

**SUPPLEMENTAL MEMORANDUM**

**TO:** District of Columbia Zoning Commission

**FROM:** Brandice Elliott, AICP, Project Manager  
*JLS*  
Jennifer Steingasser, AICP, Deputy Director, Development Review & Historic Preservation

**DATE:** September 4, 2020

**SUBJECT:** ZC Case 19-21 – Third Supplemental Report for a Proposed Text Amendment to the Zoning Regulations: Subtitles D, E and U – Roof Top or Upper Floor Elements

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**I. OP RECOMMENDATION**

The Office of Planning continues to recommend approval of the text amendments as approved in proposed action.

The text is an effort to balance the property rights of adjoining rowhouse properties and provide some guidance to the BZA when considering relief. OP agrees with the request of the Councilmember to monitor BZA cases requesting relief from solar energy system shading provisions and report back to the Commission within one year of the text adoption.

**II. ZONING COMMISSION PUBLIC MEETING COMMENTS**

At its public meeting on May 11, 2020, the Zoning Commission took proposed action to approve the proposed text amendments related to roof top elements in the R and RF zones including the protection of solar energy systems. During its discussion, the Commission indicated that while the special exception criteria for solar shading lacks specificity, it did provide standards that would provide more guidance to the BZA.

It is difficult to create absolute standards when: 1) there have not been any prior BZA cases to “try” the standards; and 2) the technology of solar panels is inconsistent, resulting in a multitude of potential outcomes for each case. It was acknowledged that once applications for this special exception relief have been reviewed by the BZA, it may be necessary for OP to revisit the text to add clarity or criteria.

Since the Commission took proposed action on this text amendment, several letters, primarily in opposition, have been added to the record. OP has reviewed these letters and attempts to consolidate and respond to the general themes and concerns provided in these letters below.

**Comments from Councilmember Nadeau:**

1. Language should be added to the text that, absent an agreement such as a solar access easement or other compensation, there be a maximum ceiling of shading allowed by the new

construction. This would have the effect of creating clearer and less discretionary guidelines around the “best efforts” standard.

The proposed text amendment would establish a 5% maximum shading of solar panels as a matter-of-right and shading beyond 5% would require special exception relief. Shading in excess of 5% would allow for a variation of outcomes that cannot be anticipated due to the different technologies in solar panels. Additionally, external variables, including existing trees, existing buildings, and building orientation, further complicate the inclusion of additional shading standards that limit shading of solar panels.

The proposed special exception criteria would require additional information to be included with the application intended to provide guidance to the BZA. Specifically, to: 1) demonstrate that the applicant has made its best efforts to minimize and mitigate the potential shading impact to solar energy systems on abutting properties to the extent reasonably practical, including possible design alternatives to the application’s proposed construction and potential solar access easements; and 2) include illustrations of the shading impact on solar energy systems on abutting properties.

As with any proposed development, it would be in the applicant’s best interest to speak to all affected property owners prior to submitting an application to the BZA. The application requirements encourage the exploration of alternatives to shading solar energy systems, which may include a reduction of proposed building height, relocating the solar panels to an adjacent taller building, or compensating the property owner for their potential losses. These solutions would be negotiated between property owners and would not require an application to the BZA. Certainly, this type of negotiation is not unique to solar energy systems, as it is regularly initiated for any development project in the District that could impact adjacent properties.

2. The new regulations should only be considered for applications from a date future, so as not to challenge the economic baseline of existing solar installations. The language governing how Special Exception relief will be considered for solar interference should be specific and distinct from that of relief in the regulations on Architectural Elements and Building Heights given that the placement of language may affect BZA’s consideration of those Special Exceptions.

The proposed text amendment would not make any part of the regulations retroactive and it would only apply to new construction or additions to buildings upon its adoption. As a result, OP does not believe that it is necessary to limit the applicability of the proposed regulations.

3. Considering the many priorities the Zoning Commission is attempting to balance in this proposed amendment, I highly recommend the Office of Planning and BZA coordinate and monitor cases that fall under these new guidelines and issue a report within one year to determine their efficacy.

OP agrees and will monitor BZA cases requesting relief from solar energy system shading provisions and will provide a report within one year of its adoption, as requested by the Councilmember.

## Opposition Comments in the Record

### Solar Energy Systems

1. Subtitle E § 5207.2 should be revised to provide specific special exception standards that would prevent the use of solar protections to block matter-of-right development and establish the risk of potential loss from shading to existing solar energy systems. Special exception criteria that would include a sliding scale of acceptable shading depending on the type of development could be considered, such as: 1) 5% shading permitted when the number of stories is not increased; 2) 15% shading when a matter-of-right story is added; and 3) 25% shading when two matter-of-right stories are proposed.

