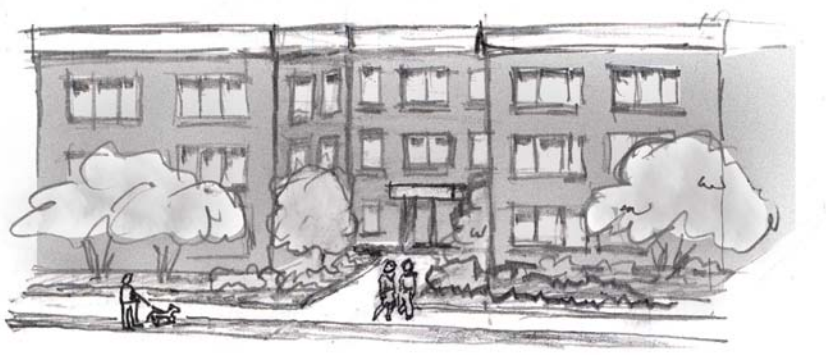
City of Seattle
Seattle Planning Commission



Discussion Papers on the Proposed Multifamily Code Update

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The Seattle Planning Commission has reviewed and made recommendations about the proposed changes to the multifamily code since the project was initiated in 2005. While the proposed legislation is a step in the right direction, it is a more tentative step than initially envisioned.

The enclosed discussion papers identify areas where the Commission encourages the revisions to the Multifamily Code to go further suggesting areas where the code could do more to meet the city's Comprehensive Plan goals, promote better design, encourage affordable housing and make the code easier to use.

Coming Soon!

The Planning Commission is working on discussion papers for the following topics:

- **Townhouses & Unit Lot Subdivision** – Limitations on long-term development potential; joint use and maintenance; design implications; skirting of SEPA, sidewalks, alleys

- **Administrative Design Review** – Reviewing proposed legislation

- **Residential Amenities** – Requirement too high; doesn't reflect different types of units/households

PARKING IN MULTIFAMILY ZONES

Support for proposed changes related to parking

The Planning Commission supports all five proposed parking changes to the Multifamily Code proposed by DPD. We strongly endorse the elimination of minimum parking quantities in urban centers and station areas. We also strongly endorse the reduction to 1.0 stall per unit outside of urban centers and station areas. We agree with the analysis given in the Director's Final Report.

Seattle's Comprehensive Plan recognizes that the Land Use Code regulates off-street parking, which is generally provided by the private sector. The Plan notes that the "quantity, design and location of parking closely relates to the general use of land and has a strong influence on the scale, shape and cost of development." Goals and polices of the Plan call for regulations that reduce dependence on automobiles. The proposed changes support these goals and policies.

DPD's Recommendations

- Require one parking space per dwelling unit in all multifamily zones outside of urban centers and Light Rail Station Areas.
- Eliminate minimum parking requirements in multifamily zones in urban centers and Light Rail Station Areas (to match requirements for multifamily uses in commercial zones).
- Eliminate the ability to require more parking in Light Rail Station Areas pursuant to SEPA.
- Maintain the requirement for one bicycle parking space for every four dwelling units (adopted as part of the commercial code changes).
- Allow reductions in required parking when transit and alternative transportation is available (would apply to multifamily use whether in multifamily or commercial zones).

Commission recommendation for additional code changes related to parking

The Planning Commission asserts that additional changes to the Multifamily Code would do even more to meet Comprehensive Plan goals and policies related to parking. We recommend one further change:

- Eliminate parking design regulations when parking is provided voluntarily.

Eliminate parking design regulations when parking is provided voluntarily

In this case, the existing regulations that govern parking in multifamily zones are found in SMC 23.15.015, which prescribes the minimum quantities of parking stalls to be provided, and in SMC 23.54.030, which sets forth the standards for parking stalls, including the required dimensions of the various sizes of parking stalls (small, medium, large), the associated widths of the drive aisles, and the required mix of sizes, as well as the required widths of driveways.

Currently, the Design Review process does not allow for relief from the parking quantity requirements of 23.54.015. Developers may seek relief from the parking space standards of 23.54.030, by applying for a departure within the Design Review process; we do not believe that this should be necessary.

Ultimately, minimum parking stall dimensions are used to enforce compliance with the parking stall quantity requirement, when there is one, i.e. outside of urban centers and station areas. For example, suppose a parking structure has columns 25 feet on center. Such a structure could have three 8-ft stalls within each bay; but a developer seeking to build less than the required parking quantity could claim four 6-ft stalls in the same space.

The minimum stall dimensions are a means to determine compliance with the quantity requirement. Beyond that, we see no purpose grounded in public health, safety or welfare. Where parking is provided voluntarily, there is no reason to regulate the sizes of the stalls or the mix of different stall sizes. Where minimum parking quantities do not apply, developers should be free to design their parking facilities to accommodate the sizes of vehicles they

anticipate now and in the future, just as they are free to determine the number of vehicles they plan to accommodate.

Regulations concerning parking facilities supplied voluntarily should remain where they implement a valid public purpose. These could include regulations related to traffic safety, such as driveway width. Curbcuts should remain regulated as a means to preserve on-street parking and to enhance pedestrian safety. Lastly, the dimensional requirements for handicapped-accessible stalls should remain.

We recommend that parking space standards be eliminated in all zones, city-wide, where parking is provided voluntarily. The primary change to the code is as follows:

> **SMC 23.54.030 Parking space standards.**
> On lots subject to this Code, ~~all~~ parking spaces required by Section 23.54.015, and required barrier-free parking, ~~provided must~~ shall meet the following standards. Parking provided in excess of the any required ~~-~~quantity shall comply with 23.54.030. D [Driveways], F [Curbcuts], and G Sight Triangle].~~whether or not the spaces are required by this Code~~:

HEIGHT IN MULTIFAMILY ZONES

Commission recommendation for additional code changes related to height

The Planning Commission proposes additional code changes to the Multifamily Code could do more to improve design flexibility, transition between zones and make the code easier to use. We recommend two further changes:

- Restore 30 foot height limits in LDT, L1 and L2; restore 37 foot height limits in L3 zones.
- Allow height to be measured by an alternative method subject to Design Review.

