

October 23, 2012

City of Portland, Inspection Division Room 315, City Hall 389 Congress Street Portland, ME 04101

<u>Level 1 - Minor Residential Development Review Application - 39 Plymouth</u> Street, Po<u>rtland, Maine</u>

Mr. Michael Mulkern, current owner of 39 Plymouth Street property is proposing to split the existing lot and develop a single family house in the rear of the property.

Mr. Mulkern currently owns two adjoining lots off Plymouth Street and Allen Ave. The proposed development will occur at the rear of these properties and will be located on a new, third lot. The driveway to the new home will be shared with the existing single family home at 39 Plymouth Street in an effort to maintain safety and decrease the development and impervious area.

The construction of the driveway will require the relocation of an existing garage at 39 Plymouth to the abutting property owned by Mr. Mulkern.

The new building will be a 28'x44' ranch with partial basement and no garage. The building will be serviced by City water and sewer and underground power lines. There will also be stone drip-edge stormwater features at the front and back of the building to help compensate for the increase in impervious area on the site.

Please review the attached materials and plans for more information and please feel free to contact us with any questions or comments you may have. We appreciate your review of this application.

Prepared by,

Terradyn Consultants, L.L.C.

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

Project Manager



Level I – Minor Residential Development Review Application Portland, Maine

Planning and Urban Development Department Planning Division

Portland's Planning and Urban Development Department coordinates the development review process for site plan, subdivision and other applications under the City's Land Use Code. Attached is the application form for a Level I: Minor Residential site plan and building permit.

Level I: Minor Residential development includes:

- Development of a single-family or a two-family building, excluding building additions, decks, or accessory structures, such development shall be deemed minor residential development for purposes of this article regardless of its size.
- The addition of any additional dwelling unit to a building initially reviewed as a two-family dwelling or multifamily structure, if the additional dwelling unit does not require subdivision review under Maine State Statutes and Portland's Subdivision Ordinance.

As of September 16, 2010 all new construction of one and two family homes are required to be sprinkled in compliance with NFPA 13D. This is required by City Code. (NFPA 101 2009 ed.)

The Maine Home Construction Contracts Act requires that any home construction or repair work for more than \$3000 in materials or labor must be based on a written contract unless the parties agree to exempt themselves. A sample contract is available on the City's website at www.portlandmaine.gov, or contact the Inspections Office to have one mailed to you.

The Land Use Code (including Article V), the Technical Manual, and the Design Manual are available on the City's web site at http://www.portlandmaine.gov/planning/default.asp or copies may be purchased at the Planning Division Office.

Inspection Division

Room 315, City Hall 389 Congress Street (207) 874-8703 Office Hours

Monday, Tuesday, Wednesday and Friday 8:00 a.m. – 4:00 p.m. Thursday 8:00 a.m. – 1:00 p.m.

Planning Division

Fourth Floor, City Hall 389 Congress Street (207) 874-8721 Office Hours

Monday thru Friday 8:00 a.m. – 4:30 p.m.

| Project Address: | | | | | | |
|--|------------|-------------|---------------------|----------------|------------|--|
| Total Square Footage of Proposed | Area of lo | t (total sq | . ft.): | | | |
| Structure/Area: | Garage: | Yes | No | Number of S | stories: | |
| | | Attache | ed | Number of B | Sathrooms: | |
| | | Detach | ed | Number of B | Sedrooms: | |
| | | Sq. Ft.: | | | | |
| Tour Assessment's Object Disable 0 Last | (/-)- | • | | | | |
| Tax Assessor's Chart, Block & Lot Chart# Block # Lot # | (s): | | | | | |
| | | | | | | |
| | | | | | | |
| Current legal use: | | | _ | | | |
| Number of Residential Units | | | | | | |
| If vacant, what was the previous u | se? | | | | | |
| Is property part of a subdivision? | | If yes, pl | ease name | | | |
| Project Description: | | | | | | |
| | | | | | | |
| Applicant – must be owner, Lessee or Buyer Applicant Contact Information | | | | | | |
| Applicant – must be owner, Lessee or Buyer Name: | | | Work # | itormation | | |
| | | | | | | |
| Business Name, if applicable: | | | Home# | | | |
| Address: | | | Cell # | | | |
| City/State : Zip Code: | | | e-mail: | | | |
| Owner – (if different from Applicant) | | | Owner Contact Infor | mation | | |
| Name: | | | Work # | | | |
| Address: | | | Home# | | | |
| City/State : | Zip Code: | | Cell # | | | |
| | | | e-mail: | | | |
| | | | | | | |
| Billing Information | | | Contact when Buildi | ng Permit is R | leady: | |
| Name: | | | Name: | | | |
| Address: | | | Address: | | | |
| City/State : | Zip Code: | | City/State : | | Zip Code: | |
| Phone Number: | | | Phone Number: | | | |

DEVELOPMENT REVIEW FEES:

Payment may be made in cash, credit card or check addressed to the City of Portland.

| Level I Minor Residential Site Plan | Fees Paid: | | | | |
|--|------------|--|--|--|--|
| 1. Application Fee - \$300.00 | \$ | | | | |
| 2. Inspection Fee - \$100.00 (for site plan inspection by the Planning Division) | \$ | | | | |
| 3. Certificate of Occupancy Fee - \$75.00 | \$ | | | | |
| 4. Building Permit (Cost of Work) | \$ | | | | |
| Total Due: | \$ | | | | |
| Building Permit Fee - \$30 for the first \$1,000 construction cost - \$10 every additional \$1,000. | | | | | |
| Performance Guarantee- Exempt except for those projects that complete construction in the winter and the site work is incomplete. | | | | | |

Please submit all of the information outlined on the applicable Checklist, shown on Page 4 and 5 of this Application. In addition, a CD or PDF (e-mailed to buildinginspections@portlandmaine.gov) of the entire Application, including all plans, must be submitted with the Application. Failure to do so may result in the automatic denial of your permit.

