

**APPLICATION FOR
MODIFICATION OF
COMPREHENSIVE PERMIT
M.G.L. Chapter 40B, Sections 20-23**

WOBURN 38 DEVELOPMENT, LLC

**PROPERTY: 1042 MAIN STREET
WOBURN, MA**

DEVELOPMENT TEAM

A. DEVELOPER

Woburn 38 Development, LLC
Steve Lopes, Manager
1621 State Street
New Haven, CT 06511

B. ATTORNEY

Theodore C. Regnante, Esquire
Paul J. Haverty, Esquire
Regnante, Sterio & Osborne LLP
401 Edgewater Place, Suite 630
Wakefield, MA 01880
(781) 246-2525 (telephone)

C. CHIEF DESIGN ENGINEER

Timothy J. Williams, P.E.
Allen & Major Associates, Inc.
100 Commerce Way
Woburn, MA 01801

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1. City of Woburn Application Form
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4. Engineer's Certificate
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7. Drainage Report
8. Traffic Report
9. Site Plans/Architectural Plans (loose copies)

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Kristin A. Zampell*
Laura R. McKelligott

File No. 41011

February 6, 2012

HAND DELIVERED

Edward S. Robertson, Chairman
Woburn Zoning Board of Appeals
10 Common Street
Woburn, MA 01801

Re: Request for Modification of Comprehensive Permit
Woburn 38 Development, LLC
1042 Main Street, Woburn, Massachusetts

Dear Chairman Robertson:

This office represents Woburn 38 Development, LLC ("Woburn 38") regarding the property located at 1042 Main Street, Woburn, Massachusetts. As you are aware, Woburn 38 applied for an extension of a previously issued Comprehensive Permit. The Board denied the requested extension, and such denial was appealed by Woburn 38 to the Housing Appeals Committee (the "HAC"). That appeal was subsequently subject to an Order of Remand for the purpose of the Board imposing reasonable conditions upon the extension of the comprehensive permit. The Board then issued a revised decision on January 19, 2012. Pursuant to the extension issued by the Board, Woburn 38 has a period of thirty days from the effective date of the extension to file a request for modification of the comprehensive permit.

Consistent with the requirement contained in the extension, Woburn 38 has reviewed the site and has prepared modified plans which will significantly reduce the height of the proposed structure(s), will provide for a more aesthetically pleasing development, and which will address many other concerns which have previously been raised concerning the development. Please accept this letter as a formal request to modify the Comprehensive Permit, pursuant to 760 CMR 56.05(11). Additionally, attached please also find revised Site Plans, revised Architectural Plans (contained within the Site Plans from Allen & Major), Development Impact Statement from Allen & Major (which includes a memorandum detailing the changes to the site plan, including waiver requests and a narrative on blasting impacts), a Drainage Report, and a Traffic Memorandum from TEC addressing traffic impacts of the proposed modification.

The Applicant notes that 760 CMR 56.05(11)(c), states that a Board has twenty (20) days to determine whether a proposed modification is substantial or insubstantial. If the Board determines that a proposed modification is substantial it has thirty (30) days from the date of that determination to hold a public hearing on the requested modification. The Applicant acknowledges that its proposed modification is substantial, therefore it is not necessary for the Board to go through the process of making a determination that the modification is substantial. Furthermore, the Applicant has scheduled a neighborhood meeting to discuss the proposed modifications with the abutting property owners. This meeting is scheduled for March 7, 2012. The Applicant would prefer that the initial public hearing on the request for modification occur after the neighborhood meeting. Accordingly, the Applicant requests that the public hearing be opened at the Board's regularly scheduled meeting in March, or some other mutually agreeable date in March (but subsequent to March 7th). The Applicant hereby waives the requirement contained in 760 CMR 56.05(11)(c) that requires a public hearing to be scheduled within thirty (30) days.

As you are aware, the original application, as approved by the HAC, called for a single structure 472 feet in length and 207 feet in width, containing six stories and building height of 65 feet. The modification proposes to replace the single structure with four free-standing apartment structures and a single clubhouse structure, which will be significantly more aesthetically pleasing than the original design. The modified structures will contain only 3 stories, and will have a reduced height of 50 feet.

The proposed modification also features a change in parking configuration, from 20 foot wide aisles and a one-way traffic flow, to 24 foot wide aisles and two-way traffic. This configuration should be considered an improvement by the Board, as it had previously indicated concerns with the parking configuration as approved by the HAC.

The proposed modification also addresses concerns previously raised regarding the slope of the driveway for the Project. While the grade has been increased from 8 percent to 9.5 percent on the straight leg of the driveway, this increase has allowed the reduction of the grade in the interior of the turns, from 11.5 percent to 8.5 percent, thereby providing a much safer project driveway.

The proposed modification also significantly improves the quality of the emergency access for the Project. As originally approved, the grade of the emergency access drive was 20 percent. Pursuant to the proposed modification, the grade for the emergency access will be 4 percent. The design of the modified emergency access has

been presented to the Woburn Fire Department for review, and no concerns have been raised.

We recognize that an issue of paramount concern to the abutters is the impact of increased blasting necessary for the proposed modification. According to the memo from Allen & Major, as a result of the proposed modification, "the total volume of rock to be blasted will be increased by approximately 25 percent from the previous design." It is important to note, however, that even with the increased amount of blasting, "[t]he size of each blast, in terms of charge weight, and the intensity of each blast, in terms of vibration, will not increase from the original blast design." Woburn 38 recognizes the concerns of the neighborhood regarding any increase in blasting, and recognizes that a thorough review of this issue will be required by the Board. Woburn 38 is prepared to have its blasting expert appear before the Board to discuss the concerns raised by the additional blasting that is being proposed.

