



# Zoning & Planning Committee Report

## Part 2

### City of Newton In City Council

**Thursday, October 14, 2021**

Present: Councilors Crossley (Chair), Danberg, Albright, Leary, Ryan, Wright, Krintzman, and Baker

Also Present: Councilors Bowman, Malakie, Downs, Kalis, Lipof, Oliver and Kelley

City Staff: Director of Planning and Development Barney Heath, Deputy Director of Planning and Development Jen Caira, Chief of Long Range Planning Zachary LeMel and Assistant City Solicitor Andrew Lee

Newton Historical Commission: Peter Dimond (Chair), Doug Cornelius, Jennifer Bentley, and Amanda Park

Planning & Development Board: Peter Doeringer (Chair)

New TV

**#180-21      Requesting a review and possible amendments to Section 4.2.5(A)**  
COUNCILORS LAREDO, LUCAS, LIPOF AND MARKIEWICZ requesting review of and possible amendments to Section 4.2.5(A) of the City of Newton Zoning Ordinance to clarify language concerning shadows and blocked views in the Mixed Use 4 district.

**Zoning & Planning Held 8-0 on 09/13/21**

**Action:      Zoning & Planning Held 8-0; Public Hearing Scheduled for November 8, 2021**

**Note:**      Chief of Long Range Planning Zachary LeMel joined the Committee for discussion on this item.

Mr. LeMel presented a summary of Section 4.2.5(A) (PowerPoint attached) on, including intent, existing language, proposed revisions, and expected outcomes.

Mr. LeMel stated that the proposed amendment to the language is not a substantive change. Rather, the amendment would bring the text into alignment with how City Council applies the criteria in an MU4 zone when assessing projects seeking a special permit for building height and/or setback waivers, in particular, to clarify how shadows and blocked views will be assessed relative to other criteria.

At the September 13, 2021, meeting, Committee members requested that staff review the proposed language with ISD to ensure that the proposed revision is clear to them, and would accomplish the goal, or requires additional clarification.

The existing language could be interpreted to mean that any creation of a shadow or blocked view could be considered an adverse effect, as recently suggested during a special permit review. If this were the case, a special permit could only be approved if no shadows or blocked views could be created at all by a proposed building. However, such an interpretation is not consistent with the expressed intent of MU4, past application of standards, or reason.

Proposed amendment language to Section 4.2.5(A).1 Height, 4.2.5A.2 Mixed-Use Residential Incentive and 4.2.5.A.4 Setbacks of the City of Newton Zoning Ordinance

*“Does not create shadows or blocked views that adversely affect its surroundings”.*

Staff believe the expected outcomes from this change to be minimal. Rather, this update is a clarifying change to better align with current practice and with the intent put forward in the mixed-use element of the Comprehensive Plan. As the Special Permit Granting Authority, Council will continue to review whether and to what extent a new building may impact shadows and blocked views, including by using shadow studies, to assess shadow extent, duration, seasonal reach, ground level uses it affects, etc., in evaluating a petition in an MU4 zone.

The Planning Department recommends setting a public hearing for November 8, 2021.

**Committee members comments, suggestions, questions and answers:**

**In reference to attachment A, #4 Setbacks, is it a draft oversight that the following was deleted? It may be necessary to keep because of specific criteria.** The City Council may grant a special permit to waive the following setback requirements by finding the proposed plan does not create shadows or blocked views that adversely affect its surroundings, can better protect the surrounding community from shadows and blocked views, supports pedestrian vitality, and advances encourage the purposes of this district: ~~than strict compliance with the following standards:~~ Mr. LeMel answered that he will discuss this internally and will get back to the Committee before the public hearing.

**(Update: see redlined language in Draft Ordinance provided with public hearing notice, which adds “strict compliance” language)**

**I think it is not a wise policy for City Council to empower itself to determine what is an adverse effect. That one adverse effect is not significant enough compared to the other things that we think would be furthered by a project.** Mr. LeMel said that as we know in Newton, there are many uses existing in residential districts that are not residential. *For example, there could be a parking lot that's zoned residential, and it may make sense to move some mass (in an abutting business district) closer to the parking lot, and away from something else, such as a public park. Of course, the Council is the decider*

*on these things, and I hope would carefully weigh all of the criteria together to make that informed decision.*

**Residential districts and residential uses are appropriate, sensitive and special circumstances that we can craft qualifying amendments to ensure issue is taken care of.**

