

AGENDA

ANC 6A Economic Development & Zoning Committee
Wednesday December 17, 2008, 7-9:00 PM
Sherwood Recreation Center (640 10th St. NE)
2nd Floor Community Room

7:00 pm **Call to order**

7:01 **Ongoing Status Reports:**

1. 1400 Maryland Ave. BZA Case #17825 (Drew Ronneberg) (3 min)
2. Vacant Properties (Dan Golden) (3 min)
3. Historic District Survey (Barbara Halleck/Drew Ronneberg) (3 min)
4. Zoning Code Rewrite (Cody Rice) (4 min)

7:15 **Old Business** - None

7:15 **New Business**

1. Zoning Code Rewrite – Proposed Changes to Residential Code Regulations. Cody Rice will update the committee on the working group proposals for rewriting the residential portions of the Zoning Code. The committee will formulate recommendations for the ANC regarding the proposed changes to the regulations. (1 hr. 15 min)

8:30 **Additional Community Comment (time permitting)**

Everyone is welcome! Call Drew Ronneberg with questions at 202 431-4305.

Visit our website at <http://www.anc6a.org/>

Sign up for automated meeting reminders and community listserv at

<http://groups.yahoo.com/group/anc-6a/>

DRAFT Low/Moderate Density Residential Recommendations

This document lays out draft recommendations for consideration by the Low & Moderate Density Residential Working Group. The protection of existing or desired neighborhood character is the focus of the recommendations, while the main impact is to increase local neighborhood influence over zoning while improving the usability and clarity of the regulations. Recommendation one lays out the basic strategy of providing a standard template for all residential zones that can be customized through the small area plan process for individual areas. Recommendations two through seven are the building standards that would be included in the template and customizable. Recommendations eight through fifteen are policies related to the residential zones.

1. Customized Zones – Tools & Template

Existing Practice

Currently, there are four to six low and moderate density residential zones that are meant to be mapped across the city. When localized zoning specificity is needed, overlay zones have historically been drafted that alter specific components of the underlying zone in response to small area plans or neighborhood concerns. Both zoning classifications then apply to the area; the more restrictive standards for each measure duplicated in the underlying and overlay zones is enforced.

Issues

The existing system is often confusing to interpret or apply. Users of the ordinance must reference and compare multiple chapters in the regulations to determine the appropriate standards for a property. More importantly, the process for creating overlays for local zoning control is long, unclear, and ad hoc. Each overlay is designed from scratch, usually creating new tools or new lists of uses, and often having minimal organizational or functional relationship to other overlays or the rest of the ordinance.

Recommendation 1

Allow customizable residential zones. This means creating a standard template for Low Density (i.e. detached & semi-detached) and Moderate Density (i.e. rowhouse) zones that could be customized for local areas and would replace the use of local overlays to modify underlying zoning. The planning process for neighborhoods to identify and customize neighborhood-specific zoning would remain the same as the current system (i.e., pursuant to a Small Area Plan).

Recommendations 2 through 7 would comprise customizable standards within the zoning templates.

Discussion

The Comprehensive Plan recognizes the variety of neighborhood types throughout the District and calls for maintaining that variety (Policy LU-2.1.1). The Plan further

recognizes the importance of “an emphasis on conservation in some neighborhoods and revitalization in others” (Policy LU-2.1.3), and expresses a need to “provide a better match between zoning and existing land uses in the city’s residential areas” (Action LU-2.1.C). The Plan also calls for exploration of “changes which would facilitate development of accessory apartments, English basements, and single room occupancy housing units” (Action H-1.5.B).

Discussions with the Working Group confirmed that the existing regulations are inadequate to accomplish these objectives. Working group members recognized that the existing zoning creates confusion and frustration for both property owners and neighbors, and that it was inadvisable to establish “one-size-fits-all” solutions for the entire city. Several working group members expressed satisfaction with the intent and focus of the current tactic of using overlays to achieve a “micro-zoning” framework, but also recognized that current methods of applying overlays to base zone districts can be an additional source of confusion.

A system of customizable local zones would not involve any immediate changes to the bulk or density limitations or the remapping of particular neighborhoods. The bulk and density standards of each zone (i.e. R-1-A, R-1-B, R-2, etc.) remain the same. Existing overlays would be transferred into the system with their unique standards. The system would therefore not necessitate any change, but would allow for easier local control through the existing process.

2. Height

Existing Practice

Currently, height in low density neighborhoods is measured in feet to the ceiling of the top story. The height for all low density neighborhoods is set at three stories and forty feet.

Issues

The system of measurement allows for unlimited height above the top ceiling as well as necessitating a limit on the number of stories which leads to confusion and litigation over definitions of “top story,” “attic,” “basement,” and “ceiling.” This has led to instances of pop-up structures and neighborhood battles about the application of story measurements where attics and basements are involved.

Recommendation 2

Height maximums should continue to be measured in feet, however measurement should be to the top of a flat roof or the mid-point of a sloped roof as shown below. This system would remove the need for a separate measure of stories.



