

**MEMORANDUM**

**TO:** District of Columbia Zoning Commission  
**FROM:** *JL* Joel Lawson, Associate Director, Development Review  
Jennifer Steingasser, Deputy Director, Development Review & Historic Preservation  
**DATE:** January 11, 2021  
**SUBJECT:** ZC Case 14-13E – Public Hearing Report for Proposed Zoning Text Amendments to Penthouse Regulations

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**I. RECOMMENDATION**

The Office of Planning (OP) recommends that the Zoning Commission approve the proposed amendments to the zoning regulations as advertised in the Public Hearing Notice, intended to clarify, simplify, and strengthen various definitions and regulations regarding penthouses and roof structures.

**II. BACKGROUND**

In Zoning Commission Case 14-13, the Zoning Commission approved a series of amendments to penthouse and roof structure related provisions in the zoning regulations. These amendments were partially in response to changes made to The Height Act, although the zoning regulations cannot permit anything that would not be permitted under the Height Act, and the more restrictive of the two would continue to be applicable to any development proposal. Other changes include ones to reorganize, simplify and update the provisions.

At the time the original amendments were adopted, OP advised that the new regulations would be monitored over time, and further amendments proposed as needed. Various issues with the new regulations were subsequently identified by the Commission, members of the Board of Zoning Adjustment (BZA), staff of the Office of Planning (OP), the Department of Consumer and Regulatory Affairs (DCRA), and other agencies; and members of the public.

In response, OP initiated this text amendment with a set-down report (Exhibit 2) received by the Commission at its January 27, 2020 public meeting. OP worked closely with the Zoning Administrator (ZA), Department of Housing and Community Development (DHCD) staff, and the Office of the Attorney General (OAG) to draft and bring forward the proposal. A review of the penthouse related regulations, analysis of requests for relief from the provisions, and the issues raised and analyzed to that time was provided.

A supplemental report was filed at Exhibit 3, providing additional data requested by the Zoning Commission, and proposing additional amendments to the text, principally to no longer recommend permitting by right a stairwell/storage penthouse on the roof of low density residential buildings above the permitted building height, but rather to retain the existing special exception requirement. The case with the revised text amendments was set down for a public hearing at the Commission's February 24, 2020 public meeting. At the meeting, the Commission raised additional issues and requested additional information.

In this report, OP is not proposing substantive additional changes to the proposal, although refinement to solar panel permissions on low density residential buildings are proposed in response to Commission questions at setdown. Further discussions with staff of various agencies, including DCRA, OAG, DOEE, and DHCD did not result in substantive additional changes to the text. Rather, agencies generally expressed a desire to have the proposed amendments move forward and be adopted as soon as possible. This report also includes input from by Commissioner Eckenwiler of ANC 6C04 and another member of the public who contacted OP with questions about the proposal and suggested changes.

A copy of the proposed amendments is provided as Attachment III. It is based on the text as advertised in the public hearing notice but incorporates the minor additional amendments proposed since then, with all amendments highlighted. For reference, a partial “clean” copy of the text is provided as Attachment IV.

### III. SUMMARY OF ZONING COMMISSION COMMENTS FROM THE FEBRUARY 24, 2020 SETDOWN MEETING

ISSUE	RESPONSE	Proposed Provision
Clarify that a setback for a penthouse from a side is required from a street, alley, or other public space	A setback from a street, alley, or public space for an enclosed penthouse would remain to be required. A setback from the side wall is also required in some other instances, such as if the side of the building itself is set back from the side lot line.	C § 1504.1 provides proposed setback requirements including for a penthouse; C §§ 1504.2-.4 provide that specific rooftop elements would not be required to provide a 1:1 setback.
Clarify proposed setback requirements for a rooftop guardrail from a side building wall if facing a street	Under this proposal, a guardrail would not be required to be setback from a typical interior side wall; a guardrail would be required to be setback from any side wall facing a street or public park.	C § 1504.3(a)
Clarify proposed setback requirements for solar panels, particularly from the front, or from a side facing a street or public space	Following additional discussions with DCRA and DOEE, OP has proposed a refinement of the solar panel regulations, discussed in detail below.	C § 1504.2(d) and (e) Refer to Section IV. B (i) below for additional analysis and illustrations
Provide photos of existing solar installations on houses, or do photo simulations	See Section IV. B (i) below for a description of the proposed solar panel provisions and photographs and illustrations of typical rooftop installations.	C § 1504.2(d) and (e)
Provide additional diagrams showing: <ul style="list-style-type: none"> <li>• Special exception if above permitted height but by-right if below permitted height.</li> <li>• Rooftop structures on two and on three story rowhouses</li> </ul>	Illustrations in the form of plans and eye-level renderings for various scenarios of penthouse additions on rowhouses have been prepared and will be submitted separately as Appendix V to this report.	

