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May 10, 2023

Project No. 22098

Mr. Bub Fournier
City of Belfast
131 Church Street
Belfast, Maine 04915

B&B Midcoast Properties, LLC Proposed Subdivision – Little River Drive, Belfast Preliminary Plan Submittal

Dear Mr. Fournier:

Plymouth Engineering, Inc. is pleased to submit the attached information for planning board review as a preliminary plan submittal for the Little River Subdivision on Little River Drive in Belfast.

The proposed project will be 48 residential lots ranging in size from 0.75 to 2.16 acres off proposed new roads that will be constructed to town standards in hopes that the Town of Belfast will accept and take over the road right-of-way and improvements.

We request to be on the next available planning board agenda, so that we can proceed with the approval process in hopes of early summer construction.

Thank you for your assistance with this matter, and please call with any questions.

Sincerely,
PLYMOUTH ENGINEERING, INC.

Scott E. Braley, PE, CPESC
President

Enc.

Cc: B&B Midcoast Properties, LLC

Section VI – Submission for Preliminary Plan

The applicant shall submit 12 copies of the preliminary plan and 12 copies of any material that is to be considered with this plan. The following are to be included with this plan.

1. Soil information on the property to be subdivided.
A copy of the Soils Report from Mark Hampton Associates is attached in Appendix C at the end of this application.
2. U.S. Geological contour map for the property to be subdivided.
The existing topography for the parcel is shown on the plans attached in Appendix F at the end of this application. The proposed topography is also shown on the attached plans.
3. Soil test information for each proposed lot, for subsurface wastewater disposal system unless not required by the Board.
The majority of the subdivision will be served by municipal wastewater. The lots that will have on site wastewater disposal have passing test pits, of which the logs are attached in Appendix C after the soils report.
4. List of all abutters with mailing address.
Attached in Appendix B.
5. A statement from the Water District as to the availability of City Water if City Water is to be used.
Attached in Appendix D.
6. Copy of letter to M.S.A.D. 34 notifying them of the number of units in the proposed subdivision.
A copy of the letter to the school district is attached in Appendix D. A response has not been received.
7. Letter from Sewerage Treatment Plan regarding “capacity” if City Sewer is to be used.
Attached in Appendix D.
8. Letter from Highway Supt. Regarding availability of sewer lines to tie into, if applicable.
Olver Associates is the Highway Superintendent for the City of Belfast. An e-mail from their office is attached outlining the steps that will be needed to connect to the existing main in Little River Drive.
9. Copy of draft or proposed covenants and restrictions to be placed upon the subdivision, if any. Copy of existing covenants and restrictions or easements on land to be subdivided.
Draft restrictions are attached in Appendix C, they will be finalized with final approval of the subdivision.
10. Plan shall include:
 - a. Proposed lots
C1 attached in Appendix F.
 - b. Proposed lots are to be numbers and lot dimensions and area to be noted.
C1 attached in Appendix F.
 - c. Name of subdivision, file # (which will be assigned when application is determined to be complete & fee has been paid).
On all plans attached in Appendix F.
 - d. Owner of subdivision
B&B Midcoast Properties, LLC. As shown on all plans attached in Appendix F.

City of Belfast Preliminary Subdivision Review
Map 4 Lot 62-G

- e. Boundary survey of the proposed subdivision and the parcel from which the subdivision is created if created by deed within two years prior to the application, location of existing structures.
Attached in Appendix F.
 - f. Location of any pond, streams, wetlands, freshwater wetlands & flood hazard areas (if applicable).
EX & C1 in Appendix F.
 - g. Location of shoreland zone line (if applicable)
C1 attached in Appendix F.
 - h. Map and lot number from Assessor's Tax Map
C1 attached in Appendix F. Map 4 Lot 62-G.
 - i. Names of all abutters noted on the plan.
C1 attached in Appendix F.
 - j. Book & page number (Waldo County Registry of Deeds) of the property to be subdivided.
C1 attached in Appendix F.
11. A copy of current deed and evidence of legal standing.
Attached in Appendix B at the end of this application.

Section VII – Review Criteria

When adopting any subdivision regulations and when review any subdivision for approval, the municipal reviewing authority shall consider the following criteria and, before granting approval, must determine that:

1. Pollution. The proposed subdivision will not result in undue water or air pollution. In making this determination, it shall at least consider:
 - a. The elevation of land above sea level and its relation to the flood plains;
The site for the proposed development is steep with a significant change in elevation over the entirety of the site. There are no flood plains located on the developed portion of the site. A portion of the FEMA FIRM is attached in Appendix E showing the lot is not within a flood plain.
 - b. The nature of soils and subsoils and their ability to adequately support waste disposal;
The lots that will have on site wastewater disposal have passing test pits. The logs are attached in Appendix C.
 - c. The slope of the land and its effect on effluents;
The subdivision falls under the review of the Maine Department of Environmental Protection for Site Location of Development, as such the site's stormwater will be managed by the proposed structures for both quality and quantity.
 - d. The availability of stream for disposal of effluents; and
The site is adjacent to the Little River, but no effluent will discharge directly to the surface water.
 - e. The applicable state and local health and water resource rules and regulations;
The subdivision is being reviewed under the Maine DEP.
2. Sufficient water. The proposed subdivision has sufficient water available for the reasonably foreseeable needs of the subdivision;
Attached in Appendix D.
3. Municipal water supply. The proposed subdivision will not cause an unreasonable burden on an existing water supply, if one is to be used;
Attached in Appendix D.
4. Erosion. The proposed subdivision will not cause unreasonable soil erosion or a reduction in the land's capacity to hold water so that a dangerous or unhealthy condition results;
Attached in Appendix C is the standard Maine DEP Erosion and Sedimentation control plan outlining the measures to be undertaken prior to, during, and after the completion of construction. The erosion control will be placed down gradient of all work. It has been omitted from the site plans for clarity.
5. Traffic. The proposed subdivision will not create unreasonable highway or public road congestion or unsafe conditions with respect to use of the highways or public roads existing or proposed;
The following table outlines the anticipated traffic generated by the proposed development of the 48 residential lots. Using the 8th edition of the ITE manual for single family detached housing (210), COPIES OF WHICH ARE IN Appendix E. The increase in traffic generated by the development will be gradual as the lots are developed.

	Rate	Total (48 lots)
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Weekday	9.57	460
AM Peak	0.77	37
PM Peak	1.02	49
Saturday	10.08	484

6. Sewage disposal. The proposed subdivision will provide for adequate sewage disposal and will not cause an unreasonable burden on municipal services if they are utilized;
A letter attached in Appendix D shows the conversation between the applicant and sewer department for adequacy.
7. Municipal solid waste and sewage disposal. The proposed subdivision will not cause an unreasonable burden on the municipality's ability to dispose of solid waste and sewage, if municipal services are to be utilized;
A letter attached in Appendix D shows the conversation between the applicant and sewer department for adequacy. The municipal solid waste will be removed from the site in the same manner as adjacent uses.
8. Aesthetic, cultural, and natural values. The proposed subdivision will not have an undue adverse effect of the scenic or natural beauty of the area, aesthetics, historic sites, significant wildlife habitat identified by the Department of Inland Fisheries and Wildlife or the municipality, or rare and irreplaceable natural areas or any public rights for physical or visual access to the shoreline;
A letter from the Maine Natural Area Program in Appendix C verifies there are no areas of concern. A letter to the Maine Fisheries is also attached in Appendix C. A response has not been received.
9. Conformity with local ordinances and plans. The proposed subdivision conforms with a duly adopted subdivision regulation or ordinance, comprehensive plan, development plan or land use plan, if any. In making this determination, the Planning Board may interpret these ordinances and plans.
The lots and roads were laid out to meet the standard set forth in the City of Belfast ordinance for a planned unit development.
10. Financial and technical capacity. The subdivider has adequate financial and technical capacity to meet the standards of this section;
A letter of financial capacity from the applicant's lender is attached in Appendix B.

TECHNICAL CAPACITY

Owner: B & B Midcoast Properties, LLC. The Applicant and the staff of Plymouth Engineering have experience in dealing with large site development projects. Specifically, the Applicant's owners are engineers and contractors that have been involved with other developments. The day-to-day contact for this project will be Ben Hooper.

Engineering Services: Plymouth Engineering, Inc. is providing site planning, land use permitting and engineering services for this project. Plymouth Engineering is an engineering firm and has designed many projects that have been reviewed by the Maine Department of Environmental Protection. Professional profiles for key team members are attached at the end of this section.

Wetland Delineation, and Soil Survey: Hampton Associates, Portland, Maine performed soil profile descriptions, soil map and a soil narrative report for the SLODA application. Mr. Hampton is a Certified Soil Scientist and a Licensed Site Evaluator.

Survey: Plisga and Day, Inc. of Bangor, Maine, provided the boundary and topographic information for this subdivision. It was previously surveyed by a firm that Plisga and Day purchased. The overall group has years of experience with survey work for development projects.

11. Surface waters: outstanding river segments. Whenever situated entirely or partially within the watershed of any pond or lake or within 250 feet of wetland, freshwater wetland, great pond, or river as defined in Title 38, Chapter 3, Subchapter I, Article 2-B, the proposed subdivision will not adversely affect the quality of that body of water or unreasonable affect the shoreline of that body of water.

The site is located along the Little River. The new storm water generated by the site is being managed through a combination of management structures that meet the standards of the Maine DEP SLODA application process.

- a. When lots in a subdivision have frontage on an outstanding river segment, the proposed subdivision plan must require principal structures to have a combined lot shore frontage setback from the normal high-water mark of 500 feet.

The parcel to be subdivided is located on the river, but the portion of the lot that is being subdivided is not located on the river.

- 1) To avoid circumventing the intent of this provision whenever a proposed subdivision adjoins a shoreland strip narrower than 250 feet which is not lotted, the proposed subdivision shall be reviewed as if lot lines extended to the shore.

The development is outside the 250-foot shoreland zone.

- 2) The frontage and setback provisions of this paragraph do not apply either within areas zoned as general development or its equivalent shoreland zoning, Title 38, Chapter 3, Subchapter I, Article 2-B, or within areas designated by ordinance as densely developed. The determination of which areas are densely developed must be based on a finding that existing development met the definition requirements of Section III of this Chapter.

The development will not be located within the shoreland zone.

12. Ground water. The proposed subdivision will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of ground water;

The proposed development will not withdraw from or discharge to the ground water table.

13. Flood areas. Based on the Federal Emergency Management Agency's Flood Boundary and Floodway Maps and Flood Insurance Rate Maps, and information present by the applicant, whether the subdivision is in a flood prone area. If the subdivision, or any part of it, is in such an area, the subdivider shall determine the 100-year flood elevation and flood hazard boundaries within the subdivision. The proposed subdivision plan must include a condition of plat approval requiring that principal structures in the subdivision will be constructed with their lowest floor, including the basement, as least two feet above the 100-year flood elevation; and

The developed portion of the site is not located within a flood plain. Attached in Appendix E is a portion of the FEMA FIRM verifying that the development is not located in a flood prone area.

14. Storm water. The proposed subdivision will provide for adequate storm water management.

The proposed development is being reviewed under Maine DEP SLODA.

15. River, stream, or brook. Any river, stream, or brook within or abutting the proposed subdivision shall be identified on any maps submitted as part of the application. For purposes of this section, "river, stream or brook" has the same meaning as in title 38, Section 480-B Subsection 9.
Shown on the plans attached in Appendix F.
16. Freshwater wetlands. All freshwater wetlands/wetlands within 250 feet of the proposed subdivision shall be identified on any maps submitted as part of the application, regardless of the size of these wetlands.
Shown on the plans attached in Appendix F.
17. Spaghetti-lots. Spaghetti lots as defined in 30-A MRSA Section 4404 (17) or subsequent amendment shall be prohibited. No lot in a subdivision may have a spaghetti lot unless the Planning Board shall specifically find there is a necessity to create said lot based upon historical lot orientation.
None proposed.
18. The subdivision must comply with the general standards of Chapter Two through Five of the Subdivision Ordinance.
The subdivision is designed to meet the standards of the City of Belfast.

CHAPTER 2 GENERAL STANDARDS

In reviewing applications for a subdivision, the Planning Board shall consider the following general standards and make findings that each has been met prior to the approval of a Final Plan. In all instances the burden of proof shall be upon the applicant.

Section I. Conformance with Comprehensive Plan.

All proposed subdivisions shall be in conformity with the Comprehensive Plan of the City of Belfast and with the provisions of all pertinent federal, state and local codes, ordinances, rules and/or regulations.

Section II. Land Not Suitable for Development. The following lands shall not be included in the calculations of lot area for the purpose of meeting the requirements of the Minimum Lot Size Law.

1. Land which is situated below the normal high-water mark of any water body.
None of the land that is proposed for subdivision is located below the high-water mark of any adjacent water body.
2. Land which is located within 100-year frequency flood plains as identified by the Federal Emergency Management Agency or the Department of Housing and Urban Development, Flood Insurance Administration, unless the subdivider shows proof through the submittal of materials prepared by a Registered Land Surveyor which shown that the property in question lies at least two feet above the 100-year flood level. The elevation of filled or made land shall not be considered. See City of Belfast Flood Management Ordinance.
None of the land allocated for subdivision is located within the 100-year flood area. A copy of the FEMA FIRM is attached in Appendix E at the end of this application.
3. Land which is part of a right of way, or easement, including utility easements.
The land within the right of way or easements are not included in the lot area calculations.
4. Land which has a water table within ten inches of the surface for at least three months of the year as identified by the County calculations if municipal sewage collection and treatment is provided and if the lot(s) are to be deed restricted to prohibit buildings with basements or require basement floor elevations one foot above the seasonal water table.
The lot areas are located outside of flood plain, and most are on public sewer.
5. Land that has been created by filling or draining a pond or wetland.
The minimum lot area is being met only through upland areas.
6. Land meeting the definition of wetland or freshwater wetland as defined in this ordinance.
The onsite wetlands are not included in the lot area calculations.

Section III. Lots

1. All lots shall meet the minimum requirements of the Belfast Zoning Ordinance for the zoning district in which they are located. The lot configuration should be designed to allow maximum access to solar energy on building sites with suitable orientation.
The applicant is requesting a waiver to the minimum lot size requirement of the City of Belfast for standard lots.. The subdivision was designed under the planned unit development standard of the City of Belfast to allow for smaller lots within the subdivision.

2. Lot configuration and area shall be designed to provide for adequate off-street parking and service facilities based upon the type of development contemplated. Wherever practicable parking areas shall be laid out to coincide with building locations to maximize solar energy gain of the building.
The lots will all have adequate space for a home, garage, and driveway that will have adequate parking area for the occupants of the proposed residences.
3. Lots with multiple frontages shall be avoided wherever reasonably practical.
There are a few lots with multiple frontages within the subdivision, but those lots will be limited to one road access.
4. The subdivision of tracts into parcels with more than twice the required minimum lot size shall be laid out in such a manner as either to provide for or preclude future re-subdivision.
None of the lots will be available for future subdivision.
5. Where public utilities could be extended to the subdivision in the foreseeable future, the subdivision shall be designed to accommodate the extensions of utilities.
The utilities within the proposed subdivision are shown on the attached plans. The extension is part of the proposed design.
6. No re-subdivision of any lot in an approved subdivision or change in boundary of any lot in an approved subdivision shall be permitted without Planning Board approval.
There will be no opportunity for re-subdivision of any lot in the future.
7. If a lot on one side a stream, tidal water, road or other similar barrier fails to meet the minimum requirements for lot size, it may not be combined with a lot on the other side of the stream, tidal water or road to meet the minimum lot size.
All lots within the subdivision meet the minimum requirements of a planning unit development.
8. The ratio of lot length to width shall not be more than five to one. Flag lots and other odd shaped lots on which narrow strips are joined to other parcels in order to meet minimum lot size requirements or to defeat the intent of this ordinance are prohibited.
There are no flag lots proposed within the subdivision.

Section IV Electrical Utilities

Electrical Utilities must be noted on the plan and installed at the expense of the developer.

The electrical utilities have been omitted from the proposed plans for clarity. The electric will be installed per the standards of the utility.

Section V Water Supply

1. When a subdivision is to be served by a public water system, the complete supply system, including fire hydrants, shall be installed at the expense of the subdivider.
The proposed water mains within the subdivision, and connection to the existing water main available on Little River Drive are shown on the attached plans.
 - a. The subdivider shall provide a written statement from the Belfast Water District that adequate water for both domestic and firefighting purposes can be provided without placing an undue burden on the source facilities or distribution system involved. The subdivider shall be responsible for paying the costs of system improvements necessary to serve the subdivision. The subdivider shall also supply the Planning Board with design plans for the construction of water service to and within the subdivision and also the design plans for a water supply line from the existing terminus of a public water supply to the connection of the subdivision water supply

on premises. No subdivision shall be approved unless the Planning Board determines from submissions made by the developer that the system will be adequate to provide for the criteria above referenced.

Attached at the end of this application in Appendix D is an e-mail from Keith Pooler, Superintendent of the Belfast Water District attesting to the adequacy of the available supply of water to the proposed subdivision.

2. When the location of a subdivision does not allow for a financially reasonable connection to a public water supply system, the Board may allow the use of individual wells or a private community water system.

This standard is not applicable.

3. The Planning Board may authorize the Belfast Water District's Engineer to review and report on the water supply system submitted by the subdivider.

Section VI Sewage Disposal

1. Public System

- a. A sanitary sewer system shall be installed at the expense of the subdivider when there is a public sanitary sewer line located within 1,000 feet of the proposed subdivision at its nearest point. The applicant shall provide the Planning Board with certificate from the Belfast Wastewater Treatment Plant Supervisor that there is currently sufficient capacity to service the subdivision as proposed. In addition, the applicant shall provide the Planning Board with a certificate from the Belfast Highway Department Superintendent, that in the opinion of the Belfast Highway Department, the collection and transmission facilities proposed to be constructed and utilized in providing service to the subdivision are adequate for the proposed subdivision. Prior to obtaining the certification aforementioned the applicant shall provide the Planning Board and parties required to make certification as above provided with construction plans showing installation of the sewer lines and all related facilities that will need to be installed to service the proposed subdivision. This submission shall initially be made to the Planning Board or to the Code Enforcement Officer. No certification as above provided shall be considered by the Planning Board unless the certification has been made subsequent to review by the Plan Supervisor and Belfast Highway Department Supervisor of said plans.

Attached in Appendix D at the end of this application is an e-mail from Annaleis Hafford of Olver Associates acknowledging that the City is currently in the process of upgrading the existing pump station that will serve the proposed subdivision. The applicant will provide the financial difference to ensure the design will meet the additional needs of the proposed subdivision.

- b. The Planning Board may have an independent engineer review and approve in writing the construction drawings for the sewage system. These plans shall also be subject to the review of the Supt. Of the Highway Department.

The existing pump station is being designed by Olver Associates, and the proposed design within the subdivision was designed by Plymouth Engineering, Inc.

2. Private Systems

- a. The developer shall submit evidence of soil suitability for subsurface sewage disposal prepared by a Maine Licensed Site Evaluator in full compliance with the requirements of the State of Maine Subsurface Wastewater Disposal Rules. In addition, on lots in which the limiting factor

has been identified as being within 24 inches of the surface, a second site with suitable soils shall be shown as a reserve area for future replacement of the disposal area. The reserve area shall be shown on the plan and restricted so as not to be built upon. No subsurface wastewater disposal sewer system shall be permitted off the lot.

Six of the lots will have on-site septic disposal systems. The test pits, and proposed septic locations are shown on the attached plans.

- b. In no instance shall a disposal area be permitted on soils or on a lot which requires a New System Variance from the subsurface wastewater disposal rules.

None of the systems require a variance.

- c. Separation distance between all wells and subdivision wastewater disposal system shall be a minimum of 100 feet.

The lots will be served by public water. No separation will be required.

Section VII Surface Drainage

The storm water management plan submitted in accordance with Chapter Three, Section IV shall be installed.

Section VIII Land Features

1. Topsoil shall be considered part of the subdivision and shall not be removed from the site except for surplus topsoil from roads, parking areas, and building excavations.
Earth removal from the site will be handled in a responsible manner. The cut and fill volumes over the entirety of the proposed subdivision were closely balanced to allow for use on site.
2. To prevent soil erosion in shoreline areas, tree cutting in the strip extending one hundred feet inland from any such areas or boundaries be limited in accordance with the following:
Setbacks from waterbodies will be respected.
 - a. The Belfast Shoreland Zoning Ordinance and applicable Maine State Statutes.

Section IX Construction in Flood Hazard Areas

When any part of a subdivision is located in a special flood hazard area as identified by the Federal Emergency Management Agency, the plan shall indicate that all principal structures on lots in the subdivision shall be constructed with their lowest floor, including the basement two feet above the 100-year flood elevation. Such a restriction shall be included in the deed to any lot which is included or partially included in the flood hazard area.

The subdivision lots are not located in a flood hazard area. A portion of the FEMA FIRM is attached in Appendix E verifying the location of the subdivision.

Section X Impact on Ground Water

1. When a hydrogeologic assessment is submitted or requested the assessment shall contain at least the following information.
The subdivision will not be withdrawing from or discharging to the groundwater. It will not be impacted.
 - a. A map showing the basic soil types.
 - b. The depth to the water table at representative points throughout the subdivision.

- c. Drainage conditions throughout the subdivision.
- d. Data on the existing ground water quality, either from test wells in the subdivision or from existing wells on neighboring properties.
- e. An analysis and evaluation of the effect of the subdivision on ground water resources. In the case of residential developments, the evaluation shall, at a minimum, include a projection of post development nitrate-nitrogen concentrations at any wells within the subdivision, at the subdivision boundaries and at a distance of 1,000 feet from potential contamination sources, whichever is a shorter distance. For subdivisions within the watershed of a pond projections of the subdivision's impact on ground water phosphate concentrations shall also be provided.
- f. A map showing the location of any existing subsurface wastewater disposal systems and drinking water wells within the subdivision and within 200 feet of the subdivision boundaries.

Section XI Access Control and Traffic Impacts

1. General. Provision shall be made for vehicular access to the subdivision and circulation within the subdivision in such a manner as to safeguard against hazards to traffic and pedestrians in existing streets and within the subdivision, to avoid traffic congestion on any street and to provide safe and convenience circulation on public street and with the subdivision. More specifically, access and circulation shall also conform to the following standards and the design criteria below.

The layout of the proposed streets within the subdivision are shown on the attached plans.

- a. The vehicular access to the subdivision shall be arranged to avoid traffic use of existing local residential streets.

The subdivision will be accessed via the existing Little River Drive which is a commercial subdivision.

- b. Where a lot has frontage on two or more streets, the access to the lot shall be provided to the lot across the frontage to the street where there is less potential for traffic congestion and for hazards to traffic and pedestrians.

For any proposed lot with frontage on more than one street, access will be assigned to one street.

- c. The street giving access to the subdivision and neighboring streets which can be expected to carry traffic to and from the subdivision shall have traffic carrying capacity and be suitably improved to accommodate the amount and types of traffic generated by the proposed subdivision. No subdivision shall increase the volume capacity ratio to any street above 0.9 nor reduce the street's Level of Service to "D" or below. (See Belfast Zoning Ordinance Appendix Guidelines for Traffic "A".)

The following table outlines the anticipated traffic generated by the proposed development of the 48 residential lots. Using the 8th edition of the ITE manual for single family detached housing (210), COPIES OF WHICH ARE IN Appendix E. The increase in traffic generated by the development will be gradual as the lots are developed.

	Rate	Total (48 lots)
Weekday	9.57	460
AM Peak	0.77	37
PM Peak	1.02	49
Saturday	10.08	484

- d. Where necessary to safeguard hazards to traffic and pedestrians and/or to avoid traffic congestion, provisions shall be made for turning lanes, traffic directional islands, frontage roads, and traffic controls within public streets.

The layout of the proposed subdivision will not necessitate additional measures to be added to the existing access roads.

- e. Access ways shall be made of a design and have sufficient capacity to avoid queuing of entering vehicles on any street.

The existing roads will have adequate capacity for the proposed development. Traffic to and from the subdivision will for the most part be at the busy times of day traveling in the opposite direction as existing streets.

- f. Where topographic and other conditions allow, provisions shall be made for circulation access connections to adjoining lots of similar existing or potential use:

There are no other lots that require access through the proposed development.

- a) When such access connection will facilitate fire protection services as approved by the Fire Chief; or

- b) When such access will enable the public to travel between two existing or potential uses, generally open to the public, without need to travel upon a street.

2. Subdivision Access Design for Subdivisions entering onto Arterial Streets.

When access to a subdivision is a street, the street design and construction standards of chapter three shall be met. Where there is a conflict between the standards in this section and the standards of chapter three the stricter or more stringent shall apply.

- a. General. Access design shall be based on the estimated volume using the access classification defined below. (Trips per day shall be determined in conjunction with trip general rates for common land use categories. See Belfast Zoning Ordinance Appendix: Guidelines for Traffic Section A.)

