CITY OF NEWTON

IN BOARD OF ALDERMEN

ZONING & PLANNING COMMITTEE REPORT

MONDAY MAY 9, 2011

Present: Ald. Johnson(Chair), Baker, Sangiolo, Yates, Shapiro, Lennon, Swiston

Absent: Ald.Lappin

<u>City Staff</u>: Seth Zeren (Chief Zoning Code Official), Jen Molinsky (Interim Chief Planner for Long Term Planning), Marie Lawlor (Assistant City Solicitor), Candace Havens (Director of Planning and Development), John Lojek (Commissioner, ISD), Rebecca Smith (Committee Clerk)

Planning Board: Rev. Howard Haywood

Public hearing held on April 25, 2011

#17-11(2) TERRENCE P. MORRIS et. al., proposing amendments to Section 30-1 of

the Zoning Ordinance which would institute a length-weighted mean approach for calculating grade plane by revising the current definition of grade plane; and by inserting a new definition of average grade containing a method for a length-weighted mean grade plane calculation. [03-30-11 @ 4:12PM]

(Public Hearing closed 4-25-2011; 90 day expiration July 22, 2011)

ACTION: HELD 6-0 (Swiston not voting)

NOTE: Seth Zeren, Chief Zoning Code Official, joined the Committee at the table. He walked the Committee through the responses to the questions that arose from the last meeting. For the list of questions and answers please see the attached memorandum. The below primarily addresses additional questions related to the answers that Mr. Zeren provided:

Question #1:

Ald. Baker wanted to make clear that the interpretation of the current definition (issued by ISD, December 2010) is consistent with what the text of the ordinance says. Mr. Zeren, in response, stated that yes that is correct.

Question #2:

There was a discussion between Ald. Baker, Mr. Zeren, and Commissioner Lojek regarding the implications of the changes of grade plane, as well as the the possible effect it would have on FAR.

The definition of a basement is a habitable space that is 50% (or more) under the average grade plane. Something that is 50% or greater above the grade plane would be considered the first story. Ald. Baker, trying to understand the implications of the change, stated that his understanding of the issue is that the change would raise the level of the grade plane, making it more likely that a first floor could be considered a basement. He inquired as to whether then, in turn, a larger portion of the space would be partially counted into FAR, lessening the FAR and therefore allowing for more bulk to be added.

Mr. Zeren and Jen Molinsky, Interim Chief Planner for Long Term Planning, clarified that the amount of FAR is not based on what is above the average grade plane but what is above actual ground level. They added that the first step is to determine whether or not a space is a basement. If it's a basement, then you determine the percentage of the perimeter of the basement portion of the structure with a wall 4' or more above ground and multiply that by the FAR of the basement to give you the portion that will be added into the building's total FAR. So the grade plane tells you whether it's a basement and the determination of a basement indicates how much FAR to count. The location of the grade plane doesn't have any bearing on calculating FAR other than determining whether or not the space is a basement. The Planning Department and ISD communicated to the Committee on more than one occasion during the meeting that that it may be more likely to have some spaces become basements with the new grade plane calculation but that any effect would be minimal.

The discussion on this question also contained a conversation about the implications on stories and the measurement of height, since grade plane is the baseline for the measurement of height. Ald. Baker stated his concern that the height of a building may go up since it's being measured from a higher grade plane with the new calculation. Commissioner Lojek explained that those impacts will be nominal and the benefits of a clearer calculation, allowing for easier enforcement, far outweigh such minor effects.

Ouestion 3:

Mr. Zeren elaborated on the statements in the memo. He stated that using a percentage instead of the 6' proposal will treat homes differently. The example in the memo shows that walls less than 5% of the perimeter won't count. If this were implemented, larger homes would have a more significant portion of the structure removed from calculation; if you set a lower percentage, then smaller houses are going to have very small portions taken removed from calculation. It was determined that 6' was a good compromise that satisfies different objectives.

Ouestion #4:

Mr. Zeren explained that prior to 1997 the measurement of height was to the highest point, exempting uninhabitable space. From 1997 to 1999 levels were measured to the highest roof surface.

Ald. Baker tried to understand the rationale to replace roof surface with highest point. He recollects that this had something do with encouraging pitched roofs. Mr. Zeren

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confirmed that, going back to 1997, the Committee wanted to encourage pitched roofs by suggesting a change to 2.5 stories opposed to 3. The Planning Department still sees this as an important incentive for encouraging pitched roofs.

Ald. Baker was concerned that we are losing an incentive to encourage pitched roofs if we measure to the top of a structure. Mr. Zeren confirmed that this would remove one incentive for pitched roofs but stated that that wouldn't cause an overwhelming impact due to the preferred architectural styles in Newton and the 2.5 story restriction.

Question #8:

Ald. Baker asked if the list of exemptions and potential height restrictions for them should be reviewed. The Committee believes that this is not something that should be discussed at this time. Furthermore, Commissioner Lojek stated that this is not something that causes an issue for his department.

There was some discussion though about potentially clarifying/defining "roofline" in the ordinance at some point.

Revised Language for Grade Plane

Ald. Baker suggested, and the Committee agreed, that he'd like more information on where in the ordinance there are references to "grade plane" and "average grade plane". He wants to be sure that there is consistency in the ordinance and that the use of different terms in different areas doesn't and won't cause an issue, especially with the addition of the new term "grade, average".

Ms. Molinksy informed Mr. Baker that the ordinance was combed for references. Mr. Zeren stated that it was determined that the combination of the revised definition for "grade plane" and the new definition for "grade, average" provide enough clarity. The Planning Department recommended this approach because it is less invasive, yet still accomplishes the desired effect.

Ald. Sangiolo asked if it would be possible to search and revise the other terms in the ordinance. Marie Lawlor, Assistant City Solicitor, stated that those amendments couldn't happen at this time since they were not advertised.

Mr. Zeren explained that another reason why the Planning Department doesn't want to change all references to replace it with a new term is because there are references to grade plane in the ordinance that aren't exactly germane to the issue at hand. Mr. Zeren did suggest though that, to cause less confusion, we could change the second definition proposed to "grade plane, average".

Ald. Swiston was in support of Mr. Zeren's suggestion. She stated that the intent of these two definitions is to recognize each other and cover all references. Together they essentially say is that grade plane is calculated based on average grade.

It was ultimately determined that the item would be held until the Planning Department, Law Department, and ISD can provide a more detailed lists about where the references to these terms are located, what will change, and where.

Public hearing held on April 25, 2011

- #65-11(2) TERRENCE P. MORRIS & JOSEPH PORTER proposing amendments to the Zoning Ordinance to revise the definition of "height" in Section 30-1
 - A) so as to calculate building height as the distance from grade plane to the peak of the roof; to revise clause (b) in the definition of "height, contextual" in Section 30-1 (relating to Section 30-15(s) Planned Multi-Use Business Developments) so as to calculate vertical distance using the peak of the roof; to increase the height limits in residential districts contained in Section 30-15, Density/Dimensional Controls, Tables 1 and 4; to increase the height limit contained in Section 30-15(m) for accessory structures;
 - B) and to add a provision in Section 30- 15(m) to allow accessory structure height limits to be waived by special permit. [03-30-11 @ 4:12PM]

(Public Hearing closed 4-25-2011; 90 day expiration July 22, 2011)

ACTION: HELD 6-0 (Swiston not voting)

NOTE: The Committee agreed on the definition of height as proposed. The conversation about what the correct number for height to be adjusted to was what the majority of the discussion centered around. The Planning Department suggests that the height return to 36' as it was for quite some time; ISD supports that suggestion. Ald. Yates supported returning to a limit of 36' as well. Mr. Zeren informed the Committee that 35' is common practice in surrounding communities but that Wellesley has a limit of 45' and Weston (a town which also uses length weighted mean system) has a limit of 37' for sloped roofs and 32' for flat roofs.

Commissioner Lojek made the statement that for sloping roofs, since the grade plane is changing, the height must increase to offset the change, otherwise you'd be making structures smaller.

Ald. Baker moved for 35 instead of 36. The motion wasn't supported by the Committee.

Ald. Swiston moved to amend the proposal to be 36' only for sloping roofs and retain the 30' for flat roofs. This would apply to anywhere in Table 1 or Table 4. The Committee took a straw vote for the approval of this amendment to the proposal, the motion carried.

Accessory Structure: Height

The Committee voted to amend the proposal so that there is a 22' limit for accessory structures with sloping roofs and a limit of 18' for accessory structure with flat roofs. Ald. Baker moved this proposal. The committee approved this amendment via straw vote.

Accessory Structure: Special Permits

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The Planning Department doesn't support the idea of having special permits for height of accessory structure and therefore did not provide language for a change.

Ald. Yates stated that he agrees with Atty. Rosenberg's prior comments about the near impossibility of obtaining a variance and thinks we should allow more flexibility by offering the relief of special permits for height in general.

The Committee wants to further discuss the possibility of allowing special permits for accessory structures. Because of this, they decided to split the item into sections A and B. The last section of the item pertaining to special permits for accessory structures will termed section (B) of 65-11(2). The rest of the item is section (A).

The Committee requested that the Planning Department provide them with language for special permit relief for accessory structures for the next time this item is discussed.

#150-08 ALD. GENTILE proposing that Chapter 30 be amended to clarify that for

a commercial vehicle to be parked legally at a residential property, it must be registered to the owner/occupant of that residential property. [4/15/08

@ 2:17PM].

ACTION: HELD 6-0 (Swiston not voting)

NOTE: This item was held due to the hour at which the Committee completed their discussion on grade plane and height; it will be discussed at a later date.

#122-09 ALD. SANGIOLO on behalf of Armando Rossi requesting a discussion of

the proliferation of signage in the city.

ACTION: NO ACTION NECESSARY 6-0 (Ald. Swiston not voting)

NOTE: The Committee voted NAN on the item as there's no further action that this Committee can take. Ald. Sangiolo will follow up with Mr. Rossi to make sure he has met with David Norton, of ISD, and his concerns are addressed.

#133-03 ALD. YATES proposing an amendment to Chapter 30 requiring a special

permit for a so-called "snout house" (one with excessive/intrusive garage

on the front) following the example of Fort Collins, Colorado.

ACTION: HELD 5-1 (Ald. Johnson opposed; Ald. Swiston not voting)

NOTE: Ald. Yates stated that he'd like to pursue this item. He asks that the Planning Department contact Fort Collins, Colorado, and the APA to ask them for sample language. He moved to hold the item. Ald. Johnson disagrees with the motion; she believes that there are other more pressing things on the agenda that need to be discussed. The Committee voted in favor of the motion to hold.

Re-appointment by His Honor the Mayor

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#135-11 <u>SCOTT WOLF</u>, 27 Philbrick Road, Newton Centre, re-appointed to the

Planning and Development Board for a term of office to expire February 1, 2014. [04/25/2011@ 4:20PM] (60 days to expire on June 23, 2011)

ACTION: APPROVED 5-0-1 (Ald. Yates abstaining; Ald. Swiston not voting)

NOTE: #135-11, 136-11, 108-11-111-11, were discussed together. Ald. Shapiro commented that he'd be interested in having re-appointments come in to Committee. It was suggested that he docket an item if he'd like to pursue this.

Ald. Yates stated that he would abstain from these votes, with the exception of Ms. Collins, as he doesn't believe the Commission has been effective. Ms. Havens spoke in response to this comment stating the Commission is becoming actively involved in our strengths and weaknesses with the economic development tool. Going forward, this tool will give them the knowledge to focus their efforts in the best way.

Ald. Shapiro moved approval of all appointments. The Committee voted to approve the items.

Re-appointment by His Honor the Mayor

#136-11 JANE IVES, 34 Lucille Place, Newton Upper Falls, re-appointed to the

Economic Development Commission for a term of office to expire August 17, 2013 [04/19/2011@ 4:47PM] (60 days to expire on June 17, 2011)

ACTION: APPROVED 5-0-1 (Ald. Yates abstaining; Ald. Swiston not voting)

Re-appointment by His Honor the Mayor:

#108-11 CHARLES EISENBERG, 4 Ashford Road, Newton Centre, re-appointed

to the Economic Development Commission for a term to expire on August 17, 2013. [04-11-11 @5:30PM] (60 days to expire on June 19, 2011)

ACTION: APPROVED 5-0-1 (Ald. Yates abstaining; Ald. Swiston not voting)

Re-appointment by His Honor the Mayor:

#109-11 <u>DAPHNE COLLINS</u>, 372 Waltham Street, West Newton, re-appointed to

the Economic Development Commission for a term of office to expire on July 13, 2013. [04-11-11 @5:29PM] (60 days to expire on June 19, 2011)

ACTION: APPROVED 6-0 (Ald. Swiston not voting)

Re-appointment by His Honor the Mayor:

#110-11 PHILIP PLOTTEL, 50 Roslyn Road, Waban, re-appointed to the

Economic Development Commission for a term of office to expire on December 21, 2013. [04-11-11 @5:28 PM] (60 days to expire on June 19,

2011).

