

BOARD OF ZONING ADJUSTMENT  
FOR THE DISTRICT OF COLUMBIA

Appeal of Kalorama Citizens Association from )  
The Decision of DCRA Issuing Building Permits )  
B455571 & B455876 Notwithstanding Non- ) BZA No. 17109  
Compliance of Plans with FAR, Height, and Setback )  
Requirements with respect to 5-story Apartment in R-5-D )  
Zone at 1819 Belmont Road, N.W. (Square 251, Lot 45). )  
\_\_\_\_\_ )

*Appellant Kalorama Citizens Association's Memorandum of Law on the  
Height of Buildings Act*

Two of the issues raised by Kalorama Citizens Association (“KCA”) in this appeal involve questions of statutory interpretation under the 1910 Act of Congress, commonly referred to as the Height Act (*36 Stat. 452 (1910), DC Code §6-601 et seq.*). First, this appeal raises the question of whether the Zoning Administrator has the discretion to permit a “roof deck” to exceed the maximum allowable height set by the Height Act, even though roof decks are not among the roof structures that are specifically enumerated in the statute as exceptions to the allowable maximum specified under the Height Act. D.C. Code § 6-601.05(h). Second, this appeal raises the question of whether the Zoning Administrator may lawfully exempt exterior walls that are party walls from the Height Act’s requirement that a penthouse be set back from the “exterior walls” for a distance equal to the height of the penthouse. This memorandum of law analyzes these issues of first impression under the Height Act.

BZA  
Case No. 17109  
Exhibit No. 41

**I. Legislative and Regulatory Background on the Height Act**

**A. The Height Act Constrains the Authority of District officials and Agencies.**

As pointed out in KCA's prehearing statement, the Height Act places special limitations on the authority of instrumentalities of the District Government. While explicitly reserving to itself the right to amend the Act (DC Code §§ 6-601.09), Congress has proscribed amendment of the Height Act by the Zoning Commission, the Board of Zoning Adjustment, and, in the District's Home Rule Charter, the D.C. Council. *Id.* § 6-641.06.

Thus, while the Board of Zoning Adjustment has the authority to grant variances or special exceptions to the area requirements specified by the zoning regulations, this authority cannot be exercised so as to authorize a height or set back in excess of those specified by the 1910 Height Act. For that reason, the zoning regulations expressly do *not* give the Zoning Administrator authority to permit minor deviations from height and roof structure setback requirements, but instead are limited to other area requirements not controlled by the Height Act. 11 DCMR § 407. To the contrary, the general regulation governing minor deviations specifically contains the proviso that "all deviations of roof structure setback requirements comply with the Act to Regulate the Height of buildings in the District of Columbia approved June 1, 1910 (6 Stat. 452, as amended; D.C. Official Code §§ 601.01 to 6-601.09(2001))." 11 DCMR §2522(c). The Zoning Regulations further make clear that "in addition to any controls established in this title, all buildings or other structures shall comply with the Act to Regulate the Height of Buildings in the

District of Columbia . . .” 11 DCMR §2520.1. The proviso in §2522.1(c), included at the insistence of the National Capital Planning Commission,<sup>1</sup> explicitly rules out any even minor deviation that does not comply with that Act. These regulatory references to the Height Act specifically recognize that the Height Act brooks no exceptions other than those specifically enumerated by statute.

### **B. History and Policy Objectives of the Height Act**

While the notion of restricting the height of buildings in the capital city dates back as far as Washington and Jefferson, the history of the Height Act itself dates from the 1894 D.C. Commissioners’ regulations, apparently largely stimulated by the still-startling height of the then newly constructed Cairo Apartments on Q Street N.W. These were amended somewhat and essentially turned into federal statute law by the 1899 act of Congress,<sup>2</sup> which was followed by a 1902 proposal for further amendment of that act by the Senate Subcommittee chaired by Senator James McMillan (of the McMillan Commission)<sup>3</sup> and, eventually, following McMillan’s death in that year, by an amendment proposal from the District Commissioners that eventuated in the 1910 Act.

An underlying policy objective of height regulation in the District has been the protection of light and air enjoyed by neighboring structures—broadened in later years to include a general concern for the aesthetic quality of the District as “horizontal city”—alongside the oft-stated concern with fire safety. The reports of the Committees on the

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<sup>1</sup> Zoning Commission Order No. 864, Case No. 98-19, September 13, 1999, at p. 3.

<sup>2</sup> An Act to regulate the height of buildings in the District of Columbia, March 1, 1899 (30Stat. 922).

<sup>3</sup> See Building Height Limitations, Staff Report, U.S. House of Representatives Committee on the District of Columbia, 94<sup>th</sup> Congress Second Session, April 1, 1976, at pp. 27-28.

District of Columbia of the House and Senate on the 1899 version of the law stated that “In addition to the uncertainty of structural conditions, serious objections can be urged on the grounds of light and ventilation and danger of fire. Of course, the higher the building, the more light and air is shut out from the street and adjacent premises on all sides.”<sup>4</sup>

During debate of the 1910 version, Senator Stafford stated: “ I assume that in Washington we are seeking to keep down the height of these structures which affect the general view of some of our large cities. Now, why should we in Washington when we are seeking to make it ‘the city beautiful’, raise the height of the buildings still more?”

As to the setback requirement specifically, the evident intent was to minimize the visual intrusiveness and impact on light and air of these structures. Although the Act has been amended since 1910, the setback provisions remain as they were in 1910 regarding the separation of penthouses from the exterior walls. This view, along with the view that the setback provisions must be strictly interpreted and scrupulously applied, is clearly reflected in the treatment of these provisions by the Zoning Commission’s Regulations of more recent times.

## **II. The Zoning Administrator Was Without Authority to Permit the Construction of A Roof Deck to Exceed the Height Act’s Limit On Building Height.**

The Height Act provides that “[o]n a residence street, avenue, or highway no building shall be erected, altered or raised in any manner so as to be over 90 feet in height at the highest part of the roof or parapet, nor shall the highest part of the roof or parapet

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<sup>4</sup> House of Representatives Report No. 1704 at pp.1-2, December 20, 1898; and Senate Report No. 1532 at p. 1, January 26, 1899, 55<sup>th</sup> Congress 3d Session.

exceed in height the width of the street, avenue, or highway upon which it abuts, diminished by 10 feet . . .” D.C. Code § 6-601.05(b). The Height Act specifically enumerates the types of roof structures that are permitted as exceptions to this height limitation, as follows: “[s]pires, towers, domes, minarets, pinnacles, penthouses over elevator shafts, ventilation shafts, chimneys, smokestacks, and fire sprinkler tanks may be erected to a greater height than any limit prescribed in this subchapter when and as the same may be approved by the Mayor of the District of Columbia . . . .” *Id.* § 6-601.05(h).

Here, the height of the building as measured from the curb at the property midpoint to the roof top is 69 feet and 9 3/8 inches high – just under the 70-foot height limit allowed for buildings on Belmont Street, which has a street width of 80 feet. *See* KCA Pre-hearing Submission, Exhibit 6. However, with the addition of a roof deck and banister, the overall height of the building exceeds that allowed by the Height Act by approximately five feet. *Id.* When this error was brought to the Zoning Administrator’s attention, the Zoning Administrator provided no explanation as to how this could be lawfully justified. *See* Hargrove Declaration, ¶ 23(d).

The addition of the roof deck and banister, which results in a building height in excess of 70 feet, violates the Height Act because roof decks are not among the types of roof structures specifically enumerated in the Height Act and its implementing regulations that are permitted as exceptions to the Height Act limit. The Height Act specifically and exhaustively lists the types of roof structures that are permitted to exceed the applicable building height limit, limiting them to “[s]pires, towers, domes, minarets, pinnacles, penthouses over elevator shafts, ventilation shafts, chimneys, smokestacks,

and fire sprinkler tanks.” D.C. Code § 6-601.05(h). This list does not include “roof decks,” nor is there a clause indicating any intent to include roof structures other than those specifically enumerated.

Therefore, the only permissible interpretation of this statute is that Congress intended the exception for certain roof structures to be limited to those specifically enumerated roof structures (i.e., spires, domes, etc.). It is a settled principle of statutory construction that, “where Congress explicitly enumerates certain exceptions to a general prohibition, additional exceptions are not to be implied in the absence of a contrary legislative intent.” *Anthony Winters v. Walter Ridley*, 596 A.2d 569 (D.C. 1991) (citing *Andrus v. Glover Construction Co.*, 446 U.S. 608, 616-17, 100 S. Ct. 1905, 64 L. Ed. 2d 548 (1980)). *See also TRW v. Andrews*, 122 S.Ct. 441 (2001).