Height limits in lowrise zones

While the current code was adopted in 1982, it was revised in 1989 and height limits in the Lowrise zones were reduced. In zones LDT, L1 and L2, the limit was reduced from 30 feet to 25 feet, resulting in the anomaly that these thee multifamily zones, intended for more intense development than single family (SF) zones, have a lower height limit lower than the 30 foot limit in the SF zones. In Zone L3, the limit was reduced from 37 feet to 30 feet.

The Commission has consistently endorsed the restoration of the height limits in effect prior to 1989, i.e. 30 feet in LDT, L1, and L2 zones, and 37 feet in L-3. DPD's final report and recommendations explains that height limits "are important to providing an appropriate transition between zones of greater and lesser intensity" and goes on to state:

> A height of 30' to 35' is generally needed to accommodate structures with at least three floors, which is common for townhouse and other multifamily structures, especially with structured parking at ground level. In addition, assessment of recently built projects in L3 zones where there is currently a 35' height limit, when a pitched roof is used, shows that there is more variety in roof designs, both contemporary and traditional. **This also happens to be the height limit allowed in single family zones.**[1] (Emphasis added.)

DPD's draft recommendations, made in 2007[2], included restoration of height limits; the proposed legislation leaves height limits untouched except for certain increases to be granted in connection with affordable housing incentives or pitched roofs. The Planning Commission strongly urges Council to restore height limits to 30 feet for LDT, L1 and L2 zones and 37 feet for the L3 zone. These height limits will provide greater design flexibility, increased livability and improved transitions between zones.

Method of height measurement

Although the proposed legislation does not address the method of height measurement, the Commission strongly urges Council to address this complicated aspect of the land use code. The Commission has consistently recommended that a simpler method of height measurement be adopted, at least as an alternative to the current method, in residential zones. This recommendation could also be extended to commercial zones.

Currently, there are three methods of height measurement in Seattle's Land Use Code. Their applicability depends on location. The following descriptions are somewhat simplified:

1. In Downtown Zones, height is measure from a plane datum, established as the grade at the property line at the midpoint of the street frontage. For sloping sites, the principal street frontage is divided into two or more segments and a plane datum is established for each segment. The height limit is thus a level plane or planes.
2. In the Shoreline Overlay, height is measured from a plane datum, established as the average of the midpoint elevations of the sides of the site. The height limit is thus a level plane.
3. Outside of the Downtown zones and the Shoreline Overlay, height is measured from existing or finish grade, whichever is lower, at all points on the site. Unless the site is absolutely level (a rare occurrence in

[1] DPD's Final Report and Recommendations for Amendments to the Multifamily Chapter of the Land Use Code, p 20
[2] http://www.seattle.gov/dpd/news/20070926a.asp

> Seattle), the height limit is thus a sloping plane, or in some cases a warped surface (a surface of compound curvature). This third method, which we can refer to (for simplicity) as the sloping plane method, is widely regarded, among architects as unnecessarily complicating overall building design, and significantly reducing the ability to provide usable floor area on the building's upper levels. While some additional height is granted on sloping sites, the added height is usually not sufficient to mitigate the difficulty of designing a building, having flat floors and meeting accessibility laws and regulations, on a sloping site with a sloping height limit.

Further, the Building Code uses a single datum, called Grade Plane, for height measurement. Grade Plane is calculated as the average of the grades around the building, a method very similar to that used in the Shoreline Overlay as described above. The result is a height limit which is a level plane. Both the Land Use Code and the Building Code must be complied with. It often happens, therefore, that building height on part of a site is constrained by the sloping limit of the land use code, and on another part of the site is constrained by the level limit of building code.

The Commission has therefore proposed, as a means to achieve code simplification (or "making the code easier to use"), that an alternative, simpler method of height measurement be adopted outside of the Downtown zones and the Shoreline Overlay. Three candidate methods have been suggested, all of which have been described above:

1. The method used in the Downtown zones.
2. The method used in the Shoreline Overlay.
3. The method used in the Building Code.

Each of these uses a single datum (or, downtown on a sloping site, two or more datums) that results in height limits which are level planes.

DPD staff has maintained, in discussions, that adoption of a simpler method such as the Commission has recommended, would result in taller buildings. The Commission has maintained that, as a general rule, the result would not be taller buildings, but rather a redistribution of height on a site: buildings could be taller on the downhill side of a site, but would be shorter on the uphill part of a site.

While origin of the sloping height method is obscure, it can be speculated that its intent is to preserve views in cities, such as Seattle, where the topography is very hilly and views from private residential property are part of the value of much real estate. On the west coast, most cities fall into this category. A cursory examination of the zoning codes of major west coast cities indicates that the sloping height method is used to regulate building height in some cities, while other cites use some form of single datum/flat plane method, and still others use both methods:

The sloping height method, in some form, is used in Vancouver, B.C., Oakland, CA, and San Diego, CA.

The single-datum/flat plane method, in some form, is used in Portland, OR, San Francisco, CA, Berkeley, CA, and Los Angeles, CA. In Portland and Los Angeles, the method used is the same as under their respective building codes.

Both methods are used in Seattle, as described above. In Tacoma, the single datum method is used downtown; the sloping method is used elsewhere.

The Planning Commission recommends that a simpler method of height measurement could be introduced as an option to the current method that would be made subject to the approval of the Design Review Boards, for projects subject to Design Review.

HIGHRISE MULTIFAMILY ZONE

Support for proposed changes related to the highrise zone

The Planning Commission supports some of the proposed changes to the highrise (HR) zone proposed by DPD, including the general intent to maintain the zone standards and requirements. We also support the inclusion of the incentive program that would allow for increased height and density when affordable housing is provided.