Portland's development review process and requirements are outlined in the Land Use Code (Chapter 14), which includes the Subdivision Ordinance (Section 14-491) and the Site Plan Ordinance (Section 14-521). Portland's Land Use Code is on the City's web site: www.portlandmaine.gov Copies of the ordinances may be purchased through the Planning Division. All of the information on the checklist must be submitted for review. The applicant must check off the items contained in the application package to ensure the application is complete.

Property Taxes:

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before a permit of any kind is accepted.

Separate Permits:

Separate permits are required for internal and external plumbing, HVAC, and electrical installations.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Planning Authority and Code Enforcement's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

| Signature of Applicant: | Date: | | |
|-------------------------|-------|--|--|
| | | | |

This is not a permit - you may not commence any work until the permit is issued.

(A CD or PDF (e-mailed to <u>buildinginspections@portlandmaine.gov</u>) of the entire application, including all plans, must be submitted with the application.)

| | General Submittal Requirements – Level I Minor Residential | | | | |
|------------------------|--|---|---|--|--|
| Applicant Checklist | Checklist Suhmittal Requirement | | | | |
| Х | 4 | 2 | Completed application form and check list. | | |
| X | | 1 | Application fees. | | |
| Х | | 2 | Evidence of right, title and interest. | | |
| n/a | | 2 | Copies of required state and/or federal permits. | | |
| n/a | | 2 | Written Description of existing and proposed easements or other burdens. | | |
| n/a | | 2 | Written requests for waivers from individual site plan and/or technical standards. | | |
| | | 2 | Written summary of fire safety (referencing NFPA fire code and Section 3 of the City of Portland Technical Manual). Refer to Fire Department Checklist on page 6 of this application. | | |

| | Site Plans an | d Boundary Surv | rey Requirements – Level I Minor Residential | | | |
|------------------------|------------------------------------|---|---|--|--|--|
| Applicant Checklist | Planner Checklist (internal) | Number of Copies | Submittal Requirement | | | |
| X | | 3 | Boundary survey meeting the requirements of section 13 of the City of Portland Technical Manual with the site plan information listed below shown on the plan, including a north arrow and a scale greater than or equal to 1"=20'. (Photocopies of the plat or hand drawn building footprints will not be accepted.) | | | |
| × | | overlay zoi | | | | |
| × | | _ | Existing and proposed structures (including location of proposed piers, docks or wharves if in Shoreland Zone). | | | |
| X | | Location ar | Location and dimension of existing and proposed paved areas. | | | |
| X | | ■ Proposed g | round floor area of building. | | | |
| X | | ■ Finish floor | Finish floor elevation (FEE) or sill elevation. | | | |
| | | ■ Exterior bu | ilding elevations (show all 4 sides). | | | |
| X | | Existing and proposed utilities (or septic system, where applicable) | | | | |
| X | | Existing and proposed grading and contours. | | | | |
| X | | Proposed stormwater management and erosion controls. | | | | |
| X | - | Total area and limits of proposed land disturbance. | | | | |
| N/A | | Proposed protections to or alterations of watercourses. | | | | |
| N/A | | Proposed wetland protections or impacts. | | | | |
| X | | Existing vegetation to be preserved and proposed site landscaping and street trees (2 trees per unit for a single or two-family house). | | | | |

| N/A | Existing and proposed curb and sidewalk, except for a single family home. |
|-------------|---|
| N/A | Existing and proposed easements or public or private rights of way. |
| . X | Show foundation/perimeter drain and outlet. |
| ^/ A | Additional requirements may apply for lots on unimproved streets. |

| Building Permit Submittal Requirements –Level I: Minor Residential Development | | | | | |
|--|------------------------------------|------------------|--|--|--|
| Applicant Checklist | Planner Checklist (internal) | Number of Copies | Submittal Requirement | | |
| | | 1 | One (1) complete set of construction drawings must include: | | |
| \times | | | Cross section with framing details | | |
| X | | | ■ Floor plans and elevations to scale | | |
| N/A | | | Stair details including dimensions of : rise/run, head room, guards/handrails, baluster space | | |
| × | | | Window and door schedules | | |
| | | | Foundation plans w/required drainage and damp proofing, if applicable | | |
| | | | Detail egress requirements and fire separation, if applicable | | |
| X | | | Insulation R-factors of walls, ceilings & floors & U-factors of windows per the IEEC 2003 | | |
| N/A | | | Deck construction including: pier layout, framing, fastenings, guards, stair dimensions | | |
| X | | | As of September 16, 2010 all new construction of one and two family homes are required to be sprinkled in compliance with NFPA 13D. This is required by City Code. (NFPA 101 2009 ed.) | | |
| X | | | Reduced plans or electronic files in pdf format are also required if original plans are larger than 11X17" | | |

** Reminder: **

- 1. A CD or PDF of the entire application, including all plans, must be submitted with the application.
- 2. Separate permits are required for internal and external plumbing, HVAC, and electrical installations.
- 3. Please submit all of the information outlined in this application checklist.
- 4. If the application is incomplete, the application may be refused.
- 5 . The Planning and Urban Development Department may request additional information prior to the issuance of a permit.

Site Plan Standards for Review of Level I: Minor Residential

Level I: Minor Residential site plan applications are subject to the following site plan standards*, as contained in section 14-526 of Article V, Site Plan:

- 14-526 (a) Transportation Standards:
 - 2.a. Site Access and Circulation (i) and (ii);
 - 2.c Sidewalks: (if the site plan is a two-family or multi-family building only);
 - 4.a. Location and required number of vehicle parking spaces:(i) and (iv)
- 14-526 (b) Environmental Quality Standards:
 - Preservation of significant natural features.
 - 2.a. Landscaping and landscape preservation
 - 2.b. Site landscaping (iii)
 - 3.a. Water quality, stormwater management and erosion control: a., d., e., and f.
- 14-526 (c) Public Infrastructure and Community Safety Standards:
 - 1. Consistency with Master Plan
 - 2. Public Safety and fire prevention
 - 3. Availability and adequate capacity of public utilities; a., c., d., and e.
- 14-526 (d) Site Design Standards:
 - 5. Historic Resources
 - 9. Zoning related design standards
- Except as provided in Article III of the City Code, or to conditions imposed under Section 14-526(e) only, or to those submission requirements set forth in section 14-527 as relate solely thereto.