While the proposed modification will result in no impacts upon the projected traffic generation for the Project (because there has been no change proposed in the number of units or bedrooms), an updated traffic memorandum prepared by TEC has also been provided. According to the TEC Memorandum, the actual traffic increase on Route 38 in the area of the Project site has increased less than what was predicted in the original traffic study for the Project conducted in 2002. Furthermore, the TEC Memorandum contains a "Crash History Analysis" of the area between 1030 and 1080 Main Street, the intersection of Main Street and Mountain Street, the intersection of Main Street and School Street, and the intersection of Main Street and Kearsarge Avenue. TEC concluded that "all study intersections experience a crash rate far less than that of the statewide and District 4 averages for unsignalized and signalized intersections." It is clear from the memo provided by TEC that there are no significant traffic concerns associated with the Project, and certainly no concerns related to the modification. See, 760 CMR 56.05(11)(c) ("[o]nly the changes in the Project or aspects of the Project affected thereby shall be at issue in such hearing.").

As is clear from the items above, set forth more fully in the Site Plans from Allen & Major Associates, Inc., dated January 27, 2012, the Development Impact Statement from Allen & Major Associates, Inc., dated January 27, 2012, the Drainage Report from Allen & Major Associates, Inc., dated January 27, 2012 and the Traffic Memorandum from TEC dated January 27, 2012, the proposed modification will address many concerns previously raised by the Board and the abutters to the project, and will provide a safer and more attractive development than the one originally approved by the Housing Appeals Committee.

Edward S. Robertson, Chairman
Woburn Zoning Board of Appeals
February 6, 2012
Page 4

Thank you for your consideration in this matter. If you have any questions, please feel free to contact us.

Very truly yours,

REGNANTE, STERIO & OSBORNE LLP

By



THEODORE C. REGNANTE, ESQ.
PAUL J. HAVERTY, ESQ.

- cc: Steve Lopes, Manager, Woburn 38 Development, LLC (w/enclosures)
Brian H. Rehrig, Pres., Renco Management Inc. (w/o enclosures)
Daniel Kerner, Commercial Property Capital (w/o enclosures)
Bernard Saulnier, Jr. (w/o enclosures)
Andrew Dolben, The Dolben Company, Inc. (w/o enclosures)
John O'Connor, The Dolben Company, Inc. (w/enclosures)
Joseph Tarby, Esq. (w/enclosures)
Ellen Callahan Doucette, Esq. (w/enclosures)

Exhibit 1



City of Woburn, Massachusetts

BOARD OF APPEALS
City Hall/City Clerk's Office
10 Common Street
Woburn, MA 01801
781-897-5850

Filing Fee \$125.00

VARIANCE PETITION OR CLAIM OF APPEAL

DATE February 7, 2012

To the Board of Appeals:
Woburn, Massachusetts

The undersigned, being (circle one):

1. aggrieved by an inability to obtain a building permit or by action taken by the Building Inspector.
2. affected by the terms of the Zoning Ordinances.
3. (other) Modification of Comprehensive Permit

hereby petitions for a variance or claims an appeal in accordance with the General Laws of the Commonwealth, Chapters 40A and 41, and the Zoning Ordinances of the City of Woburn, and requests a hearing thereon.

1. Name and address of applicant for building permit Woburn 38 Development, LLC
1621 State St., New Haven, CT 06511 Telephone: (203) 624-4196 x 106.
2. Name and address of landowner See above
Telephone: _____
3. Date of application for building permit N/A
4. Property Location: 1042 Main Street, 7 Driftwood Drive and 0 Briarwood Road
5. Zoning District: _____

Relief desired (If additional space is required, use back of the sheet.)

Modification of Comprehensive Permit. See attached cover Letter.

Signature of petitioner/appellant *[Handwritten Signature]* Date: 2/7/12

Signature of landowner _____ Date: _____

Exhibit 2

Exhibit 3

Abutters to 7 Driftwood Drive (08-01-46)

08-01-41
William & Crissy Gomez
31 Briarwood Rd
Woburn MA 01801

08-01-42
Matthew & Patricia Teeven
29 Briarwood Rd
Woburn MA 01801

08-01-43
Robert & Carla McDonough
2 Driftwood Drive
Woburn MA 01801

08-01-45
Briarwood Rd Rear
New England Telephone Co.
Property Tax Dept.
P.O. Box 152206
Irving TX 75015

08-01-47
Edward & Ruth Crowley
5 Driftwood Drive
Woburn MA 01801

08-01-48
Stephen V. & Ann B. Pember
3 Driftwood Drive
Woburn MA 01801

08-01-49 - Pennsylvania Ave.
08-01-03 - Ferdinand/Grafton
08-01-05 - Kearsage Ave.
08-01-07 - Lamoil Street
Frank V & Francis Procopio Trs.
11 Lamoil Street
Woburn MA 01801

08-01-02
Wanda Griffiths
5 Kearsage Ave.
Woburn MA 01801

08-01-04
Lot 21-b-Worcester St.
Anthony Santullo Tr.
Michael Realty Trust
P.O. Box 201
Burlington MA 01803