The proposed subdivision will create a medium volume of traffic increase, the proposed subdivision will be accessed through the existing Little River Drive. It will be a rural lane per staff interpretation.

- a) Low Volume Access: Less than 25 vehicle trips per day.

- b) Medium Volume Access: Any access that is not a low volume or high-volume access.

- c) High Volume Access: Peak hour volume of 400 vehicles or greater.

- b. Sight Distances. Accesses shall be designed in profile and grading and located to provide the required sight distance measured in each direction. Sight distance shall be measured from the driver's seat of a vehicle standing on that portion of a vehicle standing on that portion of the exist with the front of the vehicle a minimum of 10 feet behind the curb line or edge of shoulder, with the height of the eye 3 1/2 feet, to the top of an object 4 1/2 feet above the pavement. The required sight distances are listed below for various posted speed limits.

The intersections within the subdivision have been designed for sight distance. The connection to the existing end of Little River Drive will not require an intersection.

- a) Two Lane Roads. A sight distance of ten feet for each mile per hour of posted speed limit shall be maintained or provided.

There is sufficient proposed sight distance.

- b) Four Lane Roads. The sight distance provided below are based on passenger cars exiting from accesses onto four land roads and are designed to enable exiting vehicles.

Not applicable.

- 1) Upon turning left or right to accelerate to the operating speed of the street without causing approaching vehicles to reduce speed by more than 10 miles per hour, and
- 2) Upon turning left, to clear the near half of the street without conflicting with vehicles approaching from the left. (See appendix "A").
- 3) Vertical Alignment. Accesses shall be flat enough to prevent the dragging of any vehicle undercarriage. Low volume accesses shall slope upward or downward from the gutter line on a straight slope of 2 percent or less for at least 25 feet followed by a slope of no greater than 10 percent for the next 50 feet. The maximum grade over the entire length shall not exceed 15 percent. Medium and high-volume accesses should slope upward or downward from the gutter line on a straight slope of 2 percent or less for at least 25 feet. Following this landing area, the steepest grade on the access shall not exceed 8 percent.
- 4) Low Volume Access.
 - a. Skew Angle. Low volume accesses shall be two-way operation and shall intersect the road at an angle as nearly 90 degrees as site conditions permit, but in no case less than 60 degrees.
 - b. Curb Radius. The curb radius shall be between 5 feet and 15 feet, with a preferred radius of 10 feet.
 - c. Access Width. The width of the access shall be 20 feet.
 - d. Curb-cut Width. Curb cut width shall be between 22 feet and 35 feet, with a preferred width of 25 feet.
- 5) Medium Volume Accesses.
 - a. Skew Angle. Medium Volume Accesses shall be either one way or two-way operation and shall intersect the road at an angle as nearly 90 degrees as site conditions permit, but in no case less than 60 degrees.
 - b. Curb Radius. Curb radii will vary depending if the access is one way or two-way operation. On a two-way access the curb radii shall be between 25 feet and 40 feet, with a preferred radius of 30 feet. On one-way accesses, the curb radii shall be 30 feet for right turns into and out of the site, with a 5-foot radius on the opposite curb.
 - c. Width. On a two way access the width shall be between 24 and 26 feet, with a preferred width of 26 feet, however where truck traffic is anticipated the width may be no more than 30 feet. On a one way access the width shall be between 16 feet and 20, with a preferred width of 16 feet.
 - d. Curb cut Width. On a two way access the surf cut width shall be 35 feet unless the curb cut servicing the subdivision with the intention of the road to be taken over by the City, the curb cut shall be determined by the Belfast City Council.
- 6) High Volume Accesses.
 - a. Skew Angle. High Volume Accesses shall intersect the road at an angle as nearly 90 degrees as site conditions permit, but in no case less than 60 degrees.

- b. Curb Radius. Without channelization islands for right turn movements into and out of the site, the curb radii shall be between 30 feet and 50 feet. With channelization islands, the curb radii shall be between 75 feet and 100 feet.
 - c. Curb Cut Width. Without channelization, curb cut width shall be between 106 feet and 162 feet with a preferred width of 154 feet. With channelization the curb cut width shall be between 196 feet and 262 feet with a preferred width of 254 feet.
 - d. Entering and exiting accesses shall be separated by a raised median which shall be between 6 feet and 10 feet in width. Medians separating traffic flows shall be no less than 25 feet in length, with a preferred length of 100 feet.
 - e. Width. Access widths shall be between 20 feet and 26 feet on each side of the median, with a preferred width of 24 feet. Right turn only lanes established by a channelization island shall be between 16 feet and 20 feet, with a preferred width of 20 feet.
 - f. Appropriate traffic control signage shall be erected at the intersection of the access and the street and on medians and channelization islands.
7. Special Case Access. Special Case Accesses are one way or two-way drives serving median or high volume uses with partial access right turn only permitted. These accesses are appropriate on roadway segments where there is a raised median and no median breaks are provided opposite the proposed access. These accesses are usually located along the approaches to major signalized intersections where a raised median may be provided to protect left turning vehicles and separate opposing traffic flows, such access shall be subject to acceptance of the Belfast City Council.
 - a) Perpendicular driveways.
 - 1) Curb radii. Curb radii shall be between 30 feet and 50 feet, with a preferred radius of 50 feet.
 - 2) Access width. Access width shall be between 26 feet and 30 feet with a preferred width of 30 feet. On two-way accesses, a triangular channelization island shall be provided at the intersection with the street. On each side of the island the one-way drive shall be between 15 feet and 24 feet with a preferred width of 20 feet.
 - 3) Curb Cut Widths. The total curb cut width shall be between 86 feet and 130 feet with a preferred width of 130 feet.
 - 4) Channelization island. The channelization island on two-way accesses shall be raised and curbed. Corner radii shall be 2 feet.
 - b) Skewed Accesses.
 - 1) Skew Angle. The skew angle shall be between 45 degrees and 60 degrees, with a preferred angle of 45 degrees.
 - 2) Curb Radii. Curb radii shall be between 30 feet and 50 feet on the obtuse side of the intersection, with a preferred radius of 30 feet. Curb radii shall be between 5 feet and 10 feet on the acute side of the intersection with a preferred radius of 5 feet.
 - 3) Access width. The width of the access shall be between 15 feet and 24 feet with a preferred width of 20 feet. When entering and existing accesses meet, the width shall be between 24 feet and 30 feet, with a preferred width of 30 feet.
 - 4) Curb Cut Width. The curb cut width for each access shall be between 35 feet and 75 feet with a preferred width of 42 feet.

3. Access Location and Spacing

- A. Minimum Corner Clearance. Corner clearance shall be measured from the point of tangency (PT) for the corner to the point of tangency for the access. In general the maximum corner clearance should be provided as practical based on-site constraints. Minimum corner clearances are listed based upon access or minor street volume and intersection type. (See Appendix "B")

Where the minimum standard for a full access drive cannot be met, only special case access shall be permitted. If based on the above criteria, full access to the site cannot be provided on either the major or minor streets, the site shall be restricted to partial access.

Alternately, construction of a shared drive with an adjacent parcel is recommended.

The proposed access to the subdivision will be located at the dead end of the existing Little River Drive. There will be no new intersection.

- B. Access Spacing. Access and street intersections shall be separated from adjacent accesses, street and property lines in the table, in order to allow major through routes to effectively serve their primary function of conducting through traffic. This distance shall be measured from access point of tangency to the access point of tangency for spacing between accesses and from the access point of tangency to a projection of the property line at the edge of the roadway for access spacing to the property line. See Appendix "C".

There is sufficient spacing to meet the standards of the City of Belfast as shown on the attached plans.

4. Number of Accesses. The number of accesses onto a single street is controlled by the available site frontage and the table. In addition, the following criteria shall limit the number of accesses independent of frontage length.

There is a single new access to the subdivision. The internal proposed roads allow for safe travel.

- A. No low volume traffic generator shall have more than one two way access onto a single roadway.
- B. No medium or high-volume traffic generator shall have no more than two-way accesses or three access in total onto a single roadway.

5. Construction Materials/Paving

All construction will meet the standards of the City of Belfast.

- A. All accesses entering a curbed street shall be curbed with materials matching the street curbing. Sloped curbing is required around all raised channelization islands or medians.
- B. Paving requirement shall be determined by the Planning Board by taking into consideration:
- Traffic use
 - Road length
 - Slopes
 - Other factors deemed relevant in determining appropriate paving.

Chapter Three

Street and storm Drainage Construction Standards

Section I General Requirements

1. The Planning Board shall not approve any subdivision unless proposed streets and storm water management systems are designed in accordance with the Belfast Zoning ordinance and/or the specifications contained in this ordinance. Approval of the Final Plan by the Board shall not be deemed to constitute or be evidence of acceptance by the City of Belfast of any street or easement.
2. Subdividers shall submit to the Board, as part of the Final Plan, detailed construction drawings shown a plan view, profile, and typical cross section of the proposed street and existing streets within 300 feet of any proposed intersections. The plans shall include the following information:
The layout, profiles, and typical cross sections of the proposed road are shown on the attached plans at the end of this application.
 - A. Date, scale, and magnetic or true north point.
Shown on plans at the end of this application in Appendix F.
 - B. Intersections of the proposed streets with existing streets.
Shown on plans at the end of this application in Appendix F. The proposed access to the subdivision will be the continuation of the existing Little River Drive.
 - C. Roadway and right of way limits including edge of pavement, edge of shoulder, sidewalks and curbs.
Shown on plans at the end of this application in Appendix F.
 - D. Kind, size, location, material, profile and cross section of all existing and proposed drainage structures, streets and their location with respect to the existing natural waterways and proposed drainage ways.
Shown on plans at the end of this application in Appendix F.
 - E. Complete curve data shall be indicated for all horizontal and vertical curves.
Shown on plans at the end of this application in Appendix F.
 - F. Turning radii at all intersections
Shown on plans at the end of this application in Appendix F.
 - G. Centerline gradients.
Shown on plans at the end of this application in Appendix F.
 - H. Locations of all existing overhead and underground utilities, to include but not be limited to water, sewer, electricity, telephone, lighting, and cable television.
The existing utilities located on Little River Drive are shown on the plans, along with the proposed utilities that will be a continuation of the existing.
3. Where the subdivider proposed improvements within existing public streets, the proposed design and construction details shall be approved in writing by the Highway Superintendent or the Maine department of Transportation, as appropriate.
There are no proposed improvements in existing streets associated with the proposed subdivision.
4. Where the subdivision streets are to remain private roads, the following words shall appear on the recorded plan.

"All roads in this subdivision shall remain private roads to be maintained by the developers or the lot owners and shall not be accepted or maintained by the City".

The roads are being proposed to be taken over by the City of Belfast after the completion of construction.

Section II Street Design Standards

1. These design standards shall be met by all streets within subdivision, and shall control the roadway, shoulders, curbs, sidewalks, drainage systems, culverts, and other appurtenances.
The streets within the proposed subdivision were designed to the standards of the City of Belfast.
2. Streets shall be designed to discourage through traffic on minor streets within a residential subdivision.
The proposed streets within the subdivision will only be used to access the lots within the proposed subdivision, there is no through traffic necessary.
3. Where a subdivision borders an existing narrow street (not meeting the width requirements of the standards for streets in those regulations) or when the Comprehensive Plan indicates plans for realignment or widening of a road that would require use of some of the land in the subdivision, the plan shall indicate reserved areas for widening of a road that would require use of some of the land in the subdivision, the plan shall indicate reserved areas for widening or realigning the road marked "Reserved for Road Realignment (Widening) Purposes." Land reserved for such purposes may not be included in computing lot area or setback requirements is indicated on the Official Map, the reserve area shall not be included in any lot, but shall be reserved to be deeded to the City or State.
This standard is not applicable.
4. Any subdivision expected to generate average daily traffic of 200 trips per day or more, shall have at least two street connections with existing public streets, streets shown on an Official Map, or streets on an approved subdivision plan for which performance guarantees have been filed and accepted. Any street with an average daily traffic of 200 trips pr more, shall have at least two street connections leading to existing public streets, streets shown on an Official Map, or streets on an approved subdivision plan for which performance guarantees have been filed and accepted. See appendix "D" for design standards.
The estimated daily trips will exceed 200 at full development of the subdivision, there is no other location available for access to the subdivision other than the access at the end of the existing Little River Drive. A waiver is being requested for a second access.
5. The centerline of the roadway shall be the centerline of the right of way.
Shown on plans at the end of this application in Appendix F.
6. Dead End Streets. In addition to the design standards above, dead end streets shall be constructed to provide a cul-de-sac turn around with the following requirements for radii:
Property line: 65 feet; outer edge of pavement: 50 feet; inner edge of pavement: 30 feet. Where the cul-de-sac is in a wooded area prior to development, a stand of trees shall be maintained within the center of the cul-de-sac. When, because of design considerations dealing with traffic usage future possible expansions, esthetic or environmental considerations or other considerations of a significant nature, excluding costs of the developer, the Board determines that another type of turn around should be utilized. e.g. a "hammer head turn around", instead

of a cul-de-sac, then such turn around may be approved, if it other protects the public health, safety and welfare and is not contrary to the purposes of this ordinance.

Shown on plans at the end of this application in Appendix F, it was requested by the City of Belfast during the design phase of the subdivision that the dead ends be shown at hammer heads.

The Board may require the reservation of a twenty-foot easement in line with the street to provide continuation of pedestrian traffic or utilities to the next street. The Board may also require the reservation of a fifty-foot easement in line with the street to provide continuation of the road where future subdivision is possible.

There is no possibility of continuation of streets within the subdivision.

7. Grades, Intersections, and Sight Distances.

A. Grades of all streets shall conform in general to the terrain, so that cut, and fill are minimized while maintaining the grade standards above.

The cuts and fills within the subdivision were balanced for material conservation. The existing topography within the subdivision is significant from north to south, and the roads were designed to reflect the natural grades as much as possible while still adhering to the standards of the City of Belfast. The plan and profiles of the proposed streets are shown on plans at the end of this application in Appendix F.

B. All changes in grade shall be connected by vertical curves in order to provide the following minimum stopping sight distances based on the street design speed. See Appendix "E".

Shown on plans at the end of this application in Appendix F.

C. Where new street intersections or driveway curb cuts are proposed, sight distances, as measures along the road onto which traffic will be turning, shall be based upon the posted speed limit and conform to the table. Sight distances shall be measures from the drives seat of a vehicle standing on that portion of the exit with the front of the vehicle a minimum of 10 feet behind the curb line or edge of shoulder, with the height of the eye 3 ½ feet, to the top of the object 4 1/2 feet above the pavement. See appendix "f". Where necessary, corner lots shall be cleared of all growth and sight obstructions, including ground excavation, to achieve the required visibility.

Sight distances will be maintained throughout the proposed subdivision.

D. Cross (four corners) street intersections shall be avoided insofar as possible, except as shown on the Comprehensive Plan or at other important traffic intersections. A minimum distance of two hundred feet shall be maintained between centerlines of side streets.

There are none proposed.

8. Sidewalks. Sidewalks shall be installed within all subdivisions within the urban compact area.

Where installed sidewalks shall meet these minimum requirements. In the event that a proposed subdivision contains a proposed subdivision road. The Planning Bord should require sidewalks when they are deemed to be necessary to insure the safe passage of pedestrian traffic within the subdivision. If a sidewalk is required, the sidewalk shall be paved and shall be at least four feet wide. The sidewalk shall meet the criteria of Chapter Three Section II. 8. The location of said sidewalk shall be by the Belfast Planning Board, relative to safety issues.

The proposed subdivision is not within the urban compact district, as such no sidewalks are being proposed.

A. Bituminous Sidewalks.

- a. The crushed aggregate base course shall be no less than eight inches thick.
- b. The hot bituminous pavement surface course shall be no less than two inches after compactions.
- B. Portland Cement Concrete Sidewalks.
 - a. The sand base shall be no less than six inches thick.
 - b. The Portland Cent concrete shall be reinforced with six-inch square, number 10 wise mesh and shall be no less than four inches thick.
- C. Or other weather resistant material approved by the Planning Board.
9. Granite, concrete or bituminous curbing shall be installed on a thoroughly compacted gravel base of six inches minimum thickness. Bituminous curbing shall be installed on the base course of the pavement. The specified pavement width above shall be measured between the curbs.

Section III Street Construction Standards

The construction of the streets within the proposed subdivision will follow the guidelines of this ordinance, and those set forth by the City of Belfast.

1. Minimum thickness of material after compaction. See Appendix "G".
2. Preparation.
 - A. Before any clearing has started on the right of way, the center line and sidelines of the new road shall be staked or flagged at fifty-foot intervals.
 - B. Before grading is started, the entire right of way shall be cleared of all stumps, roots, brush, and other objectionable material. All tree stumps shall be removed from the right of way.
 - C. All organic materials shall be removed to a depth of two feet below the sub grade of the roadway. Ion soils which have been identified by the City Engineer as not suitable for roadways, the subsoil shall be removed from the street site to a depth of two feet below the sub surface and replaced with materials meeting the specifications for gravel aggregate subbase below.
 - D. Except in a ledge cut, side slopes shall be no steeper than a slope of three feet horizontal to one foot vertical, and shall be graded, loamed, limed, fertilized, and seeded according to the specifications of the erosion and sedimentation control plan. Where a cut results in exposed ledge a side slop no steeper than four feet vertical to one foot horizontal is permitted.
 - E. All underground utilities shall be installed prior to paving to avoid cuts in the pavement. Building sewers and water service connections shall be installed to the edge of the right of way prior to paving.
3. Bases and Pavement (see Appendix I for typical road cross section)
 - A. Bases
 - a. The aggregate subbase course shall be gravel or hard durable particles free from vegetative matter, lumps or balls of clay and other deleterious substances.
 - b. The aggregate base course shall be gravel or hard durable particles free from vegetative matter, lumps or balls of clay and other deleterious substances. The gradation of the part that passes a 3-inch square mesh sieve shall meet the requirements set forth in Appendix "I". Aggregate for the base shall contain no particles of rock exceeding two inches in any dimension.
 - B. Pavement joints. Where pavement joins an existing pavement, the existing pavement shall be cut along a smooth line and form a neat, even, vertical joint.

- C. Curbs and Gutters. Curbs and gutters shall be installed within the urban compact area, or within any areas designated in the Capital Improvements Plan or Comprehensive Plan as areas of compact development.
- D. Pavements (when required by Planning Board)
 - a. Minimum standards for the base layer of pavement shall be the M.D.O.T. specifications for plant mix grade B with an aggregate size of more than 1 inch maximum.
 - b. Minimum standards for the surface layer of pavement shall meet the M.D.O.T. specifications for plant mix grade C with an aggregate size no more than ¾ inch maximum.

Section IV Storm Water management design standards

1. Adequate provision shall be made for disposal of all storm water generated within the subdivision, and any drained ground water through a management system of swales, culverts, underdrains, and storm drains. The stormwater management system shall be designed to conduct storm water flows to existing water courses or storm drains.

The proposed subdivision is being reviewed by the Maine department of Environmental Protection under the Site Location of Development Act. The stormwater is being managed on site by a combination of underdrain soil filters, buffers, and wet ponds designed to the standards of the Maine DEP to not exceed the pre-development flows from the site. A copy of the stormwater management report and calculations have been attached in Appendix C. The HydroCAD calculations that were submitted to the Maine DEP can be reviewed in the City of Belfast's copy of the SLODA application, they have been omitted from this application for conciseness.

- A. Where a subdivision is traversed by a stream, river, or surface water drainageway, or where the Board feels that surface water run-off to be created by the subdivision should be controlled, there shall be provided easements or drainage rights of way with swales, culverts, catch basins or other means of channeling surface water within the subdivision system and over other properties. This stormwater management system shall be designed by a Registered Professional Engineer.
The stormwater management on site is shown on the attached plans. The system was designed under the supervision of Scott E. Braley, PE#6227.
- B. Drainage easement for existing water courses or proposed drainage ways shall be provided at least thirty feet wide, conforming with the lines of existing natural drainage.
Shown on attached plans attached in Appendix F.
- C. All components of the stormwater management system shall be designed to limit peak discharge to predevelopment levels for every storm between the 2 year and the 50 year, 20 hour duration, frequencies, based on rainfall data for Portland, Maine. When the subdivision discharges directly to a major water body, peak discharges may be increased from predevelopment levels provided downstream drainage structures are suitably sized.
The stormwater management on site will control peak flows for the 2, 10 and 25 year storms as required by the Maine DEP.
- D. The minimum pipe size for any storm drainage pipe shall be twelve inches. Maximum trench width at the pipe crown shall be the outside diameter of the pipe plus two feet. Pipe shall be bedded in a fine granular materials, containing no stones larger than 3 inches, lumps of

clay, or organic matter, reaching a minimum of six inches below the bottom of the pipe extending to six inches above the top of the pipe.

All proposed pipe sizes exceed the minimum set by the City of Belfast as shown on the attached plans.

2. The storm water management system shall be designed to accommodate upstream drainage, taking into account existing conditions and approved or planned developments not yet built and shall include a surplus design capacity factor of 25% for potential increases in upstream run-off. **The stormwater management systems are designed for the proposed roads as well as the development that will created on each lot.**
3. Downstream drainage requirements shall be studied to determine the effect of the proposed subdivision. The storm drainage shall not overload existing or future planned storm drainage systems downstream from the subdivision. The subdivider shall be responsible for financing any improvements to existing drainage systems required to handle the increased storm flows. **The stormwater management system designed for the proposed subdivision will not generate any greater flows from the site than the pre-development conditions that currently exists on the site.**
4. Catch basins shall be installed where necessary and located at the curb line. **No catchbasins are proposed.**
5. Outlets shall be stabilized against soil erosion by stone riprap or other suitable materials to reduce storm water velocity. Wherever the storm drainage systems not within the right of way of a public street, perpetual easements shall be provided to the City allowing maintenance and improvement of the system. **Erosion control measures will be undertaken to prevent any sort of soil erosion within the proposed development.**
6. Where soils require a sub surface drainage system, the drains shall be installed and maintenance separately from the storm water drainage system. **Wetland crossing will be inspected for additional drainage needs.**

Section V Storm Drainage Construction Standards

1. Materials
 - A. Reinforced Concrete Pipe.
This standard is not applicable.
 - B. Asbestos Cement Pipe.
This standard is not applicable.
 - C. Corrugated Metal Pipe.
This standard is not applicable.
 - D. ABS Pipe.
This standard is not applicable.
 - E. Corrugated Plastic Pipe.
Materials will be used to meet the standards.
 - F. Manholes.
Materials will be used to meet the standards.
 - G. Catch Basins.
This standard is not applicable

2. Drain inlet alignment shall be straight in both horizontal and vertical alignment unless specific approval of a curvilinear drain is obtained in writing from the board, after consultation with the Municipal Engineer.
Alignments are shown on the attached plans. All are straight.
3. Manholes shall be provided at all changes in vertical or horizontal alignment and at all junctions. On straight runs, manholes shall be placed at a maximum of 400 foot intervals.
Locations of proposed manholes are shown on the attached plans. The locations meets the requirements of the City of Belfast.
4. Upon completion each catch basin or manhole shall be cleaned of all accumulation of silt, debris or foreign matter and shall be kept clean until final acceptance.
Final cleaning will be done upon completion of construction.

Section VI Additional Improvements and Requirements

1. Erosion Control. The procedures outlined in the erosion and sedimentation control plan shall be implemented during the site preparation, construction, and clean up stages.
The standard erosion and sedimentation control narrative included in Appendix C, and the plans in Appendix F outline the proper measures to be undertaken prior to, during, and after completion of construction to the standards of the Maine DEP.
2. Cleanup. Following street construction, the developer or contractor shall conduct a thorough clean up of stumps and other debris from the entire street right of way. If on site disposal of the stumps and debris is proposed, the site shall be indicated on the Plan, and be suitably covered with fill and topsoil, limed, fertilized and seeded.
The applicant will complete the after construction clean as outlined in the erosion and sedimentation control plan.
3. Street Names, Signs and Lighting. Street which join and are in alignment with streets of abutting or neighboring properties shall bear the same name. Names of new streets shall not duplicate, not bear phonetic resemblance to the names of existing street within the Municipality, and shall be subject to the approval of the Board. No street names shall be the common given name of a person. The developer shall reimburse the Municipality for the costs of installing street name, traffic safety and control signs. Streets lighting shall be installed as approved by the Board.
The proposed street names are shown on the attached plans in Appendix F. The applicant understands the additional responsibilities associated with the finalizing of the proposed subdivision.

Section VII Certification of Construction

"As built" plans shall be submitted to the Code Enforcement Officer. Upon completion of street construction a written certification signed by a professional engineer registered in the state of Maine shall be submitted to the code enforcement officer at the expense of the applicant, certifying that the proposed way meets or exceeds the design and construction requirements of this ordinance.

Proper documentation will be submitted upon finalization of construction.

Chapter Four

Performance Guarantees

Upon Final Plan submittal, the performance guarantee with be submitted.