#### **IV. PROPOSED TEXT AMENDMENTS AND OP ANALYSIS**

As described in the previous OP reports, the OP proposed amendments are intended to make the regulations more targeted and effective, and easier to understand and administer. They include proposed amendments to add or amend definitions in Subtitle B, to substantially reorganize Subtitle C Chapter 15, Penthouses, and to clarify and modify the current regulations. Some amendments are intended to further encourage progressive energy efficiency elements (green roof, solar panels), a high priority for DC, while others are intended to ensure a more equitable and effective affordable housing linkage requirement. Many of the penthouse provisions would remain substantively unchanged.

OP has also continued to coordinate with other agencies, particularly DCRA, DHCD, and OAG. Additional coordination with DOEE and DCRA regarding solar panels was also undertaken.

OP has also been monitoring the penthouse provisions since they were first adopted in 2015, with analysis of BZA and Zoning Commission cases which included penthouse relief provided in the first two OP reports. OP conducted additional cursory analysis of BZA cases during 2020, and did not find a significant deviation from that previous analysis, although there was a higher percentage of cases requesting special exception relief for a rooftop eating or drinking establishment (4 cases). In a total of thirteen cases, the most common form of relief remained for setback from a side building wall, with 8 cases (over 60%) requesting this relief.

A blackline version of the proposed text is provided at Attachment III, which also highlights additional proposed changes since publication of the Public Hearing Notice. A “clean” version of portions of the text, including relevant portions of Subtitles B and C (including all of Chapter 15) is provided as Attachment IV.

##### **a. ISSUE RAISED SUBSEQUENT TO THE ZC SETDOWN MEETING BUT PRE-PHN**

Subsequent to setdown, members of the public noted an inadvertent issue with proposed wording changes to Subtitle C §§ 1001.5 and .6. The changes were intended to apply the housing linkage requirement for habitable penthouses on certain forms of buildings, but also would have exempted a Continuing Care Retirement Community from the Inclusionary Zoning program. Many such facilities do offer fully independent living units for seniors, to which applying the IZ program is appropriate. As such, OP worked with OAG to amend this text for the Public Hearing Notice – largely to revert language back from what was proposed to what is existing in the regulations.

##### **Current text:**

1001.5 Except for new penthouse habitable space as described in Subtitle C § 1500.11, the requirements of this chapter shall not apply to hotels, motels, or inns.

1001.6 The requirements of this chapter shall not apply to:

...

- (b) Boarding houses, assisted living facilities, community residence facilities, youth residential care homes, substance abusers’ homes, community based institutional facilities, or single room occupancy projects within a single building;

##### **Proposed at setdown:**

1001.5 Except for new penthouse habitable space as described in Subtitle C § 1507, the requirements of this chapter shall not apply to hotels, motels, inns, **Boarding Houses,**

**Continuing Care Retirement facility, or single room occupancy projects within a single building.**

1001.6 IZ requirements of this chapter shall not apply to:

...

- (b) ~~Boarding houses, assisted living facilities,~~ Community residence facilities, youth residential care homes, substance abusers' homes, or community based institutional facilities, ~~or single room occupancy projects within a single building;~~

...