ACTION: APPROVED 5-0-1 (Ald. Yates abstaining; Ald. Swiston not voting)

Re-appointment by His Honor the Mayor:

#111-11 PETER LAW, 61 West Pine Street, Auburndale, re-appointed to the Economic Development Commission for a term of office to expire on April 30, 2014. [04-11-11 @5:28 PM] (60 days to expire on June 19,

2011).

ACTION: APPROVED 5-0-1 (Ald. Yates abstaining; Ald. Swiston not voting)

Respectfully Submitted,

Marcia Johnson, Chairman



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Candace Havens Director

MEMORANDUM

Public Hearing Date:

April 25, 2011

Zoning and Planning Action Date:

July 11, 2011

Board of Aldermen Action Date:

July 18, 2011

90-Day Expiration Date:

July 22, 2011

DATE: May 6, 2011

TO:

Alderman Marcia T. Johnson, Chairman, and

Members of the Zoning and Planning Committee

Candace Havens, Director of Planning and Development FROM:

Jennifer Molinsky, Interim Chief Planner for Long-Range Planning

Seth Zeren, Chief Zoning Code Official

RE: **Working Session**

- Petition #17-11. Terrence P. Morris, Joseph Porter, Bruce Bradford, George Collins, Verne T. Porter, Jr., and Michael Peirce, proposing an amendment to the zoning ordinance for the purpose of changing the definition of "Grade Plane" and adding a new definition of "Average Grade."
- Petition #65-11. Terrence P. Morris & Joseph Porter proposing an amendment to the zoning ordinance to change the definition of "height" with a concomitant increase in the height to the pre-1997 limits; to make height exceptions in accessory buildings subject to special permit rather than a variance.

CC:

Mayor Setti D. Warren

Board of Alderman

Planning and Development Board

John Lojek, Commissioner, Inspectional Services Department

Marie Lawlor, Assistant City Solicitor

I. BACKGROUND AND SUMMARY

On April 25, the Zoning and Planning Committee held a public hearing on two related Petitions (#17-11 and #65-11) concerning changes to the definition and regulation of "grade plane" and "height." This memorandum has been prepared in response to specific questions and inquiries made my members of the Committee, the Planning and Development Board, the Board of Aldermen, and the public. (Please see the Planning Department memoranda dated April 22, 2011 for more detailed explanations of the proposed amendments.)

II. ANSWERS TO QUESTIONS

On sloping lots, the current method of calculating grade plane may produce a result that is less than an average grade plane. Is this the intention of the current policy?

The Planning Department Memorandum associated with petition #79-99, through which the current grade plane definition was adopted, does not say whether the intent was to produce an average grade plane or some lower-than-average plane. The language of the current definition and of other egulations in the Zoning Ordinance that employ grade plane points to the intent being a true average grade plane. The current definition of grade plane refers to "a reference plane for a building as a whole representing the average of finished grounds level..." The current definition of basement also refers to "average grade plane." In 2008, Ordinance Z-20 changed the definition of height, replacing "grade plane" with "average grade plane." However, the current definition does not achieve a true average. The definition proposed in petition #17-11 would achieve a more easily verifiable, consistent, and truly average grade plane.

How would the change in grade plane affect the determination of basements and the number of stories?

For residences in Newton, a basement is defined as a floor in which one half or more of the distance between the floor and the ceiling is below the "average grade plane." For homes that exist now, there are two issues of concern regarding the determination of basements. The first issue centers on the current policy, which is now being more strictly enforced by the Inspectional Services Department (ISD). Prior to ISD's clarification about the calculation of grade plane that was issued last December, many calculations of grade plane produced results that were higher than would be consistent with a strict application of the grade plane ordinance. The stricter enforcement of the grade plane policy could matter to some homes on steep slopes, where the determination about basements is a close call. Were these homes to seek to make an addition today and present a survey under the rules of the December clarification, which would likely show a lower average grade plane than might have been calculated before December, it is possible that their basement would actually count as a first story, potentially making the house nonconforming with respect number of stories and Floor Area Ratio. If so, these homes would then require a special permit for otherwise by-right additions today. However, the City lacks the data that would be necessary to accurately determine the number of "basements" that would potentially be affected.

The change in the definition of grade plane proposed in petition #17-11 could also affect the determination of basements in the future. The length-weighted mean method would change the grade plane calculation by one or two feet in most cases, and so only those homes on steeply

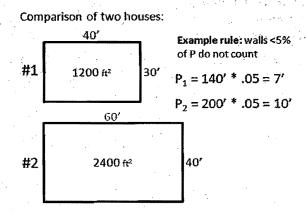
sloped lots where basement determinations are close calls would be affected. These homes, the same that may be placed in nonconformity now under the stricter enforcement of the policy, may be placed back into conformity under the petition.

For new construction, the general effect of the proposed amendments is difficult to predict precisely, as any calculation of grade plane in part relies on the design and siting of each house. Story and basement determinations and overall height for houses on more or less flat lots will not be greatly affected by the change in grade plane definition. Houses on steeply-sloped lots or with basement garages will receive a moderate increase in their grade plane of one to two feet on average, with a corresponding increase in allowed height over the recent more strictly-enforced standard. The revised height regulation would eliminate one of several incentives to build steeply sloped roofs, but building heights in general would remain roughly unchanged and would be more easily verified and enforced.

Why use six feet in limiting the effect of minor architectural features on the calculation of grade plane? Why not a percentage of the perimeter?

The determination to use six feet was made in consultation between ISD and Planning Department staff as a compromise between setting too large a limit, which would potentially exempt significant portions of structures, and too small a limit, which would not prevent architectural "gaming" of

grade plane which this provision is intended to prevent. In response to inquiries during the public hearing, Planning Department staff did consider a percentage approach to determining which "minor" walls would be exempt from grade plane calculations (see figure to right). In general, such a method adds a significant amount of additional complexity both for surveyors and inspectors for little improvement in the outcome of this provision. Also, while equal in terms of percentage, larger segments would be exempt for larger homes than for smaller homes.



Why do the petitions propose changing back to the way height was regulated before?

The proposed changes are not a return to a previous method of measuring height. The 1997 amendment made several significant changes to the pre-1997 height regulation, including measuring height to the highest roof surface, eliminating an exception for uninhabitable space, and setting the maximum height at 30 feet in residential zones. In 1999 the "midpoint" calculation was introduced, which had the effect of increasing absolute building height and encouraging sloping roofs. The proposed change is a further refinement; measuring to the highest point of the roof is easily comprehensible, regulates absolute height, and is easy for building inspectors to verify and enforce. The complementary increase in building height is an attempt to preserve broadly equivalent outcomes under the new definition. The existing 2½-story limit still provides an incentive for a sloping roof (as the half story must be under a "sloping roof").

Why not clarify the existing mid-point method?

Though it would be possible to revise the use of "wall plate," a problematic term in the existing definition that likely resulted from a scrivener's error, or to otherwise improve the language of the existing definition, the mid-point approach will always be fundamentally more confusing and

difficult to verify and enforce. Any method that relies on an imaginary projection, or the intersection of two planes, or a construction feature that is located within a wall will be difficult for building inspectors to verify. In contrast, the maximum height of a structure is easily verified by measurement and can be easily enforced. Furthermore, the existing approach is difficult to apply to structures that have compound or asymmetrical roofs. For example, in the salt-box house to the right, it is unclear where to draw the mid-point.



What is the potential impact of the height petition on roof pitch?

The proposed change would eliminate one incentive for steeper pitched roofs. The requirement that the half story of a 2½-story residential structure be under a sloping roof would remain as an incentive for sloping roofs. The Committee could consider the approach used in Weston, MA, where the height limit (measured to the "highest point") is 37 feet under a sloping roof and 32 feet under a flat roof.

What is the intent of height limits? Can the Zoning Ordinance allow for different height limits in different neighborhoods?

Height limits are a core dimensional control instituted to limit the impacts of development on neighbors and to ensure new development is compatible with neighborhood character. Currently, Newton's many diverse residential neighborhoods are regulated under zoning districts that are applied city-wide with uniform standards. Neighborhood-specific regulations would require a change of zone, neighborhood overlay districts, or an adaptive standard where height limits depended on the heights of nearby structures.

Should the Board consider revisiting the exceptions to height?

The Planning Department and ISD see no pressing need to revisit these exceptions. The existing exceptions to height have been in place for over twenty years without any serious problems.

What is the potential impact of the proposed height changes on institutional uses?

Section 30-15 Table 2 regulates dimensions, including height, for religious and non-profit educational uses. All zoning requirements for such uses (typically protected under the "Dover Amendment" MGL Chapter 40A, Section 3) must meet a stricter standard of reasonableness. Currently, Table 2 limits the heights of these structures (which frequently have sloping roofs and would thus be impacted by the definition change) to 36 feet and three stories. However, footnote 4 of Table 2 allows structures an additional story per 150 feet of setback, "not to exceed 6 stories or 60 feet." Because the petition recommends changing the way height is measured for all structures in the City but does not propose amending the height limit for institutional uses, the proposed definition would effectively reduce the allowed height for such institutional uses with sloped roofs (bearing in mind that ornamental domes or spires are still exempted) and remove the only zoning incentive (higher absolute height) for sloping roofs on such structures. Structures located at least

450 feet from the property line can now conceivably be six stories and 60 feet tall to the top of a flat roof or the midpoint of a sloping roof; under the proposed definition, they could be 60 feet tall to the peak of the roof. Assuming 10 foot tall floors and a sloping roof, the proposed definition would somewhat constrain the ability to use the upper most floor (which would be under the eaves in either case). If the Committee is concerned about increasing the constraints on institutional uses, the Committee could amend Table 2 to allow an additional six feet of building height for structures with sloping roofs or insert a similar amendment (which would require a separate petition and hearing).

For the definition of height, is there a generally-agreed upon definition of "surface?" Why not use "the highest point?"

Planning Department Staff have considered this question and conferred with ISD staff and concur that the term "surface" may be difficult to interpret as it does lack a generally-agreed upon definition. We have revised the proposed language to read "to the highest point."

How would the proposed changes interact with the new FAR rules?

The proposed grade plane definition potentially impacts the determination of whether some floors count as basements or first floors. The new FAR rules contain a provision for including a fraction of the basement area in FAR (a percentage of the perimeter more than 4' out of the ground) so the impact of the changed grade plane definition would be muted compared with current FAR regulations, where basements are wholly exempt from FAR. The proposed height regulations would also have little interaction with the new FAR rules.

How would the proposed changes affect the projects at 37 Sullivan Ave and at Francis and Elliot Streets?

ISD staff has examined the proposed plans for both these structures. It should be noted that neither is at finished grade, which will significantly affect their final appearances. In both cases, ISD staff found that the structures are very close to the existing height limit. David Norton, Zoning Enforcement Agent, writes: "...looking at them in their current condition, the new ordinance would make them too tall and they would have to make building or grade adjustments. With the new ordinance it would make it a lot easier for the inspector to verify and make it easier to enforce."

III. PLANNING DEPARTMENT CLARIFICATION ON VARIANCES

At the public hearing, the petitioner cited a list of specific dimensional and density requirements which may be waived by special permit. It is true that Section 30-15(m), which relates to accessory buildings, is the only regulation of the Ordinance that specifically calls out requiring a "variance" for relief. In general, however, exceeding any particular dimensional or density standard without a previous legal nonconformity requires a variance. For example: a variance would be required to subdivide a lot into lots smaller than post-1953 standards; a variance would be required for an existing structure to expand into a required side or front setback that is currently conforming; a variance would be required for a primary structure to exceed the maximum allowed height, unless it is already legally nonconforming with regard to height; and so forth. It is unclear why this particular provision of Section 30-15 specifically calls out "variance." Removal of that clause would result in the same outcome.