PORTLAND FIRE DEPARTMENT SITE REVIEW FIRE DEPARTMENT CHECKLIST



A separate drawing[s] shall be provided to the Portland Fire Department for all site plan reviews.

- 1. Name, address, telephone number of applicant.
- 2. Name address, telephone number of architect
- 3. Proposed uses of any structures [NFPA and IBC classification]
- 4. Square footage of all structures [total and per story]
- Elevation of all structures
- 6. Proposed fire protection of all structures
 - As of September 16, 2010 all new construction of one and two family homes are required to be sprinkled in compliance with NFPA 13D. This is required by City Code, (NFPA 101 2009 ed.)
- 7. Hydrant locations

Subject

Doct: 42226 Bk:29812 Pg: 215

WARRANTY DEED – SHORT FORM DEEDS ACT 33 M.R.S.A. §§ 761 et seq.

KNOW ALL BY THESE PRESENTS, that I, Clifton R. Hilton, of Portland, Cumberland County, State of Maine, for valuable consideration received, hereby grant to Michael Mulkern and Lynne M. Mulkern of South Portland, Cumberland County, State of Maine, as JOINT TENANTS, with WARRANTY COVENANTS, that certain lot or parcel of land, with any improvements thereon, located at 39 Plymouth Street, Portland, Cumberland County, State of Maine, as more fully described in Exhibit A attached hereto and fully incorporated herein by reference.

| IN WITNESS WHEREOF, I have | Chille R Holes by Males Was Attorney in Fact |
|----------------------------|---|
| Witness | Clifton R. Hilton BY: Michelle A. Hilton His Attorney in Fact |

Witness

STATE OF MAINE Cumberland, ss.:

On August 3, 2012, personally appeared the above-named Michelle A. Hilton, Attorney in Fact for Clifton R. Hilton and acknowledged the foregoing deed to be her free act and deed.

Before me,

Notary Public/ Attorney At Law

Litoury W. Courier

Type or Print Name

EXHIBIT A Legal Description of Property in Cumberland County 39 Plymouth Street, Portland, ME 04103

File No. R12041

Tax Map 343, Block B, Lot 13-15

- A certain lot or parcel of land, together with any buildings and improvements thereon, situated on the easterly side of Plymouth Street as marked by the City of Portland, said iron marking the southwest corner of Lot Numbered Ninety-five (95) on plan of Deering Villa, recorded in Cumberland County Registry of Deeds, Plan Book 11, Page 71; thence by said Plymouth Street and on a course South 19° 12' East, eight and twenty-six hundredths (8.26) feet to a stake marking the point of curvatures in the side line of said Plymouth Street as determined by the City of Portland; thence on a curve to the left whose radius is about two hundred ninety-three and sixty-two hundredths (293.62) feet, a distance of fifty-three and seventy-four hundredths (53.74) feet as measured on the arc thereof to an iron marking the northwest corner of Lot Number Ninety-seven (97) shown on said recorded plan; thence by said Lot No. 97 and on a course of North 56° 45' East one hundred forty and fifty-two hundredths (140.52) feet to an iron marking a point on the westerly sideline of Lot Numbered One Hundred Nine (109) on said plan; thence by said Lot No. 109 and Lot No. 110 and on a course of North 29° 16' West thirty-seven and five tenths (37.5) feet to an iron at the southeast corner of Lot No. 95 on said plan; thence by said Lot No. 95 and on a course of South 66° 50' West, one hundred thirty-four and ninety-nine hundredths (134.99) feet to the point of beginning. Said above described courses are magnetic and of the date of 1951.
- Being Lot Numbered Ninety-six (96) on said plan, and being the same lot of land conveyed to Carl F. Cloudman by Everett L. Sawyer, by his deed of warranty dated October 22, 1956, and recorded in the Cumberland County Registry of Deeds in Book 2321, Page 175, and being the same lot conveyed to Everett L. Sawyer by the New England Land Company by deed dated January 15, 1912 and recorded in said Registry of Deeds in Book 887, Page 488.
- Also hereby conveying another certain lot or parcel of land, situated on the east side of Plymouth Street, in the City of Portland, County of Cumberland and State of Maine and more particularly bounded and described as follows:
- "Land East side Plymouth St., Nos. 41-43, Lot 95, Rec. Plan Deering Villa, Portland, Maine, City Assessors' Plan 343-B-12, Area 6625 sq. feet. Val. \$75.00."
- as so described in the quitclaim deed without covenants of the City of Portland to Carl F. Cloudman, dated April 24, 1952 and of record in the Cumberland County Registry of Deeds, Book 2074, Page 385.
- The above parcel is all and the same premises conveyed by deed of Carl F. Cloudman to Robert F. Dean and Avis H. Dean, as joint tenants, dated January 16, 1979 and recorded in the Cumberland County Registry of Deeds in Book 4370, Page 76. Robert F. Dean was the surviving joint tenant of Avis H. Dean who died a resident of Portland, Maine on November 15, 1993.
- Also, a certain lot or parcel of land located in Portland, Maine and being Lot 110 located in Deering Villa, plan of which, made by C. A. Thayer, Civil Engineer, dated July, 1907, and recorded in the Cumberland County Registry of Deeds in Plan Book 11, Page 71, to which reference may be made for a more particular description.
- Also another certain lot or parcel of land located on Plymouth Street, Portland, Maine, and being Lot 97 on Plan of Deering Villa, which was made by C.A. Thayer, Civil Engineer, dated July, 1907, and recorded in Cumberland County Registry of Deeds Plan Book 11, Page 71, to which reference may be made for a more particular description.
- Title to Lot 110 was conveyed by tax deed from the City of Portland to Walter E. Rollins, dated June 29, 1948, and recorded in the Cumberland County Registry of Deeds in Book 1921, Page 267.