**As advertised in the Public Hearing notice**

1001.5 None of the requirements of this chapter except for Subtitle C § 1507 shall apply to hotels, motels, inns, **boarding houses, and single room occupancy projects within a single building.**

1001.6 The requirements of this chapter shall not apply to:

...

- (b) ~~Boarding houses,~~ Assisted living facilities, community residence facilities, youth residential care homes, substance abusers' homes, or community based institutional facilities, ~~or single room occupancy projects within a single building;~~

**b. PROPOSED CHANGES TO TEXT ADVERTISED IN THE PUBLIC HEARING NOTICE**

Below is a summary of proposed amendments to the wording contained in the Public Hearing Notice. The first is an OP response to a question raised by the Zoning Commission at setdown regarding solar panels. Others were suggested by an ANC Commissioner and are detailed refinements or clarifications of the text that do not significantly impact the intent or substance of the provisions.

**i. Subtitle C § 1504.2 (d) – Solar Panels**

Commission members requested that OP continue to examine regulations pertaining to rooftop solar panel systems, and to continue discussions with DOEE staff. OP discussed solar panels further with DOEE and the DCRA solar coordinator. Both indicated support for removing barriers in zoning to the provision of solar panels on all buildings – a main barrier in zoning being setback requirements.

The DOEE website notes that *“Rooftop solar generation is the leading strategy for generating local, clean energy in the densely developed District. Installing solar panels on your home or business is one way that you can help the District achieve its greenhouse gas emission reduction goals. In addition, rooftop solar not only benefits the environment but it can also reduce your annual energy costs”*. As the District moves towards greater climate resilience and equity, solar energy production, in all its forms, will play a more important role. The Mayor has set aggressive targets to produce more energy locally, and to reduce greenhouse gas emissions to improve air quality and reduce our city’s impacts on climate change. The Sustainable DC Plan notes that *“96 percent of the emissions in the District come from using energy, and 75 percent of those emissions come just from the energy used to heat, cool, and power buildings.”* (Sustainable DC, p.70). It goes on to state that *“Locally generated electricity from renewable sources has many benefits for the*

*District: it helps reduce greenhouse gas emissions, reduces regional air pollution, diversifies the local energy supply, lowers energy bills, and can even help create jobs in renewable energy installation.”* (p. 76). Among its goals are: to increase the proportion of energy sourced from both clean and renewable supplies; to improve the performance of existing buildings by reducing energy and water use, advancing health, and increasing livability; and to ensure the highest standards of building performance and operation for all new construction, including netzero energy use, while advancing health and overall livability.

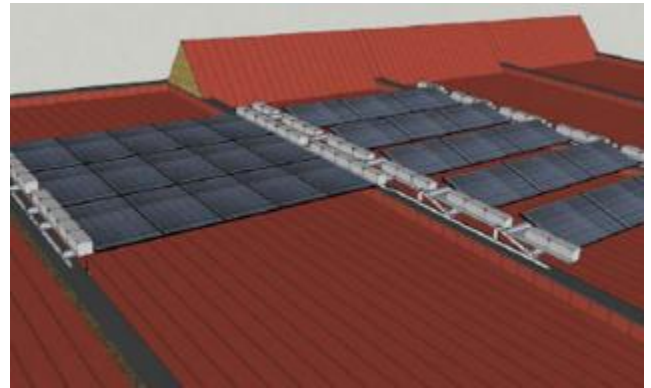
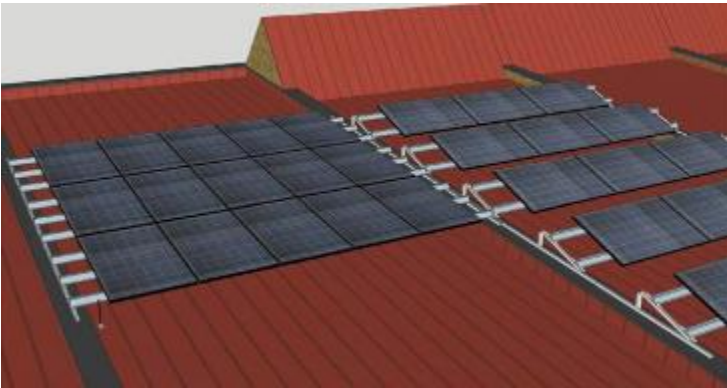
As noted on the DOEE website, the [Clean Energy Omnibus Amendment Act of 2018](#) (the CEDC Act) represents one of the country’s most aggressive and impactful clean energy actions to-date and establishes the District of Columbia as a global leader in the fight against climate change. The CEDC Act promotes a wide range of new policies and initiatives that primarily target energy supply, building energy use, and greenhouse gas emissions from vehicles. The Act’s provisions include a goal of 100% Renewable Energy by 2032. By 2041, at least 10% of that energy must come from solar energy generated within the District.