Planning staff reviewed the petitioner's memo and found that the majority of cases cited where relief can be sought through a special permit rather than a variance are not comparable to the provision in petition #65-11, which seeks to make height exceptions in accessory buildings subject to a special permit. In a few cases (such as Open Space Developments, per Section 30-15(k), and in Business zones, per Section 30-15(h)) a special permit is allowed to modify what would be allowed by right, but only to an established maximum beyond which a variance would be required. There is no comparable relief from dimensional controls for typical structures and uses in residential zones.

The rationale that has been advanced for the proposed change is that it would make it easier for property owners to re-create carriage houses in traditionally Victorian areas of the City; however, such a provision would apply citywide, not just to areas where such enlarged accessory structures would be appropriate. Accessory structures currently also benefit from reduced required setbacks. An increase in height would allow owners to build significantly more massive accessory structures, approaching the size of the main house, close to their neighbors' property, subject to special permit.

This aspect of the proposal seems to express a novel goal of allowing new structures to match an historic, but currently nonconforming, building fabric or architectural period. This approach would require revisiting not only accessory structure height, but also other aspects of neighborhood building character including setbacks, open space, lot size, and primary structure height, among others. This stands in contrast to the general purpose of the other aspects of these petition items which is to make existing regulations and concepts more clear, more consistent, and more verifiable in as outcome-neutral a method as possible.

If the Committee decides that this change in relief is appropriate, the Planning Department recommends that the provision include specific criteria for the granting of the special permit and a limit on the maximum height.

IV. REVISED PROPOSED LANGUAGE

Delete existing definition of grade plane and replace it with the following:

Sec. 30-1 Grade plane: A horizontal reference plane for a building as a whole, passing through the elevation of the finished Average Grade around the perimeter of a building, from which building height is determined.

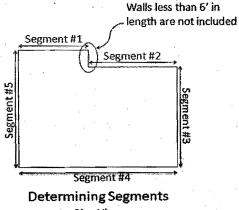
Sect. 30-1 Grade, Average: The average of the grade elevations around the perimeter of a building, as determined by the length-weighted mean formula below. All walls of length greater than six feet shall be included in segments of consistent grade or slope.

$$\frac{\Sigma[(e1 + e2)/2 \times L]}{P}$$

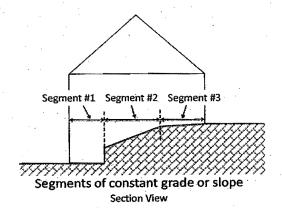
Where:

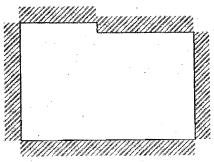
- Σ sums the weighted average grades of all segments;
- e1 and e2 are the elevations of the finished ground level at the respective ends of each segment, determined as the lowest point at each end of the segment within six feet of the foundation or the lot line, which ever is closer;
- L is the corresponding horizontal length of the segment; and
- P is total horizontal length of all segments.

Delete the existing images and replace them with the following:

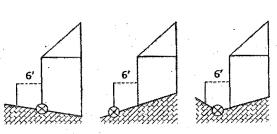


Plan View





Segment ends use lowest elevation within 6' Plan View



Segment ends use lowest elevation within 6' View along segment

Delete existing definition of "Height" in 30-1 and replace it with:

Section 30-1: Height: The vertical distance between the elevations of the following: (a) the average grade plane and (b) the peak of the roof line the highest point of the roof. Not included in such measurements are 1) cornices which do not extend more than five (5) feet above the roof line; 2) chimneys, vents, ventilators and enclosures for machinery of elevators which do not exceed fifteen (15) feet in height above the roof line; 3) enclosures for tanks which do not exceed twenty (20) feet in height above the roof line and do not exceed in aggregate area ten (10) per cent of the area of the roof; and 4) towers, spires, domes and ornamental features.

Amend definition of "Height, Contextual in 30-1:

Section 30-1: Height, Contextual: The vertical distance between the elevations of the following: (a) the Newton Base Elevation utilized by the city as implemented by the engineering division of the department of public works and (b) the mid-point between the highest point of the ridge of the roof and the line formed by the intersection of the wall-plane and the roof plane the highest point of the roof. Not included in such measurements are 1) cornices which do not extend more than five (5) feet above the roof line; 2) chimneys, vents, ventilators and enclosures for machinery of elevators which do not exceed fifteen (15) feet in height above the roof line; 3) enclosures for tanks which do not exceed twenty (20) feet in height above the roof line and do not exceed in aggregate area ten (10) per cent of the area of the roof; and 4) towers, spires, domes and other ornamental features.

Amend "building height" in Sec. 30-15 Table 1 for all Single Residence Districts, changing "30" to "36," and changing the building height for all Multi-Residence Districts currently limited to "30" to "36."

Amend Sec. 30-15(m)(2) as follows:

(2) The maximum height of each accessory building shall not exceed eighteen (18) feet 22 (twenty-two) feet.





17-11 165-11

CITY OF NEWTON, MASSACHUSETTS

Planning and Development Board

MEETING MINUTES

April 25, 2011

Full Members Present:

David Banash Joyce Moss **Doug Sweet** Scott Wolf

Candace Havens Director Planning & Development

Setti D. Warren

Mayor

Kathleen Cahill Community Development Senior Planner

Members

Tabetha McCartney, Chair Joyce Moss, Vice-Chair David Banash Leslie Burg Howard Haywood **Doug Sweet** Scott Wolf

Staff Present:

Candace Havens, Director of Planning and Development, ex-officio

J. Moss, Vice- Chair, called the meeting to order at 10:00 p.m.

Acting as the Planning Board, the group convened following a public hearing with the Zoning and Planning Committee of the Board of Aldermen to discuss petitions #17-11 and #65-11 regarding definitions of grade plane, average grade and building height, as well as consideration of special permits versus variances of height for accessory buildings.

Building Height. The group agreed with the notion that the highest point of the roof was a preferable measure to the mid-point measurement that is currently used. The members preferred the word "point" rather than "surface" for clarify. They questioned how the recent FAR changes in combination with the proposed new means of measurement would interface and whether there would be unintended design consequences; some drawings that demonstrate the variations in attic space based on roof pitches were requested. Members noted that sometimes taller buildings with sharper roof pitches, such as those on Victorian homes, are appropriate in their context and questioned whether the proposed changes would limit such designs. If height exceptions for accessory structures are allowed by special permit, there was agreement that criteria are needed to determine appropriateness for exceptions.

Grade Plane. All agreed with the need to establish a true average grade plane and with the redefinition of grade plane. There was general discussion about exemption of wall planes that constitute a percentage of a wall façade as opposed to walls less than six feet wide as proposed, and also about whether all portions of a wall should counted towards the grade plane calculation. Some were concerned that wall planes measured in feet and not percentages of a wall

1000 Commonwealth Ave. Newton, MA 02459 T 617/796-1120 F 617/796-1142 would encourage designs that would violate the intent of the new language (such as 5'11" wall planes.)

The Board recommended conditional approval of the proposals based on the information provided at the public hearing as follows:

- 1. Definitions of grade plane and average grade plane with weighted length pursuant to investigation of pros and cons of a six-foot exemption vs. an exemptions based on a percentage of a given wall (4-0).
- 2. Special permit for accessory building height exceptions (3-0-1) Havens abstained.
- 3. Proposed definition of building height, but with substitution of "point" for "surface." (4-0)
- S. Wolf was not present for the votes.

The meeting was adjourned at 11 p.m.

Respectfully Submitted,

Candace Havens

Director of Planning and Development

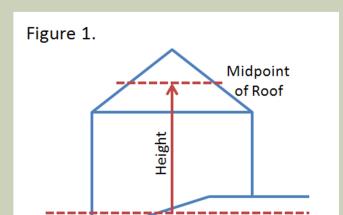
Department of Planning and Development

1

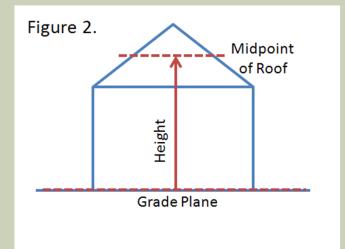
Public Hearing: Revisions to Grade Plane Definition

Petition #17-11. Terrence P. Morris, Joseph Porter, Bruce Bradford, George Collins, Verne T. Porter, Jr., and Michael Peirce, proposing an amendment to the zoning ordinance for the purpose of changing the definition of "grade plane" and adding a new definition of "average grade."

Grade Plane Definition



Grade Plane

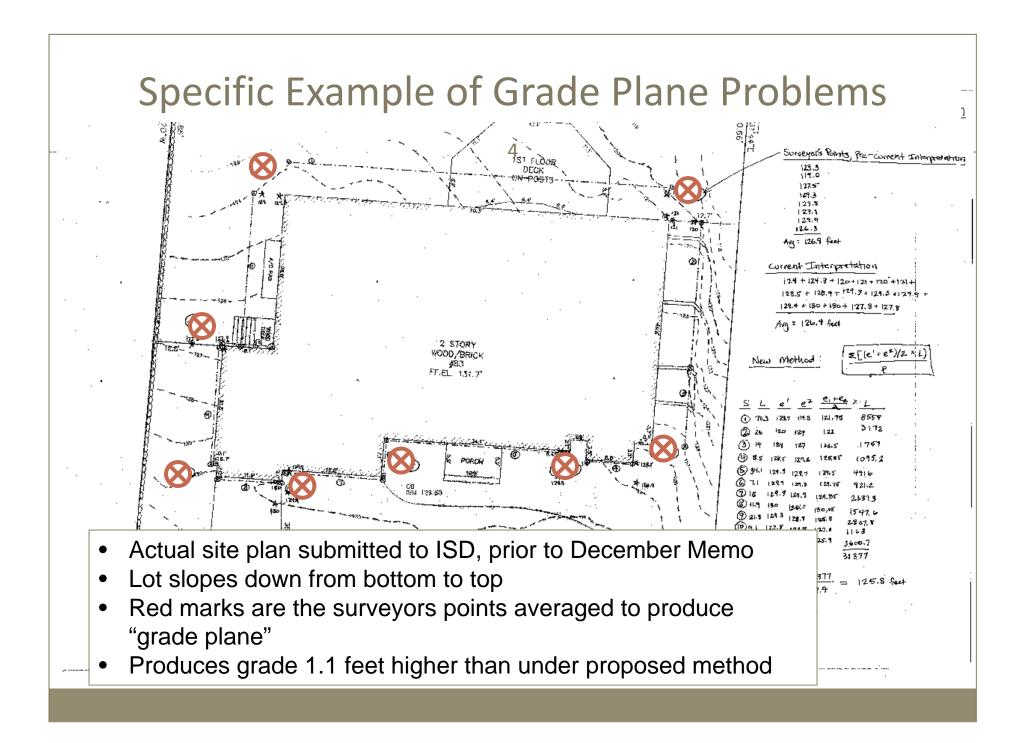


- "The average of finished ground level adjoining the building"
- Benchmark from which height is measured

Problems with Grade Plane Definition



- The Inspectional Services Department has observed numerous problems with the definition of "grade plane" over the years:
 - The calculation is confusing
 - Surveyors had their own <u>inconsistent</u> interpretations of the definition
 - Their reported grade planes were <u>hard to verify</u>
 - Can be interpreted to produce a grade plane that is too high
- ISD issued detailed guidance in December 2010 to standardize calculation of grade plane

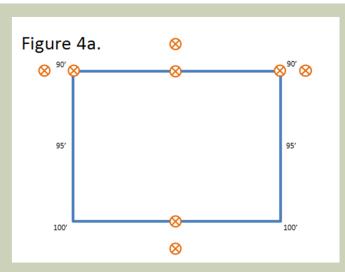


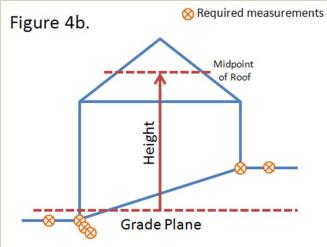
Continuing Problems with Grade Plane Definition



- Petition #17-11 was filed in response the ISD memo of December 2010
 - Two page memo clarified calculation and set clear standard
- Method under the current definition:
 - Two points are taken from each wall (at the lowest point)
 - Each point is averaged together to calculate the "grade plane"
 - But now the grade plane calculation may result in a grade plane that is too high

Example on a Sloping Lot





Example:

- Lot slopes down from bottom to top
- Averaging these points produces a grade plane of 92.5 feet
- But, common sense average of all the elevations would be 95 feet

Summary:

- Confusing and difficult to verify
- When manipulated, can be too high
- When calculated correctly, can be too low
- Does not yield a true "average of finished ground level"

Text of Current Definition

7

Text of current definition and summary of current interpretation (in **bold**):

• "Grade Plane: A reference plane for a building or structure as a whole (that is, a plane that encircles the building or structure) representing the average of finished ground level adjoining the building or structure at all exterior walls (at least one measurement must be taken at each exterior wall). In calculating said reference plane, the elevation of each point used to calculate said average shall be determined by using the lowest elevation of finished ground level with in the area (wall) immediately adjoining the building or structure (flush against the wall) and either the lot line or a point six (6) feet (perpendicular) from the building or structure, whichever is closer to the building or structure, as illustrated in the diagrams below."