08-01-14
St. Anthony's Club
1020R Main Street
Woburn MA 01801

08-01-16
1022 Main Street
Michael Fionda
1024 Main Street
Woburn MA 01801

08-01-17
1028 Main Street
Luciana Fionda Tra.
Luccozi Nello Tr.
100 Greendale Ave.
Needham MA 02494

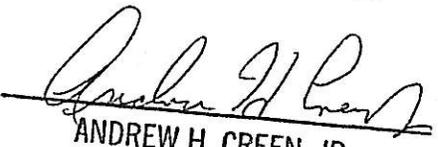
08-01-18
David W. Benson
1032 Main Street
Woburn MA 01801

08-01-40
William & Laura McGrath
32 Briarwood Road
Woburn MA 01801

08-01-44
Carlos & Melissa Capelo
4 Driftwood Drive
Woburn MA 01801

08-01-50
John & Linda Santullo
1 Driftwood Drive
Woburn MA 01801

BOARD OF ASSESSORS
CERTIFICATION APPROVED


ANDREW H. GREEN, JR.

2/2/2012

Abutters to 1042 Main Street (08-01-20)

08-01-31

Summit/Alpine Avenues
Josephine Carchia
23 Nahanton Street
Newton Centre MA 02459

08-07-01-Mass. Ave.

08-07-02

Nicholas Tedesco
c/o Thomas Tedesco
1037 Main Street
Woburn MA 01801

08-07-03

Mass. Avenue
City of Woburn
10 Common Street
Woburn MA 01801

08-07-04

Stephen Smith
Cathy & Jody Smith
1043 Main Street
Woburn MA 01801

08-07-05-01

Richard Ranno Jr.
Stephenie M. Wilks
1047A Main Street
Woburn MA 01801

08-07-06

2 Mass. Av enue
Patricia A. Vaglica Tr.
21 Heritage Drive
Woburn MA 01801

08-07-17

1073 Main Street
Patricia & Vincent Napoli
191 Kendall Road
Tewksbury MA 01876

08-07-18

Alexander Roketenetz
Ben-Val Realty Trust
1071 Main Street
Woburn MA 01801

08-07-19

Carlos Santos
Eileen Caulfield
1041 Main Street
Woburn MA 01801

08-07-20

Thomas & Cheryl Tedesco
7 Mass. Avenue
Woburn MA 01801

08-01-14

St. Anthony's Club
1020R Main Street
Woburn MA 01801

08-01-17

1028 Main Street
Luciana Fionda Tr.
Nello Luccozi Tr.
100 Greendale Avenue
Needham MA 02494

08-01-18

David W. Benson
1032 Main Street
Woburn MA 01801

08-01-19

Vladimir & Mara Pejic
1036 Main Street
Woburn MA 01801

08-01-21

Bharat & Dipti Patel
1046 Main Street
Woburn MA 01801

Abutters to 1042 Main Street (08-01-20)

08-01-22

Timothy & Linda Ahern
1050 Main Street
Woburn MA 01801

0801-23

Donna Lally
Thomas Humphrey
1052 Main Street
Woburn MA 01801

08-01-24

Alan & Debra Valente
1072 Main Street
Woburn MA 01801

08-15-03

Brandon Manning
Rose Smith
6 Naples Avenue
Woburn MA 01801

08-22-08

Joseph J. Marciano Jr.
1025 Main Street
Woburn MA 01801

08-07-02-02

1047 Main Street B
Paul J. Donohoe Tr.
PJD Realty Trust
P.O. Box 2324
Woburn MA 01888-0524

08-14-02

Phelly Braselman
1 Mass. Avenue
Woburn MA 01801

BOARD OF ASSESSORS
CERTIFICATION APPROVED



ANDREW H. GREEN, JR.

2/2/2012

CITY OF WOBURN
BOARD OF ASSESSORS

CITY OF WOBURN
ASSESSORS

2012 FEB -2 PM 12:15

REQUEST FOR CERTIFICATION OF ABUTTERS

SECTION I

APPLICANT: Woburn 38 Development LLC

DATE: 2/2/2012

LOCATION OF PROPERTY: 0 Briarwood Road

ASSESSORS PARCEL IDENTIFICATION:

MAP 08

BLOCK 01

LOT 30

SECTION II
(FOR OFFICE USE)

REASON FOR CERTIFICATION:

BOARD OF APPEAL PETITION XXXX

CITY COUNCIL PETITION

PLANNING BOARD

CONSERVATION COMMISSION

OTHER

SUBMITTED BY: P.George

COMMENTS: 300'

Applicant completes Section I only.
City agency completes Section II.

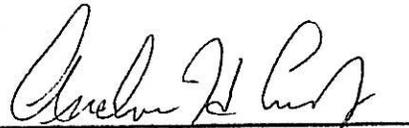
Abutters to 0 Briarwood Rd (08-01-30)