Figure 1

Discussion

This recommendation would simplify the measurement of height in low and moderate density residential areas. Currently, height in these areas is measured to the ceiling of the top story. In the diagram above, each of these houses could have different heights based on where the ceiling was placed. Moreover, the two houses on the right would be subject to determinations of whether the tops of the buildings were “attics” or “stories,” which would have further impact on the height measurement while having nothing to do with the actual height as seen from the street. The OP recommendation would measure height to the top of the building with allowance for roof features or peaked roofs. This system would allow for simplified height measurement in a way that is most meaningful to the surrounding properties, and when accompanied by a removal of story designations, would greatly simplify administration and enforcement.

3. Front Yards

Existing Practice

There are currently no zoning regulations for front yards, however some areas of the city are subject to deed-required building restriction lines.

Issues

Many areas of the city that are built to uniform front yard lines through design or coincidence do not have a regulation in place to assure that new construction follows the existing pattern. This can greatly impact residential character when new construction is built to extend out in front of the established building line.

Recommendation 3

Front yard setbacks should be available as tools for local neighborhood zones. Front yard setbacks should be based on the characteristics of existing buildings on the same block face.

Discussion

Office of Planning research has shown while there is generally consistency of front yard setback within block faces, the majority of residential buildings in D.C. are *not* built to the front lot line. Based on OP's citywide study of residential neighborhoods, approximately 65% of the single family residential structures are setback from the property line. This appears to hold true for both detached homes and rowhouses. With no current regulation of front yards, this means that there are many areas where a new rowhouse could extend forward further than the surrounding group or, conversely, the home could be setback significantly more than its neighbors. Either situation could detract from the character of a residential neighborhood.

While front yards are often a neighborhood defining element, there is no current mechanism for ensuring their maintenance. Unlike other characteristics, which can often be uniform for several blocks or a large neighborhood area, front yard setbacks are more variable and often change from block to block or on different faces of the same block.

Based on OP analysis of existing conditions throughout the city, the most equitable way to regulate front yards would be to base the setback or build-to line on the setbacks of existing buildings on the same block face. This would mean that new buildings could start no further forward or back than any existing building on the same block face.

4. Side Yards

Existing Practice

Currently, when side yards are required, they must be a minimum of eight feet throughout the city in all residential districts. Existing side yards between five and eight feet may be extended, but yards less than five feet may not. The regulations have conflicting guidance on whether non-conforming side yards in historic areas may be eliminated to create rowhouses.

Issues

The existing side yard standard does not represent existing characteristics of most of the city's neighborhoods. It does not allow a complimentary building to be built in a neighborhood with less than eight foot side yards or with uneven side yards. The lack of ability to extend many existing side yards leads to a large number of variances. Finally, there is a lack of clarity for the rules for side yards in historic areas.

Recommendation 4a

For detached homes, the standard should change from a side yard measure to a measure of the ratio of building width to lot width (shown below). It would still be appropriate to maintain an absolute minimum on each side.

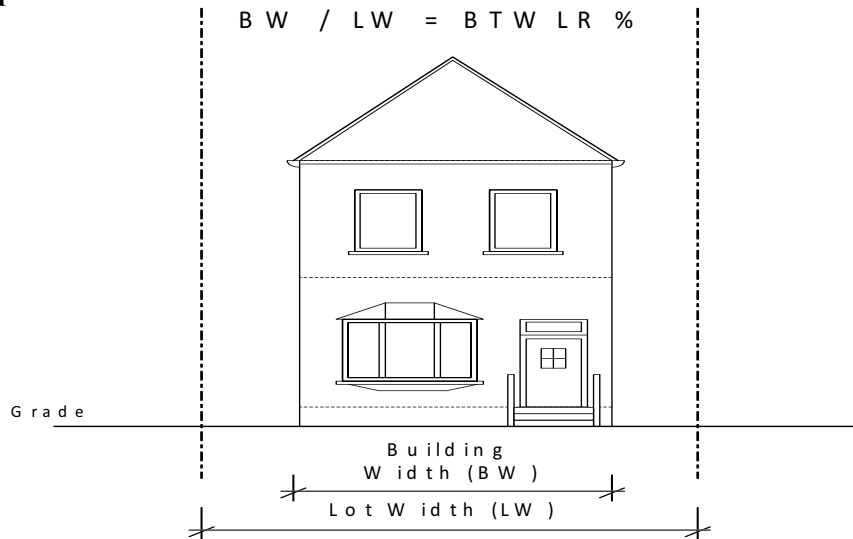


Figure 2

Recommendation 4b

Allow buildings to expand along the line of existing non-conforming side yards.

Recommendation 4c

In historic areas, do not allow the reduction or elimination of side yards below the minimum standard.

Discussion

A thorough study of residential side yards around the city showed that there is no regularity to the separation of buildings from one another or to the width of their side lot lines. A standard eight foot requirement for side yards does not promote building location on infill lots that would complement the character of most existing neighborhoods. One solution would be to allow side yard requirements to vary by local area, however this may be a measurement that is too localized and area-specific to effectively regulate.

