

335-B-3

Beverly St. (lot 139) and 147
Woodford's Gardens
Street Vacations
Diversified Drop.

on Spread sheet

**CITY OF PORTLAND, MAINE
MEMORANDUM**

TO: Chair and Members of the Planning Board

FROM: Richard Knowland, Senior Planner

DATE: June 13, 1995

RE: Woodfords Gardens Subdivision Street Vacations

On August 10, 1993, the Planning Board held a public hearing to consider a proposal by R.J. Grondin and Sons to alter the Woodfords Gardens Subdivision which is located in the outer Forest Avenue area. This proposal includes vacating portions of Newell Avenue, Braintree Street and Beverly Avenue. Although the Board made a positive recommendation on the street vacations, the applicant delayed forwarding this request to the City Council for approval. Given the nearly two years that has transpired since the Board's public hearing, the Planning Director has determined that a fresh look at the street vacation proposals is appropriate. For vicinity map, site plans and background information, see Attachments A, B, and C.

As the Board may recall, the Grondin proposal is located north of Saugus Street. Recently the Board reviewed a similar proposal by Diversified Properties (James Wolf) for streets south of Saugus Street. Although Mr. Wolf represented the Grondin proposal in 1993, he is no longer associated with this project.

Street Vacations

The applicant proposes to vacate portions of Newell Street, Beverly Street and Braintree Street. These street vacations will improve the roadway circulation of the subdivision by eliminating segments that are either awkward or not needed. All of these segments are unaccepted and undeveloped streets. The Newell Street segment running through lots 148 to 150 heads to a steep ravine (across from Duraston Concrete Products). It is highly unlikely this section would ever be built. The 200 foot section of Newell Street between Braintree Street and Milton Street is also being vacated because if it were constructed, it would result in a poor three-way intersection. Vacating a small segment of Beverly Street allows Milton Street to be looped to Beverly Street.

In reviewing these street vacations in the context of the PORTLAND TRANSPORTATION PLAN, street connections are being preserved. All of the streets are looped and connected. A Newell Street connection to Milton Street has been preserved providing a connection for streets to the west of this site.

1993 Planning Board Subdivision Alterations Approval

When the Board made a recommendation on the applicant's street vacation request, the Board also approved certain revisions to this subdivision. The Woodfords Gardens Subdivision was originally recorded in 1916 and has a number of design deficiencies which the applicant sought to address. These measures include the proposed street vacations, reconfiguring several street intersections and combining or reconfiguring lots, since the original lot sizes were only between 3,000 sq. ft. to 4,000 sq. ft. in size.

The Board's 1993 approval included the following:

- * Reconfiguring or extending segments of Braintree Street, Milton Street and Beverly Street to improve circulation.
- * Approving new lots created by the vacation of streets and the new street extensions. These lots include 148, 149, 154 to 161 and range in size from 10,000 sq. ft. to 17,066 sq. ft. of land area.

The remainder of the lots are being reconfigured to meet the 10,000 sq. ft. R-2 minimum lot size. As this revision involves reconfiguring lots of an existing subdivision, these changes can be reviewed by the Planning Authority. A condition of the Board's 1993 approval stated:

"That engineering drawings including street profiles for the subdivision streets be submitted to City staff for review and approval."

When the lots and engineering for the streets are reviewed, City staff will review drainage issues in a comprehensive manner including drainage impacts of the subdivision and requiring grading/drainage plans for each lot.

Attachments:

- A) Vicinity Map
- B) Site Plans
- C) Background Information
- D) 1993 Planning Board Approval Letter

CITY OF PORTLAND, MAINE

PLANNING BOARD

Kenneth M. Cole III, Chair
Jadine R. O'Brien, Vice Chair
Joseph R. DeCoursey
Irving Fisher
Cyrus Hagge
John H. Carroll
Donna Williams

August 16, 1993

Mr. James Wolf
P.O. Box 10127
Portland, ME 04101

Re: Woodfords Gardens Subdivision

Dear Mr. Wolf:

On August 10, 1993 the Portland Planning Board voted 6-0 (Cole absent) on the following motions regarding the proposed alterations to the Woodfords Gardens Subdivision.

1. Recommendation to the City Council that certain portions of Newell Avenue, Beverly Street and Braintree Street be vacated subject to the following conditions:
 - i. That an easement in an appropriate form be granted to the Portland Water District for their waterline in Braintree Street;
 - ii. That an executed copy of waiver and indemnification benefiting the City for the street vacations be submitted to City staff for review and approval; and
 - iii. That the written descriptions of the street vacations be subject to review and approval by City staff.
2. That the proposed alterations to the Woodfords Gardens Subdivision are in conformance with the Subdivision Ordinance of the Land Use Code.
 - i. That engineering drawings including street profiles for the subdivision streets be submitted to City staff for review and approval; and
 - ii. That a deed be submitted to City staff for review and approval regarding the conveyance of a portion of Lot 128 for the reconfiguration of Braintree Street.

The approval is based on the submitted site plan and the findings related to site plan review standards as contained in Planning Report #28-93, which is attached. Mylar copies of the construction drawing for the subdivision must be submitted to the Public Works Department prior to the release of the plat. In addition, a performance guarantee covering the public improvements as well as an inspection fee payment of 1.7% of the guarantee amount must be submitted to and approved by the Planning Division and Public Works prior to the recording of the subdivision plat.

QUITCLAIM DEED WITHOUT COVENANT

^{PH}
STEVEN J. ROGERS and JENNIFER A. ROGERS, of Portland, Cumberland County, State of Maine, for consideration paid, releases to **THE INHABITANTS OF THE CITY OF PORTLAND**, a municipal corporation located in the County of Cumberland and State of Maine, the a certain thirty (30) foot wide public drainage easement situated on the southerly portion of said Rogers' land and on the easterly side of Alice Street in Portland, Cumberland County, State of Maine, said easement bounded and described as follows:

See Attached Exhibit A

The premises are conveyed subject to any and all easements and restrictions of record and include all rights, easements, privileges and appurtenances pertaining thereto.

WITNESS our hands this ___ day of October, 1999.

Luceille Keeney

Witness

Steven J. Rogers

^{PH}
Steven J. Rogers

Dee Judd

Witness

Jennifer A. Rogers

Jennifer A. Rogers

STATE OF MAINE
CUMBERLAND, SS.

Personally appeared before me the above-named ^{PH} Steven J. Rogers this 02 day of ~~October~~ NOVEMBER, 1999, and acknowledged the foregoing instrument to be his free act and deed.

Lyman S. Durnell

Notary Public

LYMAN S. DURNELL
Type or Print Name

My commission expires: 08-10-00

EXHIBIT A

A certain thirty (30) foot wide public drainage easement on the southerly portion of Lot 7 as shown on a plan titled "Alice Street Subdivision" dated June 11, 1993 and recorded in the Cumberland County Registry of Deeds in Plan Book 195, Page 12, as amended by those amended plans recorded in Plan Book 195, Page 115, Plan Book 196, Page 77, and Plan Book 196, Page 319, said public drainage easement being further located on the easterly side of Alice Street in Portland, Cumberland County, State of Maine, bounded and described as follows:

Beginning on the easterly side of Alice Street in Portland, Cumberland County, State of Maine, at a point N 57° 58' 50" W thirty feet (30.00') from an iron pin at the southerly most corner of said Lot 7;

Thence N 57° 58' 50" W along the easterly sideline of Alice Street thirty feet (30.00') to a point;

Thence N 32° 01' 10" E sixteen and eighty-eight hundredths feet (16.88') to a point;

Thence N 57° 50' 26" E thirteen and twelve hundredths feet (13.12') to a point;

Thence S 56° 47' 17" E thirty three feet (33.00') through a certain thirty foot wide private drainage easement to a point;

Thence S 57° 50' 26" W twenty feet (20.00') to a point;

Thence S 32° 01' 10" W ten feet (10.00') to the point of beginning.

Reference is made to an amended plan of Alice Street Subdivision dated August 11, 1998, to be recorded in the Cumberland County Registry of Deeds.

PLANNING BOARD

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August 16, 1993

Mr. James Wolf
P.O. Box 10127
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 - ii. That an executed copy of waiver and indemnification benefiting the City for the street vacations be submitted to City staff for review and approval; and
 - iii. That the written descriptions of the street vacations be subject to review and approval by City staff.
2. That the proposed alterations to the Woodfords Gardens Subdivision are in conformance with the Subdivision Ordinance of the Land Use Code.
 - i. That engineering drawings including street profiles for the subdivision streets be submitted to City staff for review and approval; and
 - ii. That a deed be submitted to City staff for review and approval regarding the conveyance of a portion of Lot 128 for the reconfiguration of Braintree Street.

The approval is based on the submitted site plan and the findings related to site plan review standards as contained in Planning Report #28-93, which is attached. Mylar copies of the construction drawing for the subdivision must be submitted to the Public Works Department prior to the release of the plat. In addition, a performance guarantee covering the public improvements as well as an inspection fee payment of 1.7% of the guarantee amount must be submitted to and approved by the Planning Division and Public Works prior to the recording of the subdivision plat.

BK11731PG015

336-K-8-12

11-30-94

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WARRANTY DEED - SHORT FORM DEEDS ACT
33 M.R.S.A. Section 761 et seq.

71062

KNOW ALL BY THESE PRESENTS, that I, Ronald S. Smith, Jr, duly authorized officer of Custom Built Homes of Maine, Inc., a Corporation existing by law with a principal place of business in the County of Cumberland and State of Maine, for valuable consideration received, hereby grant to Bettie A. Leonard of the County of Cumberland and State of Maine, with WARRANTY COVENANTS, that certain lot or parcel of land, with any improvements thereon, located at 102 Milton Street, Portland, in the County of Cumberland and State of Maine, as more fully described in Exhibit A attached hereto and fully incorporated herein by reference.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on behalf of Custom Built Homes of Maine, Inc. in my capacity aforesaid on November 30, 1994.

[Signature]
Witness

[Signature]
Custom Built Homes of Maine, Inc.
By: Ronald S. Smith, Jr
Its: Officer

STATE OF MAINE
Cumberland, ss:

On November 30, 1994, personally appeared the above-named Ronald S. Smith, Jr and acknowledged the foregoing deed to be his/her free act and deed and his/her free act and deed in his/her said capacity.

Before me
[Signature]
Notary Public/Attorney At Law
Thomas W. Lawrence
Type or Print Name

336-K-8-12

✓

LAND USE CONSULTANTS INC

Thence, North 51-57-40 West along easterly sideline of the new alignment of said Beverly Street, a distance of sixty-nine and eighty-seven hundredths (69.87) feet to a point on the southerly line of lot 563;

Thence, North 82-20-30 East along the southerly lines of lots 563, 562 and 561, a distance of two hundred fifty and ninety-five hundredths (250.95) feet to a point and land now or formerly of DMC, Metals, Inc. (CCRD 4557/241);

Thence, South 40-06-24 East along said land of DMC Metals, Inc., a distance of fifty-nine and twenty-five hundredths (59.25) feet to a point being the most northerly corner of lot 557;

Thence, South 82-20-30 West along said lots 557, 558, 559 and 560, a distance of two hundred thirty-three and ninety-four hundredths (233.94) feet to the point of beginning.

Said parcel contains 12,122 square feet (0.28 acres) more or less.

Parcel 3 - Portion of Beverly Street East of Missouri Avenue

A certain lot or parcel of land situated westerly of and adjacent to Beverly Street in Portland, Maine, more particularly bounded and described as follows:

Beginning at a point at the northwesterly terminal end of the said newly aligned Beverly Street;

Thence, South 51-57-40 West along the said westerly sideline of Beverly Street a distance of thirty and no hundredths (30.00) feet to a point of curvature and the newly aligned northwesterly sideline of Milton street;

Thence, southerly along said westerly sideline of the proposed extension of Milton Street and a curve to the right having a radius of twenty and no hundreds (20.00) feet, an arc distance of eight-ten and ten hundredths (18.10) feet to a point of non-tangency and the northerly line of lot 589 as shown on a plan of "Woodfords Garden" by Ernest W. Branch, dated November 16, 1916, and recorded in the Cumberland County Registry of Deeds Plan Book 13, page 75;

Thence, South 67-11-40 West along said lots 589, 588, 587, 586, 585, 584 and 583, a distance of one hundred eighty-five and ten hundredths (185.10) feet to the easterly sideline of Missouri Avenue;

Thence, North 14-13-47 West along the said easterly sideline of Missouri Avenue a distance of fifty and fifty-seven hundredths (50.57) feet to a point, being the most southerly corner of lot 582;

Thence, North 67-11-40 East along the said southerly sideline of lots 582, 581, 580, 579, 578, and 577, a distance of one hundred seventy-three and thirty-three hundredths (173.33) feet to a point on the said northerly terminal end of the newly aligned Beverly Street;

LAND USE CONSULTANTS INC

Thence, South 38-02-17 West along the said terminal end of the newly aligned Beverly Street a distance of thirteen and one hundredths (13.01) feet to the point of beginning.

Said parcel contains 8,801 square feet (0.2 acres) more or less.

Bearings stated hereon are based on a magnetic observation by others in 1985.

NAME & ADDRESS	PLAN #	ASSESSORS #	MORTGAGE HOLDER
STELLA ADAMS & PHILLIP DALRYMPLE 76 MILTON ST, PORTLAND, ME	26-32	336 K17-23	NORWEST MORTGAGE PO BOX 5137, DES MOINES, IA 50306
JAMES AMABILE & LYNN LAWSON 83 MILTON ST, PORTLAND, ME	104-106	336 H30-32	PEOPLES HERITAGE BANK 140 LISBON ST, LEWISTON, ME
JEFFERY & THERESA ANDERSON 81 SAUGUS ST, PORTLAND, ME	49-52	336 K1-3 226 L27	MARGARETTEN & CO, INC 1 RONSON RD, ISELIN NJ 08830
COLLEEN ANDREWS WHITE ROCK PARK, GORHAM, ME	435-436	335c24-25	NONE
HARRY ANDREWS WHITE ROCK PARK, GORHAM, ME	433		NONE
HARRY ANDREWS, JR WHITE ROCK PARK, GORHAM, ME	434	335c 26	NONE
LINDA BALLARD 134 BRAINTREE, PORTLAND, ME	184-187	333c21;24, 335c24-25	MAINE STATE HOUSING AUTHORITY AUGUSTA, ME (2 ND) PEOPLES HERITAGE ONE PORTLAND SQ, PORTLAND, ME
MARGARET BEACHY & MARK MOSHER 4701 ADRIAN ST, ROCKVILLE, MD	455-457	336 A33-34 335d19-21	NONE
CHERYL BONNEY 82 SAUGUS ST, PORTLAND, ME	46-48	336 K1-3 226 L27	MARGARETTEN & CO, INC 1 RONSON RD, ISELIN, NJ 08830
ELMER BRACKETT C/O NE BRACKETT 113 PILLSBURY DR, SCARBORO, ME	448-449	335d14-15	NONE
NORMAN BRACKETT 113 PILLSBURY DR, SCARBORO, ME	458-466	335d22-24	NONE
MICHAEL & LEIGH ANN BRANDON 32 SAUGUS ST, PORTLAND, ME	307-310	336 E1-4	CENTERBANK MORTGAGE CO. 43 SOUTH MAIN ST, WATERBURY CT 06720
LAURIE BRING & RUSSELL WAYNE 40 LONGWOODS RD, FALMOUTH, ME	199-201	333H 9-11 25	BANK UNITED OF TX DBA COMMONWLTH UNITED
LAURIE BRING & RUSSELL WAYNE 40 LONGWOODS RD, FALMOUTH, ME	233	333H	BANK UNITED OF TX DBA COMMONWLTH UNITED
MARGARET BRITT	445-447	335 09-11	NONE
RACHEL BRITTING 132 NEWTON ST, PORTLAND, ME	399-401	335c21-23	NONE

RACHEL BRITTING 132 NEWTON ST, PORTLAND, ME	402-411		NONE
LESLIE BROWN 389 CONGRESS ST, PORTLAND, ME	482	335 E5	NONE
MARY BROWN 389 CONGRESS ST, PORTLAND, ME	483-484		
DAVID & NANCY BURKE 11 SAUGUS ST, PORTLAND, ME	220-222	335A1-2	CITIZENS BANK OF MA 65 SUMMER ST, BOSTON MA
RICHARD CALDWELL 62 NEWTON ST, PORTLAND, ME	131-133		
STEVEN & SANDRA CAPRIOLA 23 SAUGUS ST, PORTLAND, ME	216-219	336 A2-5	GMAC OF PA 8360 OLD YORK RD, ELKINS PARK, PA 19117
RICHARD CASEY 108 WINN RD, FALMOUTH, ME	12-13		
CITY OF PORTLAND	502-507	335 E25-26	NONE
CITY OF PORTLAND	508-511	335 E30-34	NONE
GERALD & VICTORIA COURTOIS 66 SAUGUS ST, PORTLAND, ME	90-93	336 H43-46	BOSTON FIVE CENTS SAVINGS 10 SCHOOL ST, BOSTON, MA 02108
WILLIAM CRABTREE 389 CONGRESS ST, PORTLAND, ME	476	335 D40	NONE
WILLIAM CRABTREE 389 CONGRESS ST, PORTLAND, ME	476	335 D40	NONE
RICHARD & PAULINE CURRY BRAINTREE ST, PORTLAND, ME	126	336 J26-29	FLEET BANK OF ME 39 ALBURN ST 37, PORTLAND, ME
RICHARD & PAULINE CURRY BRAINTREE ST, PORTLAND, ME	137-140	336 J 13-16	FLEET BANK OF ME 39 ALBURN ST 37, PORTLAND, ME
DIVERSIFIED PROPERTIES, INC	53-57	333 E29-33	NONE
DIVERSIFIED PROPERTIES, INC.	70-74	333 G12-16	NONE
DIVERSIFIED PROPERTIES, INC.	75-76	333 G10-11	NONE
DIVERSIFIED PROPERTIES, INC.	77-79	333 G7-9	NONE
DIVERSIFIED PROPERTIES, INC.	80-83	333 G3-6	NONE
DIVERSIFIED PROPERTIES, INC.	84-85	333 G1-2	NONE

DIVERSIFIED PROPERTIES, INC.	153-154	336H22-25	NONE
DIVERSIFIED PROPERTIES, INC.	155-157	336H22-25	NONE
DIVERSIFIED PROPERTIES, INC.	158-161	336H 15-18	NONE
DIVERSIFIED PROPERTIES, INC.	162-165	336H 11-14	NONE
DIVERSIFIED PROPERTIES, INC.	166-171	336H5-10	NONE
DIVERSIFIED PROPERTIES, INC.	245-256	336E 30	NONE
DIVERSIFIED PROPERTIES, INC.	257-306	336E 5-7	NONE
DIVERSIFIED PROPERTIES, INC.	318-322	336B8-12	NONE
DIVERSIFIED PROPERTIES, INC.	323-325	336B13-15	NONE
DIVERSIFIED PROPERTIES, INC.	326-329	336B16-19	NONE
DIVERSIFIED PROPERTIES, INC.	330-333	336B20-23	NONE
DIVERSIFIED PROPERTIES, INC.	356-363	336B25-26	NONE
DIVERSIFIED PROPERTIES, INC.	379-385	335C 1-7	NONE
DIVERSIFIED PROPERTIES, INC.	386-389	335C 8-11	NONE
DIVERSIFIED PROPERTIES, INC.	390-392	335C 12-14	NONE
DIVERSIFIED PROPERTIES, INC.	516-518	335 822-24	NONE
DIVERSIFIED PROPERTIES, INC.	519-523	335- 817-21	NONE
DIVERSIFIED PROPERTIES, INC.	524-529	335 811-16	NONE
DIVERSIFIED PROPERTIES, INC.	530	335 810	NONE
DIVERSIFIED PROPERTIES, INC.	531-532	335 N8-9	NONE
DIVERSIFIED PROPERTIES, INC.	533-535	335 8 5-7	NONE
DIVERSIFIED PROPERTIES, INC.	536-537	335 8 3-4	NONE
THOMAS DUFFY 121 DEERHILL CR, WESTBROOK, ME	500-501	335 E23-24	NONE
LUCY DYER & RITA MONELIS 104 CONGRESS ST, PORTLAND, ME	495-498	335 E18-21	NONE
BRIAN & EMILY EDWARDS 46 NEWTON ST, PORTLAND, ME	1-2		

MAINE STATE HOUSING AUTHORITY
AUGUSTA, ME

FRED & KATHERINE FIA PO BOX 10515 PORTLAND, ME	127-129	336j19	NONE
SANDRA P FALSEY 141 ALLEN AVE, PORTLAND, ME	130 PART OF 134	337A	PEOPLES HERITAGE BANK 1 PORTLAND SQ, PORTLAND, ME
JOHN FOLEY 82 BRACKETT ST, PORTLAND, ME	33-36	336 k13-16	NONE
REGINA A. FOLEY 6 BRAINTREE ST, PORTLAND, ME	135 PART OF 134	336j 18	CORINTHIAN MORTGAGE CO. 10561 BARKLEY SUITE 300 OVERLAND PARK, KS 66212
REGINA A. FOLEY 6 BRAINTREE ST, PORTLAND, ME	136		CORINTHIAN MORTGAGE CO. 10561 BARKLEY SUITE 300 OVERLAND PARK, KS 66212
PHILIP & NANCY GERMANI 18 BAILEY AVE, PORTLAND, ME	58-69	333 E34-45	PEOPLES HERITAGE 1 PORTLAND SQ, PORTLAND, ME
MARY GLEASON 389 CONGRESS ST, PORTLAND, ME	471-473	335d35-37	NONE
DAVID & MARTHA GOOGINS 1 HOLBROOK ST, PORTLAND, ME	478-481	335 E3-4	1 ST COMFED MORTGAGE CO 45 CENTRAL ST, LOWELL MA 01852
JOHN GOULETTE & GERTRUDE MCCAUL 120 MOUNTAIN AVE, MALDEN MA	417-418	335 C42-44	NONE
PAMELA GRASSETI 188 TANNERY RD, WESTFIELD MA	238-244	336E 38-42	NONE
GRH ENTERPRISES	538-542		NONE
MARTIN & GABRIEL GRIFFEN 389 CONGRESS ST, PORTLAND, ME	485-487	335 E 8-10	NONE
RJ GRONDIN	223-232	333 H15-25	NONE
RJ GRONDIN	364-366	336832-33	NONE
RJ GRONDIN	369-374	335A3-6	NONE
RJ GRONDIN	543-560	333 J1-9	NONE
RJ GRONDIN	561-562		NONE
RJ GRONDIN	563-567	333K 1-7	NONE
RJ GRONDIN	568-578	333 K8-15 333 K 16	NONE

RL GRONDIN		333 K 17	
RJ GRONDIN	579-582	333K18-20	NONE
RJ GRONDIN	583-589	333 KF 12-18	NONE
RJ GRONDIN	590-595	333 F 6-11	NONE
RJ GRONDIN	596	333 F 5	NONE
JOHN & JUDITH GUISTI PO BOX 3465, PORTLAND, ME	597-600	333 F 1-4	NONE
GLEN & FRNACINE HEMMINGWAY 21 HARMONY, PORTLAND, ME	192-195	333 G29-32	CITIZENS MORTGAGE CORP 3150 BRISTOL ST, STE 250, COSTA MESA CA
EVA HIGGINS 90 CLIFFORD ST, S PORTLAND, ME	20-23, 1/2 OF 19	336 L3-6	CITICORP HOMEOWNERS 670 MASO RIDGE CTR, ST LOUIS MO 63141
EVA HIGGINS 90 CLIFFORD ST, S PORTLAND, ME	512-513	335 E37-38	NONE
MATTHEW HOLLYDAY PO BOX 10982, PORTLAND, ME	514-515	335 E37-38	NONE
MICHAEL & LISA JOYCE 65 SAUGUS ST, PORTLAND, ME	343-345	336D20-22	FEDERAL HOME LOAN MORTGAGE CORP 1109 SUNSET HILLS RD RESTON, VA 22090
THOMAS F JOYCE, JR & LILLIAN WHITE 616 MIGEON AVE, APT 4 TORRINGTON, CT 06790	8-9	336 G5-8	MANHATTAN SAVINGS BANK 415 MADISON AV, NY, NY 10017
PAUL KIRBY 75 MILTON ST, PORTLAND, ME	107-109	H26-27	FURST SECURITY SAVINGS 2600 TELEGRAPH RD, BLOOMFIELD HILLS MI
GEORGE & THOMAS LAFFERTY 21 BOULAY ST, BERLIN, NH	311-317	33688-12	NONE
MADLINE LAMBERT 57 SAUGUS ST, PORTLAND, ME	176-176	336G1-4	NONE
JAGDEEP & PARAMJIT LEKHI 129 BRAINTREE ST, PORTLAND, ME	302-305	333 H5-8	MARGARETTEN MORTGAGE CO 1 RONSON RD, ISELIN NJ 08838
BETTY LEONARD MILTON ST, PORTLAND, ME	37-41	336 K8-12	NONE
PAUL & MELISSA LEWIS 93 MILTON ST, PORTLAND, ME	100-103	336 H33-36	COUNTRYWIDE FUNDING CORP 155 N LAKE AVE, PASADENA CA 91101
RUBERT & REBECCA LEWIS	172-175	336H1-4	NORWEST MORTGAGE

16 COTTAGE ST, S PORTLAND, ME

JAMES & DEBRA LOMBARDO
MILTON ST, PORTLAND, ME

MARGARET MCCARTHY
13 TUCKER AVE, PORTLAND, ME

RONALD, DANIEL & MARK MCCULLOUGH
26 SEAVIEW AVE, OLD ORCHARD BCH, ME

JOHN T & CYNTHIA A MCGOVERN
181 LEXINGTON AVE, PORTLAND, ME

JOHN T & CYNTHIA A MCGOVERN
181 LEXINGTON AVE, PORTLAND, ME

CYNTHIA A MCGOVERN

GORDON & JULIE MERRILL
42 SAUGUS ST, PORTLAND, ME

ANDREW MUSACCHIO
432 RANDOLPH, PORTLAND, ME

ANDREW MUSACCHIO
432 RANDOLPH, PORTLAND, ME

ANDREW MUSACCHIO
432 RANDOLPH, PORTLAND, ME

GEORGE ODENCRANTZ

GEORGE ODENCRANTZ

GEORGE ODENCRANTZ

GEORGE ODENCRANTZ

GEORGE ODENCRANTZ

DIANE PAOLINE
45 BRAINTREE, PORTLAND, ME

DIANE PAOLINE
45 BRAINTREE, PORTLAND, ME

GUIDO PARDI
41 SAUGUS ST, PORTLAND, ME

FLORENCE PENOLETON
10 CONGRESS ST, PORTLAND, ME

110-112

488-490

438-444

339

340-342

350

234-237

430

431

432

419-420

421-423

450-454

474

475

117-122

143-150

210-213

467-470

336 H23-24

335e 11-13

335d2-8
D38-39

336d13

336d14-16

336d 6

336 E38-42

336c 29

335c 29

335 D 38-39

335 c 40-41

335c37-39

335 d14-15

335 D 38-39

336 26-29

336j26-29

336j3-10

336j3-5

336A8-11

335033-34

MINNEAPOLIS MN

PEOPLES HERITAGE BANK
1 PORTLAND SQ, PORTLAND, ME

NONE

NONE

NONE

NONE

NONE

PEOPLES HERITAGE BANK
1 PORTLAND SQ, PORTLAND, ME

STM MORTGAGE CO
1250 MOCKINGBIRD LN, DALLAS TX 75247

STM MORTGAGE CO
1250 MOCKINGBIRD LN, DALLAS TX 75247

STM MORTGAGE CO
1250 MOCKINGBIRD LN, DALLAS TX 75247

NONE

NONE

NONE

NONE

NONE

EMC MORTGAGE CO
PO BOX 141358, IRVING TX 75014

EMC MORTGAGE CO
PO BOX 141358, IRVING, TX 75014

SEARS MORTGAGE CORP
1355 CONGRESS ST, PORTLAND, ME 04102

SEARS MORTGAGE CORP
1355 CONGRESS ST, PORTLAND, ME 04102

PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	24-25	336 11-12	NONE
PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	113-116	336 j30-33	NONE
PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	151-152	336 j1-2	NONE
PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	334-339	336d8-9	NONE
PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	354-355	336d1-2	NONE
PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	412-416	335c46-48	NONE
JOHN & HOLLY RICHIO 112 MILTON ST, PORTLAND, ME	42-45	336 k4-7	PEOPLES HERITAGE BANK 140 LISBON ST, LEWISTON, ME
JOHN F RIDGE 2 PLEASANT VALLEY, CAPE ELIZABETH, ME	337-338	336d11-12	
PETER & CLAUDIA RISBARA 426 RANDOLPH ST, PORTLAND, ME	424-427	335c33-36	CASCO NORTHERN 1 MONUMENT SQ, PORTLAND, ME
PETER RISBARA 426 RANDOLPH ST, PORTLAND, ME	428-429	335 c 31-32	CASCO NORTHERN 1 MONUMENT SQ, PORTLAND, ME
CHARLES RODWAY 1023 WASHINGTON AVE, PORTLAND, ME	14-17	336 l9-12	NONE
CHARLES RODWAY 1023 WASHINGTON AVE, PORTLAND, ME	18, 1/2 of 19	336l8	NONE
STEVEN & BETSY ROMAN 118 NEWTON ST, PORTLAND, ME	346-348	336d17-19	GMAC MORTGAGE CORP 3451 HAMMOND AVE, WATERLOO, IOWA
DONNA RUSSO 21 DEEPWOOD LN, PORTLAND, ME	336	336 d10	
DONNA RUSSO 21 DEEPWOOD LN, PORTLAND, ME	349	336 d7	
JOSEPH RUSSO 21 DEEPWOOD LN, PORTLAND, ME	351-353	336 03-5	
CHRISTINE SAUCIER 41 BRAINTREE ST, PORTLAND, ME	117-122	336j26-29	MAINE STATE HOUSING AUTHORITY AUGUSTA, ME

CHRISTINE SAUCIER 41 BRAINTREE ST, PORTLAND, ME	141-142	336j11-12 21-23	MAINE STATE HOUSING AUTHORITY AUGUSTA, ME
KARL & CARLA SAVINO 41 EPPING ST, PORTLAND, ME	188-191	333g25-28	BANCOSTON 7301 BAYMEADOWS WAY, JACKSONVILLE, FL
MARK & SUZANNE SILVERMAN 107 MILTON ST, PORTLAND, ME	94-96	336 h40-42	MAINE STATE HOUSING AUTHORITY AUGUSTA, ME
MARIA STRONG 31 SALIGUS ST, PORTLAND, ME	314-315	336a6	MAINE STATE HOUSING AUTHORITY AUGUSTA, ME
ANATOLY TABUN 52 NEWTON ST, PORTLAND, ME	3-7		NONE
ANATOLY TABUN 52 NEWTON ST, PORTLAND, ME	10-11		NONE
FRANK VANSANFORD 99 MILTON ST, PORTLAND, ME RE: [unclear]	97-99	336 h37-39	NONE
MICHAEL & MARY VERVILLE 12 SALIGUS ST, PORTLAND, ME	375-378	3353-6	CITIZENS MORTGAGE CO 55 SUMMER ST, BOSTON, MA
DAVID & MARY WALTON and the list of a-180-183 of mortgage holders, originally submitted in Lot # 128 BRAINTREE ST, PORTLAND, ME		333G17-20	PEOPLES HERITAGE 1 PORTLAND SQ, PORTLAND, ME
WATT SAMAKI TEMPLE 239 PARK AVE, PORTLAND, ME	393-398	335c15-20	PEOPLES HERITAGE 1 PORTLAND SQ, PORTLAND, ME
JOHN WELCH 485 CLIMBERLAND AVE, PORTLAND, ME	437	335D1	NONE
JOHN WELCH 485 CLIMBERLAND AVE, PORTLAND, ME	477	335E3-4	NONE
ARTHUR WHIPPLE 17 OLD COUNTY RD, SCARBOROUGH, ME	491-494	335 e14-17	NONE
LLOYD WOLF PO BOX 10127, PORTLAND, ME	206-209	333 h1-4	MAINE BANK & TRUST 467 CONGRESS ST, PO BOX 619, PORTLAND
KEVIN & TERRY YORK 153 BRAINTREE ST, PORTLAND, ME	196-198	333 h12-14	PEOPLES HERITAGE BANK 1 PORTLAND SQ, PORTLAND, ME

RECEIVED
RECORDED REGISTRY OF DEEDS

96 JUL -9 11:11:08

CUMBERLAND COUNTY

John B O'Brien

EXHIBIT A
 LEGAL DESCRIPTION OF PROPERTY LOCATED
 in Cumberland County at
 102 Milton Street, Portland, Maine

A certain lots or parcels of land and any improvements thereon situated off Forest Avenue in the City of Portland, County of Cumberland, and State of Maine, and being lots 37, 38, 39, 40 and 41 as shown on Plan of Woodfords Gardens, said Plan prepared for J.W. Wilbur Company, Inc., said plan made by Ernest W. Branch, C.E. dated November 16, 1916 and recorded at the Cumberland County Registry of Deeds in Plan Book 13, Page 75.

Meaning and intending to convey and hereby conveying the same premises conveyed to Custom Built Homes of Maine, Inc. by deed of R.J. Grondin & Sons dated September 23, 1994, to be recorded in the Cumberland County Registry of Deeds Book 11660, Plan 281.

This document is a reproduction of a document filed in the Cumberland County Registry of Deeds. It is not a certified copy.

RECEIVED
 REGISTERED REGISTRY OF DEEDS

24 NOV 30 PM 1:52

CUMBERLAND COUNTY

John D. Grondin

Terrence J. DeWan & Associates

121 West Main Street
Yarmouth, ME 04096

Statement

DATE

11/30/99

BILL TO

Alex Jaegerman
Dept. of Planning & Urban Development
City of Portland
389 Congress Street
Portland, ME

DATE	DESCRIPTION	AMOUNT
08/30/99	Balance forward	0.00
10/01/99	Bayside Public Health- INV #197-1486 Amount Due	168.00 168.00

Terrence J. DeWan & Associates

121 West Main Street
Yarmouth, ME 04096

Statement

DATE

11/30/99

BILL TO

Alex Jaegerman
Dept. of Planning & Urban Development
City of Portland
389 Congress Street
Portland, ME

DATE	DESCRIPTION	AMOUNT
08/30/99	Balance forward	0.00
10/01/99	Bayside Public Health- INV #197-1486	168.00
	Amount Due	168.00

0199

BK 12604 PG 147

ORDER

ORDER RE: VACATING STREETS RE: PORTIONS OF
NEWELL, BEVERLY, AND BRAINTREE STREETS-SPON-
SORED BY THE PLANNING BOARD, KENNETH N. COLE, III CHAIR.

IN THE CITY COUNCIL

November 6 19 95

Attest: Maddie E. Clark
Asst. City Clerk

Yes

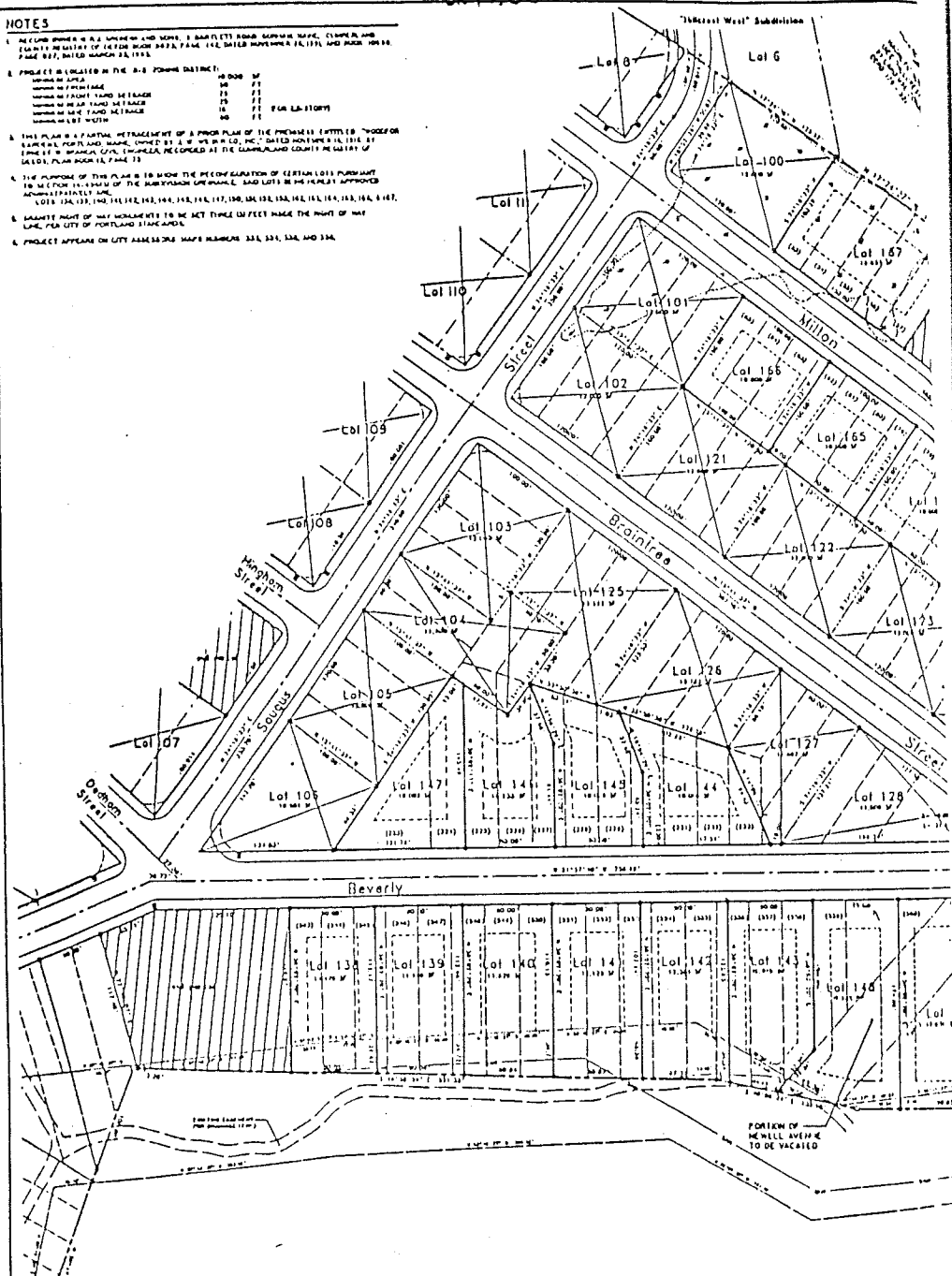
No

November 6, 1995: Councilor Harlow made a motion
to pass Orders 106, 108 and 109. Motion
seconded by Councilor Campbell. Orders 106, 108
and 109 passed with a show of hands.

NOTES

1. AS SHOWN ON A.S. MAPS AND VARIOUS BUREAU RECORDS, THE PLANNED LOTS ARE THE RESULT OF A REVISION TO THE PLAN DATED NOVEMBER 14, 1916 AND PLAN NO. 100, PAGE 101, REVISION NUMBER 23, 1915.
2. PROJECT IS LOCATED IN THE A-1 ZONING DISTRICT.

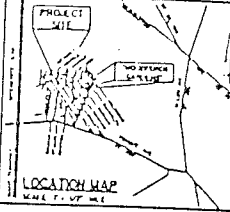
NUMBER OF LOTS	40	000	SF
NUMBER OF PARCELS	10	000	SF
NUMBER OF FRONT YARD SETBACKS	10	000	SF
NUMBER OF SIDE YARD SETBACKS	10	000	SF
NUMBER OF REAR YARD SETBACKS	10	000	SF
NUMBER OF LOT WIDTHS	10	000	SF
3. THIS PLAN IS A PARTIAL RESTATEMENT OF A PRIOR PLAN OF THE PREVIOUSLY ENTITLED "WOODS" TRACT IN PORTLAND, MAINE, OWNED BY J. W. WOOD CO., INC., DATED NOVEMBER 14, 1916, AS AMENDED BY THE SUBDIVISION COMMISSION, SAID LOTS BEING HERETO APPROVED AND RECORDED AS SUCH.
4. THE PURPOSE OF THIS PLAN IS TO SHOW THE RECONFIGURATION OF CERTAIN LOTS PURSUANT TO THE PLAN AS SHOWN ON THE SUBDIVISION COMMISSION, SAID LOTS BEING HERETO APPROVED AND RECORDED AS SUCH.
5. EASEMENT RIGHT OF WAY NECESSARY TO BE SET TIME TO EFFECT UNDER THE RIGHT OF WAY LAWS, PER CITY OF PORTLAND STANDARDS.
6. PROJECT APPEARS ON CITY ASSESSORS MAPS NUMBERS 225, 226, 227, AND 228.



SURVEYOR'S STATEMENT

I, the undersigned, being duly sworn, depose and say that I am a duly Licensed Surveyor in the State of Missouri, and that I am the author of the above and foregoing plat, and that the same is a true and correct copy of the original as the same appears in my office, and that I am not aware of any fraud or illegality in the execution of the same, and that I am not aware of any fraud or illegality in the execution of the same, and that I am not aware of any fraud or illegality in the execution of the same.

[Signature]
 B-543
 DATE



LUC

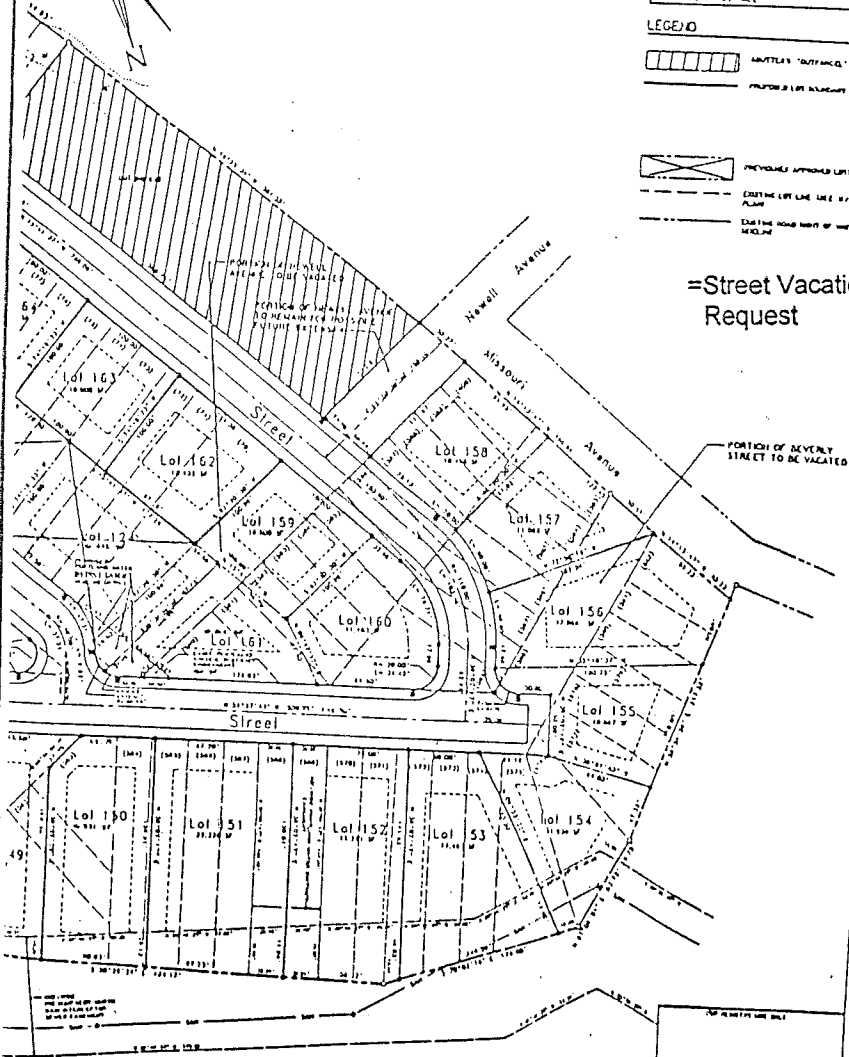
LEGEND

- HATCHED "OUTLINE"
- PROPOSED LOT BOUNDARY
- PREVIOUSLY APPROVED LOT
- EXISTING LOT LINE (FRONTAGE PLAT)
- EXISTING ROAD RIGHT OF WAY

= Street Vacation Request

PORTION OF GARDENS OAKLAND, MISSOURI

P. J. GRONCHIN & SONS
 11 HARPLETT ROAD, GARDENS, MISSOURI



DATE	
REVISION	
DESIGNED BY	
DRAWN BY	
CHECKED BY	
SCALE	AS SHOWN
DATE	8-20-21
<p>AMENDED RECORDING PLAT ALTERATIONS TO ORIGINAL LOT CONFIGURATIONS NOT AFFECTED BY STREET VACATIONS RE-ALIGNMENTS OR EXTENSIONS</p>	
JOB NO.	1831
SHEET	

ALTERATIONS TO THE ORIGINAL APPROVED RECORDING PLAT HAVE BEEN APPROVED BY THE CITY OF PORTLAND, DEPARTMENT OF PLANNING AND LAND DEVELOPMENT, IN COMPLIANCE WITH SECTION 16-49-040 OF THE SUBDIVISION ORDINANCE.

LAND USE CONSULTANTS INC

Parcel 1 - Portion of Newell Avenue between Beverly and Milton

A certain lot or parcel of land in Portland, Maine, situated between and adjacent to Braintree, Beverly, and Milton Streets, more particularly bounded and described as follows:

Beginning at a point at the former southeasterly corner of said Milton Street and Newell Avenue, said point being the most westerly corner of lot 70 as shown on a plan of "Woodfords Garden" by Ernest W. Branch, dated November 16, 1916, and recorded in the Cumberland County Registry of Deeds Plan Book 13, page 75;

Thence, North 15-41-37 West along the easterly sideline of the new alignment of Milton Street, a distance of fifty and fifty hundredths (50.50) feet to a point on the southerly line of lot 595;

Thence, North 82-20-30 East along the southerly line of lots 595, 594, 593, 592, 591, and 590, a distance of two hundred sixteen and seventy-six hundredths (216.76) feet to a point on the westerly sideline of Beverly Street;

Thence, South 51-57-43 East along the said southerly sideline of Beverly Street, a distance of twenty and seventy-three hundredths (20.73) feet to a point of curvature and the northwesterly corner of said Beverly Street and the realigned Braintree Street;

Thence, southerly along said westerly sideline of the realigned Braintree Street and a curve to the right having a radius of twenty and no hundredths (20.00) feet, an arc distance of thirty and twenty-four hundredths (30.24) feet to a point of reverse curvature;

Thence, southerly along said westerly sideline of the realigned Braintree Street and a curve to the left having a radius of sixty-five and no hundreds (65.00) feet, an arc distance of fifty-seven and thirteen hundredths (57.13) feet to a point of tangency;

Thence North 15-41-37 West along the easterly line of lots 194 and 195 a distance of forty-five and fifty-seven hundredths (45.57) feet to a point at the northeasterly corner of said lot 195;

Thence, South 82-20-30 West along said lots 195 and lot 70 a distance of two hundred one and ninety-eight hundredths (201.98) feet to the point of beginning.

Said parcel contains 67,195 feet (1.54 acres) more or less.

Parcel 2 - Portion of Newell Street East of Beverly

A certain lot or parcel of land situated easterly of and adjacent to Beverly Street in Portland, Maine, more particularly bounded and described as follows:

Beginning at a point at the former southeasterly intersection of said Beverly Street and Newell Avenue, said point being the most westerly corner of lot 560, as shown on a plan of "Woodfords Garden" by Ernest W. Branch, dated November 16, 1916, and recorded in the Cumberland County Registry of Deeds Plan Book 13, page 75;

37500

BK12604PG146

Order 109
Table 11-8-9

City of Portland, Maine
IN THE CITY COUNCIL

ORDER VACATING STREETS
RE: PORTIONS OF NEWELL, BEVERLY AND BRAINTREE STREETS

ORDERED, that portions of Newell Street, Beverly Street and Braintree Street, as delineated and described on Exhibit A attached hereto, be and hereby are vacated, pursuant to 23 M.R.S.A. §3027. This vacation shall be subject to the retention of a public utility easement for existing facilities of the Portland Water District that are located in Braintree Street and is further subject to the Street Vacation Waiver and Indemnification attached hereto as Exhibit B.

The names of the owners of property in the subdivision are included on Exhibit C.

The amount of damages awarded as a result of this vacation is: \$0.00.

NEWELLSTVAC.ORD
11.01.95

BK12302PG242

*Order 108
Tab 5 11-6-95*

01782

City of Portland, Maine
IN THE CITY COUNCIL

**ORDER VACATING STREETS AND RENAMING PORTION OF STREET
RE: VACATION OF PORTIONS OF BRAINTREE, DEDHAM, HINGHAM AND LYNN
STREETS AND RENAMING OF PORTION OF BRAINTREE STREET**

ORDERED, that portions of Braintree Street, Dedham Street, Hingham Street and Lynn Street, as delineated and described on Exhibit A attached hereto, be and hereby are vacated, pursuant to 23 M.R.S.A. §3027. This vacation shall be subject to the retention of public utility easements for existing facilities of the Portland Water District that are located in Braintree Street and existing facilities of NYNEX and Central Maine Power Company that are located in Dedham Street and is further subject to the Street Vacation Waiver and Indemnification attached hereto as Exhibit B.

The names of the owners of property in the subdivision are included on Exhibit C.

The amount of damages awarded as a result of this vacation is: \$0.00.

BE IT FURTHER ORDERED that the portion of Braintree Street delineated on Exhibit A be and hereby is renamed Buca Run.

BRAINTREESTVAC.ORD.NLB
11.01.95

0108

ORDER

ORDER VACATING STREETS AND RENAMING PORTION OF STREET RE: vacation of portions of braintree, DEDHAM, HINGHAM, AND LYNN STREETS AND RENAMING OF PORTION OF BRAINTREE STREET - SPONSORED BY THE PLANNING BOARD - KENNETH N. COLE, III, CHAIR.

IN THE CITY COUNCIL

November 6, 19 95

Maureen M. Daniels

Attest: Maureen M. Daniels
City Clerk.

SEAL

November 6, 1995: Councilor Harlow made a motion to pass Orders 106, 108, and 109. Motion seconded by Councilor Campbell. Orders 106, 108, and 109 passed with a show of hands.

Yes

Nays

A TRUE COPY ATTEST
MAUREEN M. DANIELS
CITY CLERK, PORTLAND, ME

Maureen M. Daniels

JAN-15-'00 SUN 00:18 ID:

TEL NO:

#054 P01

Exhibit A-P.2



LAND USE CONSULTANTS INC
November 1, 1995

BK 12302PG244

J. David Hayes, RLA
David A. Kassila, PE
Frederic J. Litch, Jr., PE
Brendley H. Haze, RLA
John D. Roberts, PL3
1851

Mr. James Wolf
Diversified Properties, Inc.
P.O. Box 10127
Portland Maine 04101

Post-it Fax Note	7871	Date	11/21/95	Page	4
To	DAPHNE BURNS		From	J.M. WOLF	
Co./Dept.		Co.			
Phone #		Phone #			
Fax #		Fax #			

Re: Buca Run Subdivision, Portland, Maine

Dear Mr. Wolf:

The following are the descriptions you requested with regard to the pending subdivision approval by the City of Portland.

Parcel One- Portion of Lynn Street to be vacated

A certain lot or parcel of land 58 1/2 and 00/100 feet (50.00 feet) in width commencing on the easterly sideline of Milton Street as shown on a plan of "Woodford's Gardens" by J.W. Wilbur dated November 16, 1916 and recorded in the Cumberland County Registry of Deeds in Plan Book 13 Page 75 and terminating on the westerly sideline of Dedham Street as shown on said plan being more particularly bounded and described as follows:

Commencing at a steel rebar on the easterly sideline of Milton Street marking the northwesterly corner of said Lynn Street, and being the POINT OF BEGINNING;

thence, North 74°18'23" East along the northerly sideline of said Lynn Street, a distance of six hundred ninety and 00/100 feet (690.00 feet) to a point marking the westerly sideline of Dedham Street.

thence, South 15°41'37" East along the westerly sideline of Dedham Street a distance of fifty and 00/100 feet (50.00 feet) to a steel rebar marking northeasterly corner of land now or formerly of Portland Water District (CCRD 2156-239);

thence, South 74°18'23" West along the southerly sideline of Lynn Street a distance of six hundred ninety and 00/100 feet (690.00 feet) to a steel rebar marking the southerly sideline of Milton Street;

thence, North 15°41'37" West along the westerly sideline of Milton Street a distance of fifty and 00/100 feet (50.00 feet) to a steel rebar and the POINT OF BEGINNING

Said Parcel contains 34500 square feet more or less.

Parcel Two- Portion of Braintree Street to be vacated

BK 12302 PG 245

LAND USE CONSULTANTS INC

A certain lot or parcel of land fifty and 00/100 feet (50.00 feet) in width commencing on the northerly sideline of Lynn Street as shown on a plan of "Woodfords Gardens" by J.W. Wilbur dated November 16, 1916 and recorded in the Cumberland County Registry of Deeds in Plan Book 13 Page 75 and terminating on the southerly line of Buca Run as shown on a plan entitled "Amended Recording Plat Buca Run" dated July 14, 1995 by Land Use Consultants, Inc. proposed for approval and being more particularly bounded and described as follows:

Commencing at the intersection point of the northerly sideline of Lynn Street as shown on said "Woodfords Gardens" plan with the westerly sideline of Braintree Street as shown on said plan, said point being the POINT OF BEGINNING;

thence North 15° 41' 37" West a distance of two hundred twenty five feet (225.00 feet) to the southerly sideline of Buca Run as proposed and the point of curvature of a tangent curve, concave to the Northeast, having a radius of one hundred fifty feet (150.00 feet) and a central angle of 48° 11' 23";

thence Southeasterly along said curve and Buca Run a distance of one hundred twenty six and 16/100 feet (126.16 feet) to a point on the easterly sideline of Braintree Street as shown on said "Woodfords Gardens" plan;

thence South 15° 41' 37" East a distance of one hundred thirteen and 20/100 feet (113.20 feet) to the intersection point of the easterly sideline of Braintree Street with the northerly line of Lynn Street as shown on said "Woodfords Gardens" plan;

thence South 74° 18' 23" West a distance of fifty feet (50.00 feet) to the POINT OF BEGINNING; said described tract containing 7378 square feet, more or less.

Parcel Three- Portion of Hingham Street to be vacated

A certain lot or parcel of land fifty and 00/100 feet (50.00 feet) in width commencing on the northerly sideline of Lynn Street as shown on a plan of "Woodfords Gardens" by J.W. Wilbur dated November 16, 1916 and recorded in the Cumberland County Registry of Deeds in Plan Book 13 Page 75 and terminating on the southerly line of Saugus Street as shown on said plan and being more particularly bounded and described as follows:

Commencing at the intersection point of the northerly sideline of Lynn Street as shown on said "Woodfords Gardens" plan with the westerly sideline of Hingham Street as shown on said plan, said point being the POINT OF BEGINNING;

thence North 15° 41' 37" West a distance of six hundred thirty and 44/100 feet (630.44 feet) to the intersection point of the southerly sideline of Saugus Street with the westerly line of Hingham Street as shown on said "Woodfords Gardens" plan;

BK 12302 PG 246

LAND USE CONSULTANTS INC

thence North 74° 13' 23" East a distance of fifty feet (50.00 feet) to the intersection point of the southerly sideline of Saugus Street with the easterly line of Hingham Street as shown on said "Woodfords Gardens" plan;

thence South 15° 41' 37" East a distance of six hundred ninety and 00/100 feet (690.00 feet) to the intersection point of the easterly sideline of Hingham Street with the northerly line of Lynn Street as shown on said "Woodfords Gardens" plan;

thence South 74° 13' 23" West a distance of fifty feet (50.00 feet) to the POINT OF BEGINNING; said described tract contains 34,500 square feet, more or less.

Parcel Four- Portion of Dedham Street to be vacated

A certain lot or parcel of land fifty and 00/100 feet (50.00 feet) in width commencing on the northerly sideline of Buca Run as shown on a plan entitled "Amended Recording Plat Buca Run" dated July 14, 1995 by Land Use Consultants, Inc. proposed for approval, and terminating on the southerly line of Saugus Street as shown on a plan of "Woodfords Gardens" by J.W. Wilbur dated November 16, 1916 and recorded in the Cumberland County Registry of Deeds in Plan Book 13 Page 75 and being more particularly bounded and described as follows:

Commencing at the intersection point of the proposed northerly sideline of Buca Run with the westerly sideline of Dedham Street as shown on said "Woodfords Gardens" plan, said point being the POINT OF BEGINNING;

thence North 15° 41' 37" West a distance of twenty-five and 00/100 feet (25.00 feet) to an angle point in the sideline of Dedham Street as shown on said "Woodfords Gardens" plan;

thence North 31° 07' 23" West a distance of one hundred eighty six and 74/100 feet (186.74 feet) to an angle point in the sideline of Dedham Street as shown on said "Woodfords Gardens" plan;

thence North 07° 50' 04" West a distance of three hundred sixty-three and 41/100 feet (363.41 feet) to the intersection point of the southerly sideline of Saugus Street with the westerly line of Dedham Street as shown on said "Woodfords Gardens" plan;

thence North 74° 51' 06" East a distance of fifty and 41/100 feet (50.41 feet) to the intersection point of the easterly sideline of Dedham Street with the southerly line of Saugus Street as shown on said "Woodfords Gardens" plan;

thence South 07° 50' 04" East a distance of three hundred fifty-nine and 86/100 feet (359.86 feet) to an angle point in said Dedham Street;

thence South 31° 07' 23" East a distance of one hundred eighty three and 21/100 feet (183.21 feet) to an angle point in said Dedham Street;

BK 12302 PG 247

LAND USE CONSULTANTS INC

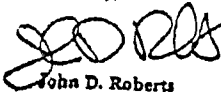
thence South 15° 41' 37" East a distance of thirty one and 77/100 feet (31.77 feet) to intersection of the easterly line of Dedham Street with the northerly line projected of Buca Run;

thence South 74° 18' 23" West a distance of fifty and 00/100 feet (50.00 feet) to the POINT OF BEGINNING; said described tract contains 23,749 square feet, more or less.

Reserving to the Inhabitants of the City of Portland from the above proposed vacation an easement twenty feet in width centered on the existing gravel roadbed, as it now lies and is displayed on the Buca Run plan for the purpose of access and egress to the culvert crossing this vacation, said easement begins at the southerly sideline of Saugus Street and extends southerly to the culvert.

If we may be of further service to you in this matter, please call.

Sincerely,



John D. Roberts
Maine Professional Land Surveyor #1155
Land Use Consultants, Inc.