08-01-31 Summit/Alpine Aves. X Josephine Garcia 23 Nahanton St. Newton Centra MA 02459	08-07-05-02 ✓ 1047 Main St B Paul J. Donphoe Tr. PJD Realty trust P.O. Box 2324 Woburn MA 01888-0524
08-01-41 William & Crissy Gomez 31 Briarwood Rd. Woburn MA 01801	08-07-16 ✓ Carmen & Ethel DiNardo Trs. 1075 Main St. Woburn MA 01801
08-01-42 Matthew & Patricia Teeven 29 Briarwood Rd. Woburn MA 01801	08-07-14 ✓ 1081 Main Street Richard & Gail MacDonald 1080 Main Street Tewksbury MA 01876
08-04-45 Briarwood Rd Rear New England Telephone Co. Property Tax Dept. P.O. Box 152206 Irving TX 75015	08-07-17 ✓ 1073 Main Street Patricia & Vincent Napoli 191 Kendall Rd. Tewksbury MA 01876
08-01-47 Edward & Ruth Crowley 5 Driftwood Drive Woburn MA 01801	08-07-18 ✓ Alexander Roketenetz Ben-Val Realty Trust 1071 Main St. Woburn MA 01801
08-01-04 Lot 21-B Worcester St. Anthony Santullo Tr. Michael Realty Truct P.O. Box 201 Burlington MA 01803	08-07-19 ✓ Carlos Santos Eileen Caulfield 1041 Main St. Woburn MA 01801
08-01-05 Frank V. Procopio Tr. Francis Procopio Tr. 11 Lamoil Street Woburn MA 01801	08-01-14 St. Anthony's Club 1020 Main Street Rear Woburn MA 01801
08-07-04 ✓ Stephen Smith Cathy & Jody Smith 1043 Main Street Woburn MA 01801	08-01--15 ✓ Robert & Donatina Brady 1020 Main Street Woburn MA 01891
08-07-05-01 ✓ Richard M. Ranno Jr. Stephanie M. Wilks 1047 Main St A Woburn MA 01810	08-01-16 ✓ Michael Fionda 1024 Main Street Woburn MA 01801

Abutters to 0 Briarwood (08-01-30)

08-01-17 1028 Main Street Luciana Fionda Tr. Nello Luccozi Tr. 100 Greendale Ave. Needham MA 02494	08-01-27 Dianna M. Parker 1082 Main Street ✓ Woburn MA 01801
08-01-18 David W. Benson 1032 Main Street Woburn MA 01801	08-01-28 Main Street Joanne M. Leach ✓ 13 Trenton St. Methuen MA 01844
08-01-19 Vladimir & Mara Pejic ✓ 1036 Main Street Woburn MA 01801	08-01-44 Carlos & Melissa Capelo 4 Driftwood Drive Woburn MA 01801
08-01-20 ✓ 1042 Main Street Woburn 38 Development LLC 1621 State Street New Haven CT 06511	08-07-15 ✓ Carey Fox 1077 Main Street Woburn MA 01801
08-01-21 ✓ Bharat & Dipti Patel 1046 Main Street Woburn MA 01801	
08-01-22 ✓ Timothy & Linda Ahern 1050 Main Street Woburn MA 01801	
08-01-23 ✓ Donna Lally Thomas Humphrey 1052 Main Street Woburn MA 01801	
08-01-24 ✓ Alan & Debra Valente 1072 Main Street Woburn MA 01801	
08-01-25 ✓ Barbara Croak 1076 Main Street Woburn MA 01801	
08-01-26 ✓ Romulo & Marcia Santos 1080 Main Street Woburn MA 01801	

BOARD OF ASSESSORS
CERTIFICATION APPROVED



ANDREW H. GREEN, JR.

2/2/2012



**TOWN OF WILMINGTON
BOARD OF APPEALS/PLANNING/CONSERVATION
CERTIFIED LIST OF ABUTTERS**

0 Briarwood Rd., Woburn, MA
PROJECT NAME OR STREET ADDRESS

DATE: 2/3/12
MAP & PARCEL: NIA - Woburn

To: Board of Appeals/Planning/Conservation

Please check the following information needed to complete a certified list of abutters for the above referenced project:

- BOARD OF APPEALS - 300' FROM ALL CORNERS OF SUBJECT PROPERTY
- SITE PLAN REVIEW - 300' FROM ALL CORNERS OF SUBJECT PROPERTY
- DEFINITE SUB-DIVISION (FORM E) - ABUTTERS TO THE ABUTTERS, INCLUDING PARCELS SEPARATED BY STREET
- SPECIAL PERMIT FOR NON-CONFORMING LOT - 300' FROM ALL CORNERS OF SUBJECT PROPERTY
- APPLICATION FOR MULTI-FAMILY PERMIT - 300' FROM ALL CORNERS OF SUBJECT PROPERTY
- 81G - DIRECT ABUTTERS TO SUBJECT PARCEL - INCLUDING ACROSS THE STREET
- CONSERVATION SUB-DIVISION - 300' FROM ALL CORNERS OF SUBJECT PROPERTY
- OTHER - PLEASE SPECIFY. See Attached Request

CERTIFIED FOR PROPERTY IN THE
TOWN OF WILMINGTON
ONLY

Signature of Applicant

Murtha Cullina LLP
Company Name

600 Unicorn Park Dr., Woburn, MA
Street Address & City/Town

781-933-5505
Telephone Number

This is to certify that at the time of the last assessment for taxation made by the Town of Wilmington, the names and addresses of the parties listed are certified as the owner(s) of record for that period of time.