**It is necessary to balance the good with the bad, pros and cons. No special permit is perfect, it is always a judgement of the Land Use Committee and City Council. This new draft language makes clear we must balance (impacts).**

**In zoning discussions, we are always looking to size buildings for (appropriate) density and balance (the impacts). It is necessary to use all the tools, and not amend language to be too specific.**

**I think the Land Use permitting process has two dimensions. This draft amendment is offering an opportunity to weigh costs and benefits in various contexts and say whether on balance it's a good idea. However, the special permit criteria, I think, says that there must be a *public benefit\**, and must not do certain adverse things. So, I just think it's important to remember that we do not always take a special permit as a cost benefit analysis in total. We have to follow the ordinance criteria each time.**

*(Chair's note: See Section 7.3 Special Permit Review, especially 7.3.3 Grant of Permit, which lists the five general criteria)*

**Public benefits are in the eyes of the beholder; it is often a judgement call.**

Chair Crossley stated she feels the draft language is an improvement and clarifies that impacts of shadows are not to be considered as a standalone item, but rather within the context of a particular project.

Without further discussion, Councilor Danberg made a motion to schedule a public hearing for November 8, 2021. Councilor Leary made a motion to hold this item. Committee members agreed 8-0.

**#149-21      Requesting a discussion with the Planning Department**

COUNCILORS LIPOF, CROSSLEY, RYAN AND ALBRIGHT requesting a discussion with the Planning Department to address concerns relative to the trend of significantly raising grade elevations on lots, using retaining walls, terracing and other means to add soil to conceal a raised basement, which can lead to new buildings that are significantly taller than nearby existing houses in the area, cause denuding of wooded areas and increasing storm water runoff.

**Action:      Zoning & Planning Held 8-0**

**Note:**      Docket items #149-21 and #11-21 were discussed together. Please see report following item #11-21.

**#11-21 Request for Ordinance requiring topographic data prior to building permit issuance**  
COUNCILORS CROSSLEY AND ALBRIGHT requesting an ordinance to require that topographic data be provided on surveys of existing and proposed conditions currently required for new construction and additions, prior to issuing construction permits.

**Action:** **Zoning & Planning Held 8-0**

**Note:** Discussion items #149-21 and #11-21 were discussed together.

Deputy Director of Planning and Development Jen Caira joined the Committee and presented a (PowerPoint attached) on summary of existing regulations related to regulating building height relative to grade elevation, grade change, retaining walls and storm water management, noting recent and ongoing issues, a range of potential solutions and next steps.

See also Planning Memo dated October 8, 2021, attached.

Ms. Caira stated that the next steps include (1) research past building permits to better understand the issues and how prevalent they have been. (2) Work with the Engineering and Inspectional Services Department to develop possible solutions. (3) Coordinate with proposed stormwater ordinance updates and (4) Return to the Committee early in the next term.

In closing, Ms. Caira asked Committee members the following questions: Are we missing any related issues? Which of these issues are of greatest concern: aesthetics, retaining wall safety or stormwater runoff?

**Committee member comments, questions, answers:**

**Before committing to an ordinance amendment, is there anything else necessary to do before advancing into a more comprehensive review that can make the current process succeed?**

**Regarding the question of greatest concern, it may be necessary to address stormwater runoff issues and perhaps amend that section of the ordinance first.**

**Can we separate the requirement for a topographic plan from the rest of the item?** Ms. Caira answered yes, it will be necessary to understand priorities with short-term fixes which can be implemented sooner than the complicated issues. She then stated that she believes that the Draft stormwater ordinance coming from the engineering department requires a topographic survey showing existing conditions. The City can require that the topographic plan be submitted with a building permit application. Most engineering plans do show the existing and proposed grades.

**It is necessary to get the stormwater runoff problem under control.**

**Aesthetics, retaining wall safety and stormwater runoff are all important concerns.**

**Is height calculated using the proposed or existing grade?** Ms. Caira answered no, height is calculated off of the average grade calculation which is the grade elevation around the perimeter of the building, the finished grade.

**Regarding retaining walls and height, it is necessary to address safety concerns.**

**A suggestion was made to include fence/railing requirements for retaining walls over a certain height.** Ms. Caira said that the Planning Department will work closely with Engineering and Inspectional Services Departments to better understand the current rules and to determine if changes are necessary within a jurisdiction and zoning.