DPD's Recommendations supported by the Planning Commission:

- For both MR and HR zones, the height and FAR limits will serve as the principal controls on bulk and scale. The transition to FAR as a bulk control will allow more flexibility in the massing and design of large structures to better adapt them to specific site conditions.
- Base FAR limits are proposed for the HR zone that generally reflects the amount of development currently achievable under existing height and bulk standards.
- Current height limits are retained as base height limits, which can only be exceeded where participation in incentive programs is allowed.
- Update development incentives in Highrise zones. Landmark preservation and public open space improvements are maintained as amenities eligible for a bonus.
- Combined lot provisions are established for the HR zone to allow the transfer of density between lots on the same bock.

Commission recommendation for additional code changes related to the highrise zone

Although the Planning Commission supports the intent behind the proposed changes to bulk and scale regulations, we suggest that additional changes to the HR zone would do more to ensure design flexibility and encourage the development of affordable housing. We recommend the following further changes:

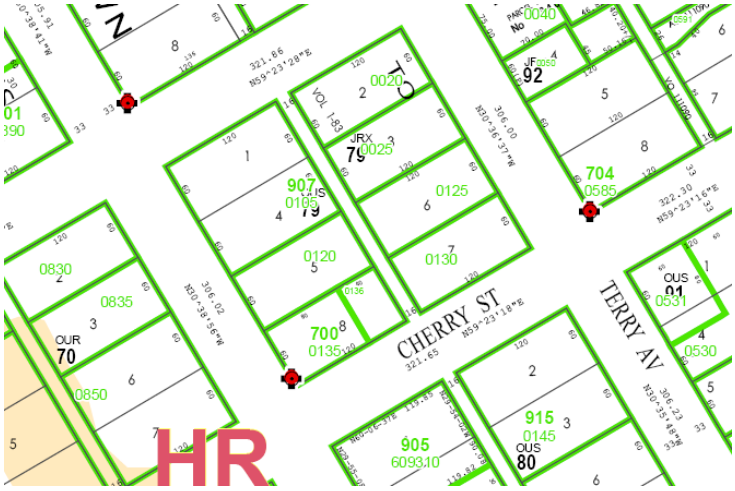
- Rather than using building depth and width controls, use a maximum tower floor plate area criteria in combination with FAR to define and control bulk.
- Establish a more generous incentive for providing 'on site' affordable housing within the project by offering greater FAR and larger floor plate maximums.
- Increase the workforce housing incentive height limits beyond the proposed 300 feet. Adding only 60 feet of height is marginally worth the added time and expense of peer reviewed structural systems over 240 feet tall. We suggest a more significant up-zone to 350 feet subject to 'skinny tower' proportions.
- Establish minimum tower spacing criteria to better buffer adjacent properties, we suggest a bare minimum of 60 feet.
- Eliminate the large amount of bulk from 45-85 foot heights and establish maximum tower floor plates above 45 feet to allow more light and air to the public realm at the street.
- Eliminate side yard setbacks at grade up to 45 feet.
- Reduce front yard setbacks to five feet for residential uses and eliminate them for commercial uses.
- Redefine residential amenity criteria to include interior amenity rooms and all sizes of balconies.
- Encourage full block developments to pursue alley vacations to allow better solar orientation/solar heat gain control by turning the long sides of building to the south rather than the west.
- Rely on design review boards to grant innovation and appropriate departures of the above standards (other than height and FAR) given site specific conditions and improved design and/or public benefits.

Highrise building is clearly unique among the array of multifamily typologies. Beyond height and view blockage, shadowing and wind shear effects combined with the added cost and complexity of structural systems, life safety systems and exterior skins make high-rise worthy of requiring special regulatory consideration. For this reason, the SPC is writing this paper to specifically address development standards for buildings over 85 feet tall, specifically for Seattle's HR zone.

DPD's has proposed many development standard changes for HR zones within the Multifamily Code Update process. The SPC offers the following specific recommendations and adjustments to the proposed legislation.

Block size

Seattle's HR zoning occurs only in the First Hill Area, just east of downtown. Inspection of the platting in this area shows a rigorous pattern of 256' x 240' blocks with 16 foot alleys. Given this consistent pattern any revised or new development standards for HR zone must be tailored to work well for this block configuration in this neighborhood.



Affordability and floor plate sizes

There is a delicate balance between creating affordability and regulating humane bulk and tower spacing that allows reasonable public and resident access to light, air and views. Affordability is directly proportional to construction costs driven by floor plan efficiency and floor plate size. Making a tower floor plate too small may result in higher priced units to cover the additional systems, infrastructure costs and the higher exterior skin to exterior volume ratio. That is why most of Seattle's recent towers are generally 10,700 SF floor plates or larger. This is unlike Vancouver B.C.'s desirable 'skinny towers' of 6,500 to 7,500 SF floor plates. Vancouver achieves this by the use of scissor type exit stairs (not allowed in this state) and fewer elevators to make smaller interior cores. Additionally, Vancouver 'pencil towers' are also subject to less restrictive energy codes, more reasonable construction costs and they build extremely small units compared to the Seattle market. Without significant changes to our codes and marketplace, we will not likely see that small of a tower in Seattle, particularly for affordable housing.

DPDs' proposal calls for maximum tower depths and widths of 110' x 110' (12,100 SF floor plates) with a series of complicated setback criteria. Unfortunately, the block configuration of First Hill will not allow full utilization of this standard with DPD's proposed setbacks:

- ¼ block lots: 90'x 65' = 7,650 SF maximum floor plates
- Larger lots: 90' x 110' = 9,900 SF maximum floor plates

Furthermore, the proposal would actually allow four small towers on a block with just 40-46 feet of spacing continuously between all towers. This is an outcome we do not find likely or desirable. Illustrations in figures 1 and 2 shows a potential outcome of the DPD proposed standards.

DPD's recommendation for a 110' x 110' width and depth (12,100 SF floor plate) is physically unattainable with First Hill's standard block geometry. 90' x 110' (9900 SF) is the most floor plate possible. That is why we recommend reducing the front street side setbacks from 15 feet to no setback for commercial uses and five feet for residential. This is also a more urban scenario. We also do not favor the 'wedding cake' graduated setbacks in the proposal, especially when the increments are so small. We recommend eliminating the limit on width and depth and replace that standard with a maximum floor plate area. We would suggest that 10,700 SF floor plates above 45 feet and up to 240 feet is a good target for meeting the viable needs of the marketplace with respect to this block geometry.

