

CITY OF NEWTON

IN BOARD OF ALDERMEN

ZONING & PLANNING COMMITTEE REPORT

MONDAY FEBRUARY 28, 2011

Present: Ald. Johnson(Chairman), Yates, Lappin, Shapiro, Lennon, Swiston, Sangiolo

Absent: Ald. Baker

Also present: Ald. Crossley

City Personnel: Seth Zeren(Chief Zoning Code Official), Jen Molinsky (Interim Chief Planner for Long Term Planning), Marie Lawlor (Assistant City Solicitor), Phil Herr (Chair, Newton Housing Partnership), Rebecca Smith (Committee Clerk).

#154-10 ALD. JOHNSON, CROSSLEY and HESS-MAHAN requesting to amend **Section 30-1 Definitions**, by inserting a new definition of “lot area” and revising the “setback line” definition for clarity. [06/01/10 @ 9:25 PM]
HELD 7-0

NOTE: Seth Zeren (Chief Zoning Code Official) gave a presentation on the item (*presentation attached*). The purpose of this proposal is to define “lot area” and redefine “setback” in order to clarify what is included in “lot area” as well as clarify where “setbacks” should be drawn from. The hope is that these definitions create consistency and clarity while also leaving room for reasonable interpretation.

There is currently no definition for “lot area” in the ordinance; this is a term that should be clearly defined. “Setback” doesn’t have a definition in the ordinance either, but is implied through the regulations in section 30-15. In order to make a clear and consistent ordinance, Mr. Zeren and the Planning Department propose replacing the “setback line” definition with the new “setback” definition. They propose moving this definition to section 30-15. The new “setback” definition would also include a practice that Commissioner Lojek already follows: measuring setbacks from interior corners around an arc. Mr. Zeren assured the Committee that he and the Planning Department will go through the ordinance and make sure that the proposed changes to the “setback” definition are consistent throughout the ordinance.

In addition to these two terms, Mr. Zeren suggests creating definitions for “lot”, “lot line”, and “lot line types” because, he stated, together they are the foundation of a lot and of our density and dimensional regulations (slide 7). “Lot” and “lot area” are both currently undefined in the ordinance. Crafting definitions for these terms would create clarity of metes and bounds and would connect the five definitions together. A definition of “lot line” would clarify that lot lines (and setbacks and lot area) do not include streets. For the third definition, “lot line types”, Mr. Zeren proposes creating sub-definitions to guide the interpretation of what is a front, side, and rear lot line. For some cases, where the lot line is not one straight line but rather a combination of different lines, he suggests the use of the term “assemblage of lines”.

Mr. Zeren concluded his presentation by stating that outcomes aren't going to change with the creation of these definitions, the purpose of this proposal is solely to make the ordinance more clear and consistent and to add processes into the ordinance that are already practiced.

Ald. Yates began the conversation by asking what problems Inspectional Services has faced in the past that these changes are intended to fix, and how often they occurred. Mr. Zeren will address this in the memo after speaking in detail about it with Commissioner Lojek, who was unable to attend this meeting. Ald. Yates also questioned what exactly is meant by "facing" in the definition of "front lot line" definition. Mr. Zeren responded, stating that "facing" essentially means the lot line adjoined between the street and the property (slide 14). Ald. Yates suggested that the definition include this description instead of "facing" as facing implies the direction, not the placement. He also stated that "street-wall relationship" could be better put as "streetscape".

Ald. Sangiolo asked how we calculate properties that abut rail lines. Mr. Zeren stated that there's no special calculation that addresses that situation. There was debate within the Committee about whether defunct rail lines count as a public use or a footway, which would affect the front lot line and setback (slide 17). Mr. Zeren will look into this and include this information in the Planning Memo.

Ald. Johnson believes that because of how it has been presented, the perception of this proposal is that it's very complex. She asked for more visuals for future presentations on the item, stating that it is easier to grasp the concept when the ideas aren't lost in words.

Ald. Shapiro asked whether the terms used in the proposed definitions are specific to Newton or if these are widely used terms of art. Mr. Zeren stated that the one term that he would want to vet more is "assemblage of lines", but the others are generally accepted terms used in other city's ordinances. Jen Molinsky, Interim Chief Planner for Long Term Planning, added that one of the resources used by the Planning Department are planner's dictionaries, which samples other city's ordinances; these are used as guidelines for the planners who then compile the elements that make sense for Newton. Mr. Phil Herr shared that the idea of assemblage of lines is of common usage, though it seems to be less commonly seen in Massachusetts.

Ald. Crossley shared her thoughts stating that she's pleased that the Planning Department is looking into the zoning ordinances comprehensively, though this is more complicated than she thought it would be. She also believes that there are redundancies and that we shouldn't be writing the ordinance for the average citizen, but for the professionals, specifically the land surveyors.

Mr. Joe Porter, Land Surveyor, of VTP associates, shared some thoughts and concerns about the proposal on the presentation. He first agreed that streets should never be included in the lot area, though there is a method through the Land Court to acquire defunct streets into the property. Regarding public footpaths and front setbacks (see slide 17), he stated that if a lot's legal frontage is the footpath then the front setback should be drawn from the footpath. Mr. Porter's main concern about the proposal is use of the interior corner arc measurement (slide 18, 19); he stated that this is going to be difficult to calculate and will cause irregularities throughout the profession unless there is one specific way to calculate it. Mr. Zeren will address this question in his memo. Mr. Zeren is also going to look into the wording of the rear lot line definition as Ald. Crossley and

Ald. Swiston believes it implies that there is only one rear lot line when Mr. Zeren and Mr. Porter interpret that there could be two rear discontinuous setbacks depending on the layout of the lot (slide 15).

Ald. Swiston asked for clarification of the front lot line in terms of homes that are situated sideways on the lot. Mr. Porter had offered his interpretation that the front is the direction that the main entrance of the house is facing. Mr. Zeren explained that in regard to houses on corner lots, this is the common interpretation, but when it's not a corner lot then the front lot line is what faces the street.

Ald. Yates moved hold. The next time we take this up we will have the Planning Department memo addressing the questions and concerns raised during this discussion. Additionally, Ald. Sangiolo requested that the Committee receive presentation materials 48 hours ahead of the meeting so they can be more educated about the item coming into discussion. The committee then voted unanimously to hold the item.

#217-00 ALD. YATES requesting that Chapter 30 be amended to require a special permit for the demolition of a structure aged 100 years or more, containing one or more residential units in any residential district.

NO ACTION NECESSARY 7-0

NOTE: Ald. Yates moved a vote of No Action Necessary for this item. He doesn't see it progressing but may consider re-docketing a similar item that also requests a report from the Newton Housing Partnership. Ald. Johnson shared that homes 100 years old or more are less frequent now and are often more expensive, though there are a lot of homes from the post war era; she suggests that should he re-docket the item he should reconsider the era of housing stock he's looking to protect. The Committee then voted unanimously to NAN this item.

#17-11 TERRENCE P. MORRIS, JOSEPH PORTER, BRUCE BRADFORD, GEORGE COLLINS, VERNE T. PORTER, JR., MICHAEL PEIRCE proposing an amendment to the zoning ordinance for the purpose of changing the definition of "Grade Plane" and adding a new definition for "Average Grade". [12-28-10 @ 10:22AM]

HELD 7-0

NOTE: Terrence P. Morris, and Joseph Porter joined the table to present this item. The cause for this proposal was a memo issued by the Inspectional Services Department which stated that starting December 1, 2010 plans submitted to ISD should be done in conformity with the new interpretation of calculating grade plane. This new interpretation is very restrictive; it states that to calculate grade plane one should take the lowest point of each side which is then used to represent the average grade of that entire wall. Using this method, the complete average grade plane is then skewed, representing the average of the lows, not the true grade plane average. This method is counter to the practices of many of the surveying firms that do business here. Mr. Morris communicated with a number of them and they all calculate it similar to each other, but not the way it is now being interpreted by ISD.