Certainly, nothing in the Height Act’s underlying policy objective of protecting the light and air enjoyed by neighboring structures discussed above could be construed so as to permit this Zoning Administrator to expand the exhaustive list of roof structures permitted to exceed the Height Act to include roof decks, or for that matter, any other structure that is not enumerated (and that could include reviewing stands, platforms, and bins, for example). See 11 DCMR § 199.1(definition of “structure”). Accordingly, the Zoning Administrator lacked discretion under the statute or the regulations to permit Montrose to construct a roof deck in excess of the Height Act’s 70-foot height limitation

**III. The Zoning Administrator Was Without Authority to Permit the Construction of A Roof Structure That Is Not Set Back from All Exterior Walls By A Distance Equal to the Height of the Roof Structure.**

In addition to the height limit discussed above, the Height Act also provides for a minimum set back for certain types of roof structure that are permitted to exceed the height limitations, by providing that “penthouses, ventilation shafts and tanks shall be set back from the exterior walls distances equal to their respective heights above the adjacent roof: . . .” D.C. Code § 6-601.05(h). The Zoning Regulations make clear that a stairway penthouse provided on the roof of a building or structure “shall be set back from *all exterior walls* a distance at least equal to its height above the roof upon which it is located.” 11 DCMR § 400.7(b) (emphasis added).

Here, as noted in KCA’s Pre-hearing Statement, the penthouse for 1819 Belmont Road, which is at least 11 feet, 7 ½ inches above the roof, lawfully exceeds the 70 foot height limit pursuant to the exception for penthouses set forth in D.C. Code § 6-601.05(h). However, the penthouse is not set back the required 11 feet, 7 ½ inches from all four exterior walls of the building. Instead, the east wall of the penthouse is flush with the east wall of the building, and the west wall of the penthouse is set back only about 6 feet from the west wall of the building. See KCA Prehearing Statement, Exhibit 7. As a result, the penthouse does not conform to the Height Act’s set back requirements.

When this error was brought to the Zoning Administrator’s attention, the Zoning Administrator responded that the penthouse could be erected flush with the side walls since these were “party walls.” See Hargrove Declaration, ¶ 23(c). Presumably, the Zoning Administrator’s view is based on the assumption that party walls are “interior

walls,” whereas the setback requirement under the Height Act applies only to the building’s “exterior walls.” D.C. Code § 6-601.05(h).

However, that assumption is not correct. The legal definition of the term “party wall” has been defined as “a wall built next to, or astride, a boundary line and designed to serve simultaneously as the *exterior* wall of two adjacent structures.” 9 Powell on Real Property § 61.01 (2000) (emphasis added). Accordingly, party walls constitute exterior rather than interior walls. Moreover, here, it is obvious that the east and west walls of this particular building are “exterior walls,” as can be seen from even a casual inspection. These walls rise above the adjacent buildings by the equivalent of several stories. See KCA Pre-hearing submission, Exhibit 4. They are replete with windows, that provide light, presumably air, and views of distant vistas to occupants of the building. *Id.*

Nor is there any support for the view that the Height Act only requires roof structures to be set back from the exterior walls of a building that front a street. Rather, the plain language and regulatory history of the roof structure set back provisions contained in the zoning regulations make clear that the set back provisions apply to all four exterior walls of the building (regardless of whether or not they are “party walls.”)

Of special relevance is the record on the extensive consideration of the regulations regarding penthouses that the Zoning Commission undertook in 1984 (Case No. 84-10), resulting in Zoning Commission Order No. 476 of June 9, 1986 (Attachment 1). In that case the Zoning Commission extensively considered possible changes in the regulations governing roof structures. As to setback, the then current regulations required a 1:1 set back not from exterior walls but from “all lot lines of the lot”, except in the C-5 district

where a 2:1 setback from the perimeter of the roof fronting on a street was required. The Zoning Commission initially, in the advertisement of the case, had proposed a change requiring setback measurement from “the perimeter of the roof”,<sup>5</sup> but later proposed less restrictive amendments that would retain “lot lines” as the point of measurement.<sup>6</sup> In comments to the Zoning Commission on the setback issue, both the Office of Planning and the NCPC refer to a reported Corporation Counsel opinion to the effect that the Height Act imposes a still less restrictive requirement, namely, penthouse setback only from the *lot line on the side facing a street*.<sup>7</sup>

The NCPC, however, opposed these interpretations, and directed the Zoning Commission to reject the then-current and proposed language requiring setback from “all lot lines of the lot.” Noting the policy on building height limitation stated in the Comprehensive Plan for the National Capital, aimed at protection of the horizontal character of the city by limiting building heights, the NCPC stated:

“Setbacks measured from the exterior walls should be included in the regulations in keeping with the Heights [sic] Act, the intent of the Act to hide penthouses and other rooftop structures as much as possible and the above policy to protect this city’s horizontal character.”<sup>8</sup>

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<sup>5</sup> Attachment 2: letter of June 3, 1986 from NCPC, Reginald W. Griffith, to Zoning Secretariat, Cecil B. Tucker, p. 2.

<sup>6</sup> See Attachment 3: letter of June 28, 1985 from Steven E. Sher, Zoning Secretariat, to NCPC

<sup>7</sup> Attachment 2: letter of June 3, 1986 from NCPC, Reginald W. Griffith, to Zoning Secretariat, Cecil B. Tucker, p. 2.; Attachment 4: excerpt from memorandum of February 3, 1984 from John H. McKoy, OP, to Zoning Commission, at p. 6. *See also* memorandum of May 16, 1984 from John H. McKoy, OP, to Zoning Commission, which makes recommendations for certain changes in the setback and other roof structure requirements, and again expresses the view, at p. 3, that “The 1910 Height Act requires 1:1 setback only from exterior building walls fronting on adjacent street.”

<sup>8</sup> Attachment 5: Report of NCPC to the Zoning Commission on Amendments to the Zoning Regulations of the District of Columbia Relating to Penthouses, August 1, 1985, at pp. 4-5; Attachment 1: Zoning Commission Order No. 476, June 9, 1986, p. 6.

Asked by the Zoning Commission for further comment, the NCPC replied:

“We believe that the 1910 Height Act’s requirement of penthouse setback from exterior walls is clearly intended to hide or screen penthouses from street views. Penthouse setbacks from lot lines do not provide this screening effect (unless the building line, perimeter of roof, and lot line are in the same vertical plane).”<sup>9</sup>

Noting that the Zoning Commission had first advertised a provision requiring setback from “the perimeter of the roof,” the NCPC stated that it believes “that provision to be in keeping with the Height of Building Act which uses the term ‘exterior walls.’” Indeed, in the record of Order No. 476 both the NCPC and the Zoning Commission sometimes used the term “perimeter of the roof”, which necessarily implies a setback from all sides, interchangeably with the term “exterior walls”.<sup>10</sup>

In the end the Commission acceded to the NCPC, unequivocally rejecting the less restrictive setback formulations and interpretations that had been discussed, and making clear its intent to conform the Regulations to the Height Act. It adopted the present regulations on setback, and provided, in accordance with the Height Act requirements, that penthouses be set back from “*all* exterior walls.” 11 DCMR § 400.7(b) (emphasis added). The Commission stated:

“To the Commission, the reference of the Height Act to “exterior walls” is clear, and leaves no room for amendment by administrative construction. The Commission intends that its use of the phrase “exterior walls” not be subject to exceptions under any circumstances. As to the concern regarding that penthouse setback requirements not be in conflict with the 1910 Height Act, the Zoning

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<sup>9</sup> Attachment 2: letter of June 3, 1986 from NCPC, Reginald W. Griffith, to Zoning Secretariat, Cecil B. Tucker, p. 2.

<sup>10</sup> *Ibid.*; and Attachment 1: Zoning Commission Order No. 476, June 9, 1986, p. 6, both referring to the Zoning Commission’s advertised proposal, which spoke of measurement from the “perimeter of the roof” as requiring setback to be measured from “exterior walls”.

Commission believes that its decision in this case lawfully and appropriately addresses the matter.”<sup>11</sup>

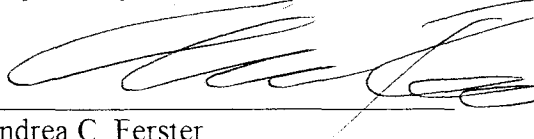
Against the backdrop of this regulatory history, it is plain that the Zoning Administrator erred in not requiring that the penthouse be set back at least 11 feet 7 ½ from the east and west walls of the building, as well as from the front and rear walls. In essence, the Zoning Administrator’s decision would create a narrow exception applicable to row houses and row buildings, allowing massive, highly visible penthouse structures without any side set back, which has no basis in the Height Act. Indeed, the exemption from the set back requirement for “party walls” does even more violence to the Height Act’s requirements than did the Zoning Commission’s original formulation, which would have plainly required set backs from all four walls, but allowed them to be measured from the building lot lines – an interpretation rejected as unlawful by the NCPC.