Taking this a step further, we have found that few if any recent Seattle highrise projects are including affordable units on site. For that reason, a greater incentive should be put forward to increase housing diversity in the HR zone. We suggest increasing maximum floor plates and associated FARs to allow up to 13,000 floor plates when 20 percent or more of the units on site are set aside for below median income residents. If projects do not include affordability and choose to write a check for affordability off-site per the proposed incentive program, then those towers should only have a floor plate of 10,000 SF to assure market driven skinny towers. See the massing examples in figures 3 and 4 below.

Increase incentive height limit to 350 feet

The proposed incentive heights increase from 240 to 300 feet is not significant enough to justify the added cost and time for peer-review, which is required of buildings over 240 feet. We suggest that this increase be more significant, 350 feet, yet subject to true 'skinny tower' criteria. Requiring a 9,600 SF floor plate maximum for towers at this height would be a reasonable standard. See the massing example in figure 4 below.

Tower spacing

Tower spacing is a complicated matter as it's currently applied in downtown Seattle on a 'first come first served' basis and does not include spacing from towers built before 2006. Rather than relying on this method, we feel a moderate use of minimal setbacks, FAR and tower floor plate maximums with tower spacing should be studied by DPD to determine an appropriate regulatory standard. The range of 60 to 80 foot tower spacing is generally considered appropriate as an urban minimum to assure light, air and view through and between buildings for both residents and the public beyond the project. Given the geometry of small blocks on First Hill, 60 foot minimum spacing is acceptable.

Bulk up to 85 feet

DPD's proposal also allows considerable bulk dimensions below 85 feet. This encourages 'bread loaf' massing and defeats the concept of spaced towers allowing light and air at the street level. We recommend podium portions of towers be limited to 45 feet. This allows a four story street wall. Massing above 45 feet will be subject to the floor plate limits mentioned above. Graduated setbacks are not necessary or desirable, especially when the proposed increments are so small.

Residential amenities

DPD's proposal requiring that five percent of the gross floor area be used for residential amenities, all of which must be outside or on an enclosed roof, may be reasonable on less intense multifamily zones, but in HR with smaller floor plates and very limited ground planes, some greater flexibility of this standard is necessary. Small floor plates mean smaller roof areas. High rise mechanical equipment, elevators and stairs take up significant amounts of roof area and high winds make these locations unsuitable for outdoor roof gardens. We suggest that all interior common amenity rooms be included in this requirement and that balconies of any size (not just those 6'x10' or larger) be counted in this calculation. Otherwise a smaller percentage for HR open space should be implemented.

Side yard and alley setbacks at-grade

The 7' side yard setback in the DPD proposal is unnecessary at-grade on urban sites with high-rise proportions. A base podium of up to 45' tall massing should be allowed to build to the property line without an essentially trivial side yard setback where the sun will likely never shine. The alley side also does not need a setback for the first floor, other than the typical 2' city addition to both sides of 16' wide existing alleys in urban centers and downtown.

Alley vacation and solar orientation

Another issue concerning the First Hill block geometry is the orientation of the longer faces of rectangular buildings is toward the intense southwest sun. To offset this heat gain problem, alley vacations or re-direction of alleys on whole block projects should be encouraged for whole block developments. This was done at the "Skyline at First Hill" project recently built with considerable design review departures.

Conclusion

The consequences of not establishing appropriate tower spacing and bulk regulation has been demonstrated by built projects in Belltown and the Denny Triangle. This is exemplified by the Cosmo/Schnitzer projects on Ninth and Virginia where only 18 feet separates a 300 foot tower from a 400 foot tower. The opportunity in the HR zone is unique as the height limits with incentives are significant. If the concepts discussed here are implemented, these regulations will help accomplish an appropriate scaled neighborhood with reasonable sized market rate residential towers, as well as economically more viable affordable towers. The outcome should result in better affordability and better livability through access to light and air and reasonable street wall height dimensions.

Rebalancing appropriate FAR targets with the floor plate maximums, tower separation and setbacks suggested above will need to be researched further by DPD staff. We suggest undertaking a series of case studies on specific First Hill opportunity sites on will show these new standards yield more welcome results.

Fig. 1: Four Towers per block – crowded, economically too skinny, but allowed in DPD proposal