- Title to Lot 97 was conveyed by tax deed from the City of Portland to Walter E. Rollins, dated July 22, 1948, and recorded in the Cumberland County Registry of Deeds in Book 1921, Page 266.
- Madeline R. Rollins inherited these two lots described in next above from her late husband, Walter E. Rollins, Cumberland County Probate Court Docket No. 70264.
- The two lots next above are all and the same premises conveyed by deed of Madeline R. Rollins to Robert F. Dean, dated October 10, 1980, and recorded in the Cumberland County Registry of Deeds in Book 4678, Page 260, and subsequently conveyed by deed of Robert F. Dean to Robert F. Dean and Avis H. Dean, as joint tenants, dated April 19, 1989, and recorded in the Cumberland County Registry of Deeds in Book 8724, Page 238. Robert F. Dean was the surviving joint tenant of Avis H. Dean who died a resident of Portland, Maine on November 15, 1993.
- Meaning and intending to convey and hereby conveying the same premises conveyed to Clifton R. Hilton by Deed of Distribution By Personal Representative by Clifton R. Hilton, Personal Representative of the Estate of Robert F. Dean dated November 13, 2006 and recorded in the Cumberland County Registry of Deeds in Book 24582, Page 114.

Received Recorded Resister of Deeds Aus 06:2012 11:52:38A Cumberland Counts Pamela E. Lovles

Subject

Doc#: 27589 Bk:26084 Ps: 165

QUITCLAIM DEED WITH COVENANT

Maine Statutory Short Form

KNOW ALL MEN BY THESE PRESENTS, that I, Lynne M. Mulkern, of South Portland, County of Cumberland, State of Maine, for consideration paid, grant to Michael E. Mulkern, of South Portland, County of Cumberland, State of Maine, whose mailing address is 241 Elm Street, South Portland, Maine 04106, with Quitclaim Covenant, a certain lot or parcel of land with the buildings thereon, bounded and described as follows: See attached Exhibit A.

Meaning and intending to convey and hereby conveying the same premises conveyed to Michael E. Mulkern and Lynne M. Mulkern by Warranty Deed of Arlington Investments, Inc., dated August 1, 1996 and duly recorded in the Cumberland County Registry of Deeds, Book 12646, Page 251.

TO HAVE AND TO HOLD the aforegranted and bargained premises, with all the privileges and appurtenances thereof, to the said Michael E. Mulkern, his heirs and assigns, to his and their use and behoof forever. And I do covenant with the said Grantee, his heirs and assigns, that I shall and will warrant and defend the premises to the said Grantee, his heirs and assigns forever, against the lawful claims and demands of all persons claiming by, through, or under me.

IN WITNESS WHEREOF, I, the said Lynne M. Mulkern in this deed as Grantor, and relinquish and convey all rights by descent and all other rights in the above described premises, have hereunto set my hand and seal this ____ day of the month of April, 2008.

SIGNED, SEALED AND DELIVERED

IN PRESENCE OF

Witness

Lynne M. Mulkern

ACKNOWLEDGMENT

State of Maine Cumberland, ss:

April **3**, 2008

Then personally appeared the above-name Lynne M. Mulkern and acknowledged the foregoing instrument to be her free act and deed.

Before me,

Notary Public/Attorney at Lav

NOTARY PUBLIC, MAINE
MY COMMISSION EXPIRES
FEBRUARY 21, 2009

EXHIBIT A

The real property situated at 164 Allen Avenue in Portland, County of Cumberland and State fo Maine, described as follows:

Those certain lots or parcels of land, with the improvements thereon, identified as Lot Nos. One Hundred Seven (107), One Hundred Eight (108) and One Hundred Nine (109) as shown on a Plan of Deering Villa, which said Plan was made by C. A. Thayer, C.E., dated June 1907 and is recorded in the Cumberland County (Maine) Registry of Deeds in Plan Book 11, at page 71, to which Plan reference is made for a more particular description of said lots.

This conveyance is subject to the following:

Sewer and water rights as set forth in deed dated June 8, 1995 and recorded in said Registry of Deeds in Book 12004, Page 40.

Rights and easements granted to Central Maine Power Company as set forth in deed dated November 29, 1972 and recorded in said Registry of Deeds in Book 3346, Page 342.

Meaning and intending to convey a portion of the premises conveyed to Arlington Investments, Inc., by Deed of Madeline R. Rollins dated December 16, 1992 and recorded in the Cumberland County Registry of Deeds in Book 10475, Page 144.

Received
Recorded Resister of Deeds
May 28:2008 11:31:06A
Cumberland County
Pamela E. Loyley



STORMWATER REPORT

39 Plymouth Street Michael Mulkern October 22, 2012

The following Stormwater Report has been prepared to summarize the stormwater impact of a single family structure at 39 Plymouth Street in Portland, Maine.

Project Description:

Mr. Mulkern is proposing the development of a single family home at 39 Plymouth Street. The new home will introduce approximately 2,402 square feet of impervious area to the 20,760 s.f. lot. The impervious area includes the building and an extension of the existing driveway.

Existing Conditions:

Mr. Mulkern currently owns the proposed new house lot, an existing two-unit property and existing single family home lot, concurrently. The proposed new house lot is to be located at the rear of the two, existing buildings. The area to be developed is currently a mix of lawn area and woods. The lot slopes toward the rear and runoff is directed to an undeveloped portion of the adjacent school's campus. There is city water and sewer within Plymouth Street and no storm drainage system.

Proposed Conditions:

The new home will be located in the rear of the property. A crushed rock infiltration trench is proposed along the front and back edges of the home with a storage capacity of approximately 480 cubic feet. This represents the difference in the volume of runoff produced in the post-development conditions versus the pre-development conditions. Runoff will enter the trench and be allowed to exit via the foundation drain piping. The foundation drain piping has a free outflow at the rear of the property. Some runoff will be allowed to infiltrate into the sub-soils of the property. This reduces the overland flow of runoff during rain events.