NAME & ADDRESS	PLAN #	ASSESSORS #	MORTGAGE HOLDER
STELLA ADAMS & PHILLIP DALRYMPLE 76 MILTON ST, PORTLAND, ME	26-32	336 K17-23	NORWEST MORTGAGE PO BOX 5137, DES MOINES, IA 50306
JAMES AMABILE & LYNN LAWSON 83 MILTON ST, PORTLAND, ME	104-106	336 H30-32	PEOPLES HERITAGE BANK 140 LISBON ST, LEWISTON, ME
JEFFERY & THERESA ANDERSON 81 SAUGUS ST, PORTLAND, ME	49-52	336 K1-3 226 L27	MARGARETTEN & CO, INC 1 RONSON RD, ISELIN NJ 08830
COLLEEN ANDREWS WHITE ROCK PARK, GORHAM, ME	435-436	335C24-25	NONE
HARRY ANDREWS WHITE ROCK PARK, GORHAM, ME	433		NONE
HARRY ANDREWS, JR WHITE ROCK PARK, GORHAM, ME	434	335C 26	NONE
LINDA BALLARD 134 BRAINTREE, PORTLAND, ME	184-187	333J21-24	MAINE STATE HOUSING AUTHORITY AUGUSTA, ME (2 ND) PEOPLES HERITAGE ONE PORTLAND SQ, PORTLAND, ME
MARGARET BEACHY & MARK MOSHER 4701 ADRIAN ST, ROCKVILLE, MD	455-457	335D19-21	NONE
CHERYL BONNEY 82 SAUGUS ST, PORTLAND, ME	46-48	336 K1-3 226 L27	MARGARETTEN & CO, INC 1 RONSON RD, ISELIN, NJ 08830
ELMER BRACKETT C/O NE BRACKETT 113 PILLSBURY DR, SCARBORO, ME	448-449	335D14-15	NONE
NORMAN FRACKETT 113 PILLSBURY DR, SCARBORO, ME	458-466	335D22-24	NONE
MICHAEL & LEIGH ANN BRANDON 32 SAUGUS ST, PORTLAND, ME	307-310	336 E1-4	CENTERBANK MORTGAGE CO. 43 SOUTH MAIN ST, WATERBURY CT 06720
LAURIE BRING & RUSSELL WAYNE 40 LONGWOODS RD, FALMOUTH, ME	199-201	333H 9-11 25	BANK UNITED OF TX DBA COMMONWLTH UNITED
LAURIE BRING & RUSSELL WAYNE 40 LONGWOODS RD, FALMOUTH, ME	233	333H	BANK UNITED OF TX DBA COMMONWLTH UNITED
MARGARET BRITT	445-447	335 D9-11	NONE
RACHEL BRITTING 132 NEWTON ST, PORTLAND, ME	399-401	335C21-23	NONE

RACHEL BRITTING 132 NEWTON ST, PORTLAND, ME	402-411		NONE
LESLIE BROWN 389 CONGRESS ST, PORTLAND, ME	482	335 C5	NONE
MARY BROWN 389 CONGRESS ST, PORTLAND, ME	483-484		
DAVID & NANCY BURKE 11 SAUGUS ST, PORTLAND, ME	220-222	335A1-2	CITIZENS BANK OF MA 65 SUMMER ST, BOSTON MA
RICHARD CALDWELL 62 NEWTON ST, PORTLAND, ME	131-133		
STEVEN & SANDRA CAPRIOLA 23 SAUGUS ST, PORTLAND, ME	216-219	336 A2-5	GMAC OF PA 8360 OLD YORK RD, ELKINS PARK, PA 19117
RICHARD CASEY 108 WING RD, FALMOUTH, ME	12-13		
CITY OF PORTLAND	502-507	335 E25-26	NONE
CITY OF PORTLAND	508-511	335 E30-34	NONE
GERALD & VICTORIA COURTOIS 66 SAUGUS ST, PORTLAND, ME	90-93	336 H43-46	BOSTON FIVE CENTS SAVINGS 10 SCHOOL ST, BOSTON, MA 02108
WILLIAM CRABTREE 389 CONGRESS ST, PORTLAND, ME	476	335 C40	NONE
WILLIAM CRABTREE 389 CONGRESS ST, PORTLAND, ME	476	335 C40	NONE
RICHARD & PAULINE CURRY BRAintree ST, PORTLAND, ME	126	336 J26-29	FLEET BANK OF ME 39 AUBURN ST 37, PORTLAND, ME
RICHARD & PAULINE CURRY BRAintree ST, PORTLAND, ME	137-140	336 J13-16	FLEET BANK OF ME 39 AUBURN ST 37, PORTLAND, ME
DIVERSIFIED PROPERTIES, INC	53-57	333 E29-33	NONE
DIVERSIFIED PROPERTIES, INC.	70-74	333 G12-16	NONE
DIVERSIFIED PROPERTIES, INC.	75-76	333 G10-11	NONE
DIVERSIFIED PROPERTIES, INC.	77-79	333 G7-9	NONE
DIVERSIFIED PROPERTIES, INC.	80-83	333 G3-6	NONE
DIVERSIFIED PROPERTIES, INC.	84-85	333 G1-2	NONE

DIVERSIFIED PROPERTIES, INC.	153-154	336H22-25	NONE
DIVERSIFIED PROPERTIES, INC.	155-157	336H22-25	NONE
DIVERSIFIED PROPERTIES, INC.	158-161	336H 15-18	NONE
DIVERSIFIED PROPERTIES, INC.	162-165	336H 11-14	NONE
DIVERSIFIED PROPERTIES, INC.	166-171	336H5-10	NONE
DIVERSIFIED PROPERTIES, INC.	245-256	336E 30	NONE
DIVERSIFIED PROPERTIES, INC.	257-306	336E 5-7	NONE
DIVERSIFIED PROPERTIES, INC.	318-322	336B8-12	NONE
DIVERSIFIED PROPERTIES, INC.	323-325	336B13-15	NONE
DIVERSIFIED PROPERTIES, INC.	326-329	336B16-19	NONE
DIVERSIFIED PROPERTIES, INC.	330-333	336B20-23	NONE
DIVERSIFIED PROPERTIES, INC.	356-363	336B25-26	NONE
DIVERSIFIED PROPERTIES, INC.	379-385	335C 1-7	NONE
DIVERSIFIED PROPERTIES, INC.	386-389	335C 8-11	NONE
DIVERSIFIED PROPERTIES, INC.	390-392	335C 12-14	NONE
DIVERSIFIED PROPERTIES, INC.	516-518	335 B22-24	NONE
DIVERSIFIED PROPERTIES, INC.	519-523	335- B17-21	NONE
DIVERSIFIED PROPERTIES, INC.	524-529	335 B11-16	NONE
DIVERSIFIED PROPERTIES, INC.	530	335 B10	NONE
DIVERSIFIED PROPERTIES, INC.	531-532	335 B8-9	NONE
DIVERSIFIED PROPERTIES, INC.	533-535	335 B 5-7	NONE
DIVERSIFIED PROPERTIES, INC.	536-537	335 B 3-4	NONE
THOMAS DUFFY 121 DEERHILL CR, WESTBROOK, ME	500-501	335 E23-24	NONE
LUCY DYER & RITA MONELIS 104 CONGRESS ST, PORTLAND, ME	495-498	335 E18-21	NONE
BRIAN & EMILY EDWARDS 46 NEWTON ST, PORTLAND, ME	1-2		MAINE STATE HOUSING AUTHORITY AUGUSTA, ME

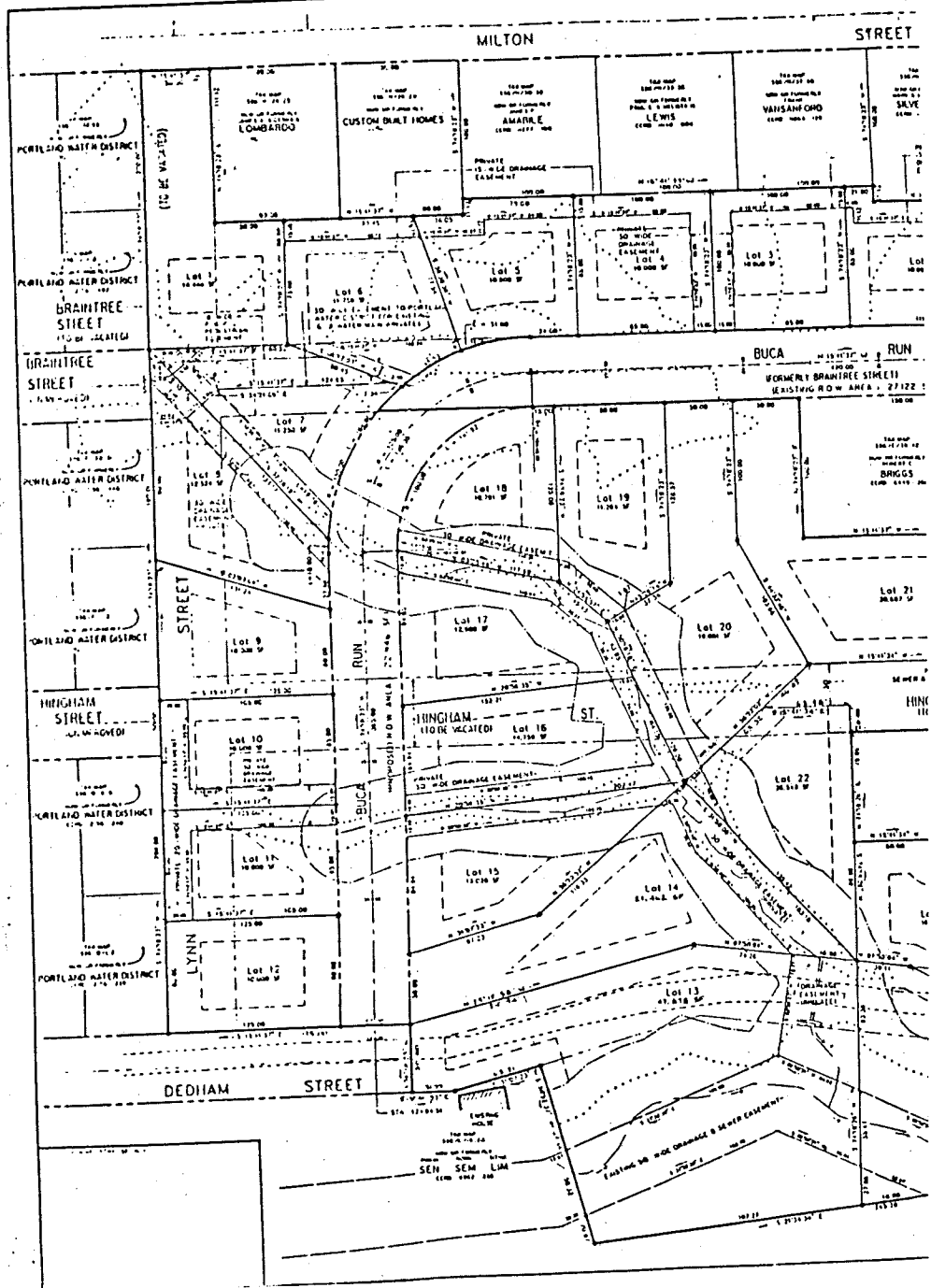
FRED & KATHERINE HIA PO BOX 10515 PORTLAND, ME	127-129 134	336J19	NONE
SANDRA P FALSEY 141 ALLEN AVE, PORTLAND, ME	130 PART OF 134	337A	PEOPLES HERITAGE BANK 1 PORTLAND SQ, PORTLAND, ME
JOHN FOLEY 82 BRACKETT ST, PORTLAND, ME	33-36	336 K13-16	NONE
REGINA A. FOLEY 6 BRAINTREE ST, PORTLAND, ME	135 PART OF 134	336J 18	CORINTHIAN MORTGAGE CO. 10561 BARKLEY SUITE 300 OVERLAND PARK, KS 66212
REGINA A. FOLEY 6 BRAINTREE ST, PORTLAND, ME	136		CORINTHIAN MORTGAGE CO. 10561 BARKLEY SUITE 300 OVERLAND PARK, KS 66212
PHILIP & NAJCY GERMANI 18 BAILEY AVE, PORTLAND, ME	58-69	333 E34-45	PEOPLES HERITAGE 1 PORTLAND SQ, PORTLAND, ME
MARY GLEASON 389 CONGRESS ST, PORTLAND, ME	471-473	335D35-37	NONE
DAVID & MARTHA GOOGINS 1 HOLBROOK ST, PORTLAND, ME	478-481	335 E3-4	1 ST COMFED MORTGAGE CO 45 CENTRAL ST. LYNN MA 01852
JOHN GOULLETTE & GERTRUDE MCCAUL 120 MOUNTAIN AVE, MALDEN MA	417-418	335 C42-44	NONE
PAMELA GRASSETI 188 TANNERY RD, WESTFIELD MA	238-244	336E 38-42	NONE
GRH ENTERPRISES	538-542		NONE
MARTIN & GABRIEL GRIFFEN 389 CONGRESS ST, PORTLAND, ME	485-487	335 E 8-10	NONE
RJ GRONDIN	223-232	333 H15-25	NONE
RJ GRONDIN	364-366	336B32-33	NONE
RJ GRONDIN	369-374	335A3-6	NONE
RJ GRONDIN	543-560	333 J1-9	NONE
RJ GRONDIN	561-562		NONE
RJ GRONDIN	563-567	335A 1-7	NONE
RJ GRONDIN	568-578	333 K8-15 333 K 16	NONE

		333 A 17	
RJ GRONDIN	579-582	333K18-20	NONE
RJ GRONDIN	583-589	333 KF 12-18	NONE
RJ GRONDIN	590-595	333 F 6-11	NONE
RJ GRONDIN	596	333 F 5	NONE
RJ GRONDIN	597-600	333F 1-4	NONE
JOHN & JUDITH GULSTI PO BOX 3465, PORTLAND, ME	192-195	333 G29-32	CITIZENS MORTGAGE CORP 3150 BRISTOL ST, STE 250, COSTA MESA CA.
GLEN & FRANCES HEMMINGWAY 21 HARMONY, PORTLAND, ME	20-23, 1/2 OF 19	336 L3-6	CITICORP HOMEOWNERS 670 MASO RIDGE CTR, ST LOUIS MO 63141
EVA HIGGINS 90 CLIFFORD ST, S PORTLAND, ME	512-513	335 E37-38	NONE
EVA HIGGINS 90 CLIFFORD ST, S PORTLAND, ME	514-515	335 E37-38	NONE
MATTHEW HOLLYDAY PO BOX 10982, PORTLAND, ME	343-345	336D20-22	FEDERAL HOME LOAN MORTGAGE CORP 1109 SUNSET HILLS RD RESTON, VA 22090
MICHAEL & LISA JOYCE 65 SAUGUS ST, PORTLAND, ME	86-89	336 G5-8	MANHATTAN SAVINGS BANK 415 MADISON AV, NY, NY 10017
THOMAS F JOYCE, JR & LILLIAN WHITE 616 MILGON AVE, APT 4 TORRINGTON, CT 06790	8-9		
PAUL KIRBY 75 MILTON ST, PORTLAND, ME	107-109	H26-27	FIRST SECURITY SAVINGS 2600 TELEGRAPH RD, BLOOMFIELD HILLS MI
GEORGE & THOMAS LAFFERTY 21 BOULAY ST, BERLIN, NH	311-317	336H8-12	NONE
MARLENE LAMBERT 57 SAUGUS ST, PORTLAND, ME	176-176	336G1-4	NONE
JAGDEEP & PARAJIT LEKHI 129 BRAINTRLE ST, PORTLAND, ME	302-305	333 H5-8	MARGARETTEN MORTGAGE CO 1 RONSON RD, ISELIN NJ 08838
BETTY LEONARD MILTON ST, PORTLAND, ME	37-41	336 K8-12	NONE
PAUL & MELISSA LEWIS 93 MILTON ST, PORTLAND, ME	100 103	336 H33-36	HANTRYWIDE FINANCING CORP 155 N LAKE AVE, PASADENA CA 91101
RUBERT & REBECCA LEWIS	177-175	336H1-4	NORWEST MORTGAGE

16 COTTAGE ST, S PORTLAND, ME				MINNEAPOLIS MN
JAMES & DEBRA LOMBARDO MILTON ST, PORTLAND, ME	110-112	336 H23-24		PEOPLES HERITAGE BANK 1 PORTLAND SQ, PORTLAND, ME
MARGARET MCCARTHY 13 TUCKER AVE, PORTLAND, ME	488-490	335E 11-13		NONE
RONALD, DANIEL & MARK MCCULLOUGH 26 SEAWAY AVE, OLD ORCHARD BCH, ME	438-444	335D2-8 D38-39		NONE
JOHN T & CYNTHIA A MCGOVERN 181 LEXINGTON AVE, PORTLAND, ME	339	336D13		NONE
JOHN T & CYNTHIA A MCGOVERN 181 LEXINGTON AVE, PORTLAND, ME	340-342	336D14-16		NONE
CYNTHIA A MCGOVERN	350	336D 6		NONE
GORDON & JULIE MERRILL 42 SAULUS ST, PORTLAND, ME	234-237	336 E38-42		PEOPLES HERITAGE BANK 1 PORTLAND SQ, PORTLAND, ME
ANDREW MUSACCHIO 432 RANDOLPH, PORTLAND, ME	430			STM MORTGAGE CO 1250 MOCKINGBIRD LN, DALLAS TX 75247
ANDREW MUSACCHIO 432 RANDOLPH, PORTLAND, ME	431	335C 29		STM MORTGAGE CO 1250 MOCKINGBIRD LN, DALLAS TX 75247
ANDREW MUSACCHIO 432 RANDOLPH, PORTLAND, ME	432			STM MORTGAGE CO 1250 MOCKINGBIRD LN, DALLAS TX 75247
GEORGE ODENCRANTZ	419-420	335 C 40-41		NONE
GEORGE ODENCRANTZ	421-423	335C37-39		NONE
GEORGE ODENCRANTZ	450-454	335 D14-15		NONE
GEORGE ODENCRANTZ	474	335 D 38-39		NONE
GEORGE ODENCRANTZ	475			NONE
DIANE PAOLINE 45 BRAINTREE, PORTLAND, ME	117-122	336J26-29		EMC MORTGAGE CO PO BOX 141358, IRVING TX 75014
DIANE PAOLINE 45 BRAINTREE, PORTLAND, ME	143-150	336J3-10 24-25		EMC MORTGAGE CO PO BOX 141358, IRVING, TX 75014
GUIDO PARDI 41 SAULUS ST, PORTLAND, ME	210-213	336A8-11		SEARS MORTGAGE CORP 1350 CONGRESS ST, PLUMBLAND, ME 04102
FLORENCE PENDLETON 10 CONGRESS ST, PORTLAND, ME	467-470	335D33-34		

PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	24-25	336 11-12	NONE
PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	113-116	336 J30-33	NONE
PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	151-152	336 J1-2	NONE
PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	334-339	336 08-9	NONE
PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	354-355	336 01-2	NONE
PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	412-416	335 46-48	NONE
JOHN & HOLLY RICHIO 112 MILTON ST, PORTLAND, ME	42-45	336 K4-7	PEOPLES HERITAGE BANK 140 LISBON ST, LEWISTON, ME
JOHN I RIDGE 2 PLEASANT VALLEY, CAPE ELIZABETH, ME	337-338	336 011-12	
PETER & CLAUDIA RISBARA 426 RANDOLPH ST, PORTLAND, ME	424-427	335 C33-36	CASCO NORTHERN 1 MONUMENT SQ, PORTLAND, ME
PETER KISHARA 426 RANDOLPH ST, PORTLAND, ME	428-429	335 C 31-32	CASCO NORTHERN 1 MONUMENT SQ, PORTLAND, ME
CHARLES RODWAY 1023 WASHINGTON AVE, PORTLAND, ME	14-17	336 19-12	NONE
CHARLES RODWAY 1023 WASHINGTON AVE, PORTLAND, ME	18, 1/2 of 19	336 L8	NONE
STEVEN & BETSY ROMAN 118 NEWTON ST, PORTLAND, ME	346-348	336 017-19	GMAC MORTGAGE CORP 3451 HAMMOND AVE, WATERLOO, IOWA
DONNA RUSSO 21 DEEPWOOD LN, PORTLAND, ME	336	336 010	
DONNA RUSSO 21 DEEPWOOD LN, PORTLAND, ME	349	336 07	
JOSEPH RUSSO 21 DEEPWOOD LN, PORTLAND, ME	351-353	336 03-5	
CHRISTINE SAUGER 41 BRAINTREE ST, PORTLAND, ME	117-122	336 26-29	MAINE STATE HOUSING AUTHORITY AUGUSTA, ME

CHRISTINE SAUCIER 41 BRAINTREE ST, PORTLAND, ME	141-142	33611-12 21-23	MAINE STATE HOUSING AUTHORITY AUGUSTA, ME
KARL & CARLA SAVINO 41 EPPING ST, PORTLAND, ME	188-191	333G25-28	BANCOSTON 7301 BAYMEADOWS WAY, JACKSONVILLE, FL
MARK & SUZANNE SILVERMAN 107 MILTON ST, PORTLAND, ME	94-96	336 H40-42	MAINE STATE HOUSING AUTHORITY AUGUSTA, ME
MARIA STRONG 31 SAUGUS ST, PORTLAND, ME	314-315	336A6	MAINE STATE HOUSING AUTHORITY AUGUSTA, ME
ANATOLY TABUN 52 NEWTON ST, PORTLAND, ME	3-7		NONE
ANATOLY TABUN 52 NEWTON ST, PORTLAND, ME	10-11		NONE
FRANK VANSANFORD 99 MILTON ST, PORTLAND, ME	97-99	336 H37-39	NONE
MICHAEL & MARY YERVILLE 12 SAUGUS ST, PORTLAND, ME	375-378	3353-6	CITIZENS MORTGAGE CO 55 SUMMER ST, BOSTON, MA
DAVID & MARY WALTON 128 BRAINTREE ST, PORTLAND, ME	180-183	333G17-20	PEOPLES HERITAGE 1 PORTLAND SQ, PORTLAND, ME
WATT SAMAKI TEMPLE 239 PARK AVE, PORTLAND, ME	393-398	335C15-20	PEOPLE HERITAGE 1 PORTLAND SQ, PORTLAND, ME
JOHN WELCH 485 CUMBERLAND AVE, PORTLAND, ME	437	335D1	NONE
JOHN WELCH 485 CUMBERLAND AVE, PORTLAND, ME	477	335E3-4	NONE
ARTHUR WHIPPLE 17 OLD COUNTY RD, SCARBOROUGH, ME	491-494	335 E14-17	NONE
LLOYD WOLF PO BOX 10127, PORTLAND, ME	206-209	333 H1-4	MAINE BANK & TRUST 467 CONGRESS ST, PO BOX 619, A.WILAND
KEVIN & TERRY YORK 153 BRAINTREE ST, PORTLAND, ME	196-198	333 H12-14	PEOPLES HERITAGE BANK 1 PORTLAND SQ, PORTLAND, ME



May 20, 1999

Joseph Gray
Director of Planning
389 Congress Street
Portland, ME 04104

RE: Buca Run

Dear Mr. Gray,

As the owners of lots 1, 6 and 7 on Buca Run we object to the construction of the Public Pedestrian Easement which abuts our properties.

The easement, although well intended when asked for by the Planning Staff, will add to what is already a health and safety problem. Since purchasing our properties we have each cleaned the area of "party debris" (bottles, paper, ect.), have experienced theft and destruction of property, have had our property trespassed on and watched two and four wheel motor vehicles race along our boundaries and the proposed easement. By constructing the easement as proposed we feel that the City will be creating a larger problem than what now exists.

We urge you to amend the developers scope of work pursuant to section 14-496 of the city code and not require the construction of the path. Our understanding is that the developer plans to do this job shortly, thus we would appreciate this letter to be given your prompt attention.

Thank you for your cooperation. W-767-2070 H-797-8983

Sincerely, DAN & MICHELE ROSS LOT 1 63 MILTON ST.

THIS WALKWAY THRU OUR BACK YARDS WAS REALLY SHOCKING TO HEAR ABOUT. HAD WE KNOWN, WE NEVER WOULD HAVE BOUGHT THE LAND + BUILT ON IT. WE HAVE LIVED IN GREATOL PLCD ALL OUR LIVES + NEVER HAD A BACK YARD + PRIVACY. PEOPLE - KIDS - BIKES - MOTOR BIKES - EVERY ONE IS USING OUR LAND AS ACCESS OR PLAY GROUND -

OWNERS OF LOT #6 LOT #7 LOT #8 ON BUCA RUN DON'T WANT THIS TO HAPPEN. WE ALL FEEL THIS PROPOSED WALKWAY IS VERY UNNECESSARY.

CC: Robert Ganley, Portland City Manager
Diversified Properties
Penny Littell, Portland Corporation Council

P.S. PUT WALKWAY THRU HARMONY STREET WHERE IT WOULD NOT EFFECT ANYONES PRIVACY OR SAFETY.

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Thank you for your cooperation.

Sincerely,

Joseph Montecalvo - lot 6 46 Buca Run
My understanding is that 5' of my property is being taken from me for the public. I paid for that 5' of property with my money. What right do you have taking it from me free of charge. That property was cleared and paid for by me!

CC: Robert Ganley, Portland City Manager
Diversified Properties
Penny Littell, Portland Corporation Council



CITY OF PORTLAND

January 28, 1999

Jim Wolf
Diversified Properties, Inc.
P.O. Box 10127
Portland, ME 04104

Dear Jim:

The purpose of this letter is to confirm our understanding about the resolution of the drainage problems on the Donner lot, affecting lots 4 and 5 in Buca Run. Our previous solution was frustrated by the lateness in the season and the fact that the contractor backed out of doing the job this fall due to frost in the ground. By consensus of all parties, the project has been delayed to the spring.

The scope of work will include the installation of underdrain in the center of what had been shown as a drainage easement with shallow swale, extending along the full length of the rear yards of lots 4 and 5, and outletting into the drainage way leading to the culvert under Buca Run. The underdrain specification will conform to the sketch and notes by Jim Wendell as shown on the attached sheet. The earlier agreement included the Donners contributing the cost of removing and resetting the fence to accommodate the work. Because the contractor canceled after the fence was removed, the Donners are not willing to pay for this a second time.

My advice to you, Jim, is to simply include the fence removal and reset as part of the contract. If you have a problem with this, call me and we can discuss it.

Jim Wendell recommends that the work be scheduled for mid to late June, to give the land a chance to dry out in the spring. Please confirm that you will be scheduling this work to take place as agreed upon and summarized in this letter.

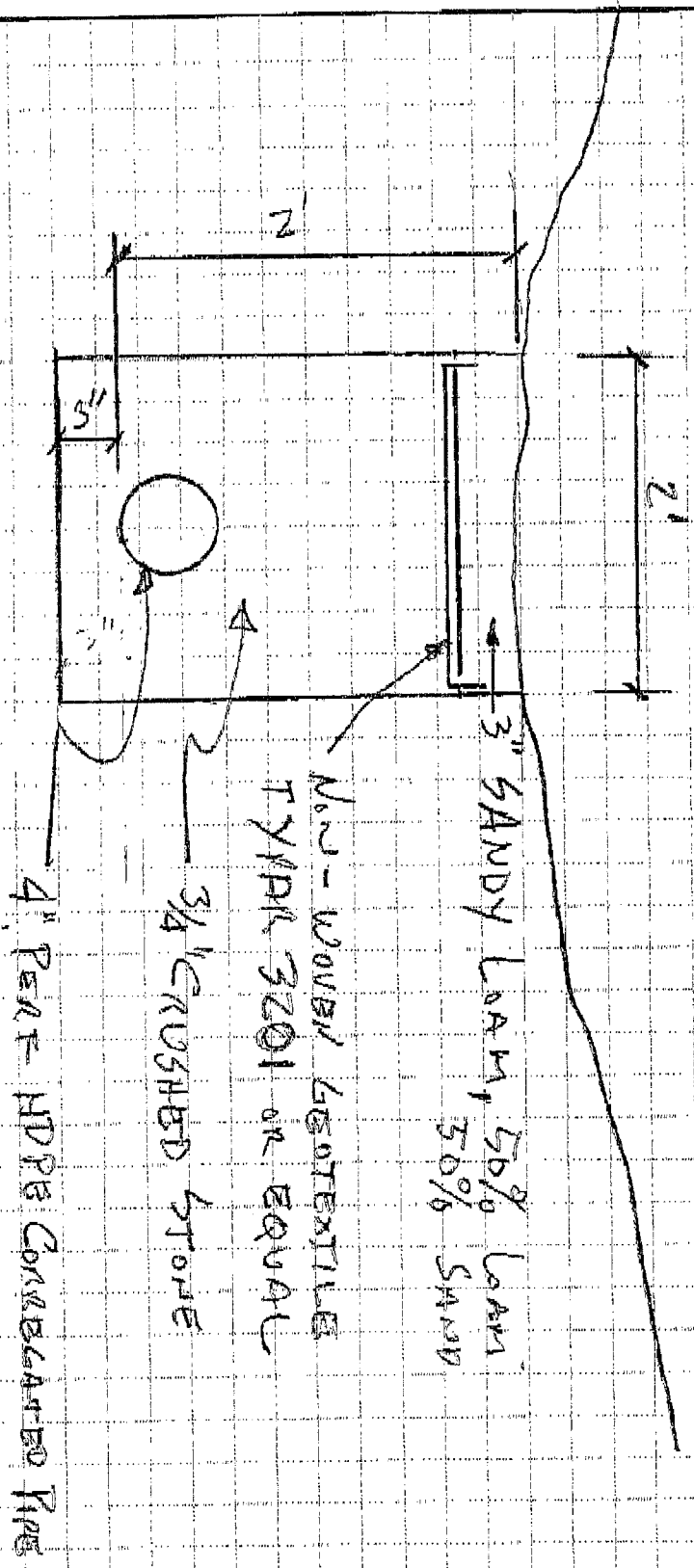
Sincerely,


Alexander Jaegerman
Chief Planner

cc: Karen and Todd Donner, 54 Buca Run, Portland, ME 04103
Jim Wendell, DeLuca Hoffman Assoc. Inc. South Portland, ME 04106
✓ Richard Knowland, Senior Planner
Penny Littell, Associate Corporation Counsel
Joseph E. Gray, Jr. Director of Planning & Urban Development

O:\PLAN\MGT&BDGT\DONNER.WPD1/28/99

- DRAIN TO BE PLACED ALONG THE INSIDE OF THE SWALES
- REMAINS AND LOAM DISTURBED AREAS TO BE REPAIRED
- REPAIR HEAVY APPLICATION OF SEED, RAKE INTO LOAM & PLACE HEAVY COVER OF 1" MULCH.



LOT 4.5 PRIVATE DRAINAGE BASINEMENT FRANCHISE DRAIN

IN BUCA RUN

DELUCA-HOFFMAN ASSOCIATES, INC.
 Consulting Engineers
 778 Main Street Suite 8
 SOUTH PORTLAND, MAINE 04106
 (207) 775-1121
 FAX (207) 879-0896

SCALE _____
 SHEET NO. _____
 OF _____
 CALCULATED BY _____
 DATE _____
 CHECKED BY _____
 DATE _____

May 20, 1999

Joseph Gray
Director of Planning
389 Congress Street
Portland, ME 04104

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CC: Robert Ganley, Portland City Manager
Diversified Properties
Penny Littell, Portland Corporation Council

8-3-99

TODD-

AS I INDICATED IN MY VOICE MAIL MESSAGE TODAY, THE ATTACHED DOCUMENTS NEED TO BE SIGNED SO THAT THE DRAINAGE PROJECT CAN PROCEED. I HAVE ALSO ENCLOSED A SHEET FOR YOUR NEIGHBOR (THE STOKES) TO SIGN, SINCE THE CONTRACTOR WILL NEED TO CROSS THEIR PROPERTY.

ONCE THESE HAVE BEEN SIGNED, PLEASE FORWARD TO:

PENNY LITTELL
CORPORATION COUNSEL OFFICE
CITY HALL
389 CONGRESS STREET
PORTLAND, ME. 04101

SHOULD YOU HAVE ANY QUESTIONS ON THIS PLEASE CALL ME AT 874-8725.

RICK KNOWLAND

LEAVITT

EARTHWORKS CO., INC.

P.O. Box 703 • Standish, ME 04084
(207) 839-5750 • Fax (207) 839-2426

PROPOSAL

TO: City of Portland
Alex Yegerman
City Hall
289 Congress Street
Portland, ME 04101

PHONE	DATE 7-20-99
JOB NAME / LOCATION	
JOB NUMBER	JOB PHONE

We hereby submit specifications and estimates for:

We hereby agree to furnish all equipment, material and labor necessary to complete all work as follows:

Buca Run (lot #'s 4 & 5)
Private drainage easement french drain.

- A. Remove necessary fence between lot 4&5 and re-set.
- B. Dig minimum 2'X2' ditch and fill with 3/4" crushed stone and 4" pipe as to sketch faxed by Jim Wendall @ Deluca Hoffman. 7-8-99
- C. Loam all disturbed areas, rake and seed.
- D. Approx. start date of 8-31-99

NOTE: Permits by others.
Ledge is owners expense.

WE PROPOSE hereby to furnish material and labor – complete in accordance with the above specifications, for the sum of:

Four Thousand One Hundred Dollars 00/100

dollars (\$ 4,100.00).

Payment to be made as follows:

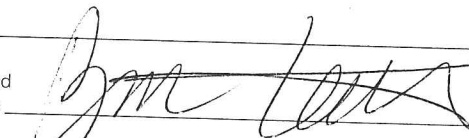
Upon completion of job.

All material is guaranteed to be as specified. All work to be completed in a professional manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado, and other necessary insurance. Our workers are fully covered by Worker's Compensation insurance.

ACCEPTANCE OF PROPOSAL – The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do all the work as specified. Payment will be made as outlined above.

Date of Acceptance: _____

Authorized
Signature



Note: This proposal may be
withdrawn by us if not accepted within

days. 30

Signature



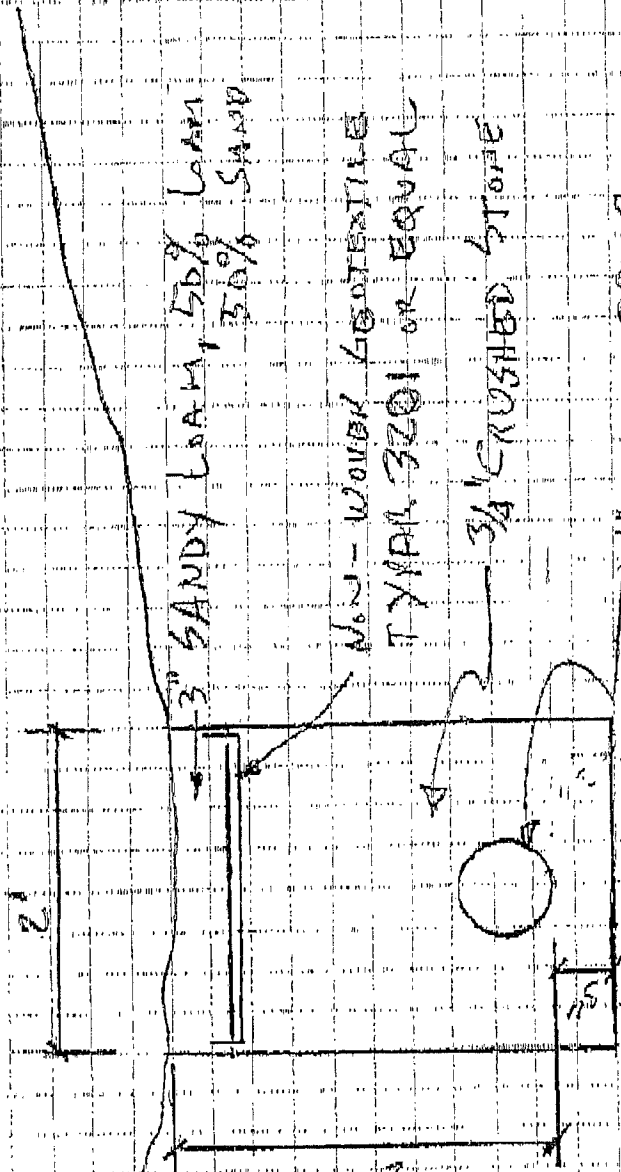
Signature

DeLUCA-HOFFMAN ASSOCIATES, INC.

Consulting Engineers
778 Main Street Suite 8
SOUTH PORTLAND, MAINE 04106
(207) 775-1121
FAX (207) 879-0896

JOB _____ OF _____
SHEET NO. _____ OF _____
CALCULATED BY _____ DATE _____
CHECKED BY _____ DATE _____
SCALE _____

- DRAIN TO BE PLACED ALONG THE LOWEST OF THE SWALE
- REGRADE AND LOAM DISTURBED AREAS TO DRAIN
- MAKE HEAVY APPLICATION OF SEED, RATE WITH LOAM & PLANTS
HEAVY COVER OF HAY MULCH.



4" DIA. HDPE CORRUGATED PIPE

LOT 4, 5 PRIVATE DRAINAGE EASEMENT PARALLEL DRAIN

10 BUCA RUN

Corporation Counsel
Gary C. Wood



CITY OF PORTLAND

Associate Counsel
Charles A. Lane
Elizabeth L. Boynton
Donna M. Katsiaficas
Penny Littell

August 12, 1999

Leavitt Earthworks Co., Inc.
P.O. Box 703
Standish, ME 04084

Re: Buca Run Lot #s 4 & 5

Dear Mr. Leavitt:

Thank you for the information which you provided in connection with the above. I am enclosing for your files an executed original of the contract for the work at Buca Run. Please let us know when the work will be performed.

Sincerely,

A handwritten signature in cursive script that reads 'Penny Littell'.

Penny Littell
Associate Corporation Counsel

Enclosure

cc: Alex Jaegerman, Chief Planner
Rick Knowland, Senior Planner

O:\WP\PENNY\LTRS\LEAVITT.LTR

LEAVITT EARTHWORKS CO., INC.

P.O. Box 703 • Standish, ME 04084
(207) 839-5750 • Fax (207) 839-2426

PROPOSAL

TO: City of Portland
Alex Yegerman
City Hall
289 Congress Street
Portland, ME 04101

PHONE	DATE 7-20-99
JOB NAME / LOCATION	
JOB NUMBER	JOB PHONE

We hereby submit specifications and estimates for:

We hereby agree to furnish all equipment, material and labor necessary to complete all work as follows:

Buca Run (lot #'s 4 & 5)
Private drainage easement french drain.

- A. Remove necessary fence between lot 4&5 and re-set.
- B. Dig minimum 2'X2' ditch and fill with 3/4" crushed stone and 4" pipe as to sketch faxed by Jim Wendall @ Deluca Hoffman. 7-8-99
- C. Loam all disturbed areas, rake and seed.
- D. Approx. start date of 8-31-99

NOTE: Permits by others.
Ledge is owners expense.

WE PROPOSE hereby to furnish material and labor – complete in accordance with the above specifications, for the sum of:

Four Thousand One Hundred Dollars 00/100

dollars (\$ 4,100.00).

Payment to be made as follows:

Upon completion of job.

All material is guaranteed to be as specified. All work to be completed in a professional manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado, and other necessary insurance. Our workers are fully covered by Worker's Compensation insurance.

ACCEPTANCE OF PROPOSAL – The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do all the work as specified. Payment will be made as outlined above.

Date of Acceptance: _____

Authorized
Signature _____

Note: This proposal may be
withdrawn by us if not accepted within
days. 30

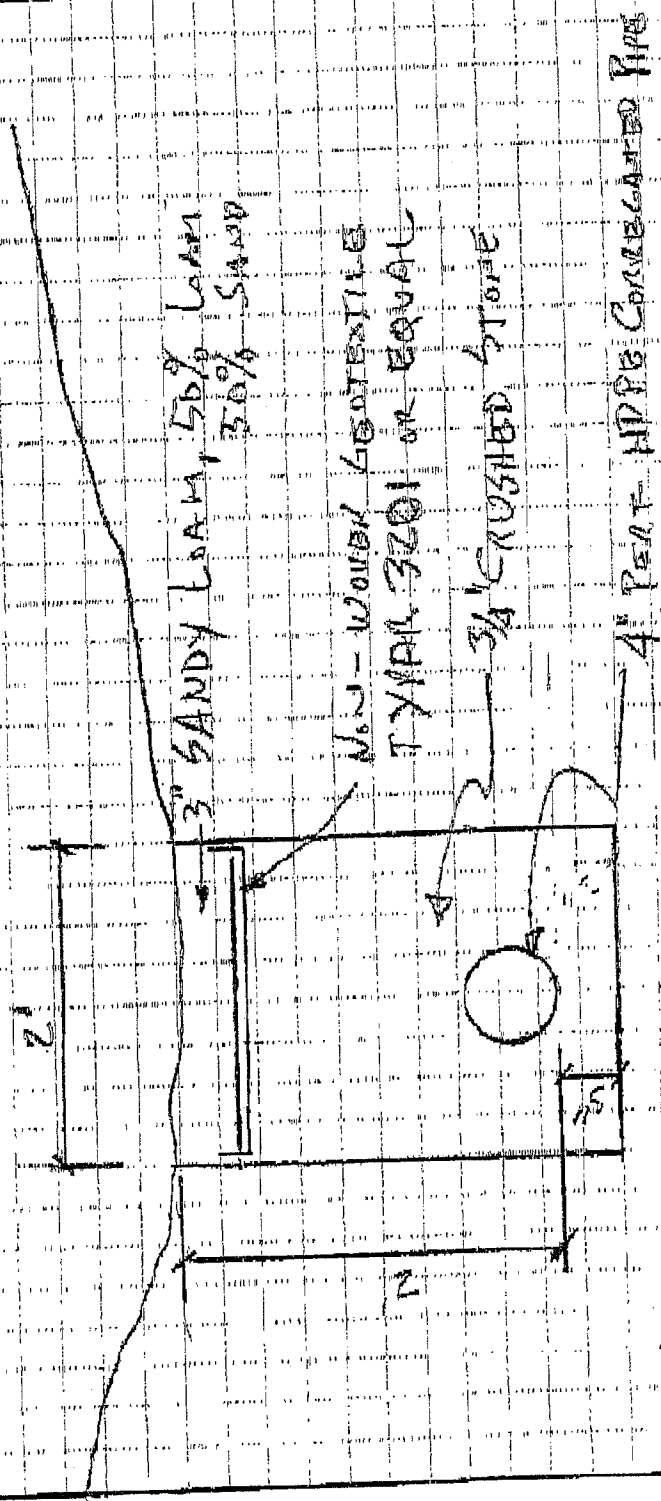
Signature _____

Signature _____

DeLUCA-HOFFMAN ASSOCIATES, INC.
Consulting Engineers
778 Main Street Suite 2
SOUTH PORTLAND, MAINE 04106
(207) 775-1121
FAX (207) 879-0896

JOB _____
SHEET NO. _____ OF _____
CALCULATED BY _____ DATE _____
CHECKED BY _____ DATE _____
SCALE _____

- Drain to be placed along the lowest of the swales
- Re-grade and loam dist. a 650' swale to drain
- Place heavy application of seed, rate into loam & place heavy cover of hay mulch.



LOT 4.5 PRIVATE DRAINAGE EASEMENT PRESENT DRAIN

12 BUCA RUN

CITY OF PORTLAND, MAINE
CORPORATION COUNSEL

To: Jen Babcock, Finance Administrator

From: Penny Littell

Date: 8-12-99

Re: Buca Run Release and Indemnification

For your info./review/comments

For your approval/signature

For your files

Other _____

Comments: 2 Release and Indemnification/

Right of Entry forms (originals): one for

Kurt and Kelly Stokes and one for Todd and

Karen Doner.

cc: Rick Knowland (with copies of enclosures)

RELEASE AND INDEMNIFICATION/RIGHT OF ENTRY

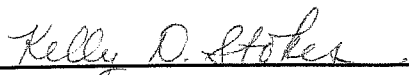
We, Kurt Stokes and ^{Kelly}~~Kelley~~ Stokes, of 60 Buca Run, owner of the real estate located at 60 Buca Run, Portland, Maine (hereinafter "**Property**") hereby request and give permission to the City of Portland or its agent to enter the property and install an underdrain in the center of the drainage easement at the rear of the **Property**. In consideration for the City's installation of the underdrain, we hereby release the City of Portland, its agents and employees, officers, contractors and subcontractors from any and all claims, damages, causes of action or suits whatsoever which may arise as a result of the installation of the underdrain by the City of Portland or its agents. We further understand that the City of Portland will have no responsibility whatsoever for any damages to our property which might occur after the underdrain has been installed, or as a result of the installation of the underdrain. We agree to indemnify and defend the City of Portland from any and all claims, damages and causes of action of any nature which any person, partnership or corporation, or other entity may have on account of the installation of the underdrain by the City of Portland or its agents and on account of the drainage easement located on our **Property**.

Dated this 10th day of August, 1999.

CAUTION: THIS IS A COMPLETE RELEASE OF ALL RIGHTS RELATED TO PROPERTY DAMAGE AND BODILY INJURY. READ CAREFULLY BEFORE SIGNING.



Kurt Stokes



Kelly Stokes
Kelly

RELEASE AND INDEMNIFICATION/RIGHT OF ENTRY

We, Todd Donner and Karen Donner, of 54 Buca Run, owner of the real estate located at 54 Buca Run, Portland, Maine (hereinafter "**Property**") hereby request and give permission to the City of Portland or its agent to enter the property and install an underdrain in the center of the drainage easement at the rear of the **Property**. In consideration for the City's installation of the underdrain, we hereby release the City of Portland, its agents and employees, officers, contractors and subcontractors from any and all claims, damages, causes of action or suits whatsoever which may arise as a result of the installation of the underdrain by the City of Portland or its agents. We further understand that the City of Portland will have no responsibility whatsoever for any damages to our property which might occur after the underdrain has been installed, or as a result of the installation of the underdrain. We agree to indemnify and defend the City of Portland from any and all claims, damages and causes of action of any nature which any person, partnership or corporation, or other entity may have on account of the installation of the underdrain by the City of Portland or its agents and on account of the drainage easement located on our **Property**.

Dated this 10 day of August, 1999.

CAUTION: THIS IS A COMPLETE RELEASE OF ALL RIGHTS RELATED TO PROPERTY DAMAGE AND BODILY INJURY. READ CAREFULLY BEFORE SIGNING.

Todd M Donner
Todd Donner

Karen Donner

LEAVITT EARTHWORKS CO., INC.

P.O. Box 703 • Standish, ME 04084
(207) 839-5750 • Fax (207) 839-2426

PROPOSAL

TO: City of Portland
Alex Yegerman
City Hall
289 Congress Street
Portland, ME 04101

PHONE	DATE 7-20-99
JOB NAME / LOCATION	
JOB NUMBER	JOB PHONE

We hereby submit specifications and estimates for:

We hereby agree to furnish all equipment, material and labor necessary to complete all work as follows:

Buca Run (lot #'s 4 & 5)

Private drainage easement french drain.

- A. Remove necessary fence between lot 4&5 and re-set.
- B. Dig minimum 2'X2' ditch and fill with 3/4" crushed stone and 4" pipe as to sketch faxed by Jim Wendall @ Deluca Hoffman. 7-8-99
- C. Loam all disturbed areas, rake and seed.
- D. Approx. start date of 8-31-99

NOTE: Permits by others.

Ledge is owners expense.

WE PROPOSE hereby to furnish material and labor – complete in accordance with the above specifications, for the sum of:

Four Thousand One Hundred Dollars 00/100

dollars (\$ 4,100.00).

Payment to be made as follows:

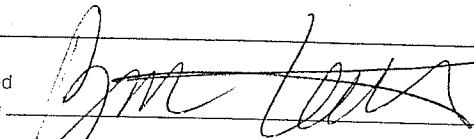
Upon completion of job.

All material is guaranteed to be as specified. All work to be completed in a professional manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado, and other necessary insurance. Our workers are fully covered by Worker's Compensation insurance.

ACCEPTANCE OF PROPOSAL – The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do all the work as specified. Payment will be made as outlined above.

Date of Acceptance: _____

Authorized
Signature



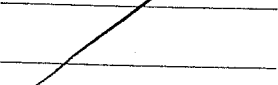
Note: This proposal may be
withdrawn by us if not accepted within

days. 30

Signature



Signature

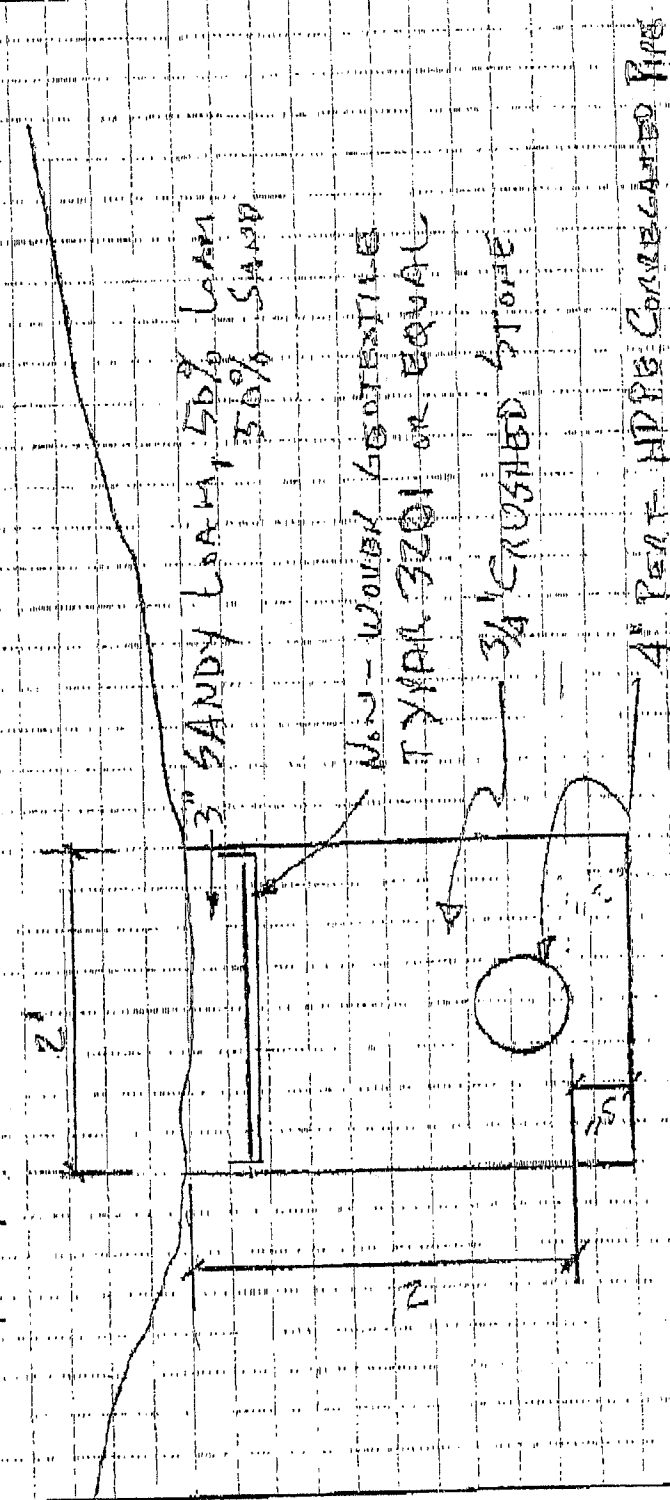


DeLUCA-HOFFMAN ASSOCIATES, INC.

Consulting Engineers
778 Main Street Suite 8
SOUTH PORTLAND, MAINE 04106
(207) 775-1121
FAX (207) 879-0896

JOB _____
SHEET NO. _____ OF _____
CALCULATED BY _____ DATE _____
CHECKED BY _____ DATE _____
SCALE _____

- DRAIN TO BE PLACED ALONG THE HIGHEST OF THE SWALES
- REGRADE AND LOAM DISTRICTS AREAS TO BEHIND
- PLACE HEAVY APPLICATION OF SAND/RAVE INTO LOAM & PLACES
HEAVY COVER OF HAY/MULCH.



LOT 4.5 PRIVATE DRAINAGE EASEMENT PARCELS DRAIN
to BUCA RUN

Planning & Urban Development



Joseph E. Gray Jr.
Director

CITY OF PORTLAND

June 3, 1999

Dan McCarthy
Custom Built Homes of Maine, Inc.
27 Main Street
Windham ME 04062

RE: Buca Run (lot 16)
Woodfords Gardens Subdivision

Dear Mr. McCarthy:

Please be advised that the site plan approval for the referenced lot included an adjustment to the easterly line of the building envelope for the lot.

The easterly line of the building envelope was formed by a 25' NRPA buffer to the wetlands within the drainage gully. The 25' buffer is no longer a requirement of the NRPA law. This allowed the City to consider a request by the applicant for an adjustment in the building envelope. The adjustment of the easterly line of the building envelope permitted the location of the house to a more easterly location on the lot. As a result of the adjustment, the easterly building envelope line is parallel to the easterly lot sideline and 1' east of the most easterly corner of the eaves of the house.

Should you have any questions, please call.

Sincerely,

Richard Knowland
Senior Planner

cc: Joseph E. Gray, Jr., Director of Planning and Urban Development
Alexander Jaegerman, Chief Planner

YORK

13551

STATUTORY WARRANTY DEED

CUSTOM BUILT HOMES OF MAINE, INC., a Maine Corporation, with a principal place of business in the Town of Windham, County of Cumberland and State of Maine,

For Consideration Paid, GRANTS with WARRANTY COVENANTS TO:

KEVIN M. YORK and TERRY J. YORK of 1390 Forest Avenue, Apt. 3K, in the City of Portland, County of Cumberland and State of Maine as Joint Tenants

A certain lot or parcel of land, together with the improvements thereon situated in the City of Portland, County of Cumberland and State of Maine, being property described in Exhibit A annexed hereto and made a part hereof.

Meaning to convey and hereby conveying a portion of the premises conveyed to CUSTOM BUILT HOMES OF MAINE, INC. by deed of R.J. Grondin & Sons dated October 16, 1992, and recorded in the Cumberland County Registry of Deeds in Book 10352, Page 8.

Witness my hand this 17th day of ~~December~~, ^{FEB.} 1994, 1993.

CUSTOM BUILT HOMES OF MAINE, INC.

[Signature]

By: [Signature]
Its President

THE STATE OF MAINE Cumberland, ss. ~~December~~, ^{FEB. 17, 1994} 1993

Then personally appeared the above-named Ronald S. Smith, Jr., of Custom Built Homes of Maine, Inc., and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said corporation.

M. Kathryn Dawley
Attorney at Law/Notary Public
M. Kathryn Dawley
Term expires - Aug 5, 2003.

EXHIBIT A

Certain lots or parcels of land and any improvements thereon situated off Forest Avenue, in the City of Portland, County of Cumberland, and State of Maine, and being lots 196, 197 and 198 as shown on Plan of Woodfords Gardens, said Plan prepared for J. W. Wilbur Company, Inc., said plan being made by Ernest W. Branch, C.E. dated November 16, 1916, and recorded at the Cumberland County Registry of Deeds in Plan Book 13, Page 75.

Excepting and reserving a certain lot or parcel of land situated southwesterly of and adjacent to Beverly Street in Portland, Maine, being a portion of Lot 196 on said Plan, more particularly described as follows:

Beginning at the southwesterly intersection of Newell Avenue and Beverly Street, said point being the northeast corner of Lot 196 as shown on said plan of Woodfords Garden.

Thence, South 51-57-43 East along the southwesterly sideline of said Beverly Street a distance of thirty-five and seventy-one hundredths (35.71) feet to a point of curvature;

Thence, southwesterly along a curve to the left having a radius of fifteen (15.00) feet an arc distance of thirty seven and sixty-three hundredths (37.63) feet to a point on the easterly sideline of Braintree Street;

Thence, North 15-41-37 West along said easterly sideline of Braintree Street a distance of thirty-eight and fifty-one hundredths (38.51) feet to a point on the southerly sideline of Newell Avenue.

Thence, South 82-20-30 West along said southerly sideline of Newell Avenue a distance of six and three hundredths (6.03) feet to the point of beginning.

Said excepted parcel contains 383 square feet, more or less and is described in a deed from the Grantor herein to R.J. Grondin & Sons dated September 6, 1993. Said conveyance was made to R.J. Grondin & Sons for road construction purposes.

Handwritten notes:
R-196
Beverly St
Newell Ave
Braintree St

Recorded
Cumberland County
Registry of Deeds
03/02/94 02:21:17PM
John B. O'Brien
Register



LAND USE CONSULTANTS INC
 LAND PLANNERS • ENGINEERS • SURVEYORS
 966 RIVERSIDE STREET
 PORTLAND, MAINE 04103
 207 • 878 • 3313
 FAX: 207-878-0201

DATE: 6/26/95 L.U.C. NO.: 1857

PROJECT: WOODFARDS
GRANDIN

TO: RICK KNOWLAND
PORTLAND PLANNING DEPT.

FROM: DAIE KAMILA

RE: DEED TO LOT # 128

FAX NO.: _____

- TRANSMITTAL FAX TELCOMM MEMORANDUM MEETING NOTES
- LETTER REPORT FOR COMMENT FOR SUBMISSION MAILED BY L.U.C. L.U.C. DELIVERY
- PLANS AS REQUESTED FOR YOUR RECORD OTHER DEED CLIENT PICK-UP

MESSAGE: _____

YOU WANTED A COPY OF THE DEED
TO THIS LOT TO VERIFY THAT THE SMALL
TRIANGLE WAS RESERVED FOR THE REALIGNMENT
OF BRAINARD / BEVERLY STREET INTERSECTION.

— DAK

COPY TO: _____

NO. PAGES: _____



CITY OF PORTLAND

November 22, 1995

Duane Christian
Custom Built Homes of Maine, Inc.
27 Main Street
Windham, ME 04062

RE: Woodfords Gardens Subdivision, Beverly Street, Lot 143

Dear Mr. Christian:

This letter is to confirm that the Portland Planning Authority has approved an amendment to the Woodfords Gardens Subdivision plan (R.J. Grondin and Sons portion) for lot 143 on Beverly Street. The approved revision changes the minimum lowest building opening elevation from (shown on Note #7) 72.5 feet to 66 feet.

This approval letter shall be recorded at the Cumberland County Registry of Deeds within thirty (30) days of the date of this letter.

Should you have any questions concerning this letter please call the Planning Office.

Sincerely,

A handwritten signature in cursive script, appearing to read "Joseph E. Gray, Jr.", written over the typed name and title.