To correct this issue, Mr. Morris and Mr. Porter have developed a new formula for calculating the grade plane which would average the lowest and the highest grade of each side and use that as the average for the side so that the total grade plane is the true average. This method is used by Weston and Sudbury; when you fill out an application for a permit in these towns you must also fill out a calculation sheet to show how you calculated the grade plane. This method is proven to get you to a truer average grade (*draft Board Order and sample calculation sheet are attached*).

Ald Yates thinks this is a very important thing to change and believes this may account for many of the discrepancies he's seen. Mr. Morris responded by agreeing that there is a sense of urgency as ISD is accepting applications which abide by this restrictive interpretation. He stated that it's a concern because it affects the height of buildings; he questioned how you can calculate the height of a building when the base is the grade plane and the calculation for finding the grade plane is flawed.

For clarification, Mr. Zeren noted that the consequence of this new interpretation is greater restriction on building height, but this proposal by Mr. Morris, and any other the Committee would see, will create less restrictions on building height.

Mr. Porter responded by saying that this current interpretation just made 2/3 of all basements noncompliant as basements since any basement for a sloping site doesn't qualify as half underground and therefore doesn't qualify as a basement, it qualifies as their first floor.

Mr. Morris also responded to Mr. Zeren stating that there is a companion piece to this docket item which he will docket and which would address height restrictions. If you pass this item and the companion height item it will address the issue at both ends, but if you only pass this item then, yes, the height restrictions would be less restrictive.

Ald. Lappin would like to know why the Commissioner would implement this new interpretation; it sounds like it should be an ordinance change. She's glad that they're proposing to fix it and said that their proposal makes logical sense. There are other ways to address height than to skew what height is.

Ald. Sangiolo requested that whenever the Commissioner changes policy, or puts forth a statement like this, he should notify at least the Chairman of the Zoning and Planning Committee if not the entire Committee. The Committee then voted unanimously to hold the item.

Respectfully Submitted,

Marcia Johnson, Chairman

Department of Planning and Development

1

Petition #154-10: Defining lot area and setbacks

Working Session – February 28, 2011
Zoning and Planning Committee
Newton, MA

Petition #154-10: History and Aims

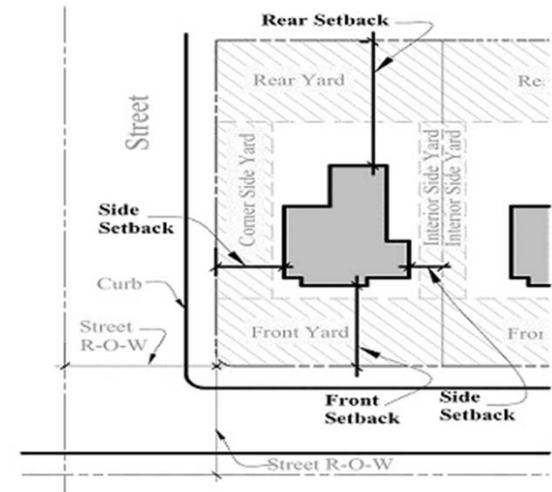
2

- **Define “lot area”**

- Foundation of many density regulations:
 - ✦ FAR, open space, lot coverage, minimum lot area, etc.
- Desire to clarify how lot area applies with private streets and easements

- **Redefine and clarify “setback lines”**

- Core dimensional control of building spacing
- Desire to clarify how setbacks interact with private streets, open space, easements, and irregularly shaped lots



Overall Planning Goals

3

“What’s included in lot area?”

“Where are setbacks drawn from?”

- **Improve clarity and consolidate definitions**
 - Make comprehensible by average citizens
 - Eliminate inconsistencies and redundancy
 - Modernize language and concepts
- **Incorporate “intent” in regulations**
- **Avoid regulating through definitions**
- **Leave room for reasonable interpretation in complex cases**

Particular Challenges in Newton

4

- **Private streets** – where deeds describe property rights going out to the middle of the road
- **“Paper streets”** – created by subdivision plans, but never constructed, may be owned by adjacent properties
- **Easements and other deed restrictions** – for access to rear lots, etc.
- **Aqueducts** – borders with aqueducts do not count as a “lot line” (meaning no setbacks)
- **Public footways and open space** – publicly open parks or pedestrian ways; uncertainty about how to draw setbacks
- **Irregularly shaped lots**

Lot Area

5

- **No existing definition**
- **Used widely for FAR, Open Space, Lot Coverage, etc.**
- **Interpreted as horizontal area between lot lines**
 - “lot line” is defined in §30-1
 - “Meets and bounds” described on the deed for the property
 - We should define it directly

Setback

6

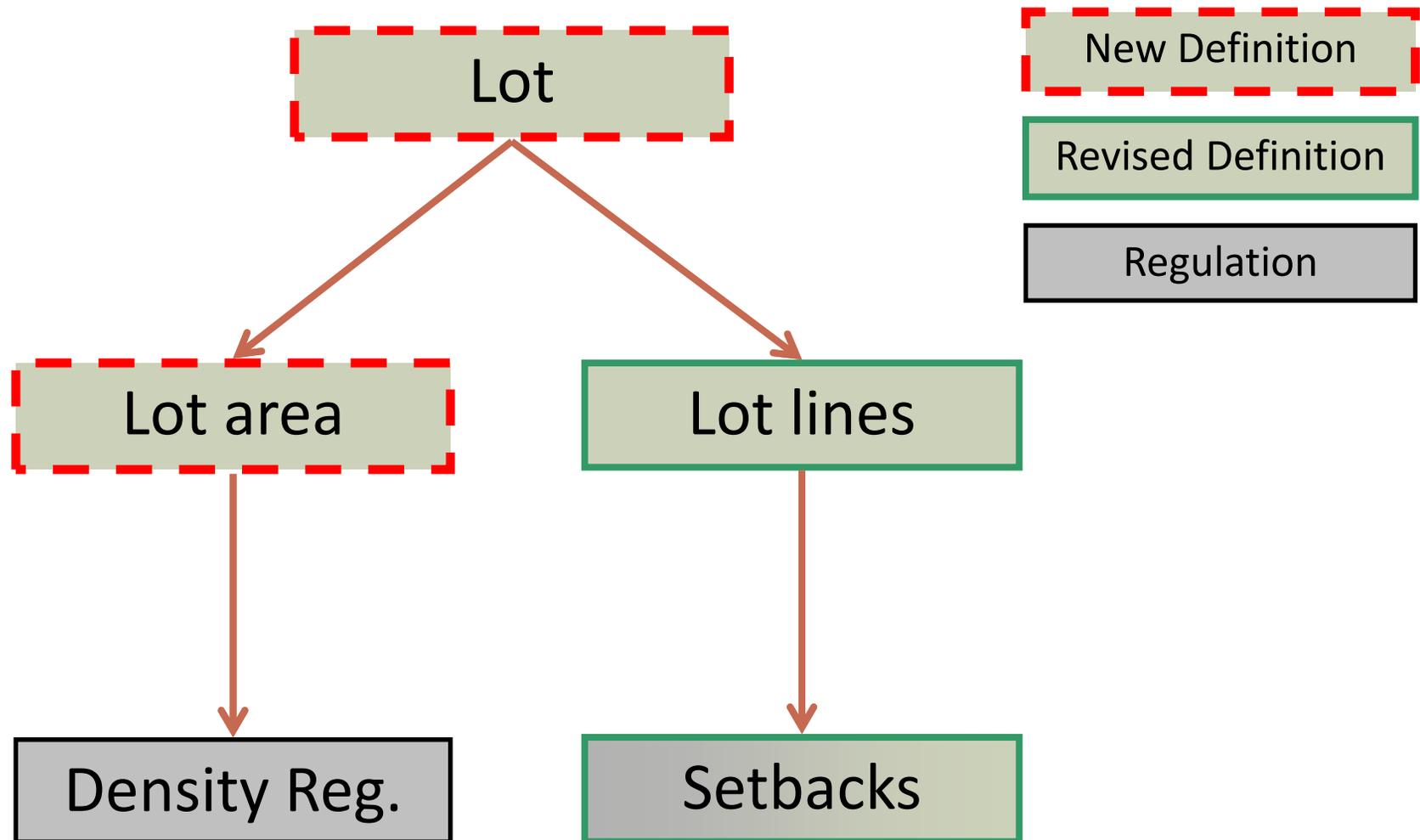
- **“Setback line” is defined in §30-1 as**
 - ✦ “A line equidistant from the lot line which establishes the nearest point to the lot line at which the nearest point of the structure may be erected
- **No definition of the fundamental concept of “setback” in §30-1**
- **A definition of “setback” is implied through regulations in §30-15**
 - ✦ “Distances shall be measured from the lot lines to the nearest portion of the structure...”