Such an interpretation would undermine the strong policy favoring protecting light and air, as well as the aesthetic quality of the District’s streetscapes, which underlies the Height Act, and which requires a scrupulously strict construction of the Act’s requirements, including that of setback from “all exterior walls”. Anything less than this, and particularly a general policy of exempting row house party walls from the setback requirements, would carry very unfortunate implications for the city’s vast row house neighborhoods and, where the Height Act is involved, circumvent its requirements and frustrate its policy objectives.

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<sup>11</sup> Attachment 1: Zoning Commission Order No. 476 of June 9, 1986, at p.6.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Andrea C. Ferster', written over a horizontal line.

Andrea C. Ferster  
1100 17th Street, N.W. 10th Fl.  
Washington, D.C. 20036  
(202) 974-5142

Counsel for Kalorama Citizens Association

March 9, 2004

# Government of the District of Columbia

## ZONING COMMISSION



ZONING COMMISSION ORDER NO. 476

Case No. 84-10

(Penthouse - Text Amendment)

June 9, 1986

Pursuant to notice, a public hearing was held by the District of Columbia Zoning Commission on October 22 and 25, 1984. At those hearing sessions, the Zoning Commission considered proposed amendments to the penthouse and antenna provisions of the District of Columbia Zoning Regulations, pursuant to Section 9101. The public hearing was conducted in accordance with the provision of Chapter 5 of the Rules of Practice and Procedure before the Zoning Commission.

From time to time during recent years, members of the Zoning Commission had expressed concerns regarding the appearance of the roof structures of various projects that were before the Commission for zoning consideration.

Roof structures originally consisted primarily of spires, towers, domes and other architectural solutions to roof design as well as chimneys essential to the heating of buildings. Modern buildings, however, in response to an emphasis on functionalism and to the ever-growing number and sophistication of building systems (heating, ventilating, air conditioning, and electrical), have tended to be designed with flat roofs supporting an increasing quantity of equipment. With the exterior design focus on the facade of the building, the roof became an efficient collection area for equipment, sometimes hidden from the ground, separate from leasable or otherwise occupiable space and often above the general building height limit. As this use of the roof increased, the chaotic development where the building meets the sky became more obvious, leading to regulations designed to control, minimize or camouflage the clutter of rooftop equipment.

The District of Columbia Office of Planning, by memorandum dated August 11, 1983, reported that the solution to roof structure clutter that the regulations support is the penthouse. Penthouses, while they have improved the roofscape by collecting and hiding much of the clutter of rooftop buildings themselves, appear as additional blocks resting on top of the roofs. While the required 1:1 setback minimizes their visual impact from the adjacent streets,

they are often visible from a distance against the sky, from the windows of other buildings and from rooftop terraces and observation towers. Thus, the Zoning Commission requested the Office of Planning to review the situation and recommend changes to the existing regulations which would result in an improvement in the appearance of roof structures.

On July 9, 1984, at its regular monthly meeting, and subsequent to the consideration of status memoranda from the OP dated February 3, May 16, and July 2, 1984, the Zoning Commission authorized a public hearing to consider amendments to the Zoning Regulations that would regulate penthouses, satellite dishes, antennas, and heliports.

The Commission subsequently determined that it would not consider proposed amendments to regulate heliports. As a result of that action the proceeding in this case began to fall into two distinct issues; namely penthouses, and antennas, which included satellite dishes. The first hearing session generally focused on issues related to regulating penthouses and the second hearing session, on issues related to antennas.

The Office of Planning, by memorandum dated October 12, 1984, evaluated three basic, but not mutually exclusive, approaches to address the problem of roof structure design and to improve the appearance of the roof area. They are as follows:

1. Reducing the visibility of the penthouse;
2. Improving the appearance of the roof and penthouse; and
3. Integrating the penthouse into the overall design of the building and its roof.

The Office of Planning believes that reducing the area and height of the penthouse, or increasing penthouse setbacks would be extremely difficult and, on balance, probably not desirable because it would tend to reduce energy efficiency, increase operating costs, not accommodate certain rooftop equipment, and could facilitate the continued location of transformers vaults and grates in public space, adversely affecting landscaping and pedestrian circulation.

The Office of Planning indicated that the typical roof and penthouse could be improved in appearance by allowing greater flexibility in the choice of materials and/or by encouraging the introduction of landscaping and other decorative elements on the roof. Temporary restaurants, scenic overlooks, exercise facilities or employee lunch areas would bring users to the roof. The necessary railing,

which would be permitted an exception to the height limit, could be designed to act as an architectural embellishment in helping to provide a visual cap for the building.

Active use of the roof would increase the demands on the penthouse with the need to accommodate public restrooms and corridor access from the elevator to the roof. The major problem would be to provide the elevator access to the roof which would not only enhance use of the roof but would be required by the D.C. Architectural Barriers Act. Elevator access to the roof would require an additional elevator override height of approximately ten feet which would need to "pop up" above the normal penthouse. Under the current Zoning Regulations, the developer would have to seek an area variance for the added height and hope to justify it on the basis of the unusual circumstances and requirements of the project. If the Regulations treated an increase in penthouse height for the purpose of gaining access to active rooftop use as a special exception, the BZA would only require the developer to show that the impact of the added height would not bring with it any significant adverse impacts.

The Office of Planning indicated that the integration of a penthouse into the overall design of the building and its roof could be achieved the following ways:

1. A sloped setback at a forty-five degree angle from the building face could achieve essentially the same visual setback that exists in the current regulations, as seen from the street level;
2. A cornice or architectural embellished parapet wall extending no more than five feet above the roof would strengthen the visual cap of the building, reduce the sight lines to the penthouse and tend to divert the viewer's attention from the penthouse; and
3. Increasing the roof height would essentially be comparable to a twenty-foot high parapet wall. It would provide more flexibility in the design and integration of the roof and penthouse, and increase an opportunity to pursue the Comprehensive Plan policy for Downtown by utilizing architectural embellishments and other means to visually strengthen the roof.

The Office of Planning, by that same memorandum, identified the three types of telecommunications antennas; namely local communications, satellite earth stations, and microwave

terrestrial. The OP gave examples of how each type is typically used including physical features associated with them; namely, size, mounting height, mounting locations, etc.

The proposal required that all penthouses be setback to a 1:1 ratio from the perimeter of the structure (2:1 ratio in the C-3-C and C-4 Districts), that the height of penthouses not exceed 18 feet 6 inches, that no mechanical equipment exceed that height limit, that an elevator penthouse be permitted to exceed 18 feet 6 inches as a special exception to permit rooftop access, that more than one mechanical equipment enclosure be permitted in certain conditions, that the character, material and color of all penthouse enclosures be essentially the same as the structure, and that the height increase of parapet walls be permitted for architectural embellishments as a special exception.

The proposal also defined antenna, permitted dish antennas to be mounted no more than seven feet in height under certain conditions in the R-1 through R-5-A Districts (no more than nineteen feet in height in the R-5-B District), permitted telecommunications antenna as an accessory structure in any required yard to exceed a four foot height limit, required that roof-mounted telecommunications antennas meet certain conditions, and permitted telecommunications antennas to exceed permitted height limits.

At the public hearing, the Commission heard testimony from representatives of various architectural firms regarding penthouses, and received considerable testimony from various representatives of the communications industry.

Representatives from the architectural community opposed the setback proposal for roof structures because it would in their opinion, stifle the opportunity for creative design solutions; e.g., infill buildings and unusually shaped lots, intended illusion of height, or intended design relief in a continuous facade. They supported the retention of the current setback provisions of the Zoning Regulations.

Various architects, by testimony presented at the public hearing, supported permitting more than one penthouse as well as rooftop access by permitting elevator penthouses to exceed 18 feet 6 inches. They believed that the ability to construct buildings in stages would be improved and that more functional uses of rooftops could be made.

Architects also supported the concept of encouraging architectural embellishments at the roofline and would encourage some streamlining of the six-month process before the Board of Zoning Adjustment (BZA).

A registered mechanical engineer, by testimony presented at the public hearing, recommended that the height limit for mechanical equipment enclosures be increased to 19 feet - 6 inches to 20 feet because it would provide for the most efficient operation of cooling towers.

The Zoning Commission heard testimony from representatives of the C & P Telephone Company, the Columbia Broadcasting System, the MCI Telecommunications, Inc., the GTE Communications Corp., the Direct Satellite Television, Inc., and several individuals, all of whom expressed grave concerns about the incompleteness of, problems and technological constraints associated with, and loop-holes in the proposal.

Subsequent to the conclusion of the public hearing, the Zoning Commission determined that the issues raised by the communications industry and others were so vast and complex that the proposal regarding the definition and treatment of antennas required further consideration. Consequently, on June 10, 1985, at its regular monthly meeting, the Zoning Commission took proposed action to amend the penthouse provisions of the Zoning Regulations, only, and to consider the antenna provisions of the Zoning Regulations at a later time.

A notice of proposed rulemaking was published in the D.C. Register on August 2, 1985 (32 DCR 4506). No comments were received related to the substance of the proposal, as a result of the publication of that notice of proposed rulemaking.