Joseph E. Gray, Jr.
Director of Planning and Urban Development

cc: Alexander Jaegerman, Chief Planner
Richard Knowland, Senior Planner
James Seymour, Acting Development Review Coordinator
Samuel Hoffses, Chief of Inspections

CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Chair and Members of the Planning Board

FROM: Richard Knowland, Senior Planner

DATE: June 13, 1995

RE: Woodfords Gardens Subdivision Street Vacations

On August 10, 1993, the Planning Board held a public hearing to consider a proposal by R.J. Grondin and Sons to alter the Woodfords Gardens Subdivision which is located in the outer Forest Avenue area. This proposal includes vacating portions of Newell Avenue, Braintree Street and Beverly Avenue. Although the Board made a positive recommendation on the street vacations, the applicant delayed forwarding this request to the City Council for approval. Given the nearly two years that has transpired since the Board's public hearing, the Planning Director has determined that a fresh look at the street vacation proposals is appropriate. For vicinity map, site plans and background information, see Attachments A, B, and C.

As the Board may recall, the Grondin proposal is located north of Saugus Street. Recently the Board reviewed a similar proposal by Diversified Properties (James Wolf) for streets south of Saugus Street. Although Mr. Wolf represented the Grondin proposal in 1993, he is no longer associated with this project.

Street Vacations

The applicant proposes to vacate portions of Newell Street, Beverly Street and Braintree Street. These street vacations will improve the roadway circulation of the subdivision by eliminating segments that are either awkward or not needed. All of these segments are unaccepted and undeveloped streets. The Newell Street segment running through lots 148 to 150 heads to a steep ravine (across from Duraston Concrete Products). It is highly unlikely this section would ever be built. The 200 foot section of Newell Street between Braintree Street and Milton Street is also being vacated because if it were constructed, it would result in a poor three-way intersection. Vacating a small segment of Beverly Street allows Milton Street to be looped to Beverly Street.

In reviewing these street vacations in the context of the PORTLAND TRANSPORTATION PLAN, street connections are being preserved. All of the streets are looped and connected. A Newell Street connection to Milton Street has been preserved providing a connection for streets to the west of this site.

1993 Planning Board Subdivision Alterations Approval

When the Board made a recommendation on the applicant's street vacation request, the Board also approved certain revisions to this subdivision. The Woodfords Gardens Subdivision was originally recorded in 1916 and has a number of design deficiencies which the applicant sought to address. These measures include the proposed street vacations, reconfiguring several street intersections and combining or reconfiguring lots, since the original lot sizes were only between 3,000 sq. ft. to 4,000 sq. ft. in size.

The Board's 1993 approval included the following:

- * Reconfiguring or extending segments of Braintree Street, Milton Street and Beverly Street to improve circulation.
- * Approving new lots created by the vacation of streets and the new street extensions. These lots include 148, 149, 154 to 161 and range in size from 10,000 sq. ft. to 17,066 sq. ft. of land area.

The remainder of the lots are being reconfigured to meet the 10,000 sq. ft. R-2 minimum lot size. As this revision involves reconfiguring lots of an existing subdivision, these changes can be reviewed by the Planning Authority. A condition of the Board's 1993 approval stated:

"That engineering drawings including street profiles for the subdivision streets be submitted to City staff for review and approval."

When the lots and engineering for the streets are reviewed, City staff will review drainage issues in a comprehensive manner including drainage impacts of the subdivision and requiring grading/drainage plans for each lot.

Attachments:

- A) Vicinity Map
- B) Site Plans
- C) Background Information
- D) 1993 Planning Board Approval Letter



LAND USE CONSULTANTS INC

May 4, 1995

J. David Hayes, R.L.A.
David A. Kamila, P.E. ATTACHMENT

Bradley H. Hare, R.L.A.
Frederic Licht, Jr., P.E.
John D. Roberts, P.L.S.

1851

Mr. Joseph E. Gray, Director
Department of Planning and Urban Development
City Hall
389 Congress Street
Portland, Maine 04101

Woodfords Gardens Subdivision

Dear Joe:

I am writing to request that the Woodfords Gardens project involving the proposed vacation of portions of Newell Avenue, Beverly Street and Braintree Street be re-activated and placed on the City Council Agenda for consideration.

We originally appeared before the Planning Board on August 10, 1993, with our plans for reconfiguring proposed streets and lots. The Board supported our proposal at that time, however, due to legal issues we have been delayed until now. At the time of the original application in 1993 the owner R. J. Grondin & Sons was being represented by James Wolf. As a result of a recent agreement Wolf no longer represents Grondin whereby the project is now split between Wolf and Grondin with Wolf taking title to remaining undeveloped lots south of Saugus Street and Grondin retaining title to undeveloped lots north of Saugus Street.

We have also made some minor adjustments to proposed lots No. 144 and No. 145 involving a portion of Lot No. 125. We had originally proposed retaining a portion of Lot No. 127 to be annexed to Lot No. 144. This was inadvertently conveyed with Lot No. 127 so in order to make up the lost area we acquired a portion of Lot No. 125 and reconfigured Lots No. 144 and No. 145 so they would have the required minimum area. This is reflected on the revised plans attached.

We have been in contact with Public Works and are proceeding with engineering design and construction of the portion of Beverly Street between Saugus and Braintree Street which is not affected by the street vacations.

Please let us know if you need any additional documentation and if a fee will be required.

Phil Grondin and I are available to meet with you at your convenience to answer questions and move this project forward.

LAND USE CONSULTANTS INC

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "David A. Kamila". The signature is fluid and cursive, with a large initial "D" and a stylized "K".

David A. Kamila, P.E.
Vice President

DAK/b

Enc.

c.c.: Phil Grondin



Portland
Water District

225 Douglass St. • P.O. Box 3553 • Portland, ME 04104-3553

(207) 774-596
FAX (207) 761-830

July 23, 1993

Mr. James Wolf
Wolf Associates
P.O. Box 10127
Portland, Maine 04104

Re: Proposed Vacation of Portions of Newell Ave. and Beverly St.

Dear Jim:

As per your request, this letter is to acknowledge that the Portland Water District does not object to the proposed vacation of Newell Avenue between Braintree Street and Harmony Road; Newell Avenue from Beverly Street easterly to its terminus; and Beverly Street from Missouri Ave (Tufts Street) easterly 180 feet more or less, provided that the District's 16" water main running up Braintree and onto Beverly Street as per the attached map remains in the retained road right of way.

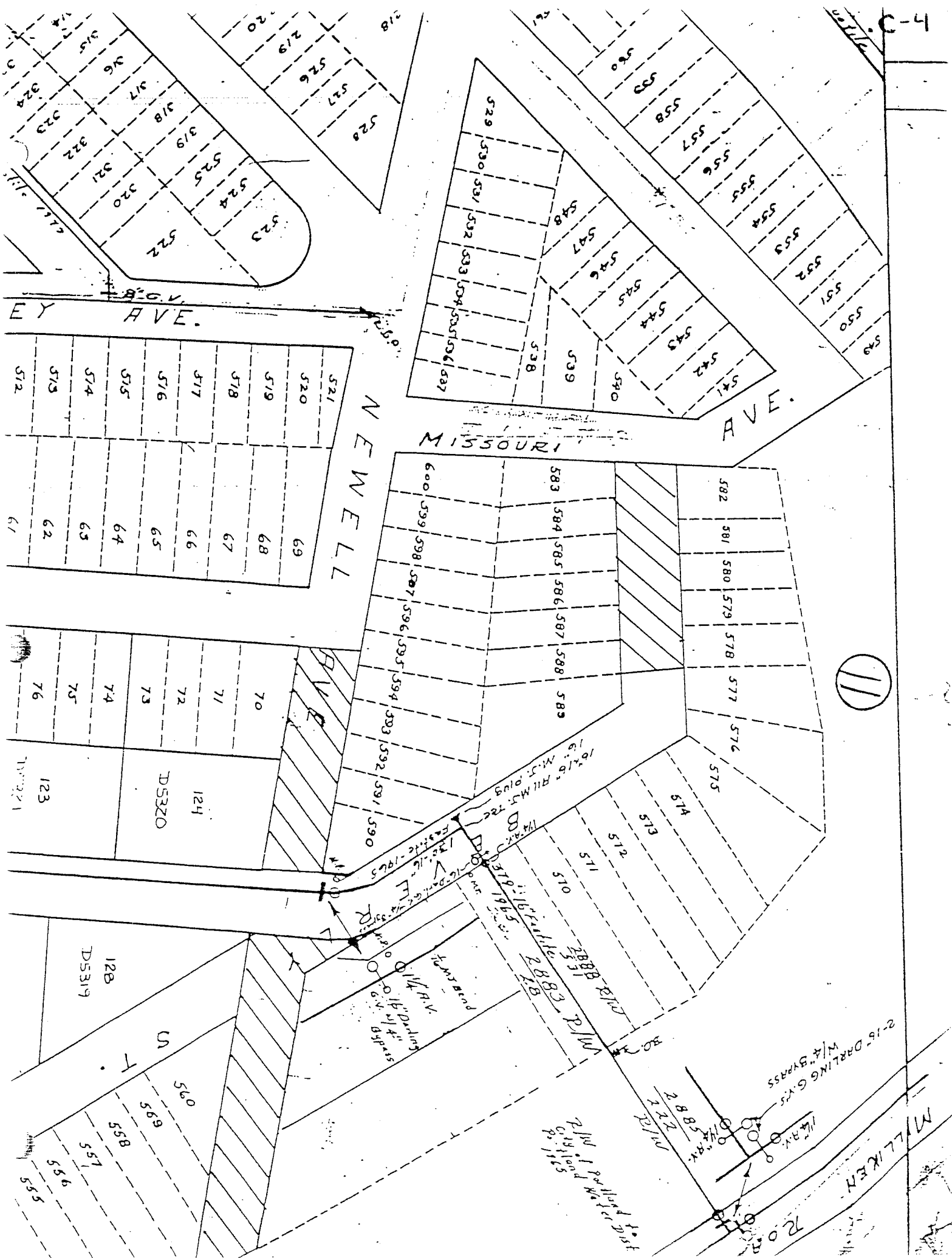
If you have any questions or need anything further, do not hesitate to call me at 774-5961 ext. 3057.

Sincerely yours,

PORTLAND WATER DISTRICT



Norman V. Twaddel
Right of Way Agent



11

2-16 DARLING G.V.S. W/A BYPASS

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MISSOURI AVE.

AVE.

EY AVE.

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New England Telephone

A NYNEX Company

5 Davis Farm Road
Portland, Maine 04103
Phone (207) 797-1785Blaine N. Hopkins
Manager - Right of Way

August 3, 1993

Mr. James Wolf
Wolf Associates
P. O. Box 10127
Portland, ME 04104

Dear Jim:

In accordance with our discussion, please be advised that New England Telephone Company does not object to the proposed vacation of Newell Avenue between Braintree Street and Harmony Road; Newell Avenue from Beverly Street easterly to its terminus; and Beverly Street from Missouri Avenue (Tufts Street) easterly for approximately 200 feet.

As always, it is a pleasure working with Wolf Associates. If you have any questions or if I may be of assistance, please do not hesitate to call.

Sincerely,

Blaine N. Hopkins
Manager - Right of Way

BNH/ clr





Northern Utilities, Inc.

07-28-93

Mr. James Wolf
Wolf Associates
P.O. Box 10127
Portland, Maine 04104

Re: Proposed vacation of portions of Newell Ave. and Beverly St.

Dear Jim:

Northern Utilities Inc. has no objections to the vacation of the above locations. We have no facilities at any of those locations. Thank you for contacting us. If we can be of any further assistance, please call me at 797-8002 ext. 6274.

Sincerely,

Northern Utilities Inc.

A handwritten signature in black ink, appearing to read 'David E. Fay III', written over the printed name.

David E. Fay III
New Business Coordinator

DRAFT

VACATION WAIVER AND INDEMNIFICATION

WHEREAS, R.J. GRONDIN & SONS of 11 Bartlett Road, Gorham, Maine (the "Petitioner") has requested the City of Portland ("City") to vacate, pursuant to 30 M.R.S.A. 3027 et seq., a certain portion of Newell Avenue between Beverly and Milton, portion of Newell Street East of Beverly and a portion of Beverly East of Missouri more particularly described in Exhibit 1;

WHEREAS, the City of Portland as a condition precedent to any vacation of the proposed Town way or portion thereof requires a waiver of any and all claims which the Petitioner may have against the City for such vacation, and further, requires indemnification against any and all claims of any and all third persons arising out of or resulting from the vacation of said proposed Town way or portion thereof;

NOW, THEREFORE, in consideration of the City vacating said proposed Town way or portion thereof, the Petitioner for itself, its successors, heirs and assigns, agrees as follows:

1. The petitioner hereby waives any and all claims for damages which it may now or hereafter have against the City arising out of or resulting from any vacation of said proposed Town way or portion thereof by the City pursuant to 23 M.R.S.A. 3027 et seq.,

2. The Petitioner hereby agrees to defend, indemnify and hold harmless the City against any and all claims by any and all third persons against the City for damages arising out of or resulting from any vacation of said proposed Town way or portion thereof by the City pursuant to 23 M.R.S.A. 3027 et seq.

DATED: August , 1993.

BY: _____

print name

ITS: _____

Parcel 1 - Portion of Newell Avenue between Beverly and Milton

A certain lot or parcel of land in Portland, Maine, situated between and adjacent to Braintree, Beverly, and Milton Streets, more particularly bounded and described as follows:

Beginning at a point at the former southeasterly intersection of said Milton Street and Newell Avenue, said point being the most westerly corner of lot 70 as shown on a plan of "Woodfords Garden" by Ernest W. Branch, dated November 16, 1916, and recorded in the Cumberland County Registry of Deeds planbook 13 page 75:

Thence, North 15-41-37 West along the easterly sideline of the new alignment of Milton Street, a distance of fifty and fifty (50.50) feet to a point on the southerly line of lot 595:

Thence, South 82-20-30 West along the southerly line of lots 595, 594, 593, 592, and 590, a distance of two hundred sixteen and seventy hundredths (216.77) feet to a point on the westerly sideline of Beverly Street:

Thence, South 51-57-43 East along the said southerly sideline of Beverly Street, a distance of twenty and seventy three hundredths (20.73) feet to a point of curvature and the northwesterly intersection of said Beverly Street and the realigned Braintree Street:

Thence, southerly along said westerly sideline of Braintree Street and a curve to the right having a radius of twenty and no hundredths (20.00) feet, an arc distance of thirty and twenty-four hundredths (30.24) feet to a point of reverse curvature:

Thence, southerly along said westerly sideline of Braintree Street and a curve to the left having a radius of sixty-five and no hundredths (65.00) feet, an arc distance of fifty-seven and thirteen hundredths (57.13) feet to a point of tangency:

Thence, North 15-41-37 West along the easterly line of lot 194 and 195 a distance of forty-five and fifty-seven hundredths

LAND USE CONSULTANTS INC

(45.57) feet to a point at the northeasterly corner of said lot 195:

Thence, South 82-20-30 West along said lots 195 and lot 70 a distance of two hundred one and ninety-eight hundredths (201.98) feet to the point of beginning.

Said parcel contains 67,195 square feet (1.54 acres) more or less.

Parcel 2 - Portion of Newell Street East of Beverly

A certain lot or parcel of land situated easterly of and adjacent to Beverly Street in Portland, Maine, more particularly bounded and described as follows:

Beginning at a point at the former southeasterly intersection of said Beverly Street and Newell Avenue, said point being the most westerly corner of lot 560, as shown on a plan of "Woodfords Garden" by Ernest W. Branch, dated November 16, 1916, and recorded in the Cumberland County Registry of Deeds planbook 13 page 75:

Thence, North 51-57-43 West along easterly sideline of the new alignment of said Beverly Street, a distance of sixty-nine and eighty-seven hundredths (69.87) feet to a point on the southerly line of lot 563:

Thence, North 82-20-30 East along the southerly lines of lots 563, 562, and 561, a distance of two hundred fifty and ninety-five hundredths (250.95) feet to a point and land now or formerly of Greater Portland Building Fund, Inc. (C.C.R.D. 3157/499):

Thence, South 40-06-24 East along said land of Greater Portland Building Fund, Inc., a distance of fifty-nine and twenty-five hundredths (59.25) feet to a point being the most northerly corner of lot 557:

Thence, South 82-20-30 West along said lot 557, 558, 559, and 560, a distance of two hundred thirty-three and ninety-four hundredths (233.94) feet to the point of beginning.

Said parcel contains 12,122 square feet (0.28 acres) more or less.

Parcel 3 - Portion of Beverly east of Missouri

A certain lot or parcel of land situated westerly of and adjacent to Beverly Street in Portland, Maine, more particularly bounded and described as follows:

LAND USE CONSULTANTS INC

Beginning at a point at the northwesterly terminal end of the said newly aligned Beverly Street:

Thence, South 51-57-43 West along the said westerly sideline of Beverly Street a distance of thirty and no hundredths (30.00) feet to a point of curvature and the newly aligned northwesterly sideline of Milton Street:

Thence, southerly along said westerly sideline of Milton Street and a curve to the right having a radius of twenty and no hundred (20.00) feet, an arc distance of eighteen and ten hundredths (18.10) feet to a point of non-tangency and the northerly line of lot 598 as shown on a plan of "Woodfords Garden" by Ernest W. Branch, dated November 16, 1916, and recorded in the Cumberland County Registry of Deeds plan book 13 page 75:

Thence, South 67-11-40 West along said lot 589, 588, 587, 586, 585, 584, and 583 a distance of one hundred eighty-five and ten hundredths (185.10) feet to the easterly sideline of Missouri Avenue:

Thence, North 14-13-47 West along the said westerly sideline of Missouri Avenue a distance of fifty and fifty-seven hundredths (50.57) feet to a point , being the most southerly corner of lot 582:

Thence, North 67-11-40 East along the said southerly sideline of lots 582, 581, 580, 579, 578, and 577 a distance of one hundred seventy-three and thirty-three hundredths (173.33) feet to a point on the said northerly terminal end of the newly aligned Beverly Street:

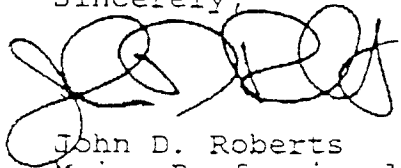
Thence, South 38-02-17 West along the said terminal end of the newly aligned Beverly Street a distance of thirteen and one hundredths (13.01) feet to the point of beginning.

Said parcel contains 8,801 square feet (0.2 acres) more or less.

Bearing stated hereon are based on a magnetic observation by others in 1985.

If we may be of further assistance in this matter, please call.

Sincerely,



John D. Roberts
Maine Professional Land Surveyor #1155
Land Use Consultants

PLANNING BOARD

Kenneth M. Cole III, Chair
Jadine R. O'Brien, Vice Chair
Joseph R. DeCoursey
Irving Fisher
Cyrus Hagge
John H. Carroll
Donna Williams

August 16, 1993

Mr. James Wolf
P.O. Box 10127
Portland, ME 04101

Re: Woodfords Gardens Subdivision

Dear Mr. Wolf:

On August 10, 1993 the Portland Planning Board voted 6-0 (Cole absent) on the following motions regarding the proposed alterations to the Woodfords Gardens Subdivision.

1. Recommendation to the City Council that certain portions of Newell Avenue, Beverly Street and Braintree Street be vacated subject to the following conditions:
 - i. That an easement in an appropriate form be granted to the Portland Water District for their waterline in Braintree Street;
 - ii. That an executed copy of waiver and indemnification benefiting the City for the street vacations be submitted to City staff for review and approval; and
 - iii. That the written descriptions of the street vacations be subject to review and approval by City staff.
2. That the proposed alterations to the Woodfords Gardens Subdivision are in conformance with the Subdivision Ordinance of the Land Use Code.
 - i. That engineering drawings including street profiles for the subdivision streets be submitted to City staff for review and approval; and
 - ii. That a deed be submitted to City staff for review and approval regarding the conveyance of a portion of Lot 128 for the reconfiguration of Braintree Street.

The approval is based on the submitted site plan and the findings related to site plan review standards as contained in Planning Report #28-93, which is attached. Mylar copies of the construction drawing for the subdivision must be submitted to the Public Works Department prior to the release of the plat. In addition, a performance guarantee covering the public improvements as well as an inspection fee payment of 1.7% of the guarantee amount must be submitted to and approved by the Planning Division and Public Works prior to the recording of the subdivision plat.

If there are any questions regarding the Board's actions, please contact the planning staff.

Sincerely,

Kenneth M. Cole III, Chair
Portland Planning Board

cc: Joseph E. Gray, Jr., Director of Planning and Urban Development
Alexander Jaegerman, Chief Planner
Richard Knowland, Senior Planner
P. Samuel Hoffses, Chief of Building Inspections
William Giroux, Zoning Administrator
George Flaherty, Director of Parks and Public Works
John Rague, Principal Engineer
Melodie Esterberg, Development Review Coordinator
William Bray, Deputy Director of Parks and Public Works
Jeff Tarling, City Arborist
Natalie Burns, Associate Corporation Counsel
Lt. Gaylen McDougall, Fire Prevention
Paul Niehoff, Materials Engineer
Louise Chase, Building Permit Secretary
Dave Kamila, Land Use Consultants
One India Street, Portland, Maine 04101
R.J. Grondin, 11 Bartlett Road, Gorham, Maine 04038
Approval Letter File

John Carroll

CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Chair and Members of the Planning Board
FROM: Richard Knowland, Senior Planner
DATE: June 13, 1995
RE: Woodfords Gardens Subdivision Street Vacations

On August 10, 1993, the Planning Board held a public hearing to consider a proposal by R.J. Grondin and Sons to alter the Woodfords Gardens Subdivision which is located in the outer Forest Avenue area. This proposal includes vacating portions of Newell Avenue, Braintree Street and Beverly Avenue. Although the Board made a positive recommendation on the street vacations, the applicant delayed forwarding this request to the City Council for approval. Given the nearly two years that has transpired since the Board's public hearing, the Planning Director has determined that a fresh look at the street vacation proposals is appropriate. For vicinity map, site plans and background information, see Attachments A, B, and C.

As the Board may recall, the Grondin proposal is located north of Saugus Street. Recently the Board reviewed a similar proposal by Diversified Properties (James Wolf) for streets south of Saugus Street. Although Mr. Wolf represented the Grondin proposal in 1993, he is no longer associated with this project.

Street Vacations

The applicant proposes to vacate portions of Newell Street, Beverly Street and Braintree Street. These street vacations will improve the roadway circulation of the subdivision by eliminating segments that are either awkward or not needed. All of these segments are unaccepted and undeveloped streets. The Newell Street segment running through lots 148 to 150 heads to a steep ravine (across from Duraston Concrete Products). It is highly unlikely this section would ever be built. The 200 foot section of Newell Street between Braintree Street and Milton Street is also being vacated because if it were constructed, it would result in a poor three-way intersection. Vacating a small segment of Beverly Street allows Milton Street to be looped to Beverly Street.

In reviewing these street vacations in the context of the PORTLAND TRANSPORTATION PLAN, street connections are being preserved. All of the streets are looped and connected. A Newell Street connection to Milton Street has been preserved providing a connection for streets to the west of this site.

1993 Planning Board Subdivision Alterations Approval

When the Board made a recommendation on the applicant's street vacation request, the Board also approved certain revisions to this subdivision. The Woodfords Gardens Subdivision was originally recorded in 1916 and has a number of design deficiencies which the applicant sought to address. These measures include the proposed street vacations, reconfiguring several street intersections and combining or reconfiguring lots, since the original lot sizes were only between 3,000 sq. ft. to 4,000 sq. ft. in size.

The Board's 1993 approval included the following:

- * Reconfiguring or extending segments of Braintree Street, Milton Street and Beverly Street to improve circulation.
- * Approving new lots created by the vacation of streets and the new street extensions. These lots include 148, 149, 154 to 161 and range in size from 10,000 sq. ft. to 17,066 sq. ft. of land area.

The remainder of the lots are being reconfigured to meet the 10,000 sq. ft. R-2 minimum lot size. As this revision involves reconfiguring lots of an existing subdivision, these changes can be reviewed by the Planning Authority. A condition of the Board's 1993 approval stated:

"That engineering drawings including street profiles for the subdivision streets be submitted to City staff for review and approval."

When the lots and engineering for the streets are reviewed, City staff will review drainage issues in a comprehensive manner including drainage impacts of the subdivision and requiring grading/drainage plans for each lot.

Attachments:

- A) Vicinity Map
- B) Site Plans
- C) Background Information
- D) 1993 Planning Board Approval Letter



LAND USE CONSULTANTS INC

May 4, 1995

J. David Hayer, R.L.A.
David A. Kamila, P.E. ATTACHMENT C-1

Bradley H. Hare, R.L.A.
Frederic Licht, Jr., P.E.
John D. Roberts, P.L.S.

1851

Mr. Joseph E. Gray, Director
Department of Planning and Urban Development
City Hall
389 Congress Street
Portland, Maine 04101

Woodfords Gardens Subdivision

Dear Joe:

I am writing to request that the Woodfords Gardens project involving the proposed vacation of portions of Newell Avenue, Beverly Street and Braintree Street be re-activated and placed on the City Council Agenda for consideration.

We originally appeared before the Planning Board on August 10, 1993, with our plans for reconfiguring proposed streets and lots. The Board supported our proposal at that time, however, due to legal issues we have been delayed until now. At the time of the original application in 1993 the owner R. J. Grondin & Sons was being represented by James Wolf. As a result of a recent agreement Wolf no longer represents Grondin whereby the project is now split between Wolf and Grondin with Wolf taking title to remaining undeveloped lots south of Saugus Street and Grondin retaining title to undeveloped lots north of Saugus Street.

We have also made some minor adjustments to proposed lots No. 144 and No. 145 involving a portion of Lot No. 125. We had originally proposed retaining a portion of Lot No. 127 to be annexed to Lot No. 144. This was inadvertently conveyed with Lot No. 127 so in order to make up the lost area we acquired a portion of Lot No. 125 and reconfigured Lots No. 144 and No. 145 so they would have the required minimum area. This is reflected on the revised plans attached.

We have been in contact with Public Works and are proceeding with engineering design and construction of the portion of Beverly Street between Saugus and Braintree Street which is not affected by the street vacations.

Please let us know if you need any additional documentation and if a fee will be required.

Phil Grondin and I are available to meet with you at your convenience to answer questions and move this project forward.

LAND USE CONSULTANTS INC

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "David A. Kamila". The signature is fluid and cursive, with the first name "David" being the most prominent.

David A. Kamila, P.E.
Vice President

DAK/b

Enc.

c.c.: Phil Grondin



Portland Water District

225 Douglass St. • P.O. Box 3553 • Portland, ME 04104-3553

(207) 774-596
FAX (207) 761-8300

July 23, 1993

Mr. James Wolf
Wolf Associates
P.O. Box 10127
Portland, Maine 04104

Re: Proposed Vacation of Portions of Newell Ave. and Beverly St.

Dear Jim:

As per your request, this letter is to acknowledge that the Portland Water District does not object to the proposed vacation of Newell Avenue between Braintree Street and Harmony Road; Newell Avenue from Beverly Street easterly to its terminus; and Beverly Street from Missouri Ave (Tufts Street) easterly 180 feet more or less, provided that the District's 16" water main running up Braintree and onto Beverly Street as per the attached map remains in the retained road right of way.

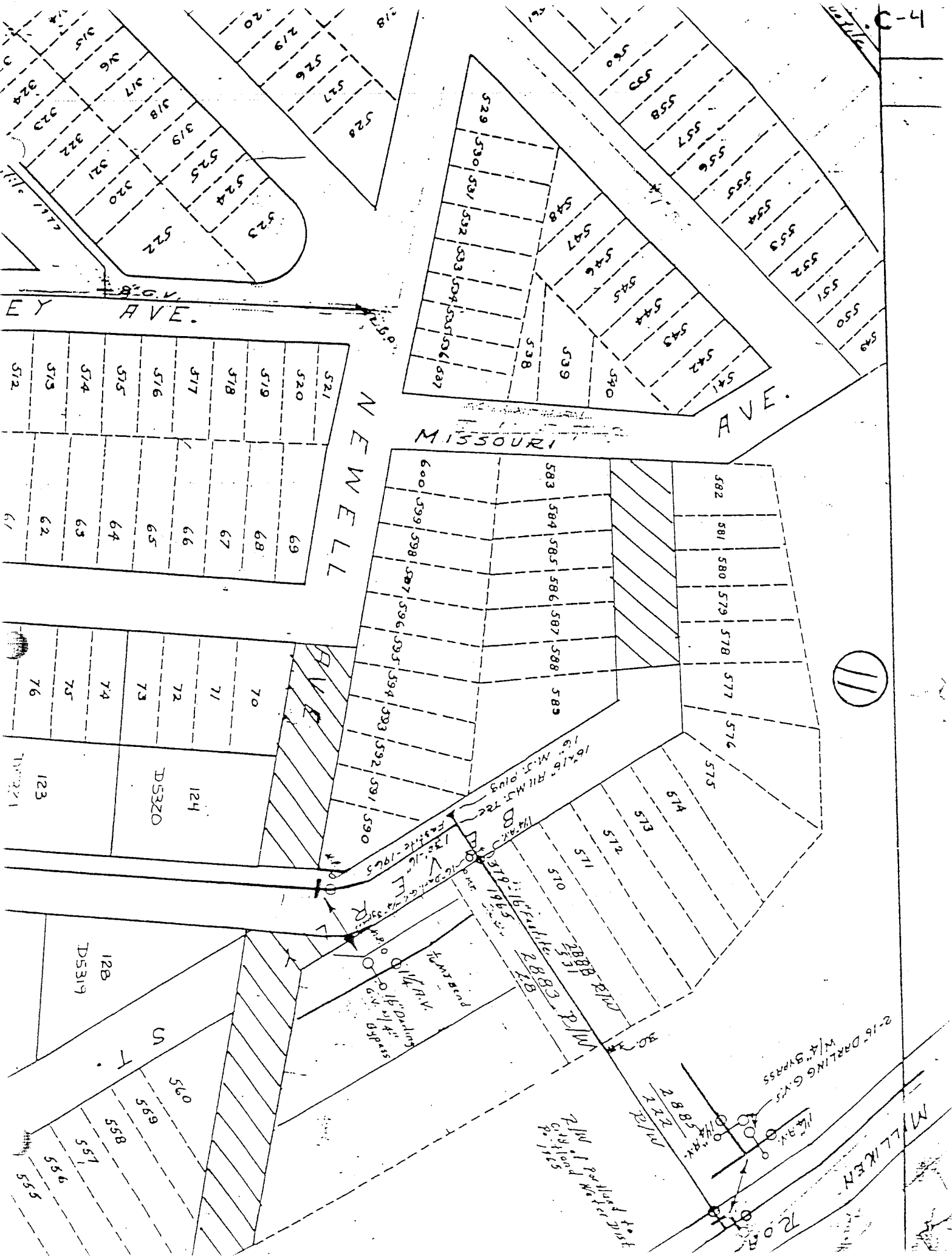
If you have any questions or need anything further, do not hesitate to call me at 774-5961 ext. 3057.

Sincerely yours,

PORTLAND WATER DISTRICT



Norman V. Twaddel
Right of Way Agent



11

EY AVE.

NEWELL AVE.

MISSOURI AVE.

AVE.

MILLIKEN

2-16 DARLING G. 155
W/A Bypass

14th Ave
2-18 1000
9-1125

14th Ave
2-22 223
2-22 223

16-18 RILLMIST
6-16 M.S. 9109

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9-1125

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New England Telephone

A NYNEX Company

5 Davis Farm Road
Portland, Maine 04103
Phone (207) 797-1785Blaine N. Hopkins
Manager - Right of Way

August 3, 1993

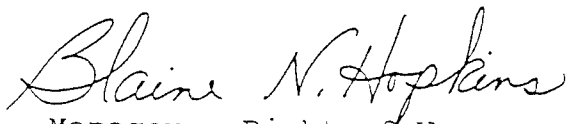
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Blaine N. Hopkins
Manager - Right of Way

BNH/ clr





Northern Utilities, Inc.

07-28-93

Mr. James Wolf
Wolf Associates
P.O. Box 10127
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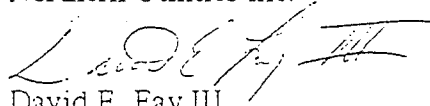
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David E. Fay III

New Business Coordinator

DRAFT

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WHEREAS, the City of Portland as a condition precedent to any vacation of the proposed Town way or portion thereof requires a waiver of any and all claims which the Petitioner may have against the City for such vacation, and further, requires indemnification against any and all claims of any and all third persons arising out of or resulting from the vacation of said proposed Town way or portion thereof;

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2. The Petitioner hereby agrees to defend, indemnify and hold harmless the City against any and all claims by any and all third persons against the City for damages arising out of or resulting from any vacation of said proposed Town way or portion thereof by the City pursuant to 23 M.R.S.A. 3027 et seq.

DATED: August , 1993.

BY: _____

print name

ITS: _____

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Thence, South 51-57-43 East along the said southerly sideline of Beverly Street, a distance of twenty and seventy three hundredths (20.73) feet to a point of curvature and the northwesterly intersection of said Beverly Street and the realigned Braintree Street:

Thence, southerly along said westerly sideline of Braintree Street and a curve to the right having a radius of twenty and no hundredths (20.00) feet, an arc distance of thirty and twenty-four hundredths (30.24) feet to a point of reverse curvature:

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Thence, North 15-41-37 West along the easterly line of lot 194 and 195 a distance of forty-five and fifty-seven hundredths

LAND USE CONSULTANTS INC

(45.57) feet to a point at the northeasterly corner of said lot 195:

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Thence, North 82-20-30 East along the southerly lines of lots 563, 562, and 561, a distance of two hundred fifty and ninety-five hundredths (250.95) feet to a point and land now or formerly of Greater Portland Building Fund, Inc. (C.C.R.D. 3157/499):

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LAND USE CONSULTANTS INC

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Thence, southerly along said westerly sideline of Milton Street and a curve to the right having a radius of twenty and no hundred (20.00) feet, an arc distance of eighteen and ten hundredths (18.10) feet to a point of non-tangency and the northerly line of lot 598 as shown on a plan of "Woodfords Garden" by Ernest W. Branch, dated November 16, 1916, and recorded in the Cumberland County Registry of Deeds plan book 13 page 75:

Thence, South 67-11-40 West along said lot 589, 588, 587, 586, 585, 584, and 583 a distance of one hundred eighty-five and ten hundredths (185.10) feet to the easterly sideline of Missouri Avenue:

Thence, North 14-13-47 West along the said westerly sideline of Missouri Avenue a distance of fifty and fifty-seven hundredths (50.57) feet to a point, being the most southerly corner of lot 582:

Thence, North 67-11-40 East along the said southerly sideline of lots 582, 581, 580, 579, 578, and 577 a distance of one hundred seventy-three and thirty-three hundredths (173.33) feet to a point on the said northerly terminal end of the newly aligned Beverly Street:

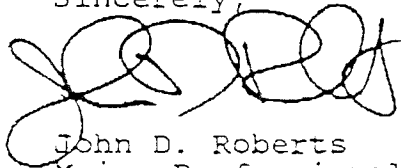
Thence, South 38-02-17 West along the said terminal end of the newly aligned Beverly Street a distance of thirteen and one hundredths (13.01) feet to the point of beginning.

Said parcel contains 8,801 square feet (0.2 acres) more or less.

Bearing stated hereon are based on a magnetic observation by others in 1985.

If we may be of further assistance in this matter, please call.

Sincerely,



John D. Roberts
Maine Professional Land Surveyor #1155
Land Use Consultants

PLANNING BOARD

Kenneth M. Cole III, Chair
Jadine R. O'Brien, Vice Chair
Joseph R. DeCoursey
Irving Fisher
Cyrus Hagge
John H. Carroll
Donna Williams

August 16, 1993

Mr. James Wolf
P.O. Box 10127
Portland, ME 04101

Re: Woodfords Gardens Subdivision

Dear Mr. Wolf:

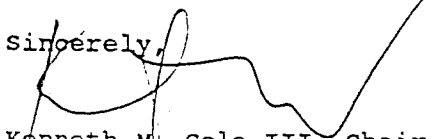
On August 10, 1993 the Portland Planning Board voted 6-0 (Cole absent) on the following motions regarding the proposed alterations to the Woodfords Gardens Subdivision.

1. Recommendation to the City Council that certain portions of Newell Avenue, Beverly Street and ~~Braintree Street~~ be vacated subject to the following conditions:
 - i. That an easement in an appropriate form be granted to the Portland Water District for their waterline in Braintree Street;
 - ii. That an executed copy of waiver and indemnification benefiting the City for the street vacations be submitted to City staff for review and approval; and
 - iii. That the written descriptions of the street vacations be subject to review and approval by City staff.
2. That the proposed alterations to the Woodfords Gardens Subdivision are in conformance with the subdivision Ordinance of the Land Use Code.
 - i. That engineering drawings including street profiles for the subdivision streets be submitted to City staff for review and approval; and
 - ii. That a deed be submitted to City staff for review and approval regarding the conveyance of a portion of Lot 128 for the reconfiguration of Braintree Street.

The approval is based on the submitted site plan and the findings related to site plan review standards as contained in Planning Report #28-93, which is attached. Mylar copies of the construction drawing for the subdivision must be submitted to the Public Works Department prior to the release of the plat. In addition, a performance guarantee covering the public improvements as well as an inspection fee payment of 1.7% of the guarantee amount must be submitted to and approved by the Planning Division and Public Works prior to the recording of the subdivision plat.

If there are any questions regarding the Board's actions, please contact the planning staff.

Sincerely,


Kenneth M. Cole III, Chair
Portland Planning Board

cc: Joseph E. Gray, Jr., Director of Planning and Urban Development
Alexander Jaegerman, Chief Planner
Richard Knowland, Senior Planner
P. Samuel Hoffses, Chief of Building Inspections
William Giroux, Zoning Administrator
George Flaherty, Director of Parks and Public Works
John Rague, Principal Engineer
Melodie Esterberg, Development Review Coordinator
William Bray, Deputy Director of Parks and Public Works
Jeff Tarling, City Arborist
Natalie Burns, Associate Corporation Counsel
Lt. Gaylen McDougall, Fire Prevention
Paul Niehoff, Materials Engineer
Louise Chase, Building Permit Secretary
Dave Kamila, Land Use Consultants
One India Street, Portland, Maine 04101
R.J. Grondin, 11 Bartlett Road, Gorham, Maine 04038
Approval Letter File

VACATING PORTIONS OF NEWELL AVENUE, BRAINTREE STREET AND
BEVERLY AVENUE

R.J. GRONDIN AND SONS, APPLICANTS

4-0 (Williams, D.C., 11/21/95)

Submitted to:

Portland Planning Board
Portland, Maine

July 25, 1995

I. Introduction

R.J. Grondin and Sons requests approval to vacate portions of Newell Avenue, Braintree Street and Beverly Avenue. The street vacations are intended to facilitate the development of a residential subdivision in this area. A vicinity map, background information and a subdivision plan are shown as attachment A, B and C.

105 notices were sent to area residents.

II. Findings

On August 10, 1993, the Planning Board held a public hearing to consider this proposal. Although the Board made a positive recommendation on the street vacations, the applicant delayed forwarding this request to the City Council for approval. Given the nearly two years that has transpired since the Board's public hearing, the Planning Director has determined that a fresh look at the street vacation proposals is appropriate.

As the Board may recall, the Grondin proposal is located north of Saugus Street. Recently the Board reviewed a similar proposal by Diversified Properties (James Wolf) for streets south of Saugus Street. Although Mr. Wolf represented the Grondin Proposal in 1993, he is no longer associated with the project.

1993 Planning Board Approval for Woodfords Gardens Alterations

When the Board made a recommendation on the applicant's street vacation request, the Board also approved certain revisions to this subdivision. The Woodfords Gardens Subdivision was originally recorded in 1916 and has a number of design deficiencies which the applicant sought to address. These measures include the proposed street vacations, reconfiguring several street intersections and combining or reconfiguring lots, since the original lot sizes were only between 3,000 sq. ft. to 4,000 sq. ft. in size.

The Board's 1993 approval included the following:

- *Reconfiguring or extending segments of Braintree Street, Milton Street and Beverly Street to improve circulation.

- *Approving new lots created by the vacation of streets and the new street extensions. These lots include 148, 149, 154 to 161 and range in size from 10,000 sq. ft. to 17,066 sq. ft. of land area.

The remainder of the lots are being reconfigured to meet the 10,000 sq. ft. R-2 minimum lot size. As this revision involves reconfiguring lots of an existing subdivision, these changes can be reviewed by the Planning Authority. A condition of the Board's 1993 approval stated:

"That engineering drawings including street profiles for the subdivision streets be submitted to City staff for review and approval"

The applicant has submitted plans which are in the process of being reviewed. City staff will review drainage issues in a comprehensive manner including drainage impacts of the subdivision and requiring grading/drainage plans for each lot including building sill elevations as required for the Buca Run Subdivision.

III. Street Vacations

The applicant proposes to vacate portions of Newell Street, Beverly Street and Braintree Street. These street vacations will improve the roadway circulation of the subdivision by eliminating segments that are either awkward or are not needed. All of the street segments to be vacated are unaccepted and undeveloped streets. See Attachments A and C.

Two sections of Newell Street are proposed to be vacated. The Newell Street segment runs through lots 148 to 150 to a steep ravine (across from Durastone Concrete Products). It is highly unlikely this section would ever be built. The 200 foot section of Newell Street between Braintree Street and Milton Street is also being vacated because if it were constructed, it would result in a poor three-way intersection.

Vacating a small segment of Beverly Street (by lot 156, near Missouri Street) allows Milton Street to be extended. Without this street vacation, Milton Street could not be extended since an awkward three-way intersection would be created.

Comments from public utilities have been received concerning the street vacation request. The Portland Water District has requested that an easement be retained in the portion of Braintree Street to be vacated (see Attachment D) since they have an existing waterline within the right-of-way. Letters have been received from New England Telephone (Attachment E) and Northern Utilities (Attachment F) indicating no objections to the street vacation.

A draft waiver and indemnification agreement from the applicant benefiting the City has been submitted. This will need to be signed by the applicant (see Attachment G).

A written description of the street vacation has been submitted (see Attachment H). This will need to be reviewed by Public Works.

IV. Motions for the Board to Consider

On the basis of plans and materials submitted by the applicant and on the basis of information contained in Planning Report #28-93, the Planning Board finds:

1. Recommendation to the City Council that portions of Newell Avenue, Beverly Street and Braintree Street described in this report should be vacated.

Potential Conditions of Approval:

- i. That an easement in an appropriate form be granted to the Portland Water District for their waterline in Braintree Street;

- ii. That an executed copy of waiver and indemnification agreement benefiting the City for the street vacations be submitted to City staff for review and approval;
- iii. That the submitted written description of the street vacations be subject to review and approval by City staff.

Attachments

- A. Vicinity Map
- B. Background Information
- C. Subdivision Plan
- D. Letter from Portland Water District
- E. Letter from New England Telephone Co.
- F. Letter from Northern Utilities
- G. Street Vacation Waiver and Indemnification (Draft)
- H. Description of Street Vacations
- I. 1993 Planning Board Recommendation

CITY OF PORTLAND, MAINE
CITY COUNCIL AGENDA REQUEST FORM

TO: Nadeen Daniels, City Clerk/Assistant City Manager
Elizabeth Boynton, Associate Corporation Counsel

FROM: Joseph E. Gray, Jr., Director of Planning and Urban Development

DATE: October 2, 1995

- 1) Council Meeting at which action is requested (Date):
October 16 - 1st Reading
November 6 - Public Hearing
- 2) Can action be taken at a later date? X YES NO

I. SUMMARY OF ISSUE

The Planning Board is recommending that portions of three streets be vacated. These streets include Newell Street, Beverly Street and Braintree Street. The petitioner of the street vacations, R.J. Grondin and Sons, has proposed these changes to improve the roadway circulation of a subdivision by eliminating roadway segments that are either awkward or are not needed. The applicant is proposing these street vacations as part of a plan to reconfigure a portion of the Woodfords Gardens Subdivision off outer Forest Avenue. All of the streets are private unaccepted right-of-ways.

II. REASON FOR SUBMISSION (What issue/problem will this address?)

The street vacation proposal will result in eliminating awkward street segments which will improve the roadway circulation of a residential subdivision.

III. INTENDED RESULT (How does it resolve the issue/problem?)

Vacating these streets will enable the developer to reconfigure several streets in a subdivision to a more appropriate design.

IV. FINANCIAL IMPACT

There are no known financial impacts on the City. The applicant has signed a letter of indemnification to the City regarding legal issues associated with the street vacation.

V. STAFF ANALYSIS & RECOMMENDATION

The Planning Board is recommending that portions of three streets be vacated (see attached report.)

PLANNING REPORT #49-95

PLANNING BOARD REPORT

NEWELL STREET, BEVERLY STREET AND
BRAINTREE STREET STREET VACATION PETITION

R.J. GRONDIN AND SONS, APPLICANT

Submitted to:

Portland City Council
Portland, Maine

October 4, 1995

I. INTRODUCTION

The Planning Board is recommending to the City Council that portions of Newell Street, Beverly Street and Braintree Street be vacated as streets. R.J. Grondin and Sons has proposed these street vacations to improve the roadway circulation of a residential subdivision by eliminating segments that are either awkward or are not needed. All of the street segments to be vacated are unaccepted and undeveloped streets. A vicinity map and subdivision plan are shown as Attachments 1 and 2.

This proposal is located north of Saugus Street and is separate from a street vacation proposal by Diversified Properties which includes streets south of Saugus Street.

The streets are all unaccepted, meaning they were recorded at the Registry of Deeds but never accepted as public streets by the City. The streets of the subdivision are part of the Woodfords Gardens Subdivision which was recorded in 1916.

II. STREET VACATION PROPOSAL

The Grondin street vacation proposal is shown below:

Newell Street: Milton St. to Braintree St., and south of Beverly St.

Beverly Street: A 170 foot section, south of Missouri Avenue.

Braintree Street: Section at the Beverly St./Braintree intersection.

Two sections of Newell Street are proposed to be vacated. The Newell Street segment runs through lots 148 to 150 to a steep ravine (across from Durastone Concrete Products). It is highly unlikely this section would every be built. The 200 foot section of Newell Street between Braintree Street and Milton Street is also being vacated because if it were constructed, it would result in a poor three-way intersection.

Vacating a small segment of Beverly Street (by lot 156 near Missouri Street) allows Milton Street to be extended. Without this street vacation, Milton Street could not be extended since an awkward three-way intersection would be created.

A small section of Braintree Street will be vacated adjacent to the Beverly Street/Braintree Street intersection which will improve the configuration of this intersection.

The proposed street vacations are compatible with the Portland Transportation Plan since street connections are improved with the reconfigured street network.

A draft waiver and indemnification agreement from the applicant benefiting the City has been submitted. This will need to be signed by the applicant (see Attachment 3).

A written description of the street vacation has been submitted and has been reviewed and approved by Public Works (see Attachment 4).

Comments from public utilities have been received concerning the street vacation request. The Portland Water District has requested that an easement be retained in the portion of Braintree Street to be vacated (see Attachment 5) since they have an existing waterline within the right-of-way. Letters have been received from New England Telephone (Attachment 6), Central Maine Power (Attachment 7) and Northern Utilities (Attachment 8) indicating no objections to the street vacation.

III. PLANNING BOARD PUBLIC HEARING

On July 25, 1995, the Portland Planning Board voted 4-0 (Williams, DeCoursey and Hagge absent) to recommend to the City Council that portions of Newell Street, Beverly Street and Braintree Street as described in this report, be vacated. The Board's recommendation is subject to the following three conditions:

1. That an easement in an appropriate form be granted to the Portland Water District for their waterline in Braintree Street.
2. That an executed copy of a waiver and indemnification agreement benefitting the City for the street vacations be submitted for City staff review and approval.
3. That the submitted written description of the street vacations be subject to review and approval by City staff. [Note: This condition has been met]

The Board's recent recommendation reaffirmed their earlier review of this proposal. In 1993 the Planning Board approved modifications to this subdivision including reconfiguration of certain lots and streets. At that time, the Board reviewed the same street vacations as outlined in this report. Although the Board made a positive recommendation on the street vacations, the applicant delayed forwarding this request to the City Council. Given the nearly two years that had transpired since the Board's original public hearing, the Planning Director determined that a fresh look at the street vacation proposal was appropriate.

Attachments:

1. Vicinity Map
2. Subdivision Plan
3. Waiver and Indemnification Agreement
4. Written Description of Street Vacations
5. Portland Water District Letter
6. New England Telephone Letter
7. Central Maine Power Company Letter
8. Northern Utilities Letter

WAIVER AND INDEMNIFICATION

WHEREAS, R. J. Grondin & Sons of 11 Barlett Road, Gorham, Maine, 04038, has requested the City of Portland to vacate a certain proposed town way located in Woodfords Gardens pursuant to 23 M.R.S.A., Section 3027 et seq.;

WHEREAS, the City of Portland as a condition precedent to any vacation of the proposed town way, requires a waiver of any claims which R. J. Grondin & Sons may have against the City for such vacation, and further, requires indemnification against any claims of third persons arising out of or resulting from the vacation of said proposed town way;

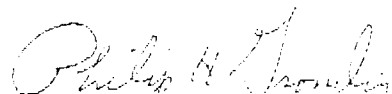
NOW THEREFORE, in consideration of the City of Portland vacating said proposed town way, R. J. Grondin & Sons for itself, its successors and assigns, agrees as follows:

1. R. J. Grondin & Sons hereby waives any claim for damages which it may now or hereafter have against the City of Portland arising out of or resulting from any vacation of such proposed town way by the City pursuant to 23 M.R.S.A. Section 3027 et seq.;

2. R. J. Grondin & Sons hereby agrees to indemnify and hold harmless the City of Portland against any claims by any third person against the City of Portland for damages arising out of or resulting from any vacation of such proposed town way by the City of Portland pursuant to said statute.

R. J. Grondin & Sons

Dated:



Philip E. Grondin
Treasurer

LAND USE CONSULTANTS INC

Parcel 1 - Portion of Newell Avenue between Beverly and Milton

A certain lot or parcel of land in Portland, Maine, situated between and adjacent to Braintree, Beverly, and Milton Streets, more particularly bounded and described as follows:

Beginning at a point at the former southeasterly corner of said Milton Street and Newell Avenue, said point being the most westerly corner of lot 70 as shown on a plan of "Woodfords Garden" by Ernest W. Branch, dated November 16, 1916, and recorded in the Cumberland County Registry of Deeds Plan Book 13, page 75;

Thence, North 15-41-37 West along the easterly sideline of the new alignment of Milton Street, a distance of fifty and fifty hundredths (50.50) feet to a point on the southerly line of lot 595;

Thence, North 82-20-30 East along the southerly line of lots 595, 594, 593, 592, 591, and 590, a distance of two hundred sixteen and seventy-six hundredths (216.76) feet to a point on the westerly sideline of Beverly Street;

Thence, South 51-57-43 East along the said southerly sideline of Beverly Street, a distance of twenty and seventy-three hundredths (20.73) feet to a point of curvature and the northwesterly corner of said Beverly Street and the realigned Braintree Street;

Thence, southerly along said westerly sideline of the realigned Braintree Street and a curve to the right having a radius of twenty and no hundredths (20.00) feet, an arc distance of thirty and twenty-four hundredths (30.24) feet to a point of reverse curvature;

Thence, southerly along said westerly sideline of the realigned Braintree Street and a curve to the left having a radius of sixty-five and no hundreds (65.00) feet, an arc distance of fifty-seven and thirteen hundredths (57.13) feet to a point of tangency;

Thence North 15-41-37 West along the easterly line of lots 194 and 195 a distance of forty-five and fifty-seven hundredths (45.57) feet to a point at the northeasterly corner of said lot 195;

Thence, South 82-20-30 West along said lots 195 and lot 70 a distance of two hundred one and ninety-eight hundredths (201.98) feet to the point of beginning.

Said parcel contains 67,195 feet (1.54 acres) more or less.

Parcel 2 - Portion of Newell Street East of Beverly

A certain lot or parcel of land situated easterly of and adjacent to Beverly Street in Portland, Maine, more particularly bounded and described as follows:

Beginning at a point at the former southeasterly intersection of said Beverly Street and Newell Avenue, said point being the most westerly corner of lot 560, as shown on a plan of "Woodfords Garden" by Ernest W. Branch, dated November 16, 1916, and recorded in the Cumberland County Registry of Deeds Plan Book 13, page 75;

LAND USE CONSULTANTS INC

Thence, North 51-57-40 West along easterly sideline of the new alignment of said Beverly Street, a distance of sixty-nine and eighty-seven hundredths (69.87) feet to a point on the southerly line of lot 563;

Thence, North 82-20-30 East along the southerly lines of lots 563, 562 and 561, a distance of two hundred fifty and ninety-five hundredths (250.95) feet to a point and land now or formerly of DMC, Metals, Inc. (CCRD 4557/241);

Thence, South 40-06-24 East along said land of DMC Metals, Inc., a distance of fifty-nine and twenty-five hundredths (59.25) feet to a point being the most northerly corner of lot 557;

Thence, South 82-20-30 West along said lots 557, 558, 559 and 560, a distance of two hundred thirty-three and ninety-four hundredths (233.94) feet to the point of beginning.

Said parcel contains 12,122 square feet (0.28 acres) more or less.

Parcel 3 - Portion of Beverly Street East of Missouri Avenue

A certain lot or parcel of land situated westerly of and adjacent to Beverly Street in Portland, Maine, more particularly bounded and described as follows:

Beginning at a point at the northwesterly terminal end of the said newly aligned Beverly Street;

Thence, South 51-57-40 West along the said westerly sideline of Beverly Street a distance of thirty and no hundredths (30.00) feet to a point of curvature and the newly aligned northwesterly sideline of Milton street;

Thence, southerly along said westerly sideline of the proposed extension of Milton Street and a curve to the right having a radius of twenty and no hundreds (20.00) feet, an arc distance of eighteen and ten hundredths (18.10) feet to a point of non-tangency and the northerly line of lot 589 as shown on a plan of "Woodfords Garden" by Ernest W. Branch, dated November 16, 1916, and recorded in the Cumberland County Registry of Deeds Plan Book 13, page 75;

Thence, South 67-11-40 West along said lots 589, 588, 587, 586, 585, 584 and 583, a distance of one hundred eighty-five and ten hundredths (185.10) feet to the easterly sideline of Missouri Avenue;

Thence, North 14-13-47 West along the said easterly sideline of Missouri Avenue a distance of fifty and fifty-seven hundredths (50.57) feet to a point, being the most southerly corner of lot 582;

Thence, North 67-11-40 East along the said southerly sideline of lots 582, 581, 580, 579, 578, and 577, a distance of one hundred seventy-three and thirty-three hundredths (173.33) feet to a point on the said northerly terminal end of the newly aligned Beverly Street;

LAND USE CONSULTANTS INC

Thence, South 38-02-17 West along the said terminal end of the newly aligned Beverly Street a distance of thirteen and one hundredths (13.01) feet to the point of beginning.

Said parcel contains 8,801 square feet (0.2 acres) more or less.

Bearings stated hereon are based on a magnetic observation by others in 1985.



Portland
Water District

225 Douglass St. • P.O. Box 3553 • Portland, ME 04104-35

(207) 774-59
FAX (207) 761-6

July 23, 1993

Mr. James Wolf
Wolf Associates
P.O. Box 10127
Portland, Maine 04104

Re: Proposed Vacation of Portions of Newell Ave. and Beverly St.

Dear Jim:

As per your request, this letter is to acknowledge that the Portland Water District does not object to the proposed vacation of Newell Avenue between Braintree Street and Harmony Road; Newell Avenue from Beverly Street easterly to its terminus; and Beverly Street from Missouri Ave (Tufts Street) easterly 180 feet more or less, provided that the District's 16" water main running up Braintree and onto Beverly Street as per the attached map remains in the retained road right of way.