Chapter Five

Waivers

The applicant is requesting a waiver to the minimum lot size, designing the subdivision to meet the standards of a Planned Unit Development.

The applicant is requesting a waiver to the second access to the subdivision. There is no other available place to have an access to the proposed subdivision. The proposed access is the continuation of the existing Little River Drive, and remains of the subdivision is surrounded by the Little River.

Article VI, Residential Planned Unit Development
Division 1, Residential Planned Unit Development
Sec. 102-801. Intent and purpose of aArticle.
[Ord. of 4-6-2010(3)]

The intent of the residential planned unit development standards is to permit greater flexibility and, consequently, more creative and imaginative design for residential uses than are generally possible under conventional Zoning, Site Plan, and Subdivision regulations. It is further intended to promote more economical and efficient use of the land while providing a harmonious variety of housing choices, a higher level of amenities, and preservation of natural areas and resources, scenic features, and open space.

Sec. 102-802. Permitted uses; and modification of standards.
[Ord. of 4-6-2010(3)]

In all zoning districts, the following special provisions may apply, subject to the conditions set forth in this Chapter:

- (1) Any permitted use or permitted use requiring Planning Board review in a zoning district in which a residential planned unit development is proposed shall be permitted as a planned unit development, subject to the criteria established in this Chapter, and provided such is consistent with the definition of a residential planned unit development identified in Chapter 66, General Provisions. An application for a permit for a residential planned unit development shall be reviewed and acted upon by the Planning Board to ensure compliance with this Chapter, and applicable requirements of Chapter 78, Floods, Chapter 82, Shoreland, Chapter 90, Site Plan, Chapter 94, Subdivisions, and Chapter 98, Technical Standards. Additional or accessory uses may be allowed upon conditions adopted by the Planning Board. However, no use shall be permitted except in conformity with specific and precise development plans pursuant to the procedural and regulatory provisions of this Chapter, and the applicable standards of the above referenced other Chapters.
- (2) Notwithstanding other provisions of this Chapter relating to dimensional and area standards, the Planning Board, in its review and approval of a proposed planned unit development, may modify area and dimensional standards to permit innovative approaches to building layout and environmental design in accordance with this Article. This shall not be construed as granting variances to relieve hardship.
- (3) Notwithstanding any requirements to the contrary, if a property that is proposed to be developed as a planned unit development is located in a zoning district that prohibits multi-family housing or the limits that number of dwelling units that can be constructed in an individual multi-family structure, the Planning Board shall have the authority to allow the construction of multifamily housing or the construction of more dwelling units in one or more individual multi-family structures than is typically allowed in the respective zoning district, provided the Planning Board makes a positive finding that allowing said housing is consistent with Sec 102-801, Intent and Purpose of this Article, and complies with the Sec 102-803 Criteria for Approval. The Board, in its Findings of Fact shall describe why it determined allowing such adjustments are appropriate, and in its Conditions of Approval, shall identify the number of multi-family units, structures, and units in any and all multifamily structures that shall be permitted. Sec 102-802.5 Review process for a residential planned unit development. The following review processes shall apply to Planning Board review of a residential planned unit development.
 - (a) All proposals for a residential planned unit development shall address the specific criteria in this Division. The Board shall use the application process identified in the City Subdivision Ordinance (Chapter 94, non-codified) to conduct its review of an application for any residential planned unit development. The Subdivision Ordinance identifies application submission requirements, requirements for both a preliminary plan and final plan, the requirements to conduct public

hearings and provide notifications to abutting property owners and the public, the recording of the final plan, and similar requirements.

- (b) A multi-family housing project typically is subject to Planning Board review pursuant to requirements of Chapter 90, Site Plan. If a proposed residential planned unit development consists solely of multi-family housing units and structures, and or a mixed use development that includes multi-family housing and other types of residential housing, the project shall be subject to review pursuant to the requirements of this Division, Chapter 90, Site Plan, and Chapter 94, Subdivisions.
- (c) A project that qualifies as a flex housing project that is subject to review as a residential planned unit development, shall be subject to review pursuant to the requirements of this Division, Chapter 90, Site Plan, and Chapter 94, Subdivisions.
- (d) If a project is a mixed use development that includes any type of residential housing and one or more nonresidential uses, the project shall be subject to review pursuant to the requirements of this Division, Chapter 90, Site Plan, and Chapter 94, Subdivisions.

Sec. 102-803. Fees.

[Ord. of 4-6-2010(3)]

Fees for permits under this Article shall be established by the City Council to cover the City's administrative, legal, and peer review costs and shall be paid upon submission of an application for a permit.

Sec. 102-804. Criteria for approval.

[Ord. of 4-6-2010(3)]

Innovative approaches for a residential planned unit development, including the layout of buildings and/or lots, the types of residential buildings (such as but not limited to single-family, two family, multi-family, and flex housing), the layout of project infrastructure (such as but not limited to roads, stormwater, sewer, subsurface systems, water, lighting, and sidewalks), landscaping, and environmental concerns, shall be subject to the following criteria:

- (1) Compliance with zoning regulations. The purpose and intent of this Chapter shall be upheld.
The applicant is proposing to only reduce the sizes of the lots within the subdivision, the remainder of the standards of the City of Belfast will be met.
- (2) Compliance with other standards. The project shall comply with all applicable federal, state and City codes, rules, ordinances and regulations.
The subdivision is being reviewed by the Maine DEP for SLODA standards.
- (3) General plan; minimum site area. Each building and/or lot shall be an element of an overall plan for site development. If the minimum lot size area for a zoning district in which a planned unit development is proposed is .5 acre or less (21,780 square feet or less), the minimum size lot on which a planned unit development may occur is 2 acres. If the minimum lot size area for a zoning district in which a planned unit development is proposed is greater than .5 acre (21,781 square feet or larger), the minimum size lot on which a planned unit development may occur is 4 acres. Notwithstanding the above provisions, in all cases, a request for a planned unit development permit pursuant to the standards in this Division must involve the creation of a minimum of 3 lots, a minimum of 3 dwelling structures, and/or a minimum of 3 dwelling units in 1 or more structures.
The proposed subdivision will consist of 48 lots on an existing 100 acre parcel varying from 0.75 acres to 2.16 acres.
- (4) Density. The maximum amount of density allowed in the proposed planned unit development shall comply with the specific overall density standards that apply to the respective zoning district in which the planned unit development is located. Some zoning districts also have standards that allow increased density for a planned unit development project. In general, the intent of the City's planned unit development standards is to allow flexibility and innovation in the lay-out of lots

and/or housing, rather than an increase in the number of lots or residential units that could be developed on a property.

There are 48 proposed lots on 100 acres. That is an average density of 2.1 acres per proposed residence.

- (5) Setbacks. The Planning Board shall have the authority to approve a reduction in the minimum structure setback standards from the dimensional standards that apply to the respective zoning district in which the planned unit development is located. If a project is located in a zoning district in which the minimum lot size is .5 acre or less, the Planning Board cannot grant a reduction in structure setback requirements that is greater than 5 feet along the side or rear lot line that formed the perimeter of the original lot. If a project is located in a zoning district in which the minimum lot size is greater than .5 acre, the Planning Board cannot grant a reduction in structure setback requirements along the side or rear lot line that formed the perimeter of the original lot. The Board shall consider how allowing a reduction in the respective structure setback standards proposed by the applicant may assist in achieving the type of imaginative, creative, and economical lot and/or dwelling unit lay-out envisioned in Sec 102-801.

There is no reduction in setbacks being requested.

- (6) Open space and recreation area required.

Per stall comments 30% of the parcel is undeveloped.

- a. A minimum of 20% of the total project area shall be preserved as open space for a planned unit development that is proposed in a zoning district that has a minimum lot size standard of .5 acre or less, or for a planned unit development proposed for any flex housing project. However, if the original lot for either of the above types of development is 4 acres or greater in size, the minimum open space requirement shall be 35%.
- b. A minimum of 35% of the total project area of the original lot shall be preserved as open space for a planned unit development that is proposed in a zoning district that has a minimum lot size standard of greater than .5 acre, with a goal of preserving 50% of the project area as open space.
- c. Open space areas that are proposed to satisfy the requirements of a) and b) above shall include features on the site that warrant preservation, such as but not limited to: large trees, tree groves, woods, ponds, streams, wetlands, floodplains, glens, rock outcrops, steep slopes, native plant life and wildlife cover, and special wildlife areas, as well as natural areas that can be used for passive recreational activities, such as walking and hiking. In addition, open space areas can include areas for active recreational and community activities, such as but not limited to: play fields, playgrounds, pavilions, barbecue pits, agricultural fields, and similar facilities. The applicant shall consider, and if deemed warranted by the Board, create opportunities for project residents to access and use open space areas, such as by the construction of a trail system. Stormwater management facilities, such as constructed sand filters and detention or retention basins, shall not be included in the calculation of open space requirements.
- d. Designated open space areas for the approved planned unit development shall be identified as protected areas that must be preserved and cannot be developed, and the approved development plan shall identify the mechanism that shall be used to protect and maintain the open space areas. Said mechanisms may include but are not necessarily limited to: private covenants or arrangements to preserve the integrity of open spaces and their use for recreational, environmental, or conservation purposes; dedications to an entity such as a land trust; and or dedications to the City. A proposed dedication to the City shall require the review and approval of the Belfast City Council.

Proposed methods of preservation will be discussed with the City staff to ensure the best practice is utilized for the future of the land to be preserved. A portion of the property is an existing trail and it will remain as part of the proposed subdivision.

- (7) Specific design standards. The developer shall take into consideration the following points, and shall illustrate on the plan the treatment of open spaces, paths, roads, service and parking areas, and other features required in his proposal:
- a. Aesthetics and orientation. Buildings and other improvements shall respect scenic vistas and natural features as defined or identified in the adopted Belfast Comprehensive Plan.
The lots have been proposed to avoid the wetlands area, and river frontage that will be conserved from development.
 - b. Streets. Access from public ways, internal circulation, and parking shall be designed to provide for vehicular and pedestrian safety and convenience, emergency and fire equipment, snow clearance, street maintenance, and delivery and collection services. Streets shall be laid out and constructed consistent with the provisions of the Chapter 98, Technical Standards, however, the Planning Board shall have latitude in allowing alternative street lay-out and construction standards that support the purpose of achieving the goals for a planned unit development.
The proposed streets have been designed to meet the standards set forth by the City of Belfast, as shown on the plans attached at the end of this application in Appendix F.
 - c. Drainage and stormwater management. Adequate provision shall be made for stormwater, with particular concern for the effects of any effluent draining from the site. Erosion resulting from any improvements on the site shall be managed by approaches such as but not limited to: landscaping, the retention of forested and vegetated areas, low impact development techniques, the construction of traditional stormwater management facilities identified in the Chapter 98, Technical Standards, and the implementation of other techniques proposed by the applicant that may be approved by the Department of Environmental Protection or the City.
The proposed stormwater management is being reviewed by the Maine DEP for conformance to their standards. Through the combination of buffers underdrain soil filters, and wetponds the post development flows will not exceed the pre-development conditions on the site. The structures will manage both quality and quantity as required by the Maine DEP SLODA standards.
 - d. Sewage disposal. Adequate provision shall be made for sewage disposal. If public sewer is unavailable or inadequate, the planned unit development must install an adequate subsurface system to serve the dwelling units, an approach that may involve the construction and management of a private community engineered system. An engineered system shall comply with all State Subsurface Wastewater Disposal System rules, and regardless of the type of dwelling units that are constructed, shall satisfy the wastewater disposal system standards identified in the Article IX, Performance Standards, Division 7, Supplemental Performance Standards for a Multi-Family or Flex Housing Project, Sec 102-1343, Wastewater Pollution and Subsurface Wastewater Disposal, (b), Subsurface Wastewater Disposal System.
The subdivision will be served by the City of Belfast Wastewater Department. The pump station in the area is currently under review and redesign, and amendments will be made to accommodate the additions flows anticipated to be generated. An e-mail from Olver Associates acknowledging this is attached at the end of this application.
 - e. Water supply. Adequate provision shall be made for potable water for ordinary use, and adequate measures shall be provided or identified as well for firefighting needs. The Planning Board shall consult with the Belfast Fire Chief to determine the adequacy of a water source for fire- fighting needs.

An email from Keith Hooper, the superintendent of the Belfast Water District is attached at the end of this application verifying the available capacity to serve the proposed subdivision.

- f. Utilities. When practical, utilities shall be installed underground, however, this shall not preclude an applicant's use of above ground utilities. Transformer boxes, pumping stations, and meters associated with underground services shall be located so as not to be unsightly or hazardous to the public.

All utilities are being proposed for underground location. All above ground features will be located to be the least obtrusive as possible.

- g. Recreation. Facilities shall be provided consistent with the development proposal. Facilities that are provided shall address the needs of persons who will reside in the project, however, when appropriate, facilities should consider opportunities to address the recreational needs of the broader community. For example, creating opportunities to connect to a trail system that allows public access on one or more adjacent properties.

The site is located adjacent to the Little River Trail, and the trail will be accessible from the conservation area within the subdivision.

- h. Buffering. Planting, landscaping, retention of existing vegetation, disposition and form of buildings and other improvements, or fencing and screening, shall be utilized to integrate the proposed development with the landscape and the character of any surrounding development.

The existing natural features on the site will be retained in so far as possible.

- i. Disposition of buildings. The lay-out and disposition of buildings shall recognize the need for natural light and ventilation, as well as methods to benefit from solar gain.

Houses and garages will be located so as to utilize existing and available natural features to the greatest extent possible.

- j. Snow removal. The plan shall provide for the storage of snow accumulation or removal from the site.

There will be sufficient area in the conservation area to store snow if necessary.

- (8) Recording of covenants and conditions. For the purpose of this Article, the owners of the tract or parcel of land involved in the planned unit development shall agree in advance to be bound by the conditions of approval established by the Belfast Planning Board and to record such covenants, easements and other provisions with the Waldo County Registrar of Deeds.

A copy of the draft Covenants, conditions and restrictions is attached at the end of this application in Appendix B for the proposed subdivision. These will be recorded upon approval of the subdivision plan and the draft by the City of Belfast Planning Board.

- (9) Performance guarantee. The developer shall file a performance guarantee with the City prior to the recording of the approved plan with the Waldo County Registry of Deeds. This may be tendered in the form of a certified check payable to the City, a savings account passbook issued in the name of the City, or a faithful performance bond running to the City and issued by a surety company acceptable to the City. The conditions pertaining to such check, passbook or performance bond established by the Planning Board shall be reviewed by the City Attorney. The amount shall be equal to 120% of the total cost of furnishing, installing, connecting and completing the entire street grading, paving, storm drainage, utilities, or other improvements specified in the final plan, and shall guarantee the satisfactory completion of all specified improvements. Terms of the performance guarantee approved by the Planning Board shall identify the City's terms for the management of the guarantee, and the release of said guarantee. If an applicant does not begin and complete project construction within 2 years of the date of Planning Board approval of the planned unit development, the Planning and Codes Department, with the assistance of City Engineer, shall review the original construction cost estimates and the adequacy of the original guarantee, and shall determine if the amount of the guarantee established by the Planning Board should be adjusted. If the Department

determines that the initial amount of the guarantee is inadequate, the applicant shall have a period of 60 days to provide the revised amount of the guarantee identified by the Department to the Department.

A performance guarantee will be established between the applicant and the City upon approval of the final plan.

(10) Dedication of common open space.

a. Consistent with conditions of approval established by the Planning Board, common open space shall be dedicated after Planning Board approval of the project, and prior to the initiation of project construction or the issuance of any building permit. There shall be no further subdivision of the land, or buildings constructed, as shown on the approved plan, until the respective dedication of the common open space has occurred.

The open space will be dedicated to the City upon recording of the plan.

b. The common open space shall be shown on the development plan with an appropriate notation on the face thereof to indicate that:

The following notes will be included on the final subdivision plan.

1. It shall not be used for future building lots; and
2. The open space land shall be managed and used for the uses identified on the planned unit development plan approved by the Board.

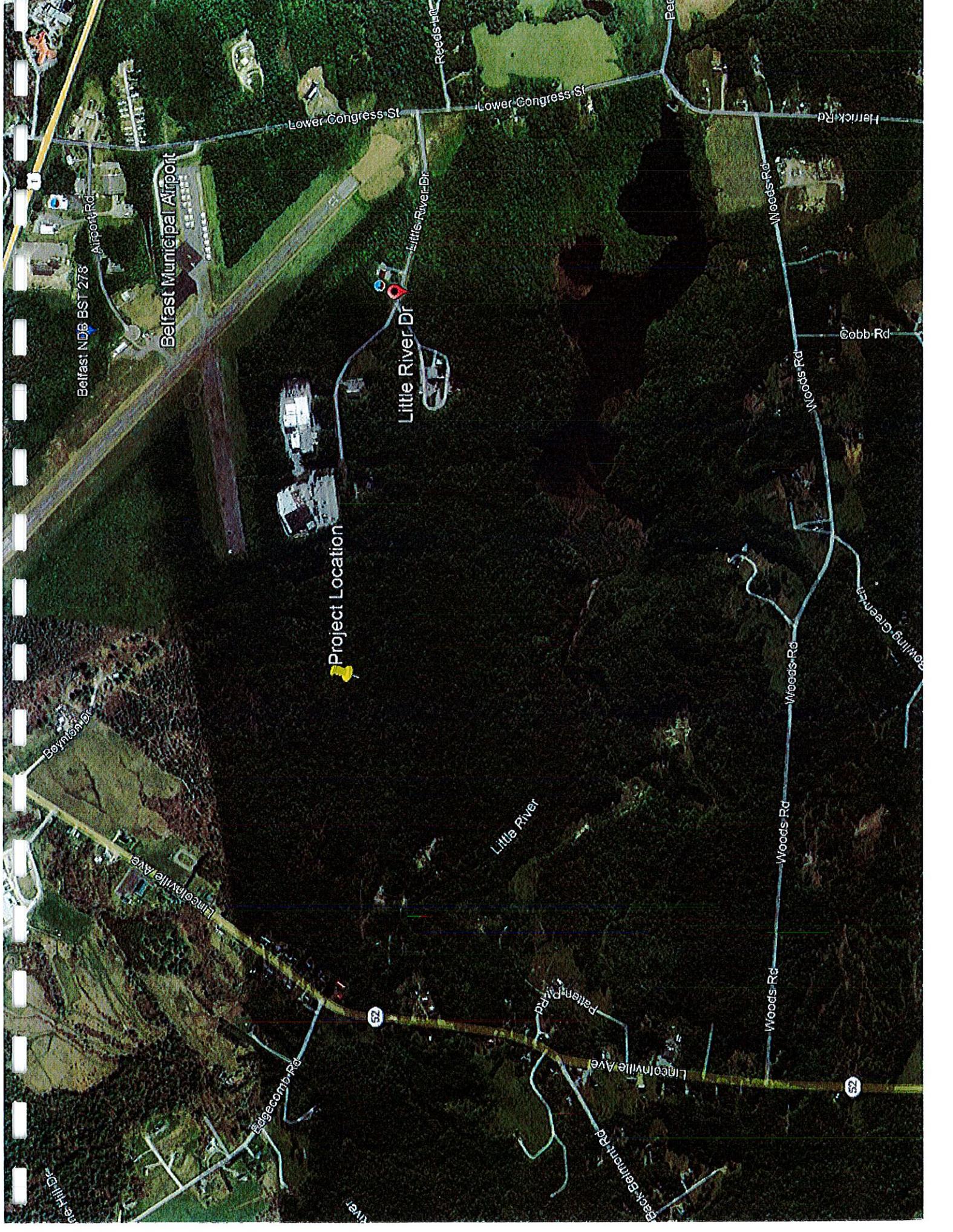
(11) Neighborhood association.

There is not neighborhood association proposed for the subdivision.

- a. If any or all of the common open space is to be reserved for use by the residents or owners, the proposed terms for the formation by the developer of a neighborhood/homeowner's association shall be presented to the Planning Board for review and approval at the final plan review, and the establishment of the association shall be required prior to the recording of the final plat approval.
- b. Covenants for mandatory membership in the neighborhood/homeowner's association, setting forth the owners' rights and interest and privileges in the association and the common land, shall be approved by the Planning Board and included in the deed for each lot or dwelling unit, and identified in the Conditions of Approval that the Board establishes for the approved plan.
- c. The neighborhood/homeowner's association shall have the responsibility of maintaining the common open space, as well as road maintenance, parking lot maintenance, snow removal, and maintenance of recreational facilities/areas. A schedule for the transfer of some or all of the owner's responsibilities to maintain project infrastructure to the neighborhood/homeowner's association shall be identified in the association documents.
- d. The association shall levy charges against all property owners to defray the expenses connected with the maintenance of open space, neighborhood recreational facilities, road maintenance, maintenance of landscaping of buffers and landscaping noted on the final plan, and City assessments for the same.
- e. The developer/applicant shall maintain control of such open space and project infrastructure and shall be responsible for its maintenance until the development is sufficient to support the association, or, alternatively, the objectives of the planned unit development have been met. Such determination shall be made by the Planning Board upon request of the neighborhood/homeowner's association or the developer/applicant.

Sec. 102-805. through Sec. 102-814. (Reserved)

APPENDIX A
SITE LOCATION



Project Location

Little River Dr

Belfast Municipal Airport

Belfast NDB BST 278

Lower Congress St

Little River Dr

Reeds Hill

Peck

Herrick Rd

Woods Rd

Cobb Rd

Woods Rd

Bowling Green Rd

Woods Rd

Little River

Lincolnville Ave

Beynton Dr

23

Edgecomb Rd

Patent Rd

Lincolnville Ave

Back Belmont Rd

Woods Rd

23

North Hill Dr

APPENDIX B

TAX MAP

DEED

CERTIFICATE OF GOOD STANDING

FINANCIAL CAPACITY

COVENANTS, CONDITIONS, AND RESTRICTIONS

ABUTTERS



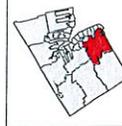
CITY OF
BELFAST
WALDO COUNTY
MAINE



LEGEND

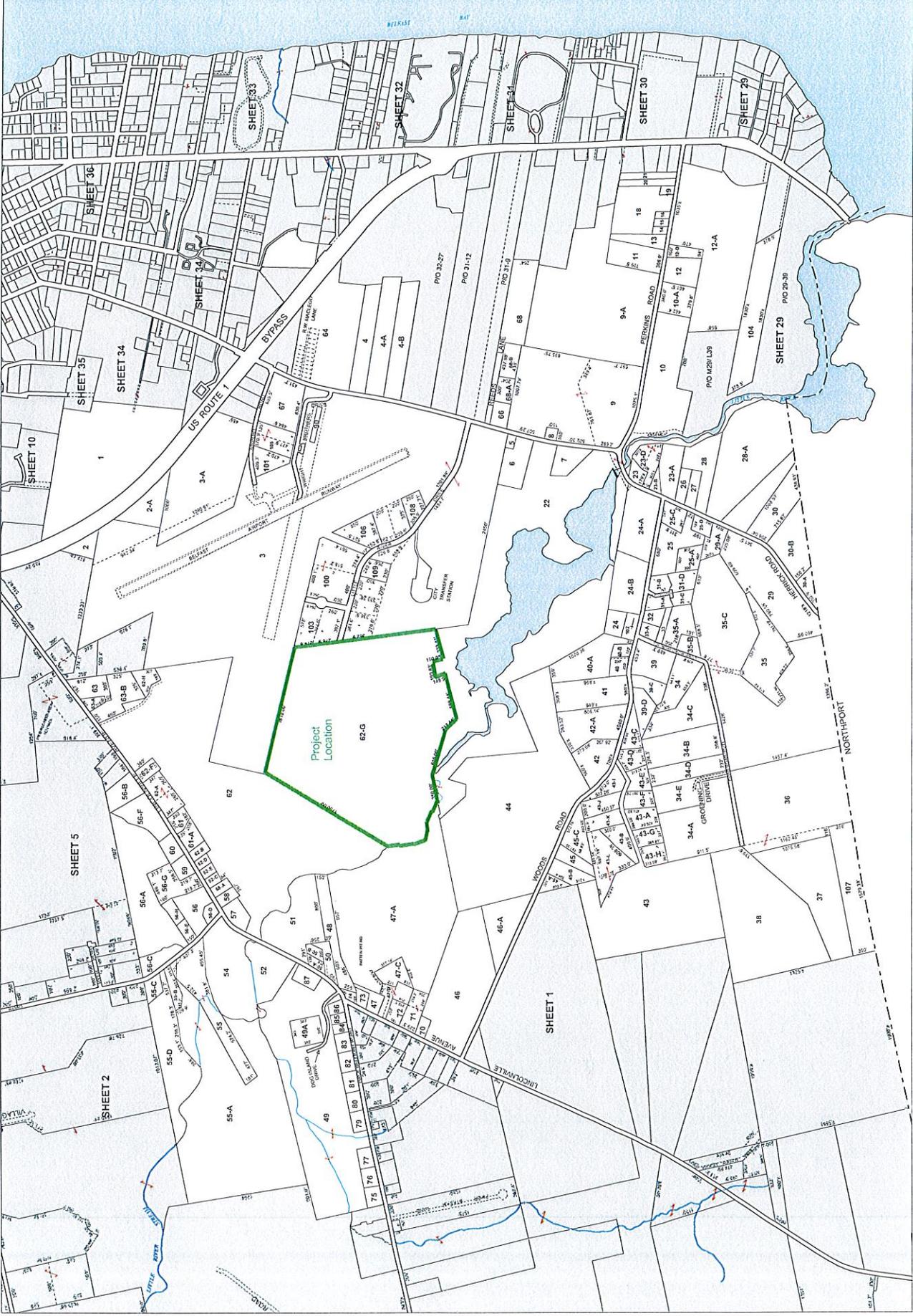
- Parcel
- Road
- Water
- Dam
- Condos
- Streams
- Cemetery
- Easement/ROW
- Parcel Hook
- Road
- Sublot Lane
- Utility

For Assessment Purposes. Not to be used for conveyances.



