 113 SB	1 sec.	A	1 sec.	A	1 sec.	A	1 sec.	A
- Senator Black Road WB	4 sec.	A	6 sec.	A	7 sec.	A	8 sec.	A
- Overall Intersection	1 sec.	A	1 sec.	A	1 sec.	A	2 sec.	A
SR 113 @ Depot Road								
- SR 113 NB	2 sec.	A	2 sec.	A	2 sec.	A	3 sec.	A
- SR 113 SB	1 sec.	A	2 sec.	A	1 sec.	A	2 sec.	A
- Depot Rd. EB	7 sec.	A	8 sec.	A	7 sec.	A	9 sec.	A
- Overall Intersection	3 sec.	A	4 sec.	A	3 sec.	A	4 sec.	A

Each of the three unsignalized study intersections, highlighted in the preceding table, operate overall at the highest or “best” level of service under both 2021 Pre- and Post-Development travel conditions.

VEHICLE SIGHT DISTANCE

Vehicle sight distance information will be provided under separate cover at a later date.

AUXILIARY LANE WARRANT ANALYSIS

The Maine Department of Transportation has published warrants for auxiliary left-turn lanes in their December 2004 Highway Design Manual. The warrants are predicated upon the volume of two-way traffic traveling on the designated highway; the volume of left-turning vehicles from the principal roadway to the minor roadway and the posted speed limit of the principal roadway. Each of the three study intersections located on State Route 113 were evaluated based upon projected 2021 post-development travel conditions. The following detail was applied in completing the analysis:

State Route 113 @ Senator Black Road (North) Intersection

Posted Speed Limit of SR 113 = 40mph

MaineDOT's Chart Reference (Figure 8-19)

Chart Inputs:

Weekday PM Peak Hour

Va = 220

Vo = 267

Lt% = 11.8%

Saturday Peak Hour

Va = 246

Vo = 439

Lt% = 10.1%

State Route 113 @ Depot Road

Posted Speed Limit of SR 113 = 50mph

MaineDOT's Chart Reference (Figure 8-18)

Chart Inputs:

Weekday PM Peak Hour

Va = 226

Vo = 198

Lt% = 34.0%

Saturday Peak Hour

Va = 234

Vo = 292

Lt% = 32.0%

State Route 113 @ Senator Black Road (South) Intersection

Posted Speed Limit of SR 113 = 55mph

MaineDOT's Chart Reference (Figure 8-17)

Chart Inputs:

Weekday PM Peak Hour

Va = 286

Vo = 276

Lt% = 8.0%

Saturday Peak Hour

Va = 281

Vo = 503

Lt% = 7.8%

Copies of the respective charts with the superimposed traffic values are attached as an appendix to the report.

The analysis demonstrates that projected "build" travel conditions do not warrant or require consideration of a left-turn treatment at any of the three study intersections.

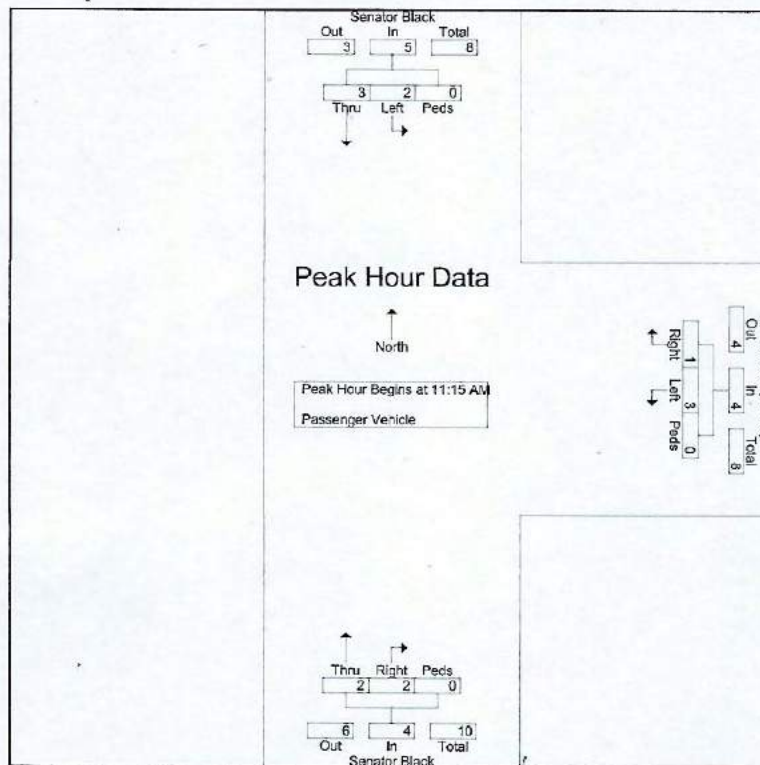
CONCLUSIONS/RECOMMENDATIONS

- The proposed Nature's Wilderness Campground project can be expected to generate a total of 103 vehicle trips during a typical weekday PM peak hour of the proposed site and a slightly greater volume of 139 vehicle trips in a Saturday peak hour.
- MaineDOT's Traffic Safety Bureau's latest three-year (2015 through 2017) safety report for the section of State Routes 113 between both intersections with Senator Black Road; the full length of Senator Black Road and the section of Marston Road between Senator Black Road and Brown Road shows the incidence of traffic crashes and corresponding critical rate factors at each identified intersection and road segment do not meet MaineDOT's threshold criteria for identification of a high crash location.

- Peak hour traffic generated by the proposed Nature's Wilderness Campground project has very minimal impact on traffic operations at each of the three study intersections along State Route 113. Each intersection, under both 2021 pre- and post-development traffic loadings is projected to operate at the highest or "*best*" level of service (Level of Service A) with very low levels of vehicle delay.
- The results of the auxiliary lane warrant analysis completed for each study intersection under forecast 2021 post-development traffic loadings demonstrates a dedicated left-turn lane is not warranted at any of the three study intersections.
- The proposed Nature's Wilderness Campground project is projected to generate in excess of 100 passenger car equivalent trips during both the weekday PM peak hour of the street and the proposed site and during a typical Saturday peak hour; accordingly, the proposed project must file for and receive a Maine Department of Transportation Traffic Movement Permit for the project.

Baldwin: Senator Black & Marston(Brown)
Saturday October 21, 2017
Sunny
Count By: Patrick Frie

File Name : Baldwin Senator Black & Marstons(Brown) 102117
Site Code : 00102117
Start Date : 10/21/2017
Page No : 5



Baldwin: Senator Black & Marstons(Brown)
 Tuesday October 24, 2017
 Cloudy with occasional mist
 Count By: Dawn-Marie Fahey

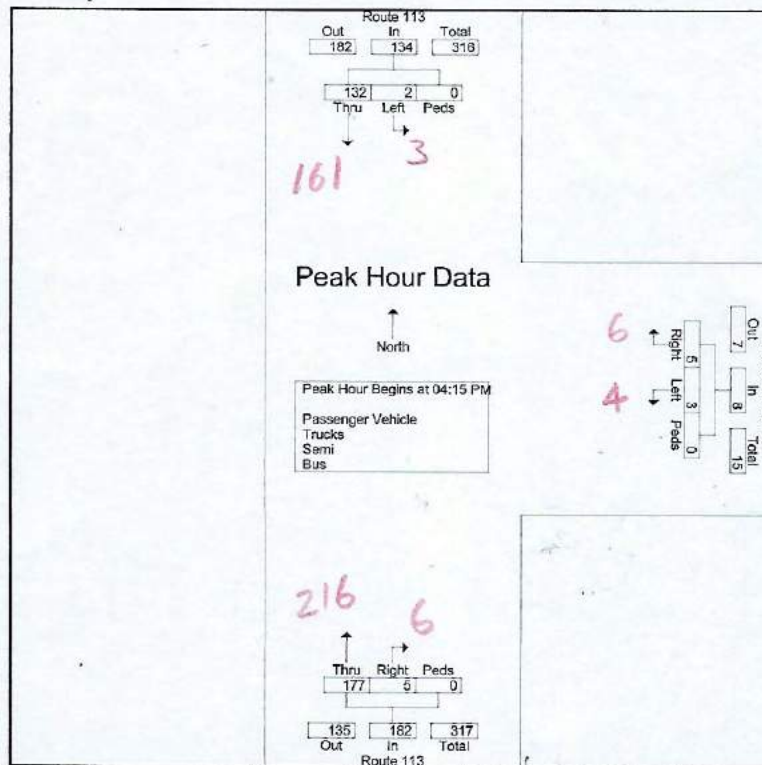
File Name : Baldwin Senator Black & Marstons(Brown) 102417
 Site Code : 01024171
 Start Date : 10/24/2017
 Page No : 5

Start Time	Route 113 From North				Marston(Brown) From East				Route 113 From South				Int. Total	
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total		
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 02:45 PM														
02:45 PM	1	0	0	1	0	0	0	0	4	1	0	5	6	
03:00 PM	0	0	0	0	1	1	0	2	1	0	0	1	3	
03:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	1	
03:30 PM	0	1	0	1	0	1	0	1	1	2	0	3	5	
Total Volume	1	1	0	2	1	3	0	4	6	3	0	9	15	
% App. Total	50	50	0		25	75	0		66.7	33.3	0			
PHF	.250	.250	.000	.500	.250	.750	.000	.500	.375	.375	.000	.450	.625	

Senator Black Road (North Int.) S. R. 113

Baldwin:Senator Black & Rte 113 Loc#1
Monday October 16,2017
Cloudy
Count By: Dawn-Marie Fahey

File Name : Baldwin Senator Black & Route 113 Location #1 101617
Site Code : 01016171
Start Date : 10/16/2017
Page No : 6



Senator Black Road (North Int.) © S.P. 113

Baldwin: Senator Black Rd & Rte 113 Loc1
Saturday October 14, 2017
Sunny
Count By: Dawn-Marie Fahey

File Name : Baldwin Senator Black & Route 113 Location #1 101417
Site Code : 00101417
Start Date : 10/14/2017
Page No : 5

	Route 113 From North				Senator Black Rd From East				Route 113 From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 02:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 11:00 AM													
11:00 AM	29	0	0	29	2	1	0	3	0	60	0	60	92
11:15 AM	44	1	0	45	0	1	0	1	0	109	0	109	155
11:30 AM	42	0	0	42	1	0	0	1	2	68	0	70	113
11:45 AM	35	0	0	35	0	2	0	2	2	57	0	59	96
Total Volume	150	1	0	151	3	4	0	7	4	294	0	298	456
% App. Total	99.3	0.7	0		42.9	57.1	0		1.3	98.7	0		
PHF	.852	.250	.000	.839	.375	.500	.000	.583	.500	.674	.000	.683	.735