**It was noted that MA building code requires safety railings when retaining walls are above a certain height.**

**In some communities the ordinances limit the volume of soils brought to or removed from a property by right. Above a certain amount (volume of soil) a special permit may be required. Please put that on the list of possible solutions to consider. Exemptions include excavating for basements.**

**In terms of limits, can we require a special permit for any wall over 4 feet tall?**

**Councilors comments:**

**It is necessary to that a topographic plan (showing existing and proposed conditions) be required by ordinance in order to properly understand and regulate building height. In the past year, I have been approached by people in five neighborhoods expressing concern that water is now running onto their properties, where they never had this issue before. There are two issues, water and context. Developers are taking advantage of using retaining walls to raise grade elevations, (then using the higher elevation as the basis for determining total building height). It is concerning to have water runoff resulting to multiple adjacent homes because of their own grade raise for the betterment of themselves not the betterment of the neighborhood.**

**It appears (from tonight's presentation) a working plan is now in place for the City to have better control on these issues. It is wrong that developers find this loophole to do what they want to do. The City must react to this and make changes.**

**Upon a permit application, the property owner must be made aware of what the City expects in regard to grading.**

**But, as Chair of Land Use, I think that requiring a special permit for any wall over 4 feet tall would be devastating to the Land Use Committee.**

Ms. Caira asked Councilors to please forward to her any concerning phone calls, addresses and photos of difficult situations caused by retaining walls and grade changes.

Ms. Caira stated that she will research other ordinances as part of a new zoning proposal. The department will review examples, research previous building permits that have been constructed, review what is being built, review changes and grades, speak with current staff, Inspectional Services and Engineering Departments to make sure that there is an understanding of grade change issues and what is driving these issues. The Planning Department will explore other neighboring ordinances including the Wellesley Ordinance. The Department will review all options to determine what is best for Newton.

Chair Crossley asked if the Engineering Department would be involved? Ms. Caira answered yes, Planning wants to understand the current process better, what current regulations exist particularly around retaining walls and determine if changes are necessary. In addition, the stormwater ordinance Drafted for the engineering section of the ordinances is soon to be released from engineering and law. This must also be reviewed carefully to ensure coordination with Chapter 30.

Committee members thanked Ms. Caira for her thorough presentation and diligence.


Without further discussion, Councilor Danberg made a motion to hold docket items #149-21 and #11-21. Committee members agreed 8-0.

The Committee adjourned at 8:50 p.m.

**Respectfully submitted,**

**Deborah J. Crossley, Chair**

# Review and Possible Amendments to Section 4.2.5.A



Docket #180-21  
Zoning & Planning Committee  
October 14, 2021

# Agenda

- Summary
- Current Language and Proposed Revisions
- Expected Outcomes
- Next steps



# Summary

## Docket Item Background Information

- Amendments proposed to Section 4.2.5.A, additional standards in the MU-4 district
  - Revise criteria for projects seeking Special Permit for building height and setback requirements in MU-4
  - Clarify how shadows and blocked views will be assessed
- Not a substantive change – bring zoning text into alignment with City Council application

# Summary

## Items from 9/13 ZAP Meeting

- Review language with other City Staff
- Research if further criteria to define adverse effects are needed within the zoning text

## Summary

### Special Permit Intent

- Waivers for setbacks and height restrictions appropriate if certain conditions are met
- Emphasis on flexibility and discretion
- Evaluate for “harmony and integration with their context, rather than just consistency with complex tables and numerical rules.”
- Shadows and blocked views are one element of review among others

# Summary

## Issues with the Existing Language

- Recent confusion from an interpretation that any creation of a shadow or blocked view is considered an adverse effect
- This recent interpretation is not consistent with intent of MU4, or past application of standards

# Sec. 4.2.5.A.1 Height

#180-21

## Existing Language

*Height.* Buildings in the Mixed Use 4 district shall be a minimum of 2 stories and shall conform to the limits for building height and stories established in Sec. 4.2.3. The City Council may grant a special permit to allow up to 4 stories and 48 feet of building height by finding that the proposed structure is compatible in visual scale to its surroundings, **does not adversely affect its surroundings by creating shadows or blocking views**, and advances the purposes of this district.

## Proposed Revision

*Height.* Buildings in the Mixed Use 4 district shall be a minimum of 2 stories and shall conform to the limits for building height and stories established in Sec. 4.2.3. The City Council may grant a special permit to allow up to 4 stories and 48 feet of building height by finding that the proposed structure is compatible in visual scale to its surroundings, **does not create shadows or blocked views that adversely affect its surroundings** ~~does not adversely affect its surroundings by creating shadows or blocking views~~, and advances the purposes of this district.