History of Grade Plane Definition



- First defined in 1997, through Ordinance No. V-111
 - The definition in 1997 read:
 - "Grade plane: A reference plane representing the average of finished ground level adjoining the building at all exterior walls"
 - Created to serve as a baseline for a revised height definition
 - In response to concerns over the loss of historic homes to out-of-scale development
- Revised in 1999 through Ordinance Number V-247 to the current definition
 - Provided a method for calculating grade plane

Proposal: Length-Weighted Mean Method

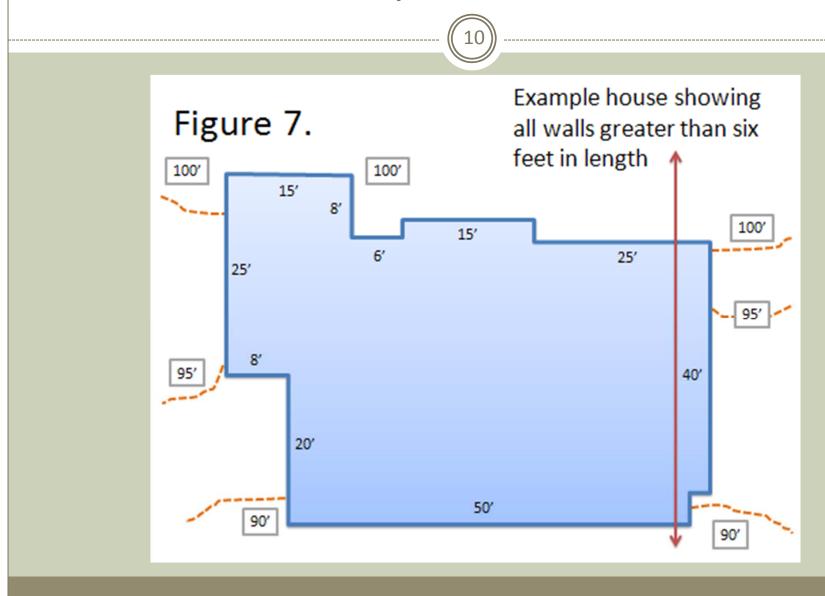


Length-weighted mean method summary:

- Divide each wall into segments of consistent grade or slope
- Determine average grade for each segment
- Weight each segment by multiplying the average grade by the length
 - (thus a wall that is 40 feet long would "count" four times as much as another wall that is only 10 feet long)
- Average together all segments together

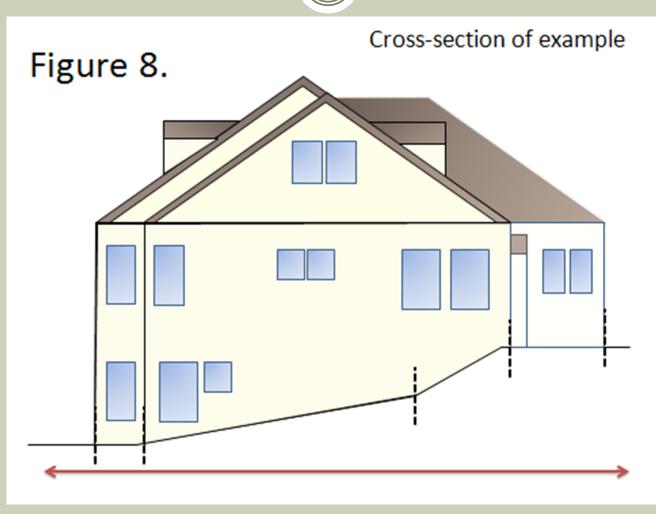
Equation:
$$\Sigma[(e1 + e2)/2 \times L]$$

Example: Plan View

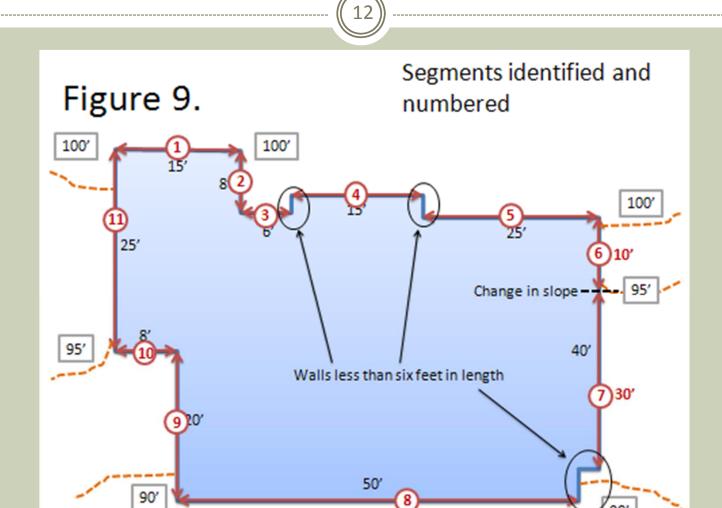


Example: Section View





Example: Divide Walls into Segments



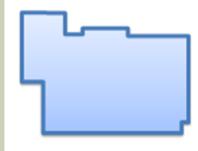
Example: Average and Weight Segments



Figure 10.

Length Weighted Mean sample calculation:

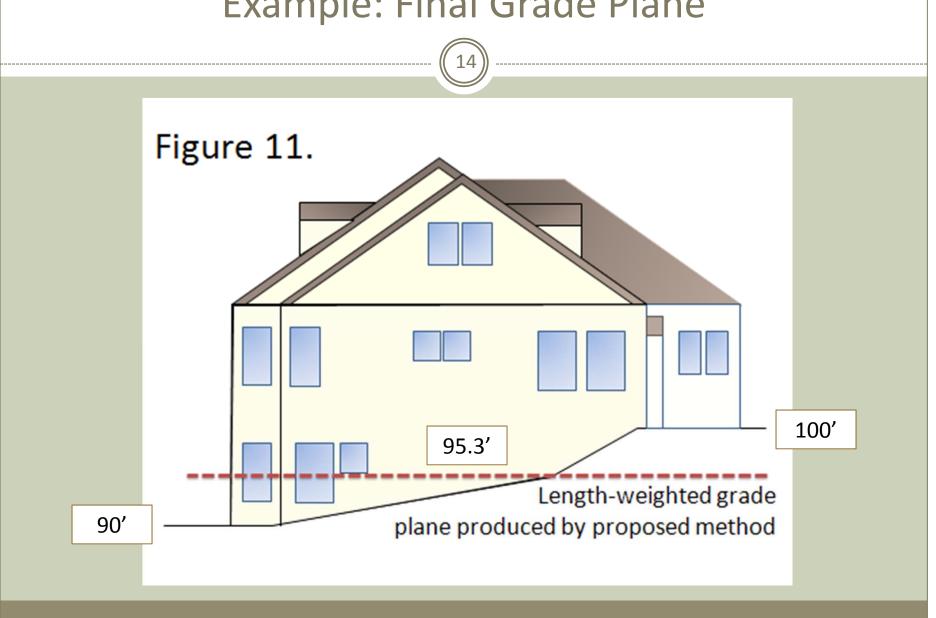
$$\frac{\Sigma[(e1+e2)/2 \times L]}{P}$$



Segment	L	e1	e2	<u>e1+e2</u> 2	хL
1	15	100	100	100	1,500
2	8	100	100	100	800
3	6	100	100	100	600
4	15	100	100	100	1,500
5	25	100	100	100	2,500
6	10	100	95	97.5	975
7	30	95	90	92.5	2,775
8	50	90	90	90	4,500
9	20	90	95	92.5	1,850
10	8	95	95	95	760
11	25	95	100	97.5	2,438
Total	212				20,198

Grade Plane under proposed method: $\frac{20,198}{212} = 95.3'$

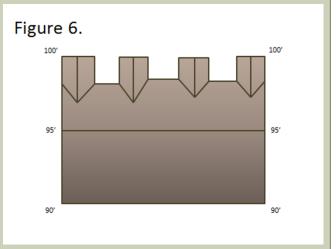
Example: Final Grade Plane



Analysis: Merits



- Achieves a fairer and more representative "average of finished ground level"
 - More representative for buildings on lots with varying grades
 - e.g. homes with basement garages or sloping lots
 - Easier to verify measurements and calculations
- What could go wrong?
 - Using "teeth" to increase segment length at higher elevation (see Figure 6.)
 - Only count segments along walls of greater than six feet
 - "Berming" around structure to increase grade plane
 - Use the lowest elevation within six feet of the ends of each segment to calculate the average grade of the segment



Analysis: Comparisons

16)

Comparisons with neighboring communities:

- We looked at the ordinances of Sudbury, Weston, Brookline, Needham, Wellesley,
 Waltham and Watertown
- Sudbury and Weston use the length-weighted mean approach and reported that the method is clear and consistent and reduces "gaming" of the system
- The other communities use methods that have many of the same problems as
 Newton's current definition

Analysis: Impacts

17)

We tested both the current method and the proposed method:

- On a flat lot both methods produced the same grade plane
- For both sloping grade and garage-under examples the proposed method yields more representative averages of grade, which are one to two feet higher than those calculated under current definition
- Current method has no mechanism for dealing with "teeth"

New proposal:

- More consistent and verifiable
- More likely to represent the "average of finished ground level"
- Small chance that some mostly buried ground levels would count as basements,
 but overall height is still limited

Recommended Changes to Proposed Language



- *Grade Plane:* A horizontal reference plane for a building as a whole, passing through the elevation of the finished Average Grade around the perimeter of a building, from which building height is determined."
- *Grade, Average:* The average of the grade elevations around the perimeter of a building, as determined by the length-weighted mean formula below. All walls of length greater than six feet shall be included in segments of consistent grade or slope.

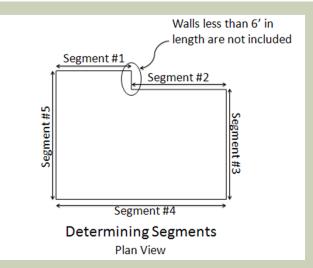
$$\frac{\Sigma[(e1 + e2)/2 \times L]}{E}$$

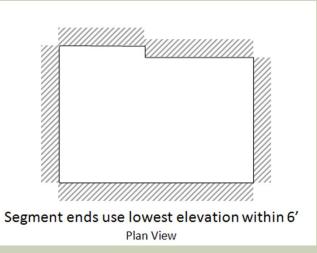
Where:

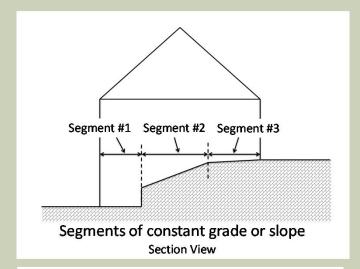
- × Σ sums the length-weighted means of all segments
- e1 and e2 are the elevations of the finished ground level at the respective ends of each segment, determined as the lowest point at each end of the segment within six feet of the foundation or the lot line, whichever is closer
- L is the corresponding horizontal length of the segment
- P is the total horizontal length of all segments

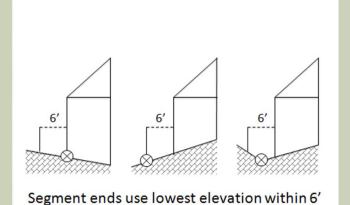
Proposed New Diagrams

(19)









View along segment

Summary

20

 Planning Department recommends the proposed changes to the definition of Grade Plane to ensure more consistent, verifiable measurement of true average grade.