183 2

4 5

5 359

File Name : Baldwin Depot & Route 113 Location 1012517
 Site Code : 01025171
 Start Date : 10/25/2017
 Page No : 5

87 73 121 60 49 93

Baldwin: Depot Rd & Route 113
 Saturday October 28, 2017
 Sunny
 Count By: Dawn-Marie Fahey

File Name : Baldwin Depot & Route 113 Location 1012817
 Site Code : 01028171
 Start Date : 10/28/2017
 Page No : 5

Start Time	Route 113 From North				Route 113 From South				Depot Road From West			
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total
Peak Hour Analysis From 11:00 AM to 02:45 PM - Peak 1 of 1												
Peak Hour for Entire Intersection Begins at 12:45 PM												
12:45 PM	24	29	0	53	25	14	0	39	16	30	0	46
01:00 PM	19	23	0	42	17	9	0	26	13	26	0	39
01:15 PM	29	28	0	57	30	7	0	37	15	21	0	36
01:30 PM	17	23	0	40	36	15	0	51	7	29	0	36
Total Volume	89	103	0	192	108	45	0	153	51	106	0	157
% App. Total	46.4	53.6	0		70.6	29.4	0		32.5	67.5	0	
PHF	.767	.888	.000	.842	.750	.750	.000	.750	.797	.883	.000	.853

109 126 132 55 62 129

Senator Black Road (South Int.)

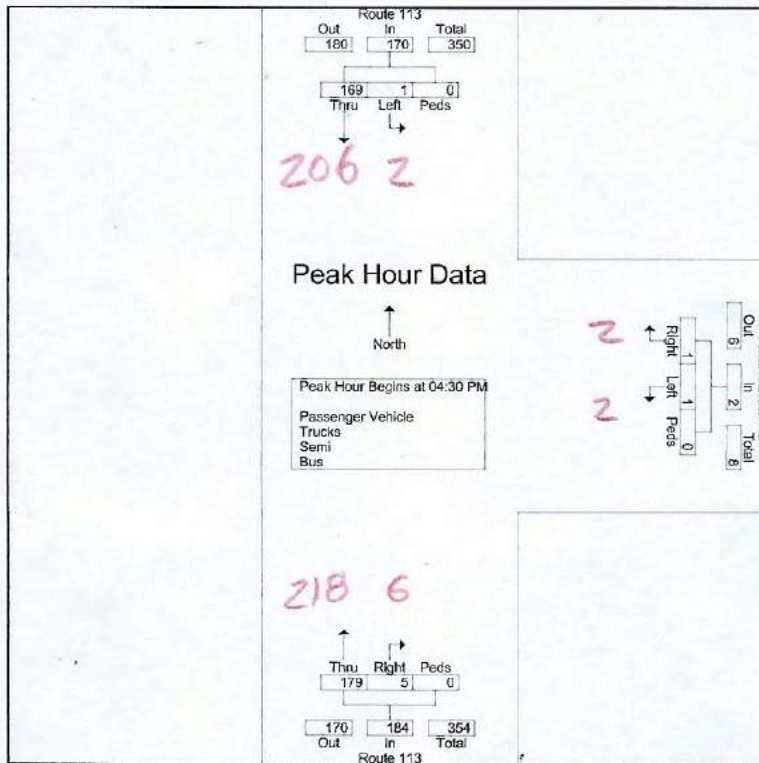
S.R. 113

Ground

South End

Baldwin: Senator Black & Rte 113 Loc2
Monday October 23, 2017
Cloudy
Count By: Dawn-Marie Fahey

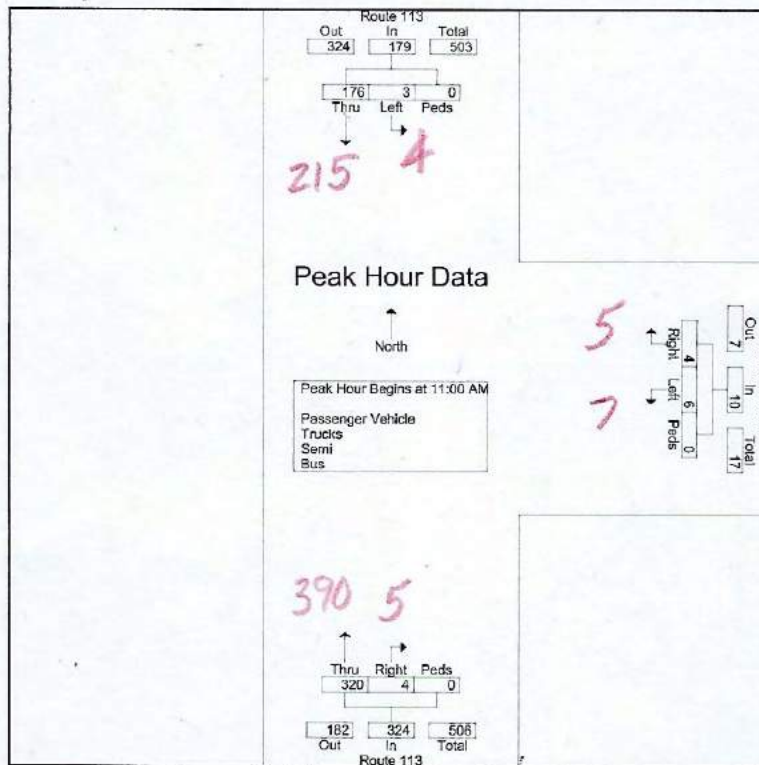
File Name : Baldwin Senator Black & Route 113 Location #2 102417
Site Code : 01023171
Start Date : 10/23/2017
Page No : 6



Senator Black Road (South Int.) @ S.R. 113

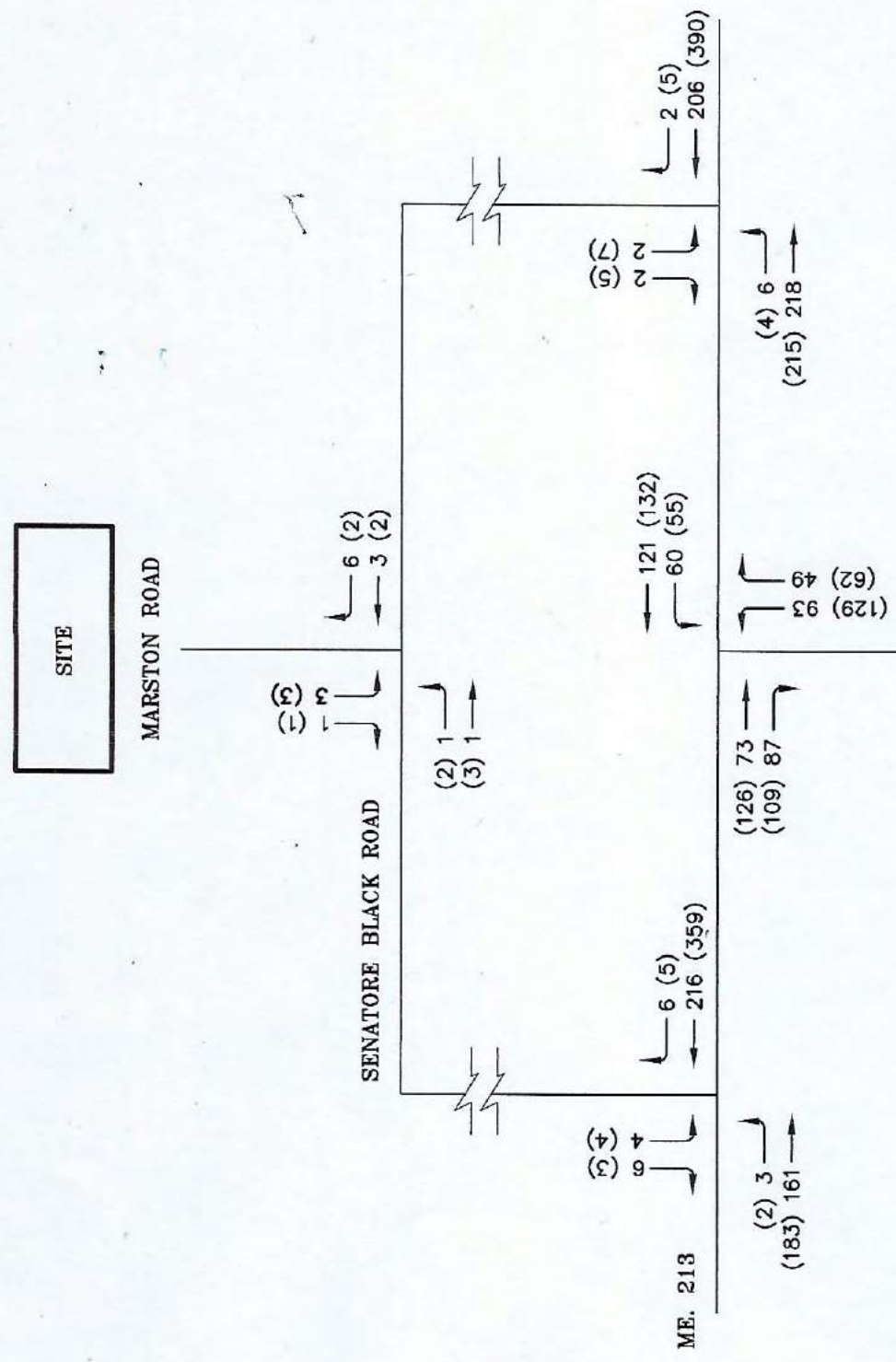
Baldwin: Senator Black & Rte 113 Loc2
Saturday October 21, 2017
Sunny
Count By: Dawn-Marie Fahey

File Name : Baldwin Senator Black & Route 113 Location #2 102117
Site Code : 02102117
Start Date : 10/21/2017
Page No : 6