There were no Advisory Neighborhood Commissions that expressed their concerns relative to this case.

On January 13, 1986, at its regular monthly meeting, the Zoning Commission authorized the scheduling of an additional public hearing on the antenna provisions of the Zoning Regulations.

As to the concerns regarding penthouse height limits, the Commission believes that the lack of any strong interest of the architectural and mechanical engineering communities to increase the height limit, indicates that the existing height limit apparently works well.

As to the concern regarding penthouse setback requirements, the Zoning Commission is not persuaded at this time that the current provisions of the Zoning Regulations requiring setbacks to be measured from the lot line, in lieu of the perimeter of the structure, should be changed.

As to the concern regarding the prohibition against more than one penthouse enclosure, the Zoning Commission believes that this prohibition is unreasonable because of changing

technology in roof-mounted equipment (e.g. satellite dish antennas and certain mechanical equipment), the building designs that include more than one mechanical core, and the need for greater flexibility in the phasing of construction.

As to the concern regarding increasing the height of parapet walls, the Zoning Commission believes that building and roofscape designs could be improved by permitting such increase. The Commission, however, is not prepared to permit such increase in the low or medium density zone districts.

As to the concern regarding increasing the height of elevator penthouses to allow rooftop access, the Zoning Commission believes that through creative design techniques, such objectives can be realized via the current regulations and this action of the Zoning Commission.

The proposed action of the Zoning Commission to amend the Zoning Regulations was referred to the National Capital Planning Commission (NCPC), under the terms of the District of Columbia Self Government and Governmental Reorganization Act. The NCPC, by report dated August 1, 1985, found that the proposed action of the Zoning Commission would neither adversely affect the Federal Establishment or other Federal interests in the National Capital nor be inconsistent with the Comprehensive Plan for the National Capital. The NCPC requested the Zoning Commission to consider adopting the proposed text of the advertised public notice for this case requiring penthouse setbacks to be measured from exterior walls in keeping with the Height of Buildings Act of 1910.

On May 8, 1986, at a special meeting and subsequent to review of the NCPC report, the Zoning Commission determined that it would request the NCPC to provide the Zoning Commission with information that expanded on the request of the NCPC. The NCPC, by response dated June 3, 1986, indicated that "the 1910 Height Act's requirement of penthouse setback from exterior walls is clearly intended to hide or screen penthouses from street views. Penthouse setbacks from lot lines do not provide this screening effect (unless the building line perimeter of roof, and lot line are in the same vertical plane)."

On June 9, 1986, at its regular monthly meeting and at the request of the Chairperson, the Zoning Commission considered a memorandum from the Zoning Secretariat dated June 6, 1986, which noted a history of administrative construction of the penthouse setback requirements of the Height Act and Zoning Regulations. The Zoning Secretariat recommended the following proposed language to ensure that the various provisions of the Zoning Regulations, which govern setback requirements for roof structures, do not operate in conflict with the 1910 Height Act:

"No roof structure shall be erected in a manner which would violate the setback proviso contained in section 5 of the Act of June 1, 1910 (36 Stat. 454)."

The Commission concludes that this language is unacceptably ambiguous. To the Commission, the reference of the Height Act to "exterior walls" is clear, and leaves no room for amendment by administrative construction. The Commission intends that its use of the phrase "exterior walls" not be subject to exceptions under any circumstance.

As to the concern regarding that penthouse setback requirements not be in conflict with the 1910 Height Act, the Zoning Commission believes that its decision in this case lawfully and appropriately addresses the matter.

The Zoning Commission believes that the proposed amendments to the Zoning Regulations are in the best interests of the District of Columbia, are consistent with the intent and purpose of the Zoning Regulations and Zoning Act, and are not inconsistent with the Comprehensive Plan of the District of Columbia.

In consideration of the reasons set forth herein, the Zoning Commission hereby orders APPROVAL of amendments to the Zoning Regulations regarding the treatment of penthouses.

The text amendments set forth below reference the format and numbering system of the December, 1985 edition of the District of Columbia Municipal Regulations (DCMR) Title 11. The numbers contained in the brackets reference the numbering system of the Provisional Edition of DCMR Title 11, dated August, 1983. The specific amendments to DCMR Title 11 (the Zoning Regulations) are as follows:

1. In an R District, control housing for mechanical equipment, a stairway or elevator penthouse constructed at any height, and prevent equipment from extending above the penthouse height limit by deleting existing §400.8 and adding new §§400.8 and 400.9 as follows:

400.8 [3201.26] If housing for mechanical equipment, a stairway or elevator penthouse is provided on the roof of a building or structure, it shall be erected or enlarged as follows:

- (a) It shall meet the requirements of §411 [3308];
- (b) It shall be set back from all exterior walls a distance at least equal to its

height above the roof upon which it is located; and

- (c) It shall not exceed eighteen feet, six inches (18', 6") in height above the roof upon which it is located.

Mechanical equipment shall not extend above the permitted eighteen foot, six inch (18', 6") height of the housing.

400.9  
[3201.27]

Housing for mechanical equipment, a stairway or elevator penthouse may be erected to a height in excess of that authorized in the district in which located.

Renumber existing §§400.9 through 400.12 to 400.10 through 400.13 [3201.27 through 3201.29 to 3201.28 through 3201.210].

2.

In an SP District, control housing for mechanical equipment, a stairway or elevator penthouse constructed at any height, and prevent equipment from extending above the penthouse height limit by deleting existing §530.5 and adding new §§530.5 and 530.6 as follows:

530.5  
[4201.22]

If housing for mechanical equipment, a stairway or elevator penthouse is provided on the roof of a building or structure, it shall be erected or enlarged as follows:

- (a) It shall meet the requirements of §411 [3308];

- (b) It shall be set back from all exterior walls a distance at least equal to its height above the roof upon which it is located; and

- (c) It shall not exceed eighteen feet, six inches (18', 6") in height above the roof upon which it is located.  
Mechanical equipment shall not extend above the permitted eighteen foot, six inch (18', 6") height of the housing.

530.6  
[4201.23]

Housing for mechanical equipment, a stairway or elevator penthouse may be erected to a height in excess of that authorized in the district in which located.

Renumber existing §530.6 to §530.7.

3. In a W District, control housing for mechanical equipment, a stairway or elevator penthouse constructed at any height, and prevent equipment from extending above the penthouse height limit and conform the height requirements to the same method of measurement as other districts by deleting existing §§930.2 and 930.4, by renumbering existing §930.3 to §930.2 and by adding new §§930.3 and 930.4, as follows:

930.3  
[4403.3]

If housing for mechanical equipment, a stairway or elevator penthouse is provided on the roof of a building or structure, it shall be erected or enlarged as follows:

- (a) It shall meet the requirements of §411 [3308];
- (b) It shall be set back from all exterior walls a distance at least equal to its height above the roof upon which it is located; and
- (c) It shall not exceed eighteen feet, six inches (18', 6") in height above the roof upon which it is located. Mechanical equipment shall not extend above the permitted eighteen foot, six inch (18', 6") height of the housing.

930.4  
[4403.4]

Housing for mechanical equipment, a stairway or elevator penthouse may be erected to a height in excess of that authorized in the district in which located.

4. In a CR District, control housing for mechanical equipment, a stairway or elevator penthouse constructed at any height, and prevent equipment from extending above the penthouse height limit and conform the height requirements to the same method of measurements as other districts by deleting existing §§630.3, 630.5 and 630.6, by renumbering existing §630.4 to 630.3 and by adding new §§630.4 and 630.5 as follows:

630.4  
[4503.4]

If housing for mechanical equipment, a stairway or elevator penthouse is provided on the roof of a building or structure, it shall be erected or enlarged as follows:

- (a) It shall meet the requirements of §411;

(b) It shall be set back from all exterior walls a distance at least equal to its height above the roof upon which it is located; and

(c) It shall not exceed eighteen feet, six inches (18', 6") in height above the roof upon which it is located. Mechanical equipment shall not extend above the permitted eighteen foot, six inch (18', 6") height of the housing.

630.5  
[4503.5]

Housing for mechanical equipment, a stairway or elevator penthouse may be erected to a height in excess of that authorized in the district in which located.

5. In a C District, control housing for mechanical equipment, a stairway or elevator penthouse constructed at any height, and prevent equipment from extending above the penthouse height limit by replacing existing §§770.7 and 770.8 with the following:

770.7  
[5201.24]

If housing for mechanical equipment, a stairway or elevator penthouse is provided on the roof of a building or structure, it shall be erected or enlarged as follows:

(a) It shall meet the requirements of §411;

(b) It shall be set back from all exterior walls a distance at least equal to its height above the roof upon which it is located;

(c) In the C-5(PAD) District, it shall be set back from that portion of the perimeter of the roof fronting on a street a minimum distance equal to twice the height of the roof structure above the roof upon which it is located; and

(d) It shall not exceed eighteen feet, six inches (18', 6") in height above the roof upon which it is located. Mechanical equipment shall not extend above the permitted eighteen foot, six inch (18', 6") height of the housing.