Department of Planning and Development

1

Public Hearing: Revisions to Height Definition

Petition #65-11. Terrence P. Morris and Joseph Porter proposing an amendment to the zoning ordinance to change the definition of "height" with a concomitant increase in the height to the pre-1997 limits; to make height exceptions in accessory buildings subject to special permit rather than a variance."

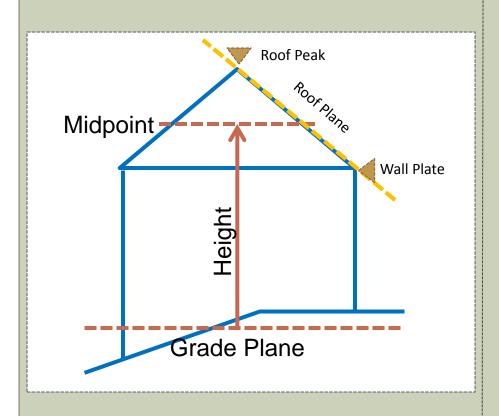
Height Definition

2

• "Section 30-1 Height: The vertical distance between the elevations of the following: (a) the average grade plane and (b) the midpoint between the highest point of the ridge of the main building roof and the line formed by the intersection of the top of the main building wall plate and the main roof plane. Not included in such measurements are 1) cornices which do not extend more than five (5) feet above the roof line; 2) chimneys, vents, ventilators and enclosures for machinery of elevators which do not exceed fifteen (15) feet in height above the roof line; 3) enclosures for tanks which do not exceed twenty (20) feet in height above the roof line and do not exceed in aggregate area ten (10) per cent of the area of the roof; and 4) towers, spires, domes and ornamental features."

Height Definition



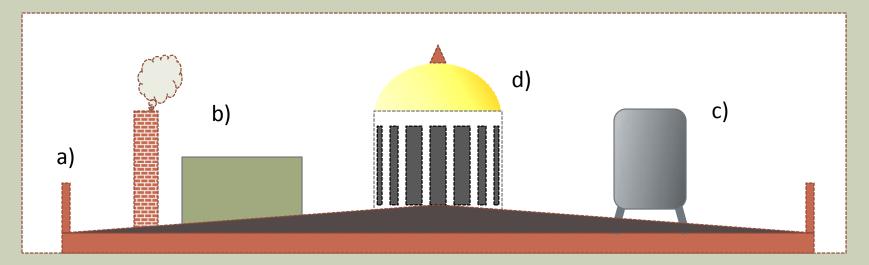


- Height is measured from the Grade
 Plane to the midpoint between the
 roof peak and the intersection of
 the wall plate and roof plane
- Change would affect all structures in the City, including accessory structures

Existing Exceptions to Height Measurement

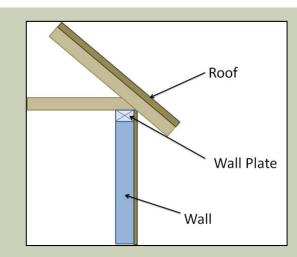


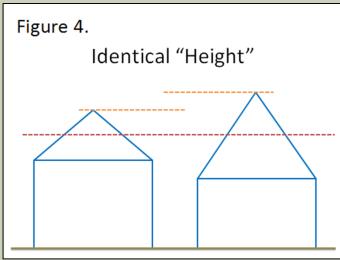
- There are a number of exceptions to the current calculation of height:
 - a) Cornices which do not extend more than five (5) feet above the roof line
 - b) Chimneys, vents, ventilators and enclosures for machinery of elevators which do not exceed fifteen (15) feet in height above the roof line
 - c) Enclosures for tanks which do not exceed twenty (20) feet in height above the roof line and do not exceed in aggregate area ten (10) per cent of the area of the roof
 - d) Towers, spires, domes and ornamental features



Summary of Problems With Current Definition

- Term "wall plate" likely a scrivener's error; intended term was "wall plane"
 - Term contributes to confusion and makes height hard to verify
- Does not actually regulate the absolute height of a structure
 - The peak height of a conforming structure can vary considerably depending on the shape of the roof
 - Buildings with steeply pitched roofs may have a taller peak height than those with flatter roofs
 - Can be manipulated to increase peak height





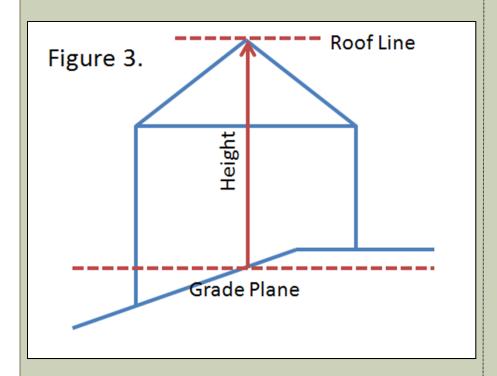
History of Height Definition



- In 1997, Ordinance V-111 revised the definition of height
 - Measure to the "highest roof surface" and lowered the allowed height to 30 feet (from 36 feet)
 - Intended to reduce development potential and protect existing structures
- In 1999, Ordinance V-232 created our current method
 - Measure from the grade plane to the midpoint between the peak and the intersection of the roof and wall planes
 - Intended to encourage pitched-roof designs
- In 2008, Ordinance Z-20 made one minor adjustment to the current definition
 - Replaced the phrase "grade plane" in the definition of height with the phrase "average grade plane"
 - Ordinance Z-20 was primarily concerned with dormers

Proposal: In Three Parts

Petition #65-11 proposes three separate revisions to the zoning ordinance:



- I. Change the definition of height in Section 30-1 to measure from Grade Plan to "peak of the roof line"
- II. Change the height limits of 30 feet in Section 30-15, Density/Dimensional Regulations Table 1 to the pre-1997 limit of 36 feet
- III. Allow height limits for accessory structures to be waived by special permit rather than by variance

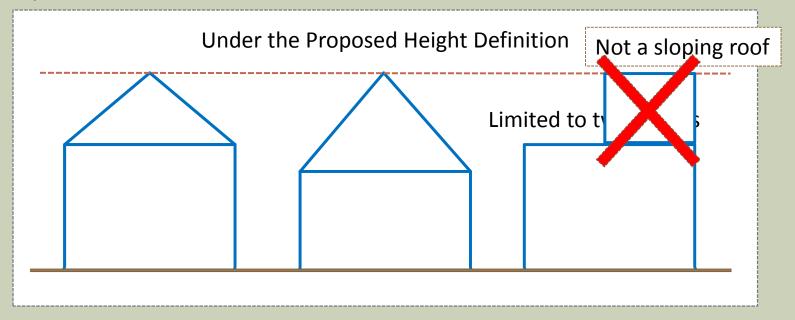
Proposed Revised Definition

8

"Height: The vertical distance between the elevations of the following: (a) the average grade plane and (b) the midpoint between the highest point of the ridge of the main building roof and the line formed by the intersection of the top of the main building wall plate and the main roof plane the highest roof surface. Not included in such measurements are 1) cornices which do not extend more than five (5) feet above the roof line; 2) chimneys, vents, ventilators and enclosures for machinery of elevators which do not exceed fifteen (15) feet in height above the roof line; 3) enclosures for tanks which do not exceed twenty (20) feet in height above the roof line and do not exceed in aggregate area ten (10) per cent of the area of the roof; and 4) towers, spires, domes and ornamental features."

Analysis: Height Definition

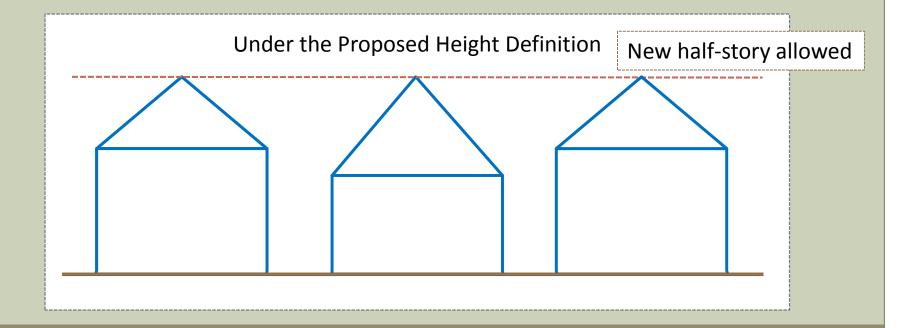
- 9
- The majority of surrounding communities clearly define height as measured to the "highest roofline" or similar
- The proposed definition change would apply to all properties
 - Half stories above the second story may only be built under a sloping roof
 - In practice, flat-roofed commercial structures are not affected



Analysis: Height Definition

10

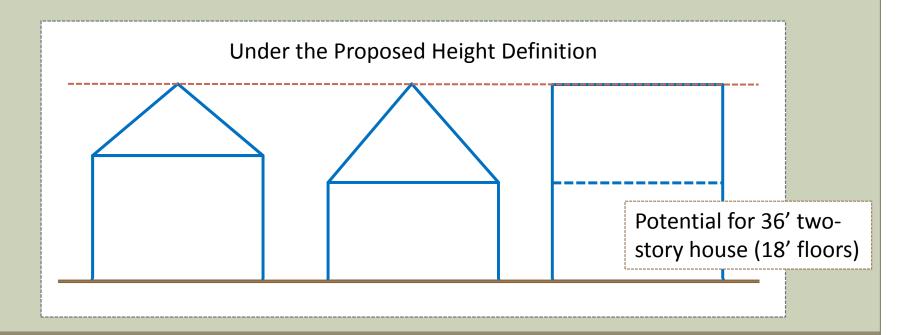
- New half-stories would be allowed
- Maximum height is easy for inspectors to verify



Analysis: Height Definition



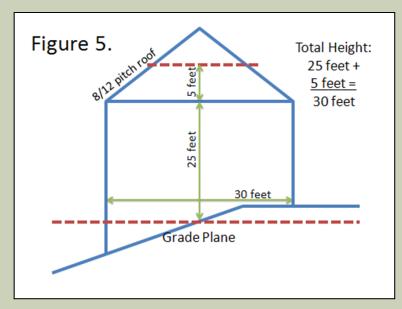
- One potential problem with more modern house styles
- Option to increase height only for structures with a sloping roof
 - Need definition for sloping roof

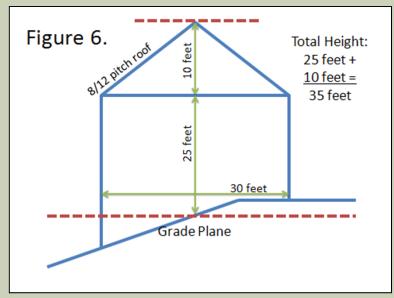


Analysis: Height Limit



- New height of 36 feet would only apply to SR and MR zones
- The most neighboring communities allow 35 feet of building height for residential structures
- Combined with the above redefinition of height, a return to a height limit of
 36 feet would have limited impact on new construction or existing homes

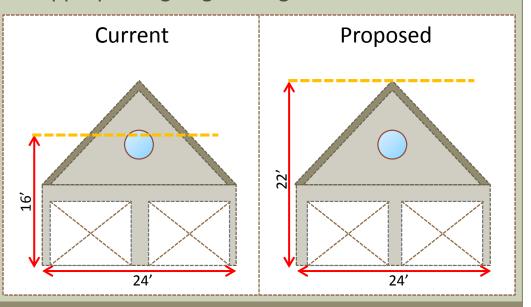




Analysis: Height Limit for Accessory Structures



- A change to the height definition would affect accessory structures as well
- Accessory structures are currently limited by Section 30-15(m) to a maximum height of 18 feet
- As for primary structures, change in definition suggests increase in limit:
 - ISD and Planning reviewed likely and appropriate garage configurations
 - Propose an increase of four feet to 22 feet total allowed height for accessory structures
 - A 22 foot limit would allow a 24 x 24 foot garage a 12:12 pitch roof



Analysis: Accessory Structure Relief



- Petition proposes allowing relief from height limit for accessory buildings by special permit rather than variance
- Staff research revealed no precedent in surrounding communities
- Very limited precedent in residential zones in Newton
 - In general, a variance is required for a conforming structure to exceed a density or dimensional requirement with some specifically noted exceptions
 - Residential FAR
 - Garage ground floor area
 - Some specific uses or residences in the MR3, MR4 and BU zones
 - Why accessory structures and not primary structures?
 - Such a rule should include maximum height under special permit and specific criteria for the special permit
- The Planning Department sees no adequate rationale for making the height of accessory structures an exception from the rule

Analysis: Consistency with the Ordinance



Reviewed Zoning Ordinance:

- In addition to the "height" definition, there is a definition of "height, contextual" which is used only by the Planned Mixed-Use Business Development (PMBD) section of the Zoning Ordinance
 - The "height, contextual" definition also uses the "midpoint" approach to measuring height
 - The committee may want to consider revising this definition to match the proposed new definition of height
- In addition to the height limits in Section 30-15, Table 1, the limits in Table 4
 for rear lots should be similarly revised
- Some setback requirements in Section 30-15, Table 1 and Table 2 are derived from building height
 - The change in height calculation is unlikely to significantly affect such properties

Summary



- The Planning Department recommends the adoption of the revised definition and height limits as presented in this memorandum
 - Revised definition provides a specific, clear, verifiable benchmark for measuring height
 - Revised height regulations for SR and MR zones respond to changed height measurement method to preserve consistent outcomes
 - (Option: increase allowed height only for sloping roofs; define sloping roof)
- The Planning Department recommends against changing the allowed relief for accessory structures
 - No adequate rationale for special treatment

SCOTT I. WOLF

LEGAL EMPLOYMENT

SCHLOSSBERG, LLC BRAINTREE, MA

MAY 1999—PRESENT

- Partner at business law firm representing closely-held businesses.
- Represent Buyers and Sellers in complex real estate transactions and business mergers, acquisitions, and sales.
- Advise business clients regarding general corporate and employment matters.
- Negotiate and draft commercial and residential leases and purchase and sale agreements.
- Conduct residential real estate closings and cash commercial closings. Abstract title and prepare commercial and residential title policies (approved First American agent).
- Prosecute trademark and service mark applications before the Patent and Trademark Office.
- Advise clients on a variety of estate planning issues, including tax and succession planning.