2017 Maine Transportation Count Book

County	STA	ROAD-PN	LOCATION	GROUP	AADT12	AADT13	AADT14	AADT15	AADT16	AADT17
Cumberland										
TOWN										
BALDWIN	40508	01729-6	IR 1729(SAND PD) NW/O SR 11/107(BRDGTN)	I	-	70 C	-	-	-	-
BALDWIN	34808	05030-6	IR 503 (CRAWFORD) NW/O IR 624 @ BR# 2098	I	-	-	-	-	50 S	-
BALDWIN	36402	05030-6	IR 5030 (DOUGLAS HILL) NE/O SR 5/113/117	I	-	-	-	-	640 C	-
BALDWIN	71608	00620-6	IR 620 (MOUNTAIN RD) NW/O IR 627	I	-	160 C	-	-	-	-
BALDWIN	86207	00624-6	IR 624 (DOUGLAS HILL) W/O IR 623@BR#5036	I	-	320 C	-	-	310 C	-
BALDWIN	71604	00627-6	IR 627 (CRAM RD) SE/O IR 626	I	-	-	-	-	180 C	-
BALDWIN	31203	00630-6	IR 630 (SEN. BLACK RD) E/O SR 5/113/117	I	-	-	-	-	140 C	-
BALDWIN	36008	00631-6	IR 631 (BROWN) NW/O SR 113 (PEQUAWET TR)	I	-	150 C	-	-	150 C	-
BALDWIN	71406	00635-6	IR 635 (PIGEON BK) SW/O SR 113 (E JCT)	I	-	250 C	-	-	-	-
BALDWIN	31107	00636-6	IR 636 (FREEMONT) W/O SR 11/107 (BRDGTN)	II	-	480 C	-	-	620 C	-
BALDWIN	35801	0107X-5	SR 107(BRIDGTN) N/O SR11(SEBAGO)@BR5045	II	-	960 C	-	-	1200 S	-
BALDWIN	35805	0011X-4	SR 11 S/O SR 107	II	-	-	-	-	2090 C	-
BALDWIN	35803	0011X-4	SR 11(SEBAGO RD) E/O SR 107 @ BR# 3693	II	-	810 C	-	-	1180 S	-
BALDWIN	31101	0011X-4	SR 11/107 (BRDGTN) N/O IR 636(FREEMONT)	II	-	1700 C	-	-	-	-
BALDWIN	35901	0011X-4	SR 11/107 (BRIDGTN RD) N/O SR 113	II	-	1370 C	-	-	1540 S	-
BALDWIN	35904	0011X-4	SR 11/113 SE/O SR 11/107 @BR# 2694	II	-	4120 C	-	-	4700 C	-
BALDWIN	36007	0113X-4	SR 113 (PEQUAWET TR) W/O IR 631 (BROWN)	II	-	3460 C	-	-	-	-
BALDWIN	35908	0113X-4	SR 113 (PEQUAWKET TR) NW/O SR 11/107	II	-	3380 C	-	-	3300 C	-
BALDWIN	36304	0113X-4	SR 113 (PEQUAWKET TR) SE/O SR 5/117	II	-	3190 C	-	-	3760 C	-
BALDWIN	36308	0005X-3	SR 5/113/117 (PEQUAWET TR) NW/O SR 5/117	II	-	3810 C	-	-	4800 C	-
BALDWIN	36500	0005X-3	SR 5/113/117 @ HIRAM TL	II	-	-	-	-	4040 C	-
BALDWIN	36206	0005X-3	SR 5/117 SW/O IR 634 @ CORNISH TL	II	-	3130 C	-	-	3530 C	-
BALDWIN	36306	0005X-3	SR 5/117 SW/O IR 8126 (ROCKY DUNN RD)	II	-	-	-	-	3550 C	-
BRIDGTON	07503	02033-6	BRICKYARD HILL RD E/O OLD ELM RD@BR#3607	III	-	110 C	-	-	-	-
BRIDGTON	04704	02033-6	BRICKYARD HILL RD SE/O SR 117	III	-	100 C	-	-	-	-
BRIDGTON	08103	00592-6	BURNHAM RD E/O SR 107 (S BRIDGTN RD)	I	-	380 C	-	-	-	-
BRIDGTON	08207	05028-6	BURNHAM RD W/O US 302 (ROOSEVELT TR)	I	-	410 C	-	-	470 C	-
BRIDGTON	06902	00572-6	CHADBOURNE HILL RD NE/O HIGHLAND RD	III	-	440 C	-	-	-	-
BRIDGTON	07307	00572-6	CHADBOURNE HILL RD W/O SR 37(N BRIDGTN)	III	-	520 C	-	-	560 C	-
BRIDGTON	00403	04028-6	CHURCH ST E/O S HIGH ST	II+III	-	580 C	-	-	-	-
BRIDGTON	01505	04028-6	CHURCH ST S/O US 302 (MAIN ST)	II+III	-	860 C	-	-	-	-
BRIDGTON	03401	00582-6	CROSS ST N/O MAIN ST	II+III	-	500 C	-	-	-	-



2017 DESIGN HOUR TRAFFIC

FIGURE 1



SITE

MARSTON ROAD

21 (38)
18 (34)

42 (44)

SENATORE BLACK ROAD

(23) 22

13 (25)
5 (9)

ME. 213

(23) 22

5 (9)

(9) 5

(17) 16

(17) 16

16 (29)
5 (9)

26 (27)