770.8  
[5201.25]

Housing for mechanical equipment, a stairway or elevator penthouse may be erected to a height in excess of that authorized in the district in which located.

6. In a C-M or M District, control housing for mechanical equipment, a stairway or elevator penthouse constructed at any height, and prevent equipment from extending above the penthouse height limit by deleting existing §840.2(b) and adding new §§840.3 and 840.4 as follows:

840.3  
[6201.22] If housing for mechanical equipment, a stairway or elevator penthouse is provided on the roof of a building or structure, it shall be erected or enlarged as follows:

- (a) It shall meet the requirements of §411;
- (b) It shall be set back from all exterior walls a distance at least equal to its height above the roof upon which it is located; and
- (c) It shall not exceed eighteen feet, six inches (18' 6") in height above the roof upon which it is located. Mechanical equipment shall not extend above the permitted eighteen foot, six inch (18' 6") height of the housing.

840.4  
[6201.23] Housing for mechanical equipment, a stairway or elevator penthouse may be erected to a height in excess of that authorized in the district in which located.

Renumber existing §840.3 to §840.5.

7. Allow more than one enclosure for penthouses and mechanical equipment under certain conditions by adding a new §411.4 as follows:

411.4  
[3308.12] When roof levels vary by one (1) floor or more or when separate elevator cores are required, there may be one (1) enclosure for each elevator core and at each roof level.

Renumber existing §§411.4 through 411.16 to 411.5 through 411.17. Renumber section references accordingly.

8. Permit increased height to allow parapet walls designed to improve the roofscape in districts where the permitted height is ninety feet or greater by adding to the definition of "Building, height of" in §199 the following:

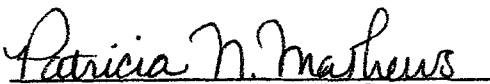
8. Permit increased height to allow parapet walls designed to improve the roofscape in districts where the permitted height is ninety feet or greater by adding to the definition of "Building, height of" in §199 the following:


In those districts in which the height of building is permitted to be ninety feet (90') or greater, the height of buildings shall be measured to the highest point of the roof excluding parapets not exceeding three feet (3) in height.

Vote of the Zoning Commission taken at the public meeting on June 10, 1985: 4-0 (George M. White, Patricia N. Mathews, John G. Parsons, and Lindsley Williams, to approve - Maybelle T. Bennett, not present not voting).

This order was adopted by the Zoning Commission at its regular public meeting on June 9, 1986 by a vote of 4-0 (John G. Parsons, George M. White and Patricia N. Mathews to adopt as amended and Lindsley Williams, by absentee vote to adopt, - Maybelle T. Bennett, not present, not voting).

In accordance with Section 4.5 of the Rules of Practice and Procedure before the Zoning Commission of the District of Columbia, this order is final upon publication in the D.C. Register, and will take effect sixty days after publication in the D.C. Register, specifically on 04 JUL 1986.

  
PATRICIA N. MATHEWS  
Chairperson  
Zoning Commission

  
EDWARD L. CURRY  
Acting Executive Director  
Zoning Secretariat

In Reply Refer To:  
ZAC File No. Z.C. 84-10

JUN 3 1986

Mr. Cecil B. Tucker  
Zoning Secreariat  
District Building, Room 11  
1350 Pennsylvania Avenue, NW.  
Washington, D. C. 20004

Dear Mr. Tucker:

In your letter of May 13, 1986, you requested that the Commission provide the Zoning Commission with rationale as to why the proposed amendment to the Zoning Regulations relating to penthouse setback requirement is "not in keeping with the 1910 Height Act."

The setback requirement for penthouse structures is addressed in Section 5 of the Act to Regulate Height of Buildings in the District of Columbia (Act of June 1, 1910, 36 Stat. 452, D.C. Code, sec. 5-401 et seq.) and reads as follows:

"And provided, That penthouses, ventilation shafts, and tanks shall be set back from exterior walls distances equal to their respective height along the adjacent roof."  
(emphasis added)

This provision of the 1910 Height Act is similar to the proposed change included in the October 22, 1984 Public Notice on Z.C. 84-10 requiring that penthouse setbacks be measured "from the perimeter of the roof rather than the lot line..."

It is our understanding that the current regulations are based on a Corporation Counsel opinion measuring penthouse setbacks from the lot line on the frontage facing the street. For example, the present measuring point (except in the C-5 district) for penthouses has been the existing lot lines. The setback requirement for penthouses in C-5 zone districts mandate a setback twice the height of the penthouse from the perimeter of the roof fronting on a street (this provision is similar but more restrictive than the 1910 Act).

We believe that the 1910 Height Act's requirement of penthouse setback from exterior walls is clearly intended to hide or screen penthouses from street views. Penthouse setbacks from lot lines do not provide this screening effect (unless the building line, perimeter of roof, and lot line are in the same vertical plane).

In its August 1, 1985 report (Case No. 84-10), the Planning Commission requested that the Zoning Commission consider adopting the October 22, 1984 advertised provision requiring penthouse setbacks to be measured from "the perimeter of the roof." The Commission believes that provision to be in keeping with the Height of Building Act which uses the term "exterior walls."

We hope this elaboration on the Commission's recommendations regarding setbacks for penthouse structures clarifies our report.

Sincerely,

(Sgd. Reginald W. Griffith)

Reginald W. Griffith  
Executive Director

bc: Fred L. Greene, Director  
D.C. Office of Planning

bcc: G.H.F. Oberlander  
R.E. Gresham  
Central File - Z.C. 84-10  
Reading File

GHOberlander:hdw:6/2/86

Government of the District of Columbia

ZONING COMMISSION

N.C.P.C.

85 JUN 28 P2:31



June 28, 1985

National Capital Planning  
Commission  
1325 G Street, N.W. (tenth floor)  
Washington, D.C. 20576

re: Z.C. Case No. 84-10  
(Text Amendment - Penthouse)

Members of the Planning Commission:

At the public meeting held on June 10, 1985, the District of Columbia Zoning Commission proposed to amend the D.C. Zoning Regulations relative to the treatment of penthouses as follows. The Zoning Commission will consider the treatment of antennas at a later time.

(see attachment)

The proposed amendment is referred to the National Capital Planning Commission for comment and review pursuant to the Zoning Act, as amended, by the District of Columbia Self-Government and Governmental Reorganization Act, as set forth in Section 5-417 of the D.C. Code, 1981 Ed.

To assist in your review of this proposed action, I am attaching copies of the Office of Planning report(s) related to this case.

Please acknowledge receipt of this referral by signing and returning the enclosed copy of this letter.

Very truly yours,

*Steven E. Sher*

STEVEN E. SHER  
Executive Director  
Zoning Secretariat

ncpcreferral/BOOTHR

## Proposed Amendments regarding Penthouses

The text amendments set forth below reference the format and numbering system of the May, 1984, edition of the District of Columbia Municipal Regulations (DCMR) Title 11. The numbers contained in the brackets reference the numbering system of the Provisional Edition of DCMR Title 11, dated August, 1983. The specific amendments to DCMR Title 11 (the Zoning Regulations) are as follows:

1. Control housing for mechanical equipment, a stairway or elevator penthouse constructed at any height and prevent equipment from extending above the penthouse height limit in an R District by replacing existing §400.8 [Paragraph 3201.26] with the following:

400.8 [3201.26] If housing for mechanical equipment, a stairway or elevator penthouse is provided on the roof of a building or structure, it shall be erected or enlarged as follows:

- (a) [3201.261] It shall meet the requirements of §411 [Section 3308];
- (b) [3201.262] It shall be set back from all lot lines of the lot upon which the structure is located a distance at least equal to its height above the roof upon which it is located; and
- (c) [3201.263] It shall not exceed eighteen feet, six inches (18', 6") in height above the roof upon which it is located. Mechanical equipment shall not extend above the permitted eighteen foot, six inch (18', 6") height.

400.9 [3201.27] Housing for mechanical equipment, a stairway or elevator penthouse may be erected to a height in excess of that authorized in the district in which located.

Renumber existing §§400.9 through 400.12 to 400.10 through 400.13 [Paragraphs 3201.27 through 3201.29 to 3201.28 through 3201.210], respectively.

2. Control housing for mechanical equipment, a stairway or elevator penthouse constructed at any height and prevent equipment from extending above the penthouse height limit in an SP District by replacing existing §530.5 [Paragraph 4201.22] with the following:

530.5 [4201.22] If housing for mechanical equipment, a stairway or elevator penthouse is provided on the roof of a building or structure, it shall be erected or enlarged as follows:

- (a) [4201.221] It shall meet the requirements of §411 [Section 3308];
- (b) [4201.222] It shall be set back from all lot lines of the lot upon which the structure is located a distance at least equal to its height above the roof upon which it is located; and
- (c) [4201.223] It shall not exceed eighteen feet, six inches (18', 6") in height above the roof upon which it is located. Mechanical equipment shall not extend above the permitted eighteen foot, six inch (18', 6") height.