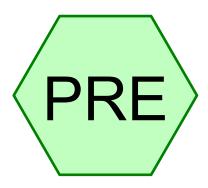
The temporary storage of runoff volume and the use of a shared driveway to reduce the overall impervious area of the development will help to maintain pre-development runoff numbers for the properties. Therefore this project is not expected to have a significant, negative impact on downstream areas.

Prepared by,

Terradyn Consultants, L.L.C.

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

Project Manager













Prepared by Terradyn Consultants, LLC 10/23/2012 HydroCAD® 7.10 s/n 003654 © 2005 HydroCAD Software Solutions LLC

Page 2

10/23/2012

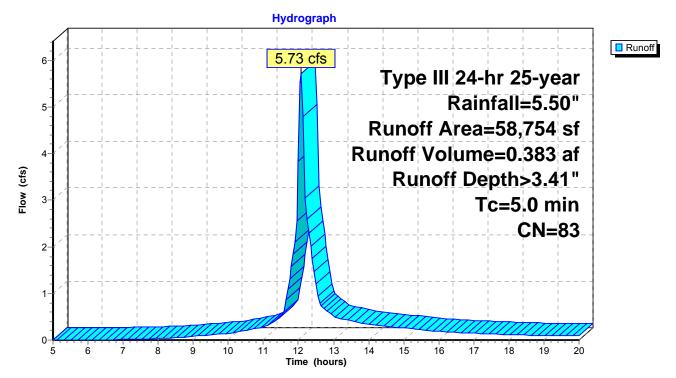
Subcatchment POST:

Runoff = 5.73 cfs @ 12.07 hrs, Volume= 0.383 af, Depth> 3.41"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.50"

| Area (sf) | CN | Description |
|--------------------------|----|---|
| 21,574 | 98 | impervious area |
| 13,620 | 70 | Woods, Good, HSG C |
| 21,158 | 74 | >75% Grass cover, Good, HSG C |
| 1,170 | 98 | new driveway |
| 1,232 | 98 | new ranch house |
| 58,754 | 83 | Weighted Average |
| Tc Lengtl (min) (feet | | pe Velocity Capacity Description /ft) (ft/sec) (cfs) |
| 5.0 | • | Direct Entry, |

Subcatchment POST:



HydroCAD® 7.10 s/n 003654 © 2005 HydroCAD Software Solutions LLC

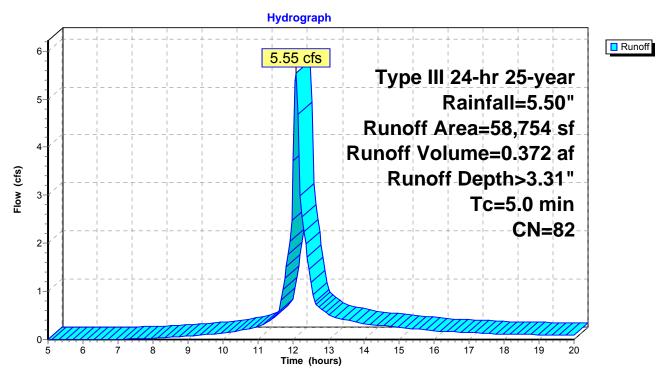
Subcatchment PRE:

Runoff = 5.55 cfs @ 12.08 hrs, Volume= 0.372 af, Depth> 3.31"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type III 24-hr 25-year Rainfall=5.50"

| A | rea (sf) | CN | Description | | |
|-------------|------------------|---------------|-------------|-------------------|---------------|
| | 21,574 | 98 | impervious | area | |
| | 13,620 | 70 | Woods, God | od, HSG C | |
| | 23,560 | 74 | >75% Grass | s cover, Go | ood, HSG C |
| | 58,754 | 82 | Weighted A | verage | |
| Tc (min) | Length (feet) | Slop (ft/f | , | Capacity (cfs) | Description |
| 5.0 | | • | | | Direct Entry, |

Subcatchment PRE:





MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Special Point Features

(+) Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

.. Gravelly Spot

Landfill

∧ Lava Flow

علد Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

+ Saline Spot

"." Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

 \sim

Gully

Short Steep Slope

Other

Political Features

0

Cities

Water Features

Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

MAP INFORMATION

Map Scale: 1:1,640 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 19N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cumberland County and Part of Oxford County,