Likewise, the [Clean Energy DC](#) Plan, the District of Columbia’s energy and climate action plan, has a goal to make DC carbon neutral by the year 2050, and advocates for the adoption and installation of solar panels and other renewable energy technologies. (p. xi). While it focuses on the need to update building codes, it also notes that the District Government will need to review existing regulations, including zoning laws, to identify barriers that will impede reasonable development of on-site solar generation. (p.153)

The DOEE Solar for All Program ([doee.dc.gov/solarforall](http://doee.dc.gov/solarforall)) is designed to promote the use of solar panels on individual homes to help the District achieve its greenhouse gas emission reduction goals while helping to reduce the electric bills low-to-moderate income households, small businesses, nonprofits, and seniors. To assist in this, DCRA operates a program targeted to assisting homeowners and businesses with the installation of solar panels. An Application for Zoning Self-Certification for A Solar System Permit is available on their website, noting that to ensure conformity with zoning, solar panels on a roof need to be less than 4’ in height above the roof or parapet wall at any point, and comply with the Zoning Regulations setback requirement (generally 1:1), excluding structural supports less than ten inches in height above the roof or parapet wall.

On flat roofed rowhouses, solar panels are typically quite close to the roof, often mounted on small beams spanning the side parapet walls. As noted in the article *Structural Considerations for PV Installations on Older Row Houses* authored by Keith Winston, the DCRA Solar Coordinator, for [Solarpro](#) (January/ February 2015, pp. 20-25) and available on the DCRA website, “*In Washington, DC, row-house roofs are separated by 12-inch-wide party walls that extend above the roof about 6–8 inches as parapets. These ... parapets in older row houses are attractive to solar contractors and structural engineers as a means of supporting the PV array. The general idea behind this approach is that the array can be mounted on a system of beams that span from parapet to parapet...*” (p.20). This is shown in the following illustration from that article:





When placed this way, the small beams holding the panels are held down by either brackets attached to the roof surface (as in the illustration on the left) or by ballast at the ends, as in the illustration to the right.

In the photo below, the beams holding the panels are mounted on top of a rail attached to the top of the parapet.



In other instances, the panels can be mounted directly to the roof surface, although articles noted care has to be taken to not compromise the integrity of the roof.



In either method, panels are mounted close to the roof to reduce cost and to minimize chances of “uplift” from winds. DCRA and DOEE Staff also noted that such systems tend to not have a significant “slope” or angle to the panels, as steeply sloping panels shade the panels behind them, and can be more costly to install. Some slope, however, is desirable to allow rainwater to wash the panels, as dirt or dust accumulation reduces their effectiveness.

In summary, while the technology of solar panels continues to evolve, DOEE and DCRA staff provided insight into current and anticipated solar panel practice. Retaining the proposed language was considered appropriate and desirable for most forms of building, to ensure maximum flexibility and because other regulations and practical considerations make a setback from the roof edge generally required. DOEE further noted that the proposed height of 4 feet also helps to encourage combined solar panel / green roof systems, allowing for adequate space for green roof maintenance and for plant growth that minimizes “shadowing” of the panels above. However, for low density residential, staff noted that solar panel systems rarely need that much height.