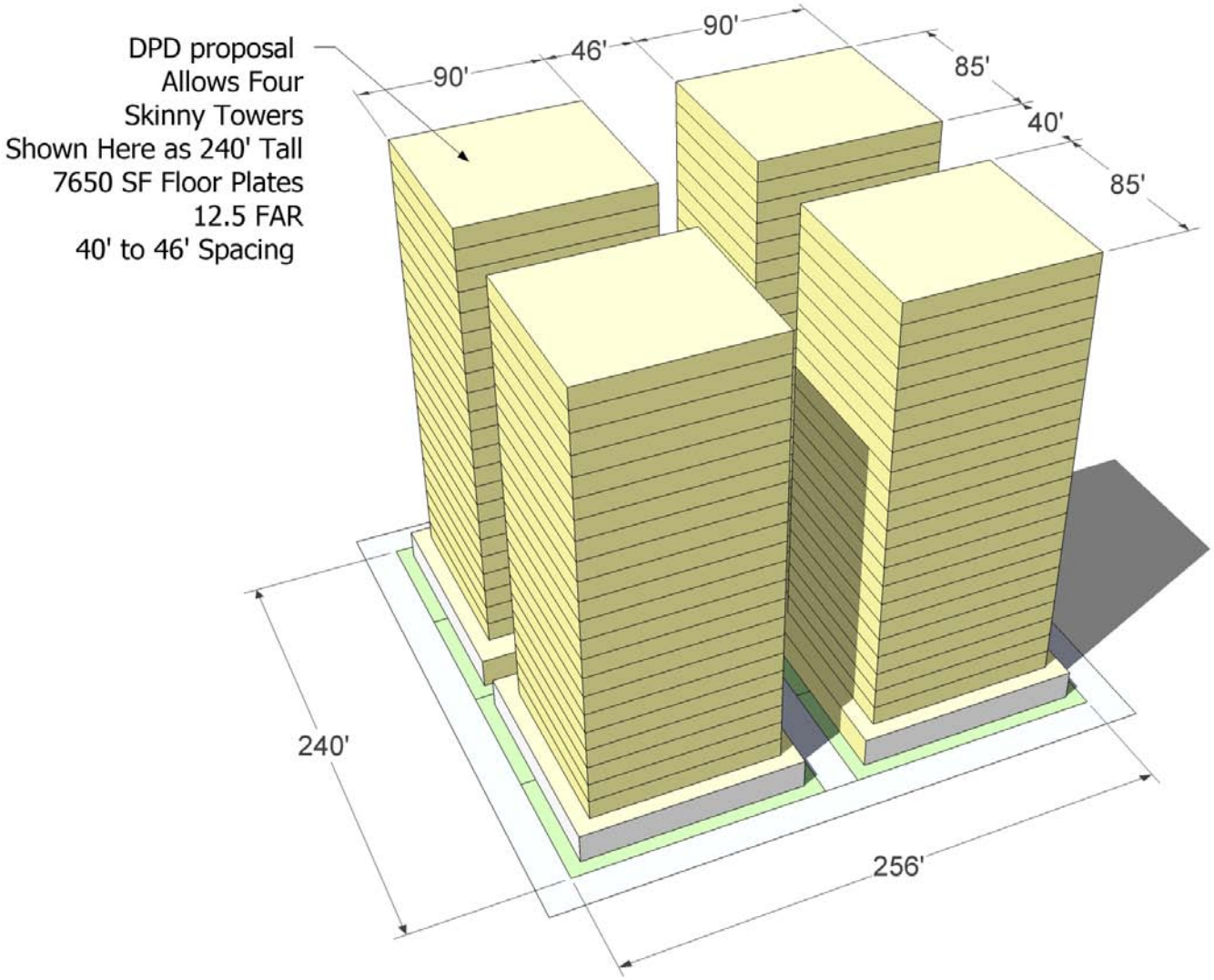


Figure 2: DPD Proposal: two towers on half block sites – overly bulky bases

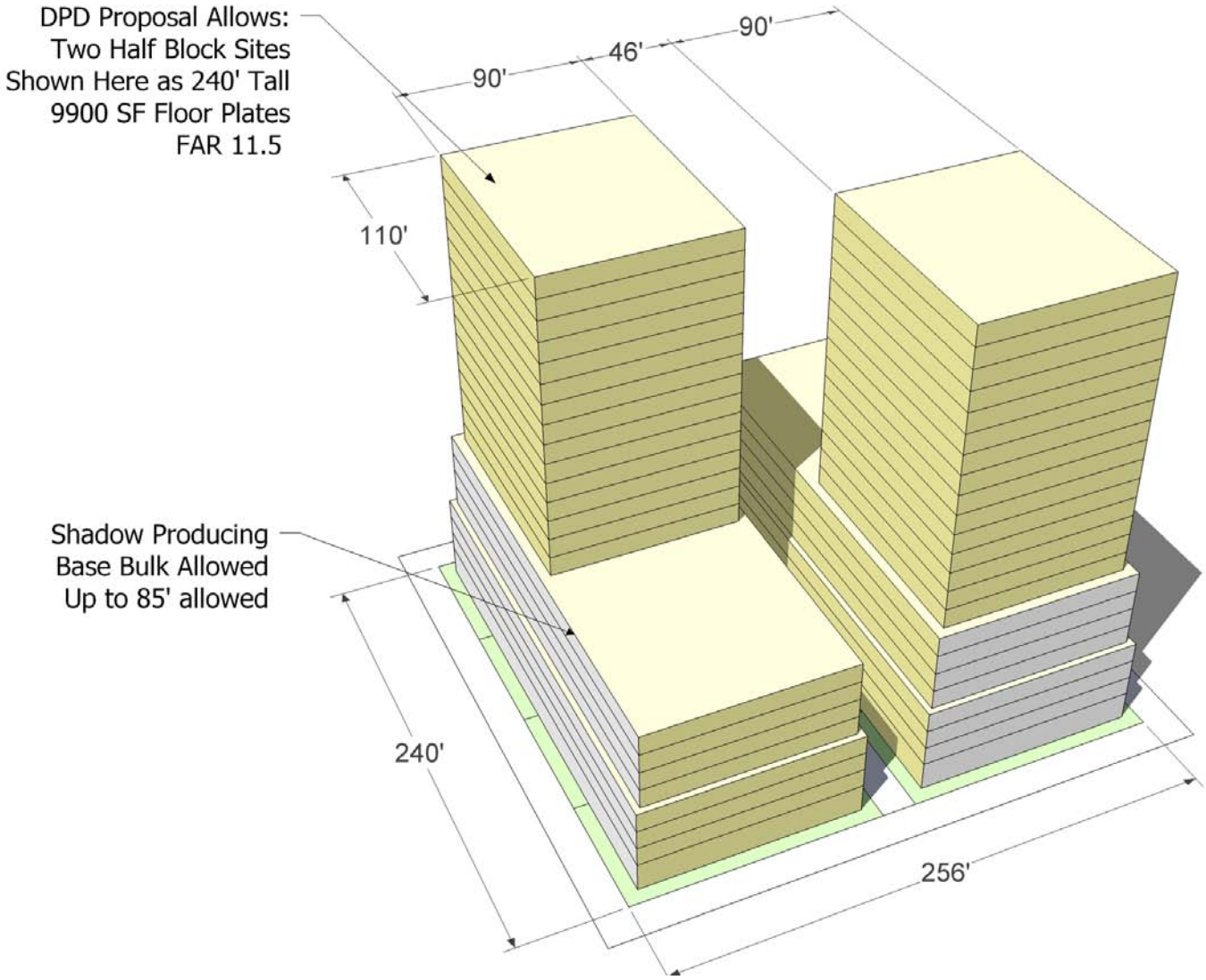


Figure 3: SPC Suggested- 2 towers per block, 60' Min. Separation, Maximum Floor plates of 13,000 SF when 20% of units are affordable.