An alternate solution may be available from the study results. The study of side yards showed that there is a high degree of regularity across the city in the ratio of a building's width to the width of its lot. These results indicate that compatible infill houses may be more simply and effectively assured through regulation of a maximum Building to Lot Width Ratio (BLWR). Such a standard would ensure that infill structures would be relatively consistent in their placement on their lots compared to similarly situated buildings.

The study shows a consistent average across the city of 70% BLWR with a very low deviation. Adoption of this standard, for example, would assure that R-1-A lots maintained two side yards that added up to 22.5 feet and R-1-B had two side yards that added up to 15 feet even if both sides were not equal.

To assure a minimum level of compliance in terms of separation from lot lines it is also recommended that a minimum standard for side-yards be established. This standard would ensure a minimum separation for passage and maintenance regardless of where the building is located between the maximum BLWR.

Recommendations 4b and 4c are the result of discussions in the Historic Preservation Working Group. 4b would allow for the expansion of all residential structures along non-conforming side yards. This would prevent the encouragement to fill in non-conforming side yards as a way to avoid variance relief. 4c would protect existing side yards along historic structures from being filled in to create row structures. This is an important clarification for the protection of the existing character of certain historic neighborhoods.

5. Courts

Existing Practice

Although not required, when provided courts have minimum width and area requirements based on type and height.

Issues

Expansions of existing non-conforming courts require variances. This provides a time and process incentive to fill in existing courts rather than preserve them which can affect building and neighborhood character.

Recommendation 5

Remove current court width and area requirements. Existing courts could be extended at their current width without a variance.

Discussion

The existing court requirements were created in 1958 as light and air standards with the creation of new courts in mind. The majority of courts created prior to that time did not meet the area and width standards and are considered non-conforming. Since the date of the original regulations, building code standards have evolved to provide light, air, and fire protection standards for all buildings. Since the original purpose of the court requirements has been supplanted by modern building codes, and the main impact of the requirements is to force variances on court expansions, OP recommends removing the requirement. Counter-intuitively, this would lead to more retention of existing non-conforming courts by removing the incentive to fill them in to avoid a variance procedure.

6. Building Area (Lot Occupancy)

Existing Practice

Building footprint is currently controlled through measurement of lot occupancy. The maximum building area is limited to a percentage of the total lot area.

Issues

In a city with DC's development pattern, lots within blocks are rarely uniform while the buildings generally are. This pattern results in wide varieties of lot occupancy among neighboring buildings. The most common consequence of this variety is evident in the smaller lots that cannot be built on as a matter-of-right with the same size and shape of house that is standard on the rest of the block.

Recommendation 6a

Each zone should have a matter-of-right building footprint regardless of lot size. Lot occupancy limits would continue to apply for buildings larger than the matter-of-right standard.

Recommendation 6b

Exclude narrow courts and side yards from footprint and lot occupancy calculations.

Discussion



Figure 3

The figure above shows several examples of the difficulty in relying on lot occupancy as an indicator of neighborhood building type. The block on the far left contains buildings that are generally uniform in foot print. However, lot occupancy on this block ranges from over 95% at the north end to less than 30% on the south end. The block in the center also shows much more regularity in the size of buildings than in the size of lots so that lot occupancy varies between 30% and 80%. Finally, the block on the bottom shows buildings that have a similar footprint as others in the figure, but cover around 75% of their very short lots.

A very noticeable impact of the current use of lot occupancy is the number of variance requests for construction or addition on smaller lots. Generally, these are cases of buildings that fit exactly with the pattern of the neighborhood, but because of the variation in lot size, cannot build what their neighbors have as a matter of right.

A solution to this problem is to allow a minimum building footprint for any house in the neighborhood based on the characteristics of the homes in the area. For example, in an area where the building footprints are generally 1200 square feet, a lot would be entitled to a 1200 square foot building footprint even if the lot was smaller than the standard lot size due to the layout of the block.

The minimum footprint proposal would not limit the right of anyone with a larger lot from developing a larger building based on the existing lot occupancy standard. The

maximum footprint of buildings would be the greater of the allowable footprint or the lot occupancy.

Based on the Lewis Plan, lot occupancy limits were originally implemented to preserve open space in residential areas. They are still useful and should be maintained for that reason. The proposal would only impact the smallest lots where open space is minimal and is outweighed by character issues and the number of created variances.

Recommendation 6b would remove narrow side yards and courts from the calculation of lot occupancy. There is incentive in the existing regulations for homeowners to fill in existing side yards and courts since they already count as lot occupancy by definition and would not therefore require a variance to add space to the building.

7. Rear Yards/Building Depth

Existing Practice

Rear yards are required at 25 feet in the R-1 zones and 20 feet in the R-2 through R-4 zones.

Issues

In rowhouse areas, the existing development pattern is not supported by standard rear yard provisions since the depth of lots varies greatly within blocks across the city. As with lot occupancy, this can create variances or impact the neighborhood character on lots that are substandard in size.