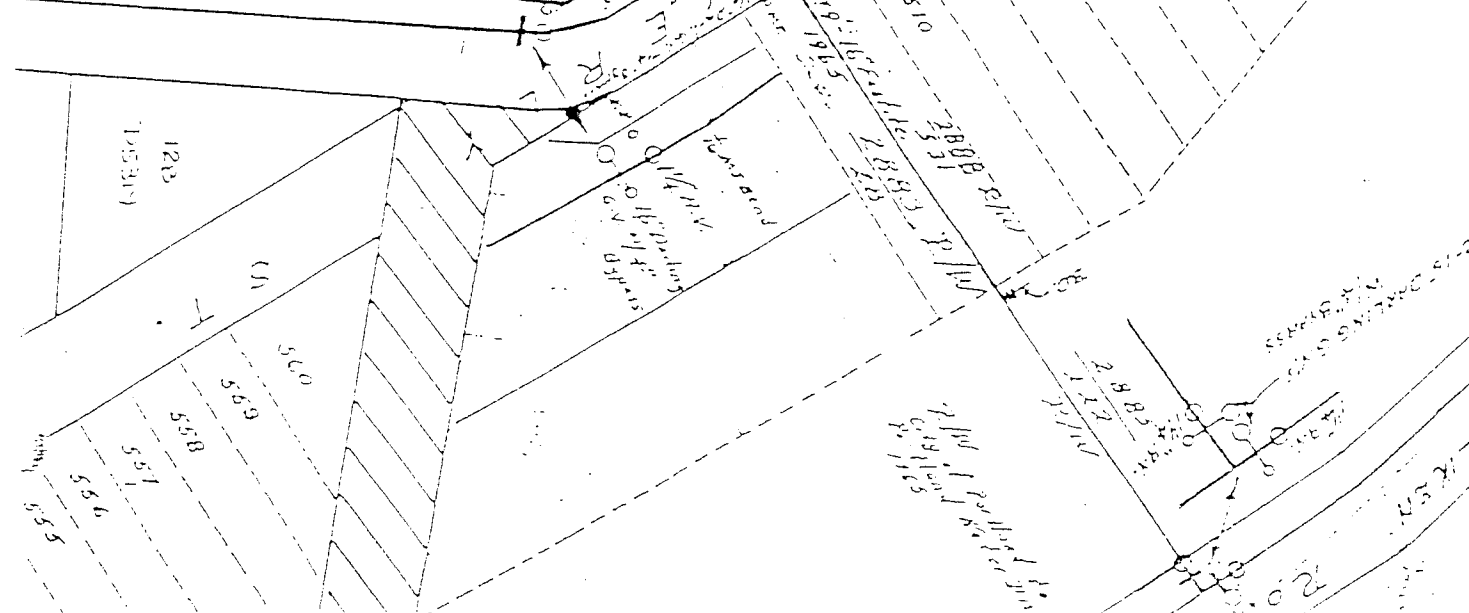
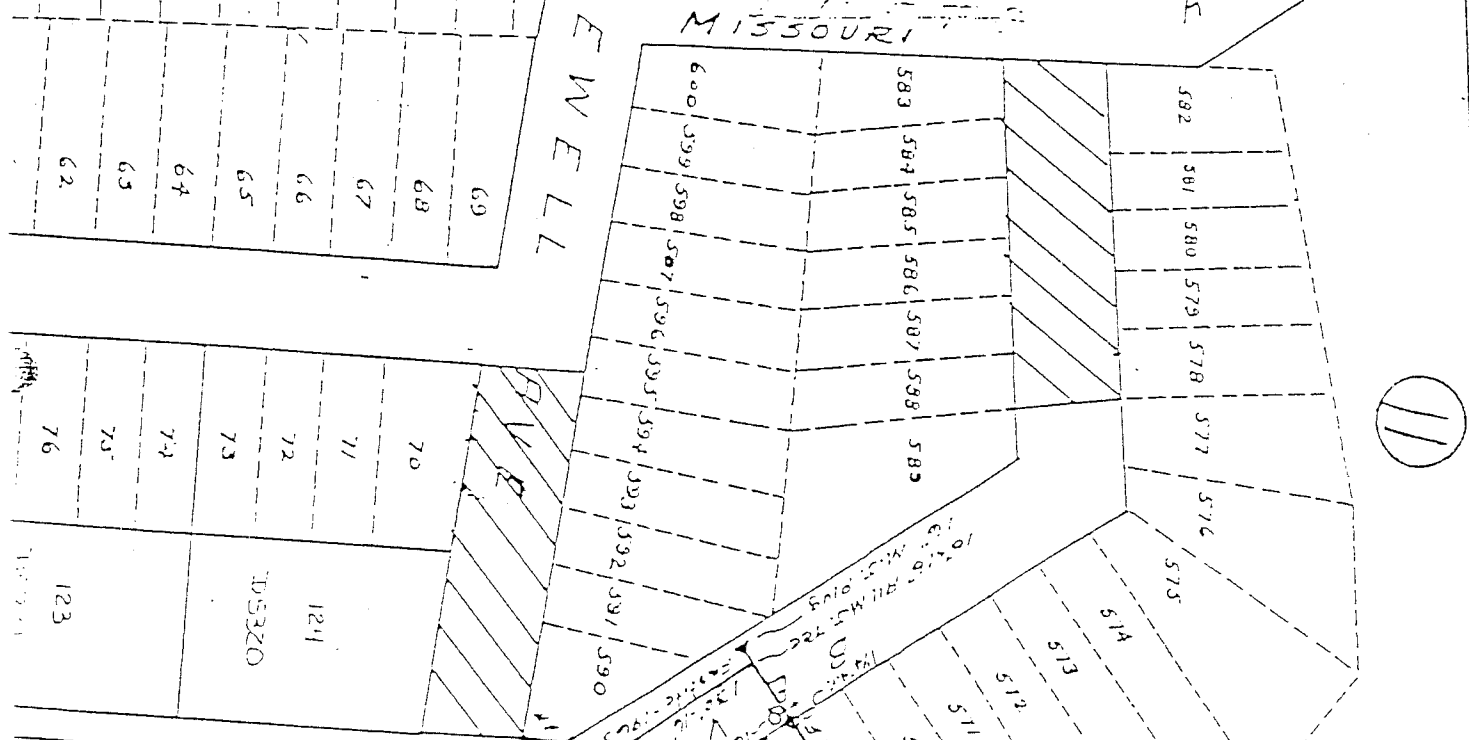
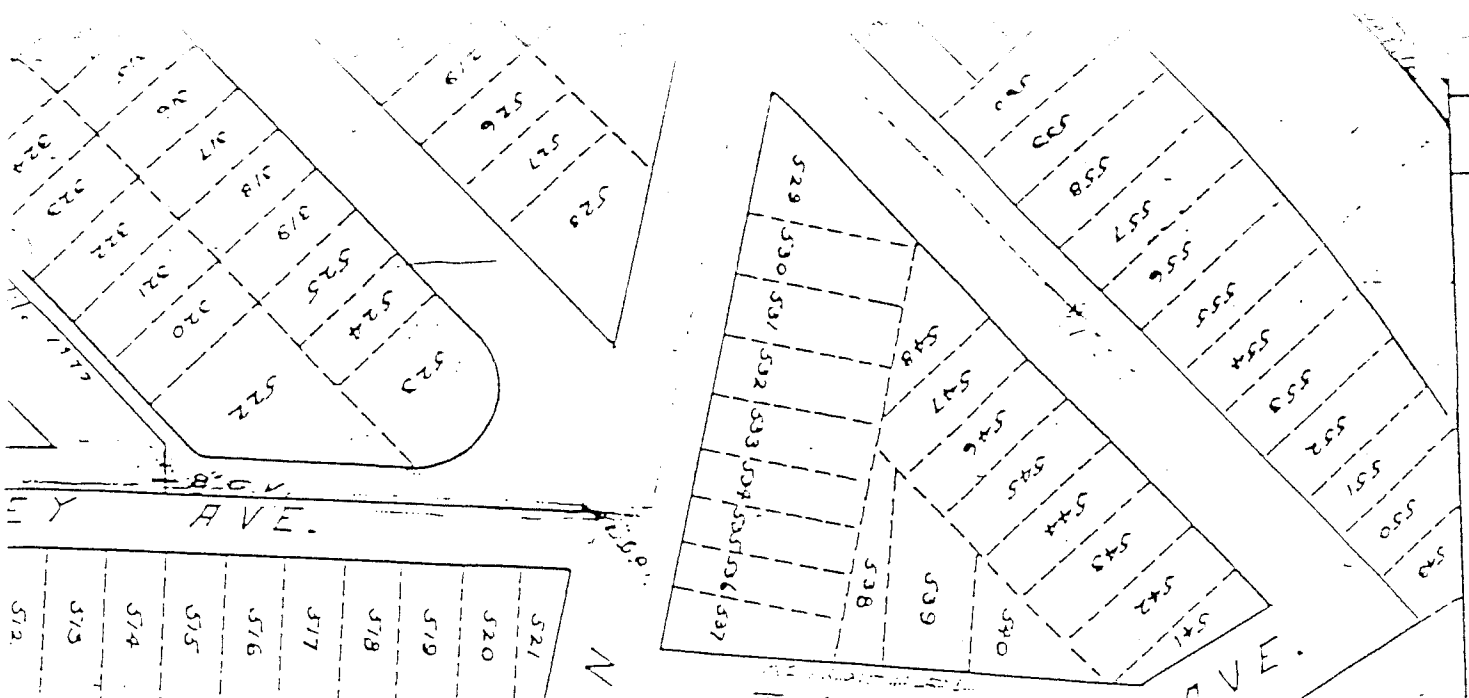
If you have any questions or need anything further, do not hesitate to call me at 774-5961 ext. 3057.

Sincerely yours,

PORTLAND WATER DISTRICT



Norman V. Twaddel
Right of Way Agent



101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1020-1021-1022-1023-1024-1025-1026-1027-1028-1029-1030-1031-1032-1033-1034-1035-1036-1037-1038-1039-1040-1041-1042-1043-1044-1045-1046-1047-1048-1049-1050-1051-1052-1053-1054-1055-1056-1057-1058-1059-1060-1061-1062-1063-1064-1065-1066-1067-1068-1069-1070-1071-1072-1073-1074-1075-1076-1077-1078-1079-1080-1081-1082-1083-1084-1085-1086-1087-1088-1089-1090-1091-1092-1093-1094-1095-1096-1097-1098-1099-1100-1101-1102-1103-1104-1105-1106-1107-1108-1109-1110-1111-1112-1113-1114-1115-1116-1117-1118-1119-1120-1121-1122-1123-1124-1125-1126-1127-1128-1129-1130-1131-1132-1133-1134-1135-1136-1137-1138-1139-1140-1141-1142-1143-1144-1145-1146-1147-1148-1149-1150-1151-1152-1153-1154-1155-1156-1157-1158-1159-1160-1161-1162-1163-1164-1165-1166-1167-1168-1169-1170-1171-1172-1173-1174-1175-1176-1177-1178-1179-1180-1181-1182-1183-1184-1185-1186-1187-1188-1189-1190-1191-1192-1193-1194-1195-1196-1197-1198-1199-1200-1201-1202-1203-1204-1205-1206-1207-1208-1209-1210-1211-1212-1213-1214-1215-1216-1217-1218-1219-1220-1221-1222-1223-1224-1225-1226-1227-1228-1229-1230-1231-1232-1233-1234-1235-1236-1237-1238-1239-1240-1241-1242-1243-1244-1245-1246-1247-1248-1249-1250-1251-1252-1253-1254-1255-1256-1257-1258-1259-1260-1261-1262-1263-1264-1265-1266-1267-1268-1269-1270-1271-1272-1273-1274-1275-1276-1277-1278-1279-1280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-2281-2282-2283-2284-2285-2286-2287-2288-2289-2290-2291-2292-2293-2294-2295-2296-2297-2298-2299-2300-2301-2302-2303-2304-2305-2306-2307-2308-2309-2310-2311-2312-2313-2314-2315-2316-2317-2318-2319-2320-2321-2322-2323-2324-2325-2326-2327-2328-2329-2330-2331-2332-2333-2334-2335-2336-2337-2338-2339-2340-2341-2342-2343-2344-2345-2346-2347-2348-2349-2350-2351-2352-2353-2354-2355-2356-2357-2358-2359-2360-2361-2362-2363-2364-2365-2366-2367-2368-2369-2370-2371-2372-2373-2374-2375-2376-2377-2378-2379-2380-2381-2382-2383-2384-2385-2386-2387-2388-2389-2390-2391-2392-2393-2394-2395-2396-2397-2398-2399-2400-2401-2402-2403-2404-2405-2406-2407-2408-2409-2410-2411-2412-2413-2414-2415-2416-2417-2418-2419-2420-2421-2422-2423-2424-2425-2426-2427-2428-2429-2430-2431-2432-2433-2434-2435-2436-2437-2438-2439-2440-2441-2442-2443-2444-2445-2446-2447-2448-2449-2450-2451-2452-2453-2454-2455-2456-2457-2458-2459-2460-2461-2462-2463-2464-2465-2466-2467-2468-2469-2470-2471-2472-2473-2474-2475-2476-2477-2478-2479-2480-2481-2482-2483-2484-2485-2486-2487-2488-2489-2490-2491-2492-2493-2494-2495-2496-2497-2498-2499-2500-2501-2502-2503-2504-2505-2506-2507-2508-2509-2510-2511-2512-2513-2514-2515-2516-2517-2518-2519-2520-2521-2522-2523-2524-2525-2526-2527-2528-2529-2530-2531-2532-2533-2534-2535-2536-2537-2538-2539-2540-2541-2542-2543-2544-2545-2546-2547-2548-2549-2550-2551-2552-2553-2554-2555-2556-2557-2558-2559-2560-2561-2562-2563-2564-2565-2566-2567-2568-2569-2570-2571-2572-2573-2574-2575-2576-2577-2578-2579-2580-2581-2582-2583-2584-2585-2586-2587-2588-2589-2590-2591-2592-2593-2594-2595-2596-2597-2598-2599-2600-2601-2602-2603-2604-2605-2606-2607-2608-2609-2610-2611-2612-2613-2614-2615-2616-2617-2618-2619-2620-2621-2622-2623-2624-2625-2626-2627-2628-2629-2630-2631-2632-2633-2634-2635-2636-26



New England Telephone

A NYNEX Company

5 Davis Farm Road
Portland, Maine 04103
Phone (207) 797-1785

Blaine N. Hopkins
Manager - Right of Way

August 3, 1993

Mr. James Wolf
Wolf Associates
P. O. Box 10127
Portland, ME 04104

Dear Jim:

In accordance with our discussion, please be advised that New England Telephone Company does not object to the proposed vacation of Newell Avenue between Braintree Street and Harmony Road; Newell Avenue from Beverly Street easterly to its terminus; and Beverly Street from Missouri Avenue (Tufts Street) easterly for approximately 200 feet.

As always, it is a pleasure working with Wolf Associates. If you have any questions or if I may be of assistance, please do not hesitate to call.

Sincerely,

Manager - Right of Way

BNE/ clr





Central Maine Power

1-800-750-40

162 Canco Road, P.O. Box 1201, Portland, Maine 04104

August 6, 1993

Mr. Jim Wolf
Wolf Associates
Real Estate Development
P.O. Box 10127
Portland, ME 04101

Dear Jim:

It appears that C.M.P. Co. has no facilities along Newell Avenue and Beverly Street, in the City of Portland in those areas proposed to be vacated at this time. Therefore, C.M.P. Co. has no objection to your plans to accept ownership of these areas.

However, if there are facilities in these areas that were not brought to my attention, you may have to contribute to any relocation costs.

Sincerely,

Robert L. Storey
Line Supervisor

RLS/lb

c: WBray - City of Portland

Post-It™ brand fax transmittal memo 7671		# of pages > /	
To	Jim Wolf	From	Rob Storey
Co.	Wolf Ass	Co.	CMP Co
Dept.		Phone #	828-4411
Fax #	797-6200	Fax #	828-2810



Northern Utilities, Inc.

07-28-93

Mr. James Wolf
Wolf Associates
P.O. Box 10127
Portland, Maine 04104

Re: Proposed vacation of portions of Newell Ave. and Beverly St.

Dear Jim:

Northern Utilities Inc. has no objections to the vacation of the above locations. We have no facilities at any of those locations. Thank you for contacting us. If we can be of any further assistance, please call me at 797-8002 ext. 6274.

Sincerely,

Northern Utilities Inc.

David E. Fay III
New Business Coordinator

CITY OF PORTLAND, MAINE

PLANNING BOARD

Kenneth M. Cole III, Chair
Cyrus Hagge, Vice Chair
Joseph R. DeCoursey
John H. Carroll
Donna Williams
Jaimey Caron
Kevin McQuinn

October 30, 1995

Mr. Philip Grondin
R.J. Grondin and Sons
11 Bartlett Road
Gorham, ME 04038

RE: Beverly Street Lots, Woodfords Gardens Subdivision

Dear Mr. Grondin:

On October 26, 1995 the Portland Planning Authority approved revisions to the lot lines of lots 138, 140 to 147 on Beverly Street which are part of the Woodfords Gardens Subdivision. This approval does not include lot 139.

Prior to the issuance of a building permit on lots 144 to 147, property deeds referencing the private drainage easement shall be submitted for staff review and approval.

Please note the following provisions and requirements for all subdivision approvals:

1. Mylar copies of the construction drawing for the subdivision must be submitted to the Public Works Department prior to the release of the plat.
2. A performance guarantee covering the public improvements as well as an inspection fee payment of 1.7% of the guarantee amount must be submitted to and approved by the Planning Division and Public Works prior to the recording of the subdivision plat. The subdivision approval is valid for three (3) years.
3. A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.
4. Prior to construction, a preconstruction meeting shall be held at the project site with the contractor, development review coordinator, Public Work's representative and owner to review the construction schedule and critical aspects of the site work. At the time, the site/building contractor shall provide three (3) copies of a detailed construction schedule to the attending City representatives. It shall be the contractor's responsibility to arrange a mutually agreeable time for the preconstruction meeting.

5. If work will occur within the public right-of-way such as utilities, curb, sidewalk and driveway construction, a street opening permit(s) is required for your site. Please contact Carol Poliskey at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)

If there are any questions regarding the Board's actions, please contact the planning staff.

Sincerely,



Kenneth M. Cole III, Chair
Portland Planning Board

cc: Joseph E. Gray, Jr., Director of Planning and Urban Development
Alexander Jaegerman, Chief Planner
Richard Knowland, Senior Planner
P. Samuel Hoffses, Chief of Building Inspections
Marge Schmuckal, Zoning Administrator
George Flaherty, Director of Environmental/Intergovernmental Services
Kathi Staples PE, City Engineer
William Bray, Deputy Director of Public Works
Jeff Tarling, City Arborist
Melodie Esterberg, Project Engineer
Natalie Burns, Associate Corporation Counsel
Lt. Gaylen McDougall, Fire Prevention
Mary Gresik, Building Permit Secretary
Kathleen Brown, Assistant Director of Economic Development
Approval Letter Fire
Dave Kamila, Land Use Consultants



LAND USE CONSULTANTS INC

October 2, 1995

J. David Haynes, RLA
David A. Kamila, PE
Frederic J. Licht, Jr., PE

Bradley H. Hare, RLA
John D. Roberts, PLS

1851

Ms. Katherine A. Staples, P.E.
City Engineer
City of Portland - Dept. of Public Works
55 Portland Street
Portland, Maine 04101

Woodfords Gardens - Beverly Street

Dear Melodie:

Per the conditional approval letter by you to Phil Grondin dated September 25, 1995, I am herewith submitting the following conditional information (corresponding numerically to that letter):

1. The public drainage easement on lots 146 and 147 has been added to the recording and subdivision plats. The drainage easement documentation has been included.
2. The field inlet has been revised on sheet 1 of 14. It has been designated a City of Portland standard catch basin with Type "A" frame and catch basin cover.
3. A private drainage easement consistent with the City's standard format is included.
4. Sill and lowest opening elevations for lots 148, 149 and 150 have been added to the amended Recording Plat (sheet 2 of 2).
5. The detailed construction cost estimate was submitted to Mike O'Sullivan at the Planning Department. However, due to changes in the plans, R. J. Grondin will be submitting a revised estimate under separate cover.
6. This item will be addressed by R. J. Grondin in their cost estimate.
7. R. J. Grondin will be submitting a construction schedule under separate cover.
8. Mylar copies of the construction plans will be submitted when R. J. Grondin applies for permits.

LAND USE CONSULTANTS INC

I trust this information will satisfy the conditions as spelled out in the aforementioned letter.
Please call with any questions.

Sincerely,

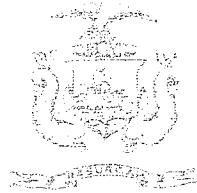
A handwritten signature in black ink, appearing to read "William R. Walsh, III". The signature is written in a cursive style with some flourishes.

William R. Walsh, III, P.E.
Project Engineer

WRW/b

Enc.

c.c.: Philip Grondin
Rick Knowland, Portland Planning Dept.



CITY OF PORTLAND

October 24, 1995

Rick - what is this about?
Allen

Mr. Jim Wolf
Diversified Properties, Inc.
P. O. Box 10127
Portland, Maine 04104

Subject: Proposed Broadway Extension

Dear Jim:

I have reviewed the submitted plans for the proposed Broadway Extension. My comments are as follows:

Submission Requirement:

1. Topographic survey notes that a TBM in NET #55 is based upon City Datum. Methodology used to determine datum and description of City benchmarks(s) used shall be noted on plans.
2. Coordinates of all new monuments must be shown on the plans.
3. Existing soil conditions are not noted on the plans.
4. The following supporting documentation has not been submitted:
 - Evidence of the applicant's right, title or interest in the property.
 - A narrative describing the existing surface drainage and a stormwater management plan indicated measures to control stormwater runoff have not been submitted. Primarily assumptions and calculations used to size proposed facilities must be submitted.
 - A construction plan outlining the anticipated sequence of construction must be submitted.

Design Comments:

1. The pavement width of Broadway extension may be reduced to 28 feet if sidewalks are provided on both sides of the street. In those areas where you are not able to widen the right of way to 50 feet, the esplanade may be omitted.

Jim Wolf
October 24, 1995

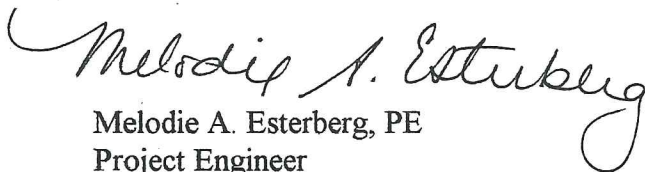
Page 2

2. Typical road section shows 1 inch hot bituminous pavement grade "C" and 1 inch hot bituminous pavement grade "D" for the sidewalk. The City standard has changed to 2 inches of hot bituminous pavement grade "C" for sidewalks.
3. Plans show catch basins connected by 6 inch underdrain. An appropriately sized storm drain shall be constructed per City of Portland standards. Underdrain will still be required for this project.
4. The drainage channel detail does not show sufficient detail to adequately review. Detail notes "riprap stones 10# max." Past experience has shown that stones that small tend to be easily vandalized. Therefore, larger stones may be a more prudent design.
5. City of Portland details have been revised since project was initially designed. Details should be revised to reflect current City standards. Copies of the revised details are attached.
6. Standard Boundary survey notes conflicting deeds dimensions. Conflicts which affect the location of Broadway must be resolved in order for the City to accept the street. Conflicts which affect proposed building locations should be resolved prior to issuance of building permits.

These comments are based on an incomplete application and cannot be inferred as a complete review of the proposed project.

If you have any questions regarding this project, please feel free to call me at 874-8847.
Sincerely,

CITY OF PORTLAND



Melodie A. Esterberg, PE
Project Engineer

pc: W. J. Bray, Deputy Director
B. A. Bell, Operations Manager
K. A. Staples, PE, City Engineer
A. Jaegerman, Chief Planner

Parcel 1 - Portion of Newell Avenue between Beverly and Milton

A certain lot or parcel of land in Portland, Maine, situated between and adjacent to Braintree, Beverly, and Milton Streets, more particularly bounded and described as follows:

Beginning at a point at the former southeasterly intersection of said Milton Street and Newell Avenue, said point being the most westerly corner of lot 70 as shown on a plan of "Woodfords Garden" by Ernest W. Branch, dated November 16, 1916, and recorded in the Cumberland County Registry of Deeds planbook 13 page 75:

Thence, North 15-41-37 West along the easterly sideline of the new alignment of Milton Street, a distance of fifty and fifty (50.50) feet to a point on the southerly line of lot 595:

Thence, South 82-20-30 West along the southerly line of lots 595, 594, 593, 592, and 590, a distance of two hundred sixteen and seventy hundredths (216.77) feet to a point on the westerly sideline of Beverly Street:

Thence, South 51-57-43 East along the said southerly sideline of Beverly Street, a distance of twenty and seventy three hundredths (20.73) feet to a point of curvature and the northwesterly intersection of said Beverly Street and the realigned Braintree Street:

Thence, southerly along said westerly sideline of Braintree Street and a curve to the right having a radius of twenty and no hundredths (20.00) feet, an arc distance of thirty and twenty-four hundredths (30.24) feet to a point of reverse curvature:

Thence, southerly along said westerly sideline of Braintree Street and a curve to the left having a radius of sixty-five and no hundredths (65.00) feet, an arc distance of fifty-seven and thirteen hundredths (57.13) feet to a point of tangency:

Thence, North 15-41-37 West along the easterly line of lot 194 and 195 a distance of forty-five and fifty-seven hundredths

LAND USE CONSULTANTS INC

(45.57) feet to a point at the northeasterly corner of said lot 195:

Thence, South 82-20-30 West along said lots 195 and lot 70 a distance of two hundred one and ninety-eight hundredths (201.98) feet to the point of beginning.

Said parcel contains 67,195 square feet (1.54 acres) more or less.

Parcel 2 - Portion of Newell Street East of Beverly

A certain lot or parcel of land situated easterly of and adjacent to Beverly Street in Portland, Maine, more particularly bounded and described as follows:

Beginning at a point at the former southeasterly intersection of said Beverly Street and Newell Avenue, said point being the most westerly corner of lot 560, as shown on a plan of "Woodfords Garden" by Ernest W. Branch, dated November 16, 1916, and recorded in the Cumberland County Registry of Deeds planbook 13 page 75:

Thence, North 51-57-43 West along easterly sideline of the new alignment of said Beverly Street, a distance of sixty-nine and eighty-seven hundredths (69.87) feet to a point on the southerly line of lot 563:

Thence, North 82-20-30 East along the southerly lines of lots 563, 562, and 561, a distance of two hundred fifty and ninety-five hundredths (250.95) feet to a point and land now or formerly of Greater Portland Building Fund, Inc. (C.C.R.D. 3157/499):

Thence, South 40-06-24 East along said land of Greater Portland Building Fund, Inc., a distance of fifty-nine and twenty-five hundredths (59.25) feet to a point being the most northerly corner of lot 557:

Thence, South 82-20-30 West along said lot 557, 558, 559, and 560, a distance of two hundred thirty-three and ninety-four hundredths (233.94) feet to the point of beginning.

Said parcel contains 12,122 square feet (0.28 acres) more or less.

Parcel 3 - Portion of Beverly east of Missouri

A certain lot or parcel of land situated westerly of and adjacent to Beverly Street in Portland, Maine, more particularly bounded and described as follows:

LAND USE CONSULTANTS INC

Beginning at a point at the northwesterly terminal end of the said newly aligned Beverly Street:

Thence, South 51-57-43 West along the said westerly sideline of Beverly Street a distance of thirty and no hundredths (30.00) feet to a point of curvature and the newly aligned northwesterly sideline of Milton Street:

Thence, southerly along said westerly sideline of Milton Street and a curve to the right having a radius of twenty and no hundred (20.00) feet, an arc distance of eighteen and ten hundredths (18.10) feet to a point of non-tangency and the northerly line of lot 598 as shown on a plan of "Woodfords Garden" by Ernest W. Branch, dated November 16, 1916, and recorded in the Cumberland County Registry of Deeds plan book 13 page 75:

Thence, South 67-11-40 West along said lot 589, 588, 587, 586, 585, 584, and 583 a distance of one hundred eighty-five and ten hundredths (185.10) feet to the easterly sideline of Missouri Avenue:

Thence, North 14-13-47 West along the said westerly sideline of Missouri Avenue a distance of fifty and fifty-seven hundredths (50.57) feet to a point, being the most southerly corner of lot 582:

Thence, North 67-11-40 East along the said southerly sideline of lots 582, 581, 580, 579, 578, and 577 a distance of one hundred seventy-three and thirty-three hundredths (173.33) feet to a point on the said northerly terminal end of the newly aligned Beverly Street:

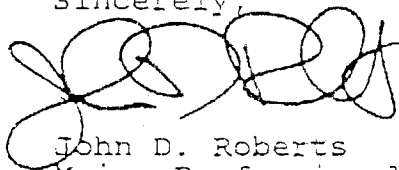
Thence, South 38-02-17 West along the said terminal end of the newly aligned Beverly Street a distance of thirteen and one hundredths (13.01) feet to the point of beginning.

Said parcel contains 8,801 square feet (0.2 acres) more or less.

Bearing stated hereon are based on a magnetic observation by others in 1985.

If we may be of further assistance in this matter, please call.

Sincerely,



John D. Roberts
Maine Professional Land Surveyor #1155
Land Use Consultants

PLANNING BOARD

Kenneth M. Cole III, Chair
Jadine R. O'Brien, Vice Chair
Joseph R. DeCoursey
Irving Fisher
Cyrus Hagge
John H. Carroll
Donna Williams

August 16, 1993

Mr. James Wolf
P.O. Box 10127
Portland, ME 04101

Re: Woodfords Gardens Subdivision

Dear Mr. Wolf:

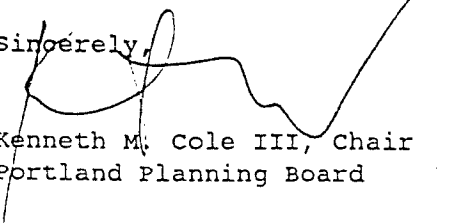
On August 10, 1993 the Portland Planning Board voted 6-0 (Cole absent) on the following motions regarding the proposed alterations to the Woodfords Gardens Subdivision.

1. Recommendation to the City Council that certain portions of Newell Avenue, Beverly Street and Braintree Street be vacated subject to the following conditions:
 - i. That an easement in an appropriate form be granted to the Portland Water District for their waterline in Braintree Street;
 - ii. That an executed copy of waiver and indemnification benefiting the City for the street vacations be submitted to City staff for review and approval; and
 - iii. That the written descriptions of the street vacations be subject to review and approval by City staff.
2. That the proposed alterations to the Woodfords Gardens Subdivision are in conformance with the Subdivision Ordinance of the Land Use Code.
 - i. That engineering drawings including street profiles for the subdivision streets be submitted to City staff for review and approval; and
 - ii. That a deed be submitted to City staff for review and approval regarding the conveyance of a portion of Lot 128 for the reconfiguration of Braintree Street.

The approval is based on the submitted site plan and the findings related to site plan review standards as contained in Planning Report #28-93, which is attached. Mylar copies of the construction drawing for the subdivision must be submitted to the Public Works Department prior to the release of the plat. In addition, a performance guarantee covering the public improvements as well as an inspection fee payment of 1.7% of the guarantee amount must be submitted to and approved by the Planning Division and Public Works prior to the recording of the subdivision plat.

If there are any questions regarding the Board's actions, please contact the planning staff.

Sincerely,


Kenneth M. Cole III, Chair
Portland Planning Board

- cc: Joseph E. Gray, Jr., Director of Planning and Urban Development
- Alexander Jaegerman, Chief Planner
- Richard Knowland, Senior Planner
- P. Samuel Hoffses, Chief of Building Inspections
- William Giroux, Zoning Administrator
- George Flaherty, Director of Parks and Public Works
- John Rague, Principal Engineer
- Melodie Esterberg, Development Review Coordinator
- William Bray, Deputy Director of Parks and Public Works
- Jeff Tarling, City Arborist
- Natalie Burns, Associate Corporation Counsel
- Lt. Gaylen McDougall, Fire Prevention
- Paul Niehoff, Materials Engineer
- Louise Chase, Building Permit Secretary
- Dave Kamila, Land Use Consultants
- One India Street, Portland, Maine 04101
- R.J. Grondin, 11 Bartlett Road, Gorham, Maine 04038
- Approval Letter File

CITY OF PORTLAND, MAINE

PLANNING BOARD

Kenneth M. Cole III, Chair
Jadine R. O'Brien, Vice Chair
Joseph R. DeCoursey
Irving Fisher
Cyrus Hagge
John H. Carroll
Donna Williams

August 16, 1993

Mr. James Wolf
P.O. Box 10127
Portland, ME 04101

Re: Woodfords Gardens Subdivision

Dear Mr. Wolf:

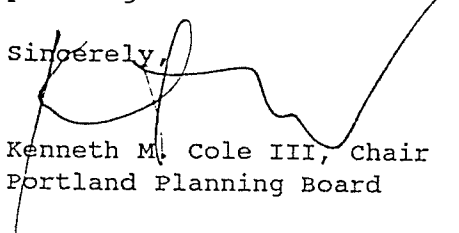
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If there are any questions regarding the Board's actions, please contact the planning staff.

Sincerely,


Kenneth M. Cole III, Chair
Portland Planning Board

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Dave Kamila, Land Use Consultants
One India Street, Portland, Maine 04101
R.J. Grondin, 11 Bartlett Road, Gorham, Maine 04038
Approval Letter File

I. Introduction

Jim Wolf representing R.J. Grondin requests approval for revisions to the Woodfords Gardens Residential Subdivision. Woodfords Gardens is located off outer Forest Avenue near Stuart Street. The proposed revisions including vacating portions of certain streets; reconfiguring and extending certain streets and creating new lots. Zoning for the site is R-2 Residential. Attachment A includes the revised subdivision plan. Attachment B includes a vicinity map. (A color version of this map was included in the July 13th staff memo.)

510 notices were sent to area property owners.

II. Findings

The Woodfords Gardens Subdivision was originally recorded in 1916. The subdivision has a number of design deficiencies which the applicant seeks to address. The following is a summary of the alterations to the original subdivision plan that the Board is being requested to review. Several of the street intersections need to be reconfigured. Many of the lots need to be combined or reconfigured since the original lot sizes were only between 3,000 sq. ft. to 4,000 sq. ft. in size.

- Street Vacations

Portions of Newell Avenue, Braintree Street, and Beverly Avenue are proposed to be vacated by the applicant. This will require Planning Board as well as City Council review.

- Street Extensions and Reconfigurations

The applicant proposes to extend Milton (Harmony) Street and reconfigure Braintree Street at the Beverly Street intersection. Since this represents an alteration to a subdivision right of way, these changes will require Planning Board review.

- New Lots

Certain new lots will be created by the vacation of streets and the new street extensions. These lots (148, 149, 155 to 161) will require Planning Board.

The remainder of the lots in which lot lines are being adjusted can be reviewed administratively by staff.

III. Street Vacations

The applicant proposes to vacate portions of Newell Street, Beverly Street and Braintree Street. These street vacations will improve the roadway circulation of the subdivision by eliminating segments of roadways that are not needed. All of the street segments to be vacated are unaccepted and undeveloped streets. See Attachment A.

Newell Street is proposed to be eliminated from Milton (Harmony) Street to Braintree Street. This segment of the road is about 230 feet long. Another segment of Newell Street would be eliminated south of Beverly Street. This portion is also about 230 feet long. Vacating these street segments eliminates an awkward intersection (Milton Street and Newell Avenue) and allows Milton (Harmony) Street to be looped to Beverly Street rather than having a dead end.

A portion of Beverly Street (see lot 156) would also be eliminated. This small segment connected into Missouri Avenue but if built would have posed circulation problems.

A small edge of Braintree Street would be eliminated. The alignment of Braintree Street is being shifted so that an appropriate intersection with Beverly Street can be accommodated. This results in a small area of right of way that can be conveyed to abutting lots (lots 124, 161).

Comments from public utilities have been received concerning the street vacation request. The Portland Water District has requested that an easement be retained in the portion of Braintree Street to be vacated (see Attachment C) since they have an existing waterline within the right of way. Letters have been received from New England Telephone (Attachment D) and Northern Utilities (Attachment E) indicating no objections to the street vacation. No letter has been received from Central Maine Power Company.

A draft waiver and indemnification agreement from the applicant benefiting the city has been submitted. This will need to be signed by the applicant (see Attachment F).

A written description of the street vacation has been submitted (see Attachment G). This will need to be reviewed by Parks and Public Works.

IV. Street Extension and Reconfiguration

Milton (Harmony) Street is proposed to be extended to Beverly Street. See Attachment A. This provides a looped circulation pattern from Milton Street to Beverly Street and eliminates a dead end.

Braintree Street is proposed to be reconfigured at the Beverly Street intersection. This will allow an appropriate radius and alignment for these two streets to meet.

V. New Lots

Certain new lots will be created by the vacation of streets and the new street extensions. These lots (148, 149, 155 to 161) will require Planning Board review (see Attachment A). These lots meet the minimum 10,000 sq. ft. land area requirement of the R-2 zone. The lots range in size from 10,000 sq. ft. to 17,066 sq. ft. of land area.

The remainder of the lots in which lot lines are being adjusted can be reviewed administratively by staff. The staff review for these lots will take place when the street vacations have been approved by the City Council. This is important because the applicant's development proposal is dependent on the proposed street circulation, i.e. Beverly Street connecting into Braintree Street, Milton Street (Harmony Street) connecting into Beverly Street.

The applicant proposes to build the streets within the subdivision to City standards including granite curbs and sidewalks on both sides of the street. However, the applicant has not submitted all of the engineering drawings for these streets. See comments from Melodie Esterberg, Project Engineer (Attachment H).

VI. Motions for the Board to Consider

On the basis of plans and materials submitted by the applicant and on the basis of information contained in Planning Report #28-93, the Planning Board finds:

1. Recommendation to the City Council that portions of Newell Avenue, Beverly Street and Braintree Street described in this report should be vacated.

Potential Conditions of Approval:

- i. That an easement in an appropriate form be granted to the Portland Water District for their waterline in Braintree Street;
 - ii. That an executed copy of waiver and indemnification agreement benefiting the City for the street vacations be submitted to City staff for review and approval;
 - iii. That the written description of the street vacations be subject to review and approval by city staff.
2. That the proposed alterations to the Woodfords Gardens subdivision are in conformance with the Subdivision Ordinance of the Land Use Code.
 - i. That engineering drawings including street profiles for the subdivision streets be submitted to staff for review and approval.

Attachments

- A. Subdivision Plan
- B. Vicinity Map
- C. Letter from Portland Water District
- D. Letter from New England Telephone Co.
- E. Letter from Northern Utilities
- F. Street Vacation Waiver and Indemnification (Draft)
- G. Description of Street Vacations
- H. Letter from Melodie Esterberg PE, Project Engineer

June 10, 1995

Mr. Joseph E. Gray, Jr.
Director of Planning and Urban Development
City Hall
4th Floor
389 Congress Street
Portland, Maine 04101

Dear Mr. Gray,

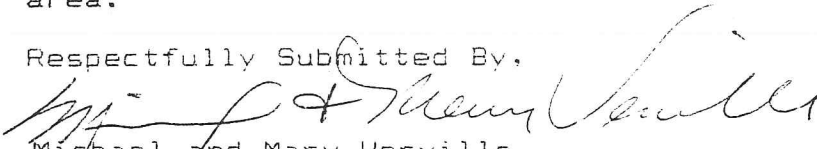
As directed by the post card sent to our addresses by Mr. Alexander Jaegerman, Chief Planner, we are submitting comments regarding the proposed expansion of the neighborhood by R.J. Grondin & Sons.

Our concern is with the expansion/development of what is referred to as Beverly Street. We are concerned with the clearing of the trees which currently act as a natural barrier, as a noise reducer and fence to hide away the monstrous industrial building which lies adjacent to the proposed site. The industrial building we are referring to houses Dura Stone Concrete on Miliken.

Our impressions are that, if the trees are not responsibly cleared/cut, that this will increase the noise level from the Turnpike and our industrial neighbors. Not to mention, increasing the exposure of the Dura Stone industrial building. Ultimately, we fear that this will adversely affect the property values of the neighborhood as well as the overall quality.

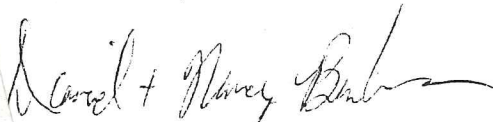
We do not object to the development and improvements to the neighborhood, including Beverly Street, as long as every consideration to the above is taken into account. Otherwise, a disservice would be done to the current residents of this area.

Respectfully Submitted By,


Michael and Mary Verville
12 Saugus St.


Steve and Sandy Capriola
23 Saugus St.

David and Nancy Burke
11 Saugus St.
Portland, Maine 04103-1445





June 1, 1995

Joseph Gray
Director of Planning & Urban Development
City of Portland
389 Congress Street
Portland, ME 04101

RE: Beverly Street Extension

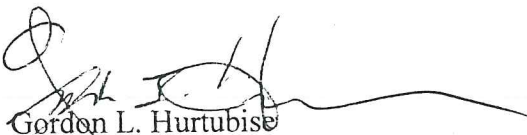
Dear Mr. Gray:

It has come to my attention that R.J. Grondin & Sons is proposing to construct Beverly Street. As the owner of the only existing home on the street, I would like to request that the city not require sidewalks in front of my property. Being that the home is 50 plus years old it was built fairly close to the then planned right of way. If the sidewalks are build it would bring people extremely close to my front porch.

Please consider this request when reviewing the proposed street design.

Thank you for your cooperation.

Very truly yours,



Gordon L. Hurtubise



June 1, 1995

Joseph Gray
Director of Planning & Urban Development
City of Portland
389 Congress Street
Portland, ME 04101

RE: Beverly Street Extension

Dear Mr. Gray:

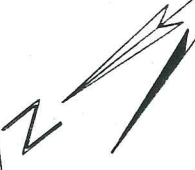
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Please consider this request when reviewing the proposed street design.

Thank you for your cooperation.

Very truly yours,

Gordon L. Hurtubise



Lot 1391

Lot 138
11,482 SF

Lot 140
11,924 SF

SILL 71.75
DAYLIGHT
BASEMT. SILL
63.75

SILL 72.00
DAYLIGHT
BASEMT. SILL
64.00

SILL 74.00
DAYLIGHT
BASEMT. SILL
66.00

EXISTING
BUILDING
FFE 75.5±

END CURB WITH TIP
DOWN STA 23+35.47

STA: 23+95.86

STA: 23+69.15

STREET

SHED

SILL ELEV.
72.85

SILL ELEV.
72.00

Lot 106
10,601 SF

Lot 147

Lot 146
10,477 SF

Lot 107
12,206 SF

SAUGUS

STA: 18+66.14
SAUGUS

EASEMENT

BOB GRONDA
DAVE KAMINS
BILL WASH

8-28-95

GRONDA SUBD.

Lot 137 should show grading for the road
we will revisit this issue once the road is put in.
for now lot ¹³⁸ is not considered to be buildable

lot 147 is buildable with the appropriate grading and
drainage easements - will show drainage arrow,
show drainage easement for drainage from lot 105/106

✗ we should add a note or write a condition
in the approval letter



Woodlot Alternatives, Inc.

June 12, 1995

Diversified Properties, Inc.
Attn: James Wolf
P.O. Box 10127
Portland, Maine 04104

**RE: Wetlands in the Proposed Braintree, Hingham, and Dedham Streets Subdivision,
Portland, Maine.**

Dear Mr. Wolf:

On May 11, 1995 Woodlot Alternatives, Inc. (WAI) delineated wetlands on the property that includes the proposed Braintree, Hingham, and Dedham Streets in Portland, Maine. We followed the technical criteria for determining the boundaries of wetlands that are under the jurisdiction of the U. S. Army Corps of Engineers (Corps) and the Maine Department of Environmental Protection (DEP). No local wetland regulations were reviewed. Wetlands were marked in the field with numbered pink and black striped flagging. Field sketches of the wetland locations and descriptions of each of the wetlands flagged were recorded in a field notebook.

Four wetlands were delineated; a long narrow wetland and stream valley that crosses the property from southwest to northeast, and three smaller isolated wetlands that straddle the cleared right-of-way for Braintree Street. The wetlands associated with the long stream valley were surveyed by Land Use Consultants. This boundary was printed on the attached plan. The three isolated wetlands straddling Braintree Road were not surveyed but were sketched on the attached plan from field notes and sketches. The exact location and size of these three wetlands should be surveyed in order to determine acreages for permits if these wetlands are going to be impacted by development.

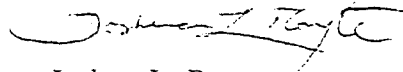
All of the wetlands found on this site are regulated by the Corps. Although Corps approval is required to dredge or fill any of the wetlands on the property, each of the wetlands is an 'above headwater wetland' and some minor filling may qualify for a Nationwide Permit. For example, Nationwide Permit #26 provides for filling of isolated or above headwater wetlands if the impact involves less than 1 acre of wetland and all applicable standards and conditions are observed.

The long narrow wetland contains a stream and a stream associated floodplain wetland that is regulated by the DEP as Class II wetland. The DEP regulated wetlands have been marked with blue on the attached plan. None of the other wetlands come under DEP jurisdiction. A Natural Resources Protection Act (NRPA) permit will be required for all development activities within the area marked with blue highlighter, as well as for any soil disturbance within 100 feet of this highlighted area. You will need to apply for a DEP Permit-by-Rule to disturb any soil within this 100 foot buffer, provided all applicable standards and conditions are observed.

In the northeast region, federal wetland regulations are currently undergoing substantial revisions. The DEP is also reviewing its regulatory program, and its thresholds for wetland regulation may also change. Changes to both Corps and DEP regulations should be in place by early 1996. Because of these changes, I recommend that you contact us prior to undertaking any activities requiring permits for the latest permit information.

Should you have any questions regarding our methods or results, or should you require additional information, please call.

Sincerely,
WOODLOT ALTERNATIVES, INC.



Joshua L. Royte
Field Biologist

Attached - Site Plan

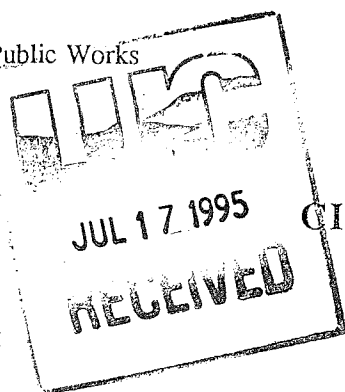
95054.00

Department of Public Works



Nadeen M. Daniels
Assistant City Manager
Director

William J. Bray
Deputy Director
City Engineer



CITY OF PORTLAND

July 13, 1995

Mr. Philip Grondin
R. J. Grondin & Sons
11 Bartlett Road
Gorham ME 04038

SUBJECT: BEVERLY STREET CONSTRUCTION PLANS

Dear Phil:

I have reviewed the construction plans for Beverly Street submitted by Land Use Consultants. My comments are as follows:

Per the submission requirements 14-403 Streets (copy attached for your reference), the following items have not been submitted or are not clear:

- 1. The survey shall be based on current City of Portland horizontal and vertical datum. Methodology used to determine datum and description of City benchmark(s) used shall be noted on the plans. Sheet 2 of 4, Phase I Beverly Street Conceptual Grading and Erosion Control Plan, notes the project benchmark is a fire hydrant on Stuart Avenue. Only a vertical elevation is noted, no horizontal data is given and methodology used is not given.
- 2. ~~Coordinates of proposed monuments are not noted.~~
- 3. No proposed rim elevations are noted for DMH 29 and SMH 24.
- 4. Light pole locations are shown, however, no light detail is provided.
- 5. Evidence of right, title or interest in the property has not been submitted.
- 6. Stormwater calculations have been submitted. However, no narrative describing the existing surface drainage and assumptions used have been submitted.
- 7. A construction plan outlining the anticipated sequence of construction has not been submitted.

*PROBABLY
MISSED
AT THIS TIME
BUT NOT
SURE
PPF-development cond'ts*

old detail

PHASING PLAN (E & SC)

Design comments:

1. Vertical alignment

- The K value for the vertical curve located between stations 24+15 and 23+55 is 14.08. Per the Technical and Design Standards and Guidelines for Street Design, Alignment and Grade Standards, the minimum K value for sag curves is 20. The combination of the low K value and the sharp corner (centerline radius of 27 feet) at the intersection creates a hazardous condition.

- There is a deep gully between Sta. 21+00 and 22+00. The plans show 15 feet of fill at the centerline of the proposed road at Sta. 21+40. Care must be taken during construction to ensure proper compaction of the fill material. Redesign of the vertical alignment as noted above may also reduce the amount of fill required.

2. As discussed at our meeting on June 28, 1995, a complete design of the intersection of Beverly and Braintree Streets must be submitted. This was also a concern during the initial Planning Board review of the project in 1993. Phasing of the construction of the project may be considered. It is our understanding that you desire to phase the project in order to start construction of phase 1 prior to the vacation of Newell Street by the City Council. This may be acceptable if the intersection is constructed as soon as practicable following action by the City Council.

3. Sewer design - The sanitary sewer as shown ends at Sta. 17+00. No provisions are made for extending the sewer for lots beyond this project. If this sewer line is to be extended to serve those lots, then the grades must be adjusted. If future development is to be served by a sewer connecting directly to the Presumpscott North Main Interceptor Sewer, then a sewer easement will be required. Since the project requires the re-recording of the subdivision plat, it may be prudent to add the sewer easement at this time to minimize amendments to the subdivision plat.

4. No underdrain is shown on the plans. The Residential Street Cross Section detail on Sheet 4 of 4, Details, notes "underdrain (typ) (size and need to be field-determined)". According to the Cumberland County Soil Survey, soils on site are Scantic silt loam. These are not free draining soils, therefore, underdrain shall be required in Beverly Street.

5. Stormwater Management:

- Storm drain ends at Sta. 19+00. This does not allow for foundation drains from lots 143, 148, and 149. Also, the same issue with respect to future development as noted above for the sanitary sewer is a concern for the storm drain as well. *• Dry Light out back - NO*

• The distance between DMH 28 and DMH 29 is 296 feet. Maximum allowed per the Technical and Design Standards and Guidelines is 250 feet.

• House lots on either side (lots 147 and 139) also have a significant amount of fill. This appears to be a major drainage course for this portion of Woodfords Gardens. The conceptual grading plan shows two homes to be constructed directly on top of the gully. In order to accommodate these two buildings, the plans show stormwater from the proposed development on the southerly side of Beverly Street, as well as the existing homes on Braintree and Saugus Streets, being directed to a proposed field inlet between lots 146 and 147. In general, stormwater does not like to change direction. It has been my experience that redirecting stormwater in this manner and constructing homes on drainage courses is not good engineering practice. The potential homeowner is apt to have numerous problems ranging from wet basements to settlement. Therefore, I cannot recommend construction of homes on lots 147 and 139. Also, drainage easements across the rear of lots 144 through 147 are required in order to ensure that abutters will not block drainage.

• A second issue with respect to the gully is the manner of directing the drainage into the storm drain. Field inlets are a maintenance problem. In locations such as this, an appropriately sized culvert would be more acceptable.

6. Residential Street Cross-Section Detail:

- Note with respect to underdrain must be changed to specify 6 inch type "B" underdrain.
- Sidewalk shall be constructed of 2 inches of grade "C" bituminous pavement.

ASO
ESM/T

UDS

ESM/T
ADMIN REVIEW

2 AVE AVE
Cottage
Milton
HOLBROOK

TALK to
JOE
&
RICK

Mr. Philip Grondin
July 13, 1995

Page 3

*Check
Drawings*

7. Granite tipdowns: In locations where there is no esplanade between the sidewalk and the curb, a 6 foot tipdown will not meet ADA standards. Therefore, 7 foot tipdowns are required in those locations. For this project, the only tipdown that is affected is adjacent to the driveway of the existing home at Sta. 23+35. Public Works is in the process of changing the standard details to conform with ADA requirements. In the future, all tipdowns will be 7 foot.
8. Any references to City of Portland Parks & Public Works Department should be changed to eliminate Parks.
9. Erosion Control:
 - Plans show the use of "Hay Bale Erosion Checks" in swales. These "checks" are essentially check dams and hay bale check dams do not meet the standards delineated in the "Maine Erosion and Sediment Control Handbook for Construction."
 - Silt fencing is shown in some locations between the proposed construction and the stream. However, there are gaps in the silt fencing and it appears that sediment can reach the brook.
10. The plans show grading outside of the right of way between Sta. 22+50 and Sta. 24+00. A construction easement from the abutting property owners must be obtained prior to the start of construction.
11. A performance guarantee and defect guarantee will be required for this project. Section 14-403 of the Land Use Code states that upon determination of the public works authority that plans for construction of the street meet the standards, the developer shall provide a performance guarantee as set forth in section 14-501 of the Land Use Code. Detailed construction cost estimates for the required improvement shall be submitted to the public works authority for approval to determine the amount of the performance guarantee. The form, terms, and conditions of the performance guarantee must be approved by the City. The performance guarantee plus a check made out to the City of Portland in the amount of 1.7 percent of the performance guarantee must be submitted prior to issuance of any permits for the affected development.

5%

STREET

If you have any questions with respect to the above, please feel free to call me at 874-4087.

Sincerely,

CITY OF PORTLAND

Melodie A. Esterberg
Melodie A. Esterberg, PE
Project Engineer

IN WGD. A.M.

- pc: W. J. Bray, Deputy Director
B. A. Bell, Operations Manager
K. A. Staples, PE, City Engineer
A. Jaegerman, Chief Planner
Bill Walsh, Land Use Consultants, 966 Riverside St, Portland, ME 04103

**CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS
OPERATIONS/ENGINEERING - INSPECTIONS
M E M O R A N D U M**

TO: Rick Knowland, Senior Planner
FROM: Tony Lombardo, Project Engineer *AM*
DATE: April 16, 1996
SUBJECT: Woodfords Gardens - Beverly Street Phase II

Land Use Consultants submitted one set of revised plans, calculations and a letter in response to the Public Works Engineering review memo dated March 29, 1996. Upon review of this recent submittal dated April 10, 1996, it appears the applicant has addressed all of the engineering concerns and has made the appropriate revisions to the construction plans. However, I still feel that Lots 150, 153 and 154 are marginal building lots. These lots should be reviewed thoroughly by Planning prior to approval as acceptable building sites. Perhaps several alternative grading schemes can be developed for each lot and submitted to Planning for review and approval.

**CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS
OPERATIONS/ENGINEERING - INSPECTIONS
M E M O R A N D U M**

TO: Rick Knowland, Senior Planner
FROM: Tony Lombardo, Project Engineer *ALM*
DATE: April 16, 1996
SUBJECT: Woodfords Gardens - Beverly Street Phase II

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LAND USE CONSULTANTS INC

August 14, 1995

J. David Haynes, RLA
David A. Kamila, PE
Frederic J. Licht, Jr., PE

Bradley H. Hare, RLA
John D. Roberts, PLS

1851

Richard Knowland, Senior Planner
City Hall
389 Congress Street
Portland, Maine 04101

Woodfords Gardens

Dear Rick:

I'm following-up on our discussion about Woodfords Gardens and the street vacations proposed by R. J. Grondin and Diversified Properties. Jim Wolf has provided the attached listing of all existing owners of lots in the subdivision along with their mortgage holders.

As I understand it the list will enable you to proceed with public notices and schedule at least the Grondin portion for a City Council Agenda.

Please call me with any questions or comments.

Sincerely,

A handwritten signature in black ink that reads 'David A. Kamila'. The signature is written in a cursive, flowing style.