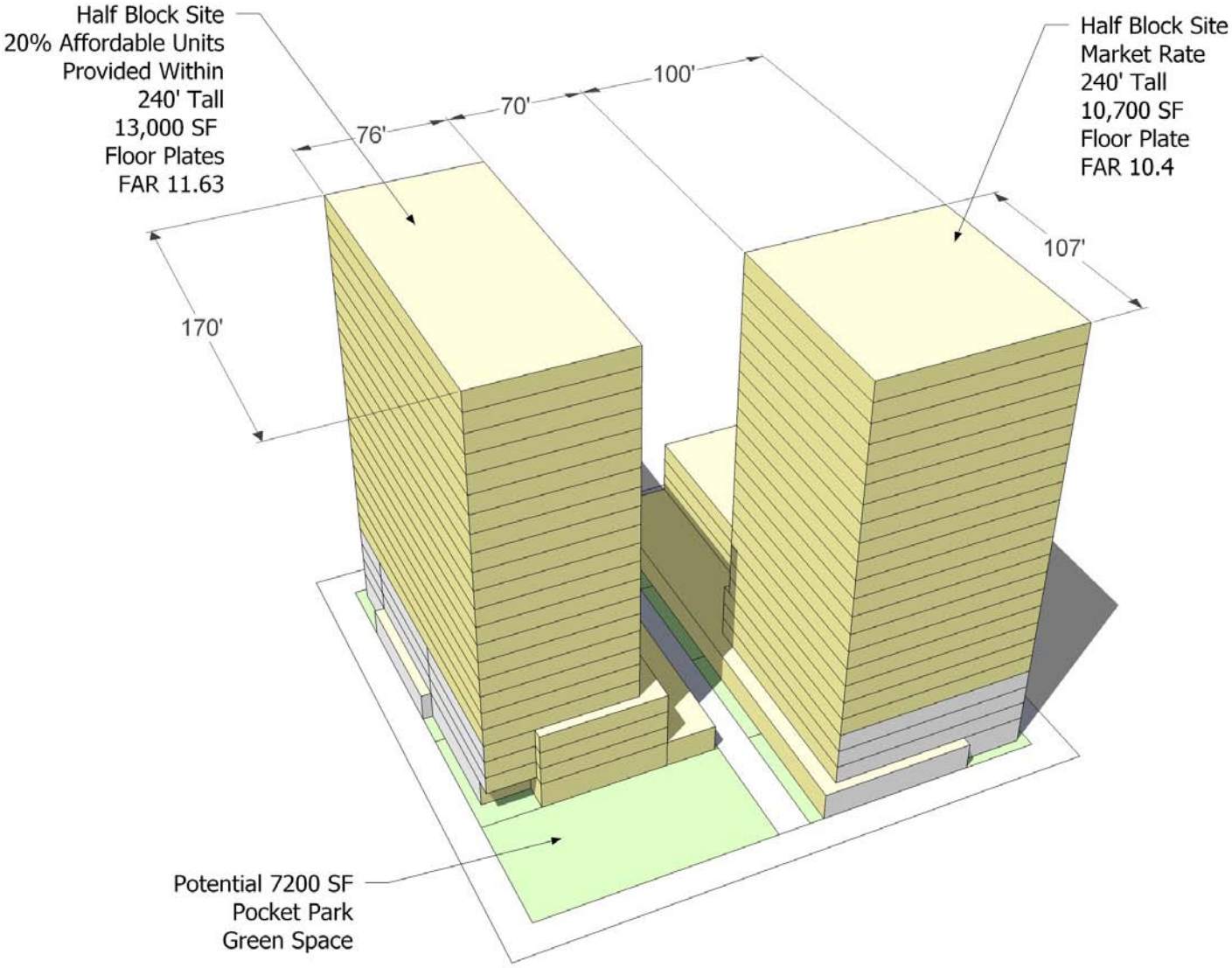
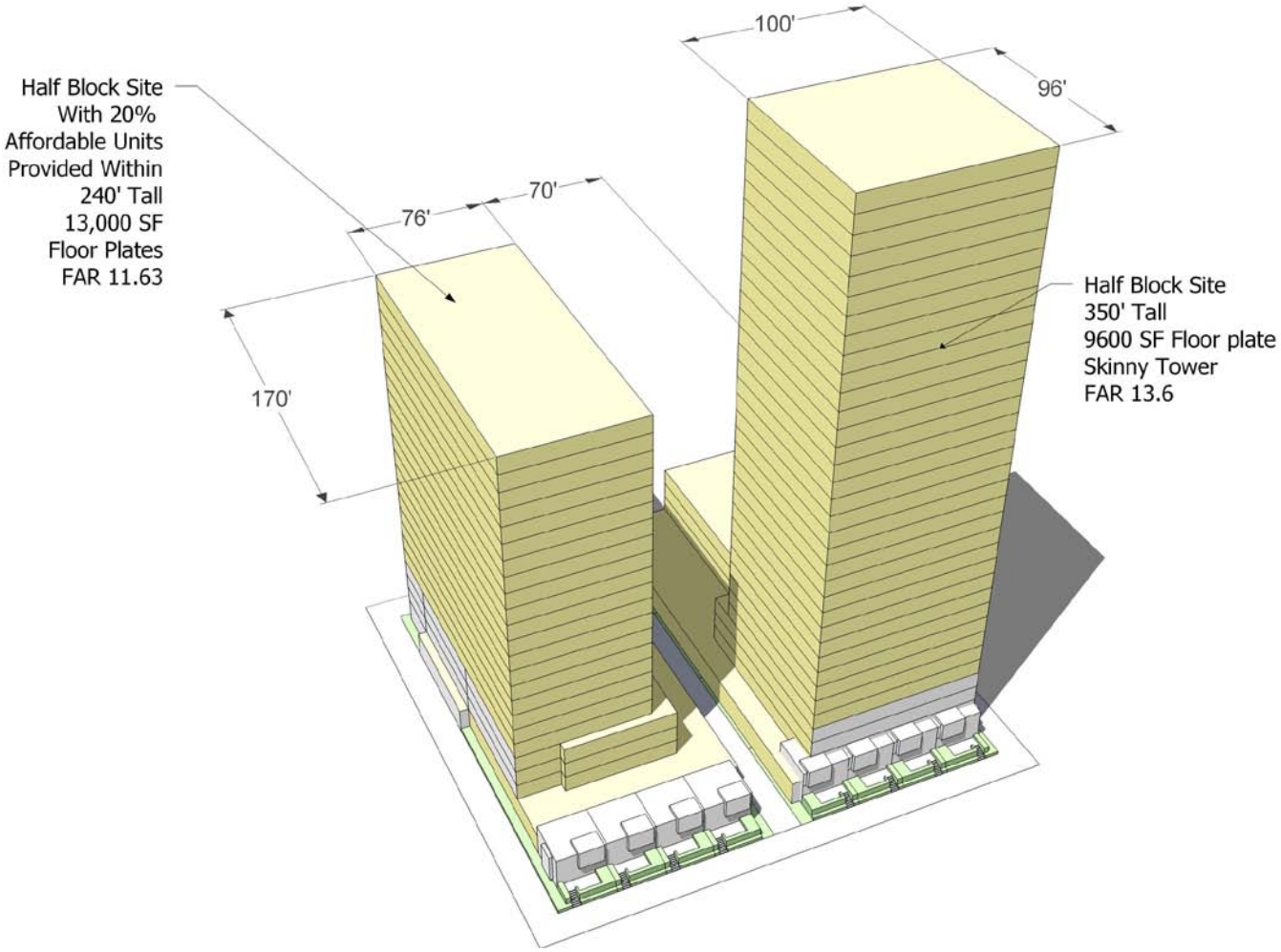