Recommendation 7

Rowhouses should have a matter-of-right depth regardless of lot depth. Rear yards would continue to be required beyond the matter-of-right depth.

Discussion

As with lot occupancy, the buildings in Figure 3 demonstrate the need in row house areas for a minimum standard size for a building when the lots are cut short by diagonal streets or odd alley layouts. OP recommends a similar solution to the one for lot occupancy. Row house buildings should have an allowable building depth based on the local building form that is achievable regardless of lot depth. This would allow infill to match the existing building characteristics and avoid unnecessary variances.

Also as with lot occupancy, for lots deeper than standard the allowable building depth would not limit development up to the existing required rear yard. Each building would be limited to the greater of the allowable building depth or the rear yard measurement.

8. Subdivision

Existing Practice

New subdivisions in low and moderate density zones are dependent on the type of structure being built (i.e. detached, semi-detached, attached). Subdivision standards also apply to infill of existing lots.

Issues

The existing system seems to be the best way to determine lot area and width for new lots, but applying the same standards to preexisting lots can limit infill in areas that do not meet lot standards. Existing areas with substandard lot sizes for the zone classification are saddled with variance requirements to build or expand.

Recommendation 8a

Continue to regulate lot area and width standards by type of structure.

Recommendation 8b

Do not limit infill on existing lots based on standards for subdivision of new lots.

Discussion

The current regulations establish the allowable lot size on the type of building. OP would recommend maintaining existing standards and consolidating into one section for ease of use in the creation of new lots.

There are many areas of existing lots that do not meet the minimum lot size standards. OP recommends that matter-of-right construction be allowed on existing lots that do not meet current standards. All new or changed lots would be continue to be subject to existing lot size standards.

9. Irregular Lots

Existing Practice

Irregular lots are not separately addressed in the regulations. See Figure 4 for examples of irregular lots.

Issues

There are not clear instructions to measure yards or other standards on irregular lots. Application of normal standards on some types of irregular lots can either require variances or lead to unusual solutions that do not compliment the character of the neighborhood.

Recommendation 9

Refine regulations to address the variety of irregular lots that exist in the District. Also ensure recognition of special circumstances associated with corner lots.