Maine

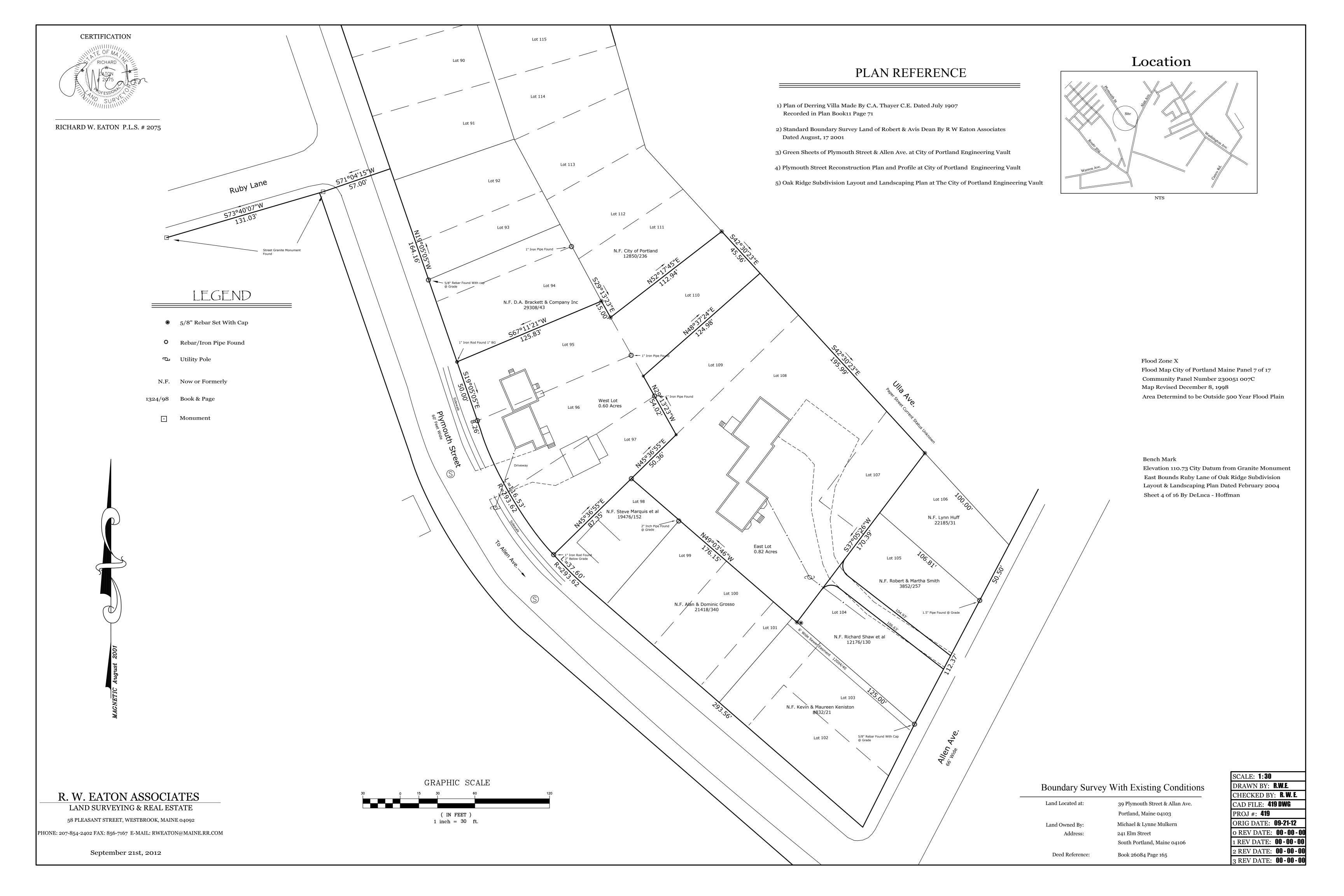
Survey Area Data: Version 7, Jan 8, 2009

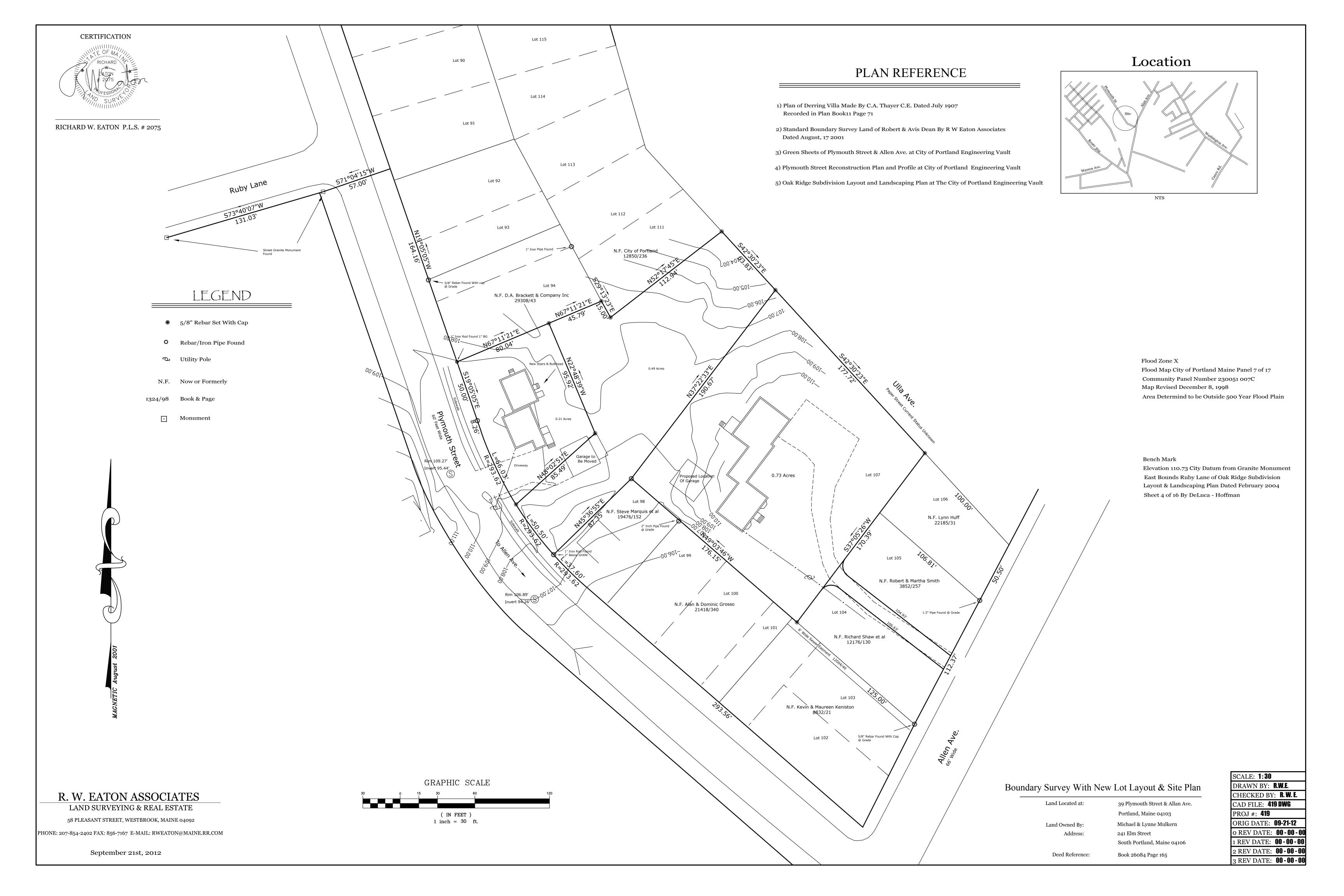
Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

| Cumberland County and Part of Oxford County, Maine (ME005) | | | | | |
|--|---|-----------------------------|--------|--|--|
| Map Unit Symbol | Map Unit Name | Acres in AOI Percent of AOI | | | |
| BuB | Buxton silt loam, 3 to 8 percent slopes | 4.3 | 59.8% | | |
| HrB | Hollis fine sandy loam, 3 to 8 percent slopes | 2.8 | 38.7% | | |
| Wa | Walpole fine sandy loam | 0.1 | 1.5% | | |
| Totals for Area of Interest | | 7.2 | 100.0% | | |