OP undertook cursory aerial view and on-site research of solar panel systems in place now. OP focused on areas with predominantly flat, or near flat, roofs which tended to be rowhouse areas. It is clear that solar panels are becoming more common, as aerial photos showed extensive use of solar panels in many neighborhoods. However, relatively few of these installations were actually visible from the street. When they were visible from the street, they were generally not obtrusive and, in many cases, would be unlikely to be noticed. The presence of street trees and other street elements tended to further diminish any visibility.

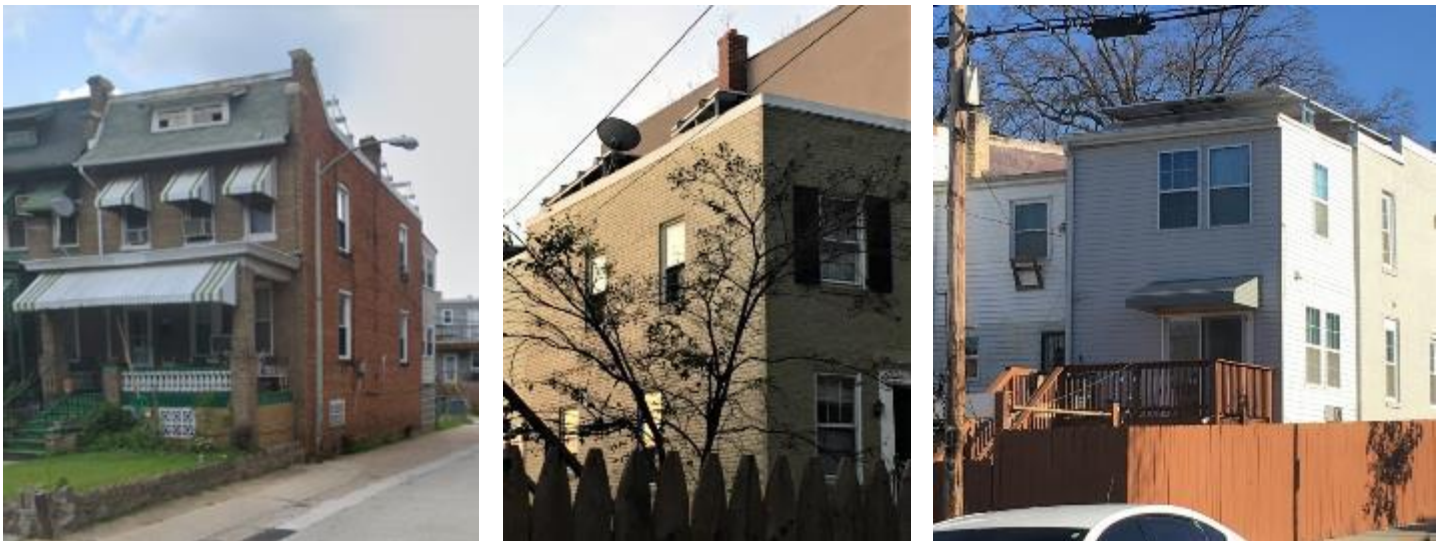


There are instances, including in photos below where the solar panels were more visible from the street. Because it was not possible to compare the on-site photos to detailed drawings of the installations, the actual height above the roof of each of these systems or whether all of these examples conform to current or proposed regulations could not be determined.





In other cases, the solar panels were more visible because the house was on the corner of two street or a street and an alley, as in the photos below.



As a result of the staff discussions, District policy, and the visual analysis, OP has proposed that that a setback not be required for rooftop solar panels on the roof of a one family dwelling or flat, or an accessory building to those uses if it is no more than two feet above the surface of the roof, or one foot above the parapet, to accommodate both forms of solar panel installation (C § 1504.2(d)). For all other buildings, OP continues to recommend that a rooftop solar panel of less than four feet not require a setback from the building walls below (C § 1504.2(e)). Panels exceeding these height limits could be permitted with BZA approval by special exception.

For reference, a copy of the DOEE Clean Energy DC One-Pager and DCRA Solar Permitting Process Summary are provided as Attachments I and II.