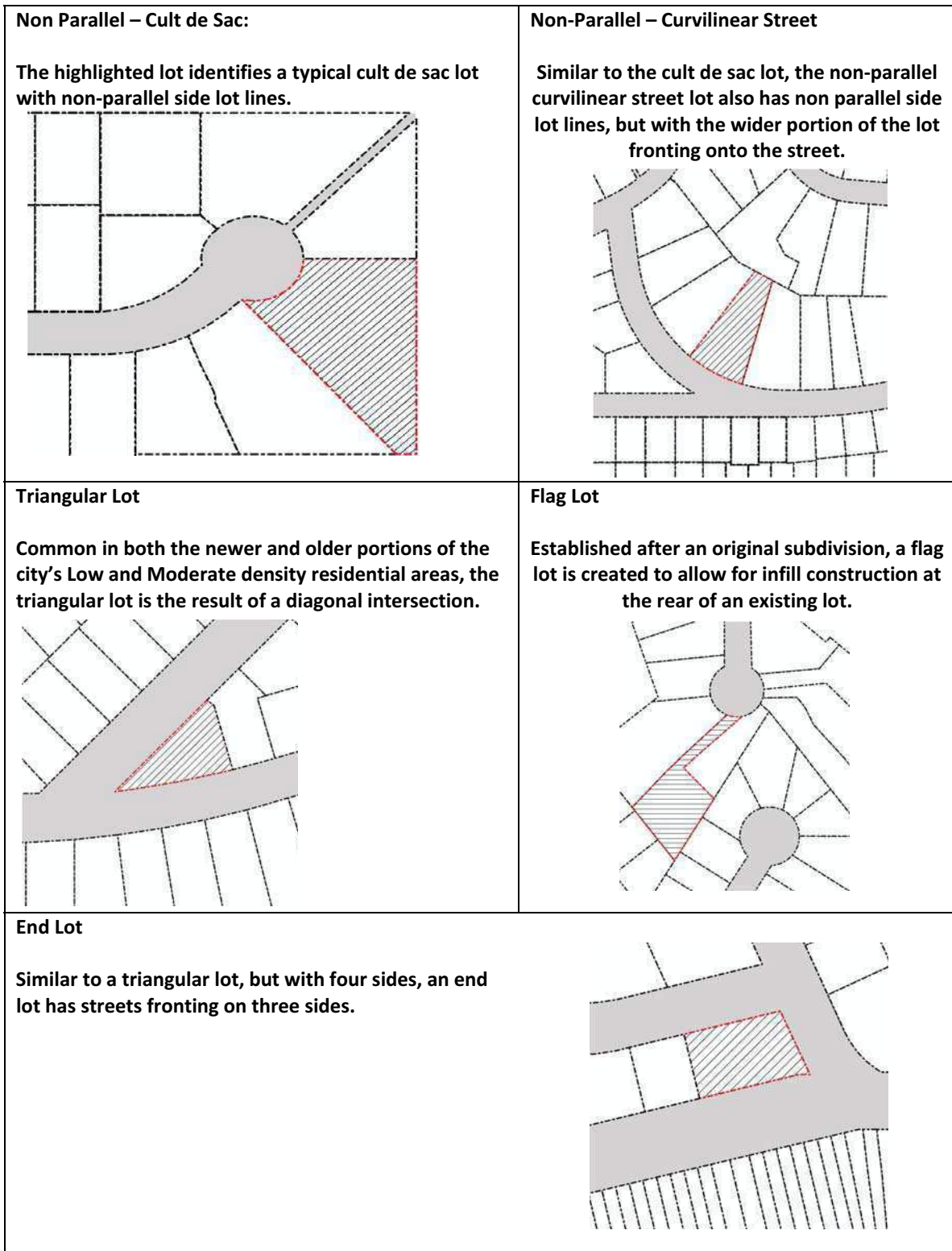


Figure 4

Discussion

OP has determined that over 20% of the residential lots in the city are irregularly shaped. This number is too high to simply require variances for standards that don't fit oddly shaped lots. Moreover, there is a need to clarify measurement of standards for non-rectangular lots.

OP is continuing the process of researching the different types of irregular lots in the city and the best ways to adapt the standards for regular lots to meet the needs of irregular lots to minimize the number of variances and encourage infill construction. With acceptance of this recommendation, OP will design interpretations for irregular lots that match (or accomplish the same policy as) the standards for regular lots. These would then be included and presented with the draft text for residential zones.

10. Residential Density

Existing Practice

Existing R-1 through R-4 zones have densities based on a maximum number of units permitted per lot. R-5 zones have no limit on the number of units.

Issues

There is limited opportunity for variety of unit counts in existing zones. A rowhouse zone can have a two-unit maximum or no maximum, but not a 3-, 4-, or 6-unit unit maximum. Many areas of the city have established rowhouse character with limited numbers of units above two. The existing zones are either too limited or provide no unit limits to protect the character of these areas.

Recommendation 10

Both Low and Moderate Density residential districts should have defined limitations on the number of residential units on a lot. These would be a flexible standard by neighborhood under the proposed residential zone system.

Discussion

Density planning in the city is hampered by the lack of flexibility in the existing residential zones. In many cases, rowhouse areas zoned R-5-B should appropriately be limited to four or six units, while many areas zoned R-4 have the room and the desire for three unit buildings. Current regulations strictly limit the zones R-4 and below while providing no density protection to areas zoned R-5-B that have well established rowhouse character.

This recommendation does not propose any change to the counts of existing zones. The transition to a new system could take place with all of the existing unit limits. It would allow future planning processes to base unit density on the characteristics of a neighborhood rather than the three levels (1 unit, 2 units, and unlimited units) that now exist.

11. Building Use

Existing Practice

Residential districts are regulated by lists of uses that are allowed as of right or by special exception. Most non-residential uses are tightly limited to those customarily seen in residence districts, such as schools, churches, etc.

Issues

Current regulations limit flexibility for local neighborhoods to allow for a wider variety of home occupations, neighborhood serving uses including corner stores, or other non-residential uses that would promote a walkable city and healthy lifestyles.

Recommendation 11

Allow local customization of use conditions. Residential zones would be implemented with commercial use limited to only home occupations, but local areas will have some flexibility to allow for neighborhood commercial uses (i.e. corner stores).

Discussion

Many areas of the city were built with a strong presence of neighborhood retail and service uses. As the city strives to promote more local food availability, walkable neighborhoods, and healthy urban environments there will be increased demand for corner stores and home businesses that allow for sustainable living.

Moreover, the existing home occupation regulations have a very limited list of possible home occupation uses. As gas prices rise and traffic increases, there will be increased pressure to telecommute and to do an increasing amount of work from home. There will be a need to allow and promote a wide variety of home occupations and allow some local customization of the standards.

OP recommends that local residential neighborhoods have the flexibility through the planning process to allow for limited commercial uses. These uses would be controlled and regulated by impact through performance measures as described in the broader discussion of uses.

The appropriateness of an area for such neighborhood uses would be determined on a local basis by small area plan, with reference to the Comprehensive Plan and historic preservation constraints.

12. Accessory Buildings

Existing Practice

Accessory buildings are allowed in residential districts and are limited, along with the main building, by an overall lot occupancy calculation.

Issues

If recommendation 6 is accepted, buildings will be allowed to achieve a minimum footprint regardless of lot size. These buildings on small lots would not be required to calculate lot occupancy and would therefore no longer have an available permitted envelope for accessory buildings. There would be a need to accommodate accessory structures on these smaller lots.

Recommendation 12

Provide a matter-of-right square footage allowance for accessory structures. Structures above the matter-of-right standard would be subject to lot occupancy limits meaning that property owners could build larger accessory structures by transferring unused footprint allowance from the primary structure.