Related Concepts and Definitions

7

- **“Lot”** – undefined; suggested for inclusion in last working meeting
- **“Lot line”** – baseline for drawing setbacks; existing definition could be improved: clarifying relationship to streets, private ways, aqueducts, and open space
- **“Lot line types: front, side, and rear”** – indicate the type of setback to draw; separately regulated in §30-15

Chart of Related Definitions



New Definitions: “Lot” & “Lot Area”

9

- **Both currently undefined:**
 - “Lot” definition is in addition to the definitions called for by #154-10, but has been suggested in previous working sessions

- **Proposed definitions:**
 - *“Lot: A contiguous parcel of land in common ownership throughout, described by the most current plan or written description of common metes and bounds recorded in the Registry of Deeds, bounded on all sides by lot lines.”*
 - *“Lot Area: The horizontal area of a lot within bounding lot lines.”*

- **What this achieves:**
 1. Is clear about our use of metes and bounds in lot determination
 2. Connects definitions of “lot,” “lot area,” and “lot lines”
 3. Creates a basis for FAR and other controls that rely on lot area

Revised Definition: “Lot Line”

10

- **Current definition:**

- *“Lot line: A division line between adjoining properties, including the division line between individual lots established by a plan filed in the registry of deeds, **except that the line between land of the commonwealth used as a aqueduct or land formerly an aqueduct now owned by the city and adjoining land shall not be termed a lot line.**”*

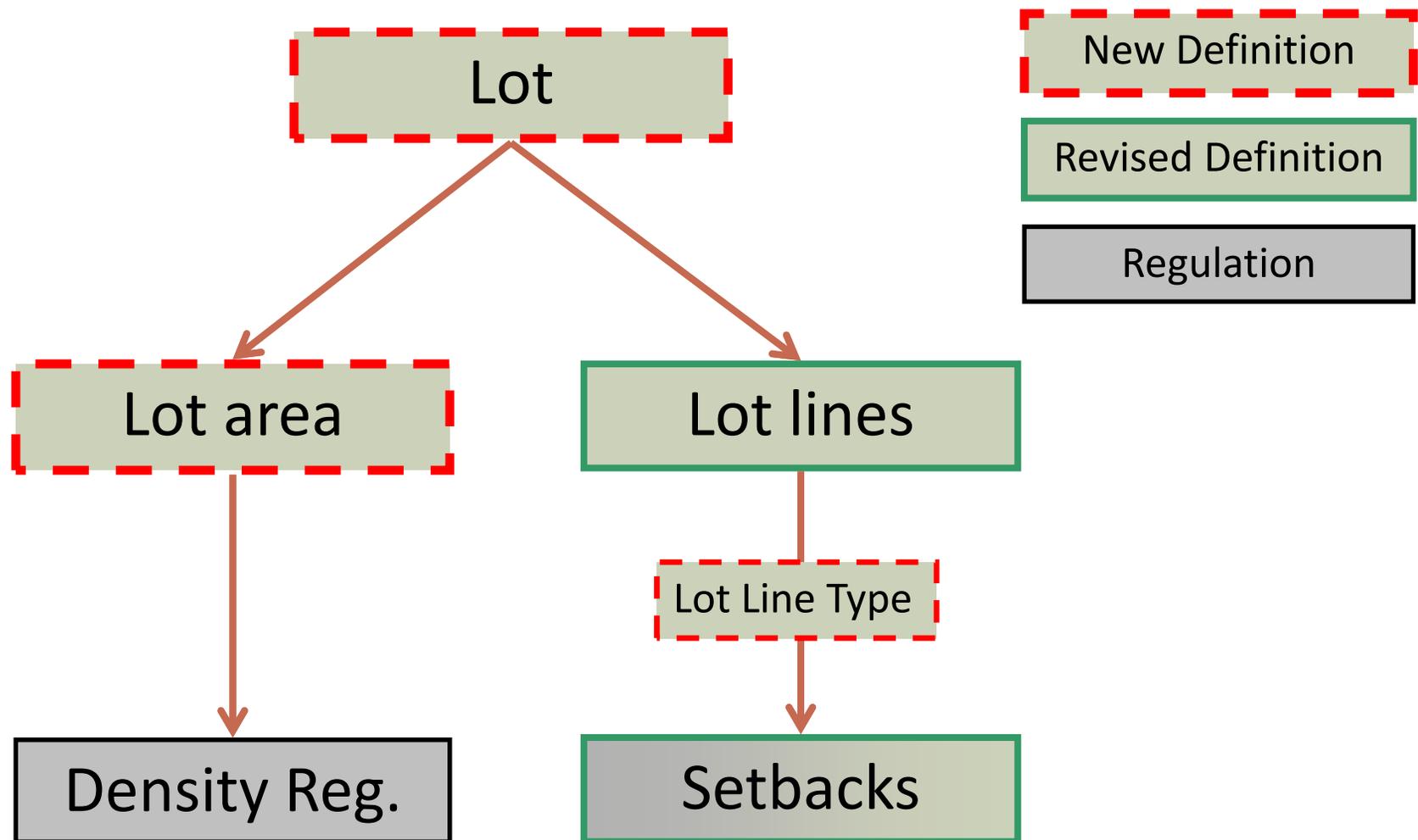
- **Proposed definition:**

- *“Lot Lines: A division line between adjoining properties established by the most current plan or written description of metes and bounds recorded in the Registry of Deeds. **Lot lines do not extend into public streets, private streets, or paper streets.**”*

- **What this achieves:**

1. Is clear about our use of metes and bounds in lot determination
2. Moves aqueduct regulation to §30-15
3. Clarifies that lot lines (and thus setbacks and lot area) do not include streets