As discussed in number one above and in previous reports, solar panel technology varies widely depending on the brand of the system and the specific location of the panels. Generally, DCRA has provided that 5% shading, which would be permitted as a matter-of-right by the proposed text, would not have substantial impact on any of the various technologies; however, an increase could result in significant disparities depending on this and other factors, including shading by trees and building orientation.

For example, one brand of solar panel may still be functional with 15% shading, including impact from trees and building orientation, while another brand may have a different pattern of electrical connections within the panel that would render it unfunctional with 15% shading. These factors create unique challenges in assigning an appropriate amount of shading in the Zoning Regulations in a fair and equitable way.

In summary, OP does not recommend a sliding scale with various levels of shading. Rather each case should be individually evaluated by the BZA, as is currently proposed in the text amendment.

2. Existing solar energy systems accepted by DCRA prior to the adoption of the proposed text amendment should be exempt from the text amendment so that there is not a significant risk of loss.

The Zoning Regulations permit matter-of-right development of residential buildings to occur within the limits prescribed in Subtitles D and E. In a case where adjacent solar panels would be shaded more than 5%, discretionary review will be required by the BZA, putting the burden on the applicant to demonstrate that the efforts to minimize and mitigate the impact of shading would be sufficient. The proposed regulations would include application requirements intended to provide the Board with sufficient information to assess any reduction in the functionality of impacted solar energy systems. In this regard, the intent of the Zoning Regulations is to balance the need for housing with the need for sustainability.

3. The provisions permitting special exception relief from the solar shading provisions should be removed.

The Zoning Regulations presently allow special exception relief to be obtained from most rooftop structure requirements. The solar shading provisions, are intended to provide guidance to the BZA in assessing requests for relief, and that would continue to be the case with the proposed text amendment.

4. OP should conduct more research to develop clearer and genuinely effective special exception review standards, particularly regarding solar energy systems.

OP has completed a significant amount of research regarding the special exception standards and has worked closely with DCRA and DOEE on the present recommendation.

#### Rooftop Architectural Elements

5. The provisions permitting special exception relief for the removal or alteration of original rooftop architectural elements should be removed.

The proposed text amendment does not intend to modify the requirements for rooftop architectural elements, with the exception of exempting properties that are subject to review by the Historic Preservation Review Board or the U.S. Commission of Fine Arts from BZA review and approval. The requirements for architectural elements are applicable to all residential buildings in the RF Zones, as the criteria is located in the Development Standards section of the Zoning Regulations, and special exception relief may be requested when the elements cannot be maintained. An applicant may presently request a special exception to modify these elements and this would continue to be an option with the proposed text.

6. Proposed text that would allow construction to evade the ban on destroying architectural elements in all cases should be removed.

Currently, the Zoning Regulations allow architectural elements to be altered or removed with the approval of a special exception. The proposed text amendment does not allow for easier removal or alteration of these elements, as this provision would be maintained.

7. Subtitle U § 320.2 (i), (j) and (k), relating to the special exception criteria for conversions of existing residential buildings to apartment houses, should remain in the text.

The special exception criteria embedded in Subtitle U § 320 are being relocated to Subtitle E §5207, which applies to the removal or modification of rooftop architectural elements on all residential buildings in the RF zone, not just conversions. This would be the most appropriate location for the special exception criteria, as it would relate to development requirements, including the preservation of rooftop architectural elements, provided in Subtitle E.

Conversions of existing residential buildings to apartment houses would continue to be subject to the special exception criteria in Subtitle X § 900, as they are currently.

8. The blanket prohibition against some forms of special exception relief, Subtitle U § 301.2 through Subtitle U § 320.3(a), should not be deleted, as it establishes development standards for conversions of rowhouses to apartments.

All of these development standards (maximum height, rear wall extensions, roof top architectural elements, and solar energy systems) are repeated in Subtitle E, which applies to *all* structures in the RF zones, not just conversions. The proposed text does not propose to modify the development standards eligible for special exception relief. The criteria in Subtitle E would continue to apply to any development in the RF zones for which special exception relief is required, including conversions.

9. The Zoning Commission should reopen the discussion of how to best protect the character of row house neighborhoods in RF zones from continued degradation as a result of conversions to multi-family dwellings and the related additions. The provision limiting the rear wall extension to 10-feet beyond adjoining rear walls should be included in this discussion.

This comment exceeds the scope of the proposed text amendment and would be considered a new case in the future. This particular amendment does not intend to address new requirements for rooftop architectural elements or rear wall extensions. As indicated in a previous OP report, the Zoning Commission has requested that rear wall extensions be considered for amendments, but those will be brought forward as a separate case.

The purpose of the subject text amendment is to address DCRA challenges related to the administration of regulations for solar energy systems, and to simplify the repair or replacement of rooftop architectural embellishments when they are replaced with “like” elements or receive approval from the Historic Preservation Board or Commission of Fine Arts.

JS/be