[Signature]
Principal Assessor



**ASSESSORS OFFICE
WILMINGTON, MA**

ABUTTERS LIST

MAP _____ PARCEL _____

MAP 12 PARCEL 18

PROPERTY ADDRESS:

955 Main St. w/s Pine s/s
Town of Wilmington

ASSESSED OWNER(S):

OWNERS MAILING ADDRESS:

121 Glen Rd
Wilmington, MA 01887

MAP _____ PARCEL _____

PROPERTY ADDRESS:

ASSESSED OWNER(S):

OWNERS MAILING ADDRESS:

MAP _____ PARCEL _____

PROPERTY ADDRESS:

ASSESSED OWNER(S):

OWNERS MAILING ADDRESS:

MAP _____ PARCEL _____

PROPERTY ADDRESS:

ASSESSED OWNER(S):

OWNERS MAILING ADDRESS:

Exhibit 4

City of Woburn
ENGINEER'S CERTIFICATE
FORM C-2

Date January 27, 2012

To the _____ Clerk _____ of the City of Woburn

I hereby certify that the accompanying plan, entitled Site Development Plans for Woburn Heights, 1042 Main Street, Woburn, MA and dated January 27, 2012, is true and correct to the accuracy required by the Rules and Regulations of the Massachusetts Board of Registration of Professional Engineers and of Land Surveyors and that all pertinent data are shown in accordance with Regulations 250 CMR 3.00 – 6.00.

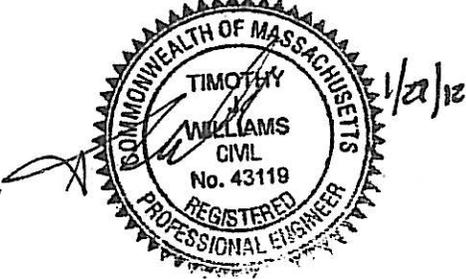
SEAL



Kevin Kiernan
Registered Land Surveyor

Registration No. 40038

SEAL



Timothy J. Williams
Registered Professional Engineer

Registration No. 43119

NAME & ADDRESS OF PETITIONER: Allen & Major Associates, Inc.
100 Commerce Way, Woburn, MA 01801

Exhibit 5



**ALLEN & MAJOR
ASSOCIATES, INC.**

100 Commerce Way
P.O. Box 2118
Woburn, MA 01888-0118
Tel: (781) 935-6889
Fax: (781) 935-2896

January 27, 2012

Edward S. Robertson, Chairman
Members of the Board
Board of Appeals
Office of the City Clerk, Woburn City Hall
10 Common Street
Woburn, MA 01801

RE: A&M Project #324-31
1042 North Main Street
Woburn, MA 01801

Dear Chairman Robertson & Board Members:

On behalf of The Dolben Company Inc., Allen & Major Associates respectfully submits this development comparison summary memo regarding the 1042 North Main Street project known as "Woburn Heights". The memo outlines the plan modifications made to the permitted Comprehensive Plans versus the current design development plans for the subject parcel. We have also documented the site design improvements associated with the current plan set over the previously permitted package.

The comparison review is based on the following materials:

- "Woburn Heights" prepared by Allen & Major Associates, Inc., dated September 29, 2000 revised through July 18, 2001. (Sheets C-2, C-3, C-4, PD-2 and A301.)
- "Woburn Heights" prepared by Allen & Major Associates, Inc., dated December 16, 2011.

Traffic:

See attached "Traffic Impact Assessment" prepared by TEC, dated November 14, 2011.

Blasting:

The current design differs from the original design in proposed building types, layout and elevations. According the current plan, the total volume of rock to be blasted will be increased by approximately 25 percent from the previous design. This is due to the changes in the proposed elevations. The overall footprint of the project has not changed, nor have the distances from the blast areas to the abutters.

Blasting will likely begin at the proposed main entrance road approximately 100 feet from Main Street. When the blasting for the entrance road is completed, it will continue at the east end of the site where a northwest/southeast face will be developed. Blasting operations will then proceed in a westerly direction with blasts being designed to move toward the northeast, using the established NW/SE face as a point of relief.

As discussed in previous meetings with the City of Woburn, all blasting on this project will be designed to maintain vibration levels well below the limits where damage to adjacent structures is likely to occur. These limits are discussed in further detail in the Seismic Recording Procedures section of this narrative.

Although the volume of rock to be blasted has increased with the new design, it is important to note the following:

- The size of each blast, in terms of charge weight, and the intensity of each blast, in terms of vibration, will not increase from the original blast design.
- Regardless of the changes to the project design, the blasting contractor is restricted to the Commonwealth of Massachusetts regulation 527CMR 13 with respect to vibration and air blast limits as well as prevention of flyrock and other blast design parameters, in order to protect the public.

Pre-blast Inspections

Pre-blast inspections will be offered prior to blasting operations being allowed at the Woburn Heights construction site. In the Commonwealth of Massachusetts, a pre-blast inspection must be offered to the owner of any structure within 250 feet of anticipated areas of blasting.

The inspection is an offer on the part of the blasting contractor to demonstrate that the blasting operations are not damaging to the surroundings. The pre-blast inspection is commonly performed by a seismic consultant (inspector), who is retained by the blasting contractor to offer and perform the inspections.

The inspection process begins with the blasting contractor defining the spatial limits of work at the site, then notifying the person performing the inspections which structures will need to be inspected. The inspector determines ownership of the properties through public record, and then attempts to contact each owner. Written notice is typically taken to the property first, and if the owner does not live at the property, a duplicate notice is sent to the owner. Owners who agree to the inspection upon receipt of the first notice are scheduled, owners which refuse an inspection are asked to sign a waiver declining the inspection. Should an owner refuse to sign a waiver, the owner is sent a certified letter confirming their decision to waive the inspection.