**ii. Subtitle B – Chapter 1 Definitions (B 100.2) - Rooftop Structure Definition**

The ANC Commissioner noted to OP that the existing wording of the definition for Rooftop Structure in conjunction with penthouse and roof structure regulations could be read such that



required screening around mechanical equipment could require additional screening of its own. As this was not the intent, OP has proposed a minor clarification of the wording for this definition.

**Structure, Rooftop:** An unenclosed or partly enclosed structure with no roof that is located on or above the roof of any part of a building, including but not limited to, unenclosed mechanical equipment **including** screening ~~for mechanical equipment~~, gooseneck exhaust ducts serving kitchen and toilet ventilating systems, roof mounted antennas, solar panels, skylights, roof hatches, trellises with beams with spacing of greater than 24 inches on center and unenclosed sides, trash chutes, plumbing vent stacks, rooftop platforms for swimming pools, roof decks, temporary enclosures, and guard rails.

**iii. Subtitle C § 1505.1 and C § 1505.1 (d)– Enclosed Area**

In this section, which addresses how to calculate the area of a penthouse for the purposes of calculating FAR, the ANC Commissioner noted that the reference to “rooftop structure” should be removed, as only an enclosed penthouse would count towards floor area ratio (FAR). OP concurs and has deleted the reference to “or rooftop structure” in both C § 1505.1 and C § 1505.1 (d).

**c. ADDITIONAL CHANGES SUGGESTED FOR CONSIDERATION BY THE PUBLIC**

In addition to the modifications noted above, additional changes were raised with OP. Although OP is not recommending these changes at this time, it was felt they warranted Zoning Commission attention.

**i. Subtitle C § 1503.3 – Screening for Mechanical Equipment**

This section provides that mechanical equipment on a rooftop is required to be enclosed within a penthouse or screened. Commissioner Eckenwiler noted that he had heard concerns from a constituent that this can result in duplicative screening for mechanical equipment which is already self-contained within a metal enclosure. The requirement that the box also be further screened can add expense, and effectively add to the amount and size of rooftop structure provided without necessarily providing significant benefit. In the time available, OP was not able to research this question or to craft language that would be specific enough that it would not potentially undermine other mechanical screening requirements. OP can investigate this further if the Commission directs us to do so.

**ii. Subtitle C § 1504.3 (f) Setbacks for Guardrails**

This subsection establishes a setback requirement for guardrails for a balcony or a deck not on the highest roof of the building, if that deck or balcony is greater than ten feet (10 ft.) in depth from the building. OP proposed this amendment at the request of DCRA to correspond to current Zoning Administrator interpretation that the guardrail setback requirement does apply to balconies and lower level decks and terraces. The ANC Commissioner noted that a balcony need not be addressed, as it is not a penthouse and should not be subject to the setback requirement. OP discussed this with the Zoning Administrator, and recommends retaining the provision as proposed for clarity and consistency with current practice.

**iii. Subtitle C § 1501.1(c) Penthouse Eating and Drinking Establishments**

The existing regulations permit an eating or drinking establishment, such as a bar or restaurant, within a penthouse only by special exception. This is intended to ensure that potential impacts of this use can be evaluated as part of a BZA process. It is a popular use, with over 20 applications

approved to date. OP has proposed to extend this special exception requirement to also include a rooftop deck, even if not associated with an eating or drinking establishment in a penthouse, for which a few examples have been seen. OP proposed this as it is often the deck portion of the use, rather than the enclosed portion, which could have the kinds of external impacts the Commission was concerned about.

The ANC Commissioner noted that the regulations would continue to allow by right a deck or terrace for an eating or drinking establishment that was not on the highest rooftop of the building, such as off a second floor restaurant, and those too could have an impact on surrounding residents.

OP is not proposing to apply this provision more broadly, as an eating or drinking establishment is allowed by-right on lower floors in mixed use zones. The provision is also consistent with published Zoning Administrator interpretation of the provisions for open areas associated with eating and drinking establishments (DCRA Interpretation ZA-009: Rooftop Dining Areas Adjacent to Partial Floors).

