Bauen Corporation

Construction Management

May 19, 2014

Mr. Michael Behrendt, Director of Planning
and Community Development
Town of Durham
15 Newmarket Road
Durham, NH 03824

Dear Michael,

As requested, Bauen Corporation has reviewed the proposed project known as Mathes
Terrace located at 15 Madbury Road/8 Mathes Terrace for the purpose of commenting on
the potential concerns associated with the construction of this project.

To familiarize ourselves with the project, we studied the following documents and Adam
Downs and I attended a site visit and meeting with MJS Engineering's representative
Mike Sievert, PE and yourself on May 7, 2014.

> Construction Management and Mitigation Plan (revised 3/21/14)
> Site Logistics Plan (dated 3/21/14)
> Revised Site Plan for Alternative Residential Access (revised 4/18/14)
> Demolition Plan (dated 12/18/13)
> Utility Work Plans WP1-WP5 (dated 3/21/14)
> Preliminary Building Elevations 5A by Wunderlich Design (dated 12/18/13)

Based on our review of these documents and our site walk around and meeting, we offer
the following thoughts regarding the proposed construction plan for the Mathes Terrace
project.

In our opinion, the Construction Management and Mitigation Plan prepared by MJS
Engineering is a thorough attempt to address the myriad of issues associated with the
construction of a building that will ultimately cover up so much of a tight residential site.
The proposed sequence of demolition and construction makes good sense and the
suggested restrictions and regulations on construction methods indicate that much
thought has been put into the project's construction. Many of the constraints that are

suggested for preventing or controlling storm water, erosion, sediment, pollution, and traffic issues will require intensive monitoring by a competent, on-site, often full time, clerk of the works type person having authority to modify or halt operations if the proposed practices and regulations are not being met during the construction period. If this person is not directly employed by the Town of Durham, significant additional hours by town personnel will be required to oversee the clerk's observations and reporting of the activities to be monitored. Due to the tight site and multitude of concerns and proposed remedies proposed in the construction management plan, we feel that the work associated with monitoring and complying with all the requirements is beyond the hours available to the onsite job superintendent typically assigned to manage this type of project. We agree with the Construction Management Plan's suggestion of someone performing routine and detailed inspections and would emphasize that the person monitoring all the constraints outlined in the plans will need to be on site full time during a good portion of the project. A clerk of the works or compliance officer, although a significant cost to the owner, will be needed to represent the interests of the town during the construction phase.

During later parts of the project build out, certain concerns will be at their most challenging. The current construction plan calls for the building foundation and wall/roof structure to be built in phased sections. This will allow for concrete trucks and other delivery vehicles to stage on site and minimize traffic impacts on Madbury Road. As construction progresses and more of the building footprint covers the site, less and less staging and construction equipment space will be available within the boundaries of the property. We cannot see any way of completing the last part of the project without temporary closures of one lane on Madbury Road to allow for unloading of construction materials and later lifting of these materials into their needed locations. This work can be coordinated with the town and is not an uncommon request from a construction company, but it will occur on a few occasions during the latter parts of the project and should be expected and planned for

The tight site will pose significant material supply challenges to certain areas of the building during construction. Subcontractors who are hired to work on this project should be well advised prior to submitting their bids of all the constraints and access issues in effect to prevent hardship and financial loss while working on this project. Many materials normally supplied by machine will need instead to be moved by hand due to the closeness of the building to boundary lines and the potential unwillingness of abutters to allow any intrusion onto their properties.

Off site utility work will intrude into both Mathes Terrace and Madbury Road three or so times during the project. Mathes Terrace is narrow and any site work will inconvenience residents to some extent. A written plan coordinated with residents, DPW, fire, and police can minimize the problems to those needing to access the buildings. A clerk of the works fully available to coordinate, monitor, and address concerns during the periods of site work will be invaluable in minimizing problems during these times.

The proposed construction schedule of spring 2014 to May 2015 is achievable if construction starts by June 1st, however it is a narrow time frame due to the access problems prevalent on the site. Utilizing prefabricated wall, floor, and roof systems can help speed up the construction if the building and fabrication plans are ready to allow for timely delivery during the construction period. With the understanding that there will be occasional minor traffic tie-ups due to delivery drivers not following regulations, trucks waiting for access, etc., Bauen Corporation feels that the project can be constructed, at considerable added expense to the developer, without significantly impacting access onto Mathes Terrace for its residents and their visitors. Feel free to contact us if you have any questions regarding this report.

Sincerely,

Andre H. Kloetz
Project Manager
Bauen Corporation

Adam Downs
Jobsite Superintendent
Bauen Corporation