LEGEND

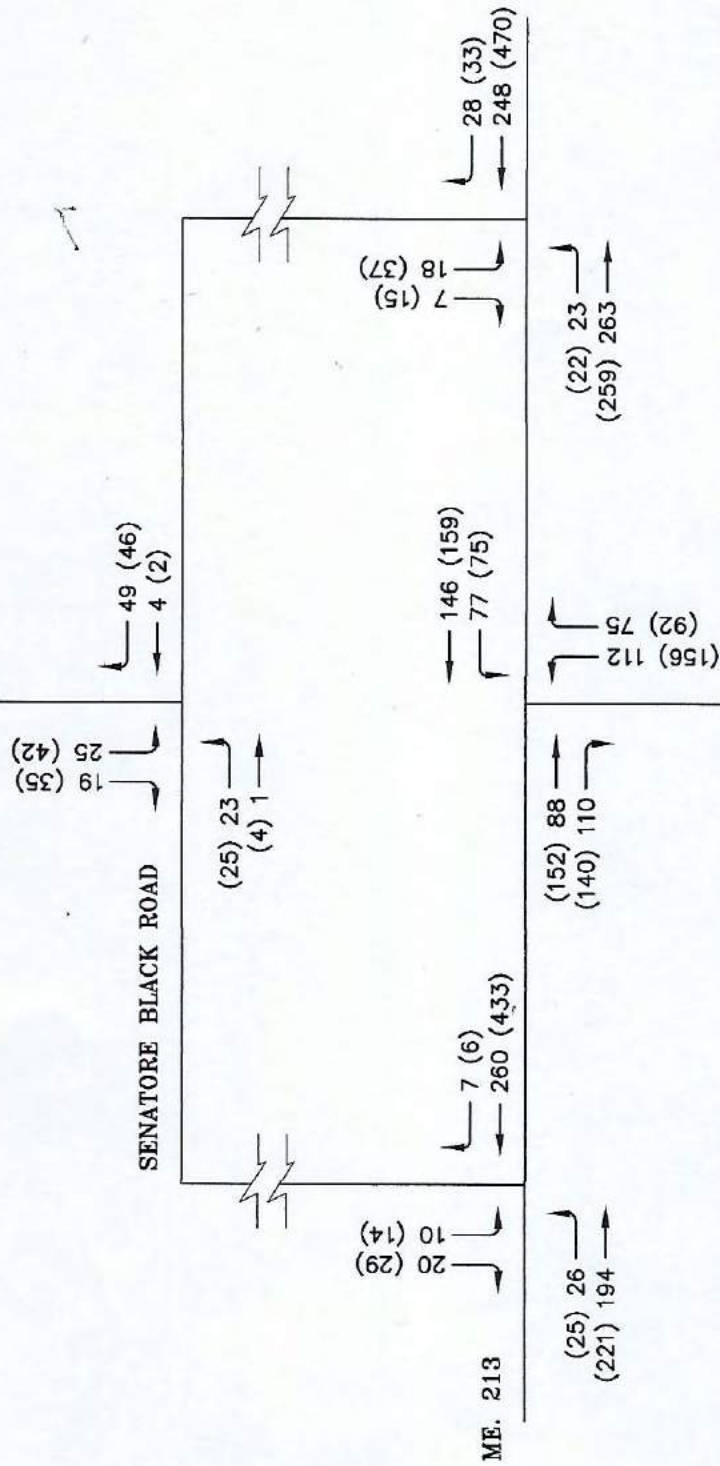
XX = WEEKDAY PM PEAK
(XX) = SATURDAY PEAK

ME. 5/17

SITE TRIP ASSIGNMENT

FIGURE 2

ME. 5/17



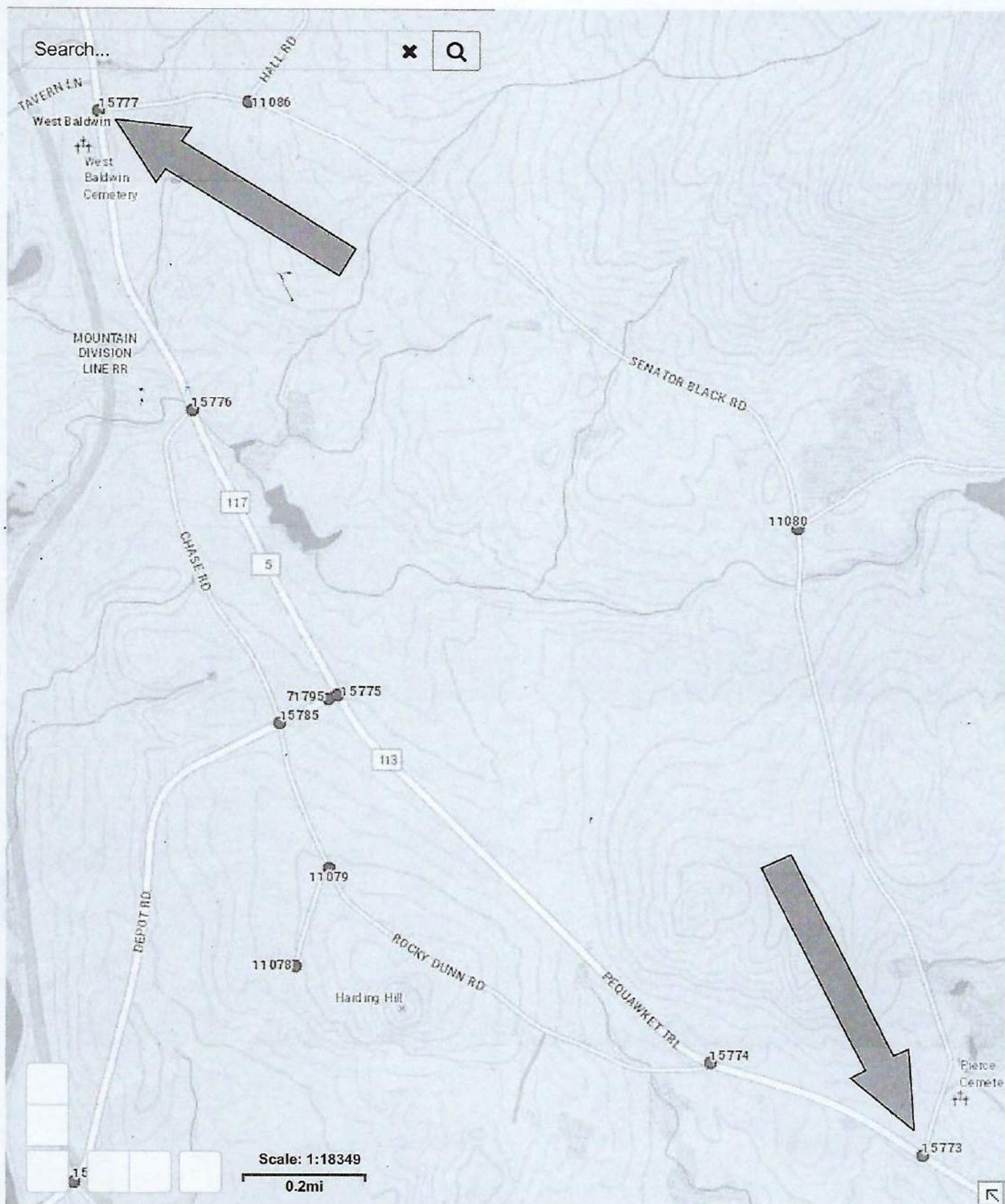
LEGEND

XX = WEEKDAY PM PEAK

(XX) = SATURDAY PEAK

ME. 5/17

2021 POST-DEVELOPMENT TRAFFIC



Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☒ Crash Summary I ☐ Section Detail ☒ Crash Summary II ☐ 1320 Public ☐ 1320 Private ☒ 1320 Summary

REPORT DESCRIPTION

Baldwin
Rte. 113 from Senator Black Rd-South to Senator Black Rd-North

REPORT PARAMETERS

Year 2015, Start Month 1 through Year 2017 End Month: 12

Route: 0113X

Start Node: 15773
End Node: 15775

Start Offset: 0
End Offset: 0

☐ Exclude First Node
☐ Exclude Last Node

Route: 0005X

Start Node: 15775
End Node: 15777

Start Offset: 0
End Offset: 0

☒ Exclude First Node
☐ Exclude Last Node

Crash Summary I

Node	Route - MP	Node Description	U/R	Nodes										CRF
				Total Crashes	K	A	B	C	PD	Injury	Percent Annual M Ent-Veh	Crash Rate	Critical Rate	
15774	0113X - 11.18	Int of PEQUAWKET TRL ROCKY DUNN RD	1	0	0	0	0	0	0	0	0.0	1.422	0.00	0.46
												Statewide Crash Rate:	0.13	
15773	0113X - 10.80	Int of PEQUAWKET TRL SENATOR BLACK RD	1	0	0	0	0	0	0	0	0.0	1.478	0.00	0.46
												Statewide Crash Rate:	0.13	
15775	0113X - 12.03	Int of DEPOT RD PEQUAWKET TRL	1	6	0	0	2	2	2	66.7	66.7	2.248	0.89	0.41
												Statewide Crash Rate:	0.13	
15776	0005X - 41.12	Int of CHASE RD PEQUAWKET TRL	1	0	0	0	0	0	0	0.0	0.0	1.784	0.00	0.44
												Statewide Crash Rate:	0.13	
15777	0005X - 41.64	Int of PEQUAWKET TRL SENATOR BLACK RD	1	0	0	0	0	0	0	0.0	0.0	1.756	0.00	0.44
												Statewide Crash Rate:	0.13	
Study Years: 3.00				NODE TOTALS:										
				6	0	0	2	2	2	66.7	66.7	8.688	0.23	0.29
														0.79

Crash Summary I

Sections																	
Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes	K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF	
15773	15774	3105870	0 - 0.38	0113X - 10.80 ST RTE 113	0.38	1	3	0	0	1	0	2	33.3	0.00537	186.20	419.05	0.00
Int of PEQUAWKET TRL SENATOR BLACK RD																	
15774	15775	3100368	0 - 0.85	0113X - 11.18 ST RTE 113	0.85	1	6	0	0	2	0	4	33.3	0.01186	168.58	347.26	0.00
Int of PEQUAWKET TRL ROCKY DUNN RD																	
15775	15776	3105871	0 - 0.52	0005X - 40.60 ST RTE 5	0.52	1	3	0	0	0	1	2	33.3	0.00927	107.92	367.33	0.00
Int of DEPOT RD PEQUAWKET TRL																	
15776	15777	3105873	0 - 0.52	0005X - 41.12 ST RTE 5	0.52	1	3	0	1	0	0	2	33.3	0.00913	109.49	368.57	0.00
Int of CHASE RD PEQUAWKET TRL																	
Study Years:		3.00	Section Totals:		2.27	15	0	1	3	1	10	33.3	0.03563	140.32	279.41	0.50	
Grand Totals:			2.27	21	0	1	5	3	12	42.9	0.03563	196.44	319.09	0.62			

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☒ Crash Summary I ☐ Section Detail ☒ Crash Summary II ☐ 1320 Public ☐ 1320 Private ☒ 1320 Summary

REPORT DESCRIPTION

Baldwin
Martson Rd. from Senator Black Rd. to Brown Rd.

REPORT PARAMETERS

Year 2015, Start Month 1 through Year 2017 End Month: 12

Route: 0500628

Start Node: 11080

End Node: 15317

Start Offset: 0

End Offset: 0

☒ Exclude First Node

☐ Exclude Last Node

Crash Summary I

Nodes														
Node	Route - MP	Node Description	U/R	Total Crashes	K	A	B	C	PD	Injury	Percent Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
15317	0500628 - 1.54	Int of BROWN RD MARSTON RD MCNEIL RD	1	0	0	0	0	0	0	0.0	0.017	0.00	-5.74	0.00
Statewide Crash Rate: 0.13														
Study Years: 3.00			NODE TOTALS:											
				0	0	0	0	0	0	0.0	0.017	0.00	-5.77	0.00

Crash Summary I

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Sections							Annual HMVM	Crash Rate	Critical Rate	CRF
						Total Crashes	K	A	B	C	PD	Percent Injury				
11080	15317	184914	0 - 1.54	0500628 - 0 RD INV 05 00628	1.54	1	0	0	0	0	0	0.0	0.00026	0.00	996.20	0.00
Int of MARSTON RD - SENATOR BLACK RD														Statewide Crash Rate: 232.00		
Study Years:		3.00			1.54	0	0	0	0	0	0	0.0	0.00026	0.00	996.24	0.00
Section Totals:					1.54	0	0	0	0	0	0	0.0	0.00026	0.00	1092.74	0.00
Grand Totals:					1.54	0	0	0	0	0	0	0.0	0.00026	0.00	1092.74	0.00



Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☒ Crash Summary I ☐ Section Detail ☒ Crash Summary II ☐ 1320 Public ☐ 1320 Private ☒ 1320 Summary

REPORT DESCRIPTION

Baldwin
Senator Black Rd from Rte 113-South to Rte 113-North

REPORT PARAMETERS

Year 2015, Start Month 1 through Year 2017 End Month: 12

Route: 0500630

Start Node: 15773

End Node: 15777

Start Offset: 0

End Offset: 0

☒ Exclude First Node

☒ Exclude Last Node

Crash Summary I

Nodes														
Node	Route - MP	Node Description	U/R	Total Crashes	K	Injury Crashes			Percent Annual M Ent-Veh			Crash Rate	Critical Rate	CRF
						A	B	C	PD	Injury	Ent-Veh			
11080	0500630 - 1.08	Int of MARSTON RD, SENATOR BLACK RD	1	0	0	0	0	0	0	0.0	0.058	0.00	-0.53	0.00
												Statewide Crash Rate: 0.13		
11086	0500630 - 2.24	Int of HALL RD, SENATOR BLACK RD	1	0	0	0	0	0	0	0.0	0.049	0.00	-0.84	0.00
												Statewide Crash Rate: 0.13		
Study Years: 3.00			NODE TOTALS:											
				0	0	0	0	0	0	0.0	0.107	0.00	0.15	0.00

Crash Summary I

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Sections							Annual HMVM	Crash Rate	Critical Rate	CRF
						Total Crashes	K	A	B	C	PD	Percent Injury				
11080	15773	184915	0 - 1.08	0500630 - 0 RD INV 05 00630	1.08	1	0	0	0	0	0	0.0	0.00064	0.00	866.29	0.00
Int of MARSTON RD SENATOR BLACK RD																
11080	11086	184913	0 - 1.16	0500630 - 1.08 RD INV 05 00630	1.16	1	0	0	0	0	0	0.0	0.00045	0.00	928.41	0.00
Int of MARSTON RD SENATOR BLACK RD																
11086	15777	184927	0 - 0.26	0500630 - 2.24 RD INV 05 00630	0.26	1	0	0	0	0	0	0.0	0.00013	0.00	946.64	0.00
Int of HALL RD, SENATOR BLACK RD																
Study Years: 3.00					Section Totals:	2.50	0	0	0	0	0	0.0	0.00123	0.00	742.35	0.00
					Grand Totals:	2.50	0	0	0	0	0	0.0	-0.00123	0.00	799.78	0.00

Summary of All Intervals

Run Number	2	4	5	6	7	Avg
Start Time	4:57	4:57	4:57	4:57	4:57	4:57
End Time	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1586	1533	1583	1543	1651	1579
Vehs Exited	1586	1539	1592	1546	1656	1585
Starting Vehs	18	16	23	17	25	20
Ending Vehs	18	10	14	14	20	13
Travel Distance (mi)	689	670	694	673	721	689
Travel Time (hr)	17.6	17.2	17.7	17.2	18.5	17.6
Total Delay (hr)	0.9	0.9	1.0	0.9	1.0	0.9
Total Stops	207	190	207	198	205	202
Fuel Used (gal)	22.0	21.4	21.8	21.2	22.9	21.9