#### **iv. Current Subtitle C §1502 (e) – Setback Required From a Side Building Wall**

The existing regulations regarding setbacks from building walls below has proven to be particularly difficult to interpret, largely because of their complexity and range of possibilities. This is especially the case for side yards. OP has attempted to simplify them somewhat, while maintaining flexibility where possible. For setback from a side building wall, the existing regulations provide a list of situations where a 1:1 setback from the side building wall is required, limited instances where a setback is not required, and further situations where a ½:1 setback is required.

In general, the proposed amended provisions (relocated to Subtitle C §1504) are less restrictive, but OP has also proposed to eliminate the ½ to 1 setback provision. This has resulted in some instances where the required setback would decrease to none – an example would be where the adjacent lot has zoning which allows a building with a taller permitted height. In other instances, setback from a side wall would increase to 1:1 - an example would be in higher density zones, a more common situation of a property on a corner lot, from the side street.

A member of the public suggested that the ½:1 setback should be retained, noting that this would add flexibility; that changing the provision could make some existing or in-design projects nonconforming, and that the change could in some instances limit penthouse space and therefore provision of IZ units or the housing linkage amount – this would most likely be the case on narrower lots.

OP does not propose this change at this time, in an effort to not reduce simplicity or clarity, and to reflect our understanding of Commission direction. OP is also not convinced this would be likely to significantly impact potential penthouse size overall, as research has indicated that penthouses do not typically maximize potential area.

#### **v. C § 1508(b)(1) – Housing Linkage for Penthouse Space on a Hotel**

This section relates to the housing linkage requirement for penthouse habitable space for non-residential buildings, including a hotel. The method of calculation is based on the total land area *times* the permitted FAR, *divided by* the assessed land value, to derive a “value per square foot of buildable” which is then applied to the proposed penthouse square footage. Effectively, a lower permitted FAR raises the value per square foot, which increases the total housing linkage contribution.

A concern was raised that the proposed regulation states that for lodging uses, the calculation is based on the maximum non-residential FAR, even though, elsewhere, the regulations treat most hotel space as residential for the purposes of calculating FAR. For example, a zone may limit non-residential FAR to 3.0, but would allow an FAR of 6.0 for residential use, allowing the lodging use to achieve 6.0 FAR as well. It was argued that actual land value for a hotel use would typically be based on this higher potential FAR, not on the lower non-residential FAR permitted.

At this point, OP does not propose a change to this provision, noting that penthouse space is optional, and on a hotel tends to be particularly valuable bar / restaurant space. Overall, the intent of the OP changes to the housing linkage formula, which were worked out with the participation of DHCD, DCRA and OAG, are intended to add clarity, and to make them more effective and less open to interpretation. However, should the Commission agree that this change is warranted, OP can work again with these agencies to provide amended language specifically for lodging use.

#### vi. Vesting

OP received a comment that the Zoning Commission should establish a vesting provision for these new regulations, to help ensure that projects already in the design phase or approval process would not be caught. OP has discussed this with OAG, and is not recommending a vesting provision, noting that these proposed amendments have been in formal discussion with the Zoning Commission for a year, and have not changed significantly since setdown in February of 2020. In addition, vesting can result in additional administrative difficulty.

If the Commission wishes to provide additional flexibility, an effective date in the near future could be established for these changes. This would provide additional opportunity for potential buildings to obtain approval prior to these changes being made effective, or to incorporate these changes into the design.

### V. COMPREHENSIVE PLAN

As fully discussed in the setdown reports (Exhibits 2 and 3), the proposed amendments would not be inconsistent with the Comprehensive Plan and would particularly further direction found in the Land Use, Urban Design, Housing, Environmental Protection, and Economic Development Elements. Since that time, Council has adopted an amended Framework Element to the Plan, which does not include additional or revised direction directly related to this issue.

### VI. PROPOSED TEXT AMENDMENTS

Revised text as published in the Public Hearing Notice is provided as Attachment III, with proposed additions shown in **bold underline** text, and proposed deletions shown in ~~**bold strike through**~~ text. Changes from the advertised text are shown in **red text**, **and bold and underlined** or ~~**strike through**~~ as appropriate.