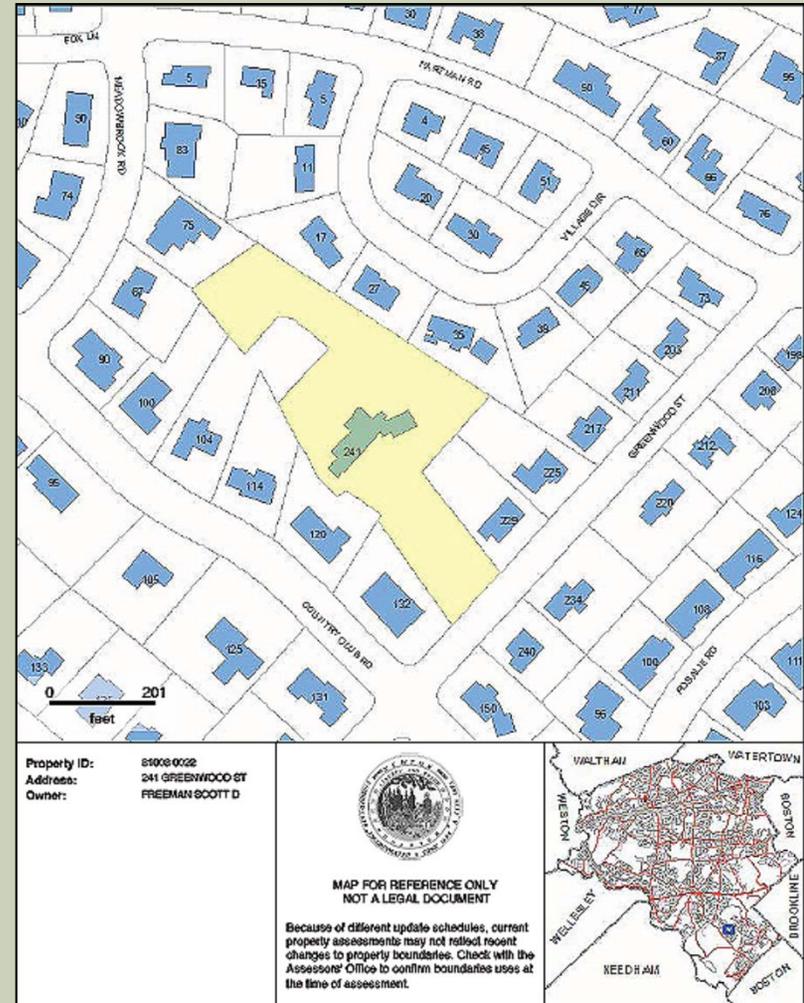
Chart of Related Definitions: Lot Line Types



Lot Line Definition, Continued

12

- Setbacks are drawn from lot lines
- The type of setback (front, side, or rear) depends on the “type” of lot line
- Determining which lot line is which “type” can be difficult due to irregularly shaped lots
- We propose creating sub-definitions that can guide interpretations





Base Map

*City of Newton,
Massachusetts*

Legend



The information on this map is from the Newton Geographic Information System (GIS). The City of Newton cannot guarantee the accuracy of this information. Each user of this map is responsible for determining its suitability for his or her intended purpose. City departments will not necessarily approve applications based solely on GIS data.

CITY OF NEWTON, MASSACHUSETTS
Mayor - Seth D. Warren
GIS Administrator - Douglas Greenfield

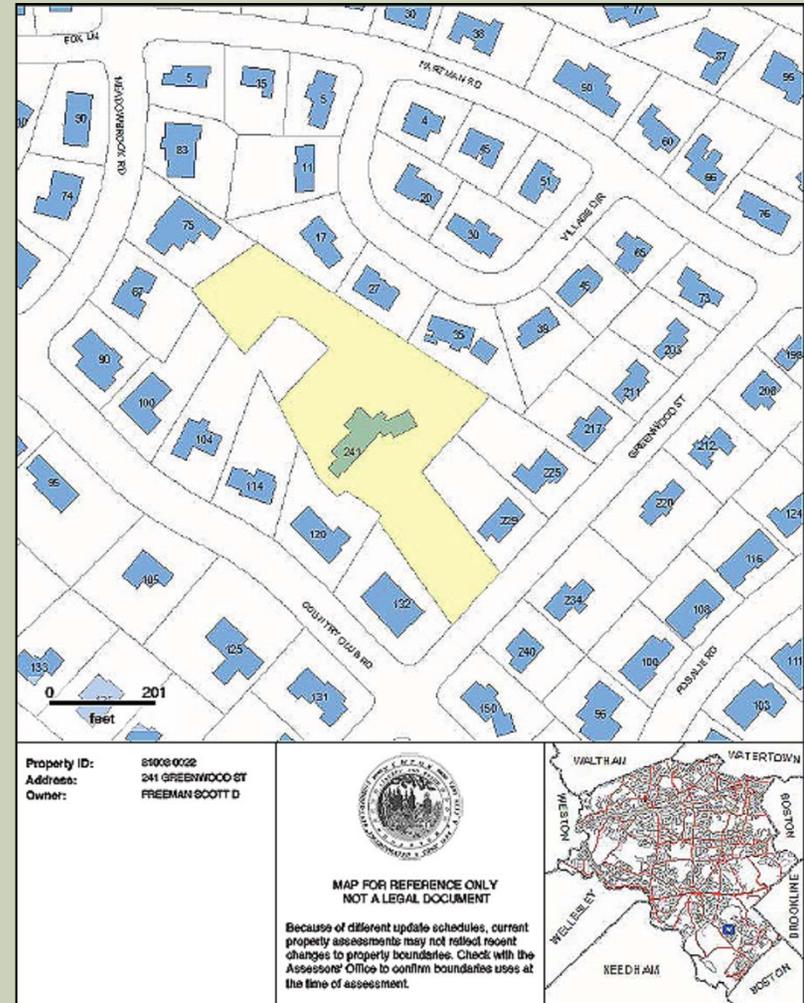


MAP DATE: February 24, 2011

Front Lot Line

14

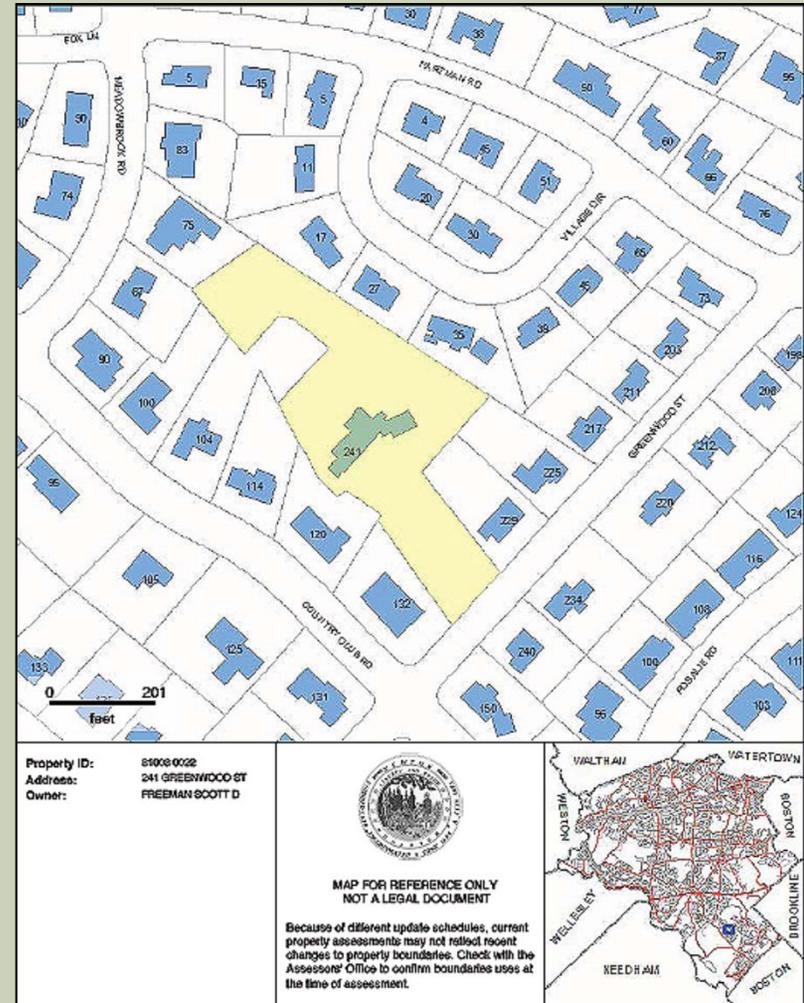
- Proposed New Definition:
 - a) *“Front Lot Line: Any portion of a lot line facing a public, private, or paper street or an open space devoted to the public use but not a public or private footway.”*
- Considerations:
 - Front setbacks are drawn from front lot lines
 - Open space rule from existing corner lot definition
 - Footways