David A. Kamila, P.E.
Vice President

DAK/b

Enc.

c.c.: Philip Grondin
James Wolf

PLAN #	ASSESSORS #	NAME & ADDRESS	MORTGAGE HOLDER &
1-2		Brian & Emily Edwards 46 Newton St Portland Me	Maine State Housing Authority Augusta, Maien
3-7		Anatoly Tabun 52 Newton St Portland Me	no mortgage
8-9		Thomas F Joyce, Jr Lillian White 616 Migeon Ave Apt 4 Torrington Ct 06790	
10-11		Anatoly Tabun	
12-13		Richard Casey 108 Winn Rd Falmouth Me 04105	
14-17	336 L9-12	Charles Rodway 1023 Washington Ave Portland Maine	no mortgage
18	336L8	Same as above	
1/2	of 19		
20-23	336 L3-6	Glen & Francine Hemmingway 21 Harmony Portland Maine	Citicorp Homeowners 670 Mason Ridge Center St Louis MO 63141
1/2	of 19		
24-25	336 L1-12	Portland Water District 225 Douglass Street Portland Maine	no mortgage
26-32	336 K17-23	Stella Adams Phillip Dalrymple 76 Milton St Portland Me	Norwest Mortgage PO Box 5137 Des Moines Iowa 50306-5137
33-36	336 K13-16	John Foley 82 Brackett Street Portland Maine	no mortgage

37-41	336	K8-12	Betty Leonard Milton Street Portland Maine	no mortgage
42-45	336	K4- 7	John & Holly Richio 112 Milton Street Portland Maine	Peoples Heritage Bank 140 Lisbon St Lewiston Me
46-48	336	K1-3	Cheryl Bonney 82 Saugus Street Portland Maine	Margaretten & Co, Inc 1 Ronson Rd Iselin NJ 08830
49-52	333	E25-28	Jeffery & Theresa Anderson 81 Saugus Street Portland, Maine	Barclays American Mortgage Corp Charlotte NC 23/821-1728
53-57	333	E29-33	Diversified Properties Inc aka DPI	no mortgage
58-69	333	E34-45	Philip & Nancy Germani 18 Bailey Ave Portland Me	Peoples Heritage 1 Portland Sq Portland Maine
70-74	333	G12-16	D.P.I.	no mortgage
75-76	333	G10-11	D.P.I.	no mortgage
77-79	333	G7-9	D.P.I.	no mortgage
80-83	333	G3-6	D.P.I.	No mortgage
84-85	333	G1-2	D.P.I.	no mortgage
86-89	336	G5-8	Micheal & Lisa Joyce 65 Saugus Street Portland Maine	Manhattan Savings Bank 415 Madison Ave New York NY 10017
90-93	336	H43-46	Gerlad & Victoria Courtois 66 Saugus Street Portland Maine	Boston Five Cent Savings 10 School St Boston MA 02108
94-96	336	H40-42	Mark & Suzanne Silverman 107 Milton Street Portland Maine	Maine State Housing Authority Augusta Me
97-99	336	H37-39	Frank Vansanford 99 Milton Street Portland Maine	no mortgage

100-103 336 H33-36 Paul & Mellisa Lewis
93 Milton Street
Portland Maine
Countrywide Funding Corporation
155 N Lake Ave
Pasadena Ca 91101

104-106 336 H30-32 James Amabile
Lynn Lawson
83 Milton Street
Portland Maine
Peoples Heritage Bank
140 Lisbon St
Lewiston Me

107-109 336 H26-27 Paul Kirby
75 Milton Street
Portland Maine
First Security Savings
2600 Telegraph Rd
Bloomfield Hills MI
48302

110-112 336 H23-24 James & Debra Lombardo
Milton Street
Portland Maine
Peoples Heritage Bank
1 Portland Sq
Portland Maine

113-116 336 J30-33 Portland Water District
no mortgage

117-122 336J26-29 Diane Paolino
45 Braintree St
Portland Maine
EMC Mortgage Co
PO Box 141358
Irving Tx 75014

123-125 336J21-23 Christine Saucier
41 Braintree St
Portland Maine
Maine State Housing Authority
Augusta Me

126 336 J26-29 Richard & Pauline Curry
Braintree St
Fleet Bank of Maine
39 Auburn St 37
Portland Maine Portland
no mortgage

127-129 336J19 Fred & Katherine Ela
PO Box 10515
Portland Maine
no mortgage

130 337A
part of 134
Sandra P Falsey
141 Allen Ave
Portland Me
Peoples Heritage Bank
1 Portland Sq
Portland Me

131-133
Richard Caldwell
62 Newton St
Portland Me 04103

135 336J 18
part of 134
Regina A. Foley
6 Braintree Street
Portland Maine
Corinthian Mortgage Co.
10561 Barkley Suite 300
Overland Park, KS 66212

136
Regina A. Foley

137-140	336J13-16	Richard & Pauline Curry	see above
141-142	336J 11-12 21-23	Christine Saucier 41 Braintree St Portland	see above
143-150	336J3-10 24-25	Diane Paolino	see above
151-152	336J1-2	Portland Water District	no mortgage
153-154	336H22-25	D.P.I.	no mortgage
155-157	336H22-25	D.P.I.	no mortgage
158-161	336H 15-18	D.P.I.	no mortgage
162-165	336H 11-14	D.P.I.	no mortgage
166-171	336H5-10	D.P.I.	no mortgage
172-175	336H1-4	Rubert & Rebecca Lewis 16 Cottage St South Portland	Norwest Mortgage Minneapolis Mn
176-179	336G1-4	Madeline Lambert 57 Saugus St Portland	no mortgage
180-183	333G17-20	David & Mary Walton 128 Braintree St Portland Maine	Peoples Heritage 1 Portland Sq Portland Maine <u>2nd</u> Town & Country Federal Credit Union PO Box 9420 So Portland Me
184-187	333G21-24	Linda Ballard 134 Braintree Portland Me	Me State Housing Authority Augusta Me <u>2nd</u> Peoples Heritage One Ptld Sq Portland Me

188-191	333G25-28	Karl Savino & Carla 41 Epping Street Portland Me	BancBoston 7301 Baymeadows Way Jacksonville Fl 32256
192-195	333 G29-32	John & Judith Guisti PO box 3465 Portland Maine	Citizens Mortgage Corp 3150 Bristol St 250 Costa Mesa CA 92126
196-198	333 H12-14	Kevin & Terry York 153 Braintree St Portland	Peoples Heritage Bank 1 Portland Sq Portland me
199-201	333H 9-11 25	Russell Wayne Laurie Brink 40 Longwoods Rd Falmouth Maine	Bank United of TX DBA Commenwealth United 20 Burlington Mall Rd Burlington Ma 01803
202-205	333 H5-8	Jagdeep & Paramjit Lekhi 129 Braintree St Portland	Margaretten Mortgage Co. 1 Ron Son RD Iselin N.J. 08838
206-209	333 H1-4	Lloyd Wolf PO Box 10127 Portland Me	Maine Bank & Trust 467 Congress St PO Box 619 Portland Maine
210-213	336A8-11	Guido Pardi 41 Saugus Street Portland Maine	Sears Mortgage Corp 1355 Congress st Portland Maine 04102
214-215	336A6	Maria Strong 31 Saugus St Portland	Maine State Housing Authority Augusta Me
216-219	336 A2-5	Steven and Sandra Capriola 23 Saugus Street Portland Maine	GMAC of Pa 8360 Old York Rd Elkins Park Pa 19117-1590
220-222	335A1-2	David & Nancy Burke 11 Saugus St Portland Me	Citizens Bank of Ma 65 Summer St Boston Ma
223-232	333 H15-25	RJ Grondin	no mortgage
233	333H	Russell & Laurie	see above

Brink

234-237	336 E38-42	Gordon & Julie Merrill 42 Saugus Street Portland	Peoples Heritage 1 Portland Sq Portland Me
238-244	336E 38-42	Pamela Grasseti 188 Tannery Road Westfield Ma	no mortgage
245-256	336E 30	D.P.I	no mortgage
257-306	336E 5-7	D.P.I	no mortgage
307-310	336 E1-4	Michael Brandon Leigh Ann Brando 32 Saugus Street Portland	Centerbank Mortgage Co. 43 South Main St Waterbury CT 06702
311-317	336B8-12	George Lafferty Thomas Laaferty 21 Boulay St Berlin NH	no mortgage
318-322	336B8-12	D.P.I.	no mortgage
323-325	336B13-15	D.P.I	no mortgage
326-329	336B16-19	D.P.I	no mortgage
330-333	336B20-23	D.P.I	no mortgage
334-339	336D8-9	Portland Water District	no mortgage
336	336 D10	Donna Russo 21 Deepwood Lane Portland Maine	
337-338	336D11-12	John F Ridge 2 Pleasant Valley Cape Elizabeth, Maine	
339	336D13	John T & Cynthia A McGovern 181 Lexington Ave Portland Maine	no mortgage
340-342	336D14-16	John & Cynthia MCGovern	no mortgage
343-345	336D20-22	Matthew Hollyday PO Box 10982 Portland Me	Federal Home Loan Mortgage Corporation 1109 Sunset Hills Rd

Reston Va 22090

346-348	336D17-19	Steven & Betsy Roman 118 Newton St Portland Me	GMAC Mortgage Corp 3451 Hammond Ave Waterloo Iowa 50702
349	336D 7	Donna Russo 21 Deepwood Dr Portland Me	
350	336D 6	Cynthia McGovern	see above
351-353	336 D3-5	Joseph Russo 21 Deepwood Drive Portland Maine	
354-355	336D1-2	Portland Water District	no mortgage
356-363	336B25-26	Diversified Properties	no mortgage
364-366	336B32-33	RJ Grondin	no mortgage
367-374	335A 7-14	RJ Grondin	no mortgage
375-378	335A3-6	Michael & Mary Verville 12 Saugus St	Citizens Mortgage Co 55 Summer St Boston Ma Portland
379-385	335C 1-7	D.P.I.	no mortgage
86-389	335C 8-11	D.P.I.	no mortgage
390-392	335C 12-14	D.P.I.	no mortgage
393-398	335C15-20	Watt Samaki Temple 239 Park Ave Portland Me	Peoples Heritage 1 Portland Sq Portland
399-401	335C21-23	Racheal Britting 132 Newton St Portland Me	no mortgage
402-411		Racheal Britting	no mortgage
412-416	335C46-48	Portland Water	no mortgage
417-418	335 C42-44	John Goulette Gertrude McCaul	no mortgage

120 Mountain Ave
Malden Ma

419-420	335 C 40-41	George Odenchantz	no mortgage
421-423	335C37-39	George Odenchantz	no mortgage
024-427	335C33-36	Claudia & Peter Risbara 426 Randolph St Portland Me	Casco Northern 1 Monument Sq Portland Me
428-429	335 C 31-32	Peter Risbara	see above
430		Andrew Musacchio	see below
431	335C 29	Andrew Musacchio 432 Randolph Portland Me	STM Mortgage Co 1250 Mockingbird Ln Dallas TX 75247
432		Andrew Musacchio	see above
433		Harry Andrews	no mortgage
434	335C 26	Harry Andrews Jr White Rock Park Gorham Me	no mortgage
435-436	335C24-25	Colleen Andrews White Rock Park Gorham Me	no mortgage
437	335 D1	John Welch 485 Cumberland Ave Portland Me	no mortgage
438-444	335D2-8 D38-39	Ronald, Daniel & Mark McCullough 26 SeaView Ave Old Orchard Beach	no mortgage
445-447	335D9-11	Margaret Britt	no mortgage
448-449	335 D12-13	Elmer Brackett c/o N E Brackett 113 Pillsbury Dr Scarboro Me	no mortgage
450-454	335 D14-15	George Odenchantz	no mortgage
455-457	335D19-21	Margaret Beachy Mark Mosher 4701 Adrian St Rockville Md	no mortgage

458-466	335D22-24	Norman Brackett 113 Pillsbury Dr Scarboro Me	no mortgage
167-470	335D33-34	Florence Pendleton 10 Congress Street Portland Me	
471-473	335D35-37	Mary Gleason 389 Congress St Portland Me	no mortgage
474	335 D 38-39	George Odencrantz	no mortgage
475		George Odencrantz	no mortgage
476	335 D40	William Crabtree n 389 Congress St Portland Me	no mortgage
477	335 E3-4	John Welch	no mortgage
478-481	335 E3-4	David & Martha Googins 1 Holbrook St Portland Me	1st Comfed Mortgage Co 45 Central St Lowell Ma 01852
			2nd Peoples Heritage 1 Portland Square Portland Me
482	335 E5	Leslie Brown 389 Congress Portland Me	no mortgage
483-484		Mary Brown 389 Congress St Portland Me	
485-487	335 E 8-10	Martin & Gabriel Griffen 389 Congress St Portland	no mortgage
488-490	335E 11-13	Margaret McCarthy 13 Tucker Ave Portland Me	no mortgage
491-494	335 E14-17	Arthur Whipple 17 Old County Rd	no mortgage

Scarboro Me

495-498	335 E18-21	Rita McNelis Lucy Dyer 104 Congress ST Portland Me	no mortgage
476	335E 22	William Crabtree	no mortgage
500-501	335 E23-24	Thomas Duffy 121 Deerhill Circle Westbrook Me	no mortgage
502-507	335 E25-26	City of Portland	no mortgage
508-511	335 E30-34	City of Portland	no mortgage
512-513	335 E35-36	Eva Higgins 90 Clifford St So Portland Me	no mortgage
514-515	335 E37-38	Eva Higgins	see above
516-518	335 B22-24	DPI	no mortgage
519-523	335 B17-21	DPI	no mortgage
524-529	335 B11-16	DPI	no mortgage
530	335 B10	DPI	no mortgage
531-532	335 N8-9	DPI	no mortgage
533-535	335 B 5-7	DPI	no mortgage
536-537	335 B 3-4	DPI	no mortgage
538-542		GRH Enterprises	no mortgage
543-560	333 J1-9	RJ Grondin	no mortgage
561-562		RJ Grondin	no mortgage
563-567	333K 1-7	RJ Grondin	no mortgage
568-578	333 K8-15 333 K 16 333 K 17	RJ Grondin	no mortgage
579-582	333K18-20	Same as above	no mortgage
583-589	333K F12-18	" "	" "
590-595	333 F 6-11	" "	" "

596

333 F 5

" "

" "

597-600

333F 1-4

" "

" "



LAND USE CONSULTANTS INC

September 7, 1995

J. David Haynes, RLA
David A. Kamila, PE
Frederic J. Licht, Jr., PE

Bradley H. Hare, RLA
John D. Roberts, PLS

1851

Ms. Melodie A. Esterberg, P.E. Project Engineer
Department of Public Works
55 Portland Street
Portland, Maine 04101

Woodfords Gardens, Beverly Street - Phase I

Dear Melodie:

Per comments received from Rick Knowland (Memorandum to Katherine Staples from Jon Giles dated July 21, 1995) and a meeting with the Planning Department on July 28, 1995, I have made further changes to the plans. The changes are as follows:

1. The grading on Lot 139 has been revised to show only the grading that is necessary for road construction. It was decided at the above referenced meeting, that this lot will be reviewed again once the road is in place to determine the feasibility of construction.
2. A note has been added to the grading plan (sheet 2 of 4) which limits the construction on Lot 139 to that necessary for road construction.
3. A 15' wide drainage easement has been added along the southeasterly side of Lot 147 to allow access for the City.
4. Drainage flow arrows have been added on the grading plan for Lots 147 and 146 to clarify the intended direction of flow.
5. Miscellaneous bearings and distances have been added to the "Amended Subdivision Plat showing proposed vacated portions of Newell Avenue, Braintree Street, and Beverly Street", Sheet 1 of 2. These changes are pursuant to the memo from Jon Giles (referenced above), and a meeting between Jon and Dave Kamila on 8/15/95.
6. The vacated street descriptions have been revised per Jon Giles' request. The changes have been highlighted for quick reference.
7. Note 22 (two trees per lot) has been added per Rick Knowland's comment.

LAND USE CONSULTANTS INC

I believe this should finalize the changes and revisions requested. We are hoping to wrap this up and get the project under construction as soon as possible. Should you have any questions while reviewing the plans, which would help to expedite the project, please feel free to call.

Sincerely,

A handwritten signature in black ink that reads "William R. Walsh, III". The signature is written in a cursive style with a prominent "W" and "R".

William R. Walsh, III, P.E.
Project Engineer

WRW/b

Enc. 3 Complete Sets
Vacated Street Descriptions

c.c.: Rick Knowland
Phil Grondin

CITY OF PORTLAND, MAINE
CORPORATION COUNSEL

To: Ellen Sanborn, Assistant Finance
Director
From: Penny Littell
Date: August 12, 1999
Re: Diversified Properties

___ For your info./review/comments
___ For your approval/signature
___ For your files
___ Other _____

Comments: Enclosed: _____

1) Check from Diversified Properties for
\$3,200.00; _____

2) W-9 for Leavitt Earthworks _____

3) 2 Certificates of Insurance _____

4) Proposal and letters _____

Please call me if you have questions. _____

cc with attachments: Rick Knowland ✓
Alex Jaegerman

DIVERSIFIED PROPERTIES, INC.
 WOODFORD GARDENS ACCOUNT
 P.O. BOX 10127
 PORTLAND, MAINE 04104

EXPLANATION	AMOUNT

52-150
112

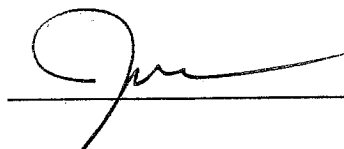
386

CHECK
AMOUNT

Thirty two hundred dollars ————— DOLLARS

E	TO THE ORDER OF	DESCRIPTION	CHECK NO.	
199	City of Portland		386	\$ -3,200.-

MAINE BANK & TRUST
 A MAINE BANK FOR MAINE PEOPLE
 PORTLAND, MAINE



⑈000386⑈ ⑆011201500⑆ 0052632 0⑈

Request for Taxpayer Identification Number and Certification

Give form to the
requester. Do NOT
send to the IRS.

Please print or type	Name (If a joint account or you changed your name, see Specific instructions on page 2.)	
	Business name, if different from above. (See Specific instructions on page 2.) <i>Leavitt Earthworks Co., Inc.</i>	
	Check appropriate box: <input type="checkbox"/> Individual/Sole proprietor <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Other	
	Address (number, street, and apt. or suite no.) <i>P.O. Box 703</i>	
City, state, and ZIP code. <i>Standish Me 04084</i>		Requester's name and address (optional)

Part I Taxpayer Identification Number (TIN) Enter your TIN in the appropriate box. For individuals, this is your social security number (SSN). However, if you are a resident alien OR a sole proprietor, see the instructions on page 2. For other entities, it is your employer identification number (EIN). If you do not have a number, see How To Get a TIN on page 2. Note: If the account is in more than one name, see the chart on page 2 for guidelines on whose number to enter.	Social security number	OR	Employer identification number <i>01-0521176</i>	List account number(s) here (optional)
				Part II For Payees Exempt From Backup Withholding (See the instructions on page 2.)

Part III Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding.

Certification Instructions. — You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. (See the instructions on page 2.)

Sign Here	Signature <i>[Handwritten Signature]</i>	Date <i>8/5/99</i>
-----------	--	--------------------

Purpose of Form. — A person who is required to file an information return with the IRS must get your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 to give your correct TIN to the person requesting it (the requester) and, when applicable, to:

- Certify the TIN you are giving is correct (or you are waiting for a number to be issued),
- Certify you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are an exempt payee.

Note: If a requester gives you a form other than a W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

What Is Backup Withholding? — Persons making certain payments to you must withhold and pay to the IRS 31% of such payments under certain conditions. This is called "backup withholding." Payments that may be subject to

backup withholding include interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

If you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return, payments you receive will not be subject to backup withholding. Payments you receive will be subject to backup withholding if:

- You do not furnish your TIN to the requester, or
- The IRS tells the requester that you furnished an incorrect TIN, or
- The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
- You do not certify to the requester that you are not subject to backup withholding under 3 above (for reportable interest and dividend accounts opened after 1983 only), or
- You do not certify your TIN when required. See the Part III instructions on page 2 for details.

Certain payees and payments are exempt from backup withholding. See the Part II instructions and the separate **Instructions for the Requester of Form W-9.**

Penalties

Failure To Furnish TIN. — If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil Penalty for False Information With Respect to Withholding. — If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal Penalty for Falsifying Information. — Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. — If the requester discloses or uses TINs in violation of Federal law, the requester may be subject to civil and criminal penalties.

AUG 5 1999

ACORD CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YY)
08/04/1999

PRODUCER (207) 642-2222 FAX (207) 642-2228
Lovejoy Agency
P. O. Box 690
Standish, Me 04084

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

COMPANIES AFFORDING COVERAGE

- COMPANY A Peerless Insurance Company
- COMPANY B Maine Employers Mutual
- COMPANY C
- COMPANY D

Attn: Ext:
INSURED
Brian Leavitt
dba Leavitt Earthworks Co. Inc
PO Box 703
Standish, ME 04084

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> OWNER'S & CONTRACTOR'S PROT	GL 9189056	08/05/1998	08/05/1999	GENERAL AGGREGATE \$ 2,000,000
	PRODUCTS - COMP/OP AGG \$ 2,000,000				
	PERSONAL & ADV INJURY \$ 1,000,000				
	EACH OCCURRENCE \$ 1,000,000				
	FIRE DAMAGE (Any one fire) \$ 100,000				
	MED EXP (Any one person) \$ 5,000				
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS	BA 9180157	08/05/1998	08/05/1999	COMBINED SINGLE LIMIT \$ 1,000,000
	BODILY INJURY (Per person) \$				
	BODILY INJURY (Per accident) \$				
	PROPERTY DAMAGE \$				
	GARAGE LIABILITY <input type="checkbox"/> ANY AUTO				AUTO ONLY - EA ACCIDENT \$
	OTHER THAN AUTO ONLY:				
	EACH ACCIDENT: \$				
	EXCESS LIABILITY <input type="checkbox"/> UMBRELLA FORM <input type="checkbox"/> OTHER THAN UMBRELLA FORM				AGGREGATE \$
	EACH OCCURRENCE \$				
	AGGREGATE \$				
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY THE PROPRIETOR/PARTNERS/EXECUTIVE OFFICERS ARE: <input type="checkbox"/> INCL <input type="checkbox"/> EXCL	1810044509	10/29/1998	10/29/1999	WC STATUTORY LIMITS OTHER
	EL EACH ACCIDENT \$ 100,000				
	EL DISEASE - POLICY LIMIT \$ 500,000				
	OTHER				EL DISEASE - EA EMPLOYEE \$ 100,000

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS
ATTN: PENNY LITTELL, ASSOC. CORP. COUNCIL

CERTIFICATE HOLDER

CITY OF PORTLAND
CITY HALL
389 CONGRESS STREET
PORTLAND, ME 04101

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 10 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

Shauna Mandeville

Shauna Mandeville

ACORD CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YY)

08/04/1999

PRODUCER (207)642-2222 FAX (207)642-2228
 Lovejoy Agency
 P. O. Box 690
 Standish, Me 04084

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

Attn: Ext:
 INSURED Brian Leavitt
 dba Leavitt Earthworks Co. Inc
 PO Box 703
 Standish, ME 04084

COMPANIES AFFORDING COVERAGE

- COMPANY A Peerless Insurance Company
- COMPANY B Maine Employers Mutual
- COMPANY C
- COMPANY D

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
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	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS	BA 9180157	08/05/1999	08/05/2000	COMBINED SINGLE LIMIT \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE \$
	GARAGE LIABILITY <input type="checkbox"/> ANY AUTO				AUTO ONLY - EA ACCIDENT \$ OTHER THAN AUTO ONLY: EACH ACCIDENT \$ AGGREGATE \$
	EXCESS LIABILITY <input type="checkbox"/> UMBRELLA FORM <input type="checkbox"/> OTHER THAN UMBRELLA FORM				EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY THE PROPRIETOR/PARTNERS/EXECUTIVE OFFICERS ARE: <input type="checkbox"/> INCL <input type="checkbox"/> EXCL	1810044509	10/29/1998	10/29/1999	WC STATUTORY LIMITS OTH-ER EL EACH ACCIDENT \$ 100,000 EL DISEASE - POLICY LIMIT \$ 500,000 EL DISEASE - EA EMPLOYEE \$ 100,000
	OTHER				

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS
 ATTN: PENNY LITTELL, ASSOC. CORP. COUNCIL

CERTIFICATE HOLDER

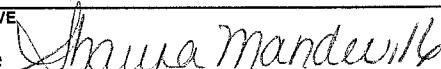
CITY OF PORTLAND
 CITY HALL
 389 CONGRESS STREET
 PORTLAND, ME 04101

CANCELLATION

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AUTHORIZED REPRESENTATIVE

Shauna Mandeville





CITY OF PORTLAND

May 10, 1999

Mr. Jim Wolf
Diversified Properties
P O Box 10127
Portland ME 04104

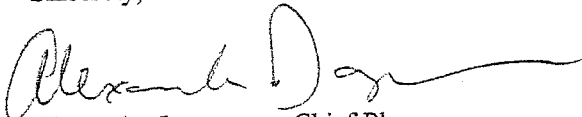
re: Buca Run

Dear Jim:

As we discussed last fall, the drainage improvements for the Donner property on Buca Run were supposed to be completed this spring. In a recent conversation with Rick Knowland, you indicated that there would be a delay in doing these improvements, as you wanted to discuss this issue further with your attorney in the context of other Buca Run issues.

I want to strongly emphasize to you that unless the Donner improvements are completed by June 23, 1999, in accordance with Jim Wendel's specifications, we will complete the improvements ourselves, and send you the bill. We have spent enough time talking about this project. It is time to complete it.

Sincerely,



Alexander Jaegerman, Chief Planner

cc: Joseph E. Gray, Jr., Director of Planning and Urban Development
Richard Knowland, Senior Planner
Penny Littell, Associate Corporation Counsel
Jim Wendel, Development Review Coordinator
Nancy Knauber, Public Works
Todd Merkel, Public Works
Todd Donner, 54 Buca Run; Portland ME 04103

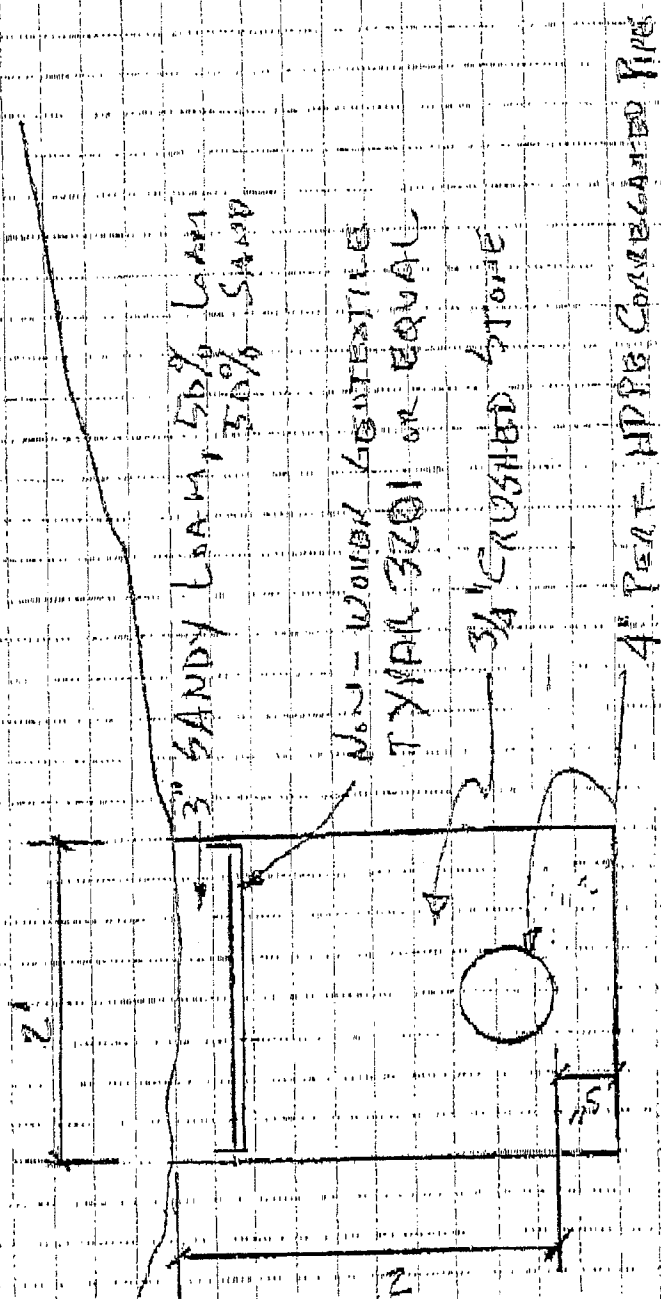
O:\PLAN\CORRESP\RICK\LETTERS\WOLF.LEC

DeLUCA-HOFFMAN ASSOCIATES, INC.

Consulting Engineers
778 Main Street Suite 3
SOUTH PORTLAND, MAINE 04106
(207) 775-1121
FAX (207) 879-0896

JOB _____
SHEET NO. _____ OF _____
CALCULATED BY _____ DATE _____
CHECKED BY _____ DATE _____
SCALE _____

- DRAIN TO BE PLACED ALONG THE LOWER OF THE SURFACES
- REGRABE AND LOAM DISTRIBUTION AREAS TO REMAIN
- POUCE HEAVY APPLICATION OF SAND, RARELY LOAM & PLACE HEAVY COVER OF HAY MULCH.



4" PEAT HDPE COMPOUNDED PIPE

LOT 4, 5 PRIVATE DRAINAGE EASEMENT PARENCH DRAIN

IN BUCA RUN

To Jim Wolf
10/29 3:30 PM

892-1383

PROPOSAL

FAY 77J-687S

LEVITY & SON EARTHWORKS
P.O. BOX 703
STANDISH, MAINE 04084

(207) 839-5750

Custom Built Homes of Maine
27 Main Street
Windham, ME 04092

PHONE	
JOB NAME / LOCATION	
JOB NUMBER	JOB PRICE

We hereby agree to furnish all equipment, material and labor necessary to complete all work as follows for Buck Run drainage upgrade.

- A. Dig trench 2'X2' behind lot #4 and 5.
- B. Install 6" perf in stocking pipe and install in entire length of trench.
- C. Fill trench with 3/4" stone.
- D. Grade as necessary and loan all areas disturbed on lot #4

Extras: Moving of fence lot #5
Seeding of newly loamed areas.

WE PROPOSE hereby to furnish material and labor — complete in accordance with the above specifications, for the sum of
Three Thousand Two Hundred Dollars 00/100 dollars (\$) **3,200.00**

Payment to be made as follows

Upon completion of job.

All material is guaranteed to be as specified. All work to be completed in a professional manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be accepted only upon written request and will become an order change over and above the estimate. All agreements contingent upon affairs, accidents or delays beyond our control. Owner to carry fire, theft, and other necessary insurance. Our workers are fully covered by Employer's Compensation insurance.

Authorized Signature _____
 Note: This proposal may be withdrawn by us if not accepted within 30 days.

ACCEPTANCE OF PROPOSAL — The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Signature _____
 Signature _____

Date of Acceptance: _____

PRODUCT 10187 14555 Inv. Order. MA 04027 To Order Phone Toll Free 1-800-255-0860

FOLD AT THIS LINE TO RETURN TO THE SUPPLIER

P.O.D

03:02P 98-29-98

January 28, 1999

Jim Wolf
Diversified Properties, Inc.
P.O. Box 10127
Portland, ME 04104

Dear Jim:

The purpose of this letter is to confirm our understanding about the resolution of the drainage problems on the Donner lot, affecting lots 4 and 5 in Buca Run. Our previous solution was frustrated by the lateness in the season and the fact that the contractor backed out of doing the job this fall due to frost in the ground. By consensus of all parties, the project has been delayed to the spring.

The scope of work will include the installation of underdrain in the center of what had been shown as a drainage easement with shallow swale, extending along the full length of the rear yards of lots 4 and 5, and outletting into the drainage way leading to the culvert under Buca Run. The underdrain specification will conform to the sketch and notes by Jim Wendell as shown on the attached sheet. The earlier agreement included the Donners contributing the cost of removing and resetting the fence to accommodate the work. Because the contractor canceled after the fence was removed, the Donners are not willing to pay for this a second time.

My advice to you, Jim, is to simply include the fence removal and reset as part of the contract. If you have a problem with this, call me and we can discuss it.

Jim Wendell recommends that the work be scheduled for mid to late June, to give the land a chance to dry out in the spring. Please confirm that you will be scheduling this work to take place as agreed upon and summarized in this letter.

Sincerely,

Alexander Jaegerman
Chief Planner

cc: Karen and Todd Donner, 54 Buca Run, Portland, ME 04103
Jim Wendell, DeLuca Hoffman Assoc. Inc. South Portland, ME 04106
Richard Knowland, Senior Planner
Penny Littell, Associate Corporation Counsel
Joseph E. Gray, Jr. Director of Planning & Urban Development

O:\PLANMGT&BDGT\DONNER.WPD1/28/99

LEAVITT
EARTHWORKS CO., INC.

INVOICE

P.O. Box 703 • Standish, ME 04084
 (207) 839-5750 • Fax (207) 839-2426

INVOICE

PAGE 1

INVOICE NO. 00000324 INVOICE DATE 08/16/99

SOLD TO:
 City of Portland
 Atten: Alex Yegerman
 289 Congress Street
 Portland, ME 04101

*Ellen has the
 \$ 3,200 check
 from Jim Wolf.*

PURCHASE ORDER NUMBER	DATE ORDERED	PAYMENT DATE	SALESPERSON
	08/16/99	08/31/99	
TERMS		NOTES	
Net 15			

REFERENCE	DESCRIPTION	AMOUNT
	Drainage Project Lot # 4 & 5 Buca Run Total amount of contract	4,100.00

MESSAGE:

Pay by invoice. No statement will follow

SUBTOTAL SALES TAX	
SHIPPING	
TOTAL	4,100.00

NAME & ADDRESS	PLAN #	ASSESSORS #	MORTGAGE HOLDER
STELLA ADAMS & PHILLIP DALRYMPLE 76 MILTON ST, PORTLAND, ME	26-32	336 K17-23	NORWEST MORTGAGE PO BOX 5137, DES MOINES, IA 50306
JAMES AMABILE & LYNN LAWSON 83 MILTON ST, PORTLAND, ME	104-106	336 H30-32	PEOPLES HERITAGE BANK 140 LISBON ST, LEWISTON, ME
JEFFERY & THERESA ANDERSON 81 SAUGUS ST, PORTLAND, ME	49-52	336 K1-3 226 L27	MARGARETTEN & CO, INC 1 RONSON RD, ISELIN NJ 08830
COLLEEN ANDREWS WHITE ROCK PARK, GORHAM, ME	435-436	335C24-25	NONE
HARRY ANDREWS WHITE ROCK PARK, GORHAM, ME	433		NONE
HARRY ANDREWS, JR WHITE ROCK PARK, GORHAM, ME	434	335C 26	NONE
LINDA BALLARD 134 BRAINTREE, PORTLAND, ME	184-187	333G21-24	MAINE STATE HOUSING AUTHORITY AUGUSTA, ME (2 ND) PEOPLES HERITAGE ONE PORTLAND SQ, PORTLAND, ME
MARGARET BEACHY & MARK MOSHER 4701 ADRIAN ST, ROCKVILLE, MD	455-457	335D19-21	NONE
CHERYL BONNEY 82 SAUGUS ST, PORTLAND, ME	46-48	336 K1-3 226 L27	MARGARETTEN & CO, INC 1 RONSON RD, ISELIN, NJ 08830
ELMER BRACKETT C/O NE BRACKETT 113 PILLSBURY DR, SCARBORO, ME	448-449	335-D14-15	NONE
NORMAN BRACKETT 113 PILLSBURY DR, SCARBORO, ME	458-466	335D22-24	NONE
MICHAEL & LEIGH ANN BRANDON 32 SAUGUS ST, PORTLAND, ME	307-310	336 E1-4	CENTERBANK MORTGAGE CO. 43 SOUTH MAIN ST, WATERBURY CT 06720
LAURIE BRING & RUSSELL WAYNE 40 LONGWOODS RD, FALMOUTH, ME	199-201	333H 9-11 25	BANK UNITED OF TX DBA COMMONWLTH UNITED
LAURIE BRING & RUSSELL WAYNE 40 LONGWOODS RD, FALMOUTH, ME	233	333H	BANK UNITED OF TX DBA COMMONWLTH UNITED
MARGARET BRITT	445-447	335 D9-11	NONE
RACHEL BRITTING 132 NEWTON ST, PORTLAND, ME	399-401	335C21-23	NONE

RACHEL BRITTING 132 NEWTON ST, PORTLAND, ME	402-411		NONE
LESLIE BROWN 389 CONGRESS ST, PORTLAND, ME	482	335 E5	NONE
MARY BROWN 389 CONGRESS ST, PORTLAND, ME	483-484		
DAVID & NANCY BURKE 11 SAUGUS ST, PORTLAND, ME	220-222	335A1-2	CITIZENS BANK OF MA 65 SUMMER ST, BOSTON MA
RICHARD CALDWELL 62 NEWTON ST, PORTLAND, ME	131-133		
STEVEN & SANDRA CAPRIOLA 23 SAUGUS ST, PORTLAND, ME	216-219	336 A2-5	GMAC OF PA 8360 OLD YORK RD, ELKINS PARK, PA 19117
RICHARD CASEY 108 WINN RD, FALMOUTH, ME	12-13		
CITY OF PORTLAND	502-507	335 E25-26	NONE
CITY OF PORTLAND	508-511	335 E30-34	NONE
GERALD & VICTORIA COURTOIUS 66 SAUGUS ST, PORTLAND, ME	90-93	336 H43-46	BOSTON FIVE CENTS SAVINGS 10 SCHOOL ST, BOSTON, MA 02108
WILLIAM CRABTREE 389 CONGRESS ST, PORTLAND, ME	476	335 D40	NONE
WILLIAM CRABTREE 389 CONGRESS ST, PORTLAND, ME	476	335 D40	NONE
RICHARD & PAULINE CURRY BRAINTREE ST, PORTLAND, ME	126	336 J26-29	FLEET BANK OF ME 39 AUBURN ST 37, PORTLAND, ME
RICHARD & PAULINE CURRY BRAINTREE ST, PORTLAND, ME	137-140	336J 13-16	FLEET BANK OF ME 39 AUBURN ST 37, PORTLAND, ME
DIVERSIFIED PROPERTIES, INC	53-57	333 E29-33	NONE
DIVERSIFIED PROPERTIES, INC.	70-74	333 G12-16	NONE
DIVERSIFIED PROPERTIES, INC.	75-76	333 G10-11	NONE
DIVERSIFIED PROPERTIES, INC.	77-79	333 G7-9	NONE
DIVERSIFIED PROPERTIES, INC.	80-83	333 G3-6	NONE
DIVERSIFIED PROPERTIES, INC.	84-85	333 G1-2	NONE

DIVERSIFIED PROPERTIES, INC.	153-154	336H22-25	NONE
DIVERSIFIED PROPERTIES, INC.	155-157	336H22-25	NONE
DIVERSIFIED PROPERTIES, INC.	158-161	336H 15-18	NONE
DIVERSIFIED PROPERTIES, INC.	162-165	336H 11-14	NONE
DIVERSIFIED PROPERTIES, INC.	166-171	336H5-10	NONE
DIVERSIFIED PROPERTIES, INC.	245-256	336E 30	NONE
DIVERSIFIED PROPERTIES, INC.	257-306	336E 5-7	NONE
DIVERSIFIED PROPERTIES, INC.	318-322	336B8-12	NONE
DIVERSIFIED PROPERTIES, INC.	323-325	336B13-15	NONE
DIVERSIFIED PROPERTIES, INC.	326-329	336B16-19	NONE
DIVERSIFIED PROPERTIES, INC.	330-333	336B20-23	NONE
DIVERSIFIED PROPERTIES, INC.	356-363	336B25-26	NONE
DIVERSIFIED PROPERTIES, INC.	379-385	335C 1-7	NONE
DIVERSIFIED PROPERTIES, INC.	386-389	335C 8-11	NONE
DIVERSIFIED PROPERTIES, INC.	390-392	335C 12-14	NONE
DIVERSIFIED PROPERTIES, INC.	516-518	335 B22-24	NONE
DIVERSIFIED PROPERTIES, INC.	519-523	335- B17-21	NONE
DIVERSIFIED PROPERTIES, INC.	524-529	335 B11-16	NONE
DIVERSIFIED PROPERTIES, INC.	530	335 B10	NONE
DIVERSIFIED PROPERTIES, INC.	531-532	335 N8-9	NONE
DIVERSIFIED PROPERTIES, INC.	533-535	335 B 5-7	NONE
DIVERSIFIED PROPERTIES, INC.	536-537	335 B 3-4	NONE
THOMAS DUFFY 121 DEERHILL CR, WESTBROOK, ME	500-501	335 E23-24	NONE
LUCY DYER & RITA MCNELIS 104 CONGRESS ST, PORTLAND, ME	495-498	335 E18-21	NONE
BRIAN & EMILY EDWARDS 46 NEWTON ST, PORTLAND, ME	1-2		MAINE STATE HOUSING AUTHORITY AUGUSTA, ME

FRED & KATHERINE ELA PO BOX 10515 PORTLAND, ME	127-129	336j19	NONE
SANDRA P FALSEY 141 ALLEN AVE, PORTLAND, ME	130 PART OF 134	337A	PEOPLES HERITAGE BANK 1 PORTLAND SQ, PORTLAND, ME
JOHN FOLEY 82 BRACKETT ST, PORTLAND, ME	33-36	336 K13-16	NONE
REGINA A. FOLEY 6 BRAINTREE ST, PORTLAND, ME	135 PART OF 134	336j 18	CORINTHIAN MORTGAGE CO. 10561 BARKLEY SUITE 300 OVERLAND PARK, KS 66212
REGINA A. FOLEY 6 BRAINTREE ST, PORTLAND, ME	136		CORINTHIAN MORTGAGE CO. 10561 BARKLEY SUITE 300 OVERLAND PARK, KS 66212
PHILIP & NANCY GERMANI 18 BAILEY AVE, PORTLAND, ME	58-69	333 E34-45	PEOPLES HERITAGE 1 PORTLAND SQ, PORTLAND, ME
MARY GLEASON 389 CONGRESS ST, PORTLAND, ME	471-473	335D35-37	NONE
DAVID & MARTHA GOOGINS 1 HOLBROOK ST, PORTLAND, ME	478-481	335 E3-4	1 ST COMFED MORTGAGE CO 45 CENTRAL ST, LOWELL MA 01852
JOHN GOULETTE & GERTRUDE MCCAUL 120 MOUNTAIN AVE, MALDEN MA	417-418	335 C42-44	NONE
PAMELA GRASSETI 188 TANNERY RD, WESTFIELD MA	238-244	336E 38-42	NONE
GRH ENTERPRISES	538-542		NONE
MARTIN & GABRIEL GRIFFEN 389 CONGRESS ST, PORTLAND, ME	485-487	335 E 8-10	NONE
RJ GRONDIN	223-232	333 H15-25	NONE
RJ GRONDIN	364-366	336B32-33	NONE
RJ GRONDIN	369-374	335A3-6	NONE
RJ GRONDIN	543-560	333 J1-9	NONE
RJ GRONDIN	561-562		NONE
RJ GRONDIN	563-567	333K 1-7	NONE
RJ GRONDIN	568-578	333 K8-15 333 K 16	NONE

		333 K 17	
RJ GRONDIN	579-582	333K18-20	NONE
RJ GRONDIN	583-589	333 K F 12-18	NONE
RJ GRONDIN	590-595	333 F 6-11	NONE
RJ GRONDIN	596	333 F 5	NONE
RJ GRONDIN	597-600	333F 1-4	NONE
JOHN & JUDITH GUISTI PO BOX 3465, PORTLAND, ME	192-195	333 G29-32	CITIZENS MORTGAGE CORP. 3150 BRISTOL ST, STE 250, COSTA MESA CA
GLEN & FRNACINE HEMMINGWAY 21 HARMONY, PORTLAND, ME	20-23, 1/2 OF 19	336 L3-6	CITICORP HOMEOWNERS 670 MASO RIDGE CTR, ST LOUIS MO 63141
EVA HIGGINS 90 CLIFFORD ST, S PORTLAND, ME	512-513	335 E37-38	NONE
EVA HIGGINS 90 CLIFFORD ST, S PORTLAND, ME	514-515	335 E37-38	NONE
MATTHEW HOLLYDAY PO BOX 10982, PORTLAND, ME	343-345	336D20-22	FEDERAL HOME LOAN MORTGAGE CORP 1109 SUNSET HILLS RD RESTON, VA 22090
MICHAEL & LISA JOYCE 65 SAUGUS ST, PORTLAND, ME	86-89	336 G5-8	MANHATTAN SAVINGS BANK 415 MADISON AV, NY, NY 10017
THOMAS F JOYCE, JR & LILLIAN WHITE 616 MIGEON AVE, APT 4 TORRINGTON, CT 06790	8-9		
PAUL KIRBY 75 MILTON ST, PORTLAND, ME	107-109	H26-27	FURST SECURITY SAVINGS 2600 TELEGRAPH RD, BLOOMFIELD HILLS MI
GEORGE & THOMAS LAFFERTY 21 BOULAY ST, BERLIN, NH	311-317	336B8-12	NONE
MADÉLINE LAMBERT 57 SAUGUS ST, PORTLAND, ME	176-176	336G1-4	NONE
JAGDEEP ;& PARAMJIT LEKHI 129 BRAINTREE ST, PORTLAND, ME	302-305	333 H5-8	MARGARETTEN MORTGAGE CO 1 RONSON RD, ISELIN NJ 08838
BETTY LEONARD MILTON ST, PORTLAND, ME	37-41	336 K8-12	NONE
PAUL & MELISSA LEWIS 93 MILTON ST, PORTLAND, ME	100-103	336 H33-36	COUNTRYWIDE FUNDING CORP 155 N LAKE AVE, PASADENA CA 91101
RUBERT & REBECCA LEWIS	172-175	336H1-4	NORWEST MORTGAGE

**STORMWATER ANALYSIS
WOODFORDS GARDENS
PORTLAND, MAINE**

INTRODUCTION

Land Use Consultants, Inc. is submitting plans and drainage calculations on behalf of Diversified Properties for an amended subdivision in Portland, Maine. The site is situated between Milton Street and Dedham Street from Lynn Street to Saugus Street. There are no improved streets within the project area. Diversified Properties proposes to vacate portions of Braintree Street, Hingham Street, Dedham Street and Lynn Street located within the project boundaries. The project proposes to construct a new street "Buca Run" along a portion of the former Braintree Street right-of-way which will connect through from the intersection of Saugus Street and Braintree Street to Dedham Street near the intersection with the former Lynn Street right-of-way. The project proposes 24 lots situated on approximately 10 acres.

SITE CHARACTERISTICS AND METHODOLOGY

The site is mostly wooded and undeveloped with a few areas of open fields particularly in the existing street right-of-way which was apparently cleared and partially graded several years ago. The open areas are well vegetated with thick grass and brush. Wooded areas include a modest canopy cover with a thick dense growth of understory brush. Except for a few finger-like ravines which traverse the property, the site is mildly sloping from 1% to 5%. The ravines include two small intermittent stream segments which converge on-site and cross through an existing culvert at Dedham Street. The existing culvert discharges to a small tributary of an unnamed brook which flows to the Presumpscot River. The entire site presently drains into these ravines and flows to the brook.

Present drainage patterns include overland or sheet flow for short distances into shallow swales or depressions to the ravines, and to the existing culvert via the small stream segments through the site. These drainage patterns will not be significantly altered as a result of the proposed development, except that a small portion of the developed site will be intercepted by the proposed storm drain system which connects to an existing large diameter storm drain located in Saugus Street. Four of the six proposed catch basins in Buca Run will drain independently directly to the stream segments on-site which will significantly limit and reduce the impacts to the existing storm drain. The peak runoff rates of the drainage which flows to the existing culvert at Dedham Street does not increase for the 25 year storm and is significantly reduced for the two year and ten year storm events. This reduction is a direct result of a small portion of the developed site drainage which will be split from the site and discharge to the existing storm drain.

LAND USE CONSULTANTS INC
CALCULATIONS AND RESULTS

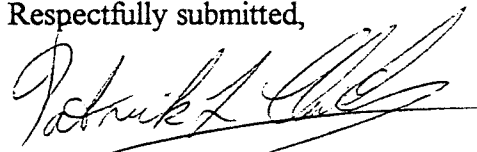
We used the SCS method for computing stormwater runoff peak flow rates. This method accounts for soil types, existing land use, topography, vegetative cover, and proposed land use for the site to be developed. We have evaluated the present and developed conditions for the site using data for a typical Type III, 24 hour storm distribution with a design frequency of occurrence of 2, 10 and 25 years. The calculations were performed using HydroCAD 4.0 software. Supporting data and calculations are included with this report.

The results of our calculations, as indicated in the summary table show that the existing peak flow rates from the site are 14.6 cfs, 31.4 cfs and 29.6 cfs for the 2 year, 10 year and 25 year storms respectively. Peak runoff rates for the two year and 10 year storm for the developed site are decreased to 12.9 cfs and 26.2 cfs. The peak rate for the 25 year storm remains unchanged at 29.6 cfs due to the fact that the existing culvert capacity is exceeded for present and developed conditions thus limiting flow to the maximum continuous culvert capacity of 29.6 cfs. As mentioned above the reductions are a result of the small portion of the developed site which will be intercepted by the storm drain.

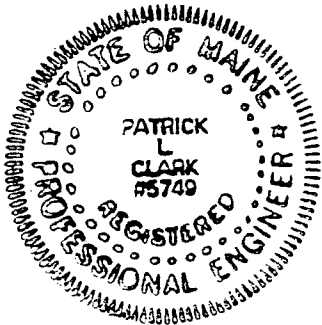
The existing storm drain and receiving runoff channels from the site in the vicinity of the property have adequate capacity for the developed site. However, this study recognizes that there is an existing capacity problem at the Riverside Street culvert downstream from the site. The existing culvert is significantly inadequate and known to produce flooding during excessive rainfall events. Slight changes in the discharge from the developed site would result in negligible impacts to the existing problem at Riverside Street. Remedies far beyond the limited range of this small subdivision to reduce impacts are required at this location.

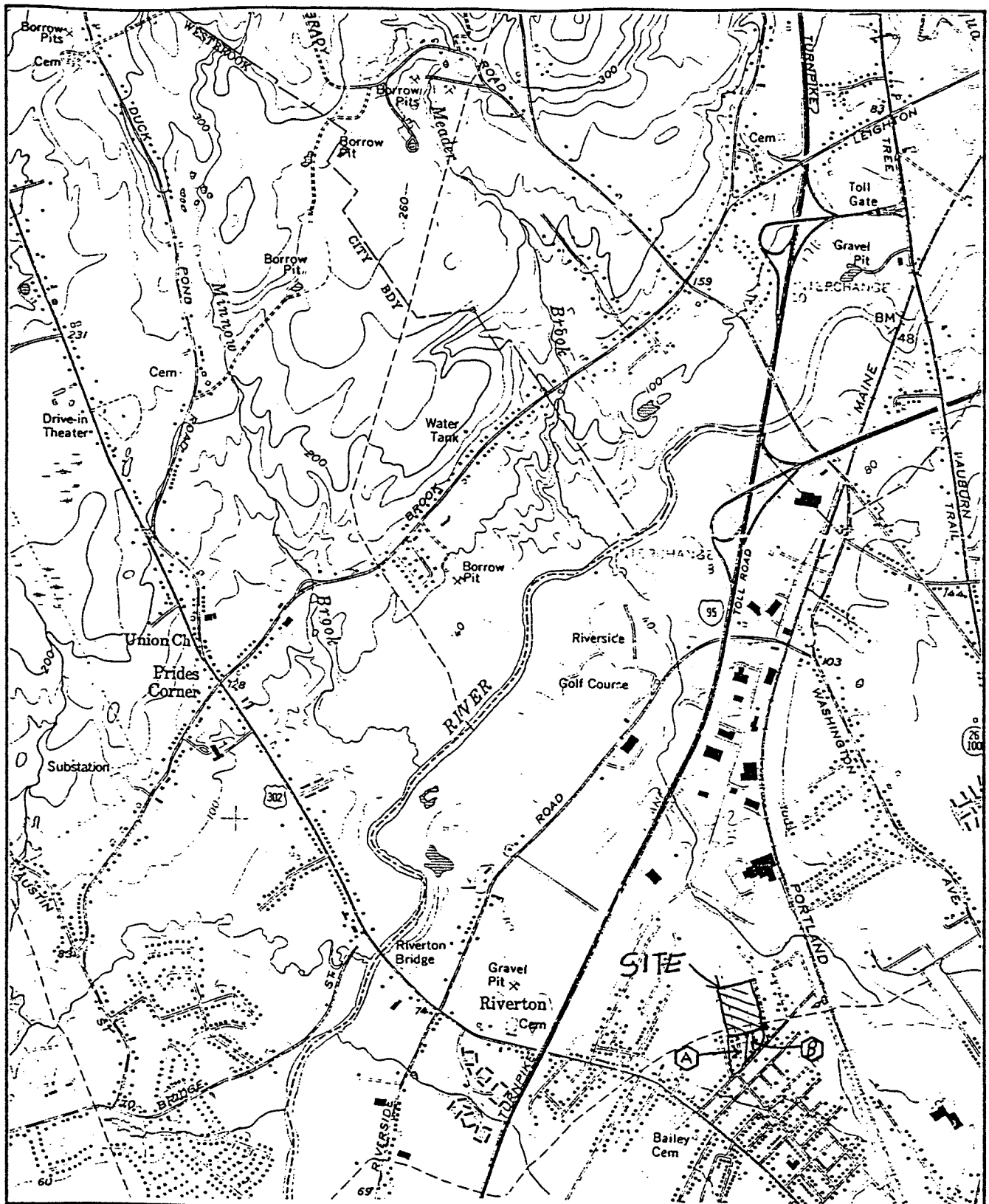
We feel that there will be no significant adverse impacts to the site or downstream reaches as a result of this project.

Respectfully submitted,



Patrick L. Clark, P.E.

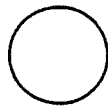




LAND USE CONSULTANTS, INC.

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 PORTLAND, MAINE 04103
 (207) 878-3313



▶ PREPARED FOR:
 Diversified Properties
 PO Box 10127
 Portland, ME

▶ TITLE: USGS Portland West
 Site Location

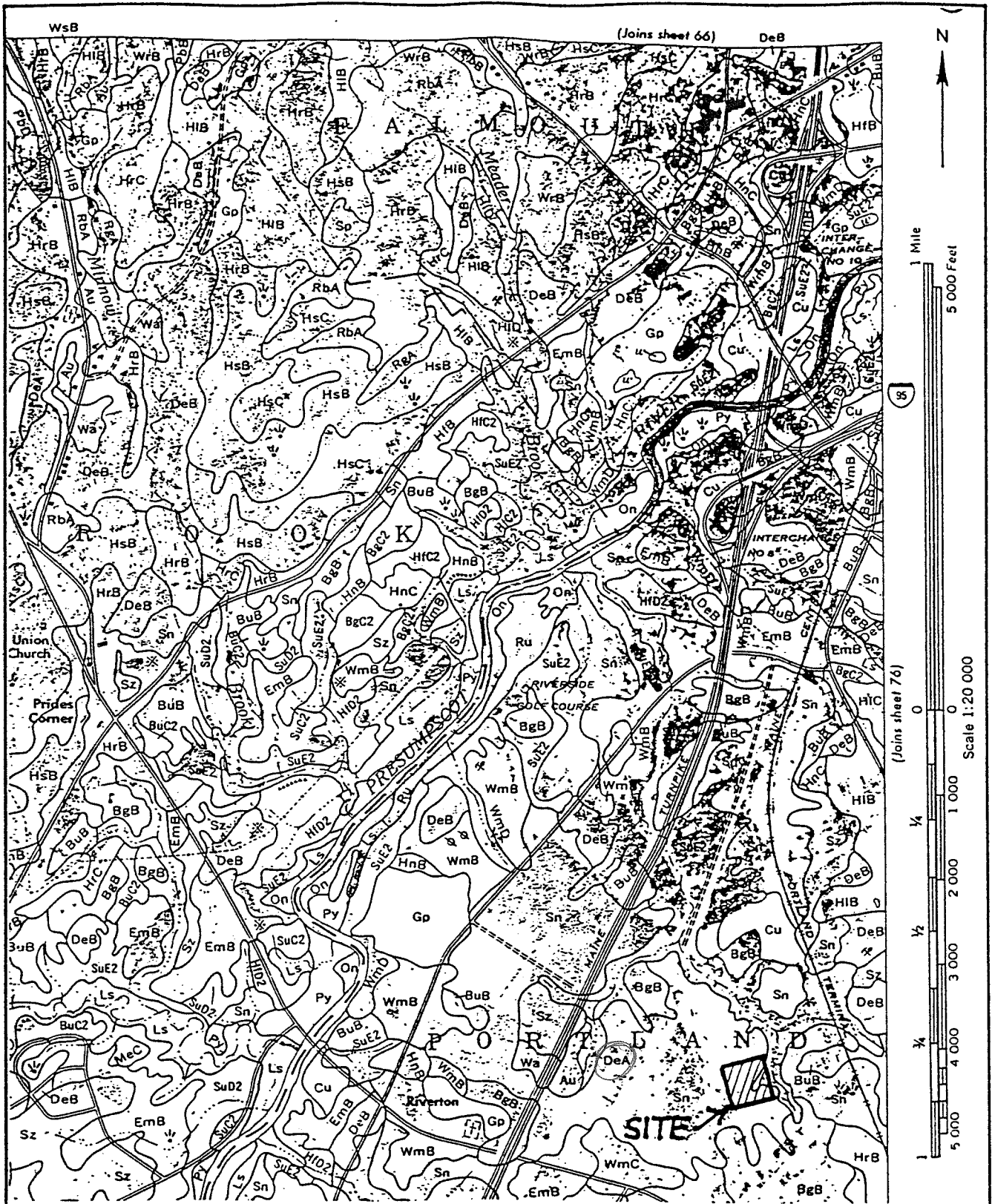
▶ SCALE: 1" = 2000' ±

▶ JOB #

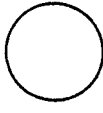
▶ FIGURE #

▶ DATE: 6/26/95

1851.1



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 PORTLAND, MAINE 04103
 (207) 878-3313



PREPARED FOR:
 Diversified Properties
 PO Box 10127
 Portland, Maine

TITLE:
 SCS Soils Map
 Woodfords Gardens

SCALE: Shown

JOB #

FIGURE #

DATE: 6/26/95

1851.1

Project Woodlands
 Job No. 1851.1
 Date 6/28/95

Computed By PLC
 Checked By _____
 Sheet _____ of _____



WATERSHED OFFSITE SUB-WATERSHED A (20) (Existing)

Curve Number

Soil name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/opened/impervious area ratio)	C _N			Area: Acres <input type="checkbox"/> mi ² <input type="checkbox"/> X	Product of C _N x area
		Table 2-2	Fig. 2-3	Fig. 2-4		
D	Residential (4ac)	87			2.50	
D	Woods/Grass	79			1.00	
Totals =					3.50	

Use only one C_N source per line.

C_N (weighted) = $\frac{\text{total product}}{\text{total area}}$ Use C_N =

2. Runoff

Frequency hr
 Rainfall, P (24-hour) in
 Runoff, Q (Use P and C_N with table 2-1, fig. 2-1, or eqs. 2-1 and 2-4.)

Storm #1	Storm #2	Storm #3

Time Of Concentration

Sheet flow (Applicable to T_c only) Segment ID: _____

- Surface description (table 3-1) Grass
- Manning's roughness coeff., n (table 3-1) 1.24
- Flow length, L (total L < 300 ft) 100 ft
- Two-year 24-hr rainfall, P₂ 3.0 in
- Land slope, s 0.02 ft/ft
- $T_c = \frac{0.007 (nL)^{0.5}}{P_2^{0.5} s^{0.5}}$ Compute T_c hr

Shallow concentrated flow Segment ID: _____

- Surface description (paved or unpaved) U
- Flow length, L 800 ft
- Watercourse slope, s 0.02 ft/ft
- Average velocity, V (figure 3-1) 2.3 ft/s
- $T_c = \frac{L}{3600 V}$ Compute T_c hr

Channel flow Segment ID: _____

- Cross-sectional flow area, A ft²
- Wetted perimeter, P_w ft
- Hydraulic radius, r = $\frac{A}{P_w}$ Compute r ft
- Channel slope, s ft/ft
- Manning's roughness coeff., n ft/s
- $V = 1.49 r^{2/3} / n$ Compute V ft/s
- Flow length, L ft
- $T_c = \frac{L}{3600 V}$ Compute T_c hr
- Use the largest of values T_c or T_c (add T_c in steps 6, 11, and 19)

WATERSHED OFFSITE SUB-WATERSHED B (30) (Existing)

Curve Number

Soil name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/opened/impervious area ratio)	C _N			Area: Acres <input type="checkbox"/> mi ² <input type="checkbox"/> X	Product of C _N x area
		Table 2-2	Fig. 2-3	Fig. 2-4		
D	Residential (4ac)	87			0.50	
D	Woods/Grass	79			2.50	
Totals =					3.00	

Use only one C_N source per line.

C_N (weighted) = $\frac{\text{total product}}{\text{total area}}$ Use C_N =

2. Runoff

Frequency hr
 Rainfall, P (24-hour) in
 Runoff, Q (Use P and C_N with table 2-1, fig. 2-1, or eqs. 2-1 and 2-4.)

Storm #1	Storm #2	Storm #3

Time Of Concentration

Sheet flow (Applicable to T_c only) Segment ID: _____

- Surface description (table 3-1) Grass
- Manning's roughness coeff., n (table 3-1) 1.24
- Flow length, L (total L < 300 ft) 100 ft
- Two-year 24-hr rainfall, P₂ 3.0 in
- Land slope, s 0.02 ft/ft
- $T_c = \frac{0.007 (nL)^{0.5}}{P_2^{0.5} s^{0.5}}$ Compute T_c hr

Shallow concentrated flow Segment ID: _____

- Surface description (paved or unpaved) U
- Flow length, L 600 ft
- Watercourse slope, s 0.02 ft/ft
- Average velocity, V (figure 3-1) 2.3 ft/s
- $T_c = \frac{L}{3600 V}$ Compute T_c hr

Channel flow Segment ID: _____

- Cross-sectional flow area, A ft²
- Wetted perimeter, P_w ft
- Hydraulic radius, r = $\frac{A}{P_w}$ Compute r ft
- Channel slope, s ft/ft
- Manning's roughness coeff., n ft/s
- $V = 1.49 r^{2/3} / n$ Compute V ft/s
- Flow length, L ft
- $T_c = \frac{L}{3600 V}$ Compute T_c hr
- Use the largest of values T_c or T_c (add T_c in steps 6, 11, and 19)

Project _____
 Job No. _____
 Date _____

Computed By _____
 Checked By _____
 Sheet _____ of _____



WATERSHED ONSITE SUB-WATERSHED 1 (Pre-Development)

Curve Number

Soil name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/connected impervious area ratio)	CN			Area (acres)	Product of CN x area
		Table 2-2	Fig. 2-3	Fig. 2-4		
D	Et. Residential (4ac)	87			1.15	
	WOODS	77			6.95	
Totals =					8.10	

Use only one CN source per line.

Totals = 8.10

Use (weighted) = $\frac{\text{total product}}{\text{total area}}$

Use CN = 77

2. Runoff

Frequency yr
 Rainfall, P (24-hour) in
 Runoff, Q in
 Use P and CN with table 2-1, fig. 2-1, or eqs. 2-3 and 2-4.

Storm #1	Storm #2	Storm #3

Time Of Concentration

Sheet flow (Applicable to T_c only) Segment ID

- Surface description (table 3-1)
- Manning's roughness coeff., n (table 3-1) ..
- Flow length, L (total L \leq 300 ft) ft
- Two-yr 24-hr rainfall, P_2 in
- Land slope, s ft/ft
- $T_c = \frac{0.007 (nL)^{0.8}}{P_2^{0.5} s^{0.4}}$ Compute T_c hr

Shallow concentrated flow Segment ID

- Surface description (paved or unpaved)
- Flow length, L ft
- Watercourse slope, s ft/ft
- Average velocity, V (figure 3-1) ft/s
- $T_c = \frac{L}{3600 V}$ Compute T_c hr

Channel flow Segment ID

- Cross sectional flow area, A ft²
- Wetted perimeter, P_w ft
- Hydraulic radius, $r = \frac{A}{P_w}$ Compute r ft
- Channel slope, s ft/ft
- Manning's roughness coeff., n
- $V = \frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V ft/s
- Flow length, L ft
- $T_c = \frac{L}{3600 V}$ Compute T_c hr
- Use the larger of T_c or T_c (add T_c in steps 6, 11, and 15) hr

WATERSHED ONSITE SUB-WATERSHED 2 (Pre-Development)

Curve Number

Soil name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/connected impervious area ratio)	CN			Area (acres)	Product of CN x area
		Table 2-2	Fig. 2-3	Fig. 2-4		
D	Woods	77			2.00	
Totals =					2.00	

Use only one CN source per line.