A second attempt to contact those which did not respond to the first offer of the inspection is made, typically within 3 days after the first notice, in a manner which is similar to the first notification. Those owners which do not respond to the second notices are sent a certified letter with return receipt as proof of attempted contact. The receipt card, or the returned letter, is final proof of attempted contact.

The inspection is most commonly performed in video format. The inspection is an interior and exterior examination of an improved property. Specific structural faults and general property conditions are recorded in the inspection, and retained by the seismic consultant for future reference.

The seismic consultant produces a completion letter when all of the inspections are completed and proofs of notifications are returned. The letter is provided to the blasting contractor, who includes the letter with other documentation to the local Fire Prevention Office with an application for a blasting permit.

Seismic Recording Procedures

Computerized seismic monitoring instruments will be used to record the ground vibration and air blast from each blast conducted at the Woburn Heights development. The seismographs will be set at the nearest off-site structure to the blast site and other structures adjacent to the site perimeter. The vibrations produced by each blast will be evaluated by the seismic consultant and blasting contractor to confirm that blast vibrations from the site are within regulatory limits.

The Commonwealth of Massachusetts Board of Fire Prevention has adopted standards for ground vibration from blasting from the United States Bureau of Mines Report of Investigations No. 8507 Structure Response and Damage Produced by Ground Vibration from Surface Mine Blasting, issued in 1980. This report recommends limits on ground motion which are based on levels of vibration which are insufficient to cause damage to the weakest of common construction materials, plaster on lath. The recommended limits are based on particle velocity (speed of particle oscillation) and the frequency of the oscillation. Frequency is expressed in cycles of oscillation per second (Hz). In the range of 2.7 to 40 Hz. or more, the particle velocity limits range from 0.50 inch per second to 2.00 inches per second. These limits apply to the most significant measurement on any one of three mutually perpendicular components of ground vibration; transverse, vertical or longitudinal (radial).

The Commonwealth of Massachusetts Board of Fire Prevention has adopted standards for air blast from blasting from the United States Bureau of Mines Report of Investigations No. 8485 Structure Response and Damage Produced by Air Blast from Surface Mining, issued in 1980. This report recommends limits which are designed to prevent damage to the materials in common construction which is most sensitive to airblast: plate glass windows and plaster on lath. The publication recommends that an air overpressure of 0.0129 pounds per square inch (psi) be used as a limit to prevent damage to plate glass, measured with a peak linear, 2 Hz. high pass sound pressure level monitoring system. This corresponds to an airblast of 133 dBL. Safe levels of airblast have been determined through studies of structure response and damage from sonic booms of aircraft, accidental explosions in air, active surface blasting sites and laboratory studies. It has been found that the likelihood of damage to plate glass increases with increased surface area of the plate itself. The airblast limit recommended by the USBM is designed to prevent damage to plate glass regardless of the dimensions of the window.

Daily reports of vibration measurements are submitted to the City of Woburn Fire Prevention office for future reference. The reports include a monitor location map and seismic records.

Architectural:

The previously approved apartment complex consisted of one megalithic structure extending 472 feet in length by 207 feet in width. Comprised of nine levels plus roof and decks on the roof, the massive structure was 102 feet from level one to the roof ridge at elevation 252 feet, 27 feet above the maximum elevation of the site, 225 feet. This ridge height extended east to west a length of 436 feet at the elevation of 252 feet. At the east end of the building, the ridge was to be 72 feet above the current grade. Viewed from Main Street the approved building would have had the mass and dominance comparable to the large corporate headquarters buildings on I-95.

The current proposal consists of four separate apartment buildings and a freestanding one story clubhouse with pool. The scale and massing will be consistent with other multi-family residential buildings approved and built in Woburn. All buildings are three levels above grade with a basement level open on the lower side to grade. This is 5 levels less than the approved project. Maximum overall proposed building height from the basement walk-out level to the roof ridge is 56 feet, 46 feet less than the approved project. The ridge of the building at the highest point of the site is at elevation 215 feet, 37 feet lower than the approved project. The building ridges are separated between buildings by a minimum of 30 feet and the ridges drop in elevation from the west to the east 5 feet to an elevation of 210 feet, 42 feet lower than the approved project. Average building length is 213 feet and width of all buildings is 69 feet. These are 259 feet less in length and 138 feet less in width than the previously approved project.

In summary, it is clear that the proposed architecture for the Woburn Heights site is significantly and dramatically less massive, less obtrusive, more in scale with other multi-family residential buildings, and more appropriate for the site than what had been approved.

On-Site Parking:

The original proposed parking layout has been modified and is reflected in the current site design package. Previously the proposed parking layout provided angled parking with a 20 foot wide one-way drive aisle. The current design proposes perpendicular parking with a 24 foot wide two-way drive aisle. The revised layout is a standard engineering design and is widely used throughout the City of Woburn and the State of Massachusetts.

ADA Accessibility:

The original proposed pedestrian access has been modified and is reflected in the current site design package. Previously a five foot wide sidewalk provided pedestrian access from Main Street adjacent to the access driveway into the site. Due to the required slope of the original and current driveways this design will not meet the current American with Disabilities Act (ADA) accessible route standards. The current design has proposed a dedicated five foot wide pedestrian access from Main Street into the site. The current access provides an ADA conforming route with running slopes of less than 1:20 (5%) and cross-slopes less than 1:50 (2%). The current access also provides handicapped ramps with running slopes less than 1:12 (8.3%), cross-slopes less than 1:50 (2%), a maximum rise of 30 inches, and handrails. The current design also provides a more accessible, much safer and fully conforming pedestrian access.