Rear Lot Line

15

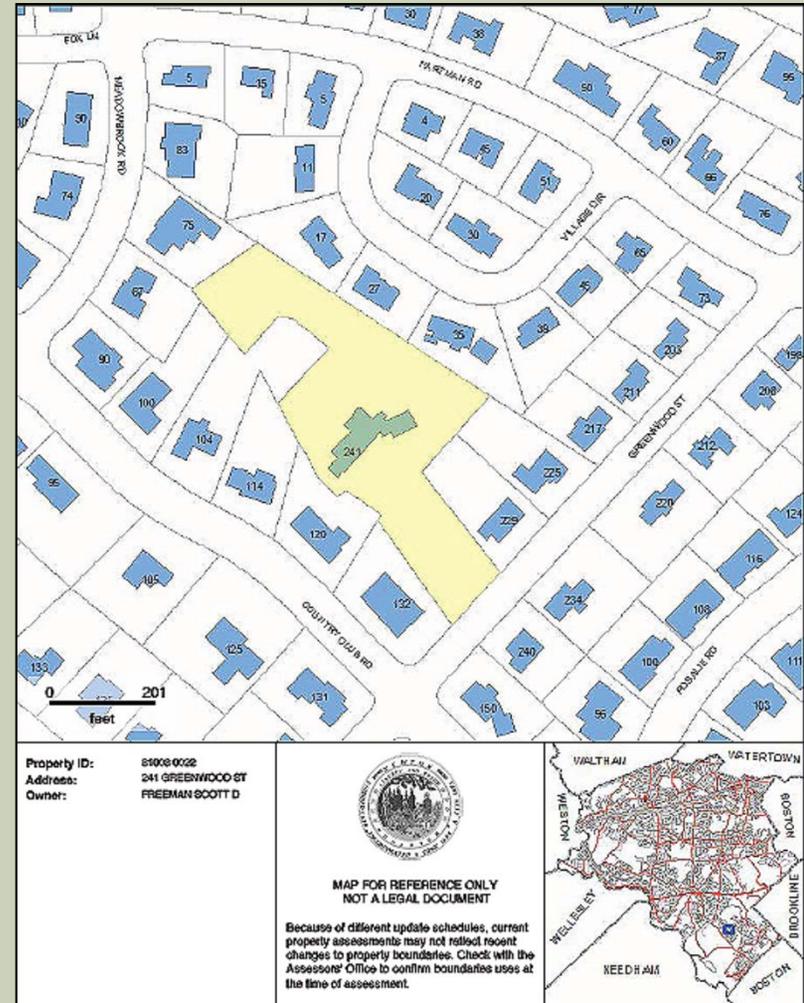
- Proposed New Definition:
 - b) *“Rear Lot Line: A lot line, lines, or **assemblage** of lot lines which is **most distant from and most parallel** to the Front Lot Line.”*
- Considerations:
 - Gives guidelines for interpretation:
 - ✦ “distant” and “parallel”
 - Adds the concept of “assemblage” to clarify interpretation



Side Lot Line

16

- Proposed New Definition:
c) *“Side Lot Line: Any lot line or **assemblage** of lot lines that is not a Front Lot Line or a Rear Lot Line.”*
- Considerations:
 - Remaining lot lines count as “side” for drawing setbacks
 - Adds the concept of “assemblage” to clarify interpretation



Lot Line Type Summary

17

- **New Sub-Definitions under “Lot Line”:**

- a) *“Front Lot Line: Any portion of a lot line facing a public, private, or paper street or an open space devoted to the public use but not a public or private footway.”*
- b) *“Rear Lot Line: A lot line or assemblage of lot lines which is most distant from and most parallel to the Front Lot Line.”*
- c) *“Side Lot Line: Any lot line or assemblage of lot lines that is not a Front Lot Line or a Rear Lot Line.”*

- **What This Achieves:**

1. Clearly defines three types of lot line
2. Clarifies that front setbacks will be drawn from public, private, and paper streets but not footways
3. Highlights existing rule for public space
4. Creates guidelines for determining rear lot lines of irregular lots

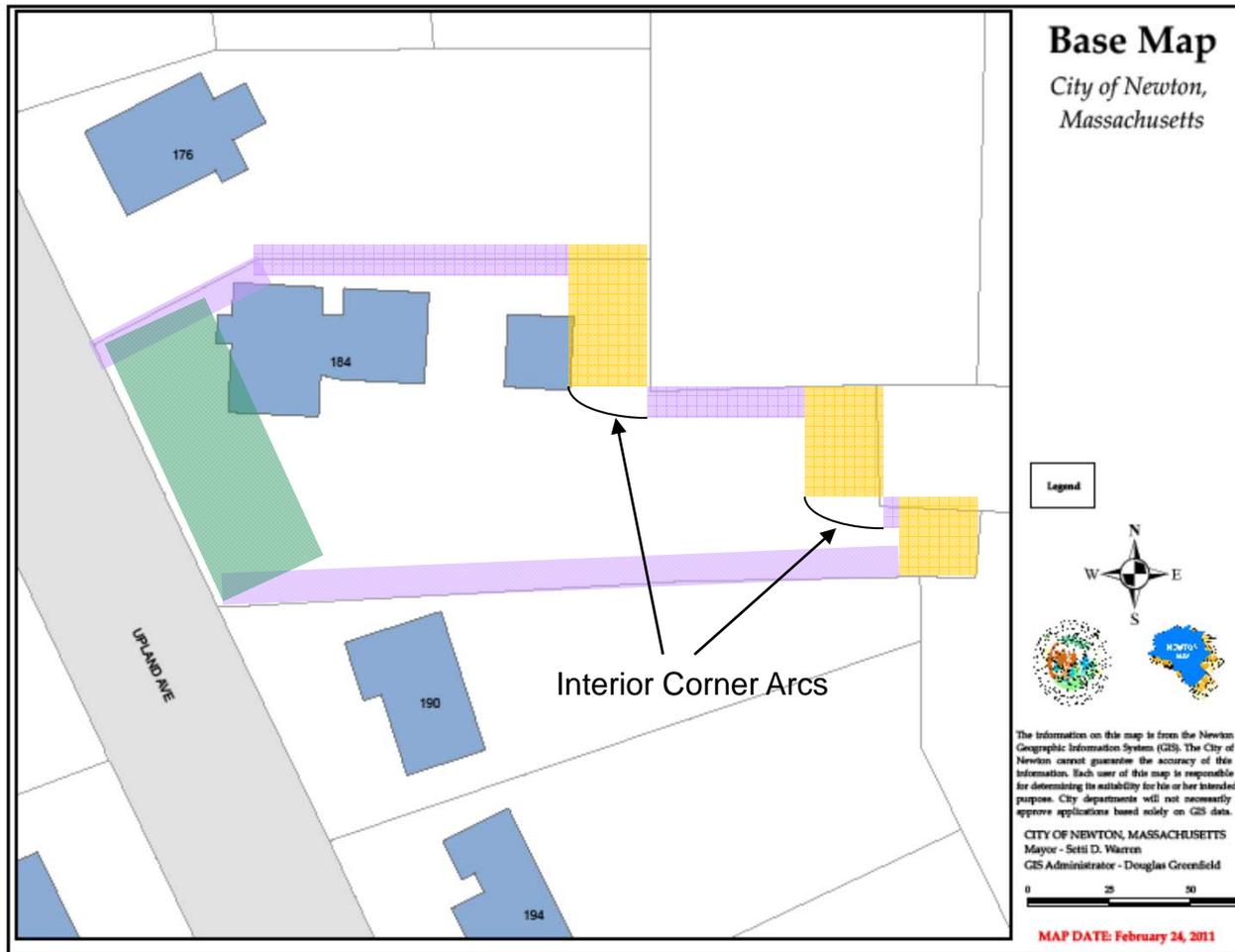
New Definition of Setbacks

18

- **Existing Definition:**
 - *“Setback line: A line equidistant from the lot line which establishes the nearest point to the lot line at which the nearest point of a structure may be erected.”*
- **Replace “setback line” definition with proposed “setback” definition:**
 - *“Setback: The minimum distance from a Lot Line, **measured perpendicularly** from each Lot Line, that the nearest portion of a Structure, including outside vestibule or porch, may be located. Setbacks from **interior corners are measured using an arc drawn from the two adjacent setbacks**. Front Setbacks are drawn from Front Lot Lines; Side Setbacks are drawn from side lot lines; Rear setbacks are drawn from rear lot lines”*
- **What this Achieves:**
 - Clearly defines what is measured and how
 - Provides tools to interpret interior corners
 - Clarifies how which setback used depends on the lot line type