Figure 4: SPC Suggested - 2 towers per block, 60' min. separation, one larger/affordable and one skinny tower, market driven with350' height.



GREEN BUILDING IN MULTIFAMILY ZONES

Support for proposed changes related to Green Building

Multifamily homes that lie within the urban boundary are inherently more sustainable than single family homes constructed on formerly vacant land in suburban or rural areas. The benefits of multifamily housing are compounding: units are typically smaller than free-standing homes, resulting in lower embodied energy and CO2 emissions; lower energy consumption for heating and cooling; and lower vehicle miles traveled by residents because more residents within an area provide greater support for frequent transit service and for retail and other services within walking distance. The introduction to the Final Report and Recommendations to the Amendment to the Multi Family Chapter of the Land Use Code recognizes the link between multi-family housing and sustainability. Pairing green building strategies with multifamily housing further compounds these benefits, for both residents and the community as a whole.

The Planning Commission supports the proposed the recommendation to require green building certification when floor area is added above base height or FAR through incentives for affordable housing for new construction in L3, MR and HR zones in eligible areas. The linking of sustainability with affordable housing is commended as green design's emphasis on energy and water use reduction will help reduce ongoing operating costs and the strategies for improved indoor environmental quality and healthy building materials should be available for all residents. Several studies, including those by DPD's green building department, show that green buildings at the certification levels required to meet this incentive do not necessarily cost more to construct, so this requirement is not a disincentive to providing affordable housing.

The Planning Commission agrees that third party verification is critical to the enforcement of this requirement and supports the changes to the development standards to allow for green building features.

DPD's Recommendations[3]

Require a green building certification when floor area is added above either base height or FAR limits through incentives for affordable housing for new construction projects in L3, MR and HR zones in eligible areas. The proposal will allow applicants to select the most appropriate green building rating system for their project. Acceptable rating systems are:

- Built Green™ Single Family New Construction *(4 Star rating or better)*
- Built Green™ Multi-family *(4 Star rating or better)*
- LEED™ for Homes *(Silver rating or better)*
- LEED™ for New Construction *(Silver rating or better)*

Allowances for Green Building Features[4]

- Allow up to 2' of additional height to accommodate a green roof that occupies at least 50% of roof area
- Allow solar collectors no more than 4' height to be located on the mechanical penthouse in LDT and L zones and not more than 7' in MR and HR zones
- Allow horizontal wind generators to extend 10' above the height limit in multifamily zones and except them from roof top coverage limits
- Allowance of extra height for elevator penthouse up to 16' above height limit to accommodate requirements of energy efficient elevators

Commission recommendation for additional code changes related to Green Building

The Planning Commission proposes additional changes to the multifamily code that would further reinforce the Comprehensive Plan goals and polices related to green building and climate change and the green building rating system standards and enforcement of this recommendation:

- Addition of the Evergreen Sustainable Development Standard and other programs providing third party verification to list of acceptable program for this requirement

[3] DPD's Final Report and Recommendations for Amendments to the Multifamily Chapter of the Land Use Code, p 39
[4] IBID, p 22, 23

- Enforcement of the green building condition
- Additional development standards to allow for green building features

Evergreen Sustainable Development Standard (ESDS)

Since the green building requirement is attached to the incentive for affordable housing, it would make sense to add the Evergreen Sustainable Development Standard to the list of acceptable rating systems. It has been developed by the State to set a minimum level of sustainable performance for projects that will use Housing Trust Funds (HTF). New construction projects are required to achieve a minimum of 50 points out of a possible 70. All projects must meet the applicable mandatory criteria. The program provides third party verification of performance with on-site evaluation of conformance.