Additionally, the proponent is currently proposing to replace the full length of sidewalk located adjacent to the site within the right-of-way. The existing sidewalk will be fully removed and replaced with granite curbs and an asphalt walkway to match what is currently in place. The sidewalk will be brought into full compliance with ADA regulations including two ADA ramps and painted crosswalk located at the proposed curb cut.

Driveway Intersection:

The current proposed driveway intersection with Main Street (Route 38) has not been modified over the previously approved and permitted design. The existing street width of 33+/- feet will increase to 40 feet. This increase will facilitate the proposed left turn lane in the Massachusetts Department of Transportation (DOT) right of way. The left hand turn is warranted by the DOT and the design is subject to final approval through a DOT State Highway Access Permit.

The centerline of the driveway is located at Mass DOT Station 11+64.00 for Main Street which is under State jurisdiction. The driveway width will continue to be 28-feet wide with curb radiuses of 30-feet for the driveway to facilitate turning movements. The curb cut will continue to provide pedestrian access along the roadway frontage including a paved sidewalk, accessible ramps, regulatory signage and a striped crosswalk.

Site Driveway:

The current design has been modified over the previously permitted driveway configuration. The original proposed driveway centerline grade of 8 percent resulted in a grade of approximately 11.5 percent along the interior of the turns. The current design has reduced the centerline grade at the turns to 6 percent resulting in a maximum grade of approximately 8.5 percent along the interior of the turns. This revision required that the straight leg of the driveway from, Station 3+89.70 to Station 6+65.11 (275 +/- feet) increase in grade from 8 percent to 9.5 percent.

Therefore, the current design has reduced the maximum grade from 11.5 percent to 8.5 percent along the driveways turns. This revision provides a safer turning section of the driveway with a minor increase in slope along the straight section.

Emergency Access:

The original proposed secondary emergency access was designed as a 20 foot wide asphalt driveway with a maximum centerline grade of 14 percent connecting Driftwood Drive into the site development parcel. The current design will continue to provide this access from Driftwood Drive however the design has been modified and will now consist of an 18 foot wide grassed paver with a maximum centerline grade of 4 percent. The current design also requires that the secondary emergency access restrict traffic with a gated fence only to be utilized by emergency personnel. The design as proposed has been initially discussed and verbally approved by the City of Woburn Fire Department.

Drainage:

The proposed drainage design, which originally was designed to meet the Massachusetts Department of Environmental Protection (Mass DEP) 1996/97 Stormwater Management Policy & Handbook, has been revised to meet the current Mass DEP - Massachusetts Stormwater Handbook, issued February, 2008.

Improvements include proposed proprietary sediment removal devices (i.e. Stormceptors), underground infiltration systems with isolator rows, and deep sump hooded catch basins. These proposed items will provide up to 80 percent TSS removal and as a result the site will discharge a higher quality and lower quantity of stormwater.

The proposed detention ponds design have been modified reducing the side slopes from the original 2:1 slope to the current 3:1 slope and has also reduced the maximum depth of the detention pond from the original eight feet to the current six feet. These modifications were made to foster vegetative growth and provide safety. The flatter slope also helps to prevent bank erosion during larger storms, make routine bank maintenance tasks (such as mowing) easier, prevent animals from getting trapped, and allow easier access to the basin.

The proposed development drainage systems will comply with all of the current Stormwater Management Practices as defined by the Mass DEP as well the project will meet the City of Woburn criteria for stormwater management. Underground stormwater storage has been incorporated into the project design. The incorporation of stormwater infiltration will help to mitigate for the proposed development and will be designed for both water quality and quantity and will aide in the mitigation for both rate and volume of stormwater generated from the site.

Sewer:

The proposed residential development will not increase the anticipated sewer discharge over the previously permitted project. The proposed number of units and bedroom count remains the same. Using the guidelines established at 314 CMR 7.15, the project will generate approximately 30,360 gallons/day of sewer discharge. A Sewer Capacity Study has been prepared in order to review the impacts from the proposed 1042 Main Street development to the existing City of Woburn municipal sanitary sewer system. As previously proposed the sanitary sewer flow from the development will connect to an existing eight inch sanitary sewer line which flows south easterly perpendicular to Main Street via gravity. At the request of the City of Woburn, the sanitary sewer flow monitoring was conducted at the sewer manhole located in front of the site on Main Street, downstream from the proposed development.

After reviewing the data collected by Flow Assessment Services, L.L.C. and the calculations of additional flow based on the information provided in the New England Interstate Water Pollution Control Commission (NEIWPCC) publication *Guides for the Design of Wastewater Treatment Works – TR-16*, the proposed 1042 Main Street residential project will not significantly impact the existing eight inch sanitary sewer trunk line at within Main Street.

The current eight inch sanitary sewer pipe within Main Street is currently flowing at 0.047 cubic feet per second (cfs) with an average depth of 1.59 inches. As outlined in the study the anticipated flow from the proposed development will generate approximately 0.263 cfs. This increase in-flow to the eight inch sewer line within Main Street will result in a flow of 0.310 cfs and an average depth of 3.02 inches. These values are well below the existing carrying capacity of 1.034 cfs and maximum depth of eight inches within the existing eight inch sewer thus the proposed project will not affect the sewer's performance or jeopardize its integrity.