D. Riprap. For areas stabilized with riprap, permanent stabilization means that appropriate backing of a well-graded gravel or approved geotextile to prevent smust be sized appropriately. It is recommended that angular stone be used. Permanent stabilization defined A. Seeded areas. For seeded areas, permanent stabilization plants with no evidence of washing or rilling of the topsoil. B. Apply limestone and fertilizer according to soil tests. Soil sample mailers are available from the local cooper variable sites, or where timing is critical, fertilizer may be square feet using 10-20-20 (n-p2o5-k2o) or equivalent. Permanent mulch. For mulched areas, permanent mulching means ulch material. Erosion control mix may be used as mulch for permanetes and limitations. Vegetated waterway. Upon final grading, the disturbed areas shall be immediately seeded to permanent vegetation and ulched and will not be used as outlets until a dense, vigorous vegetative cover has been obtained. Once soil is exposed final aterway construction, it should be immediately shaped, graded and stabilized. Vegetated waterways need to be stabilized or ly during the growing season (prior to september 15). If final seeding of waterways is delayed past september 15, nergency provisions such as sod or riprap may be required to stabilize the channel. Waterways should be fully stabilized ior to directing runoff to them. Inspect seedbed just before seeding. If traffic has left the soil compa Riprap: Since riprap is used where erosion potential is high, construction must be sequenced so that the riprap is put in ace with the minimum delay. Disturbance of areas where riprap is to be placed should be undertaken only when final exparation and placement of the riprap can follow immediately behind the initial disturbance. Where riprap is used for outlet otection, the riprap should be placed before or in conjunction with the construction of the pipe or channel so that it is in placent the pipe or channel begins to operate. Maintain temporary riprap, such as temporary check dams until the disturbed as is permanently stabilized. in unworked for more than 14 days except, stabilize areas within 100 feet of a wetland or waterbody within 7 days or to a predicted storm event, whichever comes first. If hay or straw mulch is used, the application rate must be 2 bales 0 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 be kept moist or anchored to prevent wind blowing. An erosion control blanket or mat shall be used at the base of ied waterways, steep slopes (15% or greater) and on any disturbed soil within 100 feet of lakes, streams and wetlands. Ing shall be planned so as to minimize the length of time between initial soil exposure and final grading. On large projects hould be accomplished by phasing the operation and completing the first phase up to final grading and seeding before 19 the second phase, and so on. should be made 45 days prior to the first killing frost or as a snowfall. When crown vetch is seeded in later summer, at leg cannot be done within the seeding dates, mulch according and construction to protect the site and delay seeding until construction projects on land used for agricultural purposes (e.G., pipelir may be accomplished by returning the disturbed land to agricultural use SEDIMENT For open channels, permanent s in height, with well-graded riprap, o ind flow depths without reliance on o ing of the banks, or down-cutting of າ of 3 inches p eded with rye at 3 persons stockpiled loam. lres followed by the shall they , f≣ inter CONTROL such as those offered by the university of maine soil is rative extension service office. If soil testing is not feat be applied at the rate of 800 pounds per acre or 18.4 t. Apply ground limestone (equivalent to 50% calcium e additional erosion cordinish graded areas. The cted by the inspecting election activities. 3 pounds/1,000 sf and stockpile to be I nt stabilization me o, or with another on check dams to of of the channel. the oerly in within 30 90% e free of brush, rut vent construction o **PLAN** nstall n the 의 의) perr s a dormant seeding with n at least 35% of the seed sh ling to the temporary mulch until the next recommended , ; and mu located 으 g, displacing c it beyond the be in place bef zed. Adequate prevent unre 9 the of the exposed are according to the a must be tilled and firr ılched, by des of the or other rel with local r lived with riprap have an mehind the riprap. Stone of this y tooth h until a r the see r debris, Ith mulch after the first should be hard seed ulching bmp and ded seeding period. edge of any a. Maintain the il testing laboratory. easible on small or 4 pounds per 1,000 n plus magnesium as Maintenance and inspection phase A. Contractor shall inspect disturbed and impervious areas, a for storage that are exposed to precipitation, and locations whand before and after a storm event, prior to completion of periand stormwater must conduct the inspection. This person must practices (bmps) need to be modified or if additional bmps are calendar days and prior to any storm event (rainfall). All meas until areas are permanently stabilized. B. A log (report) must be kept summarizing the scope making the inspection, the date(s) of the inspection, a sedimentation controls and pollution prevention meas maintained; location(s) of bmps that failed to operate location(s) where additional bmps are needed that dic deficiencies or enhance controls must also be indicated. D. Use mulch and mulch netting exposed to direct wind. C. Apply hay mulch at twice the standard rate ground surface will not be visible and must be ζ. If snowfall is greater t and mulched. Temporary mulch must be applied within 7 days of so areas within 100 feet from a protected natural resourc Loam shall be free Areas that have been brought to An area within 100 feet of a protected See the vegetation measures for more information or Install an erosion control blanket in TYPICAL EROSION COI FOR DWELLING UNITS s that have not been stabilize with an appropriate stone lining this standard by the departme within the g of the gro inal grade ı ROADWAY before it is must be ******* CMP d by november 1, or will be worked during the winter construction ng backed by an appropriate gravel bed or geotextile unless nt. NTROL MEASURES DRIVE - SILTATION FENCE (SEE DETAIL FOR INSTALLATION) RESIDENTIAL STRUCTURE EXISTING WOOD LOT TO REMAIN PROPERTY LINE SURFACE RUN-OFF PATTERN DRAINAGE SWALE LIMIT OF CLEARING AND SITE DISTURBANCE ons of the personnel of erosion and ps that need to be ricular location; and 1.INSTALL BACKFLOW VALVE WITH RUBBER SEAL IN EACH FOUNDATION DRAIN SERVICE. 