JACK MIKELS & ASSOCIATES BOSTON, MA

May 1996 - May 1999

Associate attorney for boutique commercial litigation and corporate general practice firm. My practice focused on: representing commercial lenders in bankruptcy, foreclosure and post-judgment collection proceedings; advising corporate clients on franchise enforcement and trademark protection matters.

EDUCATION

University of Miami School of Law

Coral Gables, Florida

MAY, 1995

Juris Doctor cum laude

Law Review: University of Miami Entertainment and Sports Law Review,

Articles and Comments Editor

Boston University

Boston, Massachusetts

MAY, 1991

Bachelor of Arts cum laude in Political Science

BAR MEMBERSHIPS/AFFILIATIONS:

Florida (1995); Massachusetts (1995); United States District Court, District of Massachusetts (1996); Real Estate Bar Association of Massachusetts; Massachusetts Bar Association Real Estate, Property, Probate, Trust Law Section of the Florida Bar.

Jane H. Ives

EDUCATION

B.A., Mills College, Oakland, CA

M.Sc., London School of Economics, London, UK

Ph.D., University of London, Faculty of Economics, London, UK

TEACHING EXPERIENCE

1999-Present Part Time Lecturer, Northeastern University, Boston, MA.

Develop and teach part-time undergraduate and graduate online and in class edurses with the College of Professional Studies and previously with the College of Basiness Strategic Management, Cross—Cultural Understanding, General Management, Business Ethics, Entrepreneurship and Business Communication.

2008-Present Instructor and Consultant, Thomas Edison State College, Trenton, NJ

Develop and teach online graduate business capstone courses in *Strategy, International Management; Non-Profit Management and Leadership.*

2006-2007 Lecturer, Bentley University, Waltham, MA

Taught undergraduate courses in Cross-Cultural Understanding with the International Studies Department.

2004, 2008

Visiting Professor, Arizona State University, Tempe, AZ

Designed and taught online undergraduate and graduate management course *International Business*. Designed and taught a module for an online graduate seminar on *The World Trade Organization, Global Trade* and *International Law and Policy*.

2003 Visiting Professor, Thunderbird, The American School of Global Management, Glendale, AZ

Designed and taught MBA Winterim Travel/Study Program in Singapore and Thailand on Managing in the Global and Pacific Rim's Digital Economy.

1999, 2001- 2002 Visiting Associate Professor, Framingham State University, Framingham, MA

Taught undergraduate marketing courses, including Principles of Marketing, Marketing Research, Marketing Management and International Marketing

2000 Visiting Professor, Thunderbird, The School of Global Management, Glendale, AZ

Designed and taught MBA Winterim Program on: Competing for the Future: Global Business and Leadership in the Global Organization.

1989-1997 Assistant Professor, University of Massachusetts, School of Management, Boston, MA

Taught undergraduate and graduate courses on: Strategic Management, Organizational Behavior, Introduction to Business, Marketing, Global Business, Entrepreneurship, Women and Business, Business Communication, Environmental Management, Business, Government and Society and Business Ethics

1990, 1993 Visiting Professor, Japan-America Institute of Management Science,

> University of Hawaii, Graduate School of Business, Honolulu, HI Visiting Professor, University of Hawaii at Manoa, Graduate School of Business, Pacific Asian Management Institute, Honolulu, HI Taught undergraduate seminar on Strategic Management, Global Business Ethics.

1981-1989 Assistant Professor, Suffolk University, School of Management, Boston, MA

> Taught undergraduate and graduate MBA Management courses on Strategic Management, Organizational Behavior, Marketing, Introduction to Business, Global Business, Entrepreneurship, Women and Business, Business Communication, Environmental Management and Business and Government and Society. Developed international course material for the business school curriculum. First faculty member to develop sequence of courses on women in business.

INTERNATIONAL TEACHING AND RESEARCH

2001 Visiting Professor, University of Aix-en-Provence, Graduate School of Business,

Aix-en-Provence, France

Taught executive MBA course on: Managing Global Business, Strategy & Entrepreneurship in the Global Digital Organization

1997 Visiting Professor, Dubai Polytechnic University, Dubai, United Arab Emirates

Taught MBA course on Strategic Management and Global Business.

1996 Visiting Fellow in International Business, Bradford University, Graduate Management

Centre, UK

Conducted research on Global Business Marketing and Leadership with European and American multinational companies.

Visiting Professor, Churchill College, Cambridge University, UK 1996

Taught executive education course on: Strategic Management, Global Business

1995 Visiting Professor, Maastricht School of Management, The Netherlands

> Taught MBA courses on Strategic Management, Entrepreneurship and Cross-Cultural Comparative Management.

1995 and 1996 Visiting Professor, Free University of Brussels, Belgium

Taught graduate courses on Sustainability; Global Business.

1995 Visiting Professor, Nyenrode University, The Netherlands

> Taught MBA courses on Strategic Management, Global Business, and Cross-Cultural Management.

1994 Visiting Professor, Negocios Internacionales, Universidad Gabriel Mistral, Santiago,

Chile

Taught graduate MBA courses on Strategic Management and Global Management.

Visiting Professor, Fulbright Scholar, National Taiwan University, Taiwan 1987

Taught MBA courses on Global Management, Sustainability and Management of

Technology.

1986 Visiting Research Associate, Taiwan National Science Council, Taiwan

Research and teaching on Strategic Management, Global Business, and Environmental

Management.

1985 Visiting Research Associate, Wolfson College, Oxford University, UK

Post-doctoral Research Associate on topics of Strategic Management, Global Business,

Organizational Behavior, and Economic Development.

1985 Visiting Lecturer, Harvard University, Department of Economics, Cambridge, MA

Taught course on International Development

ADMINISTRATIVE EXPERIENCE

2008-present

Director, Grameen Global NGO Student Internship Program and The Global Microfinance Leadership Program, Thunderbird Global Financial Services Center, Thunderbird, School of Global Management, Glendale, Arizona

Founded, secured funding and academic and corporate partners for the Grameen Global

Student Internship Program and the Global Microfinance Leadership Program. Develop and manage fundraising and programming.

Secure, fund, and manage program partners, including global corporations, international

organizations, universities, United Nations, public organizations and donors. Established and managed global student internships with domestic and global

organizations; global development programs for students, communities and the business

community.

2004-2005

Director, Global Business Ethics Center, San Francisco State University, College of Business, San Francisco, CA

Developed and managed fundraising and programming for new Global Business Ethics Center, with full responsibility for developing and securing global corporate and university partnerships and donors.

2001-2002

Consultant, Rollins College, Crummer Graduate School of Business, Winter Park, FL

Assistant Director, Committee on International Services, Programs and Projects. Consulted for Graduate School on new programs and developed international business program for students and faculty.

Researched and wrote a joint policy paper on new international university programs and

projects.

1997-1998

Manager, Global Executive Programs and Domestic and International Student Internships with the International Center, Bentley University, Waltham, MA

Developed undergraduate and graduate domestic and international internships, travelstudy programs, and taught courses with the International Center.

Developed programs and travel study courses for undergraduate and graduate students

with the International Center.

EXECUTIVE EDUCATION AND BUSINESS EXPERIENCE

2000-present

Director, American Office, Training Vision Corporation, Singapore

Develop and manage Management, Social Enterprise and Finance education and

training programs in Asia-Pacific, United States and Europe.

1998-2003 Executive Education and Management Consultant, SBC Southwestern Bell

Communications, Dallas, TX

Developed and managed training programs for businesspeople in the telecommunications

industry.

1998-present Management Consultant, Global Executive Development Associates, Shanghai and

Hong Kong, China

Developed training programs for businesspeople in the global business community.

1998 Management Consultant, NATO, London, UK

Developed management training programs for European businesspeople.

1998-1999 Consultant, Dubai Chamber of Commerce and Industry, Dubai, United Arab Emirates

Developed programs in management for the University of Dubai.

Designed and managed market research studies.

1998-1999 Management Consultant and Lecturer, Executive MBA Program, Japan-America

Institute of Management Science, University of Hawaii, Honolulu, HI

Developed program in management and a course for overseas Asian businesspeople.

Taught short course on Asian business.

1990-1999 Management Consultant and Executive Education Instructor, AT&T School of Business,

AT&T Corporation, Somerset, NJ

Developed, managed and taught executive courses for AT&T global business community on Strategic Management, Project Management, Global Business Ethics

and Entrepreneurship.

Established first AT&T Global Business Ethics Program and Global Business Ethics

(online) game for use throughout the company.

Designed and managed market research studies for the Global AT&T community.

1979-1997 Consultant and Management Trainer

Project Management, Market Research, Global Social Entrepreneurship, Management

Consulting and Training.

Clients included United Nations International Atomic Energy Agency, Austria; U.S.I.A., Washington, DC; Organization for Economic Cooperation and Development, France; Business International, Hong Kong & New York; U.N. Regional Office for Africa, The Congo; U.N. World Health Organization, Switzerland; U.N. Development Program,

Switzerland; The Swedish Centre for Working Life, Sweden; Abt Associates,

Massachusetts; Harbridge House, Massachusetts; Milliken Corporation, South Carolina; Lucent Technologies, New Jersey & Massachusetts; Shell Oil, Texas; Asia Inc., Hong Kong; Philips Corp, New Jersey & Holland; Dubai Chamber of Commerce and Industry,

Dubai, UAE; The UN International Labor Organization, Switzerland.

COMMUNITY SERVICE

Member (appointed), Economic Development Commission, Mayor's Office, Newton, MA 1997-present Member, World Boston, Boston, MA

GRANTS

2008, 2009, 2010	0,2011 Global Social Entrepreneurship Program Initiative . Corporate grant to develop and manage a Global Student Internship and Global Leadership Program initiative.	
1998	Government of Taiwan grant. Lectured and conducted international business research at National Taiwan University, Taipei, Taiwan.	
1998	European Community grant: IRISIA . Conducted research on Global Sustainable Enterprises at The Institute for the Encouragement of Scientific Research in Industry and Agriculture (IRISIA), Brussels, Belgium.	
1988	National Science Foundation grant. Conducted research in global business in India. Delivered a paper on Global Sustainable Business and Environmental Risk Management at the National Science Foundation International Conference in India sponsored by The National Science Foundation, Washington, DC, The United States Environmental Protection Agency, Washington, DC and The United Nations International Atomic Energy Agency, Austria.	
1987	Taiwan National Science Council . Lectured on global management at National Taiwan University, Taipei, Taiwan.	
1986	Fulbright Scholar Program. Lectured in the area of International Business at National Taiwan University, Taiwan, and conducted research in international business in Taiwan.	
1983	German Marshall Travel grant . Presented paper on Global Sustainability at The International Public Policy Conference, London, UK.	
1982	Natural Resources Defense Council, Washington, DC . Reported on environmental protection and occupational safety and health issues in Ireland.	