Discussion

OP recommends that each residential lot utilizing the building footprint allowance rather than lot occupancy (see recommendation 6) should be provided with a matter-of-right square footage allowance for accessory structures separate from lot occupancy. To exceed this allowance, both the main building and the accessory structure would have to meet the lot occupancy limitation in the traditional way.

Under this recommendation each lot would either have 1) a total lot occupancy limit for all buildings; or 2) two footprint allowances, one for the main building and one for an accessory building.

13. Historic Institutional Buildings

Existing Practice

Except as provided in Section 222, new uses in old institutional buildings are subject to the same special exception and variance standards as new building construction.

Issues

Often unused institutional buildings (schools, churches, etc.) are unsuitable for uses permitted in their residential zones. They are often too large for single family homes or flats, yet the district may not allow apartments. Historic designation protects these buildings from demolition and the Comprehensive Plan calls for adaptive reuse of these structures. In order to effectively use these buildings, owners are often required to get multiple variances.

Recommendation 13

Allow adaptive reuse of historic institutional buildings. Conditions would be put on the impacts of new uses in these buildings that would allow development as either matter-of-right or special exception.

Discussion

Historic institutional buildings should not be left in disuse if the use closes. The regulations should allow, through special exception or matter-of-right, the opportunity to reuse the buildings for government offices uses and other uses that are compatible with residential neighborhoods. Approval of this recommendation would simplify the path for adaptive reuse of these buildings and encourage limitation of negative impacts by offering a matter-of-right option.

14. Buildings Facing an Alley

Existing Practice

In residential zones, the use of a second structure as a residential unit requires zoning relief, even in zones that permit apartment buildings.

Issues

For lots that allow more than one unit, there is no matter-of-right way to use an existing carriage house or build a second unit unattached to the main building. This results in the need for multiple variances or the creation of artificial building connections.

Recommendation 14

Allow a second residential structure in those zones that allow two or more units. This could mean the reuse of existing carriage houses for residential units or the creation of a new unit based on alley suitability.

Discussion

As a matter-of-right or special exception as appropriate, OP recommends allowing the establishment of accessory residential units with appropriate alley access. This will allow for the adaptive reuse of existing carriage houses while also providing a source of affordable housing. These units would count against the total number of units allowed on the lot the same as any accessory unit.

Remaining Issues

OP will study the characteristics of alleys that can support residential units in order to define what alleys would be appropriate for the application of this recommendation.

15. Historic Waiver for Loading

Existing Practice

Historic structures are waived from parking and loading requirements for use changes and minor additions. Parking is required for additions over 50% of the gross floor area of the original building.

Issues

The loading standards were not updated to match the parking standards for additions to historic structures. This leaves the existing regulations unclear and allows for the potential to construct large new buildings without loading where they can connect to an existing historic structure.

Recommendation 14

Update loading standards for additions to match parking standards.

Discussion

The parking regulations were updated in 2007 to clarify the requirement to provide parking to large additions to historic structures. OP recommends that the same changes be applied to the loading chapter. This would mean that additions to historic structures that are over 50% the gross floor area of the original structure would have loading requirements based on the area of the addition. The requirement would only apply to the addition, the original structure would never have a loading requirement regardless of use change.

Drew,

We should probably take some time at the next ED&Z meeting to discuss the DC Zoning Update working group recommendations for low/moderate density residential.

Current R4 zoning (the residential zoning for most of ANC 6A) is summarized as follows:

Permits matter-of-right development of single-family residential uses (including detached, semi-detached, row dwellings, and flats), churches and public schools with a minimum lot width of 18 feet, a minimum lot area of 1,800 square feet and a maximum lot occupancy of 60% for row dwellings, churches and Flats, a minimum lot width of 30 feet and a minimum lot area of 3000 square feet for semi-detached structures, a minimum lot width of 40 feet and a minimum lot area of 4000 square feet and 40% lot occupancy for all other structures; and a maximum height of three (3) stories/forty (40) feet. Conversions of existing buildings to apartments are permitted for lots with a minimum lot area of 900 square feet per dwelling unit.

Attached is a pdf of the recommendations from the working group. There is a lot to digest, but we should probably take a look at 1) the idea of customizable residential zones, 2) the idea of matter-of-right footprint and depth, 3) height measurement and matter-of-right height, especially outside the Historic District, and 4) requirements for reuse of historic institutional structures. We might also want to discuss the situations in which minimum lot area (900 sf) controls conversion to apartments, but then is not applied against expansions of apartments in a building with an apartment CofO.

There may also be some opportunities for reasonable zoning relief for residents: allowing extension of non-conforming courts or decreases in minimum lot width and/or area to reflect typical lots. Either could reduce some of the non-controversial special exceptions and variances we sometimes see.

I think the challenge will be to pick a smaller set of issues where the ANC can maximize the impact of comments.

-Cody

Drew,

Here is additional information for the ANC 6A ED&Z committee's review. This addresses the availability of building height data for evaluating the current permissible height in the R4 Districts, particularly outside the Historic District.