Interval #0 Information Seeding

Start Time	4:57
End Time	5:00
Total Time (min)	3
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	2	4	5	6	7	Avg
Vehs Entered	1586	1533	1583	1543	1651	1579
Vehs Exited	1586	1539	1592	1546	1656	1585
Starting Vehs	18	16	23	17	25	20
Ending Vehs	18	10	14	14	20	13
Travel Distance (mi)	689	670	694	673	721	689
Travel Time (hr)	17.6	17.2	17.7	17.2	18.5	17.6
Total Delay (hr)	0.9	0.9	1.0	0.9	1.0	0.9
Total Stops	207	190	207	198	205	202
Fuel Used (gal)	22.0	21.4	21.8	21.2	22.9	21.9

3: Route 113 & Senator Black Rd (N) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.2	0.2
Total Del/Veh (s)	4.6	0.5	0.3	0.6

7: Route 113 & Route 5/17 Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.2	0.2	0.2	0.2
Total Del/Veh (s)	6.5	2.1	1.2	3.0

11: Route 113 & Senator Black Rd (S) Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.2	0.2	0.1	0.2
Total Del/Veh (s)	0.3	0.3	3.8	0.4

Total Network Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	1.9

Intersection: 3: Route 113 & Senator Black Rd (N)

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	36	22
Average Queue (ft)	11	1
95th Queue (ft)	35	10
Link Distance (ft)	1006	1191
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Route 113 & Route 5/17

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	101	56	4
Average Queue (ft)	50	13	0
95th Queue (ft)	80	41	3
Link Distance (ft)	1205	1245	1241
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: Route 113 & Senator Black Rd (S)

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	15	27
Average Queue (ft)	1	4
95th Queue (ft)	7	19
Link Distance (ft)	913	1176
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Summary of All Intervals

Run Number	2	3	4	5	6	Avg
Start Time	4:57	4:57	4:57	4:57	4:57	4:57
End Time	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	2146	2107	2080	2131	2160	2126
Vehs Exited	2142	2101	2079	2134	2155	2122
Starting Vehs	23	17	24	23	21	21
Ending Vehs	27	23	25	20	26	24
Travel Distance (mi)	932	910	902	928	939	922
Travel Time (hr)	24.0	23.6	22.9	23.7	24.2	23.7
Total Delay (hr)	1.7	1.6	1.4	1.5	1.7	1.6
Total Stops	277	300	257	272	270	277
Fuel Used (gal)	29.9	29.0	28.7	29.6	29.8	29.4

Interval #0 Information Seeding

Start Time 4:57
End Time 5:00
Total Time (min) 3
Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information Recording

Start Time 5:00
End Time 6:00
Total Time (min) 60
Volumes adjusted by Growth Factors.

Run Number	2	3	4	5	6	Avg
Vehs Entered	2146	2107	2080	2131	2160	2126
Vehs Exited	2142	2101	2079	2134	2155	2122
Starting Vehs	23	17	24	23	21	21
Ending Vehs	27	23	25	20	26	24
Travel Distance (mi)	932	910	902	928	939	922
Travel Time (hr)	24.0	23.6	22.9	23.7	24.2	23.7
Total Delay (hr)	1.7	1.6	1.4	1.5	1.7	1.6
Total Stops	277	300	257	272	270	277
Fuel Used (gal)	29.9	29.0	28.7	29.6	29.8	29.4

3: Route 113 & Senator Black Rd (N) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.3	0.2	0.3
Total Del/Veh (s)	5.6	0.7	0.4	0.7

7: Route 113 & Route 5/17 Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.2	0.2	0.3	0.2
Total Del/Veh (s)	8.1	2.2	1.8	3.9

11: Route 113 & Senator Black Rd (S) Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.2	0.4	0.1	0.3
Total Del/Veh (s)	0.4	0.6	5.9	0.6

Total Network Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	2.4

Intersection: 3: Route 113 & Senator Black Rd (N)

Movement	WB
Directions Served	LR
Maximum Queue (ft)	36
Average Queue (ft)	10
95th Queue (ft)	33
Link Distance (ft)	1006
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Route 113 & Route 5/17

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	101	57	9
Average Queue (ft)	59	15	0
95th Queue (ft)	93	44	5
Link Distance (ft)	1205	1245	1241
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: Route 113 & Senator Black Rd (S)

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	21	41
Average Queue (ft)	2	11
95th Queue (ft)	12	34
Link Distance (ft)	913	1176
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Summary of All Intervals

Run Number	1	3	4	5	7	Avg
Start Time	4:57	4:57	4:57	4:57	4:57	4:57
End Time	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1678	1695	1659	1686	1718	1688
Vehs Exited	1674	1694	1662	1690	1722	1688
Starting Vehs	17	21	16	18	22	19
Ending Vehs	21	22	13	14	18	15
Travel Distance (mi)	730	737	724	736	750	735
Travel Time (hr)	19.4	19.5	19.0	19.3	19.8	19.4
Total Delay (hr)	1.2	1.2	1.1	1.1	1.3	1.2
Total Stops	253	261	257	260	268	258
Fuel Used (gal)	23.8	23.9	23.6	23.8	24.2	23.8

Interval #0 Information Seeding

Start Time	4:57
End Time	5:00
Total Time (min)	3
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	3	4	5	7	Avg
Vehs Entered	1678	1695	1659	1686	1718	1688
Vehs Exited	1674	1694	1662	1690	1722	1688
Starting Vehs	17	21	16	18	22	19
Ending Vehs	21	22	13	14	18	15
Travel Distance (mi)	730	737	724	736	750	735
Travel Time (hr)	19.4	19.5	19.0	19.3	19.8	19.4
Total Delay (hr)	1.2	1.2	1.1	1.1	1.3	1.2
Total Stops	253	261	257	260	268	258
Fuel Used (gal)	23.8	23.9	23.6	23.8	24.2	23.8

3: Route 113 & Senator Black Rd (N) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.2	0.2
Total Del/Veh (s)	4.1	0.5	0.8	0.8

7: Route 113 & Route 5/17 Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.2	0.2	0.2	0.2
Total Del/Veh (s)	7.1	1.9	1.2	3.3

11: Route 113 & Senator Black Rd (S) Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.2	0.2	0.1	0.2
Total Del/Veh (s)	0.8	0.6	6.9	1.0

Total Network Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	2.3

Intersection: 3: Route 113 & Senator Black Rd (N)

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	45	40
Average Queue (ft)	20	5
95th Queue (ft)	45	25
Link Distance (ft)	1006	1191
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Route 113 & Route 5/17

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	119	55	4
Average Queue (ft)	53	10	0
95th Queue (ft)	92	36	4
Link Distance (ft)	1205	1245	1241
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: Route 113 & Senator Black Rd (S)

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	32	51
Average Queue (ft)	3	19
95th Queue (ft)	17	45
Link Distance (ft)	913	1176
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Summary of All Intervals

Run Number	2	3	4	5	6	Avg
Start Time	4:57	4:57	4:57	4:57	4:57	4:57
End Time	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	63	63	63	63	63	63
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	2335	2255	2294	2305	2285	2298
Vehs Exited	2332	2245	2295	2315	2284	2294
Starting Vehs	25	17	31	31	29	28
Ending Vehs	28	27	30	21	30	25
Travel Distance (mi)	1013	975	995	1003	989	995
Travel Time (hr)	27.2	26.0	26.6	26.9	26.2	26.6
Total Delay (hr)	2.2	2.1	2.1	2.1	2.1	2.1
Total Stops	402	374	382	401	340	379
Fuel Used (gal)	33.9	32.0	33.1	33.0	32.6	32.9

Interval #0 Information Seeding

Start Time	4:57
End Time	5:00
Total Time (min)	3
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	2	3	4	5	6	Avg
Vehs Entered	2335	2255	2294	2305	2285	2298
Vehs Exited	2332	2245	2295	2315	2284	2294
Starting Vehs	25	17	31	31	29	28
Ending Vehs	28	27	30	21	30	25
Travel Distance (mi)	1013	975	995	1003	989	995
Travel Time (hr)	27.2	26.0	26.6	26.9	26.2	26.6
Total Delay (hr)	2.2	2.1	2.1	2.1	2.1	2.1
Total Stops	402	374	382	401	340	379
Fuel Used (gal)	33.9	32.0	33.1	33.0	32.6	32.9

3: Route 113 & Senator Black Rd (N) Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.3	0.2	0.3
Total Del/Veh (s)	5.1	0.9	0.8	1.1

7: Route 113 & Route 5/17 Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.2	0.2	0.3	0.2
Total Del/Veh (s)	8.6	2.4	1.8	4.2

11: Route 113 & Senator Black Rd (S) Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.2	0.4	0.1	0.3
Total Del/Veh (s)	0.9	1.2	8.2	1.6

Total Network Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	3.0

Intersection: 3: Route 113 & Senator Black Rd (N)

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	49	47
Average Queue (ft)	24	6
95th Queue (ft)	49	29
Link Distance (ft)	1006	1191
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Route 113 & Route 5/17

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	134	69	4
Average Queue (ft)	64	15	0
95th Queue (ft)	104	48	3
Link Distance (ft)	1205	1245	1241
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: Route 113 & Senator Black Rd (S)