Totals = 2.00

Use (weighted) = $\frac{\text{total product}}{\text{total area}}$

Use CN = 77

2. Runoff

Frequency yr
 Rainfall, P (24-hour) in
 Runoff, Q in
 Use P and CN with table 2-1, fig. 2-1, or eqs. 2-3 and 2-4.

Storm #1	Storm #2	Storm #3

Time Of Concentration

Sheet flow (Applicable to T_c only) Segment ID

- Surface description (table 3-1)
- Manning's roughness coeff., n (table 3-1) ..
- Flow length, L (total L \leq 300 ft) ft
- Two-yr 24-hr rainfall, P_2 in
- Land slope, s ft/ft
- $T_c = \frac{0.007 (nL)^{0.8}}{P_2^{0.5} s^{0.4}}$ Compute T_c hr

Shallow concentrated flow Segment ID

- Surface description (paved or unpaved)
- Flow length, L ft
- Watercourse slope, s ft/ft
- Average velocity, V (figure 3-1) ft/s
- $T_c = \frac{L}{3600 V}$ Compute T_c hr

Channel flow Segment ID

- Cross sectional flow area, A ft²
- Wetted perimeter, P_w ft
- Hydraulic radius, $r = \frac{A}{P_w}$ Compute r ft
- Channel slope, s ft/ft
- Manning's roughness coeff., n
- $V = \frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V ft/s
- Flow length, L ft
- $T_c = \frac{L}{3600 V}$ Compute T_c hr
- Use the larger of T_c or T_c (add T_c in steps 6, 11, and 15) hr

Data for WOODFORDS GARDENS-PRE DEVELOPMENT-25 YEAR STORM

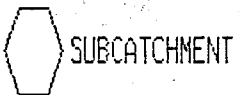
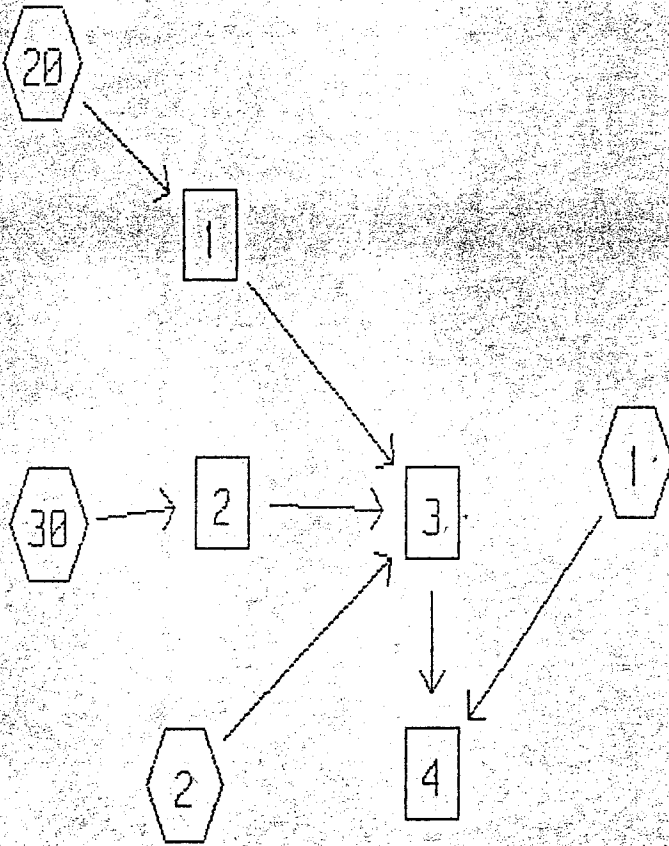
TYPE III 24-HOUR RAINFALL= 5.5 IN

Prepared by Land Use Consultants, Inc.

28 Jun 95

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WATERSHED ROUTING =====



SUBCATCHMENT



REACH



POND



LINK

SUBCATCHMENT 1 PRE-DEVELOPED SITE

PEAK= 6.2 CFS @ 12.34 HRS, VOLUME= .69 AF

ACRES	CN
1.15	87
6.95	77
8.10	78

RESID. (.25 AC), TYPE D
 WOODS, TYPE D

SCS TR-20 METHOD
 TYPE III 24-HOUR
 RAINFALL= 3.0 IN
 SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	Segment ID:1	22.2
Woods: Light underbrush	n=.4 L=100' P2=3 in s=.02 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:2	.2
Woodland	Kv=5 L=30' s=.167 '/' V=2.04 fps	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:3	3.6
Unpaved	Kv=16.1345 L=550' s=.025 '/' V=2.55 fps	
Total Length= 680 ft		Total Tc= 26.0

SUBCATCHMENT 2 PRE-DEVELOPED SITE

PEAK= 1.6 CFS @ 12.24 HRS, VOLUME= .16 AF

ACRES	CN
2.00	77

WOODS, TYPE D

SCS TR-20 METHOD
 TYPE III 24-HOUR
 RAINFALL= 3.0 IN
 SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	Segment ID:1	16.8
Woods: Light underbrush	n=.4 L=100' P2=3 in s=.04 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:2	.5
Woodland	Kv=5 L=50' s=.1 '/' V=1.58 fps	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:3	1.8
Unpaved	Kv=16.1345 L=350' s=.04 '/' V=3.23 fps	
Total Length= 500 ft		Total Tc= 19.1

SUBCATCHMENT 20 OFFSITE SUBWATERSHED A PRESENT & DEVELOPED

PEAK= 4.3 CFS @ 12.24 HRS, VOLUME= .43 AF

ACRES	CN
2.50	87
1.00	79
3.50	85

RESID. (.25 AC), TYPE D
 WOODS\GRASS COMBINATION

SCS TR-20 METHOD
 TYPE III 24-HOUR
 RAINFALL= 3.0 IN
 SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	Segment ID:1	14.7
Grass: Dense	n=.24 L=100' P2=3 in s=.02 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:2	5.8
Unpaved	Kv=16.1345 L=800' s=.02 '/' V=2.28 fps	
Total Length= 900 ft		Total Tc= 20.5

TYPE III 24-HOUR RAINFALL= 3.0 IN

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SUBCATCHMENT 30

OFFSITE SUBWATERSHED B-PRESENT & DEVELOPED

PEAK= 2.9 CFS @ 12.23 HRS, VOLUME= .29 AF

ACRES	CN
.50	87
2.50	79
3.00	80

RESID. (.25 AC), TYPE D
WOODS\GRASS COMBINATION, TYPE D

SCS TR-20 METHOD
TYPE III 24-HOUR
RAINFALL= 3.0 IN
SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	Segment ID:1	14.7
Grass: Dense	n=.24 L=100' P2=3 in s=.02 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:2	4.4
Unpaved	Kv=16.1345 L=600' s=.02 '/' V=2.28 fps	
Total Length= 700 ft		Total Tc= 19.1

TYPE III 24-HOUR RAINFALL= 3.0 IN

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REACH 1

STREAM SEGMENT 1

Q_{in} = 4.3 CFS @ 12.24 HRS, VOLUME= .43 AF
 Q_{out} = 4.1 CFS @ 12.32 HRS, VOLUME= .42 AF, ATTEN= 4%, LAG= 4.6 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	2' x 1' CHANNEL	STOR-IND+TRANS METHOD
0.0	0.0	0.0	SIDE SLOPE= .2 '/'	PEAK DEPTH= .39 FT
.1	.3	.3	n= .035	PEAK VELOCITY= 2.7 FPS
.2	.6	1.1	LENGTH= 360 FT	TRAVEL TIME = 2.2 MIN
.3	1.1	2.5	SLOPE= .025 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
.4	1.8	5.1		
.6	3.0	10.4		
.8	4.8	19.5		
1.0	7.0	32.5		

REACH 2

STREAM SEGMENT 2

Q_{in} = 2.9 CFS @ 12.23 HRS, VOLUME= .29 AF
 Q_{out} = 2.8 CFS @ 12.31 HRS, VOLUME= .29 AF, ATTEN= 4%, LAG= 4.5 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	3' x 1' CHANNEL	STOR-IND+TRANS METHOD
0.0	0.0	0.0	SIDE SLOPE= .2 '/'	PEAK DEPTH= .24 FT
.1	.4	.6	n= .035	PEAK VELOCITY= 2.8 FPS
.2	.8	2.0	LENGTH= 350 FT	TRAVEL TIME = 2.1 MIN
.3	1.4	4.2	SLOPE= .04 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
.4	2.2	8.4		
.6	3.6	16.5		
.8	5.6	30.0		
1.0	8.0	48.7		

REACH 3

STREAM SEGMENT 3

Q_{in} = 8.5 CFS @ 12.30 HRS, VOLUME= .87 AF
 Q_{out} = 8.4 CFS @ 12.33 HRS, VOLUME= .87 AF, ATTEN= 1%, LAG= 1.5 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	2' x 1' CHANNEL	STOR-IND+TRANS METHOD
0.0	0.0	0.0	SIDE SLOPE= .2 '/'	PEAK DEPTH= .54 FT
.1	.3	.3	n= .035	PEAK VELOCITY= 3.3 FPS
.2	.6	1.1	LENGTH= 180 FT	TRAVEL TIME = .9 MIN
.3	1.1	2.5	SLOPE= .025 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
.4	1.8	5.1		
.6	3.0	10.4		
.8	4.8	19.5		
1.0	7.0	32.5		

TYPE III 24-HOUR RAINFALL= 3.0 IN

Prepared by Land Use Consultants, Inc.

28 Jun 95

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REACH 4

EXISTING 24" COR. PLASTIC PIPE AT DEDHAM

Q_{in} = 14.6 CFS @ 12.33 HRS, VOLUME= 1.57 AFQ_{out} = 14.6 CFS @ 12.33 HRS, VOLUME= 1.57 AF, ATTEN= 0%, LAG= .1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	24" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.0		PEAK DEPTH= .97 FT
.2	.2	.6	n= .02	PEAK VELOCITY= 9.6 FPS
.4	.4	2.6	LENGTH= 45 FT	TRAVEL TIME = .1 MIN
.6	.8	5.8	SLOPE= .0404 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.4	2.3	24.7		
1.6	2.7	28.9		
1.8	3.0	31.5		
1.9	3.1	31.8		
1.9	3.1	31.5		
2.0	3.1	29.6		

SUBCATCHMENT 1 PRE-DEVELOPED SITE

PEAK= 14.0 CFS @ 12.32 HRS, VOLUME= 1.52 AF

ACRES	CN
1.15	87
6.95	77
8.10	78

RESID. (.25 AC), TYPE D
 WOODS, TYPE D

SCS TR-20 METHOD
 TYPE III 24-HOUR
 RAINFALL= 4.7 IN
 SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	Segment ID:1	22.2
Woods: Light underbrush	n=.4 L=100' P2=3 in s=.02 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:2	.2
Woodland	Kv=5 L=30' s=.167 '/' V=2.04 fps	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:3	3.6
Unpaved	Kv=16.1345 L=550' s=.025 '/' V=2.55 fps	
Total Length= 680 ft		Total Tc= 26.0

SUBCATCHMENT 2 PRE-DEVELOPED SITE

PEAK= 3.8 CFS @ 12.23 HRS, VOLUME= .36 AF

ACRES	CN
2.00	77

WOODS, TYPE D

SCS TR-20 METHOD
 TYPE III 24-HOUR
 RAINFALL= 4.7 IN
 SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	Segment ID:1	16.8
Woods: Light underbrush	n=.4 L=100' P2=3 in s=.04 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:2	.5
Woodland	Kv=5 L=50' s=.1 '/' V=1.58 fps	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:3	1.8
Unpaved	Kv=16.1345 L=350' s=.04 '/' V=3.23 fps	
Total Length= 500 ft		Total Tc= 19.1

SUBCATCHMENT 20 OFFSITE SUBWATERSHED A PRESENT & DEVELOPED

PEAK= 8.4 CFS @ 12.23 HRS, VOLUME= .82 AF

ACRES	CN
2.50	87
1.00	79
3.50	85

RESID. (.25 AC), TYPE D
 WOODS\GRASS COMBINATION

SCS TR-20 METHOD
 TYPE III 24-HOUR
 RAINFALL= 4.7 IN
 SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	Segment ID:1	14.7
Grass: Dense	n=.24 L=100' P2=3 in s=.02 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:2	5.8
Unpaved	Kv=16.1345 L=800' s=.02 '/' V=2.28 fps	
Total Length= 900 ft		Total Tc= 20.5

TYPE III 24-HOUR RAINFALL= 4.7 IN

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SUBCATCHMENT 30

OFFSITE SUBWATERSHED B-PRESENT & DEVELOPED

PEAK= 6.3 CFS @ 12.22 HRS, VOLUME= .60 AF

ACRES	CN
.50	87
2.50	79
3.00	80

RESID. (.25 AC), TYPE D
WOODS\GRASS COMBINATION, TYPE D

SCS TR-20 METHOD
TYPE III 24-HOUR
RAINFALL= 4.7 IN
SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	Segment ID:1	14.7
Grass: Dense n=.24 L=100'	P2=3 in s=.02 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:2	4.4
Unpaved Kv=16.1345 L=600'	s=.02 '/' V=2.28 fps	
Total Length= 700 ft		Total Tc= 19.1

TYPE III 24-HOUR RAINFALL= 4.7 IN

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REACH 1

STREAM SEGMENT 1

Q_{in} = 8.4 CFS @ 12.23 HRS, VOLUME= .82 AF
 Q_{out} = 8.0 CFS @ 12.30 HRS, VOLUME= .81 AF, ATTEN= 4%, LAG= 3.9 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)		STOR-IND+TRANS METHOD
0.0	0.0	0.0	2' x 1' CHANNEL	PEAK DEPTH= .53 FT
.1	.3	.3	SIDE SLOPE= .2 '/'	PEAK VELOCITY= 3.3 FPS
.2	.6	1.1	n= .035	TRAVEL TIME = 1.8 MIN
.3	1.1	2.5	LENGTH= 360 FT	SPAN= 10-20 HRS, dt=.1 HRS
.4	1.8	5.1	SLOPE= .025 FT/FT	
.6	3.0	10.4		
.8	4.8	19.5		
1.0	7.0	32.5		

REACH 2

STREAM SEGMENT 2

Q_{in} = 6.3 CFS @ 12.22 HRS, VOLUME= .60 AF
 Q_{out} = 6.0 CFS @ 12.28 HRS, VOLUME= .60 AF, ATTEN= 4%, LAG= 3.5 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)		STOR-IND+TRANS METHOD
0.0	0.0	0.0	3' x 1' CHANNEL	PEAK DEPTH= .36 FT
.1	.4	.6	SIDE SLOPE= .2 '/'	PEAK VELOCITY= 3.5 FPS
.2	.8	2.0	n= .035	TRAVEL TIME = 1.7 MIN
.3	1.4	4.2	LENGTH= 350 FT	SPAN= 10-20 HRS, dt=.1 HRS
.4	2.2	8.4	SLOPE= .04 FT/FT	
.6	3.6	16.5		
.8	5.6	30.0		
1.0	8.0	48.7		

REACH 3

STREAM SEGMENT 3

Q_{in} = 17.6 CFS @ 12.28 HRS, VOLUME= 1.78 AF
 Q_{out} = 17.5 CFS @ 12.30 HRS, VOLUME= 1.78 AF, ATTEN= 1%, LAG= 1.4 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)		STOR-IND+TRANS METHOD
0.0	0.0	0.0	2' x 1' CHANNEL	PEAK DEPTH= .76 FT
.1	.3	.3	SIDE SLOPE= .2 '/'	PEAK VELOCITY= 4.0 FPS
.2	.6	1.1	n= .035	TRAVEL TIME = .8 MIN
.3	1.1	2.5	LENGTH= 180 FT	SPAN= 10-20 HRS, dt=.1 HRS
.4	1.8	5.1	SLOPE= .025 FT/FT	
.6	3.0	10.4		
.8	4.8	19.5		
1.0	7.0	32.5		

TYPE III 24-HOUR RAINFALL= 4.7 IN

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REACH 4

EXISTING 24" COR. PLASTIC PIPE AT DEDHAM

Qin = 31.4 CFS @ 12.31 HRS, VOLUME= 3.30 AF
 Qout= 31.4 CFS @ 12.31 HRS, VOLUME= 3.30 AF, ATTEN= 0%, LAG= .1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	24" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.0		PEAK DEPTH= 1.79 FT
.2	.2	.6	n= .02	PEAK VELOCITY= 10.7 FPS
.4	.4	2.6	LENGTH= 45 FT	TRAVEL TIME = .1 MIN
.6	.8	5.8	SLOPE= .0404 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.4	2.3	24.7		
1.6	2.7	28.9		
1.8	3.0	31.5		
1.9	3.1	31.8		
1.9	3.1	31.5		
2.0	3.1	29.6		

Data for WOODFORDS GARDENS-PRE DEVELOPMENT-25 YEAR STORM
 TYPE III 24-HOUR RAINFALL= 5.5 IN

Prepared by Land Use Consultants, Inc.

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SUBCATCHMENT 1 PRE-DEVELOPED SITE

PEAK= 17.9 CFS @ 12.32 HRS, VOLUME= 1.94 AF

ACRES	CN	
1.15	87	RESID. (.25 AC), TYPE D
6.95	77	WOODS, TYPE D
8.10	78	

SCS TR-20 METHOD
 TYPE III 24-HOUR
 RAINFALL= 5.5 IN
 SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	Segment ID:1	22.2
Woods: Light underbrush	n=.4 L=100' P2=3 in s=.02 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:2	.2
Woodland	Kv=5 L=30' s=.167 '/' V=2.04 fps	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:3	3.6
Unpaved	Kv=16.1345 L=550' s=.025 '/' V=2.55 fps	
Total Length= 680 ft		Total Tc= 26.0

SUBCATCHMENT 2 PRE-DEVELOPED SITE

PEAK= 4.9 CFS @ 12.22 HRS, VOLUME= .47 AF

ACRES	CN	
2.00	77	WOODS, TYPE D

SCS TR-20 METHOD
 TYPE III 24-HOUR
 RAINFALL= 5.5 IN
 SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	Segment ID:1	16.8
Woods: Light underbrush	n=.4 L=100' P2=3 in s=.04 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:2	.5
Woodland	Kv=5 L=50' s=.1 '/' V=1.58 fps	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:3	1.8
Unpaved	Kv=16.1345 L=350' s=.04 '/' V=3.23 fps	
Total Length= 500 ft		Total Tc= 19.1

SUBCATCHMENT 20 OFFSITE SUBWATERSHED A PRESENT & DEVELOPED

PEAK= 10.3 CFS @ 12.23 HRS, VOLUME= 1.00 AF

ACRES	CN	
2.50	87	RESID. (.25 AC), TYPE D
1.00	79	WOODS\GRASS COMBINATION
3.50	85	

SCS TR-20 METHOD
 TYPE III 24-HOUR
 RAINFALL= 5.5 IN
 SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	Segment ID:1	14.7
Grass: Dense	n=.24 L=100' P2=3 in s=.02 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:2	5.8
Unpaved	Kv=16.1345 L=800' s=.02 '/' V=2.28 fps	

Data for WOODFORDS GARDENS-PRE DEVELOPMENT-25 YEAR STORM
 TYPE III 24-HOUR RAINFALL= 5.5 IN

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SUBCATCHMENT 30

OFFSITE SUBWATERSHED B-PRESENT & DEVELOPED

PEAK= 8.0 CFS @ 12.22 HRS, VOLUME= .76 AF

ACRES	CN	
.50	87	RESID. (.25 AC), TYPE D
2.50	79	WOODS\GRASS COMBINATION, TYPE D
3.00	80	

SCS TR-20 METHOD
 TYPE III 24-HOUR
 RAINFALL= 5.5 IN
 SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	Segment ID:1	14.7
Grass: Dense n=.24 L=100' P2=3 in s=.02 '/'		
SHALLOW CONCENTRATED/UPLAND FLOW	Segment ID:2	4.4
Unpaved Kv=16.1345 L=600' s=.02 '/' V=2.28 fps		

Total Length= 700 ft Total Tc= 19.1

Data for WOODFORDS GARDENS-PRE DEVELOPMENT-25 YEAR STORM

TYPE III 24-HOUR RAINFALL= 5.5 IN

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REACH 1 STREAM SEGMENT 1

Qin = 10.3 CFS @ 12.23 HRS, VOLUME= 1.00 AF
 Qout = 9.9 CFS @ 12.29 HRS, VOLUME= 1.00 AF, ATTEN= 4%, LAG= 3.8 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	2' x 1' CHANNEL SIDE SLOPE= .2 '/' n= .035 LENGTH= 360 FT SLOPE= .025 FT/FT	STOR-IND+TRANS METHOD PEAK DEPTH= .59 FT PEAK VELOCITY= 3.4 FPS TRAVEL TIME = 1.7 MIN SPAN= 10-20 HRS, dt=.1 HRS
0.0	0.0	0.0		
.1	.3	.3		
.2	.6	1.1		
.3	1.1	2.5		
.4	1.8	5.1		
.6	3.0	10.4		
.8	4.8	19.5		
1.0	7.0	32.5		

REACH 2 STREAM SEGMENT 2

Qin = 8.0 CFS @ 12.22 HRS, VOLUME= .76 AF
 Qout = 7.6 CFS @ 12.27 HRS, VOLUME= .76 AF, ATTEN= 4%, LAG= 3.3 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	3' x 1' CHANNEL SIDE SLOPE= .2 '/' n= .035 LENGTH= 350 FT SLOPE= .04 FT/FT	STOR-IND+TRANS METHOD PEAK DEPTH= .41 FT PEAK VELOCITY= 3.7 FPS TRAVEL TIME = 1.6 MIN SPAN= 10-20 HRS, dt=.1 HRS
0.0	0.0	0.0		
.1	.4	.6		
.2	.8	2.0		
.3	1.4	4.2		
.4	2.2	8.4		
.6	3.6	16.5		
.8	5.6	30.0		
1.0	8.0	48.7		

REACH 3 STREAM SEGMENT 3

Qin = 22.1 CFS @ 12.27 HRS, VOLUME= 2.23 AF
 Qout = 22.0 CFS @ 12.30 HRS, VOLUME= 2.22 AF, ATTEN= 1%, LAG= 1.4 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	2' x 1' CHANNEL SIDE SLOPE= .2 '/' n= .035 LENGTH= 180 FT SLOPE= .025 FT/FT	STOR-IND+TRANS METHOD PEAK DEPTH= .84 FT PEAK VELOCITY= 4.2 FPS TRAVEL TIME = .7 MIN SPAN= 10-20 HRS, dt=.1 HRS
0.0	0.0	0.0		
.1	.3	.3		
.2	.6	1.1		
.3	1.1	2.5		
.4	1.8	5.1		
.6	3.0	10.4		
.8	4.8	19.5		
1.0	7.0	32.5		

Data for WOODFORDS GARDENS-PRE DEVELOPMENT-25 YEAR STORM
TYPE III 24-HOUR RAINFALL= 5.5 IN

Prepared by Land Use Consultants, Inc.

28 Jun 95

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REACH 4

EXISTING 24" COR. PLASTIC PIPE AT DEDHAM

Qin = 39.8 CFS @ 12.30 HRS, VOLUME= 4.16 AF
Qout = 29.6 CFS @ 12.30 HRS, VOLUME= 4.16 AF, ATTEN= 26%, LAG= 0.0 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	24" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.0		PEAK DEPTH= 2.00 FT
.2	.2	.6	n= .02	PEAK VELOCITY= 10.6 FPS
.4	.4	2.6	LENGTH= 45 FT	TRAVEL TIME = .1 MIN
.6	.8	5.8	SLOPE= .0404 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.4	2.3	24.7		
1.6	2.7	28.9		
1.8	3.0	31.5		
1.9	3.1	31.8		
1.9	3.1	31.5		
2.0	3.1	29.6		

Project Woodford
 Job No. 1851.1
 Date 6/28/95

Computed By PLC
 Checked By _____
 Sheet _____ of _____



WATERSHED OFFSITE SUB-WATERSHED A (20) (Existing)

Curve Number

Soil name and hydrologic group (Appendix A)	Cover description (Cover type, treatment, and hydrologic condition; percent impervious; unconsolidated/consolidated; impervious area ratio)	C.N.			Area	Product of C.N. x area
		Table 3-1	Fig. 3-1	Fig. 3-1		
D	Residential (4ac)	87			2.50	
D	Woods/Grass	79			1.00	
		Totals =			3.50	

Use only one C.N. source per line.
 C.N. (weighted) = $\frac{\text{local product}}{\text{total area}}$ Use C.N. =

Runoff

Storm #1	Storm #2	Storm #3

Frequency hr
 Rainfall, P (24-hour) in
 Runoff, Q in
 (Use P and Q with table 2-1, Fig. 2-1, or eqs. 2-1 and 2-4.)

Time Of Concentration

Sheet flow (Applicable to T_c only) Segment ID: _____

- Surface description (table 3-1) Grass
- Nanning's roughness coeff., n (table 3-1)24
- Flow length, L (total L < 300 ft) 100 ft
- Two-hr rainfall, P₂ 3.0 in
- Land slope, s 0.02 ft/ft
- T_c = $\frac{0.007(nL)^{0.5}}{P_2^{0.4}}$ Compute T_c hr

Shallow concentrated flow Segment ID: _____

- Surface description (paved or unpaved) U
- Flow length, L 900 ft
- Minimum slope, s 0.02 ft/ft
- Average velocity, V (Figure 3-1) 2.3 ft/s
- T_c = $\frac{L}{3600 V}$ Compute T_c hr

Channel flow Segment ID: _____

- Cross-sectional flow area, A ft²
- Wetted perimeter, P_w ft
- Hydraulic radius, r = $\frac{A}{P_w}$ Compute r ft
- Channel slope, s ft/ft
- Nanning's roughness coeff., n (table 3-1) 0.02
- V = $\frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V ft/s
- Flow length, L ft
- T_c = $\frac{L}{3600 V}$ Compute T_c hr
- Use the larger of values for T_c or T_c (and T_c in steps 6, 11, and 13) hr

WATERSHED OFFSITE SUB-WATERSHED B (30) (Existing)

Curve Number

Soil name and hydrologic group (Appendix A)	Cover description (Cover type, treatment, and hydrologic condition; percent impervious; unconsolidated/consolidated; impervious area ratio)	C.N.			Area	Product of C.N. x area
		Table 3-1	Fig. 3-1	Fig. 3-1		
D	Residential (4ac)	87			0.50	
D	Woods/Grass	79			2.50	
		Totals =			3.00	

Use only one C.N. source per line.
 C.N. (weighted) = $\frac{\text{local product}}{\text{total area}}$ Use C.N. =

Runoff

Storm #1	Storm #2	Storm #3

Frequency hr
 Rainfall, P (24-hour) in
 Runoff, Q in
 (Use P and Q with table 2-1, Fig. 2-1, or eqs. 2-1 and 2-4.)

Time Of Concentration

Sheet flow (Applicable to T_c only) Segment ID: _____

- Surface description (table 3-1) Grass
- Nanning's roughness coeff., n (table 3-1)24
- Flow length, L (total L < 300 ft) 100 ft
- Two-hr rainfall, P₂ 3.0 in
- Land slope, s 0.02 ft/ft
- T_c = $\frac{0.007(nL)^{0.5}}{P_2^{0.4}}$ Compute T_c hr

Shallow concentrated flow Segment ID: _____

- Surface description (paved or unpaved) U
- Flow length, L 600 ft
- Minimum slope, s 0.02 ft/ft
- Average velocity, V (Figure 3-1) 2.3 ft/s
- T_c = $\frac{L}{3600 V}$ Compute T_c hr

Channel flow Segment ID: _____

- Cross-sectional flow area, A ft²
- Wetted perimeter, P_w ft
- Hydraulic radius, r = $\frac{A}{P_w}$ Compute r ft
- Channel slope, s ft/ft
- Nanning's roughness coeff., n (table 3-1) 0.02
- V = $\frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V ft/s
- Flow length, L ft
- T_c = $\frac{L}{3600 V}$ Compute T_c hr
- Use the larger of values for T_c or T_c (and T_c in steps 6, 11, and 13) hr

Project _____
 Job No. _____
 Date _____

Computed By _____
 Checked By _____
 Sheet _____ of _____



WATERSHED ONSITE SUB-WATERSHED 1 Post-Development

Curve Number

Soil name and hydrologic group (Appendix A)	Cover description (cover type, treatment, and hydrologic condition percent impervious unconnected/connected impervious area ratio)	C _i U			Area	Product of C _i x Area
		Table 3-1	Fig. 3-1	Fig. 3-1		
D	Residential (40%)	87			3.39	

U: Use only one C_i source per line.

Details =

C_i (weighted) = $\frac{\text{total product}}{\text{total area}}$

Use C_i = 87

2. Runoff

Storm #1	Storm #2	Storm #3

Frequency: _____ yr

Rainfall, P (24-hour): _____ in

Runoff, Q (100 P and Q use table 2-1, fig. 2-1, or eqs. 2-1 and 2-2.)

Time Of Concentration

Sheet flow (Applicable to T_c only) Segment ID:

- Surface description (table 3-1)
- Manning's roughness coeff., n (table 3-1)
- Flow length, L (total L < 300 ft) ft: 80
- 24-hr rainfall, P₂₄ in: 0.25
- Land slope, s ft/ft
- $T_c = \frac{0.007 (nL)^{0.5}}{P^{0.48}}$ Compute T_c hr

Shallow concentrated flow Segment ID:

- Surface description (paved or unpaved)
- Flow length, L ft: 400
- Maximum slope, s ft/ft
- Average velocity, V (Figure 3-4) ft/s
- $T_c = \frac{L}{3600 V}$ Compute T_c hr

Channel flow Segment ID:

- Cross-sectional flow area, a ft²
- Wetted perimeter, P_w ft
- Hydraulic radius, r = $\frac{a}{P_w}$ Compute r ft
- Channel slope, s ft/ft
- Manning's roughness coeff., n
- $V = \frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V ft/s
- Flow length, L ft
- $T_c = \frac{L}{3600 V}$ Compute T_c hr
- Method of choice: T_c or T_c (and T_c in steps 6, 11, and 19)

WATERSHED ONSITE SUB-WATERSHED 2 Post-Development

Curve Number

Soil name and hydrologic group (Appendix A)	Cover description (cover type, treatment, and hydrologic condition percent impervious unconnected/connected impervious area ratio)	C _i U			Area	Product of C _i x Area
		Table 3-1	Fig. 3-1	Fig. 3-1		
D	Residential (40%)	87			1.1	

U: Use only one C_i source per line.

Details =

C_i (weighted) = $\frac{\text{total product}}{\text{total area}}$

Use C_i = 87

2. Runoff

Storm #1	Storm #2	Storm #3

Frequency: _____ yr

Rainfall, P (24-hour): _____ in

Runoff, Q (100 P and Q use table 2-1, fig. 2-1, or eqs. 2-1 and 2-2.)

Time Of Concentration

Sheet flow (Applicable to T_c only) Segment ID:

- Surface description (table 3-1)
- Manning's roughness coeff., n (table 3-1)
- Flow length, L (total L < 300 ft) ft
- 24-hr rainfall, P₂₄ in
- Land slope, s ft/ft
- $T_c = \frac{0.007 (nL)^{0.5}}{P^{0.48}}$ Compute T_c hr

Shallow concentrated flow Segment ID:

- Surface description (paved or unpaved)
- Flow length, L ft
- Maximum slope, s ft/ft
- Average velocity, V (Figure 3-4) ft/s
- $T_c = \frac{L}{3600 V}$ Compute T_c hr

Channel flow Segment ID:

- Cross-sectional flow area, a ft²
- Wetted perimeter, P_w ft
- Hydraulic radius, r = $\frac{a}{P_w}$ Compute r ft
- Channel slope, s ft/ft
- Manning's roughness coeff., n
- $V = \frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V ft/s
- Flow length, L ft
- $T_c = \frac{L}{3600 V}$ Compute T_c hr
- Method of choice: T_c or T_c (and T_c in steps 6, 11, and 19)

(assume t_c = 6 min)

Project _____
 Job No. _____
 Date _____

Computed By _____
 Checked By _____
 Sheet _____ of _____



WATERSHED ONSITE SUB-WATERSHED 3 Post Development

Curve Number

Time Of Concentration

Soil name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/opened/curbs; impervious area ratio)	C _i or C _u			Area	Product of C _i x area
		Table 3-1	Fig. 3-2	Fig. 3-4		
D	Residential (1/4 ac)	87			0.43	

1/ Use only one C_i source per line. Totals = _____
 C_i (weighted) = $\frac{\text{total product}}{\text{total area}}$ = _____ Use C_i = **87**

2. Runoff

Frequency	IT
Rainfall, P (24-hour)	in
Runoff, Q	in

Use P and C_i with table 2-1, fig. 2-1, or fig. 2-3 and 2-4.

Sheet flow (Applicable to T_c only) Segment ID: _____

- Surface description (table 3-1) _____
- Manning's roughness coeff., n (table 3-1) _____
- Flow length, L (total L < 300 ft) _____ ft
- Twenty 24-hr rainfall, P₂ _____ in
- Land slope, s _____ ft/ft
- $T_c = \frac{0.007 (nL)^{0.58}}{P_2^{0.46}}$ Compute T_c _____ hr

Shallow concentrated flow Segment ID: _____

- Surface description (paved or unpaved) _____
- Flow length, L _____ ft
- Maximum slope, s _____ ft/ft
- Average velocity, V (figure 3-4) _____ ft/s
- $T_c = \frac{L}{3600 V}$ Compute T_c _____ hr

Channel flow Segment ID: _____

- Cross-sectional flow area, A _____ ft²
- Wetted perimeter, P_w _____ ft
- Hydraulic radius, r = $\frac{A}{P_w}$ Compute r _____ ft
- Channel slope, s _____ ft/ft
- Manning's roughness coeff., n _____
- $V = \frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V _____ ft/s
- Flow length, L _____ ft
- $T_c = \frac{L}{3600 V}$ Compute T_c _____ hr
- Use the larger of values T_c or T_c from 6, 11, and 19.

(assume t_c = 6 min.)

WATERSHED ONSITE SUB-WATERSHED 4 Post Development

Curve Number

Time Of Concentration

Soil name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/opened/curbs; impervious area ratio)	C _i or C _u			Area	Product of C _i x area
		Table 3-1	Fig. 3-2	Fig. 3-4		
D	Lawn	80			1.58	126.40
D	Woods/Brush	77			1.40	107.80
-	Impervious	98			0.37	36.26

1/ Use only one C_i source per line. Totals = **3.35** **270.46**
 C_i (weighted) = $\frac{\text{total product}}{\text{total area}}$ = **80.73** Use C_i = **81**

2. Runoff

Frequency	IT
Rainfall, P (24-hour)	in
Runoff, Q	in

Use P and C_i with table 2-1, fig. 2-1, or fig. 2-3 and 2-4.

Sheet flow (Applicable to T_c only) Segment ID: **1**

- Surface description (table 3-1) _____
- Manning's roughness coeff., n (table 3-1) _____
- Flow length, L (total L < 300 ft) _____ ft **50**
- Twenty 24-hr rainfall, P₂ _____ in **0.020**
- Land slope, s _____ ft/ft
- $T_c = \frac{0.007 (nL)^{0.58}}{P_2^{0.46}}$ Compute T_c _____ hr

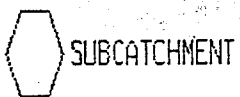
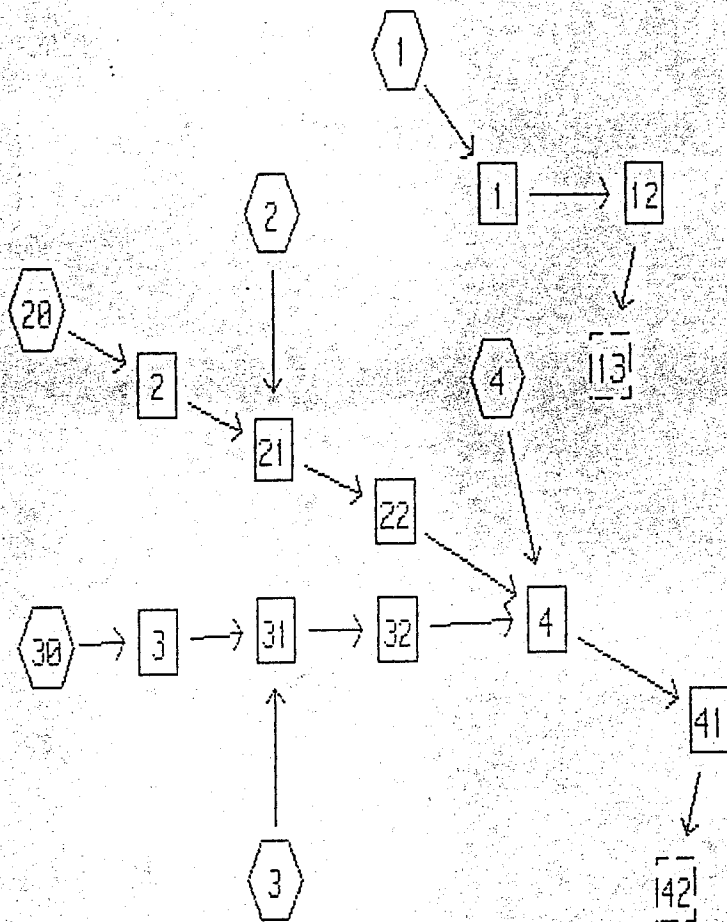
Shallow concentrated flow Segment ID: **2 3**

- Surface description (paved or unpaved) _____
- Flow length, L _____ ft **50 320**
- Maximum slope, s _____ ft/ft **200 0.20**
- Average velocity, V (figure 3-4) _____ ft/s
- $T_c = \frac{L}{3600 V}$ Compute T_c _____ hr

Channel flow Segment ID: _____

- Cross-sectional flow area, A _____ ft²
- Wetted perimeter, P_w _____ ft
- Hydraulic radius, r = $\frac{A}{P_w}$ Compute r _____ ft
- Channel slope, s _____ ft/ft
- Manning's roughness coeff., n _____
- $V = \frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V _____ ft/s
- Flow length, L _____ ft
- $T_c = \frac{L}{3600 V}$ Compute T_c _____ hr
- Use the larger of values T_c or T_c from 6, 11, and 19.

WATERSHED ROUTING =====



SUBCATCHMENT



REACH



POND



LINK

TYPE III 24-HOUR RAINFALL= 3.0 IN

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SUBCATCHMENT 1 ONSITE REGION 1

PEAK= 5.1 CFS @ 12.15 HRS, VOLUME= .45 AF

ACRES	CN	
3.39	87	RESIDENTIAL (.25 AC LOTS)

SCS TR-20 METHOD
TYPE III 24-HOUR
RAINFALL= 3.0 IN
SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	9.8
Grass: Dense n=.24 L=60' P2=3 in s=.02 '/'		
SHALLOW CONCENTRATED/UPLAND FLOW	2	4.4
Grassed Waterway Kv=15 L=400' s=.01 '/' V=1.5 fps		
Total Length= 460 ft		Total Tc= 14.2

SUBCATCHMENT 2 ONSITE REGION 2

PEAK= 2.0 CFS @ 12.04 HRS, VOLUME= .15 AF

ACRES	CN	
1.10	87	RESIDENTIAL (.25 AC LOTS)

SCS TR-20 METHOD
TYPE III 24-HOUR
RAINFALL= 3.0 IN
SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
DIRECT ENTRY	1	6.0

SUBCATCHMENT 3 ONSITE REGION 3

PEAK= .8 CFS @ 12.04 HRS, VOLUME= .06 AF

ACRES	CN	
.43	87	RESIDENTIAL (.25 AC LOTS)

SCS TR-20 METHOD
TYPE III 24-HOUR
RAINFALL= 3.0 IN
SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
DIRECT ENTRY	1	6.0

TYPE III 24-HOUR RAINFALL= 3.0 IN

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SUBCATCHMENT 4 ONSITE REGION 4

PEAK= 4.2 CFS @ 12.12 HRS, VOLUME= .34 AF

ACRES	CN		SCS TR-20 METHOD
1.58	80	LAWN, GOOD COND., TYPE D	TYPE III 24-HOUR
1.40	77	WOODS/BRUSH, GOOD COND., TYPE D	RAINFALL= 3.0 IN
.37	98	IMPERVIOUS	SPAN= 10-20 HRS, dt=.1 HRS
3.35	81		

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	8.5
Grass: Dense	n=.24 L=50' P2=3 in s=.02 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	2	.1
Grassed Waterway	Kv=15 L=50' s=.2 '/' V=6.71 fps	
SHALLOW CONCENTRATED/UPLAND FLOW	3	2.5
Grassed Waterway	Kv=15 L=320' s=.02 '/' V=2.12 fps	
Total Length= 420 ft		Total Tc= 11.1

SUBCATCHMENT 20

PEAK= 5.1 CFS @ 12.25 HRS, VOLUME= .51 AF

ACRES	CN		SCS TR-20 METHOD
3.16	87	RESID. (.25 AC LOTS-FULLY DEV.)	TYPE III 24-HOUR
1.00	79	WOODS\GRASS COMBINATION, TYPE D	RAINFALL= 3.0 IN
4.16	85		SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	14.7
Grass: Dense	n=.24 L=100' P2=3 in s=.02 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	2	6.3
Grassed Waterway	Kv=15 L=800' s=.02 '/' V=2.12 fps	
Total Length= 900 ft		Total Tc= 21.0

SUBCATCHMENT 30 OFFSITE REGION B

PEAK= 3.5 CFS @ 12.23 HRS, VOLUME= .34 AF

ACRES	CN		SCS TR-20 METHOD
.88	87	RESID. (.25 AC LOTS-FULLY DEV.)	TYPE III 24-HOUR
2.50	79	WOODS\GRASS COMBINATION, TYPE D	RAINFALL= 3.0 IN
3.38	81		SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	14.7
Grass: Dense	n=.24 L=100' P2=3 in s=.02 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	2	4.7
Grassed Waterway	Kv=15 L=600' s=.02 '/' V=2.12 fps	
Total Length= 700 ft		Total Tc= 19.4

TYPE III 24-HOUR RAINFALL= 3.0 IN

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REACH 1 FIELD INLET (CULVERT #5)

Q_{in} = 5.1 CFS @ 12.15 HRS, VOLUME= .45 AF
 Q_{out} = 5.1 CFS @ 12.16 HRS, VOLUME= .45 AF, ATTEN= 0%, LAG= .3 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)		STOR-IND+TRANS METHOD
0.0	0.0	0.0	18" PIPE	PEAK DEPTH= .64 FT
.2	.1	.3	n= .013	PEAK VELOCITY= 6.9 FPS
.3	.3	1.1	LENGTH= 35 FT	TRAVEL TIME = .1 MIN
.5	.4	2.5	SLOPE= .0143 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.1	1.3	10.5		
1.2	1.5	12.3		
1.4	1.7	13.4		
1.4	1.7	13.5		
1.5	1.8	13.4		
1.5	1.8	12.6		

REACH 2 FIELD INLET (CULVERT #3)

Q_{in} = 5.1 CFS @ 12.25 HRS, VOLUME= .51 AF
 Q_{out} = 5.1 CFS @ 12.25 HRS, VOLUME= .51 AF, ATTEN= 0%, LAG= .2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)		STOR-IND+TRANS METHOD
0.0	0.0	0.0	21" PIPE	PEAK DEPTH= .65 FT
.2	.1	.3	n= .013	PEAK VELOCITY= 6.0 FPS
.4	.3	1.4	LENGTH= 40 FT	TRAVEL TIME = .1 MIN
.5	.6	3.1	SLOPE= .01 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.2	1.8	13.3		
1.4	2.1	15.5		
1.6	2.3	16.9		
1.6	2.3	17.0		
1.7	2.4	16.9		
1.8	2.4	15.8		

REACH 3 FIELD INLET (CULVERT #1)

Q_{in} = 3.5 CFS @ 12.23 HRS, VOLUME= .34 AF
 Q_{out} = 3.5 CFS @ 12.24 HRS, VOLUME= .34 AF, ATTEN= 0%, LAG= .1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)		STOR-IND+TRANS METHOD
0.0	0.0	0.0	15" PIPE	PEAK DEPTH= .45 FT
.1	.1	.2	n= .013	PEAK VELOCITY= 8.6 FPS
.3	.2	1.0	LENGTH= 30 FT	TRAVEL TIME = .1 MIN
.4	.3	2.3	SLOPE= .0333 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
.9	.9	9.9		
1.0	1.1	11.5		
1.1	1.2	12.6		
1.2	1.2	12.7		
1.2	1.2	12.6		
1.3	1.2	11.8		

TYPE III 24-HOUR RAINFALL= 3.0 IN

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REACH 4

STREAM SEGMENT

Q_{in} = 12.9 CFS @ 12.21 HRS, VOLUME= 1.38 AF
 Q_{out} = 12.9 CFS @ 12.23 HRS, VOLUME= 1.38 AF, ATTEN= 0%, LAG= 1.4 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)		STOR-IND+TRANS METHOD
0.0	0.0	0.0	3' x 1' CHANNEL	PEAK DEPTH= .63 FT
.1	.4	.4	SIDE SLOPE= .2 '/'	PEAK VELOCITY= 3.3 FPS
.2	.8	1.4	n= .035	TRAVEL TIME = .9 MIN
.3	1.4	3.0	LENGTH= 180 FT	SPAN= 10-20 HRS, dt=.1 HRS
.4	2.2	6.0	SLOPE= .02 FT/FT	
.6	3.6	11.6		
.8	5.6	21.2		
1.0	8.0	34.4		

REACH 12

STORM DRAIN (SD#7)

Q_{in} = 5.1 CFS @ 12.16 HRS, VOLUME= .45 AF
 Q_{out} = 5.0 CFS @ 12.17 HRS, VOLUME= .45 AF, ATTEN= 0%, LAG= 1.0 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)		STOR-IND+TRANS METHOD
0.0	0.0	0.0	15" PIPE	PEAK DEPTH= .48 FT
.1	.1	.3	n= .01	PEAK VELOCITY= 11.4 FPS
.3	.2	1.3	LENGTH= 250 FT	TRAVEL TIME = .4 MIN
.4	.3	2.9	SLOPE= .032 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
.9	.9	12.6		
1.0	1.1	14.7		
1.1	1.2	16.0		
1.2	1.2	16.2		
1.2	1.2	16.0		
1.3	1.2	15.0		

REACH 21

OUTLET PIPE (CULVERT #4)

Q_{in} = 6.0 CFS @ 12.22 HRS, VOLUME= .65 AF
 Q_{out} = 6.0 CFS @ 12.22 HRS, VOLUME= .65 AF, ATTEN= 0%, LAG= .2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)		STOR-IND+TRANS METHOD
0.0	0.0	0.0	24" PIPE	PEAK DEPTH= .44 FT
.2	.2	1.1	n= .013	PEAK VELOCITY= 11.6 FPS
.4	.4	4.8	LENGTH= 65 FT	TRAVEL TIME = .1 MIN
.6	.8	10.7	SLOPE= .0585 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.4	2.3	45.8		
1.6	2.7	53.5		
1.8	3.0	58.3		
1.9	3.1	58.9		
1.9	3.1	58.3		
2.0	3.1	54.7		

TYPE III 24-HOUR RAINFALL= 3.0 IN

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REACH 22

STREAM SEGMENT

Q_{in} = 6.0 CFS @ 12.22 HRS, VOLUME= .65 AF
 Q_{out} = 5.9 CFS @ 12.27 HRS, VOLUME= .65 AF, ATTEN= 2%, LAG= 2.8 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	3' x 1' CHANNEL SIDE SLOPE= .2 '/' n= .035 LENGTH= 240 FT SLOPE= .019 FT/FT	STOR-IND+TRANS METHOD PEAK DEPTH= .43 FT PEAK VELOCITY= 2.6 FPS TRAVEL TIME = 1.5 MIN SPAN= 10-20 HRS, dt=.1 HRS
0.0	0.0	0.0		
.1	.4	.4		
.2	.8	1.4		
.3	1.4	2.9		
.4	2.2	5.8		
.6	3.6	11.3		
.8	5.6	20.7		
1.0	8.0	33.5		

REACH 31

OUTLET PIPE (CULVERT #2)

Q_{in} = 3.9 CFS @ 12.22 HRS, VOLUME= .40 AF
 Q_{out} = 3.8 CFS @ 12.23 HRS, VOLUME= .40 AF, ATTEN= 0%, LAG= .3 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	18" PIPE n= .013 LENGTH= 66 FT SLOPE= .015 FT/FT	STOR-IND+TRANS METHOD PEAK DEPTH= .55 FT PEAK VELOCITY= 6.6 FPS TRAVEL TIME = .2 MIN SPAN= 10-20 HRS, dt=.1 HRS
0.0	0.0	0.0		
.2	.1	.3		
.3	.3	1.1		
.5	.4	2.5		
1.1	1.3	10.8		
1.2	1.5	12.6		
1.4	1.7	13.7		
1.4	1.7	13.8		
1.5	1.8	13.7		
1.5	1.8	12.9		

REACH 32

STREAM SEGMENT

Q_{in} = 3.8 CFS @ 12.23 HRS, VOLUME= .40 AF
 Q_{out} = 3.8 CFS @ 12.25 HRS, VOLUME= .40 AF, ATTEN= 2%, LAG= 1.7 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	3' x 1' CHANNEL SIDE SLOPE= .2 '/' n= .035 LENGTH= 150 FT SLOPE= .0267 FT/FT	STOR-IND+TRANS METHOD PEAK DEPTH= .31 FT PEAK VELOCITY= 2.6 FPS TRAVEL TIME = .9 MIN SPAN= 10-20 HRS, dt=.1 HRS
0.0	0.0	0.0		
.1	.4	.5		
.2	.8	1.6		
.3	1.4	3.4		
.4	2.2	6.9		
.6	3.6	13.4		
.8	5.6	24.5		
1.0	8.0	39.8		

TYPE III 24-HOUR RAINFALL= 3.0 IN

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REACH 41

EXISTING CULVERT AT DEDHAM STREET

Qin = 12.9 CFS @ 12.23 HRS, VOLUME= 1.38 AF
 Qout= 12.9 CFS @ 12.23 HRS, VOLUME= 1.38 AF, ATTEN= 0%, LAG= .1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)
0.0	0.0	0.0
.2	.2	.6
.4	.4	2.6
.6	.8	5.8
1.4	2.3	24.7
1.6	2.7	28.9
1.8	3.0	31.5
1.9	3.1	31.8
1.9	3.1	31.5
2.0	3.1	29.6

24" PIPE

n= .02

LENGTH= 45 FT

SLOPE= .0404 FT/FT

STOR-IND+TRANS METHOD

PEAK DEPTH= .90 FT

PEAK VELOCITY= 9.4 FPS

TRAVEL TIME = .1 MIN

SPAN= 10-20 HRS, dt=.1 HRS

TYPE III 24-HOUR RAINFALL= 4.7 IN

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SUBCATCHMENT 1 ONSITE REGION 1

PEAK= 9.6 CFS @ 12.15 HRS, VOLUME= .83 AF

<u>ACRES</u>	<u>CN</u>	
3.39	87	RESIDENTIAL (.25 AC LOTS)

SCS TR-20 METHOD
TYPE III 24-HOUR
RAINFALL= 4.7 IN
SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	9.8
Grass: Dense n=.24 L=60' P2=3 in s=.02 '/'		
SHALLOW CONCENTRATED/UPLAND FLOW	2	4.4
Grassed Waterway Kv=15 L=400' s=.01 '/' V=1.5 fps		
Total Length= 460 ft		Total Tc= 14.2

SUBCATCHMENT 2 ONSITE REGION 2

PEAK= 3.7 CFS @ 12.03 HRS, VOLUME= .27 AF

<u>ACRES</u>	<u>CN</u>	
1.10	87	RESIDENTIAL (.25 AC LOTS)

SCS TR-20 METHOD
TYPE III 24-HOUR
RAINFALL= 4.7 IN
SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
DIRECT ENTRY	1	6.0

SUBCATCHMENT 3 ONSITE REGION 3

PEAK= 1.5 CFS @ 12.03 HRS, VOLUME= .11 AF

<u>ACRES</u>	<u>CN</u>	
.43	87	RESIDENTIAL (.25 AC LOTS)

SCS TR-20 METHOD
TYPE III 24-HOUR
RAINFALL= 4.7 IN
SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
DIRECT ENTRY	1	6.0

TYPE III 24-HOUR RAINFALL= 4.7 IN

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SUBCATCHMENT 4

ONSITE REGION 4

PEAK= 8.8 CFS @ 12.11 HRS, VOLUME= .69 AF

ACRES	CN		SCS TR-20 METHOD
1.58	80	LAWN, GOOD COND., TYPE D	TYPE III 24-HOUR
1.40	77	WOODS/BRUSH, GOOD COND., TYPE D	RAINFALL= 4.7 IN
.37	98	IMPERVIOUS	SPAN= 10-20 HRS, dt=.1 HRS
3.35	81		

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	8.5
Grass: Dense n=.24 L=50' P2=3 in s=.02 '/'		
SHALLOW CONCENTRATED/UPLAND FLOW	2	.1
Grassed Waterway Kv=15 L=50' s=.2 '/' V=6.71 fps		
SHALLOW CONCENTRATED/UPLAND FLOW	3	2.5
Grassed Waterway Kv=15 L=320' s=.02 '/' V=2.12 fps		
Total Length= 420 ft		Total Tc= 11.1

SUBCATCHMENT 20

PEAK= 9.8 CFS @ 12.24 HRS, VOLUME= .97 AF

ACRES	CN		SCS TR-20 METHOD
3.16	87	RESID. (.25 AC LOTS-FULLY DEV.)	TYPE III 24-HOUR
1.00	79	WOODS\GRASS COMBINATION, TYPE D	RAINFALL= 4.7 IN
4.16	85		SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	14.7
Grass: Dense n=.24 L=100' P2=3 in s=.02 '/'		
SHALLOW CONCENTRATED/UPLAND FLOW	2	6.3
Grassed Waterway Kv=15 L=800' s=.02 '/' V=2.12 fps		
Total Length= 900 ft		Total Tc= 21.0

SUBCATCHMENT 30

OFFSITE REGION B

PEAK= 7.3 CFS @ 12.22 HRS, VOLUME= .70 AF

ACRES	CN		SCS TR-20 METHOD
.88	87	RESID. (.25 AC LOTS-FULLY DEV.)	TYPE III 24-HOUR
2.50	79	WOODS\GRASS COMBINATION, TYPE D	RAINFALL= 4.7 IN
3.38	81		SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	14.7
Grass: Dense n=.24 L=100' P2=3 in s=.02 '/'		
SHALLOW CONCENTRATED/UPLAND FLOW	2	4.7
Grassed Waterway Kv=15 L=600' s=.02 '/' V=2.12 fps		
Total Length= 700 ft		Total Tc= 19.4

TYPE III 24-HOUR RAINFALL= 4.7 IN

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REACH 1 FIELD INLET (CULVERT #5)

Q_{in} = 9.6 CFS @ 12.15 HRS, VOLUME= .83 AF
 Q_{out} = 9.6 CFS @ 12.15 HRS, VOLUME= .83 AF, ATTEN= 0%, LAG= .2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	18" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.0		PEAK DEPTH= .96 FT
.2	.1	.3	n= .013	PEAK VELOCITY= 7.8 FPS
.3	.3	1.1	LENGTH= 35 FT	TRAVEL TIME = .1 MIN
.5	.4	2.5	SLOPE= .0143 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.1	1.3	10.5		
1.2	1.5	12.3		
1.4	1.7	13.4		
1.4	1.7	13.5		
1.5	1.8	13.4		
1.5	1.8	12.6		

REACH 2 FIELD INLET (CULVERT #3)

Q_{in} = 9.8 CFS @ 12.24 HRS, VOLUME= .97 AF
 Q_{out} = 9.8 CFS @ 12.24 HRS, VOLUME= .97 AF, ATTEN= 0%, LAG= .2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	21" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.0		PEAK DEPTH= .97 FT
.2	.1	.3	n= .013	PEAK VELOCITY= 7.0 FPS
.4	.3	1.4	LENGTH= 40 FT	TRAVEL TIME = .1 MIN
.5	.6	3.1	SLOPE= .01 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.2	1.8	13.3		
1.4	2.1	15.5		
1.6	2.3	16.9		
1.6	2.3	17.0		
1.7	2.4	16.9		
1.8	2.4	15.8		

REACH 3 FIELD INLET (CULVERT #1)

Q_{in} = 7.3 CFS @ 12.22 HRS, VOLUME= .70 AF
 Q_{out} = 7.3 CFS @ 12.23 HRS, VOLUME= .70 AF, ATTEN= 0%, LAG= .1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	15" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.0		PEAK DEPTH= .70 FT
.1	.1	.2	n= .013	PEAK VELOCITY= 10.3 FPS
.3	.2	1.0	LENGTH= 30 FT	TRAVEL TIME = 0.0 MIN
.4	.3	2.3	SLOPE= .0333 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
.9	.9	9.9		
1.0	1.1	11.5		
1.1	1.2	12.6		
1.2	1.2	12.7		
1.2	1.2	12.6		
1.3	1.2	11.8		

TYPE III 24-HOUR RAINFALL= 4.7 IN

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REACH 4

STREAM SEGMENT

Q_{in} = 26.2 CFS @ 12.19 HRS, VOLUME= 2.74 AF
 Q_{out} = 26.2 CFS @ 12.21 HRS, VOLUME= 2.74 AF, ATTEN= 0%, LAG= 1.6 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)		STOR-IND+TRANS METHOD
0.0	0.0	0.0	3' x 1' CHANNEL	PEAK DEPTH= .88 FT
.1	.4	.4	SIDE SLOPE= .2 '/'	PEAK VELOCITY= 4.0 FPS
.2	.8	1.4	n= .035	TRAVEL TIME = .7 MIN
.3	1.4	3.0	LENGTH= 180 FT	SPAN= 10-20 HRS, dt=.1 HRS
.4	2.2	6.0	SLOPE= .02 FT/FT	
.6	3.6	11.6		
.8	5.6	21.2		
1.0	8.0	34.4		

REACH 12

STORM DRAIN (SD#7)

Q_{in} = 9.6 CFS @ 12.15 HRS, VOLUME= .83 AF
 Q_{out} = 9.4 CFS @ 12.17 HRS, VOLUME= .83 AF, ATTEN= 2%, LAG= 1.1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)		STOR-IND+TRANS METHOD
0.0	0.0	0.0	15" PIPE	PEAK DEPTH= .70 FT
.1	.1	.3	n= .01	PEAK VELOCITY= 13.1 FPS
.3	.2	1.3	LENGTH= 250 FT	TRAVEL TIME = .3 MIN
.4	.3	2.9	SLOPE= .032 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
.9	.9	12.6		
1.0	1.1	14.7		
1.1	1.2	16.0		
1.2	1.2	16.2		
1.2	1.2	16.0		
1.3	1.2	15.0		

REACH 21

OUTLET PIPE (CULVERT #4)