Map 4

Project: 20220709
Effective Date: 4/1/2019





WARRANTY DEED ATTEST: Stacy L Grant, Waldo Co Registry of Deeds

KNOW ALL PERSONS BY THESE PRESENTS, THAT the COUNTY OF WALDO, a Maine governmental entity having its principal offices in the County of Waldo, State of Maine,

in consideration of one dollar and other valuable considerations,

paid by **B&B MIDCOAST PROPERTIES, LLC**, a Maine limited liability company with an address of 856 Back Brooks Road, Monroe, ME 04951

the receipt whereof it does hereby acknowledge, does hereby **give, grant, bargain, sell and convey** unto the said **B&B MIDCOAST PROPERTIES, LLC** its successors and assigns forever,

That certain lot or parcel of land, together with any improvements thereon, situated in the City of Belfast, County of Waldo, State of Maine, more particularly bounded and described in Schedule A, attached hereto and made a part hereof.

TO HAVE AND TO HOLD the aforegranted and bargained premises, with all the privileges and appurtenances thereof, to the said **B&B MIDCOAST PROPERTIES, LLC** its successors and assigns, to its own use and behoof forever.

AND the said Grantor does hereby **covenant** with the said Grantee, its successors and assigns, that it is lawfully seized in fee of the premises, that they are free of all encumbrances; that it has good right to sell and convey the same to the said Grantee, their heirs and assigns forever, against the lawful claims and demands of all persons.

IN WITNESS WHEREOF, the said **COUNTY OF WALDO** has caused this instrument to be sealed with its entity seal and signed in its entity name by Betty I. Johnson, William D. Shorey and Amy R. Fowler, its Commissioners, thereunto duly authorized, this 24 day of the month of March, A.D., 2022.

Signed, Sealed and Delivered
in presence of

COUNTY OF WALDO

Karen J. Russell
Karen J. Russell
Karen J. Russell

By: Betty I. Johnson
Betty I. Johnson, Commissioner

By: William D. Shorey
William D. Shorey, Commissioner

By: Amy R. Fowler
Amy R. Fowler, Commissioner

"MAINE REAL ESTATE
TRANSFER TAX PAID"

Schedule A

That certain lot or parcel of land together with any improvements thereon situated at the terminus of Little River Drive in the City of Belfast, County of Waldo, State of Maine, and being more particularly bounded and described in a Warranty Deed from Charles L. Boynton to the County of Waldo dated April 12, 2004, recorded in Waldo County Registry of Deeds Book 2583, Page 194 as follows:

A certain lot or parcel of land with the buildings thereon, situated at the terminus of Little River Drive in the City of Belfast, County of Waldo, and State of Maine:

Beginning at a 5/8" capped steel rod set in the northwesterly corner of land now or formerly of Group Home Foundation, Inc. described in a deed recorded in Book 1797, Page 57 at the Waldo County Registry of Deeds, being the northwesterly corner of Lot 10 of the Airport Industrial Park, Phase 2 (see plan recorded in Plan Drawer 16, Pg. 6), said rod situated 524.82 feet northerly of the northerly line of little River Drive;

Thence N 79°-05'-40" W along the southerly line of land of the City of Belfast described in a deed recorded in the Waldo County Registry of Deeds in Bk. 438, Pg. 122 a distance of 1610.00 feet to a 5/8" capped steel rod set;

Thence S 27°-25'-59" W along land to be retained by the within Grantor, Charles L. Boynton, a distance of 1750.00 feet to a 5/8" capped steel rod set;

Thence continuing S 27°-25'-59" W along land to be retained by the within Grantor, Charles L. Boynton, a distance of 68 feet, more or less, to the thread of Little River, so called;

Thence southeasterly in the thread of said Little River a distance of 807 feet, more or less, to a point situated S 73°-40'-51" W 21 feet, more or less, from a 5 / 8" capped steel rod set, said point being in the northerly bound of land of the Belfast Water District, described in Bk. 313, Pg. 285;

Thence N 73°-40'-51" E along land of said Belfast Water District 21 feet, more or less, to a 5/8" capped steel rod set;

Thence N 73°-40'-51" E along land of said Belfast Water District 350.00 feet to a 5/8" capped steel rod set;

Thence S 75°-09'-09" E along land of said Belfast Water District described in a deed recorded in Bk. 313, Pg. 180, Paragraph 2, a distance of 616.00 feet to a 5" X 5" concrete monument found;

Thence S 42°-03'-30" E along land of said Belfast Water District described in a deed recorded in Bk. 313, Pg. 180, Paragraph 2, a distance of 212.44 feet a 5/8" capped steel rod set;

Thence N 77°-20'-51" E along land of said Belfast Water District described in a deed recorded in Bk. 309, Pg. 462, a distance of 588.44 feet to a 5" X 5" concrete monument found;



MAINE

Department of the Secretary of State
Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

[Subscriber activity report](#)

This record contains information from the CEC database and is accurate as of: Wed Apr 19 2023 07:28:28. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
B&B MIDCOAST PROPERTIES, LLC	20230121DC	LIMITED LIABILITY COMPANY (DOMESTIC)	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
02/22/2022	N/A	MAINE

Other Names (A=Assumed ; F=Former)

NONE

Clerk/Registered Agent

JEREMY M. MARDEN, ESQ.
151 HIGH STREET
BELFAST, ME 04915

[New Search](#)

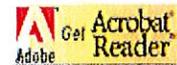
Click on a link to obtain additional information.

List of Filings [View list of filings](#)

Obtain additional information:

Certificate of Existence [\(more info\)](#) [Short Form without amendments \(\\$30.00\)](#) [Long Form with amendments \(\\$30.00\)](#)

You will need Adobe Acrobat version 3.0 or higher in order to view PDF files. If you encounter problems, visit the [troubleshooting page](#).



If you encounter technical difficulties while using these services, please contact the [Webmaster](#). If you are unable to find the information you need through the resources provided on this web site, please contact the Division of Corporations, UCC & Commissions Reporting and Information



March 28, 2023

B&B Midcoast LLC
Benjamin Hooper
Brad Lindelof
68 Little River Drive
Belfast, ME 04915

Dear Ben & Brad,

I am pleased to inform you that based on the information provided that you appear to qualify for the necessary financing required to complete the infrastructure for the 100 acre development at Little River Drive in Belfast.

The approval is conditional upon full underwriting and any additional documentation required.

If you have any questions, I can be contacted at 930-3909 or by email at pdoody@camdennational.bank

Sincerely,

Paul Doody

Vice President

DRAFT

COVENANTS, CONDITIONS AND RESTRICTIONS
for
Little River Subdivision
Belfast, Maine

THESE COVENANTS, CONDITIONS AND RESTRICTIONS are made by B&B Midcoast LLC
(hereafter the "Subdivider") effective upon the date of recordation of this signed document

RECITALS

A. Subdivider is B&B Midcoast, LLC and is the owner of all real property described in the attached Exhibit "A" (Copy of Belfast Lot Plan - hereafter the "property"). Subdivider intends to improve, subdivide and sell real property lots in progressive phases, which shall be referred to henceforth as "subdivision" consistent with the development plan.

B. In order to provide for the orderly development of the property and provide for consistent development and construction within the subdivision, the Subdivider hereby adopts these Covenants, Conditions and Restrictions to apply to all development, construction, inhabitation and tenancy upon this property. The Covenants, Conditions and Restrictions of Little River Subdivision, Belfast Maine must be agreed to in signature by initial lot purchaser and all subsequent sales and resales.

C. "Lot(s)" shall refer to the parcels numbered 1-,49 in Exhibit A of the approved subdivision plan for Little River Subdivision.

Covenants, Conditions and Restrictions

1. Recitals: The recitals set forth above are incorporated herein by this reference.
2. **COVENANTS RUN WITH THE LAND:** All the covenants; conditions and restrictions contained in this instrument shall run with the land described in the attached Exhibit ((A". No land, parcel or lot upon the property shall be conveyed, except subject to these covenants, conditions and restrictions. Each of these covenants, conditions and, restrictions are declared inserted by reference in any and all deeds to any part of the subdivision. The covenants, conditions and restrictions are for the mutual benefit of the owners/subdividers and lot purchasers to protect property values and community interests.

3. **Architectural Control:**

Architectural control in the development of this subdivision belongs solely to the subdivider and their assigns. Basic architectural requirements for each lot must meet the following minimum requirements:

- a. Each lot will have one single-family dwelling.
- b. Each lot will have at least a 1 car garage, attached or separate.
- c. Each Single story home will have a minimum living space of 1,200 square feet.
- d. Each 2-story home will have a minimum living space of 1,600 square feet.

- e. Basement or cellar areas (including daylight basement areas) shall not be included in the calculations of livable floor area.
- f. Unless topographically hindered by the lot, house footprints on each lot will parallel the road the front of the house facing the road directly, not eschewed or sideways.
- g. Roof pitch to be 6/12 or steeper on the main structure including garages. Single pitch roofs over decks, carports etc., can be less but not flat.

4. Building And Structures:

- a. No single-wide or double wide mobile homes shall be permitted on any lot
- b. No Unusual architectural styles, such as Quonset huts, geodesic domes, sod houses, underground houses "tiny" houses, or the like are not permitted, All driveways shall be paved and each home or unit is required to have a 1-car garage.
- c. All buildings, drives and walks shall be erected, completed and landscaped within one year of the building permit issuance date. No building shall be allowed to remain that does not have a finished exterior of vinyl or clapboard siding, stone, masonry, or similar, surface. (i.e. sheathing board or paper, insulation board, house wrap and other unfinished materials are not acceptable) All disturbed soil areas must be paved, finish graded, seeded, planted, mulched or otherwise restored within one year as well.
- d. Accessory buildings or structures (i.e., sheds, greenhouses, playhouse, pools, pool houses, etc.) are permitted upon any Lot providing they are aesthetically situated. on the rear side of the lot, behind the primary residence and garage. Structures for the purpose of operating a commercial business in this residential community are prohibited.

5. Setback Lines, Buffers and Green Spaces:

Building setbacks are the current setbacks required in the Town of Belfast City Codes are to be verified and followed at the time of construction. There are areas designated Green Space along little River including the Little River Walking Trail. These areas shall remain free from further development. The greenspace will be owned by B&B Midcoast whom reserves the right to convey this property to a NON-Profit or organization that manages green space, in the future. All property owners within the subdivision will have access to this greenspace and the Little River waterfront.

6. Encouraged Landscaping Choices:

As Little River Subdivision is being developed as an ecofriendly, minimal carbon footprint neighborhood certain landscaping product is recommended as more conducive to this end goal. For trees, it is strongly recommended that owners plant fruit bearing trees, Maples, Linden, Locust and nut bearing types. For shrubbery, Spirea, Lilacs, Butterfly Bush, Viburnum,. Hydrangea, Rose of Sharon and Clethera are top choices. For perennials, environmentally and aesthetically, it is recommended that owners plant Coreopsis, Lavender, Russian Sage, Shasta Daisies, Echinacea, Peonies, Phlox, Nepeta, Hyssop and the like.

7. Livestock and Exotics:

No livestock, poultry, exotic. or other animals/reptiles shall be raised, bred, or kept on any lot, except for dogs, cats and. similar household pets, which may be kept, but not bred or maintained for commercial purposes. No animal of any kind, including dogs and cats, shall be allowed to interfere with the quiet enjoyment of the other residents in the subdivision or permitted untended upon the streets or upon the premises of other occupants of the subdivision. Dogs, cats or similar household pets

shall be limited to a maximum of three.

8. Signs:

No sign, billboard, or advertisement of any kind shall be displayed on or about any Lot to public view except for street numbers and the surnames of residents. Exceptions would include temporary signs like garage/yard sale, signs advertising the property for sale or rent, and signs used by the declarant to advertise or promote the subdivision.

9. Garbage and Refuse Disposal:

No Lot shall be used or maintained as a dumping ground for rubbish. Trash, garbage, scrap metal, old appliances, old mattresses or other waste shall not be kept except in sanitary containers which must be stored within a permitted structure. It is the Resident's responsibility to keep their Lot free from garbage trash, refuse, or other waste on their property whether their own or discarded by others and to make use of the regular/weekly disposal services provided by the Town of Belfast.

10. Grounds:

The grounds, lawn and shrubs shall be kept and maintained in a neat and orderly condition at all times as determined by the Subdivider's standards. No unregistered, junked or "project" vehicles may be stored on the premises except a true restoration project vehicle that is kept inside the garage.

11. Restricted Activities:

Industry, business, trade, occupation, profession, and commercial activities, whether for profit or non-profit purposes, are restricted to those traditional home businesses or work from home scenarios that do not require more than 1 or 2 non-resident's vehicle in attendance at any one time. This language applies to regular businesses and not to the infrequent family yard/garage sale. Signage for any home based business in HHE shall not exceed 12"x 20", can be connected to the house, garage or mailbox but are restricted from the use of any independent, freestanding sign supports.

12. Municipal Rights:

The Town of Belfast shall have the right to enter upon the easement areas as shown with maintenance vehicles as necessary to maintain stormwater drainage flow patterns, Utility systems (Sewer, Water, Power and communications). Lot owners shall not disturb easement areas without agreement between the lot owner and the Town of Belfast.

Map 4 Lot 22
Belfast Water District
285 Northport Avenue
PO Box 506
Belfast, Maine 04915

Map 4 Lot 47-A
Fineline Enterprises
49 Patten Pit Road
Belfast, Maine 04915

Map 4 Lot 62
John Boynton
Gloria Brown
4 Boynton Drive
Belfast, Maine 04915

Map 4 Lot 3
City of Belfast
131 Church Street
Belfast, Maine 04915

Map 4 Lot 103
MOWI Ducktrap, LLC
FKA Ducktrap River of Maine, LC
57 Little River Drive
Belfast, Maine 04915

APPENDIX C

SOILS REPORT

EROSION AND SEDIMENTATION CONTROL PLAN

STORMWATER MANAGEMENT REPORT

LETTER FROM NATURAL AREAS PROGRAM

LETTER FROM INLAND FISHERIES AND WILDLIFE



MARK HAMPTON ASSOCIATES, INC.

SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

7095
August 9, 2022

Mr. Ben Hooper
B & B Midcoast
856 Black Brooks Road
Monroe, ME 04951

Re: Delineation of Wetlands, 100 acre parcel off end of Little River Drive Belfast, ME

Dear Ben,

I completed a wetland delineation on a 100 acre parcel located off the end of Little River Drive Belfast, ME. The wetland delineation was completed in accordance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual for the Northcentral and Northeast Regions dated January 2012. These manuals require the presence of three parameters for a wetland to be present, wetland hydrology, hydrophytic vegetation, and hydric soils.

The wetlands I found on the parcel were flagged with yellow flagging. The wetland flags are labeled in an alpha-numeric sequence and were located with a handheld GPS unit with accuracy to less than 36 inches. This information has been forwarded to Plymouth Engineering. The wetlands found onsite are forested wetlands. Those wetlands delineated on the property do not meet the definition of wetlands of special significance as defined by Maine Department of Environmental Protection.

If you have any questions or require additional information, please contact me.

Sincerely,

Mark J. Hampton C.S.S., L.S.E.
Certified Soil Scientist #216
Licensed Site Evaluator #263



MARK HAMPTON ASSOCIATES, INC.

SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

7095

Little River Subdivision
Little River Drive
Belfast, ME
B&B Midcoast Properties

Soil Narrative Report

DATE: Soil Profiles observed on August 23, 2022.

BASE MAP: Base plan provided by Plymouth Engineering, Inc. Scale
1 inch equals 150 feet and two foot contours.

GROUND CONTROL: Soil survey boundaries located by Mark Hampton Associates,
Inc. for Class B Soil Survey

Class B-High Intensity Soil Survey (Minimum Standards)

Mapping units of 1 acre or less.
Scale of 1"= 200 feet or larger.
Up to 25% inclusions in mapping units of which no more than 15% may be dissimilar
soils.
Ground Control – test pits located by means of compass by chaining, pacing or taping
from know survey control points
Base Map –2 foot contour intervals.

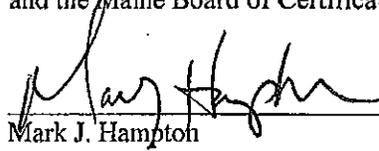
Provided:

Mapping units of 1/2 acre or larger
Base map scale of 1"= 150 feet.
Up to 25 percent inclusions in mapping units of which no more than 15 percent is
dissimilar soils.
Baseline information and test pits located by pacing and taping from know survey control
points.
Ground topographic survey with two foot contours and ground control provided.

P.O. BOX 1931 • PORTLAND, ME 04104-1931 • 207-756-2900 • mhampto1@maine.rr.com

Quality services that meet your deadline

The accompanying soil profile descriptions, soil map, and this soil narrative report were done in accordance with the standards adopted by the Maine Association of Professional Soil Scientists, and the Maine Board of Certification of Geologists and Soil Scientists.

 C.S.S. #216, L.S.E. #263 Nov. 10, 2022
Mark J. Hampton Date





MARK HAMPTON ASSOCIATES, INC.

SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

7095

Little River Subdivision
Little River Drive
Belfast, ME
B&B Midcoast Properties

Peru
(Aquic Haplorthods)

SETTING

PARENT MATERIAL: Derived from lodgment till
LANDFORM: Glaciated uplands on hills and mountains
POSITION IN LANDSCAPE: Mid-positions on landform
SLOPE GRADIENT RANGES: (A) 0-3%, (B) 3-8%,(C) 8-15%

COMPOSITION AND SOIL CHARACTERISTICS

DRAINAGE CLASS: Modertatley Well-Drained
TYPICAL PROFILE: Surface Layer: Dark brown, fine sandy loam 0-8"
Subsurface Layer: Dark Yellow brown, fine sandy loam, 8-15"
Subsoil Layer: Olive Brown, fine sandy loam, 15-26"
Substratum: Olive gray fine sandy loam, 26-65"

HYDROLOGIC GROUP: Group C
SURFACE RUNOFF: Medium to Rapid
PERMEABILITY: Slow or very Slow
DEPTH TO BEDROCK: Greater than 65 inches
HAZARD TO FLOODING: None

INCLUSIONS
(Within Mapping Unit)

CONTRASTING: Swanville, Boothbay

USE AND MANAGEMENT

Development: The limiting factor for building site development is wetness due to the presence of a high watertable for a portion of the year. Proper foundation drainage or site modification is recommended.





MARK HAMPTON ASSOCIATES, INC.

SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

7095

Little River Subdivision
Little River Drive
Belfast, ME
B&B Midcoast Properties

Boothbay
(Aquic Dystric Eutrudepts)

SETTING

PARENT MATERIAL: Glaciolacustrine and glaciomarine deposits
LANDFORM: Lake plains and river terraces
POSITION IN LANDSCAPE: Plains and lower levels.
SLOPE GRADIENT RANGES: (C) 8-15%, (D) 15-25%, (E) >25%

COMPOSITION AND SOIL CHARACTERISTICS

DRAINAGE CLASS: Moderately and somewhat poorly drained, depth to seasonal high watertable ranges from 0.5 to 1.5 feet below the surface at some time from November to May.

TYPICAL PROFILE:

<u>Surface Layer:</u>	Dark Reddish Brown, silt loam, 0-7"
<u>Subsurface Layer:</u>	Dark Brown silt loam, 7-15"
<u>Subsoil Layer:</u>	Lt Olive Brown, silt loam 15-20"
<u>Substratum:</u>	Olive, Gravelly silt loam, 20-65"

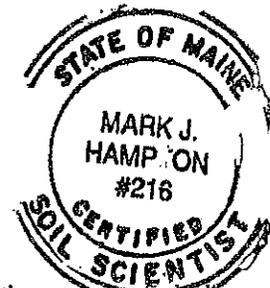
HYDROLOGIC GROUP: Group C
SURFACE RUNOFF: Slow to moderate
PERMEABILITY: Moderate in solum, slow to very slow in substratum
DEPTH TO BEDROCK: Greater than 65 inches
HAZARD TO FLOODING: None

INCLUSIONS
(Within Mapping Unit)

CONTRASTING: Peru, Swanville

USE AND MANAGEMENT

Development: The limiting factor for building site development is wetness due to the presence of a high watertable for a portion of the year. Proper foundation drainage or site modification is recommended.





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Little River Subdivision
Little River Drive
Belfast, ME
B&B Midcoast Properties

Swanville
(Aeric Epiaquepts)

SETTING

PARENT MATERIAL: Glaciolacustrine or glaciomarine deposits
LANDFORM: Lake and marine plains, deltas
POSITION IN LANDSCAPE: Intermediate positions on landform
SLOPE GRADIENT RANGES: (A) 0-3%, (B) 3-8%

COMPOSITION AND SOIL CHARACTERISTICS

DRAINAGE CLASS: Poorly drained with a perched watertable from 0 to 1.5 feet below the surface at some time from November to May or during periods of heavy precipitation.

TYPICAL PROFILE: Surface Layer: Dark Brown silt loam 0-6"
Subsurface Layer: Olive gray silt loam 6-15"
Subsoil Layer: Olive silt loam, 15-22"
Substratum: Olive silt loam, 22-65"

HYDROLOGIC GROUP: Group D
SURFACE RUNOFF: Moderate to moderately slow
PERMEABILITY: Slow to very slow
DEPTH TO BEDROCK: Greater than 65 inches
HAZARD TO FLOODING: None

INCLUSIONS
(Within Mapping Unit)

CONTRASTING: Boothbay, Peru

USE AND MANAGEMENT

Development: The limiting factor for building site development is wetness due to the presence of a high watertable for a portion of the year. Proper foundation drainage or site modification is recommended. This soil is hydric in the poorly drained phase.





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Little River Subdivision
Little River Drive
Belfast, ME
B&B Midcoast Properties

Made Land

SETTING

PARENT MATERIAL: Derived from various materials found onsite.
LANDFORM: N/A
POSITION IN LANDSCAPE: N/A
SLOPE GRADIENT RANGES: (D) 15-25%

COMPOSITION AND SOIL CHARACTERISTICS

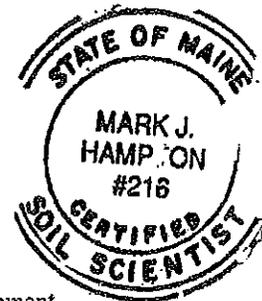
DRAINAGE CLASS: Generally moderately well drained.
TYPICAL PROFILE: Varies in profile and onsite from fine sandy loam to coarse sandy loam.
HYDROLOGIC GROUP: Group C
SURFACE RUNOFF: Usually very slow due to compaction
PERMEABILITY: Slow to very slow
DEPTH TO BEDROCK: Greater than 65 inches
HAZARD TO FLOODING: None

INCLUSIONS
(Within Mapping Unit)

CONTRASTING: Peru, Boothbay, Swanville

USE AND MANAGEMENT

Development: There may be limiting factors for building site development.



SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: **Little River Subdivision** Applicant Name: **B & B Midcoast Properties** Project Location (municipality): **Belfast**

Exploration Symbol # SS-1 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
A/O	Dark Brown	F. Sandy Loam	Weak Fine	Very Friable	
Bs1	Brown	F. Sandy Loam	Weak Fine Ang	Friable	
Bs2	Olive Brown	Fine Sandy Loam	Weak Fine Grand	Firm	Common and Distinct
Cd	Olive Gray	Fine Sandy Loam	Platy	Firm	

Soil Series/Phase Name: **Peru** Limiting Factor **16** Groundwater Restrictive Layer Bedrock
 Depth: _____
 Drainage Class: ED SED WD MWD SPD PD VPD Slope **2** Hydric Soil No Yes Hydrologic _____
 Soil Group: _____

Exploration Symbol # SS-2 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	F. Sandy Loam	Weak Angular	Very Friable	
Bg	Brown	F. Sandy Loam	Weak Fine Ang	Friable	
Bg	Olive Brown	Fine Sandy Loam	Weak Fine Grand	Firm	Common and Distinct
Cd	Olive	Fine Sandy Loam	Medium Platy	Very Firm	

Soil Series/Phase Name: **Peru** Limiting Factor **15** Groundwater Restrictive Layer Bedrock
 Depth: _____
 Drainage Class: ED SED WD MWD SPD PD VPD Slope **4** Hydric Soil No Yes Hydrologic _____
 Soil Group: _____

Exploration Symbol # SS-3 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Varies					

Soil Series/Phase Name: **Made Land** Limiting Factor **NA** Groundwater Restrictive Layer Bedrock
 Depth: _____
 Drainage Class: ED SED WD MWD SPD PD VPD Slope **12** Hydric Soil No Yes Hydrologic _____
 Soil Group: _____

Exploration Symbol # SS-4 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

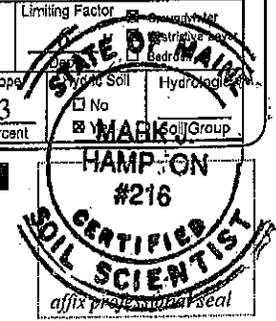
Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Olive	Silt Loam	Fine Grandul.	Friable	Common and Distinct
Bg	Olive Gray	Silt Loam	Fine Grandul.	Firm	
C1	Olive Gray	Silt Loam	Platy	Very Firm	

Soil Series/Phase Name: **Swanville** Limiting Factor _____ Groundwater Restrictive Layer Bedrock
 Depth: _____
 Drainage Class: ED SED WD MWD SPD PD VPD Slope **3** Hydric Soil No Yes Hydrologic _____
 Soil Group: _____

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SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: **Little River Subdivision** Applicant Name: **B & B Midcoast Properties** Project Location (municipality): **Belfast**

Exploration Symbol # SS-5 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
A/O	Dark Brown	F. Sandy Loam	Weak Fine Gran	Very Friable	
Bs1	Brown	F. Sandy Loam	Weak Fine Ang	Friable	
Bs2	Olive Brown	Fine Sandy Loam	Weak Fine Grand	Firm	Common and Distinct
Cd	Olive Gray	Fine Sandy Loam	Platy	Firm	

Soil Series/Phase Name: **Peru** Limiting Factor **16** Groundwater
 Depth Restrictive Layer
 Bedrock

Drainage Class: ED SED WD MWD
 SPD PD VPD Slope **6** Hydric Soil No Hydrologic
 Percent Yes Soil Group

Exploration Symbol # SS-6 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	F. Sandy Loam	Weak Angular	Very Friable	
Bg	Brown	F. Sandy Loam	Weak Fine Ang	Friable	
Bg	Olive Brown	Fine Sandy Loam	Weak Fine Grand	Firm	Common and Distinct
Cd	Olive	Fine Sandy Loam	Medium Platy	Very Firm	

Soil Series/Phase Name: **Peru** Limiting Factor **15** Groundwater
 Depth Restrictive Layer
 Bedrock

Drainage Class: ED SED WD MWD
 SPD PD VPD Slope **4** Hydric Soil No Hydrologic
 Percent Yes Soil Group

Exploration Symbol # SS-7 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Olive	Silt Loam	Fine Grand	Friable	Common and Distinct
Bg	Olive Gray	Silt Loam	Fine Grand	Firm	
G1	Olive Gray	Silt Loam	Platy	Very Firm	

Soil Series/Phase Name: **Swanville** Limiting Factor **6** Groundwater
 Depth Restrictive Layer
 Bedrock

Drainage Class: ED SED WD MWD
 SPD PD VPD Slope **2** Hydric Soil No Hydrologic
 Percent Yes Soil Group

Exploration Symbol # SS-8 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
A/O	Dark Brown	F. Sandy Loam	Weak Fine Gran	Friable	
Bs1	Brown	F. Sandy Loam	Weak Fine Ang	Friable	
Bs2	Olive Brown	F. Sandy Loam	Weak Fine Grandul	Firm	Common and Distinct
Gd	Olive Gray	F. Sandy Loam	Platy	Very Firm	

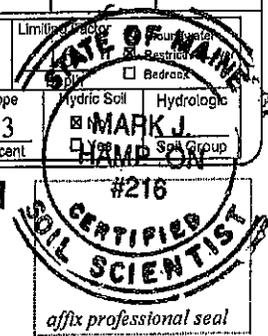
Soil Series/Phase Name: **Peru** Limiting Factor **13** Groundwater
 Depth Restrictive Layer
 Bedrock

Drainage Class: ED SED WD MWD
 SPD PD VPD Slope **13** Hydric Soil No Hydrologic
 Percent Yes Soil Group

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SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: Little River Subdivision Applicant Name: B & B Midcoast Properties Project Location (municipality): Belfast

Exploration Symbol # SS-9 Test Pit Boring Probe Organic horizon thickness Ground surface elev. Depth: of exploration, or to refusal. Soil Series/Phase Name: Swanville Limiting Factor 6 Depth Drainage Class Slope 2 Percent Hydric Soil No Yes Hydrologic Soil Group

Exploration Symbol # SS-10 Test Pit Boring Probe Organic horizon thickness Ground surface elev. Depth: of exploration, or to refusal. Soil Series/Phase Name: Peru Limiting Factor 16 Depth Drainage Class Slope 4 Percent Hydric Soil No Yes Hydrologic Soil Group

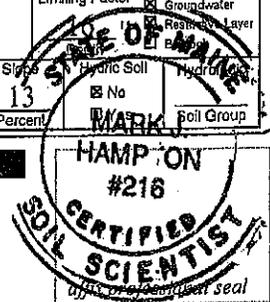
Exploration Symbol # SS-11 Test Pit Boring Probe Organic horizon thickness Ground surface elev. Depth: of exploration, or to refusal. Soil Series/Phase Name: Swanville Limiting Factor 6 Depth Drainage Class Slope 2 Percent Hydric Soil No Yes Hydrologic Soil Group

Exploration Symbol # SS-12 Test Pit Boring Probe Organic horizon thickness Ground surface elev. Depth: of exploration, or to refusal. Soil Series/Phase Name: Peru Limiting Factor 13 Depth Drainage Class Slope 13 Percent Hydric Soil No Yes Hydrologic Soil Group

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SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: Little River Subdivision Applicant Name: B & B Midcoast Properties Project Location (municipality): Belfast

Exploration Symbol # SS-13 Test Pit Boring Probe Organic horizon thickness Ground surface elev. Depth: of exploration, or to refusal. Soil Series/Phase Name: Boothbay Limiting Factor 12 Drainage Class Slope 18 Hydric Soil No Hydrologic Soil Group

Exploration Symbol # SS-14 Test Pit Boring Probe Organic horizon thickness Ground surface elev. Depth: of exploration, or to refusal. Soil Series/Phase Name: Swanville Limiting Factor 6 Drainage Class Slope 4 Hydric Soil No Hydrologic Soil Group

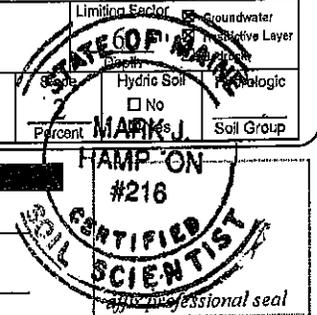
Exploration Symbol # SS-15 Test Pit Boring Probe Organic horizon thickness Ground surface elev. Depth: of exploration, or to refusal. Soil Series/Phase Name: Boothbay Limiting Factor 11 Drainage Class Slope 16 Hydric Soil No Hydrologic Soil Group

Exploration Symbol # SS-16 Test Pit Boring Probe Organic horizon thickness Ground surface elev. Depth: of exploration, or to refusal. Soil Series/Phase Name: Swanville Limiting Factor 6 Drainage Class Slope 4 Hydric Soil No Hydrologic Soil Group

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SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: Little River Subdivision Applicant Name: B & B Midcoast Properties Project Location (municipality): Belfast

Exploration Symbol # SS-17 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
A/O	Dark Brown	F. Sandy Loam	W. Fine Grand	Friable	
Bs1	Yellow Brown	F. Sandy Loam	W. Fine Ang	Friable	
Bs2	Olive Brown	Fine Sandy Loam	Weak Fine Grand	Firm	Common and Distinct
Cd	Olive Gray	Fine Sandy Loam	Platy	Very Firm	

Soil Series/Phase Name: Peru Limiting Factor 17 Groundwater
 Restrictive Layer Bedrock
 Drainage Class: ED SED WD MWD
 SPD PD VPD Slope 4 Hydric Soil Hydrologic
 Percent No Yes Soil Group

Exploration Symbol # SS-18 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
A/O	Dark Brown	F. Sandy Loam	Fine Grand	Friable	
Bs1	Yellow Brown	F. Sandy Loam	Fine Grand	Friable	
Bs2	Olive Brown	F. Sandy Loam	Weak Fine Grand	Firm	Common and Distinct
Cd	Olive Gray	F. Sandy Loam	Medium Platy	Very Firm	

Soil Series/Phase Name: Peru Limiting Factor 15 Groundwater
 Restrictive Layer Bedrock
 Drainage Class: ED SED WD MWD
 SPD PD VPD Slope 10 Hydric Soil Hydrologic
 Percent No Yes Soil Group

Exploration Symbol # SS-19 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Yellow Brown	Silt Loam	Ang Blocky	Friable	Common and Distinct
Bc	Olive Brown	Silt Loam	Ang Blocky	Friable	
C1	Olive Gray	Silt Loam	Platy	Very Firm	

Soil Series/Phase Name: Boothbay Limiting Factor 11 Groundwater
 Restrictive Layer Bedrock
 Drainage Class: ED SED WD MWD
 SPD PD VPD Slope 18 Hydric Soil Hydrologic
 Percent No Yes Soil Group

Exploration Symbol # SS-20 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

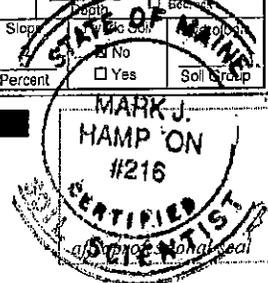
Horizon	Color	Texture	Structure	Consistence	Redox
A/O	Dark Brown	F. Sandy Loam	Weak Fine Grand	Friable	
Bs1	Yellow Brown	F. Sandy Loam	Weak Fine Ang	Friable	
Bs2	Olive Brown	F. Sandy Loam	Weak Fine Grandul	Firm	Common and Distinct
Cd	Olive Gray	F. Sandy Loam	Platy	Very Firm	

Soil Series/Phase Name: Peru Limiting Factor 17 Groundwater
 Restrictive Layer Bedrock
 Drainage Class: ED SED WD MWD
 SPD PD VPD Slope 10 Hydric Soil Hydrologic
 Percent No Yes Soil Group

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SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: Little River Subdivision Applicant Name: B & B Midcoast Properties Project Location (municipality): Belfast

Exploration Symbol # SS-21 ... Soil Series/Phase Name: Boothbay ... Limiting Factor: 12 ... Slope: 18 Percent

Exploration Symbol # SS-22 ... Soil Series/Phase Name: Swanville ... Limiting Factor: 6 ... Slope: 4 Percent

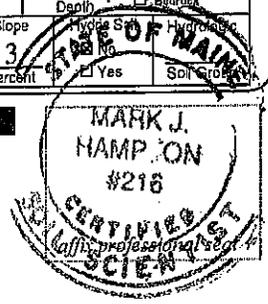
Exploration Symbol # SS-23 ... Soil Series/Phase Name: Boothbay ... Limiting Factor: 11 ... Slope: 18 Percent

Exploration Symbol # SS-24 ... Soil Series/Phase Name: Peru ... Limiting Factor: 17 ... Slope: 3 Percent

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SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: Little River Subdivision Applicant Name: B & B Midcoast Properties Project Location (municipality): Belfast

Exploration Symbol # SS-25. Soil profile table with columns: Horizon, Color, Texture, Structure, Consistence, Redox. Soil Series: Peru. Limiting Factor: 15. Slope: 15 Percent.

Exploration Symbol # SS-26. Soil profile table with columns: Horizon, Color, Texture, Structure, Consistence, Redox. Soil Series: Peru. Limiting Factor: 16. Slope: 12 Percent.

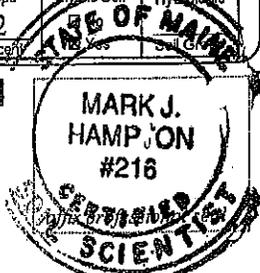
Exploration Symbol # SS-27. Soil profile table with columns: Horizon, Color, Texture, Structure, Consistence, Redox. Soil Series: Boothbay. Limiting Factor: 11. Slope: 18 Percent.

Exploration Symbol # SS-28. Soil profile table with columns: Horizon, Color, Texture, Structure, Consistence, Redox. Soil Series: Swanville. Limiting Factor: 6. Slope: 2 Percent.

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SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: **Little River Subdivision** Applicant Name: **B & B Midcoast Properties** Project Location (municipality): **Belfast**

Exploration Symbol # SS-29 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Yellow Brown	Silt Loam	Ang Blocky	Friable	
BC	Olive Brown	Silt Loam	Ang Blocky	Friable	Common and Distinct
C1	Olive Gray	Silt Loam	Platy	Firm	

Soil Series/Phase Name: **Boothbay** Limiting Factor **10** Groundwater
 Depth Restrictive Layer
 Bedrock

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD **18** No Yes
 SPD PD VPD Percent Bedrock Soil Group

Exploration Symbol # SS-30 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
A/O	Dark Brown	F. Sandy Loam	W. Fine	Friable	
Bs1	Brown	F. Sandy Loam	Weak F. Ang.	Friable	
Bs2	Olive Brown	F. Sandy Loam	Weak Fine	Firm	Common and Distinct
Cd	Olive Gray	F. Sandy Loam	Medium Platy	Firm	

Soil Series/Phase Name: **Peru** Limiting Factor **16** Groundwater
 Depth Restrictive Layer
 Bedrock

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD **6** No Yes
 SPD PD VPD Percent Bedrock Soil Group

Exploration Symbol # SS-31 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Yellow Brown	Silt Loam	Ang Blocky	Friable	
BC	Olive Brown	Silt Loam	Ang Blocky	Friable	Common and Distinct
C1	Olive Gray	Silt Loam	Platy	Very Firm	

Soil Series/Phase Name: **Boothbay** Limiting Factor **11** Groundwater
 Depth Restrictive Layer
 Bedrock

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD **18** No Yes
 SPD PD VPD Percent Bedrock Soil Group

Exploration Symbol # SS-32 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Olive Brown	Silt Loam	Ang Blocky	Friable	
Bg	Olive Gray	Silt Loam	Ang Blocky	Firm	Common and Distinct
C1	Olive Gray	Silt Loam	Platy	Very Firm	

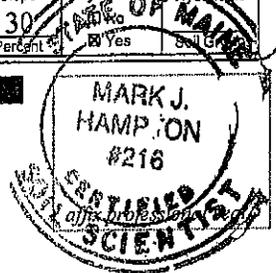
Soil Series/Phase Name: **Boothbay** Limiting Factor **12** Groundwater
 Depth Restrictive Layer
 Bedrock

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD **30** No Yes
 SPD PD VPD Percent Bedrock Soil Group

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SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: Little River Subdivision Applicant Name: B & B Midcoast Properties Project Location (municipality): Belfast

Exploration Symbol # SS-33 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
A/O	Dark Brown	Sandy Loam	Grand	Friable	
Bs1	Brown	F. Sandy Loam	Weak Fine Ang	Friable	
Bs2	Olive Brown	F. Sandy Loam	Weak Fine Grand	Firm	Common and Distinct
Cd	Olive Gray	F. Sandy Loam	Platy	Firm	

Soil Series/Phase Name: Peru Limiting Factor 18 Groundwater
 Restrictive Layer
 Bedrock

Drainage Class: ED SED WD MWD
 SPD PD VPD Slope 5 Hydric Soil No Hydrologic
 Percent Yes Soil Group

Exploration Symbol # SS-34 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	W. Fine Grand	Friable	
Bw	Yellow Brown	Silt Loam	Weak F. Ang.	Friable	
BC	Olive Brown	Silt Loam	Weak Fine Grand	Firm	Common and Distinct
C1	Olive Gray	Silt Loam	Medium Platy	Firm	

Soil Series/Phase Name: Boothbay Limiting Factor 13 Groundwater
 Restrictive Layer
 Bedrock

Drainage Class: ED SED WD MWD
 SPD PD VPD Slope 26 Hydric Soil No Hydrologic
 Percent Yes Soil Group

Exploration Symbol # SS-35 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Olive	Silt Loam	Ang Blocky	Friable	Common and Distinct
Bg	Olive Gray	Silt Loam	Ang Blocky	Friable	
C1	Olive Gray	Silt Loam	Platy	Very Firm	

Soil Series/Phase Name: Swanville Limiting Factor 6 Groundwater
 Restrictive Layer
 Bedrock

Drainage Class: ED SED WD MWD
 SPD PD VPD Slope 4 Hydric Soil No Hydrologic
 Percent Yes Soil Group

Exploration Symbol # SS-36 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Olive	Silt Loam	Ang Blocky	Friable	Common and Distinct
Bg	Olive Gray	Silt Loam	Ang Blocky	Firm	
C1	Olive Gray	Silt Loam	Platy	Very Firm	

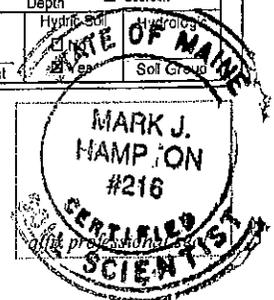
Soil Series/Phase Name: Swanville Limiting Factor 6 Groundwater
 Restrictive Layer
 Bedrock

Drainage Class: ED SED WD MWD
 SPD PD VPD Slope 4 Hydric Soil No Hydrologic
 Percent Yes Soil Group

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SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: **Little River Subdivision** Applicant Name: **B & B Midcoast Properties** Project Location (municipality): **Belfast**

Exploration Symbol # SS-37 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Olive	Silt Loam	Ang Blocky	Friable	
Bg	Olive Gray	Silt Loam	Ang Blocky	Firm	Common and Distinct
C1	Olive Gray	Silt Loam	Platy	Very Firm	

Soil Series/Phase Name: **Boothbay** Limiting Factor **11** Groundwater
 Depth Restrictive Layer
 Bedrock

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD **25** No Yes
 SPD PD VPD Percent No Yes Soil Group

Exploration Symbol # SS-38 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
A/O	Dark Brown	F. Sandy Loam	W. Fine Grand	Friable	
Bs1	Brown	F. Sandy Loam	Weak F. Ang.	Friable	
Bs2	Olive Brown	F. Sandy Loam	Weak Fine Grand	Firm	Common and Distinct
Cd	Olive Gray	F. Sandy Loam	Medium Platy	Firm	

Soil Series/Phase Name: **Peru** Limiting Factor **17** Groundwater
 Depth Restrictive Layer
 Bedrock

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD **6** No Yes
 SPD PD VPD Percent No Yes Soil Group

Exploration Symbol # SS-39 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Yel. Brwn	Silt Loam	Ang Blocky	Friable	
Bc	Olive Brown	Silt Loam	Ang Blocky	Friable	Common and Distinct
C1	Olive Gray	Silt Loam	Platy	Very Firm	

Soil Series/Phase Name: **Boothbay** Limiting Factor **10** Groundwater
 Depth Restrictive Layer
 Bedrock

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD **24** No Yes
 SPD PD VPD Percent No Yes Soil Group

Exploration Symbol # SS-40 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
A/O	Dark Brown	F. Sandy Loam	Weak F. Grand	Friable	
Bs1	Yellow Brown	F. Sandy Loam	Weak Fine Ang.	Friable	
Bs2	Olive Brown	F. Sandy Loam	Weak Fine Grand	Firm	Common and Distinct
Cd	Olive Gray	F. Sandy Loam	Platy	Very Firm	

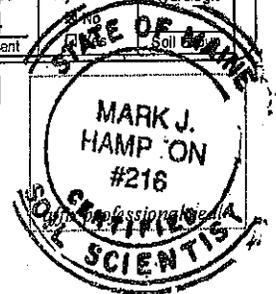
Soil Series/Phase Name: **Peru** Limiting Factor **18** Groundwater
 Depth Restrictive Layer
 Bedrock

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD **4** No Yes
 SPD PD VPD Percent No Yes Soil Group

SOIL SCIENTIST INFORMATION AND SIGNATURE

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SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: **Little River Subdivision** Applicant Name: **B & B Midcoast Properties** Project Location (municipality): **Belfast**

Exploration Symbol # SS-41 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Olive	Silt Loam	Ang Blocky	Friable	
Bg	Olive Gray	Silt Loam	Ang Blocky	Firm	Common and Distinct
C1	Olive Gray	Silt Loam	Platy	Very Firm	

Soil Series/Phase Name: **Boothbay** Limiting Factor **11** Groundwater
 Restrictive Layer
 Bedrock
 Depth

Drainage Class: ED SED WD MWD SPD PD VPD
 Slope **25** Percent
 Hydric Soil: No Yes
 Hydrologic: _____
 Soil Group: _____

Exploration Symbol # SS-42 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Olive	Silt Loam	Fine Grand	Friable	Common and Distinct
Bg	Olive Gray	Silt Loam	Fine Grand	Firm	
C1	Olive Gray	Silt Loam	Medium Platy	Firm	

Soil Series/Phase Name: **Swanville** Limiting Factor **6** Groundwater
 Restrictive Layer
 Bedrock
 Depth

Drainage Class: ED SED WD MWD SPD PD VPD
 Slope **2** Percent
 Hydric Soil: No Yes
 Hydrologic: _____
 Soil Group: _____

Exploration Symbol # SS-43 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Yel. Brwn	Silt Loam	Ang Blocky	Friable	
Bc	Olive Brown	Silt Loam	Ang Blocky	Friable	Common and Distinct
C1	Olive Gray	Silt Loam	Platy	Very Firm	

Soil Series/Phase Name: **Boothbay** Limiting Factor **10** Groundwater
 Restrictive Layer
 Bedrock
 Depth

Drainage Class: ED SED WD MWD SPD PD VPD
 Slope **24** Percent
 Hydric Soil: No Yes
 Hydrologic: _____
 Soil Group: _____

Exploration Symbol # SS-44 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Olive	Silt Loam	Fine Grand	Friable	Common and Distinct
Bg	Olive Gray	Silt Loam	Fine Grand	Firm	
C1	Olive Gray	Silt Loam	Platy	Very Firm	

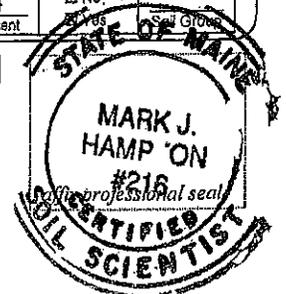
Soil Series/Phase Name: **Swanville** Limiting Factor **6** Groundwater
 Restrictive Layer
 Bedrock
 Depth

Drainage Class: ED SED WD MWD SPD PD VPD
 Slope **4** Percent
 Hydric Soil: No Yes
 Hydrologic: _____
 Soil Group: _____

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SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: Little River Subdivision Applicant Name: B & B Midcoast Properties Project Location (municipality): Belfast

Exploration Symbol # SS-45 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Olive	Silt Loam	Ang Blocky	Friable	
Bg	Olive Gray	Silt Loam	Ang Blocky	Firm	Common and Distinct
C1	Olive Gray	Silt Loam	Platy	Very Firm	

Soil Series/Phase Name: Boothbay Limiting Factor 11 " Groundwater
 Restrictive Layer
 Bedrock
 Depth

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD 25 No Yes
 SPD PD VPD Percent Yes Soil Group

Exploration Symbol # SS-46 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
A/O	Dark Brown	F. Sandy Loam	Weak Fine	Friable	
Bs1	Brown	F. Sandy Loam	Weak Fine Ang	Friable	
Bs2	Olive Brown	F. Sandy Loam	Weak Fine Grand	Firm	Common and Distinct
Cd	Olive Gray	F. Sandy Loam	Medium Platy	Firm	

Soil Series/Phase Name: Peru Limiting Factor 16 " Groundwater
 Restrictive Layer
 Bedrock
 Depth

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD 8 No Yes
 SPD PD VPD Percent Yes Soil Group

Exploration Symbol # SS-47 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Yel. Brwn	Silt Loam	Ang Blocky	Friable	
Bc	Olive Brown	Silt Loam	Ang Blocky	Friable	Common and Distinct
C1	Olive Gray	Silt Loam	Platy	Very Firm	

Soil Series/Phase Name: Boothbay Limiting Factor 12 " Groundwater
 Restrictive Layer
 Bedrock
 Depth

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD 28 No Yes
 SPD PD VPD Percent Yes Soil Group

Exploration Symbol # SS-48 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
A/O	Dark Brown	F. Sandy Loam	W. Fine	Friable	
Bs1	Brown	F. Sandy Loam	W. Fine Ang	Friable	
Bs2	Olive Brown	F. Sandy Loam	Weak Fine Grand	Firm	Common and Distinct
Cd	Olive Gray	F. Sandy Loam	Platy	Firm	

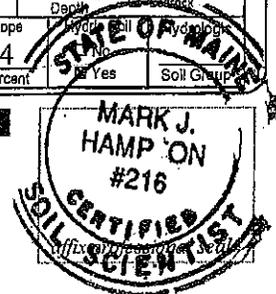
Soil Series/Phase Name: Peru Limiting Factor 15 " Groundwater
 Restrictive Layer
 Bedrock
 Depth

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD 4 No Yes
 SPD PD VPD Percent Yes Soil Group

SOIL SCIENTIST INFORMATION AND SIGNATURE

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SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: Little River Subdivision Applicant Name: B & B Midcoast Properties Project Location (municipality): Belfast

Exploration Symbol # SS-49 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Olive	Silt Loam	Ang Blocky	Friable	
Bg	Olive Gray	Silt Loam	Ang Blocky	Firm	Common and Distinct
C1	Olive Gray	Silt Loam	Platy	Very Firm	

Soil Series/Phase Name: Boothbay Limiting Factor 11 Groundwater
 Restrictive Layer
 Bedrock
 Depth

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD 25 No _____
 SPD PD VPD Percent Yes Soil Group

Exploration Symbol # SS-50 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Olive	Silt Loam	Fine Grand	Friable	Common and Distinct
Bg	Olive Gray	Silt Loam	Fine Grand	Firm	
C1	Olive Gray	Silt Loam	Medium Platy	Firm	

Soil Series/Phase Name: Swanville Limiting Factor 6 Groundwater
 Restrictive Layer
 Bedrock
 Depth

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD 2 No _____
 SPD PD VPD Percent Yes Soil Group

Exploration Symbol # SS-51 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Olive	Silt Loam	Ang Blocky	Friable	
Bg	Olive Gray	Silt Loam	Ang Blocky	Firm	Common and Distinct
C1	Olive Gray	Silt Loam	Platy	Firm	

Soil Series/Phase Name: Boothbay Limiting Factor 12 Groundwater
 Restrictive Layer
 Bedrock
 Depth

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD 20 No _____
 SPD PD VPD Percent Yes Soil Group

Exploration Symbol # SS-52 Test Pit Boring Probe
 " Organic horizon thickness Ground surface elev. _____
 " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Friable	
Bw	Olive	Silt Loam	Ang Blocky	Friable	Common and Distinct
Bg	Olive Gray	Silt Loam	Ang Blocky	Firm	
C1	Olive Gray	Silt Loam	Platy	Firm	

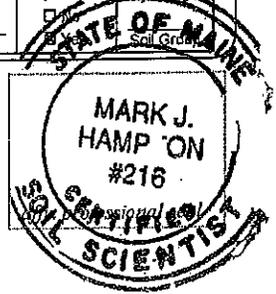
Soil Series/Phase Name: Swanville Limiting Factor 6 Groundwater
 Restrictive Layer
 Bedrock
 Depth

Drainage Class Slope Hydric Soil Hydrologic
 ED SED WD MWD 2 No _____
 SPD PD VPD Percent Yes Soil Group

SOIL SCIENTIST INFORMATION AND SIGNATURE

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MARK HAMPTON ASSOCIATES, INC.

SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

7095

January 20, 2023

Mr. Ben Hooper
B & B Midcoast
856 Black Brooks Road
Monroe, ME 04951

Re: Preliminary Soil Evaluation Phase 1 Little River Subdivision, Belfast, ME

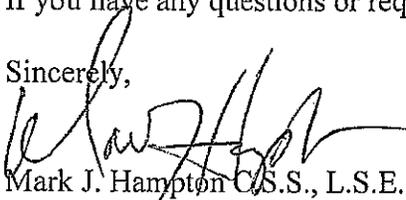
Dear Ben,

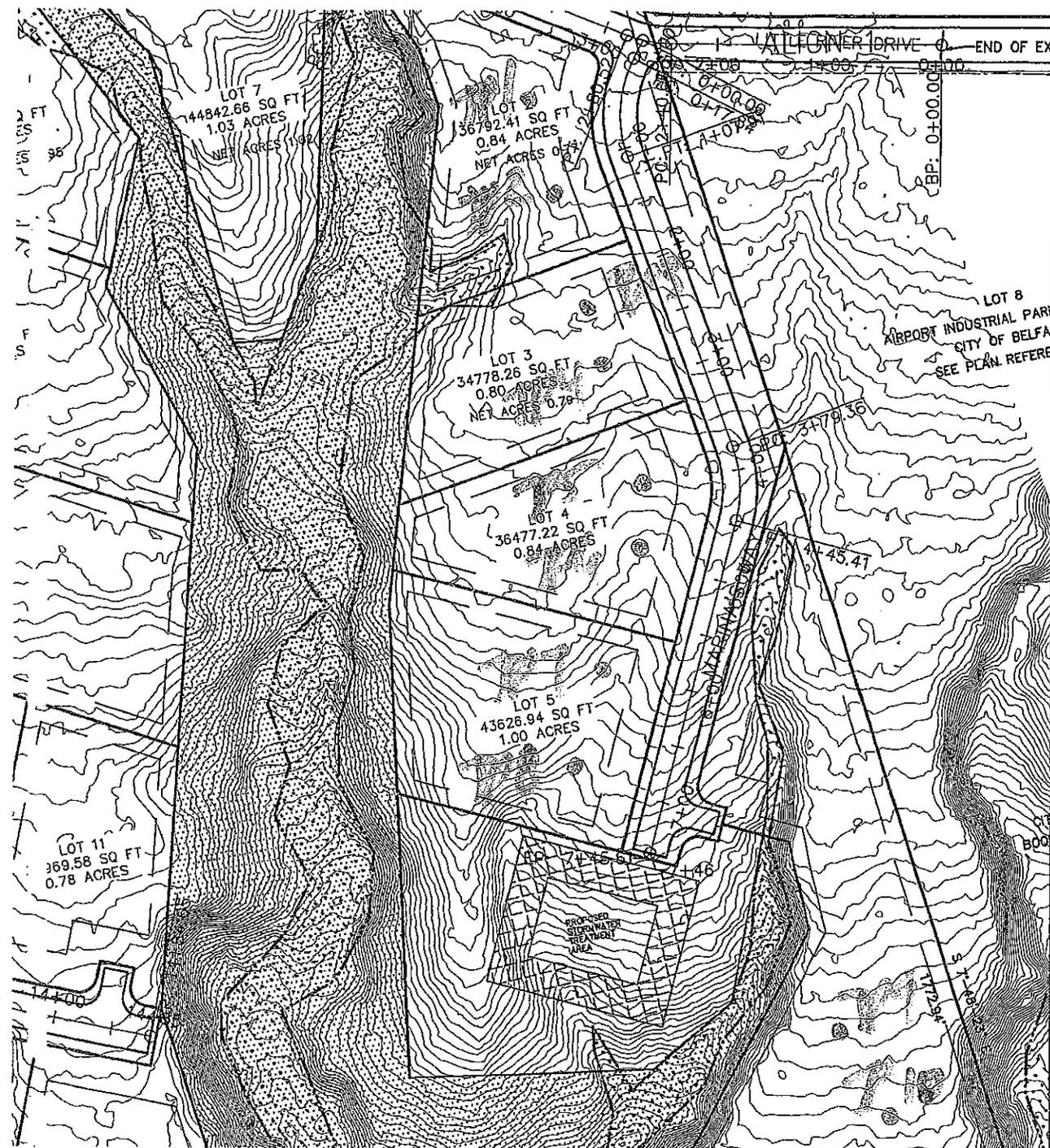
I have completed a preliminary soil evaluation on Phase 1 of the Little River Subdivision Belfast, ME. The soil evaluation was conducted in accordance with the Maine Subsurface Wastewater Disposal Rules dated August 2015, as amended. I evaluated two hand-excavated soil test pits on each proposed lot. The soils found on the lot in this area are moderately well drained glacial till soils. The depth to the limiting factor was 15 to 17 inches.

The soils as evaluated meet the minimum requirements of the state rules. In my opinion, there are suitable soils and area on each lot for a septic system. The disposal bed for a three-bedroom home could be an Eljen Indrain system with a footprint of 15x20 ft. A septic design can be completed at some time in the future.

If you have any questions or require additional information, please contact me.

Sincerely,


Mark J. Hampton C.S.S., L.S.E.
Certified Soil Scientist #216
Licensed Site Evaluator #263



GENERAL NOTES

1. BOUNDARY PROVIDED BY GOOD AND CLIENT.
2. TOPOGRAPHY PROPERTY FEATURES INC., BELFAST, N
3. THE LOCATION ABOVE AND UNDER WATER, ELECTRIC SEWER ARE APPLICABLE BEFORE ANY EXCAVATION.
4. OVERHEAD LINES ESTABLISHED BY TRANSFORMER PLANT UNITS.
5. FEDERAL, STATE REGULATIONS RESORT OF EXCAVATION, BACKFILLING, OR "DIG-SAFE" (1-1) APPLICABLE UTIL IN "DIG-SAFE", COMMENCING WORK.
6. FINAL LOCATION APPLICABLE UTIL.
7. WETLAND IN HAMPTON, CSS,
8. BOUNDARY PROPERTY OF CITY OF BELFAST REGISTRY OF DEEDS RIVER DRIVE, BELFAST.
9. PLAN REFERENCE:
 - a. THE PLAN DATED DECEMBER 17, 1991 BY GOOD AND CLIENT WALDO COUNTY DRAWER 1, PAGE 16.
 - b. REVISED SURVEY INDUSTRY DECEMBER 17, 1991 BY GOOD AND CLIENT WALDO COUNTY DRAWER 16, PAGE 16.
10. CERTIFICATE THIS SURVEY FORTH BY THE PROFESSIONAL ENGINEER FOLLOWING EXCEPT

SOIL PROFILE / CLASSIFICATION INFORMATION		SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES	
Project Name: Little River Subdivison	Applicant Name: B&B Midcoast Properties	Project Location (municipality): Belfast	

Exploration Symbol # TP-1 Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
0-10	Ap Dark Brown	F. Sandy Loam	Grand	Very Friable	
10-20	Bs1 Brown	F. Sandy Loam	Weak Sub Ang Blocky	Firm	
20-40	Bc Yellowish Brown	Fine Sandy Loam	Fine Grandu	Firm	Common and Distinct
40-60	Cd Olive Gray	Fine Sandy Loam	Platy	Very Firm	

Depth below mineral soil horizon (inches)

Soil Series/Phase Name: Peru	Limiting Factor 16 "	<input checked="" type="checkbox"/> Groundwater	<input checked="" type="checkbox"/> Restrictive Layer	<input type="checkbox"/> Bedrock
Drainage Class <input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input checked="" type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD	Slope 4 Percent	Hydric Soil <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Hydrologic Soil Group	

Exploration Symbol # TP-2 Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
0-10	Ap Dark Brown	F. Sandy Loam	Weak Angular	Very Friable	
10-20	Bs1 Brown	F. Sandy Loam	Sub Ang Blocky	Friable	
20-40	Bc Yellowish Brown	Fine Sandy Loam	Thin Platy	Firm	Common and Distinct
40-60	Cd Olive Gray	Fine Sandy Loam	Medium Platy	Very Firm	

Depth below mineral soil horizon (inches)

Soil Series/Phase Name: Peru	Limiting Factor 15 "	<input checked="" type="checkbox"/> Groundwater	<input checked="" type="checkbox"/> Restrictive Layer	<input type="checkbox"/> Bedrock
Drainage Class <input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input checked="" type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD	Slope 4 Percent	Hydric Soil <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Hydrologic Soil Group	

Exploration Symbol # TP-3 Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
0-10	Ap Dark Brown	F. Sandy Loam	Fine Grandu	Friable	
10-20	Bs1 Brown	Fine Sandy Loam	Weak Sub Ang Blocky	Friable	
20-30	Bc Yellowish Brown	Fine Sandy Loam	Thin Platy	Firm	Common and Distinct
30-60	Cd Olive Gray	Fine Sandy Loam	Medium Platy	Very Firm	

Depth below mineral soil horizon (inches)

Soil Series/Phase Name: Peru	Limiting Factor 16 "	<input checked="" type="checkbox"/> Groundwater	<input checked="" type="checkbox"/> Restrictive Layer	<input type="checkbox"/> Bedrock
Drainage Class <input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input checked="" type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD	Slope 4 Percent	Hydric Soil <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Hydrologic Soil Group	

Exploration Symbol # TP-4 Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
0-10	Ap Dark Brown	F. Sandy Loam	Grand	Friable	
10-20	Bs1 Brown	F. Sandy Loam	Weak Sub Ang Blocky	Friable	
20-30	Bs Yellowish Brown	Fine Sandy Loam	Platy	Firm	Common and Distinct
30-60	Cd Olive Gray	Fine Sandy Loam	Medium Platy	Very Firm	

Depth below mineral soil horizon (inches)

Soil Series/Phase Name: Peru	Limiting Factor 17 "	<input checked="" type="checkbox"/> Groundwater	<input checked="" type="checkbox"/> Restrictive Layer	<input type="checkbox"/> Bedrock
Drainage Class <input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input checked="" type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD	Slope 6 Percent	Hydric Soil <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Hydrologic Soil Group	

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 Signature Mark J. Hampton Name Printed	1/20/2023 Date 243/216 License No.
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SOIL PROFILE / CLASSIFICATION INFORMATION **SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES**

Project Name: Little River Subdivison Applicant Name: B&B Midcoast Properties Project Location (municipality): Belfast

Exploration Symbol # TP-5 Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	F. Sandy Loam	Grand	Very Friable	
Bs1	Brown	F. Sandy Loam	Weak Sub Ang Blocky	Firm	
BC	Yellowish Brown	Fine Sandy Loam	Fine Grandu	Firm	Common and Distinct
Cd	Olive Gray	Fine Sandy Loam	Platy	Very Firm	

Soil Series/Phase Name: Peru Limiting Factor 17 Groundwater Restrictive Layer Bedrock
 Depth _____

Drainage Class: ED SED WD MWD SPD PD VPD
 Slope 4 Percent
 Hydric Soil: No Yes
 Hydrologic: _____
 Soil Group: _____

Exploration Symbol # TP-6 Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	F. Sandy Loam	Weak Angular	Very Friable	
Bs1	Brown	F. Sandy Loam	Sub Ang Blocky	Friable	
BC	Yellowish Brown	Fine Sandy Loam	Thin Platy	Firm	Common and Distinct
Cd	Olive Gray	Fine Sandy Loam	Medium Platy	Very Firm	

Soil Series/Phase Name: Peru Limiting Factor 16 Groundwater Restrictive Layer Bedrock
 Depth _____

Drainage Class: ED SED WD MWD SPD PD VPD
 Slope 4 Percent
 Hydric Soil: No Yes
 Hydrologic: _____
 Soil Group: _____

Exploration Symbol # TP-7 Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	F. Sandy Loam	Fine Grandu	Friable	
Bs1	Brown	Fine Sandy Loam	Weak Sub Ang Blocky	Friable	
BC	Yellowish Brown	Fine Sandy Loam	Thin Platy	Firm	Common and Distinct
Cd	Olive Gray	Fine Sandy Loam	Medium Platy	Very Firm	

Soil Series/Phase Name: Peru Limiting Factor 15 Groundwater Restrictive Layer Bedrock
 Depth _____

Drainage Class: ED SED WD MWD SPD PD VPD
 Slope 4 Percent
 Hydric Soil: No Yes
 Hydrologic: _____
 Soil Group: _____

Exploration Symbol # TP-8 Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	F. Sandy Loam	Grand	Friable	
Bhs	Brown	F. Sandy Loam	Weak Sub Ang Blocky	Friable	
Bs	Yellowish Brown	Fine Sandy Loam	Platy	Firm	Common and Distinct
Cd	Olive Gray	Fine Sandy Loam	Medium Platy	Very Firm	

Soil Series/Phase Name: Peru Limiting Factor 17 Groundwater Restrictive Layer Bedrock
 Depth _____

Drainage Class: ED SED WD MWD SPD PD VPD
 Slope 6 Percent
 Hydric Soil: No Yes
 Hydrologic: _____
 Soil Group: _____

SOIL SCIENTIST INFORMATION AND SIGNATURE

Mark J. Hampton
 Signature
 Mark J. Hampton

10/24/2022
 Date
263/ 216

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SOIL PROFILE / CLASSIFICATION INFORMATION		SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES	
Project Name: Little River Subdivision	Applicant Name: B&B Midcoast Properties	Project Location (municipality): Belfast	

Exploration Symbol # TP-9 Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Depth below mineral soil horizon (inches)	Horizon	Color	Texture	Structure	Consistence	Redox
0	Ap	Dark Brown	F. Sandy Loam	Grand	Very Friable	
10	Bs1	Brown	F. Sandy Loam	Weak Sub Ang Blocky	Firm	
20	BC	Yellowish Brown	Fine Sandy Loam	Fine Grandu	Firm	Common and Distinct
40	Cd	Olive Gray	Fine Sandy Loam	Platy	Very Firm	

Soil Series/Phase Name: Peru	Limiting Factor 17 " Depth	<input checked="" type="checkbox"/> Groundwater	<input checked="" type="checkbox"/> Restrictive Layer	<input type="checkbox"/> Bedrock
Drainage Class <input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input checked="" type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD	Slope 4 Percent	Hydric Soil <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Hydrologic Soil Group	

Exploration Symbol # TP-10 Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Depth below mineral soil horizon (inches)	Horizon	Color	Texture	Structure	Consistence	Redox
0	Ap	Dark Brown	F. Sandy Loam	Weak Angular	Very Friable	
10	Bs1	Brown	F. Sandy Loam	Sub Ang Blocky	Friable	
20	BC	Yellowish Brown	Fine Sandy Loam	Thin Platy	Firm	Common and Distinct
40	Cd	Olive Gray	Fine Sandy Loam	Medium Platy	Very Firm	

Soil Series/Phase Name: Peru	Limiting Factor 16 " Depth	<input checked="" type="checkbox"/> Groundwater	<input checked="" type="checkbox"/> Restrictive Layer	<input type="checkbox"/> Bedrock
Drainage Class <input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input checked="" type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD	Slope 4 Percent	Hydric Soil <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Hydrologic Soil Group	

Exploration Symbol # _____ Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Depth below mineral soil horizon (inches)	Horizon	Color	Texture	Structure	Consistence	Redox
0						
10						
20						
30						
40						
50						
60						

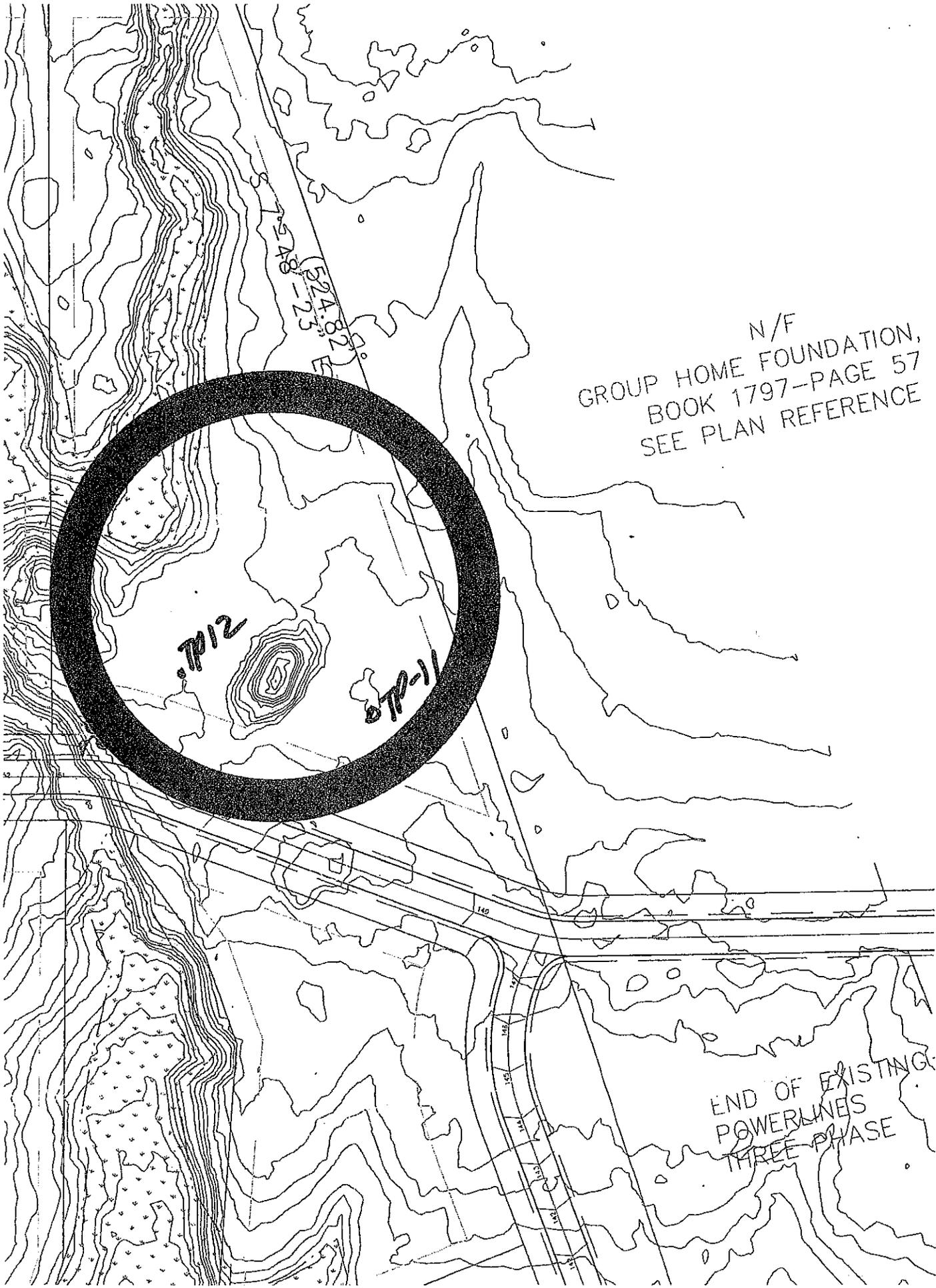
Soil Series/Phase Name:	Limiting Factor " Depth	<input type="checkbox"/> Groundwater	<input type="checkbox"/> Restrictive Layer	<input type="checkbox"/> Bedrock
Drainage Class <input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input checked="" type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD	Slope Percent	Hydric Soil <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Hydrologic Soil Group	

Exploration Symbol # _____ Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Depth below mineral soil horizon (inches)	Horizon	Color	Texture	Structure	Consistence	Redox
0						
10						
20						
30						
40						
50						
60						

Soil Series/Phase Name:	Limiting Factor " Depth	<input type="checkbox"/> Groundwater	<input type="checkbox"/> Restrictive Layer	<input type="checkbox"/> Bedrock
Drainage Class <input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD	Slope Percent	Hydric Soil <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Hydrologic Soil Group	

SOIL SCIENTIST INFORMATION AND SIGNATURE	
<p style="text-align: center;"> Signature Mark J. Hampton</p>	<p style="text-align: center;">Date 1/20/2023</p> <p style="text-align: center;">203/ 216</p> <p style="text-align: right; font-size: small;">affix professional seal</p>



N/F
GROUP HOME FOUNDATION,
BOOK 1797-PAGE 57
SEE PLAN REFERENCE

7012

872-1

END OF EXISTING
POWERLINES
THREE-PHASE

524.87

140

140

140

140

140

140

140

140

140

SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name: Little River Subdivison Applicant Name: B&B Midcoast Properties Project Location (municipality): Belfast

Exploration Symbol # TP-9 Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	F. Sandy Loam	Grand	Very Friable	
Bs1	Brown	F. Sandy Loam	Weak Sub Ang Blocky	Firm	
BC	Yellowish Brown	Fine Sandy Loam	Fine Grandu	Firm	Common and Distinct
Cd	Olive Gray	Fine Sandy Loam	Platy	Very Firm	

Soil Series/Phase Name: Peru Limiting Factor 17 " Groundwater
 Restrictive Layer
 Bedrock
 Drainage Class: ED SED WD MWD Slope 4 Hydric Soil No Hydrologic
 SPD PD VPD Percent Yes Soil Group

Exploration Symbol # TP-10 Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	F. Sandy Loam	Weak Angular	Very Friable	
Bs1	Brown	F. Sandy Loam	Sub Ang Blocky	Friable	
BC	Yellowish Brown	Fine Sandy Loam	Thin Platy	Firm	Common and Distinct
Cd	Olive Gray	Fine Sandy Loam	Medium Platy	Very Firm	

Soil Series/Phase Name: Peru Limiting Factor 16 " Groundwater
 Restrictive Layer
 Bedrock
 Drainage Class: ED SED WD MWD Slope 4 Hydric Soil No Hydrologic
 SPD PD VPD Percent Yes Soil Group

Exploration Symbol # TP-11 Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	F. Sandy Loam	Grand	Very Friable	
Bs1	Brown	F. Sandy Loam	Weak Sub Ang Blocky	Friable	
BC	Yellow Brown	Fine Sandy Loam	Fine Grandu	Firm	Common and Distinct
Cd	Olive Gray	Fine Sandy Loam	Platy	Very Firm	

Soil Series/Phase Name: Peru Limiting Factor 16 " Groundwater
 Restrictive Layer
 Bedrock
 Drainage Class: ED SED WD MWD Slope 6 Hydric Soil No Hydrologic
 SPD PD VPD Percent Yes Soil Group

Exploration Symbol # TP-12 Test Pit Boring Probe
 _____ " Organic horizon thickness Ground surface elev. _____
 _____ " Depth: of exploration, or to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	F. Sandy Loam	Weak Angular	Very Friable	
Bs1	Brown	F. Sandy Loam	Sub Ang Blocky	Friable	
BC	Yellow Brown	Fine Sandy Loam	Thin Platy	Firm	Common and Distinct
Cd	Olive	Fine Sandy Loam	Medium Platy	Very Firm	

Soil Series/Phase Name: Peru Limiting Factor 17 " Groundwater
 Restrictive Layer
 Bedrock
 Drainage Class: ED SED WD MWD Slope 4 Hydric Soil No Hydrologic
 SPD PD VPD Percent Yes Soil Group

SOIL SCIENTIST INFORMATION AND SIGNATURE

Mark J. Hampton
 Signature
 Mark J. Hampton
 Name Printed

1/20/2023
 Date
203/ 216
LS6 / SS License No.

affix professional seal

EROSION AND SEDIMENT CONTROL PLAN

Pre-Construction Phase

A person who conducts, or causes to be conducted, an activity that involves filling, displacing or exposing soil or other earthen materials shall take measures to prevent unreasonable erosion of soil or sediment beyond the project site or into a protected natural resource as defined in 38 MRS § 480-B. Erosion control measures must be in place before the activity begins. Measures must remain in place and functional until the site is permanently stabilized. Adequate and timely temporary and permanent stabilization measures must be taken. The site must be maintained to prevent unreasonable erosion and sedimentation. Minimize disturbed areas and protect natural downgradient buffer areas to the extent practicable.