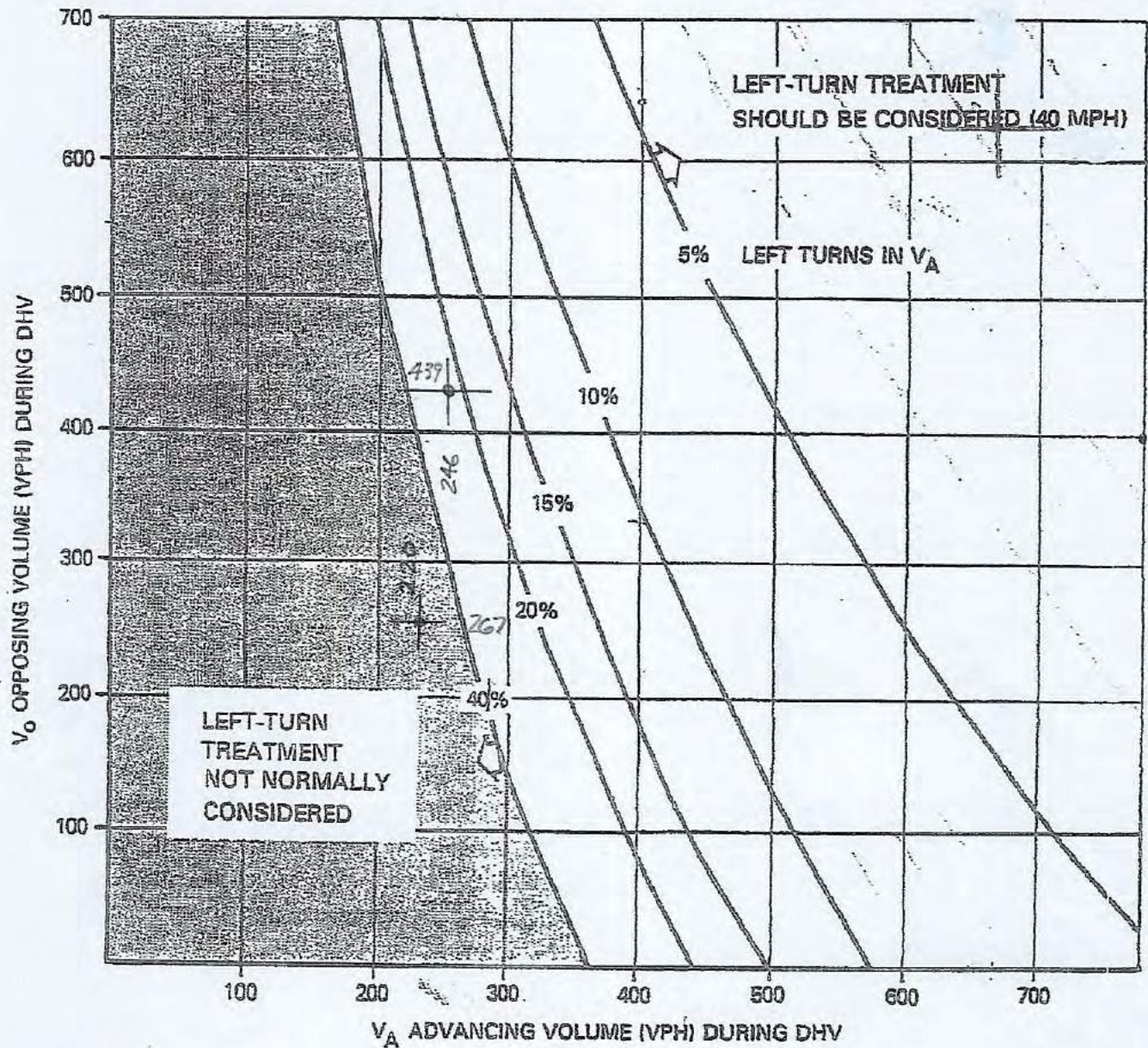
Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	47	63
Average Queue (ft)	6	25
95th Queue (ft)	27	50
Link Distance (ft)	913	1176
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

December 2004

AUXILIARY TURNING LANES

**Instructions:**

1. The family of curves represent the percent of left turns in the advancing volume (V_A). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.
4. Read V_A and V_O into the chart and locate the intersection of the two volumes.
5. Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn lane is not warranted based on traffic volumes.

**VOLUME WARRANTS FOR LEFT-TURN LANES
AT UNSIGNALIZED INTERSECTIONS ON 2-LANE HIGHWAYS
(40 mph)**

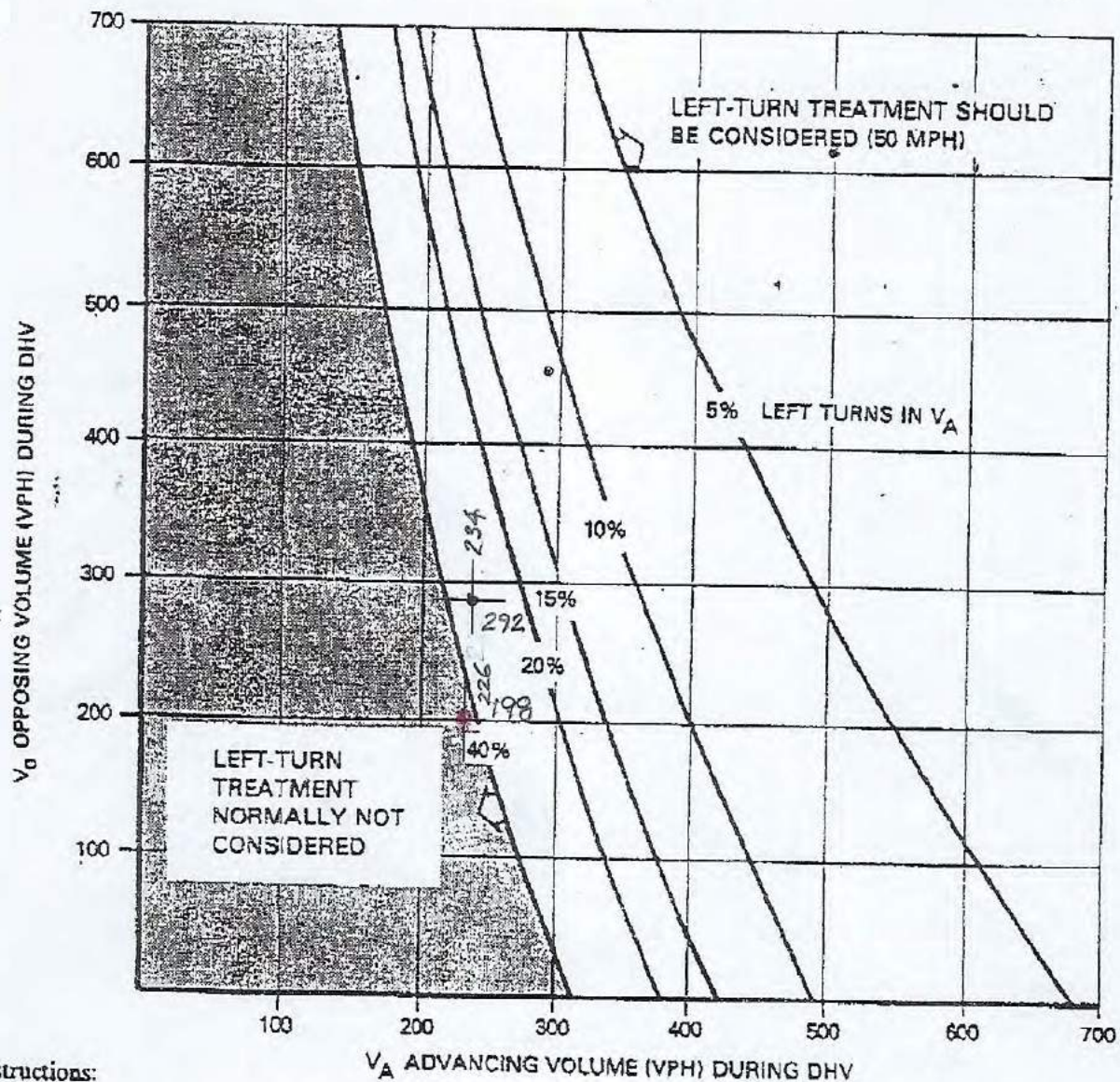
Figure 8-19

*Senator Black Rd. @ S.R. 113
North Intersection*

8-30

AUXILIARY TURNING LANES

January 1994



Instructions:

1. The family of curves represent the percent of left turns in the advancing volume (V_A). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.
2. Read V_A and V_O into the chart and locate the intersection of the two volumes.
3. Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn is not warranted based on traffic volumes.

VOLUME WARRANTS FOR LEFT-TURN LANES
AT UNSIGNALIZED INTERSECTIONS ON 2-LANE HIGHWAYS
(50 mph)

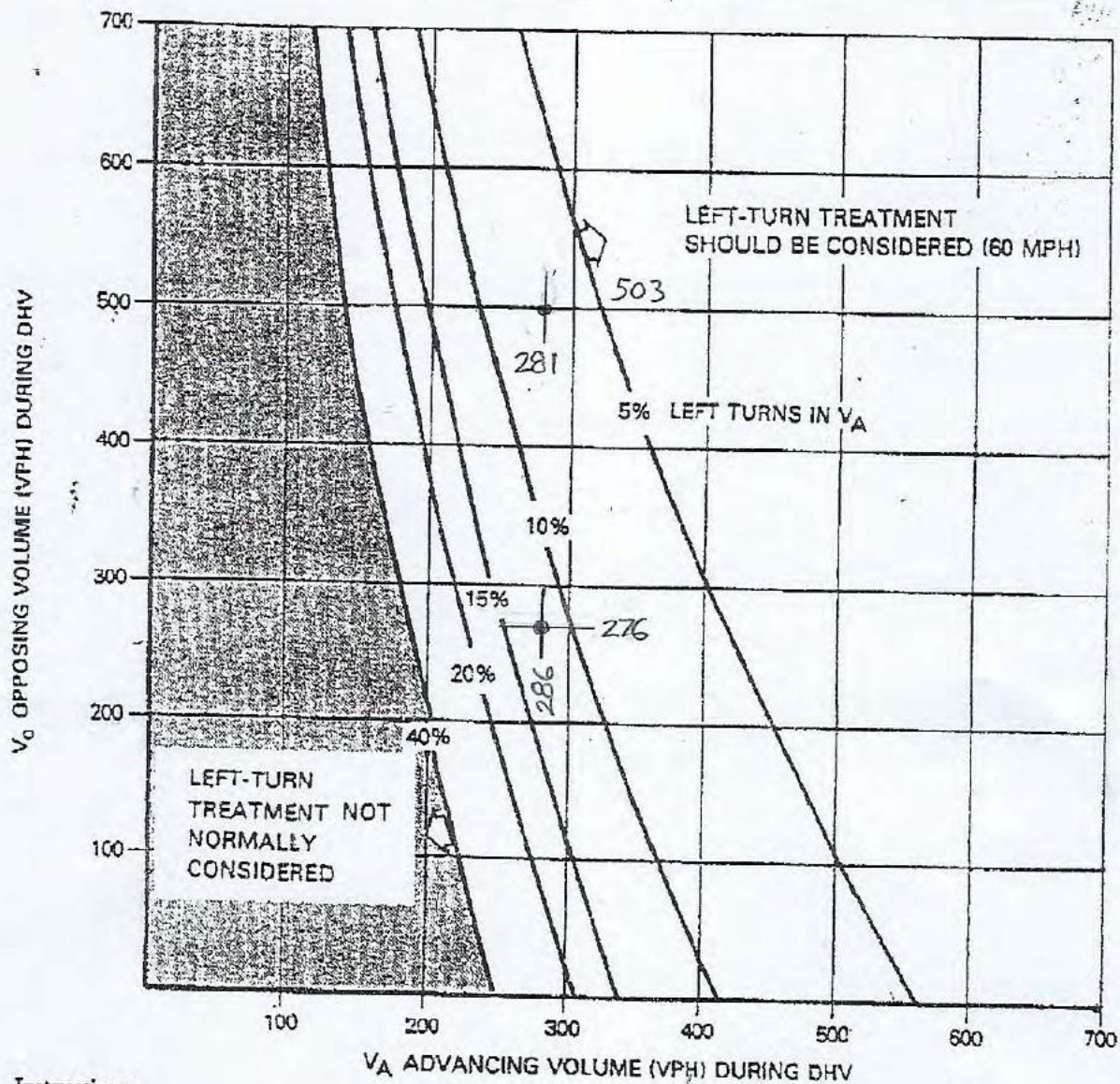
Figure 8-18

Senator Black Road @
Depot Road

January 1994

AUXILIARY TURNING LANES

8-29



Instructions:

1. The family of curves represent the percent of left turns in the advancing volume (V_A). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.
2. Read V_A and V_O into the chart and locate the intersection of the two volumes.
3. Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn is not warranted based on traffic volumes.

VOLUME WARRANTS FOR LEFT-TURN LANES
AT UNSIGNALIZED INTERSECTIONS ON 2-LANE HIGHWAYS
(60 mph)

Figure 8-17

Senator Black Rd. @ S.R. 113
South Intersection

TOTAL P.04



PAUL R. LePAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY

93 STATE HOUSE STATION
AUGUSTA, MAINE 04333

WALTER E. WHITCOMB
COMMISSIONER

October 10, 2017

Katy Bouchard
Terradyn Consultants
PO Box 339
New Gloucester, ME 04260

Via email: katy@terradyconsultants.com

Re: Rare and exemplary botanical features in proximity to: #1640, Nature's Wilderness Campground, Baldwin, Maine

Dear Ms. Bouchard:

I have searched the Natural Areas Program's Biological and Conservation Data System files in response to your request received October 5, 2017 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Baldwin, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

MOLLY DOCHERTY, DIRECTOR
MAINE NATURAL AREAS PROGRAM



PHONE: (207) 287-8044
FAX: (207) 287-8040
WWW.MAINE.GOV/DACF/MNAP

The Natural Areas Program is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. The Natural Areas Program welcomes coordination with individuals or organizations proposing environmental alteration, or conducting environmental assessments. If, however, data provided by the Natural Areas Program are to be published in any form, the Program should be informed at the outset and credited as the source.

The Natural Areas Program has instituted a fee structure of \$75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for \$150.00 for two hours of our services.

Thank you for using the Natural Areas Program in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,

A handwritten signature in cursive script, appearing to read "Krist Puryear".

Kristen Puryear | Ecologist | Maine Natural Areas Program
207-287-8043 | kristen.puryear@maine.gov

Rare and Exemplary Botanical Features within 4 miles of Project: #1640, Nature's Wilderness Campground, Baldwin Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Atlantic White Cedar						
Cliff Muhly	SC	S2	G4	1933	14	Forested wetland
	E	S1	G5	1974-09-17	1	Hardwood to mixed forest (forest, upland),Rocky summits and outcrops (non-forested, upland)
Comb-leaved Mermaid-weed						
Douglas' Knotweed	E	S1	G5	1913-07-26	2	Open wetland, not coastal nor rivershore (non-forested, wetland)
	SC	S2	G5	1933-08-01	7	Rocky summits and outcrops (non-forested, upland)
Ebony Spleenwort						
Fall Fimbry	SC	S2	G5	1985-07-20	3	Rocky summits and outcrops (non-forested, upland),Hardwood to mixed forest (forest, upland)
	SC	S2S3	G5	2004-08-24	11	Open wetland, not coastal nor rivershore (non-forested, wetland)
Fern-leaved False Foxglove						
Slender Cliffbrake	SC	S3	G5	1916-08-29	15	Dry barrens (partly forested, upland),Hardwood to mixed forest (forest, upland)
	T	S1	G5	1905-07-27	4	Rocky summits and outcrops (non-forested, upland),Hardwood to mixed forest (forest, upland)
Snail Whorled Pogonia						
Smooth Winterberry Holly	E	S2	G2	1985-06-06	6	Hardwood to mixed forest (forest, upland)
	E	S2	G2	2013-06-19	10	Hardwood to mixed forest (forest, upland)
Spotted Wintergreen	SC	S3	G5	1916-08-30	8	Forested wetland

Rare and Exemplary Botanical Features within 4 miles of Project: #1640, Nature's Wilderness Campground, Baldwin Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Wild Chess	E	S2	G5	1975-07-05	4	Conifer forest (forest, upland),Hardwood to mixed forest (forest, upland)
	E	S1	G5	1933-07-28	4	Dry barrens (partly forested, upland)
Wild Coffee	E	S1	G5	1933-08-17	4	Non-tidal rivershore (non-forested, seasonally wet),Hardwood to mixed forest (forest, upland)

STATE RARITY RANKS

- S1** Critically imperiled in Maine because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.
- S2** Imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- S3** Rare in Maine (20-100 occurrences).
- S4** Apparently secure in Maine.
- S5** Demonstrably secure in Maine.
- SU** Under consideration for assigning rarity status; more information needed on threats or distribution.
- SNR** Not yet ranked.
- SNA** Rank not applicable.
- S#?** Current occurrence data suggests assigned rank, but lack of survey effort along with amount of potential habitat create uncertainty (e.g. S3?).

Note: **State Rarity Ranks** are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines State Rarity Ranks for animals.

GLOBAL RARITY RANKS

- G1** Critically imperiled globally because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extinction.
- G2** Globally imperiled because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- G3** Globally rare (20-100 occurrences).
- G4** Apparently secure globally.
- G5** Demonstrably secure globally.
- GNR** Not yet ranked.

Note: **Global Ranks** are determined by NatureServe.

STATE LEGAL STATUS

Note: State legal status is according to 5 M.R.S.A. § 13076-13079, which mandates the Department of Conservation to produce and biennially update the official list of Maine's **Endangered** and **Threatened** plants. The list is derived by a technical advisory committee of botanists who use data in the Natural Areas Program's database to recommend status changes to the Department of Conservation.

- E** ENDANGERED; Rare and in danger of being lost from the state in the foreseeable future; or federally listed as Endangered.
- T** THREATENED; Rare and, with further decline, could become endangered; or federally listed as Threatened.

NON-LEGAL STATUS

- SC** SPECIAL CONCERN; Rare in Maine, based on available information, but not sufficiently rare to be considered Threatened or Endangered.
- PE** Potentially Extirpated; Species has not been documented in Maine in past 20 years or loss of last known occurrence has been documented.

ELEMENT OCCURRENCE RANKS - EO RANKS

Element Occurrence ranks are used to describe the quality of a rare plant population or natural community based on three factors:

- **Size**: Size of community or population relative to other known examples in Maine. Community or population's viability, capability to maintain itself.
- **Condition**: For communities, condition includes presence of representative species, maturity of species, and evidence of human-caused disturbance. For plants, factors include species vigor and evidence of human-caused disturbance.
- **Landscape context**: Land uses and/or condition of natural communities surrounding the observed area. Ability of the observed community or population to be protected from effects of adjacent land uses.

These three factors are combined into an overall ranking of the feature of **A**, **B**, **C**, or **D**, where **A** indicates an **excellent** example of the community or population and **D** indicates a **poor** example of the community or population. A rank of **E** indicates that the community or population is **extant** but there is not enough data to assign a quality rank. The Maine Natural Areas Program tracks all occurrences of rare (S1-S3) plants and natural communities as well as A and B ranked common (S4-S5) natural communities.

Note: **Element Occurrence Ranks** are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines Element Occurrence ranks for animals.

Visit our website for more information on rare, threatened, and endangered species!
<http://www.maine.gov/dacf/mnap>

2019 Season Rate Schedule Open May 1 to October 31

SEASON RATE SCHEDULE: (updated 11/12/18)

SEASONAL SITE	Peak Summer (7+ nights) 6/22 - 8/31	Peak Summer (3-6 nights) 6/22 - 8/31	Spring Season 5/1 - 6/21	Fall Season 9/1 - 10/31
Wooded Site Tent (water only)	\$43	\$46	\$28	\$38
Wooded Site Upper pond (water only)	\$47	\$52	\$31	\$47
Wooded Upper pond (water and electric)	\$49	\$52	\$31	\$43
Wooded RV Site (water & 30 amp)	\$48	\$51	\$30	\$42
Wooded RV Site (water & 50 amp)	\$55	\$58	\$36	\$49
RV Site (water, 30 amp, sewer)	\$55	\$58	\$36	\$49
RV Site (water, 50 amp, sewer)	\$59	\$62	\$40	\$55
Upper pond (water & 30 amp)	\$65	\$68	\$37	\$53
Upper pond (water & 50 amp)	\$68	\$72	\$41	\$58
Medium Size Glamping Cabin	\$129	\$139	\$99	\$99
Large Size Glamping Cabin	\$139	\$159	\$119	\$119
Two Bedroom Cabins	\$189	\$199	\$169	\$169
Two Bedroom Trailers	\$129	\$139	\$99	\$99

GOOGLE

maine campgrounds cabins

Rating ▾

Hours ▾


Your past visits ▾

Papoose Pond Family Campground & Cabins

4.6

(185) · Campground

Waterford, ME




Bar Harbor / Woodlands KOA

4.4

(165) · Campground

Bar Harbor, ME



"The grounds were clean, staff was super friendly and private bathrooms."


Big Moose Inn Cabins & Campground

4.5

(63) · Campground

Warm rooms & cabins in a low-key lodge offering a cozy restaurant, plus free parking & breakfast.