Water:

As previously proposed, municipal water service will continue to be provided by an existing eight inch ductile iron cement lined (DICT) pipe located within Main Street. Using the guidelines established at 314 CMR 7.15, the project will use approximately 33,396 gallons/day of water. This quantity represents projected sewer demand increased by 10 percent to account for external uses such as irrigation and exterior cleaning. The development plans call for the proposed buildings to have fire suppression systems that are in compliance with the current building codes.

Fire flow testing was performed by Allen & Major Associates, Inc. on July 19, 2011 with the City of Woburn Water Department. The available fire flow from the hydrants located within Main Street was found to be 1,126 gallons per minute (GPM) at a residual pressure of 50 pounds per square inch (psi).

Incorporating this information into a proposed water service modeling software (EPANET) it was found that the municipal water system can provide adequate volume however there will not be enough available pressure to meet the development needs. As a result a water booster pump station will be incorporated into the design. Upon approval by the City of Woburn Zoning Board of Appeals, design, engineered documents and calculations will be provided to the Building Inspector prior to the issuance of the building permit.

Summary of Dimensional Table:

The following City of Woburn Zoning Ordinance review compares the previously permitted project versus the current proposed site plan design.

Assessors Map #8 Parcel #1 Lots #20 & #30 Compliance	Ordinance	Permitted Project	Conceptual Project
Lot Area (Ac.)	0.275	9.03	9.03
Building Area (S.F.)	98,340	43,320	56,380
Frontage (FEET)	100	188	188
Front Yard Setback (FEET)	25	344	315
Side Yard Setback (FEET)	20 (80 ⁽¹⁾ -50 ⁽¹⁾)	89	55
Rear Yard Setback (FEET)	30 (90 ⁽¹⁾ -60 ⁽¹⁾)	49 ⁽¹⁾	78
Max Building Coverage (%)	25	11.0	14.3
Building Height (STORIES)	2.5	6.0	3.0
Building Height (FEET)	35	65 ⁽¹⁾	50 ⁽¹⁾
Useable Open Space (%)	50	59	49
Minimum Off-Street Parking Stalls	336	300 ⁽²⁾	300 ⁽²⁾
Minimum Handicapped Parking Stalls	8	10	20

1. As stated within Section 6.2.5 of the City of Woburn Zoning Ordinances, *"the side and rear yard setbacks required in the district shall be increased by two (2) feet for each foot by which the height of such structure exceeds the height permitted in the district."* The originally permitted apartment complex exceeds the allowable building height requirement by 30 feet. Therefore, the required side and rear yard setbacks have been increased to 80 and 90 feet respectfully. The current proposed apartment complex exceeds the allowable building height requirement by 15 feet. Therefore, the required side and rear setbacks have been increased to 60 and 50 feet respectfully.
2. Per the Massachusetts housing appeals committee decision dated June 11, 2003 (Cirsan Realty trust vs. Woburn board of appeals), 300 parking spaces is required.
3. Shaded area denotes noncompliance with local zoning requirements

List of Variances to the Zoning Ordinance and Other Local Land Use Requirements

The following permits, approvals and/or relief from the City of Woburn - 1985 Zoning Ordinances, with amendments through November 1, 2011 (hereinafter, the "Zoning Ordinances"), would be required if the proposed project was to be developed in accordance with the Zoning Ordinances in effect as of this date. The applicant requests waivers from each of the following sections:

Use Regulations

1. The property is currently located within the Residential-Single Family Zoning District (R-1) and Residential-Two Family Zoning District (R-2). The proposed project would be classified as "elevator apartments" pursuant to Section 5.1 of the Zoning Ordinances and, as such, would not be allowed within the Residential-Single Family Zoning District and or the Residential-Two Family Zoning District. Therefore, project would require an exception for use pursuant to Section 5.1(4).

R-1 - Residential-Single Family Zoning District

1. The project would require a variance from the City of Woburn Zoning Board of Appeals to increase the building height from 35 feet - 2 ½ stories to 50 feet - 3 stories pursuant to 6.1 of the City of Woburn Zoning Ordinances.
2. The project would require a variance from the City of Woburn Zoning Board of Appeals to decrease the Landscaped Useable Open Space from 50% to 49% pursuant to 6.1 of the City of Woburn Zoning Ordinances.
3. The project would require Site Plan Approval from the Planning Board pursuant to Section 12.2.2 of the Zoning Ordinances.

R-2 - Residential-Two Family Zoning District

1. The project would require a variance from the City of Woburn Zoning Board of Appeals to increase the building height from 35 feet - 2 ½ stories to 50 feet - 3 stories pursuant to 6.1 of the City of Woburn Zoning Ordinances.
2. The project would require a variance from the City of Woburn Zoning Board of Appeals to decrease the Landscaped Useable Open Space from 50% to 49% pursuant to 6.1 of the City of Woburn Zoning Ordinances.
3. The project would require Site Plan Approval from the Planning Board pursuant to Section 12.2.2 of the Zoning Ordinances.

Number of required Off-Street Parking Spaces

1. The project would require a variance from the City of Woburn Zoning Board of Appeals to decrease the number of parking stalls from two (2) per dwelling unit to two 1.75 per dwelling unit pursuant to 8.2.5 of the City of Woburn Zoning Ordinances.

The Applicant also seeks waivers from any other local Zoning Ordinances, rules, or regulations that may be deemed applicable.

Very truly yours,

ALLEN & MAJOR ASSOCIATES, INC.



Timothy J. Williams, P.E.
Vice President

CC: Andrew Dolben – The Dolben Company, Inc.
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