-Cody

----- Forwarded Message -----

From: Cody Rice <rice_cody@yahoo.com>
To: "Giulioni, Michael (OP)" <michael.giulioni@dc.gov>
Sent: Thursday, December 11, 2008 4:55:34 PM
Subject: Re: Elevation Information

Thanks Michael. I really appreciate the effort you have put into this. I am glad you were able to confirm the approach I was considering. The block you selected is only a block away from my house, so I'll walk over and see how it matches up with the situation on the ground. (I find "streetview" in Google maps can also be helpful for scoping.)

I will share this with the ANC 6A ED&Z committee. I think we will want to discuss where you would want to draw the line between matter-of-right and some sort of adjudicated zoning review based on our experience with projects in the neighborhood. In our case, if not 40 ft and 3 stories, then what? I have found that the expectations of residents about which projects should reasonably trigger meaningful input from neighbors can sometimes differ from the requirements of the zoning regulations. In particular, I have found that residents may be surprised that certain vertical additions may be permitted as matter-of-right even when these additions are much higher than surrounding properties.

We might also think about how standard types of rows might be affected by different height/story limits--a row of 2 story on-slab 1900 bayfronts; a row of standard 1930 porch-fronts; a row of 1900 2 story + english basement bayfronts, etc.

This may also inform our discussions of the feasibility of neighborhood flexibility (i.e., what would information would be necessary and how would it be gathered to modify a height provision for a neighborhood.)

-Cody

----- Forwarded Message -----

From: "Giulioni, Michael (OP)" <michael.giulioni@dc.gov>
To: Cody Rice <rice_cody@yahoo.com>
Sent: Thursday, December 11, 2008 4:24:20 PM
Subject: Elevation Information

Hi Cody – OK, I've done a cursory review of the information that we have on record. With respect to the roof elevation information, I reviewed the description of the data set and it states that it was

prepared from digital orthophotos. (See below.) The data is also a little bit dated. Based on where the points sit in the GIS system, this would be the general location where the elevation was taken.

By using some additional information: the topographic contours; you could establish a reasonable accurate measurement of the heights of buildings. As an example I have attached a graphic from the GIS including: the topographic layer, property lines, building elevation points and streets. (I believe all these layers are included in OCTO's data warehouse.) At this time without verifying the data based on a visit to a particular block I can't speak to how precise it is, but, it does seem pretty accurate, based on a review of oblique photos we also have.

So, if we take the individual building elevations and subtract the closest topographic point (28 meters based on the example) we would have the height of buildings. You could then use that to establish more specific information regarding gross statistics for a given area. I have attached a spreadsheet which gives you an example based on the block identified.

Some problems with this method include:

- It takes time.
- The data sets (building shapes and elevation points) are not linked through some form of common key id. You could assign information by city square or sub-square somewhat easier, but, to go building by building, would take a lot of time.
- Individual assessments regarding the base topography measurement would have to be made, where the elevation for buildings falls between two topographic lines. This would require effectively splitting squares when assembling data for collection and analysis.

Lastly – the Office of Tax and Revenue does collect information on height by storys, but, it is more focused on valuation of the building than its form.

If you need more information or any assistance we may want to schedule a meeting to get more direction. And, please feel free to contact me by phone with any questions.

Take care,

Michael

Definitions:

Rooftop Elevations - Clipped to DC Boundaries

These features were traced from the 1995 orthophotos at a scale of 1:1,000. This differs from most of DC's planimetric data, which currently are based on 1999 orthophotos.

Topographic Contours - 1 meter interval, DCGIS, National Capital Planning Commission (NCPC), DC Dept of Public Works (DPW), 07/012002.

Michael Giulioni

From: Cody Rice [mailto:rice_cody@yahoo.com]
Sent: Tuesday, December 09, 2008 10:54 AM
To: Giulioni, Michael (OP)
Subject: Data on average height of existing buildings in R4