530.6 [4201.23] Housing for mechanical equipment, a stairway or elevator penthouse may be erected to a height in excess of that authorized in the district in which located.

Renumber existing §530.6 to §530.7.

3. Control housing for mechanical equipment, a stairway or elevator penthouse constructed at any height and prevent equipment from extending above the penthouse height limit in a W District by replacing existing §930.4 [Sub-section 4403.3] with the following:

930.3 [4403.3] If housing for mechanical equipment, a stairway or elevator penthouse is provided on the roof of a building or structure, it shall be erected or enlarged as follows:

- (a) [4403.31] It shall meet the requirements of §411 [Section 3308];
- (b) [4403.32] It shall be set back from all lot lines of the lot upon which the structure is located a distance at least equal to its height above the roof upon which it is located; and
- (c) [4403.33] It shall not exceed eighteen feet, six inches (18', 6") in height above the roof upon which it is located. Mechanical equipment shall not extend above the permitted eighteen foot, six inch (18', 6") height.

930.4 [4403.4] Housing for mechanical equipment, a stairway or elevator penthouse may be erected to a height in excess of that authorized in the district in which located.

4. Control housing for mechanical equipment, a stairway or elevator penthouse constructed at any height and prevent equipment from extending above the penthouse height limit in a CR District by replacing existing §§630.5 and 630.6 [Sub-section 4503.5] with the following:

630.4 [4503.4] If housing for mechanical equipment, a stairway or elevator penthouse is provided on the roof of a building or structure, it shall be erected or enlarged as follows:

(a) [4503.51] It shall meet the requirements of §411 [Section 3308];

(b) [4503.52] It shall be set back from all lot lines of the lot upon which the structure is located a distance at least equal to its height above the roof upon which it is located; and

(c) [4503.53] It shall not exceed eighteen feet, six inches (18', 6") in height above the roof upon which it is located. Mechanical equipment shall not extend above the permitted eighteen foot, six inch (18', 6") height.

630.5 [4503.5] Housing for mechanical equipment, a stairway or elevator penthouse may be erected to a height in excess of that authorized in the district in which located.

5. Control housing for mechanical equipment, a stairway or elevator penthouse constructed at any height and prevent equipment from extending above the penthouse height limit in a C District by replacing existing §§770.7 and 770.8 [Paragraph 5201.24] with the following:

770.7 [5201.24] If housing for mechanical equipment, a stairway or elevator penthouse is provided on the roof of a building or structure, it shall be erected or enlarged as follows:

(a) [5201.241] It shall meet the requirements of §411 [Section 3308];

(b) [5201.242] It shall be set back from all lot lines of the lot upon which the structure is located a distance at least equal to its height above the roof upon which it is located;

(c) [5201.243] In the C-5(PAD) District, it shall be set back from that portion of the perimeter of the roof fronting on a street a minimum distance equal to twice the height of the roof structure above the roof upon which it is located; and

(d) [5201.244] It shall not exceed eighteen feet, six inches (18', 6") in height above the roof upon which it is located. Mechanical equipment shall not extend above the permitted eighteen foot, six inch (18', 6") height.

770.8 [5201.25] Housing for mechanical equipment, a stairway or elevator penthouse may be erected to a height in excess of that authorized in the district in which located.

6. Control housing for mechanical equipment, a stairway or elevator penthouse constructed at any height and prevent equipment from extending above the penthouse height limit in a C-M or M District by replacing existing §840.2(b) [Paragraph 6201.22] with the following:

840.3 [6201.22] If housing for mechanical equipment, a stairway or elevator penthouse is provided on the roof of a building or structure, it shall be erected or enlarged as follows:

(a) [6201.221] It shall meet the requirements of §411 [Section 3308];

(b) [6201.222] It shall be set back from all lot lines of the lot upon which the structure is located a distance at least equal to its height above the roof upon which it is located; and

(c) [6201.223] It shall not exceed eighteen feet, six inches (18', 6") in height above the roof upon which it is located. Mechanical equipment shall not extend above the permitted eighteen foot, six inch (18', 6") height.

840.4 [6201.23] Housing for mechanical equipment, a stairway or elevator penthouse may be erected to a height in excess of that authorized in the district in which located.

Renumber existing §840.3 to §840.5.

7. Allow more than one enclosure for penthouses and mechanical equipment under certain conditions by adding a new §411.4 as follows [the following sentence to the end of existing Paragraph 3308.12]:

411.4 When roof levels vary by one (1) floor or more or when separate elevator cores are required, there may be one (1) enclosure for each elevator core and at each roof level.

Renumber existing §§411.4 through 411.16 to 411.5 through 411.17, respectively. Renumber section references accordingly.

8. Permit increased height to allow parapet walls designed to improve the roofscape in districts where the permitted height is ninety feet or greater by adding to the definition of "Building, height of" in §199 [Section 1202] the following:

In those districts in which the height of building is permitted to be ninety feet (90') or greater, the height of buildings shall be measured to the highest point of the roof excluding parapets not exceeding three feet in height.

9. Conform the height requirements in the W Districts to the same method of measurement as other districts by deleting existing §930.2 as follows [from existing Sub-section 4403.1 the following]:

930.2 In the Waterfront District, the height of buildings and structures shall be measured as provided in §199 [Section 1202] (definition of "building, height of"), except that height shall be measured to the highest point of roof, excluding parapets not exceeding five feet (5') high [in height].

Renumber existing §930.3 to §930.2.

10. Conform the height requirements in the CR District to the same method of measurement as other districts by deleting existing §630.3 [Sub-section 4503.3], which reads as follows:

630.3 [4503.3] In the CR District, the height of buildings and structures shall be measured as provided elsewhere in these Regulations, except that height shall be measured to the highest point of the roof, excluding parapets not exceeding five feet (5') in height.

Renumber existing §630.4 to §630.3 [Sub-section 4503.4 to 4503.3].

roofstructuretext/SES2

# Memorandum

Government of the District of Columbia

TO: Zoning Commission

Department, Office of  
Agency, Office: Planning

FROM: John H. McKoy, Director  
Office of Planning

Date: February 3, 1984

SUBJECT: Roof Structures Text Amendment

## Background

Roof structures originally consisted primarily of spires, towers, domes and other architectural solutions to roof design as well as chimneys essential to the heating of buildings. Modern buildings, however, in response to an emphasis on functionalism and to the ever growing number and sophistication of building systems (heating, ventilating, air conditioning, and electrical), have tended to be designed with flat roofs supporting an increasing quantity of equipment. With the exterior design focus on the facade of the building, the roof became an efficient collection area for equipment, generally hidden from the ground, separate from leasable or otherwise occupiable space and usually above the building height limit. As this use of the roof increased, the chaotic development where the building meets the sky became more obvious, leading to regulations designed to control, minimize or camouflage the clutter of rooftop equipment.

The solution to roof structure clutter that the regulations support is the penthouse. Penthouses, while they have improved the roofscape by collecting and hiding much of the clutter of rooftop equipment, are generally not architecturally enhancing to the buildings themselves, appearing as additive and unarticulated blocks resting on top of the roofs. And, while the required 1:1 setback minimizes their visual impact from the adjacent streets, they are often visible from a distance against the sky, from the windows of other buildings and from rooftop terraces and observation towers. Thus, the Zoning Commission has requested the Office of Planning to review the situation and recommend changes to the existing regulations which would result in an improvement in the appearance of roof structures.

In looking at the various alternatives for improving rooftop design, it became very clear that each alternative brings with it a mixture of positive and negative results. While the objectives are laudable and the alternatives not at all unreasonable, the constraints are real and the cure often appears more onerous than the original problem. Thus, the following process of seeking appropriate alternatives is one in which it is essential to carefully weigh the trade-offs involved.

## History

The 1910 Height Act was written to bring together various existing laws and building regulations and to limit the construction of combustible buildings, encouraging the construction of fire proof buildings. The 130 foot height limit was originally set in 1897 (after a disastrous fire that destroyed 22 buildings) and followed the example of Boston and Chicago which had limits of 125 and 130 feet respectively at that time. In 1956, the Lewis Study noted that the Height Act also provided for adequate light and air on the streets and achieved an 'even cornice line and subordination of the building mass of the city to major public buildings so characteristic of European cities'. Today, it is clear that the Act has produced a special character for Washington, D.C., a horizontal city with a low profile skyline.