Q_{in} = 11.6 CFS @ 12.21 HRS, VOLUME= 1.24 AF
 Q_{out} = 11.6 CFS @ 12.21 HRS, VOLUME= 1.24 AF, ATTEN= 0%, LAG= .1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)		STOR-IND+TRANS METHOD
0.0	0.0	0.0	24" PIPE	PEAK DEPTH= .62 FT
.2	.2	1.1	n= .013	PEAK VELOCITY= 13.9 FPS
.4	.4	4.8	LENGTH= 65 FT	TRAVEL TIME = .1 MIN
.6	.8	10.7	SLOPE= .0585 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.4	2.3	45.8		
1.6	2.7	53.5		
1.8	3.0	58.3		
1.9	3.1	58.9		
1.9	3.1	58.3		
2.0	3.1	54.7		

TYPE III 24-HOUR RAINFALL= 4.7 IN

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REACH 22

STREAM SEGMENT

Qin = 11.6 CFS @ 12.21 HRS, VOLUME= 1.24 AF
 Qout= 11.4 CFS @ 12.25 HRS, VOLUME= 1.24 AF, ATTEN= 2%, LAG= 2.3 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	3' x 1' CHANNEL	STOR-IND+TRANS METHOD
0.0	0.0	0.0	SIDE SLOPE= .2 '/'	PEAK DEPTH= .60 FT
.1	.4	.4	n= .035	PEAK VELOCITY= 3.2 FPS
.2	.8	1.4	LENGTH= 240 FT	TRAVEL TIME = 1.3 MIN
.3	1.4	2.9	SLOPE= .019 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
.4	2.2	5.8		
.6	3.6	11.3		
.8	5.6	20.7		
1.0	8.0	33.5		

REACH 31

OUTLET PIPE (CULVERT #2)

Qin = 8.0 CFS @ 12.21 HRS, VOLUME= .81 AF
 Qout= 8.0 CFS @ 12.21 HRS, VOLUME= .81 AF, ATTEN= 0%, LAG= .2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	18" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.0		PEAK DEPTH= .85 FT
.2	.1	.3	n= .013	PEAK VELOCITY= 7.8 FPS
.3	.3	1.1	LENGTH= 66 FT	TRAVEL TIME = .1 MIN
.5	.4	2.5	SLOPE= .015 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.1	1.3	10.8		
1.2	1.5	12.6		
1.4	1.7	13.7		
1.4	1.7	13.8		
1.5	1.8	13.7		
1.5	1.8	12.9		

REACH 32

STREAM SEGMENT

Qin = 8.0 CFS @ 12.21 HRS, VOLUME= .81 AF
 Qout= 7.9 CFS @ 12.24 HRS, VOLUME= .81 AF, ATTEN= 1%, LAG= 1.2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	3' x 1' CHANNEL	STOR-IND+TRANS METHOD
0.0	0.0	0.0	SIDE SLOPE= .2 '/'	PEAK DEPTH= .46 FT
.1	.4	.5	n= .035	PEAK VELOCITY= 3.3 FPS
.2	.8	1.6	LENGTH= 150 FT	TRAVEL TIME = .8 MIN
.3	1.4	3.4	SLOPE= .0267 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
.4	2.2	6.9		
.6	3.6	13.4		
.8	5.6	24.5		
1.0	8.0	39.8		

TYPE III 24-HOUR RAINFALL= 4.7 IN

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REACH 41

EXISTING CULVERT AT DEDHAM STREET

Q_{in} = 26.2 CFS @ 12.21 HRS, VOLUME= 2.74 AFQ_{out} = 26.2 CFS @ 12.21 HRS, VOLUME= 2.74 AF, ATTEN= 0%, LAG= .1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)
0.0	0.0	0.0
.2	.2	.6
.4	.4	2.6
.6	.8	5.8
1.4	2.3	24.7
1.6	2.7	28.9
1.8	3.0	31.5
1.9	3.1	31.8
1.9	3.1	31.5
2.0	3.1	29.6

24" PIPE

STOR-IND+TRANS METHOD

PEAK DEPTH= 1.47 FT

PEAK VELOCITY= 10.6 FPS

TRAVEL TIME = .1 MIN

SPAN= 10-20 HRS, dt=.1 HRS

n= .02

LENGTH= 45 FT

SLOPE= .0404 FT/FT

SUBCATCHMENT 1

ONSITE REGION 1

PEAK= 11.8 CFS @ 12.14 HRS, VOLUME= 1.02 AF

ACRES	CN	
3.39	87	RESIDENTIAL (.25 AC LOTS)

SCS TR-20 METHOD
TYPE III 24-HOUR
RAINFALL= 5.5 IN
SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	9.8
Grass: Dense n=.24 L=60' P2=3 in s=.02 '/'		
SHALLOW CONCENTRATED/UPLAND FLOW	2	4.4
Grassed Waterway Kv=15 L=400' s=.01 '/' V=1.5 fps		
Total Length= 460 ft		Total Tc= 14.2

SUBCATCHMENT 2

ONSITE REGION 2

PEAK= 4.5 CFS @ 12.03 HRS, VOLUME= .33 AF

ACRES	CN	
1.10	87	RESIDENTIAL (.25 AC LOTS)

SCS TR-20 METHOD
TYPE III 24-HOUR
RAINFALL= 5.5 IN
SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
DIRECT ENTRY	1	6.0

SUBCATCHMENT 3

ONSITE REGION 3

PEAK= 1.8 CFS @ 12.03 HRS, VOLUME= .13 AF

ACRES	CN	
.43	87	RESIDENTIAL (.25 AC LOTS)

SCS TR-20 METHOD
TYPE III 24-HOUR
RAINFALL= 5.5 IN
SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
DIRECT ENTRY	1	6.0

SUBCATCHMENT 4

ONSITE REGION 4

PEAK= 11.0 CFS @ 12.11 HRS, VOLUME= .87 AF

ACRES	CN		SCS TR-20 METHOD
1.58	80	LAWN, GOOD COND., TYPE D	TYPE III 24-HOUR
1.40	77	WOODS/BRUSH, GOOD COND., TYPE D	RAINFALL= 5.5 IN
.37	98	IMPERVIOUS	SPAN= 10-20 HRS, dt=.1 HRS
3.35	81		

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	8.5
Grass: Dense n=.24 L=50' P2=3 in s=.02 '/'		
SHALLOW CONCENTRATED/UPLAND FLOW	2	.1
Grassed Waterway Kv=15 L=50' s=.2 '/' V=6.71 fps		
SHALLOW CONCENTRATED/UPLAND FLOW	3	2.5
Grassed Waterway Kv=15 L=320' s=.02 '/' V=2.12 fps		
Total Length= 420 ft		Total Tc= 11.1

SUBCATCHMENT 20

PEAK= 12.1 CFS @ 12.24 HRS, VOLUME= 1.19 AF

ACRES	CN		SCS TR-20 METHOD
3.16	87	RESID. (.25 AC LOTS-FULLY DEV.)	TYPE III 24-HOUR
1.00	79	WOODS\GRASS COMBINATION, TYPE D	RAINFALL= 5.5 IN
4.16	85		SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	14.7
Grass: Dense n=.24 L=100' P2=3 in s=.02 '/'		
SHALLOW CONCENTRATED/UPLAND FLOW	2	6.3
Grassed Waterway Kv=15 L=800' s=.02 '/' V=2.12 fps		
Total Length= 900 ft		Total Tc= 21.0

SUBCATCHMENT 30

OFFSITE REGION B

PEAK= 9.2 CFS @ 12.22 HRS, VOLUME= .88 AF

ACRES	CN		SCS TR-20 METHOD
.88	87	RESID. (.25 AC LOTS-FULLY DEV.)	TYPE III 24-HOUR
2.50	79	WOODS\GRASS COMBINATION, TYPE D	RAINFALL= 5.5 IN
3.38	81		SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	14.7
Grass: Dense n=.24 L=100' P2=3 in s=.02 '/'		
SHALLOW CONCENTRATED/UPLAND FLOW	2	4.7
Grassed Waterway Kv=15 L=600' s=.02 '/' V=2.12 fps		
Total Length= 700 ft		Total Tc= 19.4

REACH 1 FIELD INLET (CULVERT #5)

Q_{in} = 11.8 CFS @ 12.14 HRS, VOLUME= 1.02 AF
 Q_{out} = 11.7 CFS @ 12.15 HRS, VOLUME= 1.02 AF, ATTEN= 0%, LAG= .2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	18" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.0		PEAK DEPTH= 1.12 FT
.2	.1	.3	n= .013	PEAK VELOCITY= 8.0 FPS
.3	.3	1.1	LENGTH= 35 FT	TRAVEL TIME = .1 MIN
.5	.4	2.5	SLOPE= .0143 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.1	1.3	10.5		
1.2	1.5	12.3		
1.4	1.7	13.4		
1.4	1.7	13.5		
1.5	1.8	13.4		
1.5	1.8	12.6		

REACH 2 FIELD INLET (CULVERT #3)

Q_{in} = 12.1 CFS @ 12.24 HRS, VOLUME= 1.19 AF
 Q_{out} = 12.1 CFS @ 12.24 HRS, VOLUME= 1.19 AF, ATTEN= 0%, LAG= .2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	21" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.0		PEAK DEPTH= 1.13 FT
.2	.1	.3	n= .013	PEAK VELOCITY= 7.3 FPS
.4	.3	1.4	LENGTH= 40 FT	TRAVEL TIME = .1 MIN
.5	.6	3.1	SLOPE= .01 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.2	1.8	13.3		
1.4	2.1	15.5		
1.6	2.3	16.9		
1.6	2.3	17.0		
1.7	2.4	16.9		
1.8	2.4	15.8		

REACH 3 FIELD INLET (CULVERT #1)

Q_{in} = 9.2 CFS @ 12.22 HRS, VOLUME= .88 AF
 Q_{out} = 9.2 CFS @ 12.22 HRS, VOLUME= .88 AF, ATTEN= 0%, LAG= .1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	15" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.0		PEAK DEPTH= .82 FT
.1	.1	.2	n= .013	PEAK VELOCITY= 10.6 FPS
.3	.2	1.0	LENGTH= 30 FT	TRAVEL TIME = 0.0 MIN
.4	.3	2.3	SLOPE= .0333 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
.9	.9	9.9		
1.0	1.1	11.5		
1.1	1.2	12.6		
1.2	1.2	12.7		
1.2	1.2	12.6		
1.3	1.2	11.8		

REACH 4

STREAM SEGMENT

Qin = 32.6 CFS @ 12.18 HRS, VOLUME= 3.40 AF
 Qout= 32.6 CFS @ 12.21 HRS, VOLUME= 3.39 AF, ATTEN= 0%, LAG= 1.6 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	3' x 1' CHANNEL	STOR-IND+TRANS METHOD
0.0	0.0	0.0	SIDE SLOPE= .2 '/'	PEAK DEPTH= .98 FT
.1	.4	.4	n= .035	PEAK VELOCITY= 4.3 FPS
.2	.8	1.4	LENGTH= 180 FT	TRAVEL TIME = .7 MIN
.3	1.4	3.0	SLOPE= .02 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
.4	2.2	6.0		
.6	3.6	11.6		
.8	5.6	21.2		
1.0	8.0	34.4		

REACH 12

STORM DRAIN (SD#7)

Qin = 11.7 CFS @ 12.15 HRS, VOLUME= 1.02 AF
 Qout= 11.5 CFS @ 12.16 HRS, VOLUME= 1.01 AF, ATTEN= 2%, LAG= 1.0 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	15" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.0		PEAK DEPTH= .81 FT
.1	.1	.3	n= .01	PEAK VELOCITY= 13.5 FPS
.3	.2	1.3	LENGTH= 250 FT	TRAVEL TIME = .3 MIN
.4	.3	2.9	SLOPE= .032 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
.9	.9	12.6		
1.0	1.1	14.7		
1.1	1.2	16.0		
1.2	1.2	16.2		
1.2	1.2	16.0		
1.3	1.2	15.0		

REACH 21

OUTLET PIPE (CULVERT #4)

Qin = 14.3 CFS @ 12.21 HRS, VOLUME= 1.52 AF
 Qout= 14.2 CFS @ 12.21 HRS, VOLUME= 1.52 AF, ATTEN= 0%, LAG= .1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	24" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.0		PEAK DEPTH= .68 FT
.2	.2	1.1	n= .013	PEAK VELOCITY= 15.0 FPS
.4	.4	4.8	LENGTH= 65 FT	TRAVEL TIME = .1 MIN
.6	.8	10.7	SLOPE= .0585 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.4	2.3	45.8		
1.6	2.7	53.5		
1.8	3.0	58.3		
1.9	3.1	58.9		
1.9	3.1	58.3		
2.0	3.1	54.7		

REACH 22

STREAM SEGMENT

Qin = 14.2 CFS @ 12.21 HRS, VOLUME= 1.52 AF
 Qout= 14.1 CFS @ 12.24 HRS, VOLUME= 1.52 AF, ATTEN= 1%, LAG= 2.1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	3' x 1' CHANNEL SIDE SLOPE= .2 '/' n= .035 LENGTH= 240 FT SLOPE= .019 FT/FT	STOR-IND+TRANS METHOD PEAK DEPTH= .66 FT PEAK VELOCITY= 3.4 FPS TRAVEL TIME = 1.2 MIN SPAN= 10-20 HRS, dt=.1 HRS
0.0	0.0	0.0		
.1	.4	.4		
.2	.8	1.4		
.3	1.4	2.9		
.4	2.2	5.8		
.6	3.6	11.3		
.8	5.6	20.7		
1.0	8.0	33.5		

REACH 31

OUTLET PIPE (CULVERT #2)

Qin = 10.1 CFS @ 12.21 HRS, VOLUME= 1.01 AF
 Qout= 10.0 CFS @ 12.21 HRS, VOLUME= 1.01 AF, ATTEN= 0%, LAG= .2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	18" PIPE n= .013 LENGTH= 66 FT SLOPE= .015 FT/FT	STOR-IND+TRANS METHOD PEAK DEPTH= 1.00 FT PEAK VELOCITY= 8.1 FPS TRAVEL TIME = .1 MIN SPAN= 10-20 HRS, dt=.1 HRS
0.0	0.0	0.0		
.2	.1	.3		
.3	.3	1.1		
.5	.4	2.5		
1.1	1.3	10.8		
1.2	1.5	12.6		
1.4	1.7	13.7		
1.4	1.7	13.8		
1.5	1.8	13.7		
1.5	1.8	12.9		

REACH 32

STREAM SEGMENT

Qin = 10.0 CFS @ 12.21 HRS, VOLUME= 1.01 AF
 Qout= 9.9 CFS @ 12.23 HRS, VOLUME= 1.01 AF, ATTEN= 1%, LAG= 1.2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	3' x 1' CHANNEL SIDE SLOPE= .2 '/' n= .035 LENGTH= 150 FT SLOPE= .0267 FT/FT	STOR-IND+TRANS METHOD PEAK DEPTH= .51 FT PEAK VELOCITY= 3.5 FPS TRAVEL TIME = .7 MIN SPAN= 10-20 HRS, dt=.1 HRS
0.0	0.0	0.0		
.1	.4	.5		
.2	.8	1.6		
.3	1.4	3.4		
.4	2.2	6.9		
.6	3.6	13.4		
.8	5.6	24.5		
1.0	8.0	39.8		

Data for WOODFORDS GARDENS, POST-DEVELOPMENT-25 YEAR STORM
TYPE III 24-HOUR RAINFALL= 5.5 IN

Prepared by Land Use Consultants, Inc.

28 Jun 95

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REACH 41

EXISTING CULVERT AT DEDHAM STREET

Q_{in} = 32.6 CFS @ 12.21 HRS, VOLUME= 3.39 AF
Q_{out} = 29.6 CFS @ 12.30 HRS, VOLUME= 3.39 AF, ATTEN= 9%, LAG= 5.6 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	24" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.0		PEAK DEPTH= 2.00 FT
.2	.2	.6	n= .02	PEAK VELOCITY= 10.7 FPS
.4	.4	2.6	LENGTH= 45 FT	TRAVEL TIME = .1 MIN
.6	.8	5.8	SLOPE= .0404 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.4	2.3	24.7		
1.6	2.7	28.9		
1.8	3.0	31.5		
1.9	3.1	31.8		
1.9	3.1	31.5		
2.0	3.1	29.6		

Pipe Sizing Calculations

Project WoodFords Gardens
 Job No. 1851.1
 Date 6/26/95

Computed By PLC
 Checked By _____
 Sheet _____ of _____



WATERSHED (OFFSITE) SUB-WATERSHED A (20) Fully Developed?

Curve Number

Time Of Concentration

Soil name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/connected impervious area ratio)	C _N U			Area (acres) <input type="checkbox"/> mi ² <input type="checkbox"/> sq	Product of C _N x area
		Table 3-2	Fig. 2-3	Fig. 2-4		
D	Residential (1/4 ac)	87			4.16	

Use only one C_N source per line. Totals = _____
 C_N (weighted) = $\frac{\text{total product}}{\text{total area}}$ Use C_N = _____

2. Runoff

Frequency yr
 Rainfall, P (24-hour) in
 Runoff, Q in
 (Use P and C_N with table 2-1, fig. 2-1, or eqs. 2-3 and 2-4.)

Storm #1	Storm #2	Storm #3

Sheet flow (Applicable to T_c only) Segment ID

1. Surface description (table 3-1)	Grass
2. Manning's roughness coeff., n (table 3-1) ..	0.24
3. Flow length, L (total L < 300 ft)	100
4. Two-yr 24-hr rainfall, P ₂	3.0
5. Land slope, s	0.02
6. $T_c = \frac{0.007 (nL)^{0.8}}{P_2^{0.5} s^{0.4}}$ Compute T _c	hr

Shallow concentrated flow Segment ID

7. Surface description (paved or unpaved)	U
8. Flow length, L	800
9. Watercourse slope, s	0.02
10. Average velocity, V (figure 3-1)	2.3
11. $T_c = \frac{L}{3600 V}$ Compute T _c	hr

Channel flow Segment ID

12. Cross sectional flow area, A	ft ²
13. Wetted perimeter, P _w	ft
14. Hydraulic radius, r = $\frac{A}{P_w}$ Compute r	ft
15. Channel slope, s	ft/ft
16. Manning's roughness coeff., n	
17. $V = 1.49 r^{2/3} s^{1/2}$ Compute V	ft/s
18. Flow length, L	ft
19. $T_c = \frac{L}{3600 V}$ Compute T _c	hr
20. Watershed or subarea T _c or T _c (add T _c in steps 6, 11, and 19)	hr

WATERSHED OFFSITE SUB-WATERSHED B (30) Fully Developed?

Curve Number

Time Of Concentration

Soil name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/connected impervious area ratio)	C _N U			Area (acres) <input type="checkbox"/> mi ² <input type="checkbox"/> sq	Product of C _N x area
		Table 3-2	Fig. 2-3	Fig. 2-4		
D	Residential (1/4 ac)	87			3.38	

Use only one C_N source per line. Totals = _____
 C_N (weighted) = $\frac{\text{total product}}{\text{total area}}$ Use C_N = _____

2. Runoff

Frequency yr
 Rainfall, P (24-hour) in
 Runoff, Q in
 (Use P and C_N with table 2-1, fig. 2-1, or eqs. 2-3 and 2-4.)

Storm #1	Storm #2	Storm #3

Sheet flow (Applicable to T_c only) Segment ID

1. Surface description (table 3-1)	Grass
2. Manning's roughness coeff., n (table 3-1) ..	0.24
3. Flow length, L (total L < 300 ft)	100
4. Two-yr 24-hr rainfall, P ₂	3.0
5. Land slope, s	0.02
6. $T_c = \frac{0.007 (nL)^{0.8}}{P_2^{0.5} s^{0.4}}$ Compute T _c	hr

Shallow concentrated flow Segment ID

7. Surface description (paved or unpaved)	U
8. Flow length, L	600
9. Watercourse slope, s	0.02
10. Average velocity, V (figure 3-1)	2.3
11. $T_c = \frac{L}{3600 V}$ Compute T _c	hr

Channel flow Segment ID

12. Cross sectional flow area, A	ft ²
13. Wetted perimeter, P _w	ft
14. Hydraulic radius, r = $\frac{A}{P_w}$ Compute r	ft
15. Channel slope, s	ft/ft
16. Manning's roughness coeff., n	
17. $V = 1.49 r^{2/3} s^{1/2}$ Compute V	ft/s
18. Flow length, L	ft
19. $T_c = \frac{L}{3600 V}$ Compute T _c	hr
20. Watershed or subarea T _c or T _c (add T _c in steps 6, 11, and 19)	hr

Project _____
 Job No. _____
 Date _____

Computed By _____
 Checked By _____
 Sheet _____ of _____



WATERSHED ONSITE SUB-WATERSHED 1

Curve Number

Soil name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/seamless impervious area ratio)	C/N			Area	Product of C x area
		Table 3-2	Fig. 3-3	Fig. 3-4		
D	Residential (44oc)	87			3.39	

Use only one C/N source per line.

Totals =

C/N (weighted) = $\frac{\text{total product}}{\text{total area}}$

Use C/N = **87**

2. Runoff

Frequency hr
 Rainfall, P (24-hour) in
 Runoff, Q in
 (Use P and C/N with table 2-1, figs. 2-1, 2-2, and 2-3.)

Storm #1	Storm #2	Storm #3

Time Of Concentration

Sheet flow (Applicable to T_c only)

Segment ID

1. Surface description (table 3-1)		
2. Manning's roughness coeff., n (table 3-1)		
3. Flow length, L (total L < 300 ft)	60	ft
4. Two-year 24-hr rainfall, P_2		in
5. Land slope, s	0.050	ft/ft
6. $T_c = \frac{0.007 (nL)^{0.5}}{P_2^{0.5} s^{0.4}}$ Compute T_c		hr

Shallow concentrated flow

Segment ID

7. Surface description (paved or unpaved)		
8. Flow length, L	400	ft
9. Watersurface slope, s		ft/ft
10. Average velocity, V (figure 3-1)		ft/s
11. $T_c = \frac{L}{3600 V}$ Compute T_c		hr

Channel flow

Segment ID

12. Cross-sectional flow area, A		ft ²
13. Wetted perimeter, P_w		ft
14. Hydraulic radius, $r = \frac{A}{P_w}$ Compute r		ft
15. Channel slope, s		ft/ft
16. Manning's roughness coeff., n		
17. $V = \frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V		ft/s
18. Flow length, L		ft
19. $T_c = \frac{L}{3600 V}$ Compute T_c		hr
20. Use the sum of values T_c or T_c (see T_c in steps 6, 11, and 19)		hr

WATERSHED ONSITE SUB-WATERSHED 2

Curve Number

Soil name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/seamless impervious area ratio)	C/N			Area	Product of C x area
		Table 3-2	Fig. 3-3	Fig. 3-4		
D	Residential (44oc)	87			1.1	

Use only one C/N source per line.

Totals =

C/N (weighted) = $\frac{\text{total product}}{\text{total area}}$

Use C/N = **87**

3. Runoff

Frequency hr
 Rainfall, P (24-hour) in
 Runoff, Q in
 (Use P and C/N with table 2-1, figs. 2-1, 2-2, and 2-3.)

Storm #1	Storm #2	Storm #3

Time Of Concentration

Sheet flow (Applicable to T_c only)

Segment ID

1. Surface description (table 3-1)		
2. Manning's roughness coeff., n (table 3-1)		
3. Flow length, L (total L < 300 ft)		ft
4. Two-year 24-hr rainfall, P_2		in
5. Land slope, s		ft/ft
6. $T_c = \frac{0.007 (nL)^{0.5}}{P_2^{0.5} s^{0.4}}$ Compute T_c		hr

Shallow concentrated flow

Segment ID

7. Surface description (paved or unpaved)		
8. Flow length, L		ft
9. Watersurface slope, s		ft/ft
10. Average velocity, V (figure 3-1)		ft/s
11. $T_c = \frac{L}{3600 V}$ Compute T_c		hr

Channel flow

Segment ID

12. Cross-sectional flow area, A		ft ²
13. Wetted perimeter, P_w		ft
14. Hydraulic radius, $r = \frac{A}{P_w}$ Compute r		ft
15. Channel slope, s		ft/ft
16. Manning's roughness coeff., n		
17. $V = \frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V		ft/s
18. Flow length, L		ft
19. $T_c = \frac{L}{3600 V}$ Compute T_c		hr
20. Use the sum of values T_c or T_c (see T_c in steps 6, 11, and 19)		hr

(assume $t_c = 6$ min)

Project _____
 Job No. _____
 Date _____

Computed By _____
 Checked By _____
 Sheet _____ of _____



WATERSHED ONSITE SUB-WATERSHED 3

Curve Number

Soil name and hydrologic group (Appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/opened/curb impervious area ratio)	C _N			Area	Product of C _N x area
		Table 2-2	Fig. 2-3	Fig. 2-4		
D	Residential (4ac)	87			0.43	

Use only one C_N source per line.

Total =

C_N (weighted) = $\frac{\text{total product}}{\text{total area}}$

Use C_N = **87**

2. Runoff

Frequency IT
 Rainfall, P (24-hour) in
 Runoff, Q in
 (Use P and C_N with table 2-1, fig. 2-1, or fig. 2-2 and 2-4.)

Storm #1	Storm #2	Storm #3

Time Of Concentration

Sheet flow (Applicable to T_c only) Segment ID:

- Surface description (table 3-1)
- Manning's roughness coeff., n (table 3-1)
- Flow length, L (total L ≤ 300 ft) ft
- Top-yr 24-hr rainfall, P₂ in
- Land slope, s ft/ft
- $T_c = \frac{0.007 (nL)^{0.5}}{P_2^{0.4}}$ Compute T_c hr

Shallow concentrated flow Segment ID:

- Surface description (paved or unpaved)
- Flow length, L ft
- Maximum slope, s ft/ft
- Average velocity, V (figure 3-1) ft/s
- $T_c = \frac{L}{3600 V}$ Compute T_c hr

Channel flow Segment ID:

- Cross-sectional flow area, A ft²
- Wetted perimeter, P_w ft
- Hydraulic radius, r = $\frac{A}{P_w}$ Compute r ft
- Channel slope, s ft/ft
- Manning's roughness coeff., n
- $V = \frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V ft/s
- Flow length, L ft
- $T_c = \frac{L}{3600 V}$ Compute T_c hr
- Use the largest of sheet T_c or T_c (add T_c in steps 6, 11, and 13) hr

(assume t_c = 6 min)

WATERSHED ONSITE SUB-WATERSHED 4

Curve Number

Soil name and hydrologic group (Appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/opened/curb impervious area ratio)	C _N			Area	Product of C _N x area
		Table 2-2	Fig. 2-3	Fig. 2-4		
D	Lawn	80			1.58	126.40
P	Woods/Brush	77			1.40	107.80
-	Impervious	98			0.37	36.26

Use only one C_N source per line.

Total =

C_N (weighted) = $\frac{\text{total product}}{\text{total area}}$

80.73

Use C_N = **81**

2. Runoff

Frequency IT
 Rainfall, P (24-hour) in
 Runoff, Q in
 (Use P and C_N with table 2-1, fig. 2-1, or fig. 2-2 and 2-4.)

Storm #1	Storm #2	Storm #3

Time Of Concentration

Sheet flow (Applicable to T_c only) Segment ID:

- Surface description (table 3-1)
- Manning's roughness coeff., n (table 3-1)
- Flow length, L (total L ≤ 300 ft) ft
- Top-yr 24-hr rainfall, P₂ in
- Land slope, s ft/ft
- $T_c = \frac{0.007 (nL)^{0.5}}{P_2^{0.4}}$ Compute T_c hr

Shallow concentrated flow Segment ID:

- Surface description (paved or unpaved)
- Flow length, L ft
- Maximum slope, s ft/ft
- Average velocity, V (figure 3-1) ft/s
- $T_c = \frac{L}{3600 V}$ Compute T_c hr

Channel flow Segment ID:

- Cross-sectional flow area, A ft²
- Wetted perimeter, P_w ft
- Hydraulic radius, r = $\frac{A}{P_w}$ Compute r ft
- Channel slope, s ft/ft
- Manning's roughness coeff., n
- $V = \frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V ft/s
- Flow length, L ft
- $T_c = \frac{L}{3600 V}$ Compute T_c hr
- Use the largest of sheet T_c or T_c (add T_c in steps 6, 11, and 13) hr

Data for 1851.1

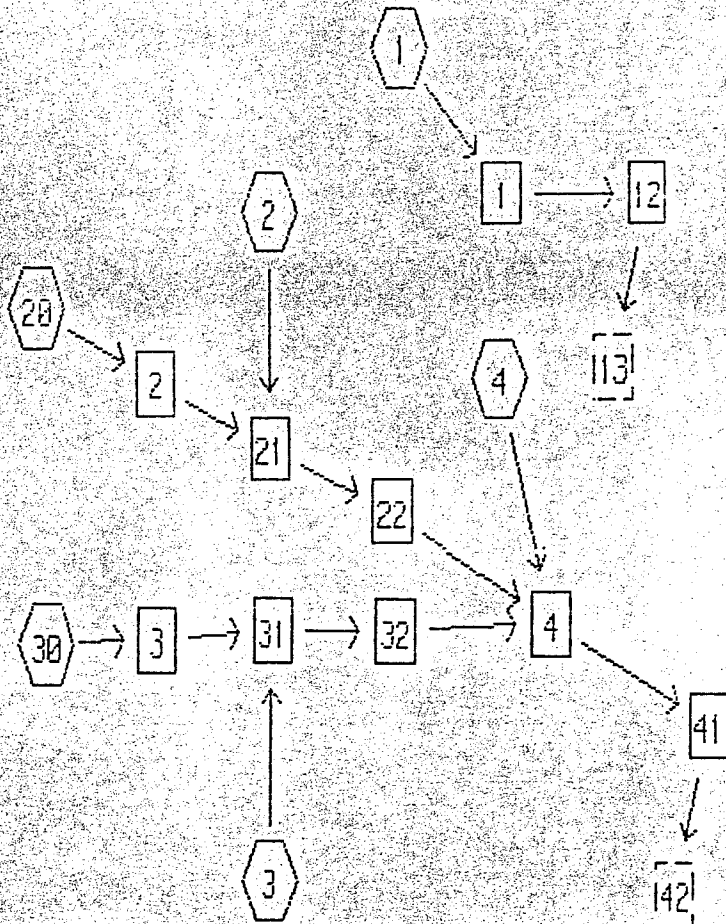
TYPE III 24-HOUR RAINFALL = 5.5 IN

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26 Jun 95

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WATERSHED ROUTING =====



Note:

Auto-size Feature was used which allows the software program to calculate the minimum (or theoretical) pipe size required to pass the connected peak flow rates for proposed pipes. These are compared to the actual proposed pipes to ensure adequate pipe sizing.



Data for 1851.1

TYPE III 24-HOUR RAINFALL= 5.5 IN

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SUBCATCHMENT 1

ONSITE REGION 1

PEAK= 11.8 CFS @ 12.14 HRS, VOLUME= 1.02 AF

ACRES	CN	
3.39	87	RESIDENTIAL (.25 AC LOTS)

SCS TR-20 METHOD
TYPE III 24-HOUR
RAINFALL= 5.5 IN
SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	9.8
Grass: Dense n=.24 L=60' P2=3 in s=.02 '/'		
SHALLOW CONCENTRATED/UPLAND FLOW	2	4.4
Grassed Waterway Kv=15 L=400' s=.01 '/' V=1.5 fps		
Total Length= 460 ft		Total Tc= 14.2

SUBCATCHMENT 2

ONSITE REGION 2

PEAK= 4.5 CFS @ 12.03 HRS, VOLUME= .33 AF

ACRES	CN	
1.10	87	RESIDENTIAL (.25 AC LOTS)

SCS TR-20 METHOD
TYPE III 24-HOUR
RAINFALL= 5.5 IN
SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
DIRECT ENTRY	1	6.0

SUBCATCHMENT 3

ONSITE REGION 3

PEAK= 1.8 CFS @ 12.03 HRS, VOLUME= .13 AF

ACRES	CN	
.43	87	RESIDENTIAL (.25 AC LOTS)

SCS TR-20 METHOD
TYPE III 24-HOUR
RAINFALL= 5.5 IN
SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
DIRECT ENTRY	1	6.0

Data for 1851.1

TYPE III 24-HOUR RAINFALL= 5.5 IN

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SUBCATCHMENT 4

ONSITE REGION 4

PEAK= 11.0 CFS @ 12.11 HRS, VOLUME= .87 AF

ACRES	CN		SCS TR-20 METHOD
1.58	80	LAWN, GOOD COND., TYPE D	TYPE III 24-HOUR
1.40	77	WOODS/BRUSH, GOOD COND., TYPE D	RAINFALL= 5.5 IN
.37	98	IMPERVIOUS	SPAN= 10-20 HRS, dt=.1 HRS
3.35	81		

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	8.5
Grass: Dense	n=.24 L=50' P2=3 in s=.02 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	2	.1
Grassed Waterway	Kv=15 L=50' s=.2 '/' V=6.71 fps	
SHALLOW CONCENTRATED/UPLAND FLOW	3	2.5
Grassed Waterway	Kv=15 L=320' s=.02 '/' V=2.12 fps	
Total Length= 420 ft		Total Tc= 11.1

SUBCATCHMENT 20

OFF-SITE REGION A

PEAK= 12.7 CFS @ 12.24 HRS, VOLUME= 1.25 AF

ACRES	CN		SCS TR-20 METHOD
4.16	87	RESID. (.25 AC LOTS-FULLY DEV.)	TYPE III 24-HOUR
			RAINFALL= 5.5 IN
			SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	14.7
Grass: Dense	n=.24 L=100' P2=3 in s=.02 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	2	6.3
Grassed Waterway	Kv=15 L=800' s=.02 '/' V=2.12 fps	
Total Length= 900 ft		Total Tc= 21.0

SUBCATCHMENT 30

OFFSITE REGION B-ASSUME FULLY DEVELOPED

PEAK= 10.6 CFS @ 12.22 HRS, VOLUME= 1.01 AF

ACRES	CN		SCS TR-20 METHOD
3.38	87	RESID. (.25 AC LOTS-FULLY DEV.)	TYPE III 24-HOUR
			RAINFALL= 5.5 IN
			SPAN= 10-20 HRS, dt=.1 HRS

Method	Comment	Tc (min)
TR-55 SHEET FLOW	1	14.7
Grass: Dense	n=.24 L=100' P2=3 in s=.02 '/'	
SHALLOW CONCENTRATED/UPLAND FLOW	2	4.7
Grassed Waterway	Kv=15 L=600' s=.02 '/' V=2.12 fps	
Total Length= 700 ft		Total Tc= 19.4

Data for 1851.1

TYPE III 24-HOUR RAINFALL= 5.5 IN

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26 Jun 95

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REACH 1 FIELD INLET (CULVERT #5)

Qin = 11.8 CFS @ 12.14 HRS, VOLUME= 1.02 AF
Qout= 11.7 CFS @ 12.15 HRS, VOLUME= 1.02 AF, ATTEN= 0%, LAG= .2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	17.6" PIPE	18" RCP OK	STOR-IND+TRANS METHOD
0.0	0.0	0.0			PEAK DEPTH= 1.15 FT
.1	.1	.2	n= .013		PEAK VELOCITY= 8.0 FPS
.3	.2	1.0	LENGTH= 35 FT		TRAVEL TIME = .1 MIN
.4	.4	2.3	SLOPE= .0143 FT/FT		SPAN= 10-20 HRS, dt=.1 HRS
1.0	1.3	9.9			
1.2	1.4	11.6			
1.3	1.6	12.6			
1.4	1.6	12.7			
1.4	1.7	12.6			
1.5	1.7	11.8			

REACH 2 FIELD INLET (CULVERT #3)

Qin = 12.7 CFS @ 12.24 HRS, VOLUME= 1.25 AF
Qout= 12.6 CFS @ 12.24 HRS, VOLUME= 1.25 AF, ATTEN= 0%, LAG= .2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	19.4" PIPE	21" RCP OK	STOR-IND+TRANS METHOD
0.0	0.0	0.0			PEAK DEPTH= 1.29 FT
.2	.1	.3	n= .013		PEAK VELOCITY= 7.1 FPS
.3	.3	1.1	LENGTH= 40 FT		TRAVEL TIME = .1 MIN
.5	.5	2.5	SLOPE= .01 FT/FT		SPAN= 10-20 HRS, dt=.1 HRS
1.1	1.5	10.7			
1.3	1.8	12.5			
1.5	1.9	13.7			
1.5	2.0	13.8			
1.6	2.0	13.7			
1.6	2.1	12.8			

REACH 3 FIELD INLET (CULVERT #1)

Qin = 10.6 CFS @ 12.22 HRS, VOLUME= 1.01 AF
Qout= 10.6 CFS @ 12.22 HRS, VOLUME= 1.01 AF, ATTEN= 0%, LAG= .1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	14.5" PIPE	15" RCP OK	STOR-IND+TRANS METHOD
0.0	0.0	0.0			PEAK DEPTH= .97 FT
.1	.1	.2	n= .013		PEAK VELOCITY= 10.7 FPS
.2	.2	.9	LENGTH= 30 FT		TRAVEL TIME = 0.0 MIN
.4	.3	2.1	SLOPE= .0333 FT/FT		SPAN= 10-20 HRS, dt=.1 HRS
.8	.9	9.0			
1.0	1.0	10.5			
1.1	1.1	11.5			
1.1	1.1	11.6			
1.2	1.1	11.5			
1.2	1.1	10.8			

Data for 1851.1

TYPE III 24-HOUR RAINFALL= 5.5 IN

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REACH 4 STREAM SEGMENT

Qin = 34.6 CFS @ 12.18 HRS, VOLUME= 3.59 AF
Qout= 34.5 CFS @ 12.21 HRS, VOLUME= 3.58 AF, ATTEN= 0%, LAG= 1.6 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	3' x 1' CHANNEL	STOR-IND+TRANS METHOD
0.0	0.0	0.0	SIDE SLOPE= .2 '/'	PEAK DEPTH= 1.01 FT
.1	.4	.4	n= .035	PEAK VELOCITY= 4.3 FPS
.2	.8	1.4	LENGTH= 180 FT	TRAVEL TIME = .7 MIN
.3	1.4	3.0	SLOPE= .02 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
.4	2.2	6.0		
.6	3.6	11.6		
.8	5.6	21.2		
1.0	8.0	34.4		

REACH 12 STORM DRAIN (SD#7)

Qin = 11.7 CFS @ 12.15 HRS, VOLUME= 1.02 AF
Qout= 11.5 CFS @ 12.17 HRS, VOLUME= 1.01 AF, ATTEN= 2%, LAG= 1.1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	13.7" PIPE	15" PVC OK	STOR-IND+TRANS METHOD
0.0	0.0	0.0			PEAK DEPTH= .90 FT
.1	.1	.2	n= .01		PEAK VELOCITY= 13.1 FPS
.2	.1	1.0	LENGTH= 250 FT		TRAVEL TIME = .3 MIN
.3	.3	2.3	SLOPE= .032 FT/FT		SPAN= 10-20 HRS, dt=.1 HRS
.8	.8	9.9			
.9	.9	11.5			
1.0	1.0	12.6			
1.1	1.0	12.7			
1.1	1.0	12.6			
1.1	1.0	11.8			

REACH 21 OUTLET PIPE (CULVERT #4)

Qin = 14.8 CFS @ 12.21 HRS, VOLUME= 1.58 AF
Qout= 14.8 CFS @ 12.21 HRS, VOLUME= 1.58 AF, ATTEN= 0%, LAG= .2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	14.8" PIPE	24" RCP OK	STOR-IND+TRANS METHOD
0.0	0.0	0.0			PEAK DEPTH= .99 FT
.1	.1	.3	n= .013		PEAK VELOCITY= 14.4 FPS
.2	.2	1.3	LENGTH= 65 FT		TRAVEL TIME = .1 MIN
.4	.3	3.0	SLOPE= .0585 FT/FT		SPAN= 10-20 HRS, dt=.1 HRS
.9	.9	12.6			
1.0	1.0	14.7			
1.1	1.1	16.1			
1.2	1.2	16.2			
1.2	1.2	16.1			
1.2	1.2	15.1			

Data for 1851.1

TYPE III 24-HOUR RAINFALL= 5.5 IN

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REACH 22

STREAM SEGMENT

Q_{in} = 14.8 CFS @ 12.21 HRS, VOLUME= 1.58 AF
Q_{out} = 14.6 CFS @ 12.24 HRS, VOLUME= 1.57 AF, ATTEN= 1%, LAG= 2.1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	3' x 1' CHANNEL	STOR-IND+TRANS METHOD
0.0	0.0	0.0	SIDE SLOPE= .2 '/'	PEAK DEPTH= .67 FT
.1	.4	.4	n= .035	PEAK VELOCITY= 3.4 FPS
.2	.8	1.4	LENGTH= 240 FT	TRAVEL TIME = 1.2 MIN
.3	1.4	2.9	SLOPE= .019 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
.4	2.2	5.8		
.6	3.6	11.3		
.8	5.6	20.7		
1.0	8.0	33.5		

REACH 31

OUTLET PIPE (CULVERT #2)

Q_{in} = 11.5 CFS @ 12.20 HRS, VOLUME= 1.14 AF
Q_{out} = 11.5 CFS @ 12.21 HRS, VOLUME= 1.14 AF, ATTEN= 0%, LAG= .2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	17.3" PIPE	18" RCP OK	STOR-IND+TRANS METHOD
0.0	0.0	0.0			PEAK DEPTH= 1.18 FT
.1	.1	.2	n= .013		PEAK VELOCITY= 8.1 FPS
.3	.2	1.0	LENGTH= 66 FT		TRAVEL TIME = .1 MIN
.4	.4	2.3	SLOPE= .015 FT/FT		SPAN= 10-20 HRS, dt=.1 HRS
1.0	1.2	9.7			
1.2	1.4	11.3			
1.3	1.5	12.3			
1.4	1.6	12.4			
1.4	1.6	12.3			
1.4	1.6	11.6			

REACH 32

STREAM SEGMENT

Q_{in} = 11.5 CFS @ 12.21 HRS, VOLUME= 1.14 AF
Q_{out} = 11.3 CFS @ 12.23 HRS, VOLUME= 1.14 AF, ATTEN= 2%, LAG= 1.2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	3' x 1' CHANNEL	STOR-IND+TRANS METHOD
0.0	0.0	0.0	SIDE SLOPE= .2 '/'	PEAK DEPTH= .55 FT
.1	.4	.5	n= .035	PEAK VELOCITY= 3.6 FPS
.2	.8	1.6	LENGTH= 150 FT	TRAVEL TIME = .7 MIN
.3	1.4	3.4	SLOPE= .0267 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
.4	2.2	6.9		
.6	3.6	13.4		
.8	5.6	24.5		
1.0	8.0	39.8		

Data for 1851.1

TYPE III 24-HOUR RAINFALL= 5.5 IN

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26 Jun 95

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REACH 41

EXISTING CULVERT AT DEDHAM STREET

Qin = 32.7 CFS @ 12.14 HRS, VOLUME= 3.58 AF

Qout= 29.6 CFS @ 12.25 HRS, VOLUME= 3.58 AF, ATTEN= 10%, LAG= 6.4 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	24" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.0		PEAK DEPTH= 2.00 FT
.2	.2	.6	n= .02	PEAK VELOCITY= 10.7 FPS
.4	.4	2.6	LENGTH= 45 FT	TRAVEL TIME = .1 MIN
.6	.8	5.8	SLOPE= .0404 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.4	2.3	24.7		
1.6	2.7	28.9		
1.8	3.0	31.5		
1.9	3.1	31.8		
1.9	3.1	31.5		
2.0	3.1	29.6		

Note: During peak flow for a 25 year storm the existing 24" culvert at Dedham Street restricts the flow to 29.6 cfs (reduced from 32.7 cfs). The theoretical pipe size required to pass the peak flow is 25.5"*

* REACH 41

EXISTING CULVERT AT DEDHAM STREET

Qin = 34.5 CFS @ 12.21 HRS, VOLUME= 3.58 AF

Qout= 34.5 CFS @ 12.21 HRS, VOLUME= 3.58 AF, ATTEN= 0%, LAG= .1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	25.5" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.0		PEAK DEPTH= 1.74 FT
.2	.2	.7	n= .02	PEAK VELOCITY= 11.1 FPS
.4	.5	3.0	LENGTH= 45 FT	TRAVEL TIME = .1 MIN
.6	.9	6.8	SLOPE= .0404 FT/FT	SPAN= 10-20 HRS, dt=.1 HRS
1.3	2.7	29.1		
1.7	3.0	34.0		
1.9	3.4	37.0		
2.0	3.5	37.1		
2.1	3.5	37.0		
2.1	3.5	34.5		

16 COTTAGE ST, S PORTLAND, ME			MINNEAPOLIS MN
JAMES & DEBRA LOMBARDO MILTON ST, PORTLAND, ME	110-112	336 H23-24	PEOPLES HERITAGE BANK 1 PORTLAND, SQ, PORTLAND, ME
MARGARET MCCARTHY 13 TUCKER AVE, PORTLAND, ME	488-490	335E 11-13	NONE
RONALD, DANIEL & MARK MCCULLOUGH 26 SEAVIEW AVE, OLD ORCHARD BCH, ME	438-444	335D2-8 D38-39	NONE
JOHN T & CYNTHIA A MCGOVERN 181 LEXINGTON AVE, PORTLAND, ME	339	336D13	NONE
JOHN T & CYNTHIA A MCGOVERN 181 LEXINGTON AVE, PORTLAND, ME	340-342	336D14-16	NONE
CYNTHIA A MCGOVERN	350	336D 6	NONE
GORDON & JULIE MERRILL 42 SAUGUS ST, PORTLAND, ME	234-237	336 E38-42	PEOPLES HERITAGE BANK 1 PORTLAND SQ, PORTLAND, ME
ANDREW MUSACCHIO 432 RANDOLPH, PORTLAND, ME	430		STM MORTGAGE CO 1250 MOCKINGBIRD LN, DALLAS TX 75247
ANDREW MUSACCHIO 432 RANDOLPH, PORTLAND, ME	431	335C 29	STM MORTGAGE CO 1250 MOCKINGBIRD LN, DALLAS TX 75247
ANDREW MUSACCHIO 432 RANDOLPH, PORTLAND, ME	432		STM MORTGAGE CO 1250 MOCKINGBIRD LN, DALLAS TX 75247
GEORGE ODENCRANTZ	419-420	335 C 40-41	NONE
GEORGE ODENCRANTZ	421-423	335C37-39	NONE
GEORGE ODENCRANTZ	450-454	335 D14-15	NONE
GEORGE ODENCRANTZ	474	335 D 38-39	NONE
GEORGE ODENCRANTZ	475		NONE
DIANE PAOLINE 45 BRAINTREE, PORTLAND, ME	117-122	336J26-29	EMC MORTGAGE CO PO BOX 141358, IRVING TX 75014
DIANE PAOLINE 45 BRAINTREE, PORTLAND, ME	143-150	336J3-10 24-25	EMC MORTGAGE CO PO BOX 141358, IRVING, TX 75014
GUIDO PARDI 41 SAUGUS ST, PORTLAND, ME	210-213	336A8-11	SEARS MORTGAGE CORP 1355 CONGRESS ST, PORTLAND, ME 04102
FLORENCE PENDLETON 10 CONGRESS ST, PORTLAND, ME	467-470	335D33-34	

PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	24-25	336 L1-12	NONE
PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	113-116	336 J30-33	NONE
PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	151-152	336 J1-2	NONE
PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	334-339	336 D8-9	NONE
PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	354-355	336 D1-2	NONE
PORTLAND WATER DISTRICT 225 DOUGLAS ST, PORTLAND, ME	412-416	335 C46-48	NONE
JOHN & HOLLY RICHIO 112 MILTON ST, PORTLAND, ME	42-45	336 K4-7	PEOPLES HERITAGE BANK 140 LISBON ST, LEWISTON, ME
JOHN F RIDGE 2 PLEASANT VALLEY, CAPE ELIZABETH, ME	337-338	336 D11-12	
PETER & CLAUDIA RISBARA 426 RANDOLPH ST, PORTLAND, ME	424-427	335 C33-36	CASCO NORTHERN 1 MONUMENT SQ, PORTLAND, ME
PETER RISBARA 426 RANDOLPH ST, PORTLAND, ME	428-429	335 C 31-32	CASCO NORTHERN 1 MONUMENT SQ, PORTLAND, ME
CHARLES RODWAY 1023 WASHINGTON AVE, PORTLAND, ME	14-17	336 L9-12	NONE
CHARLES RODWAY 1023 WASHINGTON AVE, PORTLAND, ME	18, 1/2 OF 19	336 L8	NONE
STEVEN & BETSY ROMAN 118 NEWTON ST, PORTLAND, ME	346-348	336 D17-19	GMAC MORTGAGE CORP 3451 HAMMOND AVE, WATERLOO, IOWA
DONNA RUSSO 21 DEEPWOOD LN, PORTLAND, ME	336	336 D10	
DONNA RUSSO 21 DEEPWOOD LN, PORTLAND, ME	349	336 D7	
JOSEPH RUSSO 21 DEEPWOOD LN, PORTLAND, ME	351-353	336 D3-5	
CHRISTINE SAUCIER 41 BRAINTREE ST, PORTLAND, ME	117-122	336 J26-29	MAINE STATE HOUSING AUTHORITY AUGUSTA, ME

CHRISTINE SAUCIER 41 BRAINTREE ST, PORTLAND, ME	141-142	336j11-12 21-23	MAINE STATE HOUSING AUTHORITY AUGUSTA, ME
KARL & CARLA SAVINO 41 EPPING ST, PORTLAND, ME	188-191	333G25-28	BANCBOSTON 7301 BAYMEADOWS WAY, JACKSONVILLE, FL
MARK & SUZANNE SILVERMAN 107 MILTON ST, PORTLAND, ME	94-96	336 H40-42	MAINE STATE HOUSING AUTHORITY AUGUSTA, ME
MARIA STRONG 31 SAUGUS ST, PORTLAND, ME	314-315	336A6	MAINE STATE HOUSING AUTHORITY AUGUSTA, ME
ANATOLY TABUN 52 NEWTON ST, PORTLAND, ME	3-7		NONE
ANATOLY TABUN 52 NEWTON ST, PORTLAND, ME	10-11		NONE
FRANK VANSANFORD 99 MILTON ST, PORTLAND, ME	97-99	336 H37-39	NONE
MICHAEL & MARY VERVILLE 12 SAUGUS ST, PORTLAND, ME	375-378	3353-6	CITIZENS MORTGAGE CO 55 SUMMER ST, BOSTON, MA
DAVID & MARY WALTON 128 BRAINTREE ST, PORTLAND, ME	180-183	333G17-20	PEOPLES HERITAGE 1 PORTLAND SQ, PORTLAND, ME
WATT SAMAKI TEMPLE 239 PARK AVE, PORTLAND, ME	393-398	335C15-20	PEOPLES HERITAGE 1 PORTLAND SQ, PORTLAND, ME
JOHN WELCH 485 CUMBERLAND AVE, PORTLAND, ME	437	335D1	NONE
JOHN WELCH 485 CUMBERLAND AVE, PORTLAND, ME	477	335E3-4	NONE
ARTHUR WHIPPLE 17 OLD COUNTY RD, SCARBOROUGH, ME	491-494	335 E14-17	NONE
LLOYD WOLF PO BOX 10127, PORTLAND, ME	206-209	333 H1-4	MAINE BANK & TRUST 467 CONGRESS ST, PO BOX 619, PORTLAND
KEVIN & TERRY YORK 153 BRAINTREE ST, PORTLAND, ME	196-198	333 H12-14	PEOPLES HERITAGE BANK 1 PORTLAND SQ, PORTLAND, ME

NOTICE OF PROPOSED STREET VACATION

A petition has been filed with the municipal officers of the City of Portland to vacate the following ways shown upon a subdivision plan named Woodfords Gardens Subdivision dated November 16, 1916 and recorded in the Cumberland County Registry of Deeds, Plan Book 13, Page 75.

List of ways to be vacated:

Diversified Properties Proposal:

Braintree Street . . . A 185 foot section north of Lynn St.
Dedham Street . . . From Saugus St. to a point north of Lynn St.
Hingham Street . . . From Saugus St. to Lynn St.
Lynn Street . . . From Dedham St. to Milton St.

R.J. Grondin and Sons Proposal:

Newell Street . . . Milton St. to Braintree St. and north of Beverly St.
Beverly Street . . . A 170 foot section, south of Missouri Ave.
Braintree Street . . . Section at the Beverly St./Braintree St. intersection

If the municipal officers enter an order vacating these ways, any person claiming an interest in these ways this way must, within one (1) year of the recording of the order, file a written claim thereof under oath in the Cumberland County Registry of Deeds and must, within one hundred eighty (180) days of the filing of the claim, commence an action in the Superior Court in Cumberland County in accordance with the Maine Revised Statutes Title 23, Section 3027-A.

The City Council will hold a public hearing on the proposed street vacations on Monday, November 6, 1995 at 7:30 p.m. in the City Council Chambers, City Hall, 389 Congress Street, Portland.

Further information on the street vacation proposals may be obtained at the Planning Office, City Hall, 4th Floor, 389 Congress Street, Portland, Maine or by calling 874-8300, ext. 8725.

Alexander Jaegerman
Chief Planner

STELLA ADAMS AND PHILLIP
DALRYMPLE
76 MILTON STREET
PORTLAND, ME 04101

MICHAEL AND LEIGH ANN
BRANDON
32 SAUGUS STREET
PORTLAND, ME 04101

THOMAS DUFFY
121 DEERHILL CR.
WESTBROOK, ME 04092

JAMES AMABILE AND LYNN
LAWSON
83 MILTON STREET
PORTLAND, ME 04101

LAURIE BRING AND RUSSELL
WAYNE
40 LONGWOODS ROAD
FALMOUTH, ME 04105

LUCY DYER AND RITA MCNELIS
104 CONGRESS STREET
PORTLAND, ME 04101

JEFFERY AND THERESA
ANDERSON
81 SAUGUS STREET
PORTLAND, ME 04101

RACHEL BRITTING
132 NEWTON STREET
PORTLAND, ME 04103

BRIAN AND EMILY EDWARDS
46 NEWTON STREET
PORTLAND, ME 04103

COLLEEN ANDREWS
WHITE ROCK PARK
GORHAM, ME 04038

DAVID AND NANCY BURKE
11 SAUGUS STREET
PORTLAND, ME 04101

FRED AND KATHERINE ELA
P.O. BOX 10515
PORTLAND, ME 04101

HARRY ANDREWS
WHITE ROCK PARK
GORHAM, ME 04038

RICHARD CALDWELL
62 NEWTON STREET
PORTLAND, ME 04103

SANDRA P. FALSEY
141 ALLEN AVENUE
PORTLAND, ME 04103

LINDA BALLARD
134 BRAINTREE STREET
PORTLAND, ME 04103

STEVEN AND SANDRA CAPRIOLA
23 SAUGUS STREET
PORTLAND, ME 04101

JOHN FOLEY
82 BRACKETT STREET
PORTLAND, ME 04102

MARGARET BEACHY AND MARK
MOSHER
4701 ADRIAN STREET
ROCKVILLE, MD 20853

RICHARD CASEY
108 WINN ROAD
FALMOUTH, ME 04105

REGINA FOLEY
6 BRAINTREE STREET
PORTLAND, ME 04103

CHERYL BONNEY
82 SAUGUS STREET
PORTLAND, ME 04101

GERALD AND VICTORIA
COURTOIUS
66 SAUGUS STREET
PORTLAND, ME 04101

PHILIP AND NANCY GERMANI
18 BAILEY AVENUE
PORTLAND, ME 04103

ELMER BRACKETT
C/O NE BRACKETT
113 PILLSBURY DRIVE
SCARBOROUGH, ME 04074

RICHARD AND PAULINE CURRY
BRAINTREE STREET
PORTLAND, ME 04103

DAVID AND MARTHA GOOGINS
1 HOLBROOK STREET
PORTLAND, ME 04103

NORMAN BRACKETT
113 PILLSBURY DRIVE
SCARBOROUGH, ME 04074

DIVERSIFIED PROPERTIES
INC.
P.O. BOX 10127
PORTLAND, ME 04104

JOHN GOULETTE AND GERTRUDE
MCCAUL
120 MOUNTAIN AVENUE
MALDEN, MA 02148

PAMELA GRASSETI
188 TANNERY ROAD
WESTFIELD, MA 01085

MADELINE LAMBERT
57 SAUGUS STREET
PORTLAND, ME 04101

DIANE PAOLINE
45 BRAINTREE STREET
PORTLAND, ME 04103

RJ GRONDIN AND SONS
11 BARTLETT ROAD
GORHAM, ME 04038

JAGDEEP AND PARAMIJIT
LEKHI
129 BRAINTREE STREET
PORTLAND, ME 04103

GUIDO PARDI
41 SAUGUS STREET
PORTLAND, ME 04101

JOHN AND JUDITH GUISTI
P.O. BOX 3465
PORTLAND, ME 04101

BETTY LEONARD
MILTON STREET
PORTLAND, ME 04101

FLORENCE PENDLETON
10 CONGRESS STREET
PORTLAND, ME 04101

GLEN AND FRANCINE
HEMMINGWAY
21 HARMONY
PORTLAND, ME 04103

PAUL AND MELISSA LEWIS
93 MILTON STREET
PORTLAND, ME 04101

PORTLAND WATER DISTRICT
225 DOUGLAS STREET
PORTLAND, ME 04102

EVA HIGGINS
90 CLIFFORD STREET
SO. PORTLAND, ME 04106

RUBERT AND REBECCA LEWIS
16 COTTAGE STREET
SO. PORTLAND, ME 04106

JOHN AND HOLLY RICHIO
112 MILTON STREET
PORTLAND, ME 04101

MATTHEW HOLLYDAY
P.O. BOX 10982
PORTLAND, ME 04101

JAMES AND DEBRA LOMBARDO
MILTON STREET
PORTLAND, ME 04101

JOHN RIDGE
2 PLEASANT VALLEY
CAPE ELIZABETH, ME 04107

MICHAEL AND LISA JOYCE
65 SAUGUS STREET
PORTLAND, ME 04101

MARGARET MCCARTHY
13 TUCKER AVENUE
PORTLAND, ME 04103

PETER AND CLAUDIA RISBARA
426 RANDOLPH STREET
PORTLAND, ME 04103

THOMAS JOYCE JR. AND
LILLIAN WHITE
616 MIGEON AVENUE, APT. 4
TORRINGTON, CT 06790

RONALD, DANIEL AND MARK
MCCULLOUGH
26 SEAVIEW AVENUE
OLD ORCHARD BEACH, ME
04064

CHARLES RODWAY
1023 WASHINGTON AVENUE
PORTLAND, ME 04103

PAUL KIRBY
75 MILTON STREET
PORTLAND, ME 04101

JOHN AND CYNTHIA MCGOVERN
181 LEXINGTON AVENUE
PORTLAND, ME 04103

STEVEN AND BETSY ROMAN
118 NEWTON STREET
PORTLAND, ME 04103

GEORGE AND THOMAS LAFFERTY
21 BOULAY STREET
BERLIN, NH 03570

GORDON AND JULIE MERRILL
42 SAUGUS STREET
PORTLAND, ME 04101

DONNA RUSSO
21 DEEPWOOD LANE
PORTLAND, ME 04101

JOSEPH RUSSO
21 DEEPWOOD LANE
PORTLAND, ME 04101

ANDREW MUSACCHIO
432 RANDOLPH STREET
PORTLAND, ME 04103

CENTERBANK MORTGAGE CO.
43 SOUTH MAIN STREET
WATERBURY, CT 06720

CHRISTINE SAUCIER
41 BRAINTREE STREET
PORTLAND, ME 04103

JOHN WELCH
485 CUMBERLAND AVENUE
PORTLAND, ME 04101

CITIZENS BANK OF MA
65 SUMMER STREET
BOSTON, MA 02110

KARL AND CARLA SAVINO
41 EPPING STREET
PORTLAND, ME 04101

ARTHUR WHIPPLE
17 OLD COUNTY ROAD
SCARBOROUGH, ME 04074

GMAC OF PA
8360 OLD YORK ROAD
ELKINS PARK, PA 19117

MARK AND SUZANNE SILVERMAN
107 MILTON STREET
PORTLAND, ME 04101

LLOYD WOLF
P.O. BOX 10127
PORTLAND, ME 04101

BOSTON FIVE CENTS SAVINGS
10 SCHOOL STREET
BOSTON, MA 02108

MARIA STRONG
31 SAUGUS STREET
PORTLAND, ME 04101

KEVIN AND TERRY YORK
153 BRAINTREE STREET
PORTLAND, ME 04103

FLEET BANK OF MAINE
39 AUBURN STREET 37
PORTLAND, ME 04103

ANATOLY TABUN
52 NEWTON STREET
PORTLAND, ME 04103

NORWEST MORTGAGE
P.O. BOX 5137
DES MOINES, IA 50306

CORINTHIAN MORTGAGE CO.
10561 BARKLEY SUITE 300
OVERLAND PARK, KS 66212

FRANK VANSANFORD
99 MILTON STREET
PORTLAND, ME 04101

PEOPLES HERITAGE BANK
140 LISBON STREET
LEWISTON, ME 04240

1ST COMFED MORTGAGE CO.
45 CENTRAL STREET
LOWELL, MA 01852

MICHAEL AND MARY VERVILLE
12 SAUGUS STREET
PORTLAND, ME 04101

MARGARETTEN AND CO., INC.
1 RONSON ROAD
ISELIN, NJ 08830

CITIZENS MORTGAGE CORP.
3150 BRISTOL STREET, SUITE
250
COSTA MESA, CA 92626

DAVID AND MARY WALTON
128 BRAINTREE STREET
PORTLAND, ME 04103

MAINE STATE HOUSING
AUTHORITY
AUGUSTA, ME 04330

CITICORP HOMEOWNERS
670 MASO RIDGE CENTER
ST. LOUIS, MO 63141

WATT SAMAKI TEMPLE
239 PARK AVENUE
PORTLAND, ME 04102

PEOPLES HERITAGE BANK
ONE PORTLAND SQUARE
PORTLAND, ME 04103

FEDERAL HOME LOAN MTG. CO.
1109 SUNSET HILLS ROAD
RESTON, VA 22090

MANHATTAN SAVINGS BANK
415 MADISON AVENUE
NEW YORK, NY 10017

KEY BANK
1 MONUMENT SQUARE
PORTLAND, ME 04101

FURST SECURITY SAVINGS
2600 TELEGRAPH ROAD
BLOOMFIELD HILLS, MI 48013

BANK UNITED OF TEXAS DBA
COMMONWEALTH UNITED
20 BURLINGTON MALL ROAD
BURLINGTON, MA 01803

COUNTRYWIDE FUNDING CORP.
155 N. LAKE AVENUE
PASADENA, CA 91101

STM MORTGAGE CO.
1250 MOCKINGBIRD LANE
DALLAS, TX 75247

EMC MORTGAGE CO.
P.O. BOX 141358
IRVING, TX 75014

SEARS MORTGAGE CORP.
1355 CONGRESS STREET
PORTLAND, ME 04102

GMAC MORTGAGE CORP.
3451 HAMMOND AVENUE
WATERLOO, IO 50702

BANCBOSTON
7301 BAYMEADOWS WAY
JACKSONVILLE, FL 32216

NORWEST MORTGAGE
TAX DEPARTMENT
1021 SOUTHEAST TENTH
AVENUE
MINNEAPOLIS, MN 55479-2553



CITY OF PORTLAND
Planning and Urban Development Department

MEMORANDUM

TO: David Jordan, Code Enforcement officer

FROM: James Seymour, Acting Development Review Coordinator

DATE: April 5, 1995

SUBJECT: Restatement Temporary Certificate of Occupancy for 78 Milton Street

I have reviewed the single family residence at 78 Milton Street per request of Custom Built Homes of Maine and believe it would be acceptable to issue a revised temporary Certificate of Occupancy which would decrease the number of conditions listed with the previous Temporary Certificate of Occupancy dated March 28, 1995. A permanent Certificate of Occupancy should not be issued until the following conditions have been met.