## Sec. 4.2.5.A.2 Mixed-Use Residential Incentive

#180-21

### Existing Language

***Mixed-Use Residential Incentive.*** Buildings that meet the definition of mixed-use residential buildings shall conform to the specific limits for building height and stories established in Sec. 4.2.3. The City Council may grant a special permit to allow up to 5 stories and 60 feet of building height by finding that the proposed structure is compatible in visual scale to its surroundings, **does not adversely affect its surroundings by creating shadows or blocking views**, and advances the purposes of this district.

### Proposed Revision

***Mixed-Use Residential Incentive.*** Buildings that meet the definition of mixed-use residential buildings shall conform to the specific limits for building height and stories established in Sec. 4.2.3. The City Council may grant a special permit to allow up to 5 stories and 60 feet of building height by finding that the proposed structure is compatible in visual scale to its surroundings, **does not create shadows or blocked views that adversely affect its surroundings** ~~does not adversely affect its surroundings by creating shadows or blocking views~~, and advances the purposes of this district.

## Sec. 4.2.5.A.4 Setbacks

#180-21

### Existing Language

*Setbacks.* The City Council may grant a special permit to waive the following setback requirements by finding **the proposed plan can better protect the surrounding community from shadows and blocked views**, support pedestrian vitality, and encourage the purposes of this district than strict compliance with the following Standards:

### Proposed Revision

*Setbacks.* The City Council may grant a special permit to waive the following setback requirements by finding the proposed plan **does not create shadows or blocked views that adversely affect its surroundings** ~~can better protect the surrounding community from shadows and blocked views~~, supports pedestrian vitality, and advances encourage the purposes of this district: ~~than strict compliance with the following Standards:~~

## Expected Outcomes

- Clarifying update / align with existing practice
- Impact of any shadows or blocked views will be analyzed through a shadow study (shadow extent, duration, seasonal reach, and the ground level uses it affects, among others)
- Standard Special Permit criteria remain, and Planning can bring in a peer-reviewer as needed
- Determination of adverse impact of shadows and blocked views can be specific to each site and project



## Next Steps

- Staff recommend setting a public hearing date for November 8



# Grading and Retaining Walls

## Docket #149-21 & #11-21

Zoning and Planning Committee  
October 14, 2021  
Department of Planning and Development



# Agenda

- Existing Regulations
- Issues
- Potential Solutions
- Next Steps
- Questions for the Committee

#149-21  
#11-21

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# Existing Regulations



# Height

Zoning ordinance sets maximum height and floor area limits for new single and two-family homes.

Height is measured from the average finished grade elevations around the perimeter of the building.



## Grading and Retaining Walls

Prior to 2009 a Special Permit was required to change existing grades by more than 3 feet

This rule was difficult to reasonably implement and interpretations were necessary over time to allow for foundation excavation and similar work

In 2009, at recommendation of the zoning task force, this provision was replaced by a Special Permit requirement for retaining walls over 4 feet in height in the setback



## Stormwater

Engineering requires stormwater review when there is an increase in impervious area of more than 4% of the lot area or 400 square feet

Zoning ordinance also includes language that the Commissioner of ISD and the City Engineer may reject a project if they believe it will cause runoff to or from abutting properties or the erosion of soil

The Engineering department is currently updating the stormwater ordinance, which is expected to significantly expand the thresholds for review

#149-21  
#11-21

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# Issues



# Height

Measuring height from finished grade allows for the manipulation of existing gradees, which can result in homes that appear taller than adjacent homes



#149-21  
#11-21

Before



After



# Height

Raising the existing grade is often done to construct a full basement where there is a high water table, to include a tucked under garage, or the maximize FAR





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# Retaining Walls

There are no height restrictions or Special Permit requirement for retaining walls outside of setbacks

Retaining walls are often used to allow construction on steep lots or create a flat yard



#149-21

#11-21

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# Retaining Walls

Large retaining walls present aesthetic and safety concerns for adjacent properties





# Stormwater

Most sites already contain impervious area so redevelopment, however significant, may not trigger the 4% or 400 square feet threshold