PUBLICATIONS

Book Review Editor, *International Leadership Journal*, Thomas Edison State College, New Jersey, 2009-.

Ives, J. and Swanson, J.A. ". Asian Fusion Leadership: An American Global Business Leader in Singapore."

International Leadership Journal, Volume Two, Issue Two, Winter 2010.

Ives, J. and Swanson, J.A." Bangladesh as an International Player in the World Marketplace: An Interview with a Global Transformational Business Leader."

International Leadership Journal, Volume Two, Issue One, Fall 2009

"Global Social Entrepreneurship and Innovation in Global Organizations in Asia: Trans Technology Corporation", (in progress), 2011.

"The Changing Digital Environment of North American Business," *The International Encyclopedia of Business and Management*, Malcolm Warner, ed. London: Thomson Business Press, 2001.

"Strategies to Manage Global Environmental Disasters: Implications and Recommendations for Asia," Proceedings, National Conference on Capacity Building for Environmental Management in Vietnam, Hanoi, 1998.

"Business and Societal Trends: Culture, Traditions, and Behavior in North America in the 21st Century," *IEBM Handbook of International Business*, Rosalie Tung, ed. London: Thomson Business Press, 1998. Also in *International Encyclopedia of Business and Management*, Malcolm Warner, ed., 1996.

"Global Disaster Management," International Environmental Management, Luc Hens, ed. Paris: UNESCO Publication Press, 1994.

"Management of Environmental Risks and Technology Policy in Belgium," *Proceedings*, Association on Employment Principles and Practices, San Diego, 1993.

Risk and Exports: Transnational Corporations and Environmental Control Issues, editor and co-author. London: Routledge and Kegan Paul Publishers, 1985.

PRESENTATIONS

"Global Social Entrepreneurship Initiatives and Programs 2011 with The Grameen Bank& Trust ,Bangladesh", The Pacific Asian CIBER 2010 Annual Meeting, Kona ,Hawaii July,2010 .

"Global Initiatives and Global Village Marketing in The Developing World: Social Action Programs for Undergraduate and Graduate Students," Distinguished Speakers Series, Mills College, Oakland California, October 2009.

"Global Social Entrepreneurship and Global Microfinance initiatives in South Asia and South America: Case Study". Simmons College, Boston, MA, March 2008.

"Global Social Entrepreneurship, Global Microfinance Leadership, Global Business and Rural Village Marketing in Emerging Markets," TBE Conference 2006, The Leeds Graduate School of Business, University of Colorado, Boulder, June 2006.

"The Convergence of Microfinance and Rural Village Marketing and Entrepreneurial Strategies in Key Emerging Markets," The Conference on Reinventing Today's Business for the Challenges of Tomorrow, The Kenan Institute of Private Enterprise, Kenan-Flagler Business School, University of North Carolina at Chapel Hill, March 2006.

"The Convergence of Microfinance, Entrepreneurship, and Rural Village Marketing Strategies in Emerging Markets," Thunderbird, Thunderbird Class, The American Graduate School of International Management, Phoenix, AZ, January 2006.

"Asian Fusion Management: Global Entrepreneurship, Leadership and Business Sustainability": AACSB Conference on Business, University of Colorado, Boulder, July 2005.

"Global Business Management and Strategies in the New Asia Pacific," Thunderbird, Global Business Ethics Class, April 2005 and January 2004.

"International Management and Sustainability," Brandeis University, Waltham, MA, December 2003.

"Managing in the Asian Pacific Rim's New Economy: Singapore, Thailand, and China," Conference on Asian Business, Singapore, January 2003.

Jane H. Ives

- "Corporate Strategies and Competitiveness in the Global Organization," Crummer Graduate School of Business, Rollins College, Winter Park, FL, July 2001.
- "Managing Change and Strategy and Diversity in the Global Digital Organization," University of Aix-en-Provence, Graduate School of Business, Aix-en-Provence, France, March 2001.
- "Global Social Entrepreneurship and Global Microfinance Leadership, Corporate Strategy and Business Process Reengineering in the Global Organization in Asia," presented at Training Vision Business Conference, Singapore, and October 2000.
- "Global Competitiveness and Entrepreneurship in the New Millennium," International German-American Business Conference sponsored by the German government, Gillette Corp., and Schitag Ernst and Young Corp., Leipzig, Germany, June 1999.
- "Managing the Global Organization in Asia," China Business Forum, Shanghai, China, June 1998.
- "Trends and Issues in International Business: Developing the Global Strategy and the Global Code of Conduct for AT&T Corporation," Thunderbird, Phoenix, AZ, January 1998.
- "Competing for the Future and Managing Global Entrepreneurship and Changes in Global Organizations," SIA, Inc. Forum, Hong Kong, July 1997.
- "Global Business Ethics in the 21st Century," International Conference on Business Ethics, The Lincoln Center for Ethics, Arizona State University, Tempe, October 1997.
- "Change Management and Social Entrepreneurship in the Global Multinational Company," Churchill College, Cambridge University, UK, October 1996.
- "International Management and Global Disaster Management Planning," Maastricht School of Management, Maastricht, The Netherlands, December 1995.
- "International Environmental Management Practices and Performance," Association on Employment Practices and Principles, Boston, MA, 1994.
- "International Global Ethics & Management: The Foreign Corrupt Practices Act and U.S. Federal Sentencing Guidelines," Arizona State University College of Management and Lincoln Center for Ethics, Tempe, AZ, 1994.

EXPERIENCE

WINDSTREAM RENEWABLE ENERGY LLC CEO

Develop wind turbine and solar projects in the United States and India.

- Scituate, Ma.-1.5 Megawatt wind turbine
- Plymouth, Ma.-Two 1.5 MW wind turbines
- Gujarat, India-Fifteen 2 MW turbines
- Multiple rooftop and ground mounted solar PV installations.

EISENBERG CONSULTING, LLC, Newton, MA.

2004-Present

President

Enable clients to achieve growth and greater performance through new business concepts and business process engineering. Selected recent engagements include:

- Housing Partners, Inc.-Affiliate
 - -The Stabile Companies-Development consultant for 101 unit historic mill rehab in Nashua, NH
 - -Assisting in the acquisition of financing, approvals and equity; cost estimating, design, bidding and construction management; negotiating management and service agreements for an affordable assisted living development totaling 96 units in Fitchburg, MA
 - -Developed smart growth zoning overlay districts consistent with M.G.L. 40R for Chicopee and Reading, MA.
- Weld Management Company-Development consultant for 58 unit affordable housing development in Holyoke, Massachusetts.
- B'nai B'rith Housing New England-Development Consultant for apartment projects in Boston and Stoughton, MA.
- Belgrade Place, LLC-Development consultant for 40 unit apartment building in Boston, MA.
- J.K. Scanlan Co..-Development consultant for 49-unit multifamily development in Wareham, MA.
- RRCI-Financial consultant for low income housing tax credit project in St. Thomas, USVI.

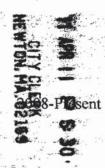
THE COMMUNITY BUILDERS, INC., Boston, MA.

2003-2004

Northeast Regional Director

Managed the development operation in New England and New York for national, non-profit affordable housing developer.

- Prepared plan to reorganize offices and redeploy resources in the Northeast region to improve productivity and reduce losses.
- Oversaw the development of twelve affordable housing developments.
- Managed twenty project managers and support staff in five offices.
- Developed and implemented the annual business plan for the Northeast Region.



LEA GROUP, INC., Boston, MA.

1994-2002

Principal, Chief Administrative and Financial Officer

Led finance, marketing and operations for this family-owned regional engineering/architecture firm.

RECOLL MANAGEMENT CORPORATION, Boston, MA.

1991-1993

Vice President, Fleet Bank

Managed and disposed of non-performing real estate assets of the former Bank of New England.

FEDERAL DEPOSIT INSURANCE CORPORATION, Franklin, MA.

1990-1991

Senior Account Officer-Division of Liquidation

Special Assistant to Assistant Managing Liquidator for New England region. Enabled senior management to recover over One Billion Dollars from failed banks and subsidiaries.

CHARLES EISENBERG & CO., INC., Boston, MA.

1987-1990

President

Principal of real estate and planning consulting firm

RELATED COMPANIES NORTHEAST, Boston, MA.

1986-1987

Vice President/Development of The Related Companies, N.Y.

Developed projects in New England

THE DRUKER COMPANY, Boston, MA.

1980-1986

Financial Vice President

Responsible for all project financing and development of suburban properties.

THE BEACON COMPANIES, Boston, MA.

1978-1980

Project Director

Managed development of residential properties.

TEACHING EXPERIENCE

BOSTON UNIVERSITY CENTER FOR PROFESSIONAL STUDIES

1999-Present

Instructor, Program in Real Estate Studies

Teach Real Estate Market Analysis course to students in certificate programs.

- Course designed to be immediately applicable to real estate professionals.
- Course credits apply towards certificate requirements in real estate finance and management.

NORTHEASTERN UNIVERSITY-UNIVERSITY COLLEGE

2003-Present

Adjunct Professor

Teach International Business Management and Operations to Undergraduates

• Upper level one-semester course required for degrees in Business or Finance.

EDUCATION/PROFESSIONAL DEVELOPMENT

Harvard University, M.B.A. with Honors

Cornell University, M.A. in Government/Planning

Brandeis University, B.A. Magna Cum Laude with Honors, Phi Beta Kappa

MAJOR ACTIVITIES AND AFFILIATIONS

Member-Newton Mayor's Mixed Use Task Force

Past Chairman and Member-Newton Economic Development Commission.

Vice Chairman and Chairman of the Refinancing Committee-Greater Boston Jewish Community Housing for the Elderly

Member, Newton Wellesaley Hospital Patient and family Advisory Committee

Chairman-Newton Centre Task Force

CFO, Newton Cultural Alliance

Member-Newton Comprehensive Planning Advisory Committee

Fellow-Brandeis University

Trustee (1987-1991)-Brandeis University

Member:

Real Estate Finance Association of Greater Boston

Urban Land Institute

Citizens Housing and Planning Association

American Wind Energy Association

New England Sustainable Energy Association

Dap	hne	M.	Collins
		A 1.M.	

PROFESSIONAL EXPERIENCE

Conservation/Historical Commission Part-Time Planning Staff, Town of Watertown Community Development and Planning,

Watertown, MA

October 2001-present

Administrative staff to the Conservation, Historical and Historic District Commissions.

Business Adviser/Marketing & Training Coordinator, SBDC, Santa Fe Community College
Santa Fe, NM April 1998-August 1999

- Provided technical assistance to small business clients, including developing business and marketing plans. Services provided both in English and Spanish.
- Instructor of Business Start Up, Marketing, and Customer Services.
- Coordinator of the SBDC workshop and training programs. Solicited instructors.
- Produced workshop brochures and marketing materials.
- Represented Center before agencies, press, and organizations, promoting the SBDC services.
- Coordinated special SBDC events Youth Enterprise Academy, SBDC Day at the State Capital Lenders Forums.
- Initiated niche business development programs: Native American Arts, Art Galleries and Book

Assistant Director, Gastón Institute of Latino Community Development and Public Policy, UMAS Boston, MA January 1997-December 19

Directed the administration and management of an Institute conducting applied research in public policy, economic development, education, health, political empowerment, and cultural affairs on and for the Latinor community in Massachusetts.

- Hired, motivated and supervised a staff of 15 employees.
- Developed annual strategic plan and budget. Guided fiscal operations totaling \$500,000.
- Responsible for legislative relations, successfully lobbied the State Legislature to increase annual allocation by 35%.
- Promoted, negotiated and represented Institute to University administration, grantors, foundations, community, press and advisory boards.
- Supervised the publications and outreach activities of the Institute. Published municipal Latino demographics brochures.
- Instituted business efficiency process.
- Managed grants HUD Enterprise Zone Grant, philanthropic and academic grants.

Senior Planner, Newton Planning and Development Department

Newton, MA

1988 - 1997

Provided the planning for the City's economic development, housing, homeless, human services, public facilities, access and neighborhood improvement programs funded under the CDBG program.