1. The installation of a private drain under the driveway and across the house front to outlet above the field inlet is acceptable provide that the drain outlet and inlet be riprapped for protection from erosion and sedimentation. The outlet should be constructed such that a riprap swale continue to the field inlet. This work shall be completed and reviewed by the Development Review Coordinator by May 1, 1995.
2. Two City of Portland approved species and size trees must be planted along the street frontage prior to issuance of a permanent Certificate of Occupancy. Trees shall also be approved by the Development Review Coordinator and planted by July 1, 1995.
3. Damaged sidewalk, curbing or streets shall be repaired. At my recent site visit I noticed that the sidewalk base was damaged where it crossed the driveway apron at Lot 136 and at 78 Milton Street. Under your conditional site plan approval as given by Owens McCullough, you are required to make these repairs. All excavated areas or dug areas near the sidewalks must be rough graded or filled by May 1, 1995. Final sidewalk repairs must be completed and reviewed by Public Works and the Development Review Coordinator by July 1, 1995.

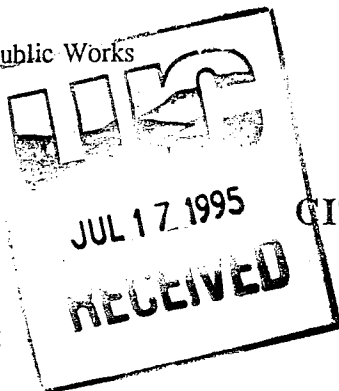
4. Prior to loaming and seeding, I request that you contact the Development Review Coordinator so that grading and drainage infrastructure can be examined. Grading should include a swale at the rear of the house draining to the field drain and to the private drain pipe which also outlets above the field drain.

The disturbed lot area shall be loamed, seeded, and mulched no later than July 1, 1995 and approved by the Development Review Coordinator.

Please review and take notice to the conditions of site plan approval for the site plan as were made by Owens McCullough's review dated January 12, 1995. If you have any questions, please feel free to contact me at the Planning Department.

cc: Paul Niehoff, Materials Engineer

Department of Public Works



Nadeen M. Daniels
Assistant City Manager
Director

CITY OF PORTLAND

William J. Bray
Deputy Director
City Engineer

July 13, 1995

Mr. Philip Grondin
R. J. Grondin & Sons
11 Bartlett Road
Gorham ME 04038

SUBJECT: BEVERLY STREET CONSTRUCTION PLANS

Dear Phil:

I have reviewed the construction plans for Beverly Street submitted by Land Use Consultants. My comments are as follows:

Per the submission requirements 14-403 Streets (copy attached for your reference), the following items have not been submitted or are not clear:

1. The survey shall be based on current City of Portland horizontal and vertical datum. Methodology used to determine datum and description of City benchmark(s) used shall be noted on the plans. Sheet 2 of 4, Phase I Beverly Street Conceptual Grading and Erosion Control Plan, notes the project benchmark is a fire hydrant on Stuart Avenue. Only a vertical elevation is noted, no horizontal data is given and methodology used is not given.
2. Coordinates of proposed monuments are not noted.
3. No proposed rim elevations are noted for DMH 29 and SMH 24.
4. Light pole locations are shown, however, no light detail is provided.
5. Evidence of right, title or interest in the property has not been submitted.
6. Stormwater calculations have been submitted. However, no narrative describing the existing surface drainage and assumptions used have been submitted.
7. A construction plan outlining the anticipated sequence of construction has not been submitted.

Design comments:

1. Vertical alignment
 - The K value for the vertical curve located between stations 24+15 and 23+55 is 14.08. Per the Technical and Design Standards and Guidelines for Street Design, Alignment and Grade Standards, the minimum K value for sag curves is 20. The combination of the low K value and the sharp corner (centerline radius of 27 feet) at the intersection creates a hazardous condition.

- There is a deep gully between Sta. 21+00 and 22+00. The plans show 15 feet of fill at the centerline of the proposed road at Sta. 21+40. Care must be taken during construction to ensure proper compaction of the fill material. Redesign of the vertical alignment as noted above may also reduce the amount of fill required.
2. As discussed at our meeting on June 28, 1995, a complete design of the intersection of Beverly and Braintree Streets must be submitted. This was also a concern during the initial Planning Board review of the project in 1993. Phasing of the construction of the project may be considered. It is our understanding that you desire to phase the project in order to start construction of phase 1 prior to the vacation of Newell Street by the City Council. This may be acceptable if the intersection is constructed as soon as practicable following action by the City Council.
 3. Sewer design - The sanitary sewer as shown ends at Sta. 17+00. No provisions are made for extending the sewer for lots beyond this project. If this sewer line is to be extended to serve those lots, then the grades must be adjusted. If future development is to be served by a sewer connecting directly to the Presumpscott North Main Interceptor Sewer, then a sewer easement will be required. Since the project requires the re-recording of the subdivision plat, it may be prudent to add the sewer easement at this time to minimize amendments to the subdivision plat.
 4. No underdrain is shown on the plans. The Residential Street Cross Section detail on Sheet 4 of 4, Details, notes "underdrain (typ) (size and need to be field-determined)". According to the Cumberland County Soil Survey, soils on site are Scantic silt loam. These are not free draining soils, therefore, underdrain shall be required in Beverly Street.
 5. Stormwater Management:
 - Storm drain ends at Sta. 19+00. This does not allow for foundation drains from lots 143, 148, and 149. Also, the same issue with respect to future development as noted above for the sanitary sewer is a concern for the storm drain as well.
 - The distance between DMH 28 and DMH 29 is 296 feet. Maximum allowed per the Technical and Design Standards and Guidelines is 250 feet.
 - House lots on either side (lots 147 and 139) also have a significant amount of fill. This appears to be a major drainage course for this portion of Woodfords Gardens. The conceptual grading plan shows two homes to be constructed directly on top of the gully. In order to accommodate these two buildings, the plans show stormwater from the proposed development on the southerly side of Beverly Street, as well as the existing homes on Braintree and Saugus Streets, being directed to a proposed field inlet between lots 146 and 147. In general, stormwater does not like to change direction. It has been my experience that redirecting stormwater in this manner and constructing homes on drainage courses is not good engineering practice. The potential homeowner is apt to have numerous problems ranging from wet basements to settlement. Therefore, I cannot recommend construction of homes on lots 147 and 139. Also, drainage easements across the rear of lots 144 through 147 are required in order to ensure that abutters will not block drainage.
 - A second issue with respect to the gully is the manner of directing the drainage into the storm drain. Field inlets are a maintenance problem. In locations such as this, an appropriately sized culvert would be more acceptable.
 6. Residential Street Cross-Section Detail:
 - Note with respect to underdrain must be changed to specify 6 inch type "B" underdrain.
 - Sidewalk shall be constructed of 2 inches of grade "C" bituminous pavement.

Mr. Philip Grondin
July 13, 1995

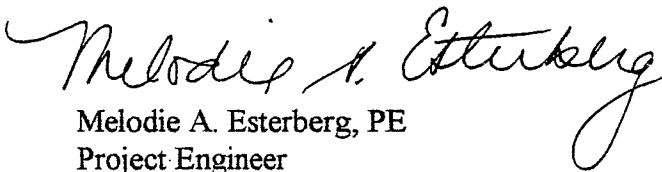
Page 3

7. Granite tipdowns: In locations where there is no esplanade between the sidewalk and the curb, a 6 foot tipdown will not meet ADA standards. Therefore, 7 foot tipdowns are required in those locations. For this project, the only tipdown that is affected is adjacent to the driveway of the existing home at Sta. 23+35. Public Works is in the process of changing the standard details to conform with ADA requirements. In the future, all tipdowns will be 7 foot.
8. Any references to City of Portland Parks & Public Works Department should be changed to eliminate Parks.
9. Erosion Control:
 - Plans show the use of "Hay Bale Erosion Checks" in swales. These "checks" are essentially check dams and hay bale check dams do not meet the standards delineated in the "Maine Erosion and Sediment Control Handbook for Construction."
 - Silt fencing is shown in some locations between the proposed construction and the stream. However, there are gaps in the silt fencing and it appears that sediment can reach the brook.
10. The plans show grading outside of the right of way between Sta. 22+50 and Sta. 24+00. A construction easement from the abutting property owners must be obtained prior to the start of construction.
11. A performance guarantee and defect guarantee will be required for this project. Section 14-403 of the Land Use Code states that upon determination of the public works authority that plans for construction of the street meet the standards, the developer shall provide a performance guarantee as set forth in section 14-501 of the Land Use Code. Detailed construction cost estimates for the required improvement shall be submitted to the public works authority for approval to determine the amount of the performance guarantee. The form, terms, and conditions of the performance guarantee must be approved by the City. The performance guarantee plus a check made out to the City of Portland in the amount of 1.7 percent of the performance guarantee must be submitted prior to issuance of any permits for the affected development.

If you have any questions with respect to the above, please feel free to call me at 874-4087.

Sincerely,

CITY OF PORTLAND


Melodie A. Esterberg, PE
Project Engineer

pc: W. J. Bray, Deputy Director
B. A. Bell, Operations Manager
K. A. Staples, PE, City Engineer
A. Jaegerman, Chief Planner
Bill Walsh, Land Use Consultants, 966 Riverside St, Portland, ME 04103

Lot 139
11,703 SF

Lot 140
11,924 SF

SILL 71.75
DAYLIGHT
BASEMT. SILL
63.75

SILL 72.00
DAYLIGHT
BASEMT. SILL
64.00

SILL 74.00
DAYLIGHT
BASEMT. SILL
66.00

EXISTING
BUILDING
FFE 75.5±

END CURB WITH TIP
DOWN STA 23+35, VT

STA: 23+95.86

STA: 23+69.15

STA: 18+66.14
SAUGUS

Lot 147
10,920 SF

SILL E.L.
72.85

Lot 146
10,177 SF

SILL E.L.
72.00

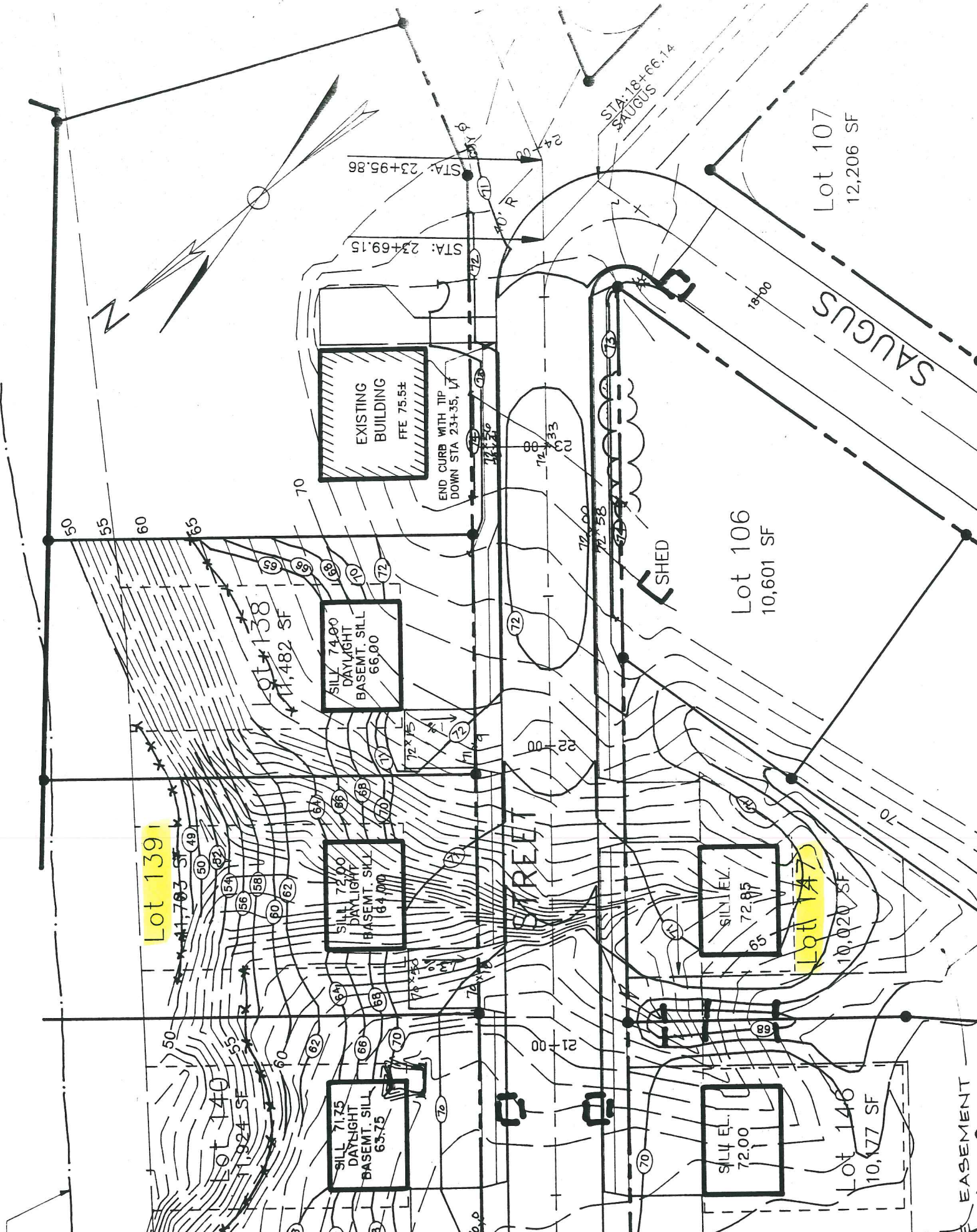
Lot 106
10,601 SF

Lot 107
12,206 SF

STREET

SHED

SAUGUS



CITY OF PORTLAND, MAINE
 Department of Planning and Urban Development
 SUBDIVISION/SITE DEVELOPMENT

COST ESTIMATE OF IMPROVEMENTS TO BE COVERED BY PERFORMANCE GUARANTEE

Name of Project BEVERLY STREET Date 8/15/95
 Address/Location _____
 Developer _____
 Form of Performance Guarantee _____
 Type of Development: Subdivision — Site Plan (Major/Minor)

ITEM	QUANTITY	UNIT COST	SUBTOTAL	COMPLETED
1. STREET/SIDEWALK:				
Road	640 LF	70.00	44,800.00	
Granite Curbing	1,030 LF	19.00	19,570.00	
Sidewalks	1,030 LF	7.85	8,085.50	
Esplanades	1,030 LF	1.35	1,390.50	
Monuments	0	0	0	
Street Lighting	2 EA	1,800.00	3,600.00	
Other				
2. SANITARY SEWER:				
Manholes	3 EA	1,200.00	3,600.00	
Piping	700 LF	18.00	12,600.00	
Connections	11 EA	375.00	4,125.00	
Other				
3. STORM DRAINAGE:				
Manholes	4 EA	1,200.00	4,800.00	
Catch Basins	5 EA	1,200.00	6,000.00	
Piping	540 LF	24.00	12,960.00	
Detention Basin	N/A			
Other				
4. SITE LIGHTING	600 LF	6.00	3,600.00	
5. EROSION CONTROL	700 LF	3.00	2,100.00	
6. RECREATION AND OPEN SPACE AMENITIES	N/A			
7. LANDSCAPING (Attach breakdown of plant materials, quantities, and unit costs)	N/A			
8. MISCELLANEOUS	N/A			
TOTAL AMOUNT OF PERFORMANCE GUARANTEE			<u>127,230.00</u>	
+1.7% = INSPECTION FEE				

Approved _____
 Approved _____



CITY OF PORTLAND

February 3, 1999

Dan McCarthy
Custom Built Homes
27 Main Street
Windham Me 04062

RE: Buca Run, Lots 13 and 15

Dear Mr. McCarthy:

I have the following comments on your proposal to modify the 25-foot buffer from the stream on lots 13 and 15.

Lot 15 . . . If the common lot line for lots 14 and 15 were adjusted, the building envelope could be increased and you could minimize the intrusion into the buffer. In order to accommodate your house design, we would consider a minimal intrusion into the buffer, but not the one you are proposing. Obviously the 50- foot frontage on lot 14 would need to be retained.

Lot 13 . . . Look at an alternative siting or orientation for the house. Although constrained by the configuration, it is a large lot, and should be able to accommodate the house without intruding into the buffer.

To summarize, we strongly recommend you review the suggested alternatives outlined above. We are not enthusiastic about adjusting the buffer regardless of the NRPA changes. The fact remains these are very steep slopes adjacent to a significant stream. The buffers are intended to protect the integrity of this watercourse.

Should you have any questions on the letter please call me.

Sincerely,

Richard Knowland
Senior Planner

cc: Joseph E. Gray, Jr., Director of Planning and Urban Development
Alexander Jaegerman, Chief Planner
Jim Wolf, Diversified Properties, P.O. Box 10127, Portland ME 04104

Department of Public Works



Nadeen M. Daniels
Assistant City Manager
Director

CITY OF PORTLAND

William J. Bray
Deputy Director
City Engineer

September 25, 1995

Mr. Philip Grondin
R. J. Grondin & Sons
11 Bartlett Road
Gorham ME 04038

SUBJECT: BEVERLY STREET CONSTRUCTION PLANS

Dear Mr. Grondin:

Engineering Staff has reviewed the revised plans submitted on September 14, 1995. The construction plans are approved with the following conditions:

1. A public drainage easement shall be provided adjacent to the proposed field inlet located between lots 146 and 147. This easement shall be a minimum of twenty (20) feet beyond the field inlet. Since this easement must be accepted by City Council, it would be prudent to prepare the documents and submit with the necessary street vacations.
2. The proposed field inlet shall be constructed using a City of Portland standard catch basin structure. The frame and cover shall be round. Square frames and covers are not permitted.
3. A drainage maintenance agreement for the remaining private drainage easements located on lots 144 through 147 shall be executed. This agreement shall be approved by the Planning Office and Corporation Counsel. In order to ensure that drainage easements are included in the deeds for lots 144 through 147, copies of deeds shall be submitted to the Planning Office with the building permit applications.
4. Sill and lowest opening elevations for lots 148, 149, and 150 shall be noted on the recording plat.
5. A performance guarantee and defect guarantee are required for this project. Section 14-403 of the Land Use Code states that upon determination of the public works authority that plans for construction of the street meet the standards, the developer shall provide a performance guarantee as set forth in section 14-501 of the Land Use Code. Detailed construction cost estimates for the required improvement must be submitted to the public works authority for approval to determine the amount of the performance guarantee. The form, terms, and conditions of the performance guarantee must be approved by the City. The performance guarantee plus a check

made out to the City of Portland in the amount of 1.7 percent of the performance guarantee must be submitted prior to issuance of any permits.

6. As agreed to during the review process for Milton Street, as well as during inspection of the construction of Milton Street, the sidewalk on Saugus Street between Milton Street and the existing section of sidewalk must be constructed. The cost of this sidewalk shall be included in the performance guarantee for Beverly Street.
7. A construction schedule shall be submitted for review and approval prior to issuance of any permits.
8. Mylar copies of the construction plans shall be submitted prior to issuance of any permits. As built drawings shall be submitted prior to acceptance of the street by the City.

If you have any questions, please contact Melodie A. Esterberg, PE, at 874-8847.

Sincerely,

CITY OF PORTLAND



Katherine A. Staples, PE
City Engineer

pc: N. M. Daniels, Assistant City Manager
W. J. Bray, Deputy Director
B. A. Bell, Operations Manager
M. A. Esterberg, PE, Project Engineer
J. E. Gray, Director, Planning and Urban Development
A. Jaegerman, Chief Planner
R. Knowland, Senior Planner

May 28, 1998

Richard Knowland, Senior Planner
City of Portland
389 Congress Street
Portland, ME 04101

RE: Lot 139, Beverly Street
Woodfords Garden Subdivision

Dear Rick,

I have attached a copy of the approved Beverly Street subdivision plan that was recorded October 10, 1995 at CCRD Plan Book 195, Page 346. Please refer to Note #8 which states that Lot 139 is **not** an approved building lot. We now have buyers for the adjacent lots, #138 and 140 but we do not want to sell those lots without addressing the future of #139 (we don't want to be left with a lot that we cannot sell). In the interest of time, we would like to facilitate this issue by conveying each half of lot 139 to the buyers of adjacent Lots # 138 and 140. Those buyers are agreeable and they know that their construction will be confined to the existing building windows of Lots 138 and 140. It is our understanding that the proper way to do this transaction is to obtain staff approval from your office and then do the conveyances simultaneously. Would you please advise me on this matter.

Thank you for your attention to this.

Sincerely,



Thomas H. Hey
Controller



LAND USE CONSULTANTS INC

March 22, 1996

J. David Haynes, RLA
David A. Kamila, PE
Frederic J. Licht, Jr., PE

Bradley H. Hare, RLA
John D. Roberts, PLS

1851

3/22/96

Mr. Richard Knowland, Senior Planner
Department of Planning & Urban Development
City Hall
389 Congress Street
Portland, Maine 04101

Woodfords Gardens - Recording Plat Sheet 1 of 2

Dear Rick:

I am submitting herewith the original mylar recording plat of Woodfords Gardens showing lots 148 thru 161 which involved street vacations of portions of Newell Avenue, Braintree Street and Beverly Street.

We have added Notes 7, 8, and 9 dealing with minimum sill elevations, trees and site plan review for each lot.

I have also included a copy of the engineering plans for the continuation of Beverly Street under Section 14-403. Melodie Estaberg is reviewing the engineering plans.

I trust you will be able to schedule this for signing by the Board as soon as possible so we can proceed with construction.

Please call with any questions or comments.

Sincerely,

David A. Kamila, P.E.

DAK/s

Enclosures

cc: Phil Grondin
Melodie Estaberg



LAND USE CONSULTANTS INC

March 22, 1996

J. David Haynes, RLA
David A. Kamila, PE
Frederic J. Licht, Jr., PE

Bradley H. Hare, RLA
John D. Roberts, PLS

1851

Melodie Estaberg, P.E.
Public Works Dept.
55 Portland Street
Portland, Maine 04101

Woodfords Gardens - Beverly Street - Phase II

Dear Melodie,

I am submitting herewith the detailed plans for the continuation of Beverly Steet in the Woodfords Gardens Subdivision being constructed by R.J. Grondin & Sons. The plans cover the remainder of Beverly Street from the intersection with Braintree Street to the intersection with Milton Street. The plans also include a portion of Milton Street from Beverly Street to the old Newell right of way. Proposed grading and first floor elevations are shown for Lots 148 thru 161.

I have attached a copy of the 14-403 Street Construction Application as well as a drainage study for this area. I am submitting a copy of these plans directly with Rick Knowland in Planning along with the mylar recording plat for this phase of the site. The mylar should be signed and recorded shortly.

Please call myself or Pat Clark with any questions or comments. Phil is anxious to get underway and we appreciate your timely attention to this matter.

Sincerely,

David A. Kamila, P.E.

DAK/s

Attachments

cc: Phil Grondin
Rick Knowland

Department of Public Works



Nadeen M. Daniels
Assistant City Manager,
Director

CITY OF PORTLAND

William J. Bray
Deputy Director
City Engineer

14-403 STREET CONSTRUCTION APPLICATION

Date: 3/22/96

Application Information

Name: R. J. Grondin & Sons

Mailing Address: 11 Bartlett Road
Gorham, ME 04038

Phone Number: _____

Project Information

Location: Beverly & Milton Streets

Nearest improved city street: Beverly Street

Original subdivision name(s): Woodfords Gardens (Amended 10/26/95)

Cumberland County Registry of Deeds Book PB 195 Page 346

Required state of federal permits and status:

None Required

I hereby acknowledge receipt of the City of Portland Department of Public Works, Engineering Section Submission Requirements for 14-403 Streets.

David A. Kamila 3/22/96

Signature of Applicant

Date

David A. Kamila, P.E.

Agent - Land Use Consultants, Inc.

March 21, 1996

1851

**DRAINAGE EVALUATION
FOR
BEVERLY/MILTON STREET IMPROVEMENTS
WOODFORDS GARDENS
PORTLAND, MAINE**

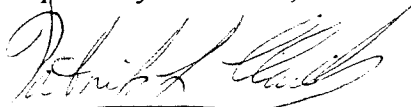
Land Use Consultants has submitted plans and drainage calculations on behalf of R.J. Grondin & Sons for a portion of Woodfords Gardens Subdivision in Portland, Maine. The site considered in the calculations includes a small 14 lot area near the intersection of Milton and Beverly Streets. Runoff calculations were performed in order to provide adequately sized storm drain lines within the related portions of Beverly Street and Milton Street to be built pursuant to Section 14-403 of the Portland Land Use Code. The 2.5 acre watershed involves approved lots 148 - 161 inclusively and was further divided into six (6) subcatchment areas, each relating to a portion of the proposed storm drain system. The new storm drain will outlet to an unnamed brook and existing drainage easement running along the northerly edge of the subdivision.

The present site is lightly wooded except for portions of Beverly and Milton Street rights of way which have been cleared several years ago and are well vegetated with grass and brush. Existing drainage patterns include overland flow to shallow swales and gullies which drain into an unnamed brook which flows to the Presumpscot River. The stream is situated in a deep channel with steep well vegetated side slopes. The site is fairly flat except for the steep banks to the brook and appears to be stable with little evidence of erosion or drainage problems.

The current proposal includes Phase II construction of Beverly Street from station 12+00± to station 16+00± and a small portion (Phase I) of Milton Street from station 31+00± to station 34+00± in order to provide adequate frontage for each of the lots, meeting the minimum requirements for street improvements, per section 14-403 of the Land Use Code. Stormwater runoff will be controlled with the addition of new catch basins and storm drains in accordance with the City of Portland Technical and Design Standards and Guidelines. Pipe sizing calculations were performed using the Rational method using rainfall data for a 25 year design storm.

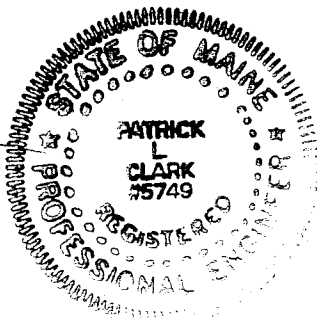
The proposed storm drain has adequate capacity for the related subdivision construction and developed watershed. Calculations and data used to evaluate the proposed facilities are included.

Respectfully Submitted,



Patrick L. Clark, P.E.

PLC/s



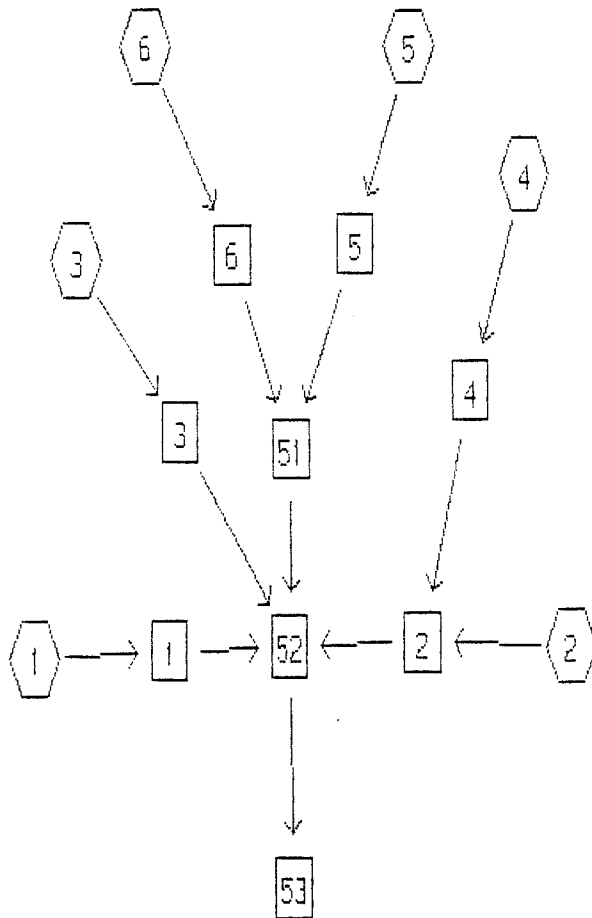
DURATION= 5 MIN INTEN= 6.20 IN/HR

Prepared by Land Use Consultants, Inc.

21 Mar 96

HydroCAD 4.51 000511 (c) 1986-1996 Applied Microcomputer Systems

WATERSHED ROUTING =====



- SUBCATCHMENT 1 = -> REACH 1
- SUBCATCHMENT 2 = -> REACH 2
- SUBCATCHMENT 3 = -> REACH 3
- SUBCATCHMENT 4 = -> REACH 4
- SUBCATCHMENT 5 = -> REACH 5

DURATION= 5 MIN INTEN= 6.20 IN/HR

Prepared by Land Use Consultants, Inc.

21 Mar 96

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SUBCATCHMENT 6	=	->	REACH 6
REACH 1	= BEVERLY ST STORM DRAIN	->	REACH 52
REACH 2	= CB LEAD SD#33	->	REACH 52
REACH 3	= CB LEAD SD#34A	->	REACH 52
REACH 4	= CB LEAD SD#34	->	REACH 2
REACH 5	= CB LEAD SD#29	->	REACH 51
REACH 6	= CB LEAD SD#30	->	REACH 51
REACH 51	= MILTON ST STORM DRAIN	->	REACH 52
REACH 52	= CROSS-COUNTRY STORM DRAIN	->	REACH 53
REACH 53	= STORM DRAIN OUTLET PIPE	->	

DURATION= 5 MIN INTEN= 6.20 IN/HR

Prepared by Land Use Consultants, Inc.

21 Mar 96

HydroCAD 4.51 000511 (c) 1986-1996 Applied Microcomputer Systems

RUNOFF BY RATIONAL METHOD: DURATION= 5 MIN INTEN= 6.20 IN/HR

RUNOFF SPAN = 0-3 HRS, dt= .01 HRS, 301 POINTS

SUBCAT NUMBER	AREA (ACRE)	Tc (MIN)	--GROUND COVERS (%CN)--				WGT'D CN	C	PEAK (CFS)	Tpeak (HRS)	VOL (AF)
1	.26	5.0	-	-	-	-	-	.65	1.01	.08	.01
2	.30	5.0	-	-	-	-	-	.73	1.31	.08	.01
3	.90	5.0	-	-	-	-	-	.52	2.80	.08	.02
4	.37	5.0	-	-	-	-	-	.51	1.13	.08	.01
5	.33	5.0	-	-	-	-	-	.55	1.09	.08	.01
6	.31	5.0	-	-	-	-	-	.55	1.02	.08	.01

DURATION= 5 MIN INTEN= 6.20 IN/HR

Prepared by Land Use Consultants, Inc.

21 Mar 96

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REACH ROUTING BY STOR-IND+TRANS METHOD

REACH NO.	DIAM (IN)	BOTTOM WIDTH (FT)	DEPTH (FT)	SIDE SLOPES (FT/FT)	n	LENGTH (FT)	SLOPE (FT/FT)	PEAK VEL. (FPS)	TRAVEL TIME (MIN)	PEAK Qout (CFS)
1	12.0	-	-	-	.009	246	.0130	5.6	.7	.95
2	12.0	-	-	-	.009	54	.0100	6.6	.1	2.38
3	10.0	-	-	-	.009	33	.0050	4.6	.1	2.33
4	10.0	-	-	-	.009	26	.0100	5.5	.1	1.11
5	10.0	-	-	-	.009	14	.0350	8.3	0.0	1.08
6	10.0	-	-	-	.009	17	.0100	5.3	.1	1.01
51	15.0	-	-	-	.009	118	.0200	7.9	.2	2.03
52	15.0	-	-	-	.009	57	.0940	20.1	0.0	7.48
53	15.0	-	-	-	.009	60	.0200	11.3	.1	7.43

DURATION= 5 MIN INTEN= 6.20 IN/HR

Prepared by Land Use Consultants, Inc.

21 Mar 96

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SUBCATCHMENT 1

PEAK= 1.01 CFS @ .08 HRS, VOLUME= .01 AF

C= .65

TOTAL AREA = .26 AC

RATIONAL METHOD

DURATION= 5 MIN

INTEN= 6.20 IN/HR

SPAN= 0-3 HRS, dt=.01 HRS

Method	Comment	Tc (min)
DIRECT ENTRY	Segment ID:1	5.0

SUBCATCHMENT 2

PEAK= 1.31 CFS @ .08 HRS, VOLUME= .01 AF

C= .73

TOTAL AREA = .30 AC

RATIONAL METHOD

DURATION= 5 MIN

INTEN= 6.20 IN/HR

SPAN= 0-3 HRS, dt=.01 HRS

Method	Comment	Tc (min)
DIRECT ENTRY	Segment ID:2	5.0

SUBCATCHMENT 3

PEAK= 2.80 CFS @ .08 HRS, VOLUME= .02 AF

C= .52

TOTAL AREA = .90 AC

RATIONAL METHOD

DURATION= 5 MIN

INTEN= 6.20 IN/HR

SPAN= 0-3 HRS, dt=.01 HRS

Method	Comment	Tc (min)
DIRECT ENTRY	Segment ID:3	5.0

SUBCATCHMENT 4

PEAK= 1.13 CFS @ .08 HRS, VOLUME= .01 AF

C= .51

TOTAL AREA = .37 AC

RATIONAL METHOD

DURATION= 5 MIN

INTEN= 6.20 IN/HR

SPAN= 0-3 HRS, dt=.01 HRS

Method	Comment	Tc (min)
DIRECT ENTRY	Segment ID:4	5.0

DURATION= 5 MIN INTEN= 6.20 IN/HR

Prepared by Land Use Consultants, Inc.

21 Mar 96

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SUBCATCHMENT 5

PEAK= 1.09 CFS @ .08 HRS, VOLUME= .01 AF

C= .55

RATIONAL METHOD

TOTAL AREA = .33 AC

DURATION= 5 MIN

INTEN= 6.20 IN/HR

SPAN= 0-3 HRS, dt=.01 HRS

Method	Comment	Tc (min)
DIRECT ENTRY	Segment ID:5	5.0

SUBCATCHMENT 6

PEAK= 1.02 CFS @ .08 HRS, VOLUME= .01 AF

C= .55

RATIONAL METHOD

TOTAL AREA = .31 AC

DURATION= 5 MIN

INTEN= 6.20 IN/HR

SPAN= 0-3 HRS, dt=.01 HRS

Method	Comment	Tc (min)
DIRECT ENTRY	Segment ID:6	5.0

DURATION= 5 MIN INTEN= 6.20 IN/HR

Prepared by Land Use Consultants, Inc.

21 Mar 96

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REACH 1 BEVERLY ST STORM DRAIN

Q_{in} = 1.01 CFS @ .08 HRS, VOLUME= .01 AF
 Q_{out} = .95 CFS @ .10 HRS, VOLUME= .01 AF, ATTEN= 6%, LAG= 1.3 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	12" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.00		PEAK DEPTH= .27 FT
.1	0.0	.12	n= .009	PEAK VELOCITY= 5.6 FPS
.2	.1	.51	LENGTH= 246 FT	TRAVEL TIME = .7 MIN
.3	.2	1.15	SLOPE= .013 FT/FT	SPAN= 0-3 HRS, dt=.01 HRS
.7	.6	4.91		
.8	.7	5.74		
.9	.7	6.25		
.9	.8	6.31		
1.0	.8	6.25		
1.0	.8	5.87		

REACH 2 CB LEAD SD#33

Q_{in} = 2.42 CFS @ .08 HRS, VOLUME= .02 AF
 Q_{out} = 2.38 CFS @ .09 HRS, VOLUME= .02 AF, ATTEN= 2%, LAG= .3 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	12" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.00		PEAK DEPTH= .47 FT
.1	0.0	.11	n= .009	PEAK VELOCITY= 6.6 FPS
.2	.1	.45	LENGTH= 54 FT	TRAVEL TIME = .1 MIN
.3	.2	1.01	SLOPE= .01 FT/FT	SPAN= 0-3 HRS, dt=.01 HRS
.7	.6	4.31		
.8	.7	5.03		
.9	.7	5.48		
.9	.8	5.54		
1.0	.8	5.48		
1.0	.8	5.15		

REACH 3 CB LEAD SD#34A

Q_{in} = 2.80 CFS @ .08 HRS, VOLUME= .02 AF
 Q_{out} = 2.33 CFS @ .07 HRS, VOLUME= .02 AF, ATTEN= 17%, LAG= 0.0 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	10" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.00		PEAK DEPTH= .83 FT
.1	0.0	.05	n= .009	PEAK VELOCITY= 4.6 FPS
.2	.1	.20	LENGTH= 33 FT	TRAVEL TIME = .1 MIN
.3	.1	.44	SLOPE= .005 FT/FT	SPAN= 0-3 HRS, dt=.01 HRS
.6	.4	1.37		
.7	.5	2.19		
.8	.5	2.39		
.8	.9	2.41		
.9	.9	2.51		
.9	.9	2.51		

DURATION= 5 MIN INTEN= 6.20 IN/HR

Prepared by Land Use Consultants, Inc.

21 Mar 96

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REACH 4

CB LEAD SD#34

Q_{in} = 1.13 CFS @ .08 HRS, VOLUME= .01 AF
 Q_{out} = 1.11 CFS @ .09 HRS, VOLUME= .01 AF, ATTEN= 2%, LAG= .2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	10" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.00		PEAK DEPTH= .33 FT
.1	0.0	.07	n= .009	PEAK VELOCITY= 5.5 FPS
.2	.1	.28	LENGTH= 26 FT	TRAVEL TIME = .1 MIN
.3	.1	.62	SLOPE= .01 FT/FT	SPAN= 0-3 HRS, dt=.01 HRS
.6	.4	2.65		
.7	.5	3.09		
.8	.5	3.37		
.8	.5	3.40		
.8	.5	3.37		
.8	.5	3.16		

REACH 5

CB LEAD SD#29

Q_{in} = 1.09 CFS @ .08 HRS, VOLUME= .01 AF
 Q_{out} = 1.08 CFS @ .08 HRS, VOLUME= .01 AF, ATTEN= 0%, LAG= 0.0 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	10" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.00		PEAK DEPTH= .24 FT
.1	0.0	.12	n= .009	PEAK VELOCITY= 8.3 FPS
.2	.1	.52	LENGTH= 14 FT	TRAVEL TIME = 0.0 MIN
.3	.1	1.16	SLOPE= .035 FT/FT	SPAN= 0-3 HRS, dt=.01 HRS
.6	.4	4.96		
.7	.5	5.79		
.8	.5	6.31		
.8	.5	6.37		
.8	.5	6.31		
.8	.5	5.92		

REACH 6

CB LEAD SD#30

Q_{in} = 1.02 CFS @ .08 HRS, VOLUME= .01 AF
 Q_{out} = 1.01 CFS @ .08 HRS, VOLUME= .01 AF, ATTEN= 1%, LAG= .1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	10" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.00		PEAK DEPTH= .31 FT
.1	0.0	.07	n= .009	PEAK VELOCITY= 5.3 FPS
.2	.1	.28	LENGTH= 17 FT	TRAVEL TIME = .1 MIN
.3	.1	.62	SLOPE= .01 FT/FT	SPAN= 0-3 HRS, dt=.01 HRS
.6	.4	2.65		
.7	.5	3.09		
.8	.5	3.37		
.8	.5	3.40		
.8	.5	3.37		
.8	.5	3.16		

DURATION= 5 MIN INTEN= 6.20 IN/HR

Prepared by Land Use Consultants, Inc.

21 Mar 96

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REACH 51

MILTON ST STORM DRAIN

Q_{in} = 2.09 CFS @ .08 HRS, VOLUME= .02 AF
 Q_{out} = 2.03 CFS @ .09 HRS, VOLUME= .02 AF, ATTEN= 3%, LAG= .5 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	15" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.00		PEAK DEPTH= .33 FT
.1	.1	.28	n= .009	PEAK VELOCITY= 7.9 FPS
.3	.2	1.16	LENGTH= 118 FT	TRAVEL TIME = .2 MIN
.4	.3	2.58	SLOPE= .02 FT/FT	SPAN= 0-3 HRS, dt=.01 HRS
.9	.9	11.05		
1.0	1.1	12.90		
1.1	1.2	14.06		
1.2	1.2	14.19		
1.2	1.2	14.06		
1.3	1.2	13.20		

REACH 52

CROSS-COUNTRY STORM DRAIN

Q_{in} = 7.50 CFS @ .09 HRS, VOLUME= .06 AF
 Q_{out} = 7.48 CFS @ .09 HRS, VOLUME= .06 AF, ATTEN= 0%, LAG= .1 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	15" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.00		PEAK DEPTH= .43 FT
.1	.1	.60	n= .009	PEAK VELOCITY= 20.1 FPS
.3	.2	2.51	LENGTH= 57 FT	TRAVEL TIME = 0.0 MIN
.4	.3	5.60	SLOPE= .094 FT/FT	SPAN= 0-3 HRS, dt=.01 HRS
.9	.9	23.95		
1.0	1.1	27.96		
1.1	1.2	30.49		
1.2	1.2	30.77		
1.2	1.2	30.49		
1.3	1.2	28.61		

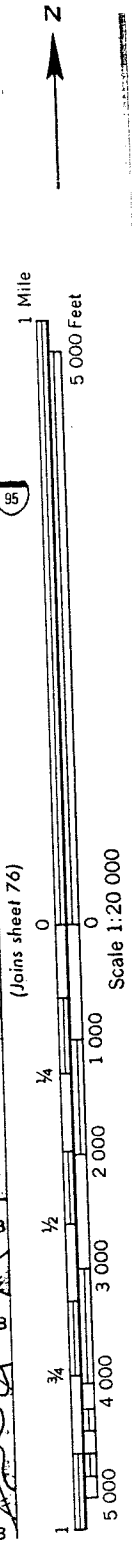
REACH 53

STORM DRAIN OUTLET PIPE

Q_{in} = 7.48 CFS @ .09 HRS, VOLUME= .06 AF
 Q_{out} = 7.43 CFS @ .10 HRS, VOLUME= .06 AF, ATTEN= 1%, LAG= .2 MIN

DEPTH (FT)	END AREA (SQ-FT)	DISCH (CFS)	15" PIPE	STOR-IND+TRANS METHOD
0.0	0.0	0.00		PEAK DEPTH= .66 FT
.1	.1	.28	n= .009	PEAK VELOCITY= 11.3 FPS
.3	.2	1.16	LENGTH= 60 FT	TRAVEL TIME = .1 MIN
.4	.3	2.58	SLOPE= .02 FT/FT	SPAN= 0-3 HRS, dt=.01 HRS
.9	.9	11.05		
1.0	1.1	12.90		
1.1	1.2	14.06		
1.2	1.2	14.19		
1.2	1.2	14.06		
1.3	1.2	13.20		

REFERENCE: S.C.S. MEDIUM INTENSITY SOIL SURVEY: CUMBERLAND CO., ME (Joins sheet 66) DeB



LAND USE CONSULTANTS, INC.
 Land Planners * Engineers * Surveyors
 966 RIVERSIDE STREET
 PORTLAND, MAINE 04103
 207-878-3313

PREPARED FOR:
 R.J. GRONDIN + SONS
 11 BARTLETT ST.
 GORHAM, MAINE

TITLE:
 PHASE II - BEVERLY ST
 SOILS MAP

DATE: 3/20/76 SCALE: SHOWN JOB NO.: 2794

FIGURE NO.:

Department of Public Works



CITY OF PORTLAND

Nadeen M. Daniels
Assistant City Manager
Director

William J. Bray
Deputy Director
City Engineer

2 April 1996

David A. Kamila, P.E.
Land Use Consultants, Inc.
966 Riverside Street
Portland ME 04103

RE: Woodfords Gardens - Beverly Street - Phase II

Dear Dave:

Enclosed please find a copy of the comments generated during Public Works Engineering review of the site plan application package you submitted on March 22, 1996.

Since this submission is subject to the requirements of Section 14-403 of the Land Use Code and subject to Public Works Engineering review, please forward all submissions in response to the attached comments to Portland Public Works.

If you have any questions, please call me at extension 8848.

Sincerely,
CITY OF PORTLAND

Anthony W. Lombardo
Project Engineer

AWL:jw
Enclosure

pc: Melodie Esterberg, P.E., Project Engineer
Rick Knowland, Senior Planner

Kamila.doc
Woodfords Gardens
Engineering

**CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS
OPERATIONS/ENGINEERING - INSPECTIONS
M E M O R A N D U M**

TO: Rick Knowland, Senior Planner
FROM: Tony Lombardo, Project Engineer *TLB*
DATE: March 29, 1996
SUBJECT: Woodford Gardens - Beverly Street, Phase II Land Use Consultants

The following comments were generated during engineering review of the application package submitted by Land Use Consultants for Woodfords Gardens - Beverly Street, Phase II.

Stormwater Management:

- Applicant has not provided pre-development drainage calculations and supporting data, including pre-development watershed map.
- Applicant must prove that development will not increase the rates of runoff outletting the site.
- Only one storm event, 25 year storm, was calculated and included with this application.
- As described in the "Technical and Design Standards and Guidelines" applicant must provide runoff calculations, pre and post-development, for the 2, 10 and 25-year storm events.
- The stormwater narrative and the hydrocad model do not specify runoff curve number (CN) assumptions, ground cover, soil types, etc. The narrative and calculations need to be more complete.
- No supporting calculations were provided for sizing and designing the riprap swale on Lot 153.

X-Country Storm Drain & Sewer:

- Profile should indicate proposed grade above sanitary and storm sewer.

Details:

- “Typical pipe installation detail” should specify table of dimensions for measurements labeled as A, B, C, D. (Sheet 5 of 5).

Grading:

- On Lot 150, contour 66 is missing to the east of the proposed building.
- At the rear of Lot 148 the centerline of stream appears to cross the edge of wetland.
- Lots 150, 153 & 154 require significant amounts of fill to produce marginal building sites. The proposed homes are shown to be constructed over existing well-defined drainage courses. The soils in this area are mapped and classified as Scantic, poorly drained soils. In addition, the rear yards specify very steep slopes. The combination of conditions listed above could result in slope stabilization & erosion problems. Applicant needs to provide site, specific permanent erosion control measures for these areas and include a construction detail.
- It appears that grassed swales are proposed on lots 158 and 153. The applicant needs to provide a construction detail.

Residential Street Cross-Section:

- Note with respect to underdrain must be revised to specify 6 inch type “B” underdrain per City of Portland “Technical and Design Standards and Guidelines.”

Supporting Data:

Per submission requirements for 14-403 streets, a construction plan outlining anticipated sequence of construction activities, including approximate dates to begin and completion dates, should be submitted.

A performance guarantee and defect guarantee will be required for this project. Section 14-403 of the Land Use Code states that upon determination of the public works authority that plans for construction of the street meet the standards, the developer shall provide a performance guarantee as set forth in section 14-501 of the Land Use Code. Detailed construction cost estimates for the required improvement shall be submitted to the public works authority for approval to determine the amount of the performance guarantee. The form, terms, and conditions of the performance guarantee must be approved by the City. The performance guarantee plus a check made out to the City of Portland in the amount of 1.7 percent of the performance guarantee must be submitted prior to issuance of any permits for the affected development.

R. J. GRONDIN & SONS
General Contractors

April 25, 1996

HAND DELIVERED

Anthony Lombardo, Project Engineer
Dept. of Public Works
55 Portland Street
Portland, ME 04101

RE: BEVERLY STREET, PHASE II
PERFORMANCE GUARANTEE

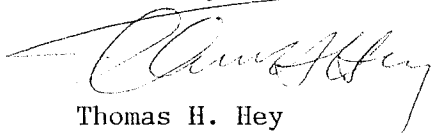
Dear Mr. Lombardo:

Please find enclosed the subdivision bond for subject job in the amount of \$177,734.00, which you requested in your letter dated April 11, 1996. Also enclosed is our inspection fee check for \$3,021.48.

Our understanding is that upon receipt of the enclosed, Rick Knowland from the Planning Department will release the subdivision mylar for recording in the registry.

Please call if you have any questions.

Sincerely,



Thomas H. Hey
Controller

cc: Rick Knowland, Planning

:ked

THCPBSPG

SUBDIVISION BOND NO. 77SB 100993055

KNOW ALL MEN BY THESE PRESENTS, That we,

R. J. GRONDIN & SONS
of Gorham, Maine

as Principal, and the AETNA CASUALTY & SURETY COMPANY OF AMERICA a corporation organized under the laws of the State of Connecticut and duly authorized to transact business in the State of Maine, as Surety, are held and firmly bound unto

CITY OF PORTLAND, MAINE

as Obligee, in the sum of **ONE HUNDRED SEVENTY SEVEN THOUSAND, SEVEN HUNDRED THIRTY FOUR AND NO/100** Dollars (\$177,734.00) for the payment whereof well and truly to be made, the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal and the Obligee have agreed to construct the subdivision improvements consisting of:

BEVERLY ST. PHASE II/
MILTON ST. EXTENSION (12 Lot)
PORTLAND, MAINE

NOW THEREFORE, the condition of the foregoing obligation is such that if the Principal shall indemnify the Obligee for all loss that the Obligee may sustain by reason of the Principal's failure to fulfill all improvements as required by the City of Portland, Maine (Section 14-499 and Article II of Chapter 25 of the Portland City Code) then this obligation shall be void; otherwise it shall remain in full force and effect.

In no event shall the Surety be liable for a greater sum than the penalty of this Bond, or subject to any claim, suit, action or other proceeding thereon that is instituted later than TWO YEARS from APRIL 25, 1996, unless this Bond is continued by a properly executed continuation certificate.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this 25th day of April 1996.

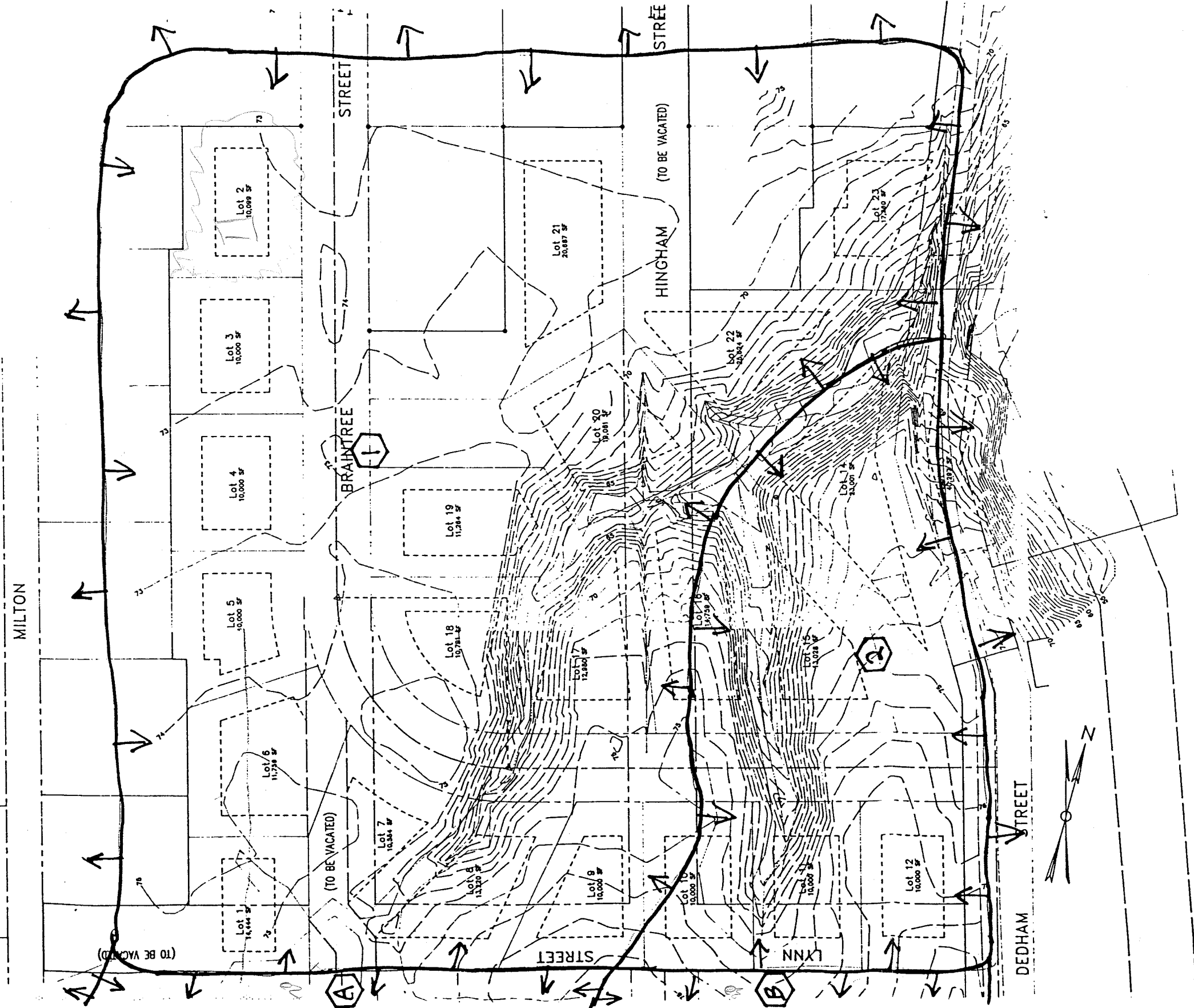
R. J. GRONDIN & SONS

By: *Philip H. Grondin*










AETNA CASUALTY & SURETY COMPANY OF AMERICA

By: *Judy L. Norring-Pickett*

Judy L. Norring-Pickett
Attorney-in-Fact



Existing Site
 Drainage Sketch
 1" = 80'
 (Reduced Plans)

Diversified Properties Proposal	
	Existing Paved Road
	Existing Gravel Road
	Street To Be Vacated
	Wolf Subdivision Street
	Street To Be Extended
	Dedham Street to Be Paved
Grondin Proposal	
	Grondin Subdivision Street
	Street To Be Vacated
	Street To Be Extended