BMP Construction Phase

- A. Sediment barriers. Prior to the beginning of any construction, properly install sediment barriers at the edge of any downgradient disturbed area and adjacent to any drainage channels within the proposed disturbed area. Maintain the sediment barriers until the disturbed area is permanently stabilized.
- B. Construction entrance: Prior to any clearing or grubbing, a construction entrance shall be constructed at the intersection with the proposed access drive and the existing roadway to avoid tracking of mud, dust and debris from the site.
- C. Riprap: Since riprap is used where erosion potential is high, construction must be sequenced so that the riprap is put in place with the minimum delay. Disturbance of areas where riprap is to be placed should be undertaken only when final preparation and placement of the riprap can follow immediately behind the initial disturbance. Where riprap is used for outlet protection, the riprap should be placed before or in conjunction with the construction of the pipe or channel so that it is in place when the pipe or channel begins to operate. Maintain temporary riprap, such as temporary check dams until the disturbed area is permanently stabilized.
- D. Temporary stabilization. Stabilize with temporary seeding, mulch, or other non-erodible cover any exposed soils that will remain unworked for more than 14 days except, stabilize areas within 100 feet of a wetland or waterbody within 7 days or prior to a predicted storm event, whichever comes first. If hay or straw mulch is used, the application rate must be 2 bales (70-90 pounds) per 1000 sf or 1.5 to 2 tons (90-100 bales) per acre to cover 75 to 90% of the ground surface. Hay mulch must be kept moist or anchored to prevent wind blowing. An erosion control blanket or mat shall be used at the base of grassed waterways, steep slopes (15% or greater) and on any disturbed soil within 100 feet of lakes, streams and wetlands. Grading shall be planned so as to minimize the length of time between initial soil exposure and final grading. On large projects this should be accomplished by phasing the operation and completing the first phase up to final grading and seeding before starting the second phase, and so on.
- E. Vegetated waterway. Upon final grading, the disturbed areas shall be immediately seeded to permanent vegetation and mulched and will not be used as outlets until a dense, vigorous vegetative cover has been obtained. Once soil is exposed for waterway construction, it should be immediately shaped, graded and stabilized. Vegetated waterways need to be stabilized early during the growing season (prior to September 15). If final seeding of waterways is delayed past September 15, emergency provisions such as sod or riprap may be required to stabilize the channel. Waterways should be fully stabilized prior to directing runoff to them.

Permanent Stabilization Defined

- A. Seeded areas. For seeded areas, permanent stabilization means an 90% cover of the disturbed area with mature, healthy plants with no evidence of washing or rilling of the topsoil.

- B. Sodded areas. For sodded areas, permanent stabilization means the complete binding of the sod roots into the underlying soil with no slumping of the sod or die-off.
- C. Permanent mulch. For mulched areas, permanent mulching means total coverage of the exposed area with an approved mulch material. Erosion control mix may be used as mulch for permanent stabilization according to the approved application rates and limitations.
- D. Riprap. For areas stabilized with riprap, permanent stabilization means that slopes stabilized with riprap have an appropriate backing of a well-graded gravel or approved geotextile to prevent soil movement from behind the riprap. Stone must be sized appropriately. It is recommended that angular stone be used.
- E. Agricultural use. For construction projects on land used for agricultural purposes (E.G., pipelines across crop land), permanent stabilization may be accomplished by returning the disturbed land to agricultural use.
- F. Paved areas. For paved areas, permanent stabilization means the placement of the compacted gravel subbase is completed.
- G. Ditches, channels, and swales. For open channels, permanent stabilization means the channel is stabilized with mature vegetation at least three inches in height, with well-graded riprap, or with another non-erosive lining capable of withstanding the anticipated flow velocities and flow depths without reliance on check dams to slow flow. There must be no evidence of slumping of the lining, undercutting of the banks, or down-cutting of the channel.

General Construction Phase

The following erosion control measures shall be followed by the contractor throughout construction of this project:

- A. All topsoil shall be collected, stockpiled, seeded with rye at 3 pounds/1,000 sf and mulched, and reused as required. Silt fencing shall be placed down gradient from the stockpiled loam. Stockpile to be located by designation of the owner and inspecting engineer.
- B. The inspecting engineer at his/her discretion, may require additional erosion control measures and/or supplemental vegetative provisions to maintain stability of earthworks and finish graded areas. The contractor shall be responsible for providing and installing any supplemental measures as directed by the inspecting engineer. Failure to comply with the engineer's directions will result in discontinuation of construction activities.
- C. Erosion control mesh shall be applied in accordance with the plans over all finish seeded areas as specified on the design plans.
- D. All graded or disturbed areas including slopes shall be protected during clearing and construction in accordance with the approved erosion and sediment control plan until they are adequately stabilized.
- E. All erosion, and sediment control practices and measures shall be constructed, applied and maintained in accordance with the approved erosion and sediment control plan.
- F. Areas to be filled shall be cleared, grubbed and stripped of topsoil to remove trees, vegetation, roots or other objectionable materials.
- G. Areas shall be scarified to a minimum depth of 3 inches prior to placement of topsoil.
- H. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc., shall be compacted in accordance with local requirements or codes.
- I. All fills shall be placed and compacted in layers not to exceed 8 inches in thickness.

- J. Except for approved landfills or non-structural fills, fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris and other objectionable materials that would interfere with or prevent construction of satisfactory lifts.
- K. Frozen material or soft, mucky or highly compressible materials shall not be incorporated into fill slopes or structural fills.
- L. Fill shall not be placed on a frozen foundation.
- M. Seeps or springs encountered during construction shall be handled appropriately.
- N. All graded areas shall be permanently stabilized immediately following finished grading.
- O. Remove any temporary control measures, such as silt fence, within 30 days after permanent stabilization is attained. Remove any accumulated sediments and stabilize.

Permanent Vegetation

Permanent vegetative cover should be established on disturbed areas where permanent, long lived vegetative cover is needed to stabilize the soil, to reduce damages from sediment and runoff, and to enhance the environment.

Seedbed Preparation

- A. Grade as feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application and anchoring, and maintenance.
- B. Apply limestone and fertilizer according to soil tests such as those offered by the University of Maine soil testing laboratory. Soil sample mailers are available from the local cooperative extension service office. If soil testing is not feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 800 pounds per acre or 18.4 pounds per 1,000 square feet using 10-20-20 (n-p₂o₅-k₂o) or equivalent. Apply ground limestone (equivalent to 50% calcium plus magnesium oxide) at a rate of 3 tons per acre (138 lb. Per 1,000 sq. Ft).
- C. Work lime and fertilizer into the soil as nearly as practical to a depth of 4 inches with a disc, spring tooth harrow or other suitable equipment. The final harrowing operation should be on the general contour. Continue tillage until a reasonably uniform, fine seedbed is prepared. All but clay or silty soils and coarse sands should be rolled to firm the seedbed wherever feasible.
- D. Remove from the surface all stones 2 inches or larger in any dimension. Remove all other debris, such as wire, cable, tree roots, concrete, clods, lumps or other unsuitable material.
- E. Inspect seedbed just before seeding. If traffic has left the soil compacted; the area must be tilled and firmed as above.
- F. Permanent seeding should be made 45 days prior to the first killing frost or as a dormant seeding with mulch after the first killing frost and before snowfall. When crown vetch is seeded in later summer, at least 35% of the seed should be hard seed (unscarified). If seeding cannot be done within the seeding dates, mulch according to the temporary mulching BMP and overwinter stabilization and construction to protect the site and delay seeding until the next recommended seeding period.
- G. Following seed bed preparation, swale areas, fill areas and back slopes shall be seeded at a rate of 3 lbs./1,000 s.F. With a mixture of 35% creeping red Fescue, 6% red top, 24% Kentucky bluegrass, 10% perennial ryegrass, 20% annual ryegrass and 5% white Dutch clover.
- H. Areas which have been temporarily or permanently seeded shall be mulched immediately following seeding.
- I. Areas which cannot be seeded within the growing season shall be mulched for over-winter protection and the area should be seeded at the beginning of the growing season.

Winter Construction Phase

If an area is not stabilized with temporary or permanent measures by November 15, then the site must be protected with additional stabilization measures.

- A. Permanent stabilization consists of at least 90% vegetation, pavement/gravel base or riprap.
- B. Do not expose slopes or leave slopes exposed over the winter or for any other extended time of work suspension unless fully protected with mulch.
- C. Apply hay mulch at twice the standard rate (150 lbs. Per 1,000 sf). The mulch must be thick enough such that the ground surface will not be visible and must be anchored.
- D. Use mulch and mulch netting or an erosion control mulch blanket on all slopes greater than 8 % or other areas exposed to direct wind.
- E. Install an erosion control blanket in all drainageways (bottom and sides) with a slope greater than 3 %.
- F. See the vegetation measures for more information on seeding dates and types.
- G. Winter excavation and earthwork shall be completed so that no more than 1 acre of the site is without stabilization at any one time.
- H. An area within 100 feet of a protected natural resource must be protected with a double row of sediment barrier.
- I. Temporary mulch must be applied within 7 days of soil exposure or prior to any storm event, but after every workday in areas within 100 feet from a protected natural resource.
- J. Areas that have been brought to final grade must be permanently mulched that same day.
- K. If snowfall is greater than 1 inch (fresh or cumulative), the snow shall be removed from the areas due to be seeded and mulched.
- L. Loam shall be free of frozen clumps before it is applied.
- M. All vegetated ditch lines that have not been stabilized by November 1, or will be worked during the winter construction period, must be stabilized with an appropriate stone lining backed by an appropriate gravel bed or geotextile unless specifically released from this standard by the department.

Maintenance and Inspection Phase

- A. Contractor shall inspect disturbed and impervious areas, and erosion and stormwater control measures, areas used for storage that are exposed to precipitation, and locations where vehicles enter or exit the parcel at least once a week and before and after a storm event, prior to completion of permanent stabilization. A person with knowledge of erosion and stormwater must conduct the inspection. This person must be identified in the inspection log. If best management practices (BMPs) need to be modified or if additional BMPs are necessary, implementation must be completed within 7 calendar days and prior to any storm event (rainfall). All measures must be maintained in effective operating condition until areas are permanently stabilized.
- B. A log (report) must be kept summarizing the scope of the inspection, name(s) and qualifications of the personnel making the inspection, the date(s) of the inspection, and major observations relating to operation of erosion and sedimentation controls and pollution prevention measures. Major observations must include: BMPs that need to be maintained; location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location; and location(s) where additional BMPs are needed that did not exist at the time of inspection. Follow-up to correct deficiencies or enhance controls must also be indicated in the log and dated, including what action was taken and when.

STORMWATER MANAGEMENT PLAN

Little River Subdivision Hermon, Maine

The following Stormwater Management Plan has been prepared for B&B Midcoast Properties, LLC to evaluate stormwater runoff and erosion control for the proposed development at the end of Little River Road in Belfast, Maine.

B&B Midcoast Properties, LLC (Applicant) proposes to develop a 100-acre, 48-lot residential subdivision in a PUD format in Belfast off the end of Little River Road. The project will be an extension of Little River Road's public way and public infrastructure. The proposed subdivision will include 6,927 feet of roadway, and public utilities for electric, communications, sewer, and water. The impervious area related to roadway construction is approximately 3.23 acres. The 48 total lots will be developed at an anticipated 2,848 sf impervious (house, garage and driveway) and 1096 sf landscaped (lawn approximately 30' surrounding the buildings and driveway) for an anticipated impervious area of 3.14 acres. The total anticipated impervious area is thus 6.37 acres. The total landscaped area is 5.98 acres for a total project developed area of 12.35 acres. This acreage of impervious area, used for storm water calculations, will likely never be reached, but is being used to be conservative. To be clear, the impervious areas and landscaped areas on the lots are included in the storm water treatment calculations.

Each lot has been designed, and will be constructed, to minimize impact to the surrounding area and existing natural resources.

Site Calculations

Total Lot Area	100 acres
Existing Impervious Area	0 acres
Total New Impervious Area	3.14 acres
Total Landscaped Area	5.98 acres
Total Developed Area	12.35 Ac

Existing Conditions

The site was forested, with no existing development, but has been recently harvested, as such has not had an opportunity to revegetated.

Proposed Development

The proposed development will include 3.14 acres of new impervious area. 3.23 acres will encompass the proposed 6,927 linear feet of road being proposed. The remaining 3.14 acres will be 48 new lots for residential development. The lots are being designed under the assumption of 2,848 square feet of impervious area and 1,096 square feet of landscaping per lot. The remainder of the lots will be left undeveloped. The project will temporarily disturb approximately 15 acres during construction and result in a total of 3.14 acres of impervious area and 12.35 acres of total developed land upon full build out.

Drainage Pattern

The applicant is proposing to use five properly sized wet ponds on the site to treat 95% of the non-linear impervious area on the site, and 75% of the linear impervious area on the site. As well as meeting the development standards of the Maine DEP. The existing topography on the site slopes in many different directions, but ultimately ends up on the agricultural drainage swales on the site. The applicant is proposing roadside ditching and surface flow to transport the water to the wetponds from the different areas on the site.

The stormwater ultimately ends up in the agricultural drainage swales, then more roadside ditches, then to the Shaw Brook.

Flooding

There is no known historically flooding on the site.

Soils

The soils within the project area are shown on the Web Soil Survey Map attached.

Water Quantity (Flooding)

	2 year	10 year	25 year
Pre-Development 1	16.92	39.96	56.05
Post-Development 1	13.73	32.95	46.08
Pre-Development 2	19.93	43.49	61.32
Post-Development 2	13.18	33.62	46.48
Pre-Development 3	31.42	71.71	100.64
Post-Development 3	20.04	61.21	90.45

The HydroCAD attached shows the post-development areas broken into the equivalent areas of the pre-development for comparison.

Water Quality (BMP Standard)

The water quality requirements will be met by wet ponds.

The structure will provide the required level of treatment for the project.

Attached is a spreadsheet showing the sizing.

Summary

Based on the results of this evaluation and verification, 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.

Scott E. Braley, PE

President, Project Manager

STORM WATER TREATMENT CALCULATIONS

Project Name
 Project Number
 Date

Little River Subdivision
 22098
 3/22/2023

Total LINEAR impervious area for project =	140842	sq ft	3.23
Total LINEAR landscaped area for project =	207686	sq ft	4.77
Total LINEAR area of project =	348528	sq ft	
Total NONLINEAR impervious area for project =	136704	sq ft	3.14
Total NONLINEAR landscaped area for project =	52608	sq ft	1.21
Total NONLINEAR area of project =	189312	sq ft	

Total Impervious area for project =	277546	sq ft =	6.37	acres
Total developed area for project =	537840	sq ft =	12.35	acres

Linear Area Treatment

IMPERVIOUS AREA

Required area to be treated= 105631.50 sq ft

Treatment Area (#)	Area treated Imp (sq ft)	Description of treatment area Description
WS1	0	USF
WS2	6190	USF
WS3	0	FORESTED BUFFER
WS4	0	FORESTED BUFFER
WS5	0	FORESTED BUFFER
WS6	0	FORESTED BUFFER
WS7	74879	WET POND
WS8	28159	WET POND
WS9	0	FORESTED BUFFER
WS10	0	FORESTED BUFFER
WS11	0	FORESTED BUFFER
WS12	10366	USF
WS13	0	FORESTED BUFFER

Total A Treated = 119594 sq ft 84.91% ≥ 75%

DEVELOPED AREA

Required area to be treated=

174264.00

sq ft

Treatment Area (#)	Area treated Imp (sq ft)	Area treated Land (sq ft)	Description of treatment area Description
WS1	0	0	USF
WS2	6190	7560	USF
WS3	0	0	FORESTED BUFFER
WS4	0	0	FORESTED BUFFER
WS5	0	0	FORESTED BUFFER
WS6	0	0	FORESTED BUFFER
WS7	74879	107536	WET POND
WS8	28159	32272	WET POND
WS9	0	0	FORESTED BUFFER
WS10	0	0	FORESTED BUFFER
WS11	0	0	FORESTED BUFFER
WS12	10366	8845	USF
WS13	0	0	FORESTED BUFFER
Total	119594	156213	
Total Area Treated =		275807	79.13% ≥ 50%

Nonlinear Area Treatment

IMPERVIOUS AREA

Required area to be treated=

129868.80

sq ft

Treatment Area (#)	Area treated Imp (sq ft)	Description of treatment area Description
WS1	5696	USF
WS2	8544	USF
WS3	5696	FORESTED BUFFER
WS4	2848	FORESTED BUFFER
WS5	2848	FORESTED BUFFER
WS6	2848	FORESTED BUFFER

WS7	68352	WET POND
WS8	14240	WET POND
WS9	2848	FORESTED BUFFER
WS10	2848	FORESTED BUFFER
WS11	2848	FORESTED BUFFER
WS12	8544	USF
WS13	2848	FORESTED BUFFER
Total A Treated = 131008		95.83%
		≥ 95%

Treatment Area (#)	Area treated		Description of treatment area
	Imp (sq ft)	Land (sq ft)	
WS1	5696	2192	USF
WS2	8544	3288	USF
WS3	5696	2192	FORESTED BUFFER
WS4	2848	1096	FORESTED BUFFER
WS5	2848	1096	FORESTED BUFFER
WS6	2848	1096	FORESTED BUFFER
WS7	68352	26304	WET POND
WS8	14240	5480	WET POND
WS9	2848	1096	FORESTED BUFFER
WS10	2848	1096	FORESTED BUFFER
WS11	2848	1096	FORESTED BUFFER
WS12	8544	3288	USF
WS13	2848	1096	USF
Total	131008	50416	
Required area to be treated =		151449.60	
DEVELOPED AREA		181424	95.83%
Total Area Treated =			≥ 80%

Name Little River
 Job Number 22098
 Town Belfast
 Date 28-Mar-23

a

Description	Impervious Area	Landscaped Area	Flow Length	Flow width per acre (impervious)	Flow width per acre (landscaped)	Flow Width	Provided
WS3	5696	2192	100	150	45	20	22
WS4	2848	1096	100	150	45	10	11
WS5	2848	1096	100	150	45	10	11
WS6	2848	1096	100	150	45	10	11

Project Name Little River Subdivision
 Project Number 22098
 Date 3/22/2023

WET POND CALCULATIONS

Treatment Area (#)	Area treated Imp (sq ft)	Area treated Land (sq ft)	Volume req'd (cubic feet)
WS7	143231	133840	32795

PERMANENT POOL

ELEV	AREA (Sq Ft)	STORAGE #	STORAGE (Ft ³)	CUMM. STORAGE (Ft ³)
91	10769	0	0	0
92	12206	1	11488	11488
93	13700	2	12953	24441
94	15252	3	14476	38917
95	16858	4	16055	54972
96	18521	5	17690	72661
97	20242	6	19382	92043
98	22018	7	21130	113173
				>

4.55 mean depth
32795

Treatment Area (#)	Area treated Imp (sq ft)	Area treated Land (sq ft)	Volume req'd (cubic feet)
WS7	143231	133840	16397

Channel Protection

ELEV	AREA (Sq Ft)	STORAGE #	STORAGE (Ft ³)	CUMM. STORAGE (Ft ³)
98	27032	0	0	0
99	29016	1	28024	28024
100	31057	2	30037	58060.5
101	33154	3	32106	90166
				>

16397

Project Name Little River Subdivision
 Project Number 22098
 Date 3/22/2023

WET POND CALCULATIONS

Treatment Area (#)	Area treated Imp (sq ft)	Area treated Land (sq ft)	Volume req'd (cubic feet)
WS8	42399	37752	9583

PERMANENT POOL

ELEV	AREA (Sq Ft)	STORAGE #	STORAGE (Ft ³)	CUMM. STORAGE (Ft ³)
108	4769	0	0	0
109	5726	1	5248	5248
110	6740	3	6233	11481
111	7811	4	7276	18756
112	8938	5	8375	27131
113	10121	6	9530	36660

3.04 mean depth
9583

Treatment Area (#)	Area treated Imp (sq ft)	Area treated Land (sq ft)	Volume req'd (cubic feet)
WS8	42399	37752	4792

Channel Protection

ELEV	AREA (Sq Ft)	STORAGE #	STORAGE (Ft ³)	CUMM. STORAGE (Ft ³)
113	13554	0	0	0
114	14945	1	14250	14249.5
115	16392	2	15669	29918

29918 cubic feet provided

3' for every 1000' of channel protection
 90 feet

length of gravel trench

Little River
 22098
 3/28/2023

UNDERDRAIN SOIL FILTER CALCULATIONS

Treatment Area (#)	Area treated imp (ft ²)	Area treated Land (ft ²)	Volume req'd (ft ³)	Depth of cell (in)	Area Required	Area Provided	5% - 2% rule	Volume prov. (ft ³)	Outlet Rate (gpm)
WS1	5696	2192	548	18	365	554	329	831	2.88
WS2	14734	10848	1589	18	1060	1217	954	1826	6.32
WS12	18910	12133	1980	18	1320	1413	1188	2120	7.34



STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
177 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

November 29, 2022

Aimee Young
Plymouth Engineering
8 Main Street Unit C
Newport, ME 04953

Via email: aimee@plymouthengineering.com

Re: Rare and exemplary botanical features in proximity to: #22233, Little River Subdivision, Little River Drive, Belfast, Maine

Dear Ms. Young:

I have searched the Maine Natural Areas Program's Biological and Conservation Data System files in response to your request received November 23, 2022 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Belfast, 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
BLOSSOM LANE, DEERING BUILDING



PHONE: (207)287-804490
WWW.MAINE.GOV/DACF/MNAP

Letter to Plymouth Engineering
Comments RE: Little River Subdivision, Belfast
November 29, 2022
Page 2 of 2

The Maine Natural Areas Program (MNAP) 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. MNAP welcomes coordination with individuals or organizations proposing environmental alteration or conducting environmental assessments. If, however, data provided by MNAP are to be published in any form, the Program should be informed at the outset and credited as the source.

The Maine 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 MNAP 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,

Lisa St. Hilaire

Lisa St. Hilaire | Information Manager | Maine Natural Areas Program
207-287-8044 | lisa.st.hilaire@maine.gov

Rare and Exemplary Botanical Features within 4 miles of
 Project: #22233, Little River Subdivision, Little River Drive, Belfast, ME

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
American Chestnut	SC	S4	G3	2001-02-13	3	Hardwood to mixed forest (forest, upland)
Bog Bedstraw	SC	S2	G5	1940-07-23	3	Conifer forest (forest, upland)
	SC	S2	G5	1964-08-30	4	Conifer forest (forest, upland)

Date Exported: 2022-11-29 11:48

Conservation Status Ranks

State and Global Ranks: This ranking system facilitates a quick assessment of a species' or habitat type's rarity and is the primary tool used to develop conservation, protection, and restoration priorities for individual species and natural habitat types. Each species or habitat is assigned both a state (S) and global (G) rank on a scale of critically imperiled (1) to secure (5). Factors such as range extent, the number of occurrences, intensity of threats, etc., contribute to the assignment of state and global ranks. The definitions for state and global ranks are comparable but applied at different geographic scales; something that is state imperiled may be globally secure.