Enforcement of the Green Building condition

In order to achieve the maximum benefit of green design and reduce the potential costs, green strategies should be designed into the project from the earliest phases. Requiring only a letter of intent at the Master Use Permit phase is not a strong enough enforcement tool to make sure the project is on track for certification and rather late to encourage this early design thinking. In addition, the penalty for non-conformance should be substantial enough to provide a disincentive to paying the penalty in lieu of delivering a green building certified to the required level. The Planning Commission suggests that sustainable development standards be considered through the initial zoning application review. We suggest that applicants use a checklist from one of the acceptable rating systems to illustrate their intent to achieve the necessary standard. This would ensure that smaller projects that do not require a MUP would be able to achieve green building standards without the additional time and cost of a discretionary review process.

Additional allowances for Green Building features in development standards

- In order to support energy conservation, allow encroachments into setbacks in all zones for fully functional fixed solar/sun shading devices, so that a depth required to adequately shade windows is encouraged. When abutting a public right of way such as a road or alley, sunscreens should be allowed to the property line in LR and MR zones. In HR zones, they should be allowed to overhang the property lines abutting public rights of way. On other internal property lines, the building code setbacks should dictate- if made of non-combustible material, then they may go to the property line. The exception would be if the site immediately abuts single family. These solar shades should not be counted in building coverage. They should also be considered as part of the building modulation requirements.
- Similarly, to encourage energy conservation, allow the outer skin of a double skin wall to encroach into setbacks and not count towards building coverage. Because of the cost, double skin walls are most likely to be used on larger projects that would be subject to Design Review.
- To support energy conservation in buildings, allow FAR zoning without setback restrictions as this provides more flexibility to shape the building adequately for energy conservation, sun exposure and ventilation.
- In order to encourage water conservation, rainwater catchment and re-use, allow encroachments into setbacks for rainwater cisterns and do not count these towards coverage. When cisterns are on the roof, allow them to exceed the height limit by 10-15 feet and do not include them in FAR calculations.
- In order to support local food production, allow 10-foot height increase beyond the height with incentive, for roof top green houses in MR and HR zones when used for on-site p-patches and vertical farming. Do not limit floor area size of roof top green houses and do not include them in FAR calculations. Similar to the Green Factor, this would also be an area where long-term enforcement will be important to ensure that sustainable features are maintained and provide the benefits for which they were approved.
- Sloped roof requirements for height bonus in L Zones are a disincentive to green roofs. Green roofs function best on slopes less than 1.5 in 12. The cost of green roofs, combined with the reduction in floor area without the sloped roof height bonus makes it highly unlikely that green roofs will be implemented in the L-zones.
- The sloped roof height bonus requirement in L zones complicates rainwater collection. The roof pitches will inevitably go in multiple directions and will require multiple points for rainwater collection. Allowing options for shed roofs would simplify rainwater collection.

GREEN FACTOR IN MULTIFAMILY ZONES

Support for proposed changes related to the Green factor

The Seattle Planning Commission has long been an advocate for innovation and sustainability. When the Green Factor was initially introduced, as part of changes to the Commercial Code in 2006, we expressed support for the intent to move toward a performance based standard for landscaping requirements. Under the proposed change to MF zones, landscaping and screening standards would be replaced with a requirement for environmentally-beneficial landscaping.
SPC supports two of DPD's proposed the recommendations related to the Green Factor.

DPD's Recommendations[5]
Require a green building certification when floor area is added above either base height or FAR limits through incentives for affordable housing for new construction projects in L3, MR and HR zones in eligible areas. The proposal will allow applicants to select the most appropriate green building rating system for their project. Acceptable rating systems are:

- Built Green™ Single Family New Construction *(4 Star rating or better)*
- Built Green™ Multi-family *(4 Star rating or better)*
- LEED™ for Homes *(Silver rating or better)*
- LEED™ for New Construction *(Silver rating or better)*

Allowances for Green Building Features[6]

- Allow up to 2' of additional height to accommodate a green roof that occupies at least 50% of roof area
- Allow solar collectors no more than 4' height to be located on the mechanical penthouse in LDT and L zones and not more than 7' in MR and HR zones
- Allow horizontal wind generators to extend 10' above the height limit in multifamily zones and except them from roof top coverage limits
- Allowance of extra height for elevator penthouse up to 16' above height limit to accommodate requirements of energy efficient elevators

Commission recommendation for additional code changes related to the Green Factor

The Planning Commission recognizes that the Green Factor scoring system has been recently revised in light of a preliminary audit of permitted projects that have met this requirement. Nevertheless, many of the Commission's initial concerns about this regulation remain. The items below outline these concerns.

- Enforcement tools should be identified for the long-term maintenance of Green Factor landscaping. Without a mechanism to ensure that Green Factor elements are properly maintained, there is no way to determine whether the intended environmental and aesthetic benefits will be realized or remain over time

- The Green Factor should be scaled to the level of intensity of the zone. Similarly, corner lots have greater ROW opportunities for achieving Green Factor requirements and should be treated differently than interior lots.

Additionally, the Commission believes that the proposed factor of 0.6 is too high. The points below address specific Green Factor 'elements' that are problematic for a variety of reasons and ultimately make the 0.6 factor untenable in Multifamily zones.

- Green roofs are not readily compatible with wood structure buildings and would be cost-prohibitive in lowrise zones.

- Bioretention features are space consumptive. Rain gardens must be at grade and connected to the subgrade soils. Planters that collect and treat storm water eventually release to a piped storm system and neither features work well with below surface parking structures.

[5] DPD's Final Report and Recommendations for Amendments to the Multifamily Chapter of the Land Use Code, p 39
[6] IBID, p 22, 23

- Preservation of existing large trees, while desirable, may not be possible at many sites particularly when setbacks are narrow.

- Green walls present a significant maintenance challenge, particularly without a strong enforcement mechanism. In addition to the potential negative visual impact during the winter, vegetated walls can attract rodents and other pests that could discourage owners from maintaining these elements. Green walls can also limit access to building facades and encourage the installation of unnecessary perimeter fences.

- Water features require significant amounts of space and would be of limited potential for small lots.

- Permeable paving must be at grade above soils with infiltration characteristics; many sites in Seattle do not have soil that meets this standard and would have to be modified prior to achieving this standard. Additionally, permeable paving does not work well with below-grade parking.