- Supervised staff of four professional planners. Chief staff to the Planning and Development Board and seven citizen advisory boards.
- Responsible for annual financial & progress status reports and grant applications totaling \$4 million yearly, following federal guidelines.
- Prepared staff reports for commission and departmental use.
- Conducted needs assessments, establishing list of capital improvements.
- Managed an economic development program totaling \$200,000, and a human services program totaling \$500,000 annually. Responsible for contract agreements.
- Environmental Review Officer for City and Consortium projects.
- Budgets and expenditures reconciled successfully quarterly with accounting systems.

- Designed applications, request for proposals, and evaluated proposals and award determinations.
- Conducted best practices and information seminars, provided technical assistance to grantees individually and in groups.
- Performed all public relations and marketing campaigns for the program.
- Successfully conducted "Special Projects" for the Mayor Rehabilitation of the Newton Senior Center and Nexus Bus System.
- Lead staff for the Brookline-Newton-Waltham-Watertown HOME Consortium.

Marketing Coordinator, Vitetta Group, Architecture, Engineering, Preservation and Planning Firm
Philadelphia, PA
1986-1987

- Prepared marketing packets in response to RFQs.
- Selected and supervised ad agencies and vendors producing firm's marketing materials.
- Promoted firm's projects in media and trade journals. Managed firm's display at trade conferences.

Community Development Planner, Township of Lower Merion

Ardmore, PA

1984-1986

- Conducted research identifying the needs of Township's low-income residents and neighborhoods.
- Managed application and reporting of Township's \$600,000 grant.
- Oversaw neighborhood capital improvement projects.
- Prepared staff reports for Planning Board.
- Responsible for applications, proposal review, awards determination, and contract management.

Community Services Specialist, Sacramento Housing and Redevelopment Authority Sacramento, CA

1980-1983

- Neighborhood planner. SHRA liaison between developers, City Council, Intermodal Transportation Agency, organizations, business and residential neighbors.
- Identified and oversaw neighborhood capital improvement projects.
- Oversaw the residential rehabilitation program.
- Editor and writer of the Alkali Review, a bilingual, bi-monthly neighborhood newsletter.

EDUCATION

Boston College

MA Administrative Studies

University of California, Berkeley Graduate Studies in City and Regional Planning

University of California, Santa Barbara BA with honors, Spanish.

Universidad de Madrid Complutense, Spain
University of California, Education Abroad Program.

PROFESSIONAL SKILLS

Spanish, reading, writing and translating proficiency. Spanish is first language. French proficiency.

Professionally trained in GIS.

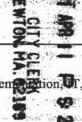
PROFESSIONAL AND VOLUNTEER ASSOCIATIONS

Member, Newton Economic Development Commission. Class Parent & Art Auction Coordinator, Walnut Park Montessori School Parent Volunteer, Jackson School and Boy Scout Pack 315



Summary

- Over twenty years, domestic and international management and consulting experience.
- Timely delivery of complex, innovative and creative solutions in operations, strategic implemental estate, engineering, construction and design.
- Life sciences, facilities, and professional services industries.



2010 -

Professional History

Telshire LLC (formerly Plottel Advisers), Waban, Massachusetts Founder, CEO

- Provide real estate, design and "know how" support to a personalized medicine start-up.
- Supported global life science firm on construction related litigation.
- · Advised landlord on trends in life science lab design and energy usage.

Novartis Institutes for BioMedical Research, Inc, (NIBR), Cambridge, Massachusetts

Global Head, Design & Engineering, 2008-2010

Head, Real Estate, Engineering & Construction, 2005 – 2008 *Executive Director*, Real Estate & Construction, 2002 – 2005

2002 - 2010

Real Estate

- Organized and led Novartis Campus Shanghai Project, a multi-billion dollar investment for new 2 million Square Feet (SF) campus on a green field site in Shanghai, China.
- Led site selection, purchase and lease negotiations for more than 1 million SF of laboratories and offices
 valued at over \$1 billion in Cambridge and Boston, including the Novartis Research Headquarters
 Campus anchored by the former NECCO candy factory.
- Procured architects, engineers, contractors, furniture, equipment, and real estate consultants for more than \$400 million construction projects.
- Managed "psycho track" permitting, design and construction of 100 Technology Square, a \$100 million, 255,000 SF fit out for biomedical research in 11 months from design to occupancy.
- Managed "fast track" permitting, design and construction of 220 Massachusetts Avenue, a \$30 million, 5 level, 60,000 SF, LEED Gold office building on a contaminated site.
- Designed and authored Lab of the Future requirements for next generation laboratories.
- Represented Novartis to governmental, regulatory and industry bodies.

General Management

- Participated on Global Research Operations Leadership Team, the management body for 250 employees in US, Switzerland, England and China, and the Cambridge Research Operations Leadership Team, the management body for 70 employees.
- Directly managed 10 associates in multiple cost centers with multi-million dollar budgets in US and China
- Approved capital renovation projects and performed engineering reviews for capital purchases.
- Created and chaired Cambridge Space Review Committee to manage space allocation and stewarded implementation of drawing and space documentation systems.
- Reduced NIBR global energy usage by 10% resulting in million dollar plus annual net savings.
- Led global Core vs. Non Core assessment for campus services, resulting in elimination of global engineering department.
- · Developed Global Research Operations' internal communication strategy.
- Established Cambridge site in 2002 as 1st Novartis associate; grown to 2,000+ FTEs.

PwC Consulting, a business of PricewaterhouseCoopers LLP, New York, New York Principal Consultant, 2000 – 2002

1998 - 2002

Consultant, 1998 - 2000

Managed CEO Nominating Committee, reporting to US Board members; Led the design and implementation
of Partner Admission System in over 100 countries on five continents reporting to Global Board Member;
 Program Manager and Team Leader for an issue-based, strategic profit improvement project.

Led construction department diagnostic review and construction cost audits for a leading entertainment indistry

company, and New York City Department of Design and Construction.

Four Engineering Firms, Ferguson Laboratory and State of Connecticut Budget Office, New York, New York; Austin, Texas; Hartford Connecticut Senior Structural Engineer; Engineer; Research Assistant; Summer Intern

Education

Yale School of Management, New Haven, Connecticut Master of Business Administration (MBA), 1998

University of Texas at Austin, Austin, Texas Master of Science in Engineering (MSE), 1991

Columbia University, School of Engineering and Applied Sciences, New York, New York Bachelor of Science (BS), 1988

Professional Registrations, Languages and Interests

- Licensed Professional Engineer, New York.
- · Fluent in French, knowledge of Spanish.
- · Travel, reading, sports and architecture.

Presentations & Publications

- Integrated Project Delivery Symposium, Harvard Business School, 2009.
- Leading-Edge Research Environments: Lessons Learned from Novartis, Tradeline Research Facility Conference, 2008.
- Yale School of Architecture, Master Student's Final Project Jury, 2007.
- Integrated Design Panel, AIA Build Boston, 2007.
- Fast Architecture, AIA National Conference, 2004 and 2005.
- Harvard University Roundtable on Capital Projects, 2005.
- "Psycho Track Building" Massachusetts Building Congress, 2003.
- High Load Pot Bearing Design, published in the "Proceedings of the 4th World Congress on Joint Sealant and Bearing Systems for Concrete Structures, volume 2. (ACI SP-164)," Barrie Atkinson, ed. American Concrete Institute, 1997 (with Drew Gilstad).
- The Use of Rectangular Steel Box Members in the U.S. Building Construction Industry, Ferguson Structural Engineering Lab Report 91-4, the University of Texas at Austin, 1991 (with Michael Engelhardt).

Community Activity

Co-chair, Yale School of Management Boston Alumni Association Building Environment Chair, Zervas Elementary School (Newton, MA) PTO City of Newton, MA Economic Development Commission, Currently Vice Chair Citizens Member, Newton North High School Task Force 2011 -

2007 -

2004 -

2002 - 2003

EXPERIENCE Goodman Networks, Plano, TX Architecture/Engineering & Construction Manager

SunEdison, Beltsville, MD December 2006- October 2007 National Accounts Project Manager Design & Construction Administration for commercial solar power systems

National Grid Wireless, Boxborough, MA September 2005- November 2006 Project Engineer Design & Construction administration oversight for cellular transmission sites

DBA Grover Development, Newton, MA

-Oak Point, Middleborough, MA (Senior Living Facility)

-Vaisala, Finland (Meteorlogical Monitoring Network)

-Central Artery (Orange Line Station)

-wireless network projects (FiberTower, Cingular, Verizon, AT&T Liberty Project)

InterNAP (CO-Space/KennTech), Seattle, WA May 2000-June 2001 Senior Project Manager Oversight for the design & construction of carrier neutral interconnect facilities -site evaluation, design & construction administration

Teligent, Waltham, MA

August 1999-May 2000 Construction Engineer II

Oversight for the design & construction of a fixed microwave transmission network

-site evaluation, design coordination, bidding & construction administration, final inspection QA, interface w/landlords & local regulatory officials

-evaluate new A&E and contractors; modification of implementation process; revise bidding

format; modify new construction status report; develop project tracker & QA forms

DBA Grover Development, Newton, MA 1998-1999 Architect Architecture/Construction Management/General Contractor

Bell Atlantic NYNEX Mobile (dba Verizon Wireless), Woburn, MA 1994-1997 Engineer, Senior Engineer, Acting Manager Implementation Design & Construction of a wireless cellular network (sites & switches) -site search & acquisition, site evaluation, design, coordination of engineering consultants for production of contract documents, supervision of project managers, historic/zoning/planning & community board meetings, construction supervision & administration Special Projects: antenna & equipment upgrades, co-locations, emergency generators, virtual office, maintenance, building officials educational program, zoning regulations & building codes

DBA Grover Development, NYC, NY 1989-1993 Architect Architecture/Construction Management/General Contractor

William Lam Associates, Inc. Cambridge, MA 1986-1988 Design Associate Design/Development of lighting concepts integrating artificial & natural lighting into the architecture of a design -computer analysis of natural & artificial lighting, design/development of concepts & details, Full scale lighting mock-ups, model construction, product development, research & specifications

Nash/Phillips Associates, Inc. Boston, MA 1983-1986 Job Captain/Office Manger -client presentations, preparation of contract documents & construction management Sergio Modigliani Associates, Boston, MA

1983 Technical Staff

-schematic design, client presentations, construction documents, existing conditions survey

Tise Wilhelm Associates, Brookline, MA

1982 Technical Staff

Preparation of contract documents for a 400 unit/11 building housing complex rehabilitation project and a 36 unit high-rise condominium project

-existing conditions documentation, design/development, construction detailing, scheduling, code research, consultant coordination

State Building Code Commission, Commonwealth of Massachusetts, Boston, MA 1978-1982 Staff Architect

Technical assistance to Architects, Engineers, contractors, building officials, general public & the Commission regarding the Mass State Building Code

-research & development of building codes & interpretations, development & presentation of technical training programs & publications, graphic design, review of construction documents & specifications for code compliance, BEPS proto-type

Environmental Design Group, New York City, NY 1977-1978 Staff Architectural Design & Urban Planning

Pratt Institute Center for Community & Environmental Development, Brooklyn, NY 1973- 1974 Staff Architectural community outreach program

EDUCATION

Columbia University

1978 Graduate Coursework

Polytechnic Institute of New York, Department of Transportation & Planning Engineering, Brooklyn, NY Sept 1975- June 1976 Candidate – Master of Science

Pratt Institute, School of Architecture, Brooklyn NY May 1974 Awarded Bachelor of Architecture

-New York State Regent Scholar & Pratt Academic Scholarship

-Admitted & took coursework, Graduate Dept. of City & Regional Planning

PUBLICATIONS

"Coal & Woodstove Installation Guide"

"Guide to the Energy Code Regulations for Rehabilitated Buildings"

"Thermal Requirements in Commercial Construction"

"Residential Heat Loss Calculation/Equipment"

"Conservation as a Design Challenge"

"Energy Code Lighting Limits"

PROFESSIONAL

Registered Architect (Massachusetts)

Licensed Construction Supervisor- unrestricted (Massachusetts)

Notary Public (Massachusetts)

COMMUNITY

Economic Development Commission, Newton, MA (1999-08) Board Dragon Boat Festival (1980-2008) Executive Steering Committee

Quincy School Community Council (1982-87) Board

Chinese-American Join Action Committee (1981) Steering Committee

United Way (1981-86) Review Committee

American Red Cross (1980-89) Volunteer Instructor

The Wellness Community (2004-08) Coach- Breast Cancer Survivor Dragon Boat Team