The information supporting these ranks is developed and maintained by the Maine Natural Areas Program (state ranks) and NatureServe (global ranks).

Rank	Definition
S1 G1	Critically Imperiled – At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
S2 G2	Imperiled – At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
S3 G3	Vulnerable – At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
S4 G4	Apparently Secure – At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
S5 G5	Secure – At very low risk of extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
SX GX	Presumed Extinct – Not located despite intensive searches and virtually no likelihood of rediscovery.
SH GH	Possibly Extinct – Known from only historical occurrences but still some hope of rediscovery.
S#S# G#G#	Range Rank – A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem.
SU GU	Unrankable – Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
GNR SNR	Unranked – Global or subnational conservation status not yet assessed.
SNA GNA	Not Applicable – A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities (e.g., non-native species or ecosystems).
Qualifier	Definition
S#? G#?	Inexact Numeric Rank – Denotes inexact numeric rank.
Q	Questionable taxonomy that may reduce conservation priority – Distinctiveness of this entity as a taxon or ecosystem type at the current level is questionable. The "Q" modifier is only used at a global level.
T#	Intraspecific Taxon (trinomial) – The status of infraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank.

State Status: Endangered and Threatened are legal status designations authorized by statute. Please refer to MRSA Title 12, §544 and §544-B.

Status	Definition
E	Endangered – Any native plant species in danger of extinction throughout all or a significant portion of its range within the State or Federally listed as Endangered.
T	Threatened – Any native plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range in the State or Federally listed as Threatened.
SC	Special Concern – A native plant species that is rare in the State, but not rare enough to be considered Threatened or Endangered.
PE	Potentially Extirpated – A native plant species that has not been documented in the State in over 20 years, or loss of the last known occurrence.

Element Occurrence (EO) Ranks: Quality assessments that designate viability of a population or integrity of habitat. These ranks are based on size, condition, and landscape context. Range ranks (e.g., AB, BC) and uncertainty ranks (e.g., B?) are allowed. The Maine Natural Areas Program tracks all occurrences of rare plants and natural communities/ecosystems (S1-S3) as well as exemplary common natural community types (S4-S5 with EO ranks A/B).

Rank	Definition
A	Excellent – Excellent estimated viability/ecological integrity.
B	Good – Good estimated viability/ecological integrity.
C	Fair – Fair estimated viability/ecological integrity.
D	Poor – Poor estimated viability/ecological integrity.
E	Extant – Verified extant, but viability/ecological integrity not assessed.
H	Historical – Lack of field information within past 20 years verifying continued existence of the occurrence, but not enough to document extirpation.
X	Extirpated – Documented loss of population/destruction of habitat.
U	Unrankable – Occurrence unable to be ranked due to lack of sufficient information (e.g., possible mistaken identification).
NR	Not Ranked – An occurrence rank has not been assigned.

Visit the Maine Natural Areas Program website for more information

<http://www.maine.gov/dacf/mnap>





Plymouth Engineering, Inc.

8 Main Street - Unit C
Newport, Maine 04953
info@plymouthengineering.com
tel: (207) 257-2071 fax: (207) 257-2130

November 17, 2022

Job No. 22098

Department of Inland Fisheries and Wildlife
41 State House Station
Augusta, Maine 04333-0041

Application for Site Law Review ~ Litte River Subdivision ~ Belfast

To Whom it May Concern:

Plymouth Engineering is in the process of preparing a Site Law application for the Little River Residential Subdivision as a continuation of Little River Drive in Belfast. GPS coordinates: 44.405436, -69.018525

Enclosed is a site location map to assist you in locating the property. We are requesting your agency's review of the area proposed for this development for the potential of issues relating to the Department of Inland Fisheries and Wildlife.

We appreciate your help in reviewing the proposed project to determine whether there are any concerns or issues relative to the Department of Inland Fisheries and Wildlife.

Sincerely,

Aimee S Young

Aimee S Young
Project Engineer

Enclosure: Site Location Map
Site Plan

APPENDIX D

CITY OF BELFAST WATER LETTER

CITY OF BELFAST SEWER DEPARTMENT LETTER

M.S.A.D. 34 LETTER



Keith Pooler

Water Capacity at Lower Industrial Park



From keith@belfastwater.org

To lindelofbrad@yahoo.com & 2 more

Apr 14, 2022 at 11:44 AM 

Brad,

This email is to follow up on the conversation we had on 4/14/22, concerning the needed water capacity to serve your proposed development off the Lower Industrial Park in Belfast.

Belfast Water has the capacity to serve this development, and there is a 12" water main in the Park, the main presently stops at the driveway of Trillium caterers, but is set to be hooked onto and extended in the future.

We look forward to working with you on your development and serving the customers of it in the future.

Let me now if you need anymore information at this time.

Regards

Keith

Keith H. Pooler
Superintendent
Belfast Water District
207-338-1200
207-338-0444 Fax
keith@belfastwater.org



Delete



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Reply All



More

Aimee Young

From: Scott Braley
Sent: Thursday, March 30, 2023 3:03 PM
To: Aimee Young
Subject: FW: little river subdivision

See below for little river subdivision application

Scott E. Braley, PE
President
Plymouth Engineering, Inc.
8 Main Street, Unit C
Newport, ME 04953
Office: (207) 257-2071
Cell: (207) 332-7343
Email: scott@plymouthengineering.com

From: Annaleis Hafford <annaleis@olverassociatesinc.com>
Sent: Wednesday, March 29, 2023 8:12 PM
To: Scott Braley <scott@plymouthengineering.com>
Subject: RE: little river subdivision

Scott –

The existing pump station will need to be updated to a larger size. That is currently in the process. At some point soon we will let you know the added cost which is minimal. Once this station is upgraded, it will have the capacity to serve the development that is planned for the Little River Subdivision.

There are no known issues with the collection system downstream from this development other than the City's pump station which is already in the process of being updated.

Please let me know if you need additional information.

Thanks,
Annaleis

From: Scott Braley <scott@plymouthengineering.com>
Sent: Monday, March 27, 2023 9:13 AM
To: Annaleis Hafford <annaleis@olverassociatesinc.com>
Subject: little river subdivision

We are in the process of submitting the SLODA for Little River this week. I know you've been on vacation, but any news on my pump station submittal to you? I need to at least have correspondence indicating that the collection system has capacity and the treatment plant has capacity, even if you need to condition it on possible system upgrades.

Scott E. Braley, PE
President
Plymouth Engineering, Inc.



Plymouth Engineering, Inc.

8 Main Street Unit C
Newport, Maine 04953
info@plymouthengineering.com
tel: (207) 257-2071 fax: (207) 257-2130

May 9, 2023

Job No.22098

RSU #71
PO Box 325
Belfast, ME 04915

Application for Subdivision Approval ~ Litte River Subdivision ~ Belfast

To Whom it May Concern:

Plymouth Engineering is in the process of preparing a Subdivision Application to the City of Belfast for the Little River Residential Subdivision as a continuation of Little River Drive in Belfast. GPS coordinates: 44.405436, -69.018525

Part of the application process is to contact the school district to inform them of the proposed development. The application is for a 48-lot residential subdivision.

Sincerely,

Aimee S Young

Aimee Young
Project Engineer

Enclosure: Site Location Map
Site Plan

APPENDIX E

FEMA FIRM

ITE TABLES



69°132'W 44°24'32"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000

69°055'W 44°24'6"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- SPECIAL FLOOD HAZARD AREAS**
- Without Base Flood Elevation (BFE) Zone A, V, AO9
 - With BFE or Depth Zone AE, AO, AH, VE, AR
 - Regulatory Floodway
- OTHER AREAS OF FLOOD HAZARD**
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
 - Future Conditions 1% Annual Chance Flood Hazard Zone X
 - Area with Reduced Flood Risk due to Levee. See Notes. Zone X
 - Area with Flood Risk due to Levee Zone X

- OTHER AREAS**
- NO SCREEN
 - Area of Minimal Flood Hazard Zone X
 - Effective LOMRS
 - Area of Undetermined Flood Hazard Zone X
- GENERAL STRUCTURES**
- Channel, Culvert, or Storm Sewer
 - Levee, Dike, or Floodwall

- OTHER FEATURES**
- Cross Sections with 1% Annual Chance Water Surface Elevation
 - Coastal Transect
 - Base Flood Elevation Line (BFE)
 - Limit of Study
 - Jurisdiction Boundary
 - Coastal Transect Baseline
 - Profile Baseline
 - Hydrographic Feature

- MAP PANELS**
- Digital Data Available
 - No Digital Data Available
 - Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/3/2023 at 2:30 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Single-Family Detached Housing (210)

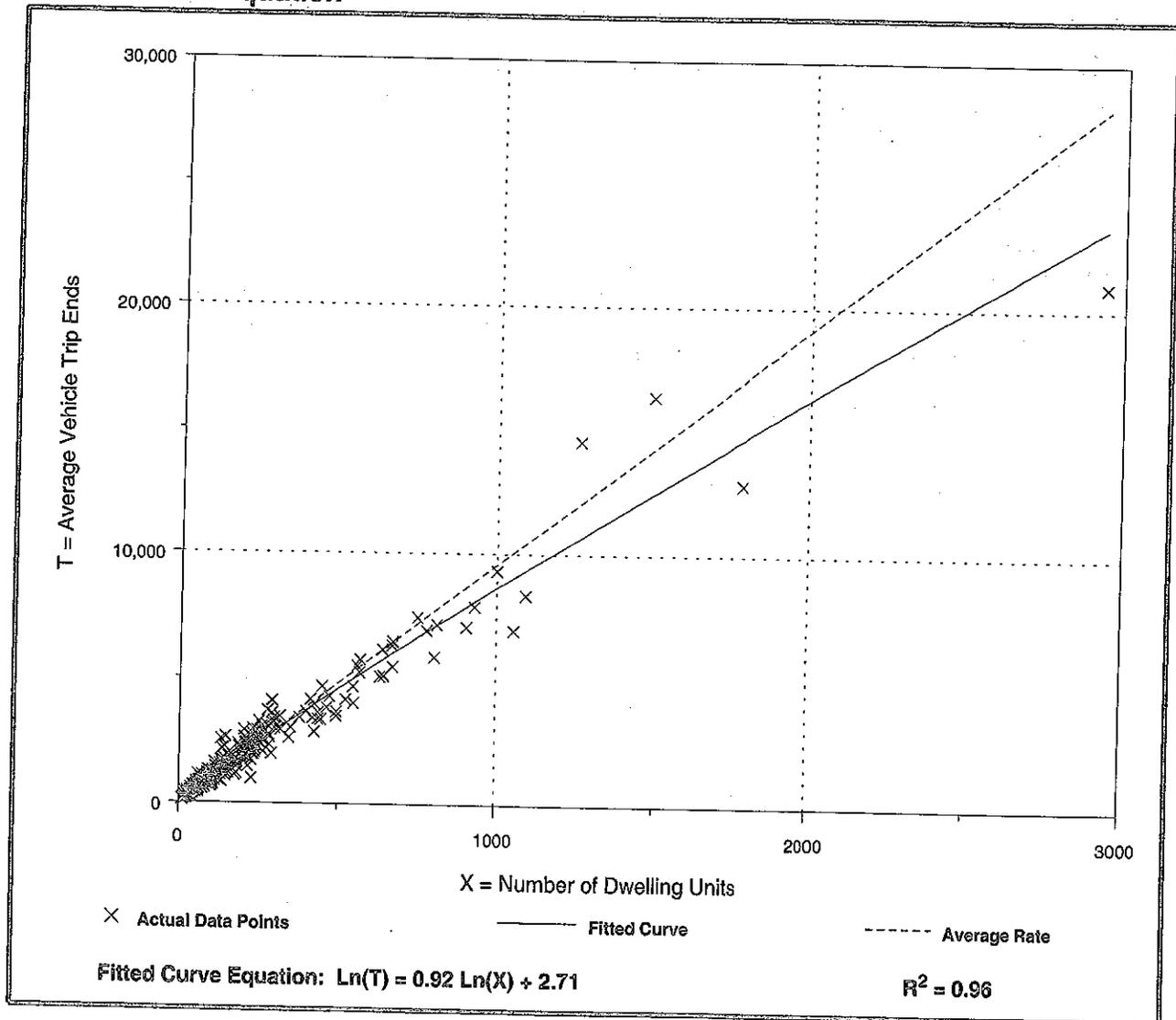
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Number of Studies: 351
Avg. Number of Dwelling Units: 197
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.57	4.31 - 21.85	3.69

Data Plot and Equation



Single-Family Detached Housing (210)

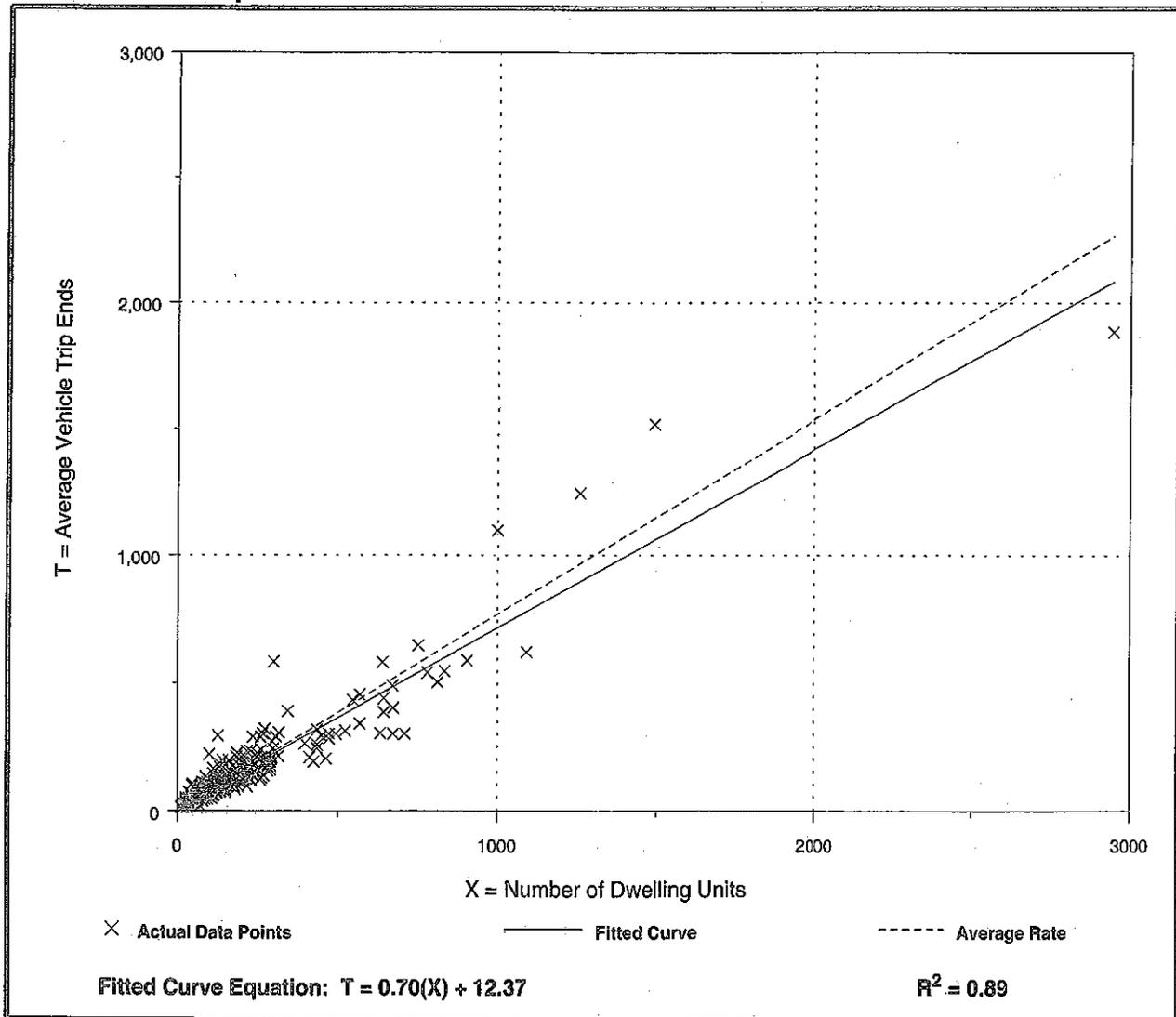
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 341
 Avg. Number of Dwelling Units: 181
 Directional Distribution: 26% entering, 74% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.77	0.33 - 2.27	0.91

Data Plot and Equation



Single-Family Detached Housing (210)

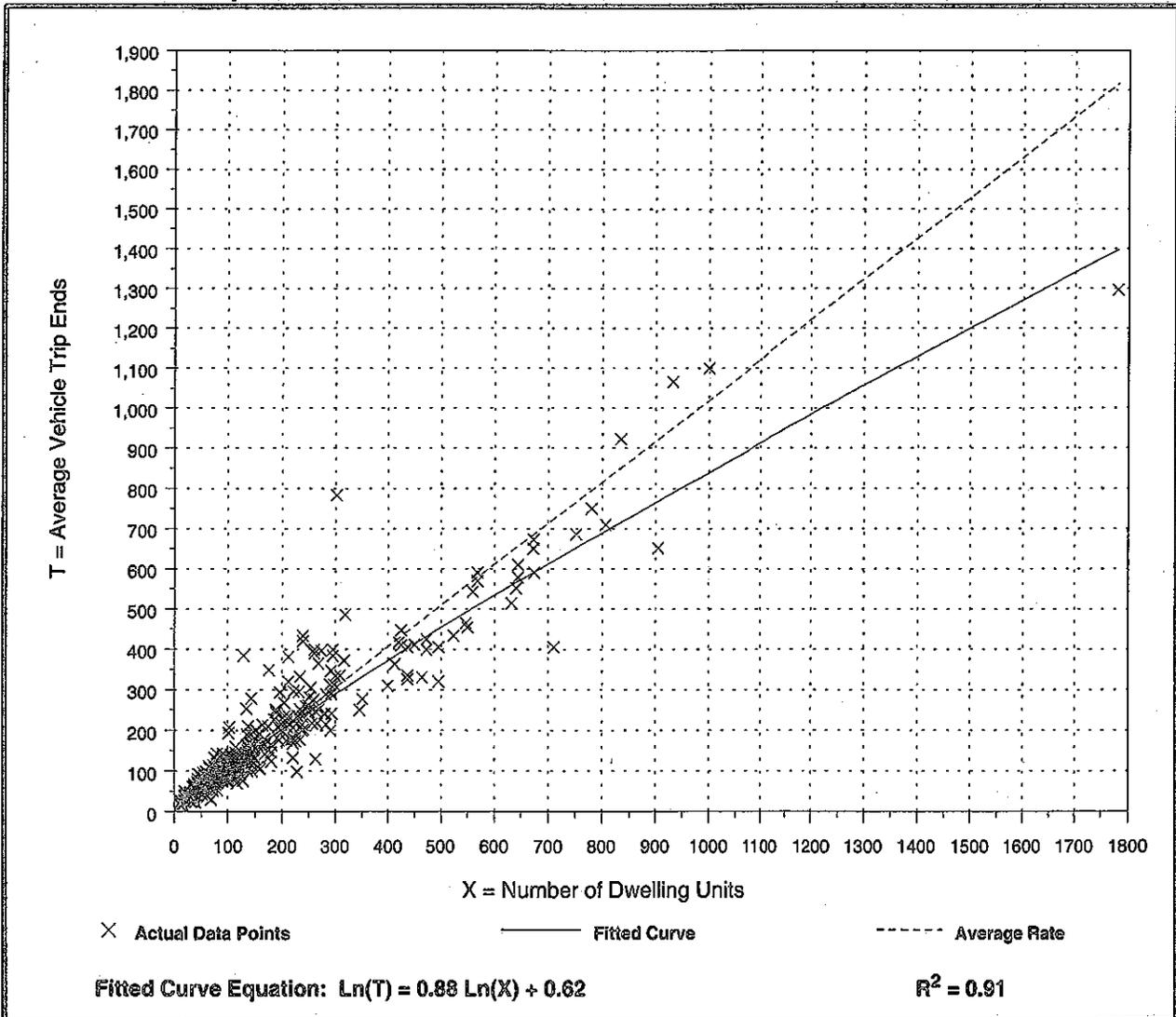
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 360
Avg. Number of Dwelling Units: 174
Directional Distribution: 64% entering, 36% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
1.02	0.42 - 2.98	1.05

Data Plot and Equation



Single-Family Detached Housing (210)

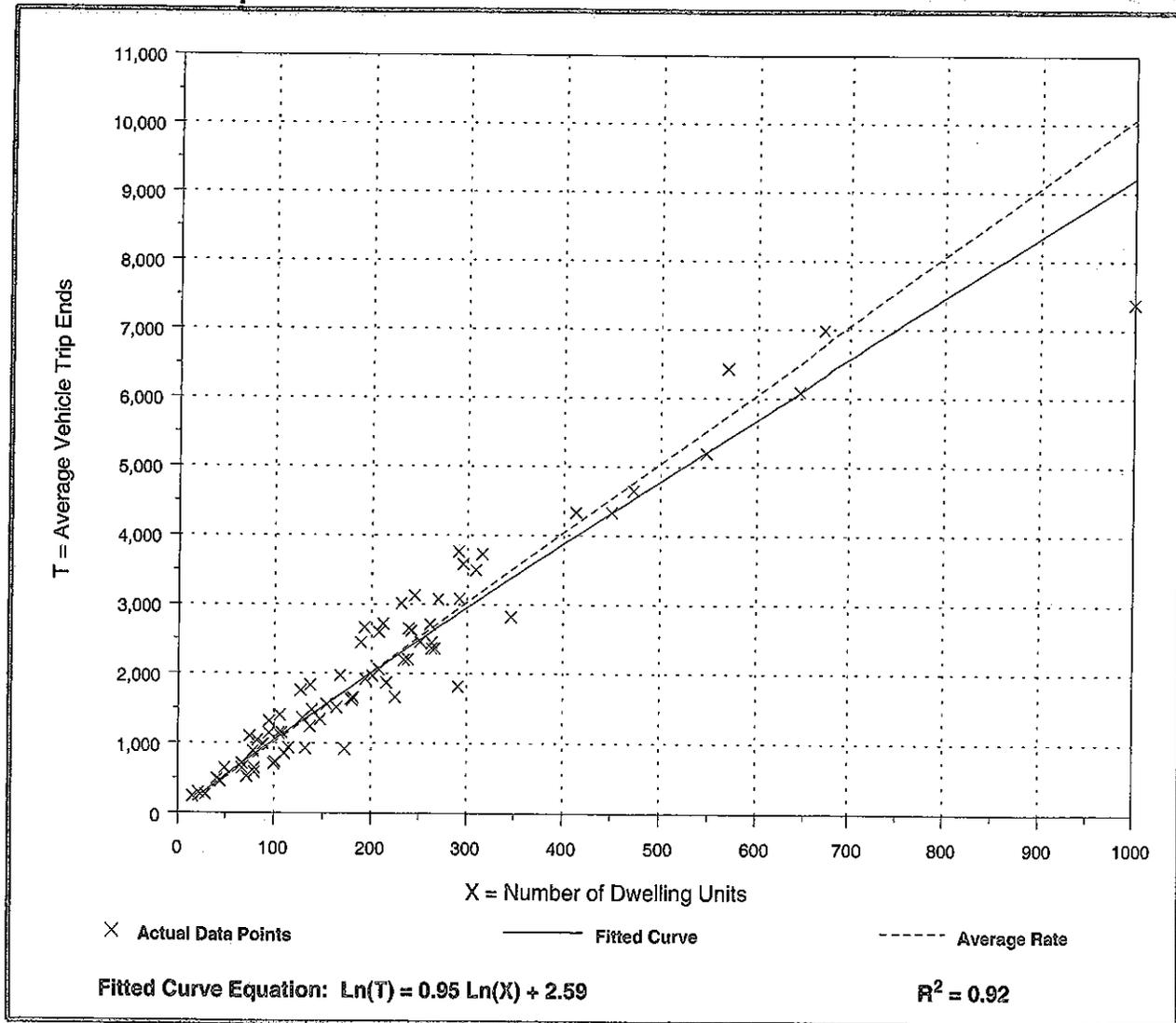
**Average Vehicle Trip Ends vs: Dwelling Units
On a: Saturday**

Number of Studies: 74
Avg. Number of Dwelling Units: 213
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
10.08	5.32 - 15.25	3.68

Data Plot and Equation



APPENDIX F

PLANS