#149-21  
#11-21



Google

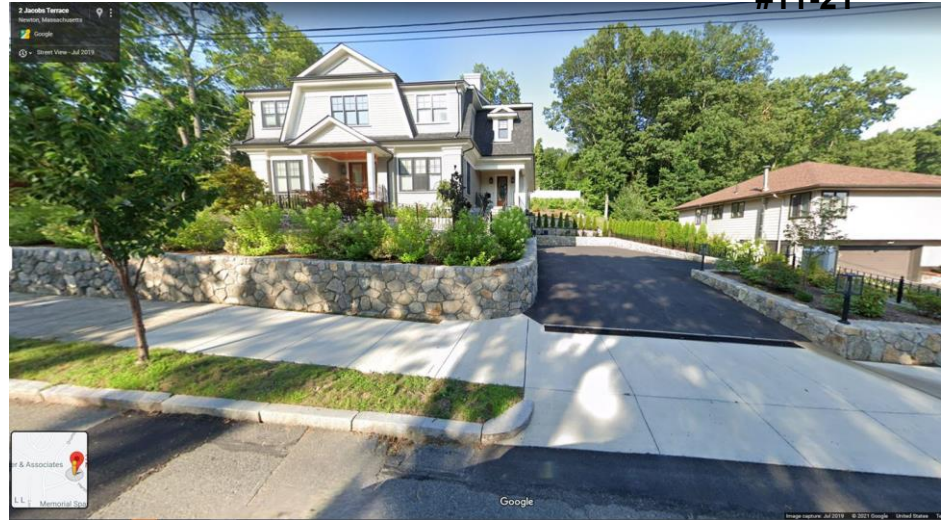
Image capture: Aug 2019 © 2021 Google



After

#149-21  
#11-21

Before





#149-21  
#11-21

Before



After



#149-21  
#11-21





## Potential Solutions

Measure height from existing grade or a fixed point such as the back of sidewalk

Measure height along the front elevation, not average grade

Require a Special Permit for all retaining walls over a certain height

Set a maximum height for individual or terraced retaining walls

Provide clear Engineering review process for retaining walls

Update zoning ordinance to be consistent with new stormwater ordinance, once adopted



## Next Steps

Research past building permits to better understand the issues and how prevalent they have been

Work with Engineering and ISD to develop possible solutions

Coordinate with proposed stormwater ordinance updates

Return to the Committee next term

# Questions for the Committee

- Are we missing any related issues?
  - Which of these issues are of greatest concern?
    - Aesthetics (building height and massing, views of retaining walls)?
    - Retaining wall safety?
    - Stormwater runoff?
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Ruthanne Fuller  
Mayor

**City of Newton, Massachusetts**  
Department of Planning and Development  
1000 Commonwealth Avenue Newton, Massachusetts 02459

**#149-21 and #11-21**

Telephone  
(617) 796-1120  
Telefax  
(617) 796-1142  
TDD/TTY  
(617) 796-1089  
www.newtonma.gov

Barney S. Heath  
Director

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**MEMORANDUM**

**DATE:** October 8, 2021

**TO:** Councilor Deborah Crossley, Chair, Zoning & Planning Committee  
Members of the Zoning & Planning Committee

**FROM:** Barney Heath, Director, Department of Planning and Development  
Jennifer Caira, Deputy Director Department of Planning and Development  
Zachery LeMel, Chief of Long Range Planning  
Cat Kemmett, Planning Associate

**RE:** **#149-21 Requesting a discussion with the Planning Department**  
COUNCILORS LIPOF, CROSSLEY, RYAN AND ALBRIGHT, requesting a discussion with the Planning Department to address concerns relative to the trend of significantly raising grade elevations on lots, using retaining walls, terracing and other means to add soil to conceal a raised basement, which can lead to new buildings that are significantly taller than nearby existing houses in the area, cause denuding of wooded areas and increasing storm water runoff.

**#11-21 Request for Ordinance requiring topographic data prior to building permit issuance**  
COUNCILORS CROSSLEY AND ALBRIGHT requesting an ordinance to require that topographic data be provided on surveys of existing and proposed conditions currently required for new construction and additions, prior to issuing construction permits.

**MEETING:** October 14, 2021

**CC:** City Council  
Planning Board  
John Lojek, Commissioner of Inspectional Services  
Neil Cronin, Chief of Current Planning  
Alissa O. Giuliani, City Solicitor  
Jonathan Yeo, Chief Operating Officer  
City Council

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**Overview**

The subject docket items are intended to identify and address concerns regarding the significant altering of the existing grades when new single and two-family homes are built. Grading, terracing, and retaining walls are used to raise up the house, maximize areas that do not count towards floor area, build a full basement where there is a high-water table, and/or to create a flat yard. The effect of these grading alterations are homes that appear taller than those nearby, the potential for increased stormwater runoff, and aesthetic and safety concerns regarding retaining walls.