Millinocket, ME




"Easy booking process, reasonable prices, nice staff, and very good facilities."

Sherwood Forest Campsite

4.8

(30) · Campground

New Harbor, ME




"Cabins had everything ..."

Quietside Campground & Cabins


4.7

(40) · Campground


Bernard, ME




Discover more places



Parks



Camping grounds




RV parks

Bear Point Marina, Cabins, Campground and Restaurant

4.6

(29) · Vacation Home Re...

Bowenbank, ME




Seaview Campground & Cottages

4.4

(43) · Campground

Eastport, ME




Birch Point Lodge Campgrounds

4.4

(63) · Campground

Island Falls, ME

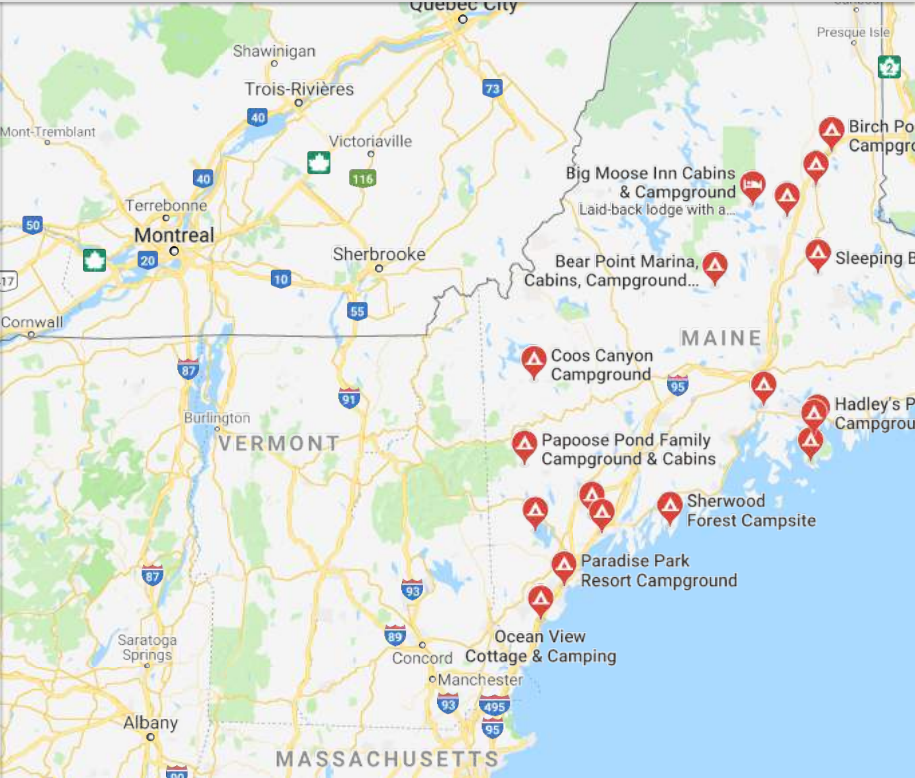


"Awesome place, full bar, restaurant, and vintage bowling alley downstairs!"

Ocean View Cottage & Camping

4.0

(60) · Campground



https://www.google.com/search?rlz=1C1JZAP_enUS782US782&tbm=loc&ei=dgHqW5LgH8G0zwLHx5KADA&q=maine+campgrounds+cabins&oq=mai... 1/1

GOOGLE

maine campsites cabins

Rating ▾

Hours ▾

Your past visits ▾


Bar Harbor / Woodlands KOA

4.4

(165) · Campground

Bar Harbor, ME

"The grounds were clean, staff was super friendly and private bathrooms."




Sherwood Forest Campsite

4.8

(30) · Campground

New Harbor, ME

"Cabins had everything ..."




Papoose Pond Family Campground & Cabins

4.6

(185) · Campground

Waterford, ME




Quietside Campground & Cabins

4.7

(40) · Campground

Bernard, ME



Big Moose Inn Cabins & Campground

4.5


(63) · Campground


Warm rooms & cabins in a low-key lodge offering a cozy restaurant, plus free parking & breakfast.

Millinocket, ME

"Easy booking process, reasonably prices, nice staff, and very good facilities."

Discover more places






Bear Point Marina, Cabins, Campground and Restaurant

4.6

(29) · Vacation Home R...

Bowenbank, ME




Mt Desert Narrows Camping Resort

4.1

(131) · Campground

Bar Harbor, ME

"Loved it amazing views Hot water Laundry room Showers included in..."




Paradise Park Resort Campground

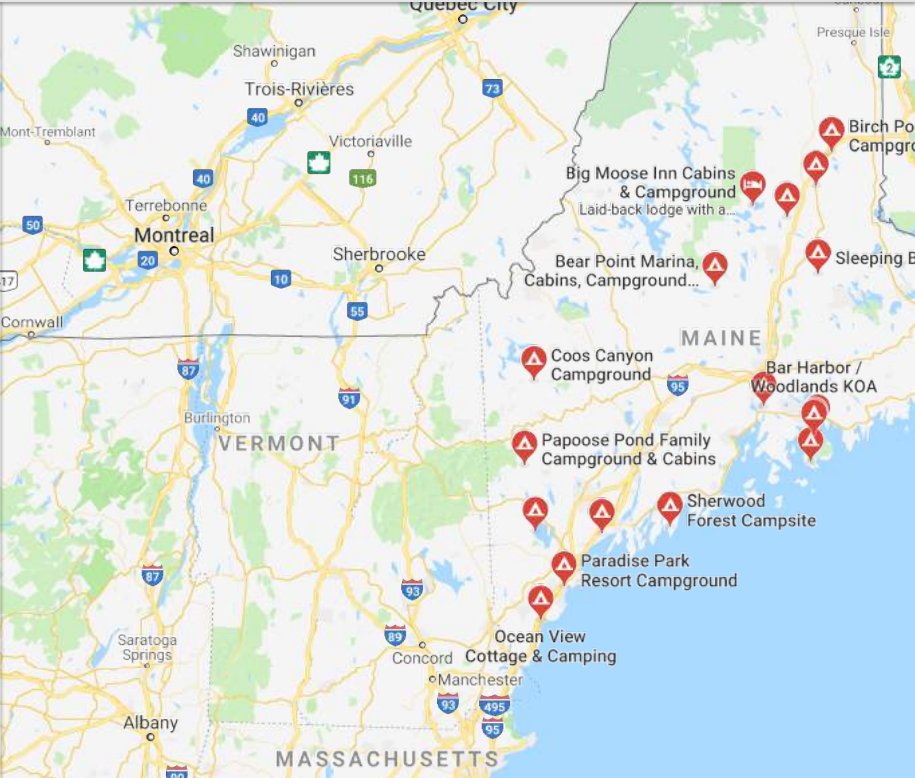
4.7

(198) · Campground

Old Orchard Beach, ME



Ocean View Cottage & Camping



https://www.google.com/search?q=maine%20campsites%20cabins&rlz=1C1JZAP_enUS782US782&oq=Maine+camping+cabins&aqs=chrome.1.016.1... 1/1

Est ID	Exp Date	Establishment Name	Mail Street 1	Mail City	Mail State	Zip Code
26750	5/21/2019	LONE MOUNTAIN CAMPGROUND	424 SOUTH MAIN ST	ANDOVER	ME	04216
27273	5/22/2019	NORTHEAST WHITEWATER	PO BOX 1623	GREENVILLE	ME	04441
27372	5/18/2019	FOX CARLTON POND CAMPGROUND	PO BOX 103	PHILLIPS	ME	04966
27515	6/15/2019	ACADIA EAST CAMPGROUND	200 METCALF RD	WINTHROP	ME	04364
27517	8/31/2019	LIVING WATERS	PO BOX 250	DANFORTH	ME	04424
27669	8/24/2019	WOODS AND WATERS CAMPGROUND	973 CENTRAL ST	MILLINOCKET	ME	04462

Email Address	Owner Name	LicenseType	Phone
TLEARNED@ROADRUNNER.COM	LONE MOUNTAIN CAMPGROUND LLC	CAMPGROUND 25-124 SITES	207-713-3617
JESSICA@NOTHEASTWHITEWATER.COM	NORTHEAST GUIDE SERVICE LLC	CAMPGROUND 5-24 SITES	207-695-0151
JON.POUND1947@GMAIL.COM	FOX CARLTON POND SPORTING CAMPS LLC	CAMPGROUND 5-24 SITES	207-491-5865
POCKETPARKCAMPING@GMAIL.COM	POCKET PARKS CAMPGROUND LLC	CAMPGROUND 5-24 SITES	207-431-7226
MOREINFO@LWGCAMP.COM	LIVING WATERS INC	CAMPGROUND 25-124 SITES	207-448-2310
INFO@PAMOLODGE.COM	KATAHDIN SERVICES LLC	CAMPGROUND 5-24 SITES	207-723-9746
Phone	Loc Street	Loc City	
207-713-3617	424 SOUTH MAIN ST	ANDOVER	
207-695-0151	155 GREENVILLE RD	SHIRLEY	
207-491-5865	TOOTHAKER POND RD	PHILLIPS	
207-431-7226	574 US ROUTE 1	GOULDSBORO	
207-448-2310	47 DARK COVE RD	WESTON	
207-723-9746	973 CENRAL ST	MILLINOCKET	

BOUNDARY SEGMENT	BEARING	LENGTH (FT)
1	N 77° 0' W	519
2	S 24° W	40
3	S 15° W	72
4	S 16° W	68
5	S 60° W	45
6	S 72° W	100
7	S 50° W	69
8	S 7° E	85
9	S 58° W	84
10	S 20° W	86
11	S 26° W	104
12	N 21° 4' E	102
13	N 18° W	103
14	N 16° 3' W	103
15	N 16° E	103
16	N 16° E	112

LEGEND

- △ SURVEY REFERENCE POINT, NO MONUMENT SET
- IRON PIPE
- CONCRETE OR STONE MONUMENT
- SURVEY TIE FOR MEASUREMENT ONLY, NOT BOUNDARY
- STREAM
- UNPAVED ROAD

John B. Barker
Register
Attest
Filed for Record in
at 10:30 AM and recorded in
Book 13
Page 84
1891
Registry of Deeds
State of Maine, Cumberland ss.

BOUNDARY SURVEY
FOR
MARY M. WYME & PAULINE GARNER
BALDWIN, MAINE
409.12 ACRES

John W. Hammond Jr.