Controls Prior to 1958 - The 1910 Height Act permits buildings on commercial streets to a height equivalent to the street width plus 20 feet up to a 130 foot limit (160 feet along the north side of Pennsylvania Avenue between the White House and the Capitol). On residential streets less than 60 feet wide the building height is equal to the street width; 60 feet is permitted on streets 60 to 65 feet wide; and a height equal to the street width less 10 feet (up to 90 feet) is permitted on streets wider than 65 feet. Exceptions include buildings fronting on Union Station and buildings on blocks immediately adjacent to public buildings, which must conform to a schedule which is more restrictive. Congress has permitted a few specific buildings, including the National Press Building, to exceed the Height Act limits.

The Height Act permits roof structures, when approved by the D.C. Commissioners, to exceed the height limits, including spires, towers, domes, minarets, pinnacles, chimneys and smokestacks. Penthouses over elevator shafts, ventilation shafts and fire sprinkler tanks are also excepted if set back an amount equal to their height from the adjacent roof.

The Zoning Regulations prior to 1958 allowed roof structures above the height limit if consistent with the 1910 Height Act, but were somewhat more restrictive in not permitting sprinkler tanks, water towers and A/C equipment to exceed the 130 foot height limit. The overall result is that penthouse structures were built up to 30 feet tall and rooftop equipment was generally scattered and exposed. The 1958 Lewis Plan noted that this was particularly offensive on low buildings along F and G Streets east of 14th Street.

1958 Zoning Regulations - The 1910 Height Act roof structure exceptions/controls were incorporated into the 1958 Zoning Regulations with TV towers added to the list of exceptions. Penthouses over elevator shafts, vent shafts and fire sprinkler tanks all requiring a 1:1 setback and not permitted to exceed the 130 foot maximum height in

the Height Act were included in the 1958 Zoning Regulations as elevator or stairway penthouses with the same setback requirements but without having to be held below the 130 foot maximum height limit. With essentially the same controls as previously existed under the 1910 Height Act, there was no change in the resulting treatment of the rooftop, with equipment scattered and exposed and penthouses built to any height desired.

1960 Amendment - At the urging of the Commission of Fine Arts, the regulations were amended in 1960 to require BZA review of roof structure applications, finally gaining control of the appearance of roof structures. FAR credits of .12 and .25 were added (.37 total) to offset the cost to the developer of the review process and the cost of architectural treatment to be recommended by the BZA. The result has been the collection of rooftop equipment into one large penthouse structure which, while set back from the exterior walls of the building and constructed of materials visually compatible with those used in the exterior of the building, is usually visible from various vantage points and appears generally as a additive and unarticulated block resting on top of the roof.

1976 Amendment - In order to reduce the BZA workload and shorten the development process, the Zoning Regulations were amended in 1976 to permit roof structures as a matter-of-right (with administrative review by the Zoning Administrator and OP) provided the structures met the criteria previously utilized by the BZA in their review and which were now codified in the Regulations. A height limit was placed on penthouses for the first time (18 feet 6 inches), roof coverage was limited to one-third in all districts having a story limit, and the two previous FAR credits were added into one (.37 FAR). Because the controls changed very little, the results have not been substantially different from those that occurred prior to the 1976 amendment.

### Three Basic Approaches to a Solution

The visual problem of the clutter of equipment scattered about the roof, while it still exists on older buildings, has given way on new buildings to the monolithic penthouse block which appears from various vantage points as an afterthought that the building roof is barely able to accommodate.

There appear to be three basic but not mutually exclusive approaches that might be taken to address the problem of roof structure design and to improve the appearance of the roof area. They are 1) to reduce the visibility of the penthouse; 2) to improve the appearance of the roof and penthouse; and 3) to integrate the penthouse into the overall design of the building and its roof. In addition, it may be necessary to modify the regulations in order to gain more control over the increasing use of antennas and satellite dishes resulting from the growth of the telecommunications industry.

1. Minimize Visibility of Penthouse - The visibility of the penthouse could be minimized by reducing the area or height of the penthouse or by shifting the penthouse back further from the edge of the roof. It should be noted, however, that even under the existing regulations the objective of minimizing visibility occasionally forces solutions which are probably unnecessarily rigid and nonfunctional.

- ° Reduce Area of Penthouse - Generally the architect designs the building giving the penthouse a preliminary size and shape based on the location of the core. Usually the resulting penthouse is an 18 foot 6 inch high structure setback 1:1 from all building walls (and on a large building it is generally built to an FAR of .37). The mechanical engineer then works within that framework, sizing equipment accordingly, notifying the architect of the potential tradeoffs between smaller equipment and higher operating costs and coordinating with the electrical and plumbing trades. During that process the penthouse rarely shrinks but can expand (depending on the circumstances), requiring BZA approval. The resulting penthouse is usually packed with equipment which barely fits, is often more inefficient (and expensive) to operate than larger, more energy efficient equipment would be, provides poor access for operation and maintenance and occasionally requires structural modification of columns to permit the equipment to fit.

Why is this so? Will the trend continue? Since the late 1960's and particularly affected by the Energy Act of 1973, there has been a substantial increase in energy conservation systems for buildings, increasing the size and amount of penthouse equipment by 20 to 25 percent. In addition, during this same period of time, the regulations have come to require that most garages exhaust through the penthouse and that penthouses contain restrooms. Also, Streetscape Committee guidelines for public space currently encourage transformer vaults (not uncommonly 1500 square feet) and accompanying grates to be located outside of public space, adding yet another candidate for the penthouse.

Additional growth of penthouse equipment cannot be predicted. In fact, it is possible that most of the growth may already have occurred, at least in response to energy conservation. As for the potential to reduce the amount and size of equipment in the future, most miniaturization has been in the area of electronics which plays only a small part in mechanical systems. The movement of large quantities of air is subject to the laws of physics, requiring large ducts and fans. The

smaller the ducts, the higher the velocity of air and the more energy is required to move a given quantity of heated or chilled air. One former solution, the stacking of some equipment, which was possible prior to the adoption of the 18 foot 6 inch height limit, is no longer an option. Finally, individual mechanical rooms on each floor, while they reduce the amount of equipment that must be accommodated in the penthouse, are not nearly as energy and cost efficient as central systems, and thus although popular now, are probably not the wave of the future.

In conclusion, it is apparent that reducing the area of the penthouse would be extremely difficult and, on balance, probably not desirable. It would tend to reduce energy efficiency and increase operating costs, and it could play a role in the continued location of transformer vaults and grates in public space, impacting landscaping and pedestrian circulation.

- Reduce Height of Penthouse - The maximum allowed penthouse height of 18 feet 6 inches was set as the minimum height to accommodate a normal elevator override. In fact, the elevator cab is restricted by the penthouse height limit to nine feet (rather than ten feet) when using high speed gearless elevators which are often used in 130 foot high buildings. This can cause problems in transporting furniture and equipment and creates maintenance problems as well. Thus, it could be argued that the penthouse height limit should actually be increased rather than decreased. However, raising the penthouse height limit to 19 feet 6 inches, while it would eliminate some problems, would not appear to be necessary. High speed elevators are an amenity in the District more than they are essential equipment, given the limited height of buildings, and those elevators can be installed and are functioning now with a nine foot high cab. No matter what the height limit, there will always be some reason that it should be increased.

The elevator is not the only piece of equipment that bumps up against the penthouse height limit. Given the physical requirements of moving large quantities of air, the air intake fans barely fit within the 18 foot 6 inch limit. The same is true of the cooling tower which can, and often does, stick up slightly above the penthouse roof. Raising the maximum height limit to 20 feet would permit larger fans but would have little effect on reducing the area of the penthouse, even recognizing that some equipment could be stacked within that height. Lowering the maximum height limit would only be feasible (to about 12 feet) if "pop ups" were allowed for the elevator

override and intake fans. While there might be some merit in this idea, at least on a case by case basis, it could lead to a greater clutter of rooftop forms. A 12 foot high penthouse (not including "pop ups") set back 18 feet 6 inches would result in a 1:1.5 setback which would, in a typical Downtown situation, increase the height at which that part of the penthouse would first be observable from the adjacent street (or building) by approximately three floors. On balance, just gaining those three floors would probably not be worth the disorder that would result from the varied configurations caused by "pop ups" for elevator override and intake fans.

- Increase Penthouse Setback - Both the 1910 Height Act and the Zoning Regulations require a minimum setback of 1:1 for a penthouse that exceeds the maximum building height limit. The intent of the setback is to insure the integrity of the height limit, maintaining the horizontal city character of Washington, D.C., and to improve the appearance of buildings by minimizing the view of the penthouse from the adjacent streets. While the regulations generally accomplish this, the penthouse is usually still visible from a distance at street level and from the windows of nearby buildings.