## **Existing Regulations**

### Height

The Zoning Ordinance sets maximum height and floor area limits for new single and two-family homes. Height is measured from the average grade plane (Section 1.5.4 F), which represents the average of finished grade elevations around the perimeter of the building. The maximum height is then measured from this plane. The average grade plane is based on finished grades, which may be very different from existing grades. For example, a site for a new single-family home could use soil and retaining walls to first build up the site prior to constructing the home. The new grades, which may be significantly higher than the existing grades of the site as well as the neighboring sites, are then used to set the baseline for the maximum height.

### Grading and retaining walls

Prior to 2009 the Zoning Ordinance required a Special Permit to change the existing grades of a site by more than three feet. This was primarily intended to protect abutting properties from drainage problems caused by grade changes. While well intentioned, the three-foot regulation became difficult to implement. Strictly interpreted it would require a Special Permit any time a foundation was excavated, or a hole was dug, regardless of the size of the site and likelihood that the grading would result in stormwater runoff. The Commissioner of Inspectional Services issued interpretations over the years that this provision was not applicable to foundation excavations or to excavations leading to garages under residences. This resulted in developers attempting to use this interpretation to justify major driveway and hillside excavations that raised both aesthetic and engineering concerns.

In 2007 the zoning task force recommended that this provision be eliminated and be replaced by a Special Permit requirement for retaining walls over a certain height in setbacks and in 2009 the City Council adopted a Special Permit requirement for retaining walls greater than four feet located in a setback (Section 5.4.2). The intent was that limiting the height of retaining walls within the setback would limit the grade changes adjacent to abutting properties. Retaining walls outside of setbacks do not require a Special Permit and do not have any maximum height restrictions.

### Stormwater

In 2009, along with the retaining wall regulations, the stormwater regulations section of the Zoning Ordinance (Section 5.3) was also amended to reference Engineering's thresholds for stormwater review (increase in impervious area by more than 4% of the lot size or 400 square feet) and to include language that the Commissioner of Inspectional Services and the City Engineer may reject a project if they believe it will cause runoff to or from abutting properties or the erosion of soil. The Engineering department is currently updating the Stormwater Ordinance, which will come before the City Council, and is expected to significantly expand the thresholds for stormwater review.

## **Issues**

### Height

Measuring height from the finished grade allows for significant altering of existing grades prior to construction. This can be seen in the homes that terrace or create a pedestal for the new home, resulting in a height that can be significantly higher than adjacent homes. This may be desirable in order to construct a full basement where there is a high-water table, create a walk-out basement, provide a garage under the home, or to maximize the area within the home that is exempt from the floor area ratio (FAR) calculation. Solutions to explore include requiring an existing topographic survey

(representing the grades on the site prior to any work) and measuring height from the existing grade or measuring height from a constant grade, such as the back of sidewalk.

#### Retaining walls

Retaining walls over four feet (the point at which they need to be designed by a licensed engineer) require a Special Permit if they are located in the setback, however retaining walls located outside of the setback are by-right and are not subject to a height maximum. Recently there have been examples of properties undergoing significant grading with very large retaining walls in order to provide a flat yard on a sloped lot or to allow construction of a home on a steep lot. These large retaining walls present aesthetic and safety concerns for adjacent properties.

Possible solutions to explore include requiring a Special Permit for all retaining walls over a certain height, capping the maximum height of individual or terraced retaining walls, and providing a clearer engineering review process to alleviate safety concerns.

#### Stormwater

While the Zoning Ordinance gives the Commissioner of Inspectional Services and the City Engineer the ability to reject a project that they believe will result in stormwater runoff to an adjacent property, the thresholds of an increase in impervious area more than 4% of the total lot area or 400 square feet (whichever is less) may no longer be sufficient as the City is mostly built out. Most sites are being redeveloped, either with new buildings or major renovations to existing buildings, and may not result in a large enough increase in impervious area on the site to trigger a review. The Engineering Department has been working on an updated Stormwater Ordinance that is expected to expand the scope of projects that automatically trigger stormwater review. Once a new ordinance is adopted, Section 5.3 of the Zoning Ordinance will also need to be updated to be consistent.

#### **Next Steps**

Planning staff will work with Inspectional Services and Engineering to identify possible solutions to the identified issues and will return to the Committee next term.