Example of Interior Corner Rule

19



Related Setback Regulations

20

- Goal to make setback regulations clear and consistent despite Newton's special complexities
- We examined the Ordinance for other uses of “setback” and “setback line”
- Inconsistencies and confusion elsewhere in the Ordinance would impact the success of proposed definitions in practice
- Below we suggest a number of changes to setback regulations in Section 30-15 that improve the clarity and consistency of the rules
 - ✦ Organize into one setback regulation sub-section: 30-15(d)
 - ✦ Describe intent for each regulation
 - ✦ Clarify and incorporate ISD interpretative practice where necessary
 - ✦ *For the most part, outcomes do not change*
- Other technical tweaks for consistency have also been identified but are not detailed here

Setbacks: Averaging Neighbors' Fronts

- **Current, Section 30-15(d)**

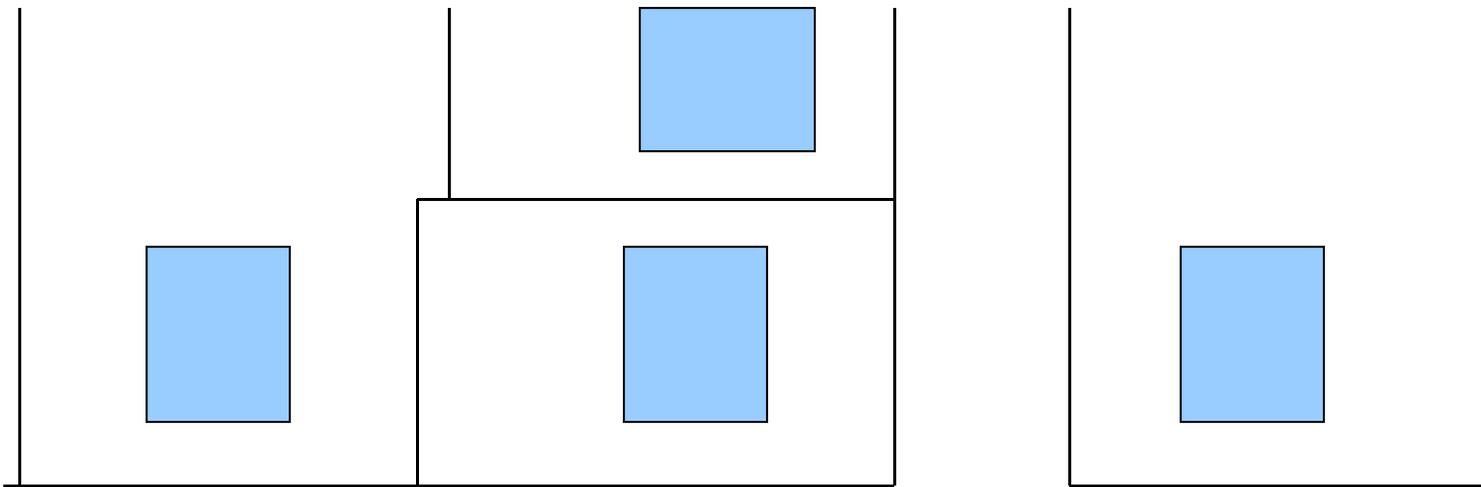
- *“(d) Front Set Back. No building need be set back more than the average of the setbacks of the buildings on the lots nearest thereto on either side, a vacant lot or a lot occupied by a building set back more than the required distance for its district to be counted as though occupied by a building set back such required distance. In no case shall any part of a building in a residence district extend nearer the street line than ten (10) feet”*

- **Proposed, New Section 30-15(d)**

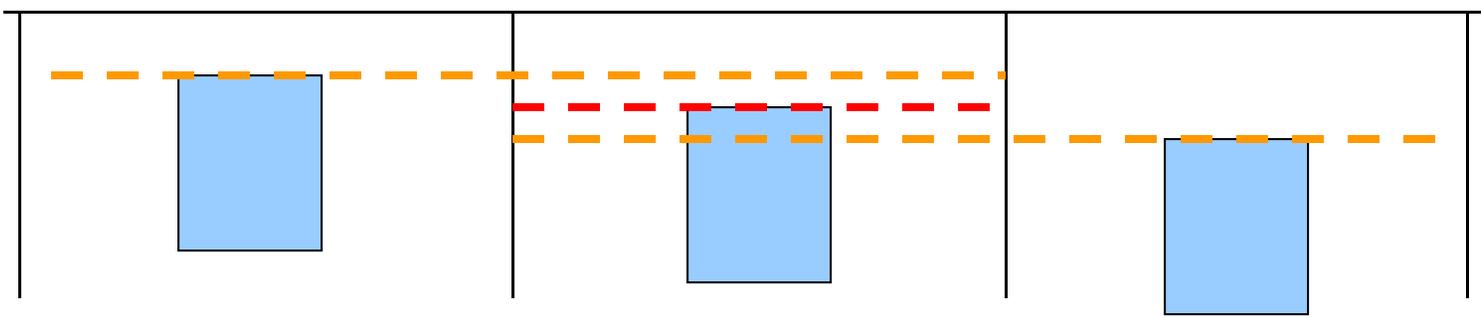
- *“(d) Setback Regulations*
- *1) To preserve the historic character of street-wall relationships, no building need be set back more than the average of the setbacks of the buildings on the lots nearest to either side. A corner lot may use the buildings on the lot immediately across a street that is still on the same linear way in calculating the average setbacks of its neighbors. A vacant lot or a lot occupied by a building setback more than the required distance for its district shall be counted as though occupied by a building at the minimum required setback. This rule shall not allow any part of a building in a residence district to extend nearer the street line than ten feet. Properties constructed under this rule are considered conforming.*