For ease of use, the entirety of Subtitle C Chapter 15 is provided, including the proposed re-organization, existing text to be deleted, text to be modified or clarified, and newly proposed text. Where text is proposed to be moved within the Chapter, that is also noted. For other subtitles, only the specific provisions proposed to be amended are included.

A partial “clean” version of the proposed text (a version with all of the proposed changes as regular text) is also provided for portions of Subtitle B and for Subtitle C Chapter 15 (Attachment IV); the sections with the majority of the substantive proposed amendments.

## **VII. ILLUSTRATIONS**

At setdown, the Commission requested additional illustrations of various proposed amendments. These are to be provided in Attachment V to this report.

JS/jl

Attachments:

- I DOEE Clean Energy DC One-Pager
- II DCRA Solar Permitting Process Summary
- III Proposed zoning text amendments
- IV “Clean” version of the proposed text amendments
- V Illustrations of various proposed amendments



**Attachment I - DOEE Clean Energy DC One-Pager**

# CLEAN ENERGY DC

THE PATHWAY TO CUT THE CARBON POLLUTION OF DISTRICT OF COLUMBIA

## 1 CONFRONTING CLIMATE CHANGE

Climate change poses a growing set of risks and challenges. In the global effort to combat climate change, cities have a critical role to play. This means protecting against climate impacts, decreasing the Greenhouse Gas (GHG) emissions that cause climate change, reducing overall energy consumption, and increasing the use of renewable energy.

**HOW WILL THE DISTRICT PLAY A CRITICAL ROLE?**

Clean Energy DC is the District's plan to cut **GHG emissions in half by 2032**

The District has committed to become **Carbon Neutral by 2050**

## 4 TARGETED ACTION AREAS

**CONSTRUCTING NET-ZERO BUILDINGS**  
Require highly efficient and zero emission new buildings

**RAMPING UP RETROFITS**  
Expand and intensify energy use reductions in existing buildings

**SHIFTING TO CLEAN ENERGY**  
Move from fossil fuels to clean and renewable energy

**GROWING LOCAL SOLAR**  
Maximize local renewable energy generation

**ELECTRIFYING TRANSPORTATION**  
Electrify bus transit, vehicle sharing, and personal vehicles

**SHIFTING TRANSPORTATION**  
Increase the use of walking, biking, and mass transit

**INCREASING EQUITY AND CAPACITY**  
Equip people and organizations with the tools, knowledge, support, and partnership they need

**FUNDING THE TRANSFORMATION**  
Increase funding and financing to eliminate barriers

## 2 A COMPREHENSIVE ENERGY PLAN

Clean Energy DC is the District's strategic action plan to make the District's energy system more sustainable, resilient, and equitable.

**THE DISTRICT'S TARGETS FOR 2032**

50%

Reduction in annual GHG emissions

50%

Reduction in energy consumption

50%

Of all energy derived from renewable sources

Achieving these targets means transforming buildings, energy supply and distribution, and transportation.

## 5 PROJECTED RESULTS

Clean Energy DC aims to avoid projected carbon emissions in order to exceed the District's GHG reduction target.

**ESTIMATED GHG SAVINGS**

Buildings ■ Energy Supply ■ Transportation ■

## 3 PATHWAYS TO CLEAN ENERGY

The District will use three broad strategies to achieve deep GHG reductions:

**EFFICIENT BUILDING DESIGN & OPERATIONS**

**MODERNIZED & RENEWABLE ENERGY SUPPLY**

**ELECTRIFICATION & FUEL SWITCHING**

i

Taking the actions in Clean Energy DC make the District more innovative, sustainable, and resilient. Together, we can build a cleaner, stronger, and more equitable future for our city.  
 Mayor Muriel Bowser

Learn more and get involved at [CleanEnergyDC.org](http://CleanEnergyDC.org)

SUMMARY REPORT **25**

**Attachment II - DCRA Solar Permitting Process Summary**