2. IF SUMP PUMP IS UTILIZED INSTALL CHECK VALVE AT SUMP PUMP THICKNESS (`T') = $1.5 \times MAX$. ROCK DIAMETER - 6" (150 mm) MIN. NOTES: 1. `La' = LENGTH OF APRON. DISTANCE `La' SHALL BE OF SUFFICIENT LENGTH TO DISSIPATE ENERGY. 2. APRON SHALL BE SET AT A ZERO GRADE AND ALIGNED STRAIGHT. 3. FILTER MATERIAL SHALL BE FILTER FABRIC OR 6" (150mm) THICK MINIMUM GRADED GRAVEL LAYER. SERVICE NOT TO SCALE PIPE OUTLET PROTECTION NOT TO SCALE GRASSED SWALE ROCK d50 50% SHALL BE LARGER THAN 6" (150mm) MIN. DIA. LENGTH AS REQUIRED TO BRING 3' BEYOND 凡 CONNECTION **OUNDATION DRAIN** PLAN SECTION FILTER AMATERIAL OVERFLOW-ELEVATION FLOW - SEWER OR STORM DRAIN FLOW PVC SDR-35 6" PVC SDR-LATERAL 45° ELBOW 14. No holes, tr in public rights-24. Details are intended to show end result of design. Any modification to shall be submitted to the engineer for review and approval prior to any wor 23. The contractor shall take full responsibility for any char authorized by the architect/engineer and/or client/owner. CONSTRUCTION NOTES 22. The general contractor shall maintain a current and complete all phases of construction for use of all trades. 20. Where the terms "approved equal", "other approved", "equal to", "acceptable" or other general qualifying terms are used in these notes, it shall be understood that reference is made to the ruling and judgment of terradyn consultants, llc. 12. Contractors shall be responsible for compliance with the requirements of 23 mrsa 3360-a. It shall be the responsibility of the contractor to coordinate with the appropriate utilities to obtain authorization prior to relocation of any existing utilities which conflict with the proposed improvements shown on these plans. If a utility conflict arises, the contractor shall immediately notify the owner, the municipality and appropriate utility 16. The proposed limits of clearing shown hereon are approximate based upon the propograding. The applicant reserves the right to perform normal forest management activities clearing limit as shown. Tree removal outside of the limits of clearing may be necessary to dying trees or tree limbs. This removal is due to potential safety hazards and to promote 18. The contractor shall be fully and solely responsible for the damaged and defective material and workmanship in connecti Contractor shall incorporate provisions as necessary in construction to protect existing structures, physical atures, and maintain site stability during construction. Contractor shall restore all areas to original condition Contractor shall clean and remove debris ar eas, or other public ways due to construction Contractor shall verify all dimensions and conditions in the field prior to fabrication and erection of any aterial. Any unusual conditions shall be reported to the attention of the engineer. Install all equipment and materials in accordance with manufacturer's recommendations and owner's quirements unless specifically otherwise indicated or where local codes or regulations take precedence Contractor shall notify engineer of all products or items noted as "existing" which are not found in the field Contractor shall visit the site and familiarize him or herself with all id shall make provisions as to the cost thereof. Contractor shall be reself with all contract documents, field conditions and dimensions accomplished as shown prior to proceeding with construction. Any ditention of the engineer prior to the commencement of work. All work within the public right-of-way shall require a M.D.O.T. Permit plicable. The contractor is hereby cautioned that all site features shown hereon are based on field observations by surveyor and by information provided by utility companies. The information is not to be relied on as being act or complete. The contractor shall contact dig safe (1-888-digsafe) at least three (3) but not more than ty (30) days prior to commencement of excavation or demolition to verify horizontal and vertical location of immediately upon completion of cuts/fills, the contractor shall stabilize disturbed areas in sion control notes and as specified on plans. safe will advise contractor of member utilities in the area. Contractor is acting non-member utilities directly. Non-member utilities may include icts and small local utilities, as well as usg public works systems. ntractor shall be aware that dig safe will advise contractor of member u TYPICAL WATER SERVICE CONNECTION trenches or structures shall be left open overnight in any excavation s-of-way. ent joints shall be ctor shall obtain all required permits prior to cor sawcut prior to paving to provide <u>ග</u> COPPER OR BRASS set of construction drawings s about the dig. When notifie esponsible for identifying and own or city water and sewer EDGE OF EASEMENT (MIMIMUM OF 5' FROM FACE OF BUILDING)

The inspecting engineer at his/h regetative provisions to maintain storoviding and installing any suppleating angular in dengineer's directions will result in descriptions.

applied in a

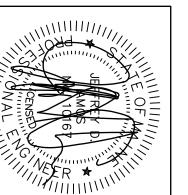
shall be be place

Areas to be aterials.

cleared, grubbed and

rified to

B. Sodded areas. For sodded areas, pern soil with no slumping of the sod or die-off.



ROSION AND

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r to any clearing a

DETAILS & NOTES PREPARED FOR MR. MICHAEL MULKERN 241 ELM STREET SOUTH PORTLAND, MAINE,04106

39 PLYMOUTH STREET

1240 DATE

2

11/16/12 SCALE

AS SHOWN

2

on site during

: Permanent seeding shalling frost and before snunscarified). If seeding overwinter stabilization a

acre (138 lb.

Per 1,000 sq. Ft)

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frog

All gr

CONSULTANTS, LLC

accessible to the public or

/ to remove dead or e proper forest growth.

accordance with

www.terradynconsultants.com

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

Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

NO. DATE

REVISIONS

JDA APP'D

- SERVICE BOX WITH ROD

CURB STOP

FINISH TO