Example of Interior Front Setback Averaging

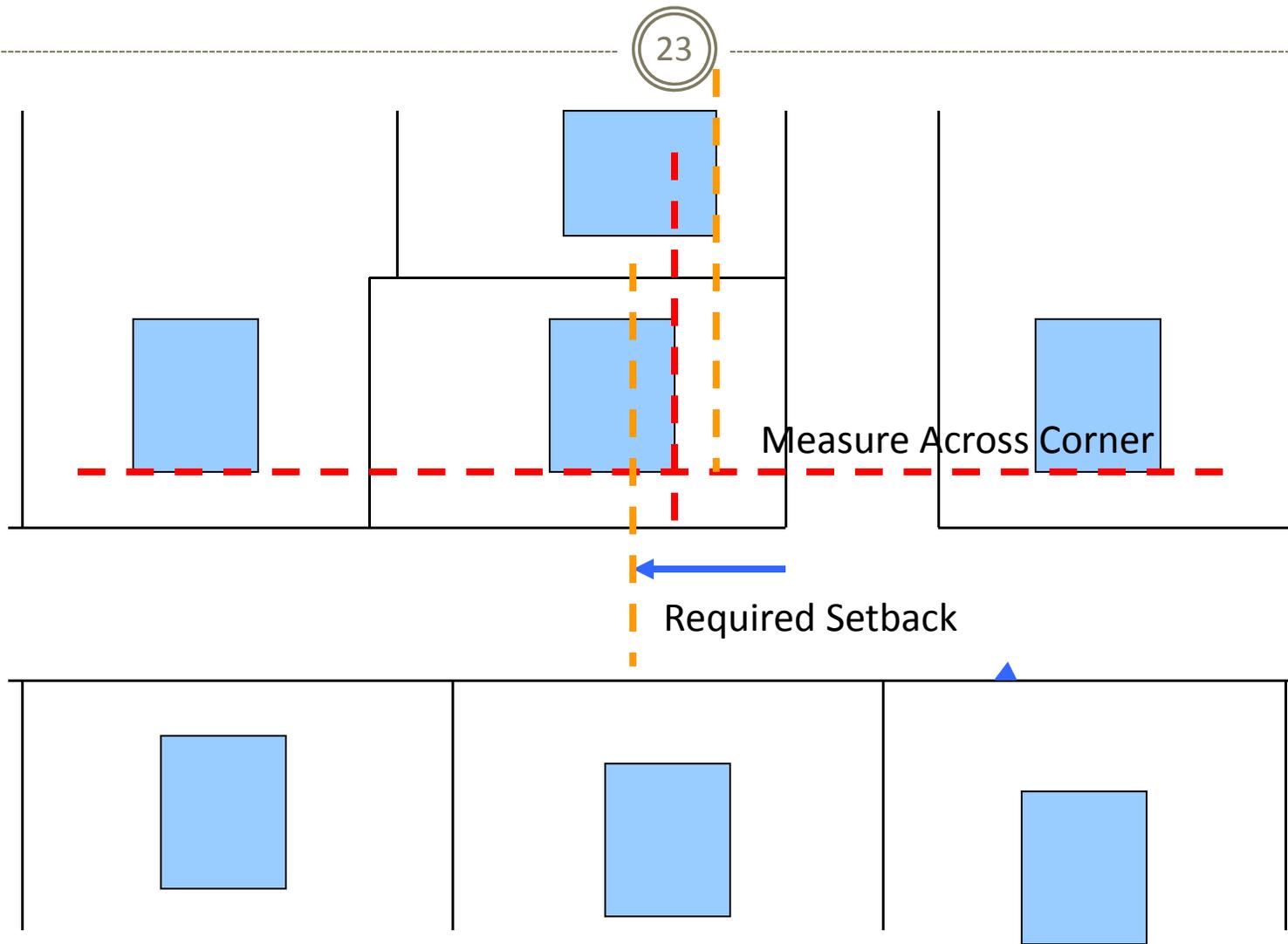
22



Front Setback Averaging

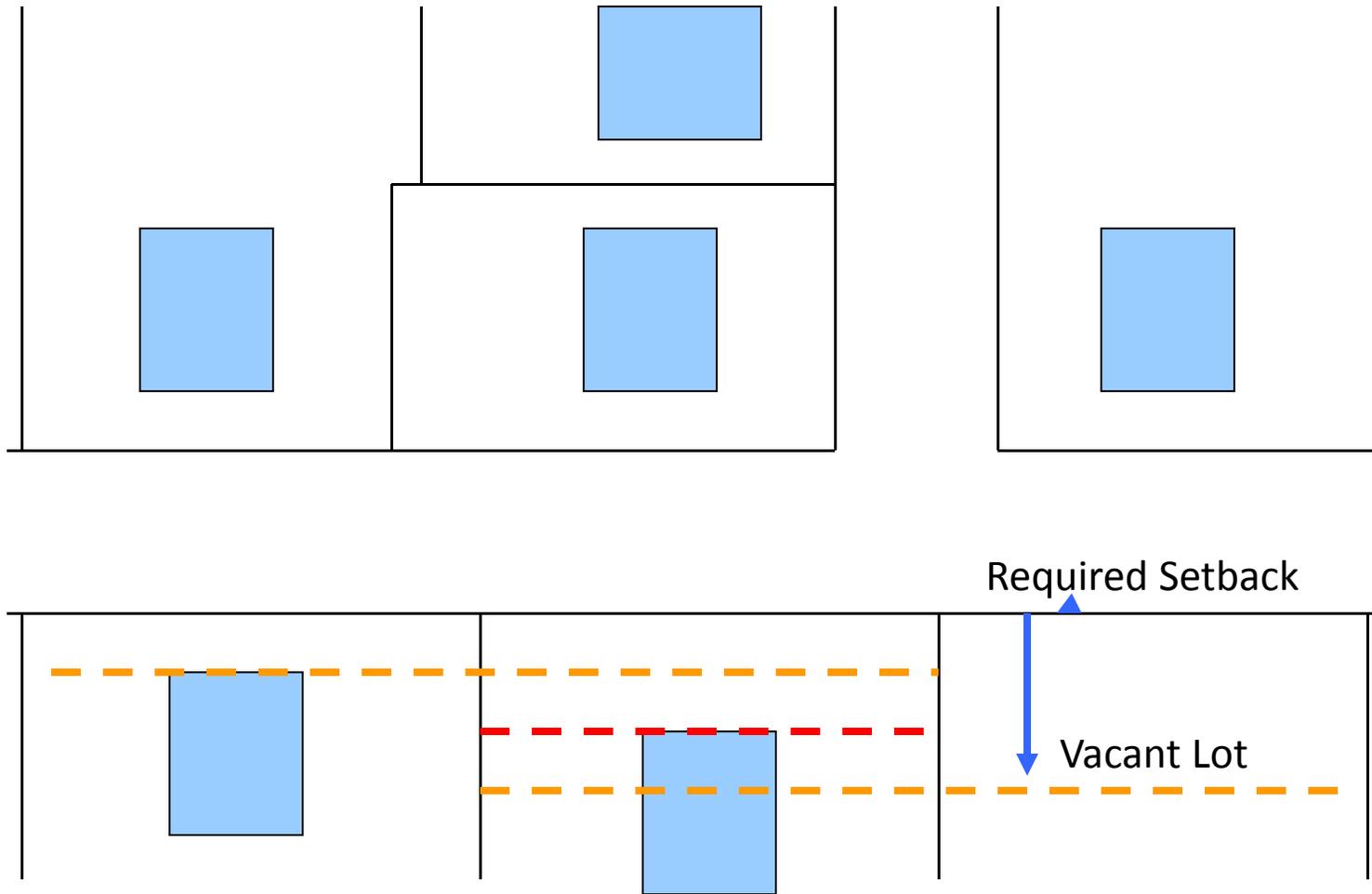


Example of Interior Front Setback Averaging



Example of Interior Front Setback Averaging

24



Setbacks: Exceptions

25

- **Current, Section 30-15(e)**

- *“(e) Setback Line. Distances shall be measured from the lot lines to the nearest portion of the structure, including outside vestibule or porch. Steps and bulkheads may project into the setback. Gutters, cornices, projecting eaves and ornamental features may project up to two (2) feet into the setback. In the case of rear lots, the setback requirements shall be measured from the rear line of the lot in front; provided, however, that on a rear lot, no building shall be erected nearer than twenty-five (25) feet from the rear line of the lot in front”*

- **Proposed, under the new 30-15(d)**

- *“(2) To ensure adequate egress from structures, steps and bulkheads no larger than the minimum required by the building code for egress may project into the setback.”*
- *“(3) To encourage historic preservation, restoration, and appropriate aesthetic ornamentation, gutters, cornices, eaves and ornamental features may project up to two (2) feet into the setback. In order to prevent ornamental features substantially altering the perceived bulk of a structure, ornamental features cannot exceed 30% of the length of the wall they are affixed to.”*