Michael,

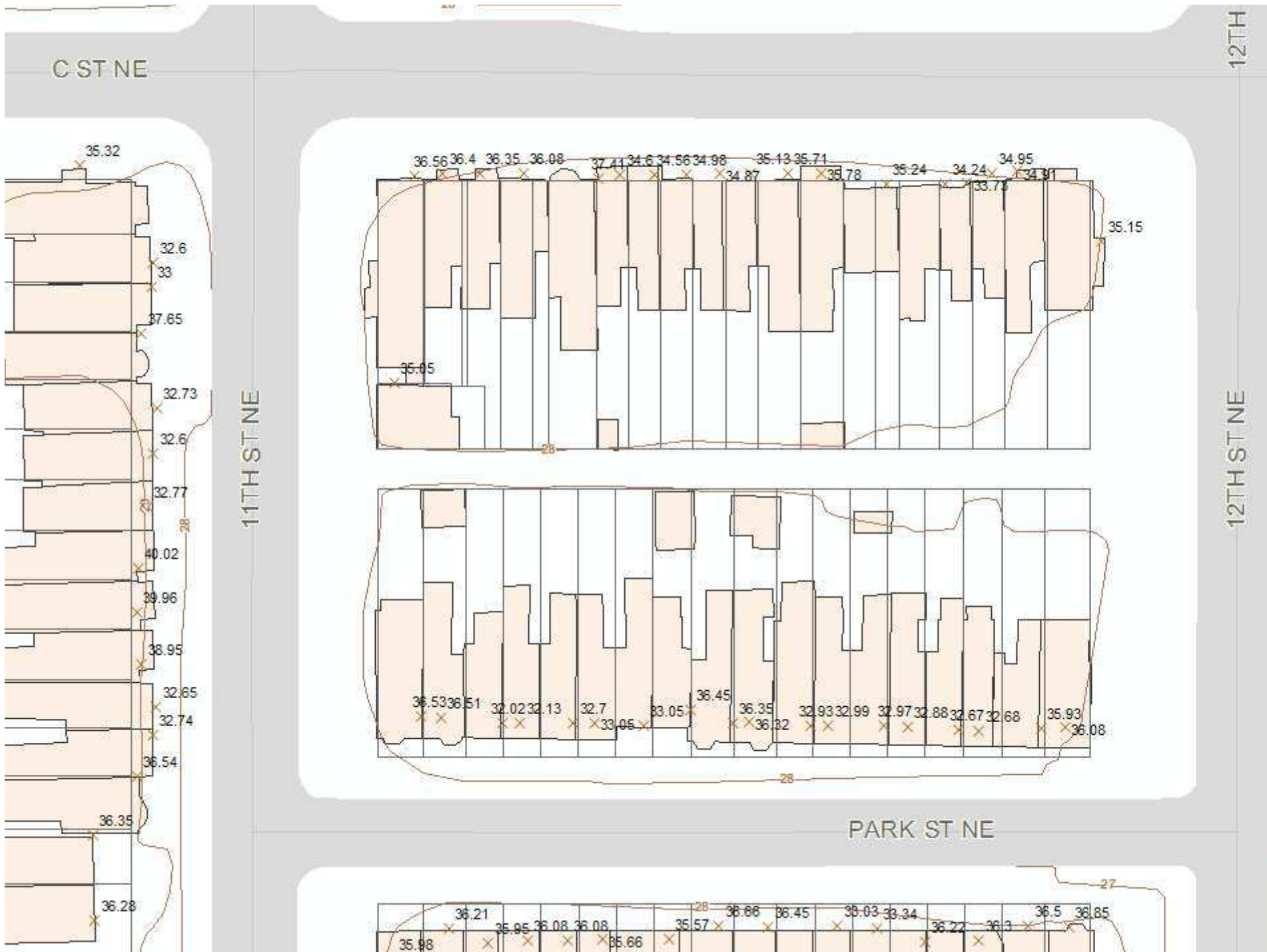
This is Cody Rice from the ANC 6A Economic Development & Zoning Committee.

I was wondering if OP has any data on the average height of existing residential buildings in the low/moderate density residential areas (specifically R4 zoning in Capitol Hill)? We are interested in the potential difference between the by-right height for R4 (3 stories/40 ft) and statistics about height of existing residential stock (mean, median, std dev).

I noticed in looking at the spreadsheet for the building study methodology that there is a field called "height" with a status of "not collected yet." I had also noticed in dcgis.dc.gov that it is possible to look at "roof elevations," but I can't tell if this nets out the underlying elevation.

Any help you could provide would be appreciated.

-Cody Rice



Rooftop Elevations	Topo. Elev	Height Meters	Height - Ft
34.91	28	6.91	22.7
34.95	28	6.95	22.8
35.78	28	7.78	25.5
35.13	28	7.13	23.4
35.71	28	7.71	25.3
36.35	28	8.35	27.4
34.87	28	6.87	22.5
36.40	28	8.40	27.6
36.08	28	8.08	26.5
34.56	28	6.56	21.5
34.98	28	6.98	22.9
34.60	28	6.60	21.6
36.56	28	8.56	28.1
37.41	28	9.41	30.9
33.73	28	5.73	18.8
34.24	28	6.24	20.5
35.24	28	7.24	23.7
35.15	28	7.15	23.5
35.05	28	7.05	23.1
36.45	28	8.45	27.7
36.53	28	8.53	28.0
36.51	28	8.51	27.9
36.32	28	8.32	27.3
32.02	28	4.02	13.2
36.35	28	8.35	27.4
32.70	28	4.70	15.4
32.13	28	4.13	13.5
33.05	28	5.05	16.6
32.97	28	4.97	16.3
33.05	28	5.05	16.6
32.93	28	4.93	16.2
32.99	28	4.99	16.4
32.88	28	4.88	16.0
36.08	28	8.08	26.5
35.93	28	7.93	26.0
32.67	28	4.67	15.3
32.68	28	4.68	15.4

22.16 Mean (Avg.)
27.39 Mode
22.89 Median
5.04 Std. Dev