One possible means of further minimizing the visibility of the penthouse would be to shift it back on the building toward the center of the square. This could be achieved by requiring a 2:1 setback from the edge of the building facing a public street and not requiring any setback on the opposing edge. According to the Zoning Administrator, there is a Corporation Counsel opinion to the effect that the 1910 Height Act requires a penthouse setback only from the lot line on the frontage facing the street. In a typical Downtown situation, a 2:1 setback would increase the height at which the penthouse would first be observed from the adjacent street (or building) by 60 feet. However, such a solution would not be without its drawbacks. Shifting the penthouse to the rear lot line or building face would make it highly visible above a lower historic structure or group of low buildings that might be located on the street bordering the opposite side of the square. Buildings on corner lots could also present problems, where what is a rear lot line from one perspective is a side lot line from another. Thus, requiring a shift in the penthouse location would be a gamble which would probably pay off in most built up situations but fail where the full building envelope was not consistently utilized.

NATIONAL CAPITAL PLANNING COMMISSION  
1325 G STREET N.W.  
WASHINGTON, D.C. 20576

NCPC File No. Z.C. 84-10

AMENDMENTS TO THE ZONING REGULATIONS OF THE DISTRICT OF COLUMBIA  
RELATING TO PENTHOUSES

Report to the Zoning Commission for the District of Columbia

August 1, 1985

The Commission, pursuant to Section 5 of the Act of June 20, 1938, as amended by the District of Columbia Self-Government and Governmental Reorganization Act (D.C. Code, 1981 edition, sec. 5-417), has reviewed the proposed amendments to the Zoning Regulations of the District of Columbia relating to penthouses (Case No. 84-10). The Commission finds that the amendments proposed by the Zoning Commission at its public meeting on June 10, 1985, would neither adversely affect the Federal Establishment or other Federal interests in the National Capital nor be inconsistent with the Comprehensive Plan for the National Capital. The Commission requests that the Zoning Commission consider adopting the proposed text of the advertised public notice for this case requiring penthouse setbacks to be measured from exterior walls in keeping with the Height of Buildings Act of 1910.

\* \* \*

BACKGROUND AND STAFF EVALUATION

Description of Proposal

At the Zoning Commission's public meeting of June 10, 1985, a proposed action was taken by the Commission to adopt certain amendments to the Zoning Regulations of the District of Columbia relating to penthouses. This proposed action has been transmitted (letter attached) to the National Capital Planning Commission for review and comment pursuant to D.C. Code, 1981 edition, sec. 5-417, prior to final action on these amendments by the Zoning Commission. A copy of the proposed amendments is attached.

Public hearings were held October 22 and 25, 1984 on proposed changes or additions to the text of the Zoning Regulations concerning penthouses and

antennas. On the basis of testimony received, as well as questions and comments from Zoning Commission members, a proposed action on nine specific items relating to penthouses only was taken. These items, the current regulations, testimony and comments and the proposed action are as follows:

1. Penthouse Setbacks From Roof Perimeter

Current Regulations: A 1:1 setback from the lot line is required for all building penthouses except that in the C-5 zone district setbacks are measured from the perimeter of the roof consistent with the language of the 1910 Height Act.

Testimony and Comments: Testimony was given supporting the concept of incorporating the penthouse as an extension of the building facade as opposed to the existing regulations intent of hiding the Penthouse. However, the Commissioners felt the evidence supported maintaining the existing regulations.

Proposed Action: None.

2. Penthouse Controls Below Heights Limit

Current Regulations: The existing controls on penthouse heights do not apply below the zone district height limits.

Testimony and Comments: The advertised change to control height, location and design, no matter what the building height, received no opposition testimony nor negative comments from the Zoning Commissioners.

Proposed Action: Control penthouse structures at all building heights.

3. Increase Penthouse Setback from Street in C-3-C and C-4 Districts

Current Regulations: The penthouse is required to be set back 1:1 from the lot line on all sides.

Testimony and Comments: Testimony generally opposed the advertised change to a 2:1 setback from the roof perimeter facing a single street and no rear setback. The additional front setback may produce adverse visual impacts when viewed over lower historic structures from the rear.

Proposed Action: None.

4. Multiple Penthouse Permitted in Certain Situations

Current Regulations: All buildings whether of multi-core or of multiple roof levels are required to have only a single penthouse enclosure.

Testimony and Comments: The advertising change would permit multiple penthouses. Testimony received supported the change and comments by Zoning Commissioners indicated that anytime there is a need for more than one elevator case, then multiple penthouses should be permitted.

Proposed Action: Allow more than one enclosure for penthouses and mechanical equipment under certain conditions by adding the following:

When roof levels vary by one (1) floor or more when separate elevator cores are required, there may be one (1) enclosure for each elevator core and at each roof level.

5. Increase Penthouse Height for Access to Rooftop Use

Current Regulations: An area variance from BZA following proof of a "practical difficulty" is required to permit an elevator override to exceed 18 feet 6 inches in height and enable access to the roof.

Testimony and Comments: The advertised change would make it easier to gain approval of an increase in the penthouse height by considering the request as a special exception. Testimony was generally supportive of this approach. However, comments from Zoning Commissioners indicated that the benefits of direct elevator access for rooftop uses would be offset by the height increase.

Proposed Action: None.

6. Increase Parapet Wall Height to Improve Rooftop Appearance

Current Regulations: Parapet walls can exceed the height limit of a given district only in the CR (Mixed Use) district and W (Waterfront) zone districts by five feet. In no case can they exceed 1910 Height Act limits.

Testimony and Comments: Testimony generally supported some change to permit parapet walls to exceed the zone district height limits by from four to six feet (a 20 percent increase was advertised). This increase could be used to partially hide the penthouse and possibly improve the rooftop.

Proposed Action: "In those districts in which the height of buildings is permitted to be ninety feet (90') or greater, the height of buildings shall be measured to the highest point of the roof excluding parapets not exceeding three feet in height." This sentence would be added to the definition of "Building, height of" and the existing five foot height now permitted for parapet walls in the W and CR districts would be deleted.

7. General Height of Penthouse

Current Regulations: The maximum height of the penthouse above the roof is established at 18 feet 6 inches.

Testimony and Comments: Testimony received indicated that in some circumstances coding towers and related equipment protrude above the limit. A penthouse height of 20 feet would take care of this problem and would also allow the full use of high speed elevators. The Commission indicated its desire to keep the existing limit and not allow equipment to exceed that limit.

Proposed Action: Add the following sentence to all references to penthouse height limit for each zone district.

Equipment housed in such roof structure shall not protrude above the permitted 18'-6" height.

8. Penthouse Floor Area Ratio (FAR) Credit of .37

Current Regulations: There is an FAR credit of .37 which was established in 1960 to offset the additional cost and time delay resulting from the BZA approval process.

Testimony and Comments: The Commission expressed concern that the credit would encourage larger than necessary penthouses but testimony did not support this concern. Large penthouses such as the one on 1300 New York Avenue, NW., is sized primarily for design reasons.

Proposed Action: None.

9. Penthouse Color and Shape

Current Regulations: The penthouse is required to harmonize with the main structure in architectural character, material and color. Walls must rise vertically but roofs can be sloping.

Testimony and Comments: It was suggested in testimony that the regulations be changed to ensure that "harmonize" not be interpreted to include "contrast"; also, to clarify that sloping roof/walls are permitted. The Commissioners felt the term "harmonize with", currently used, provided the flexibility to permit variation in materials and color encouraging a high level of design.

Proposed Action: None.

Federal Interest Evaluation

The current District of Columbia Zoning Regulations require a 1:1 setback from all lot lines except in the C-5 zone district where the setback is measured from the perimeter of the roof. The Height Act of 1910 provides that "penthouses, ventilation shafts, and tanks shall be set back from the exterior walls distances equal to their respective height above the adjacent roof." The notice for the public hearing on this case included a proposal to have penthouses set back from the perimeter of the roof in keeping with the C-5 District and the Height Act.

The proposed change in the text of the regulations was as follows:

Require that the setback of housing for mechanical equipment, a stairway or elevator penthouse be measured from the perimeter of the roof rather than the lot line by replacing "all lot lines of the lot" with "the perimeter of the roof" in existing Paragraphs 3201.26, 4201.22, 5201.24 and 6201.22 and in existing Sub-sections 4403.3 and 4503.5.

Both the Federal and District Preservation and Historic Features elements of the Comprehensive Plan for the National Capital contain a policy which states that "(t)he Federal and District governments should cooperatively continue to protect the historic horizontal character of the National Capital by limiting building heights in accordance with an act to regulate the height of buildings in the District of Columbia, approved June 1, 1910 (36 Stat. 452; D.C. Code, sec. 5-401 et seq.)." Setbacks measured from the exterior walls should be included in the regulations in keeping with the Heights Act, the intent of the Act to hide penthouses and other rooftop structures as much as possible and the above policy to protect this city's horizontal character.

The Zoning Commission should consider adopting text language in keeping with the 1910 Act and the proposed text change advertised for this case.

The Zoning Commission's resolution on the eight other items which were the subject of the public hearing on this case, and previously described, do not appear to be inconsistent with policy of the Comprehensive Plan nor would they adversely affect the Federal Establishment or other Federal interests in the National Capital.