Setbacks: Aqueducts, Corner and Rear Lots

- **Current, Section 30-15(f)**

- *“(f) Rear Lot Set Back. In the case of a corner lot, the rear lot line shall be the lot line opposite the street on which the main entrance is located.”*

- **Proposed, under the new 30-15(d)**

- *4) In the case of rear lots, the setback requirements shall be measured from the rear line of the lot in front; provided, however, that on a rear lot, no building shall be erected nearer than twenty-five (25) feet from the rear line of the lot in front.*
- *5) In the case of a corner lot, the rear lot line shall be the lot line opposite the street on which the main entrance is located.*
- *6) Lot lines along land owned the Commonwealth used as an aqueduct or land formerly an aqueduct and now owned the City shall not have a Setback requirement”*

Summary

27

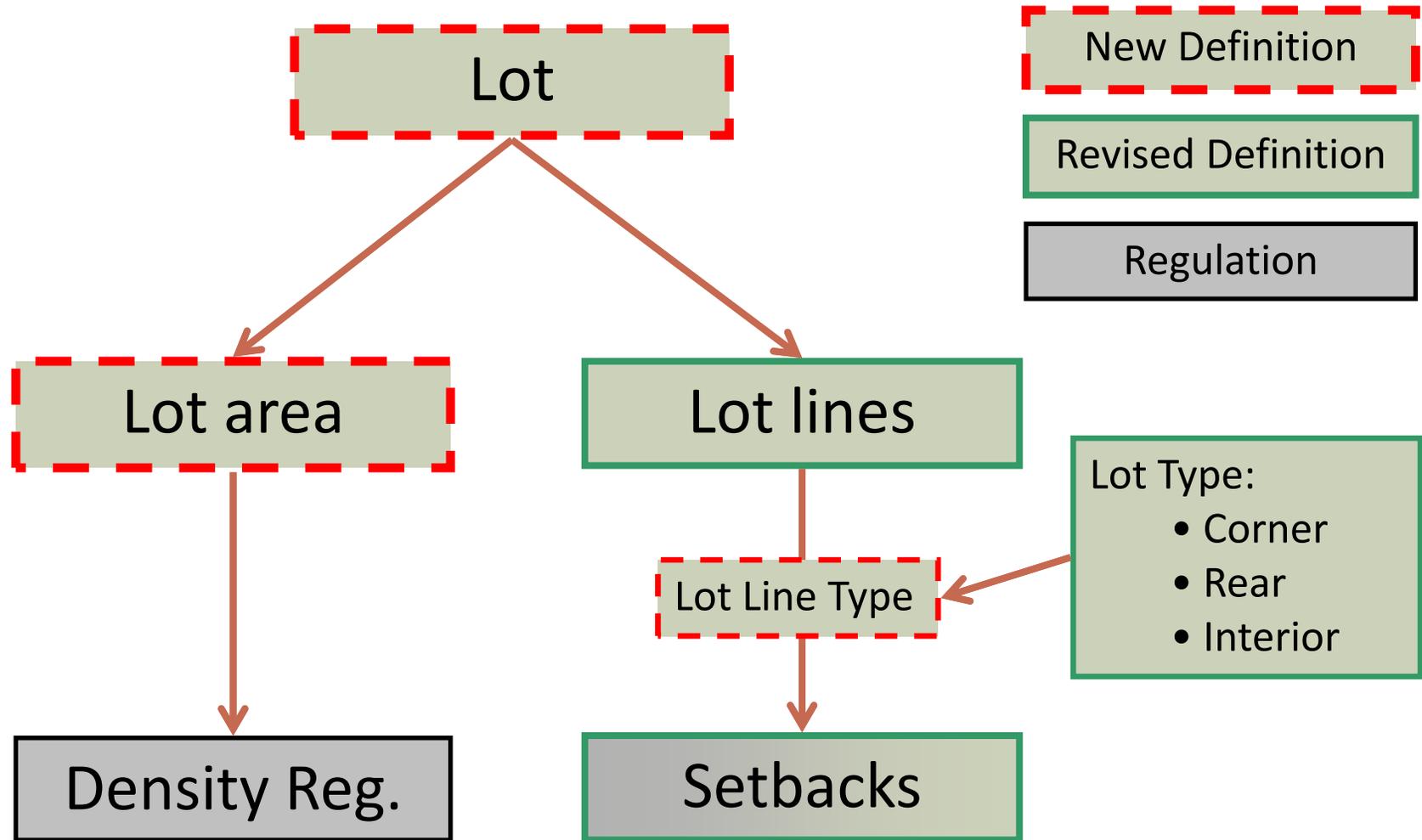
- **New and revised definitions clarify the meaning of basic land-use terminology**
 - ✦ “Lot Area” (and “Lot” and “Lot Line”) defined
 - ✦ “Setbacks” and related definitions clarified and reorganized
 - ✦ New rules are responsive to the complexities of Newton’s particular challenges and the existing ordinance
- **Leave room for reasonable interpretation in complex cases**

Suggestions arising from this petition

28

- **Consider clarifying and reorganizing the definitions of lot types: “corner,” “rear,” and “interior.”**
 - ✦ “Rear lot” definition is buried in the regulations of Section 30-15
 - ✦ Clarify “corner lot” definition and regulations
 - ✦ Incorporate diagrams into definitions section
- **Consider implementing energy efficiency exceptions to setback and other regulations**
 - ✦ “Airlock” vestibules
 - ✦ Exterior foam insulation under siding

Chart of Related Definitions: Lot types



DRAFT
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CITY CLERK
NEWTON, MA. 02159

CITY OF NEWTON

IN BOARD OF ALDERMEN

PROPOSED ORDINANCE NO. _____

BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF NEWTON AS FOLLOWS:

That the Revised Ordinances of Newton, Massachusetts, 2009, as amended, be and are hereby further amended with respect to Chapter 30, Zoning, as follows:

1. By deleting from Section 30-1 **Definitions**, the definition of *Grade Plane*, and inserting in its place the following 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.

2. By adding to Section 30-1 **Definitions**, the following new definition:

Average Grade: The average of the grade elevations around the perimeter of a building, as determined by the following length-weighted mean formula: the sum of $[(e1 + e2) / 2 \times L] / P$, where S is a segment of the building perimeter with a consistent grade or slope; e1 and e2 are the grades at the respective ends of the segment; L is the corresponding length of the segment; and P is the length of the total building perimeter. In calculating said average, the elevation of each point used to define each segment shall be determined by using the lowest elevation of finished ground level within the area immediately adjoining the building and either the lot line or a distance six (6) feet from the building, whichever is closer to the building, as illustrated in the diagrams below.

Approved as to legal form and character:

City Solicitor

GRADE PLANE CALCULATION WORKSHEET **MAR - 1 P 1: 27**

Sample

CITY CLERK
NEWTON, MA. 02159

A	B	C	D	E	F
Segment	Length of Segment (feet)	Height of High Point of Segment	Height of Low Point of Segment	$E=(C+D)/2$ Average Segment Height	$F=B \times E$
1	42.10	103.75	103.75	103.75	4367.875
2	16.80	103.90	103.85	103.88	1745.10
3	6.60	101.50	101.30	101.40	669.24
4	7.00	101.50	101.40	101.45	710.15
5	28.10	99.04	99.04	99.04	2783.02
6	7.00	101.50	101.40	101.45	710.15
7	6.60	101.50	101.30	101.40	669.24
8	16.80	103.90	103.90	103.90	1745.52
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
Total	131.00 Lin Ft of Bldg				13400.30

Total Col. F / Total Col. B = Height

102.29