

AFFIDAVIT OF LUIGI RUSSO

STATE OF NEW YORK)
) ss.:
COUNTY OF NEW YORK)

Luigi Russo, being duly sworn, deposes and says:

1. I joined SLCE in 1994 and have been a partner since January 2002. I have extensive expertise in high-rise residential and commercial development along with in-depth knowledge of construction methods. I am involved in all phases of a project and my experience provides a level of comfort for all involved. Some of my most notable projects include VIA 57 West, 220 Central Park, The Bloomberg Building at 731 Lexington Avenue, the Hyatt Andaz, and the current conversion of One Wall Street. I received my Bachelor of Science in Architecture at the City College of New York and my Bachelor of Arts at the College of Staten Island. I am registered in New York, Washington DC, Florida, Massachusetts, New Jersey, and Pennsylvania, and am a registered architect with the AIA.

2. I am the Architect of Record for the proposed development at 36 West 66th Street.

A. Mechanical Review of 36 West 66th Street

3. In my career as an architect in New York City, I have collaborated on approximately 50 new residential buildings. For each building, I oversaw the process of submitting a building permit application and working through plan examination to secure a new building approval from DOB.

4. Based on my professional experience, DOB’s review of the mechanical plans for 36 West 66th Street was typical of how DOB reviews mechanical plans in the normal course of plan examination. The plan examiner reviews each floor by examining all of the drawings for a floor relating to each mechanical trade: HVAC mechanical ductwork, HVAC mechanical piping,

fire protection, and plumbing. These drawings *in combination* provide the plan examiner with an understanding of the overall use of the space. Based on this examination, the plan examiner determines both whether the space is occupied by mechanical equipment and whether the type and amount of equipment is generally consistent with that found in a residential building.

5. In my experience, DOB has not required a calculation of the area of each piece of equipment, and has not applied a fixed ratio of area of equipment to overall floor space in determining whether to allow for deduction of an entire floor. Rather, examiners seek to ensure that the floor will be devoted to housing mechanical equipment and cannot realistically be occupied for other purposes. DOB does not base its determination on whether the mechanical layout is the most efficient for the purpose of conserving floor space nor does it consider alternative layouts; it is the responsibility of the mechanical engineer, in the exercise of his or her professional judgment, to develop a layout that works efficiently to meet the needs of the building.

B. Draft Bulletin

6. I understand Landmark West! has cited to a draft bulletin dated 2013 in support of its arguments that the mechanical layout for 36 West 66th Street is improper. The draft bulletin has not been promulgated and is just that—a draft. It has not been my experience that plan examiners apply the numerical standards set forth in the draft bulletin. The draft bulletin is useful nonetheless insofar as, for example, it contains a list (albeit incomplete) of various types of mechanical equipment for reference.

7. It is my understanding that the draft bulletin has not been promulgated at least in part because it does not fully account for equipment types and the space needs of a mechanical floor. If the DOB bulletin were to be applied as drafted, it would virtually prohibit altogether the mechanical deduction of a full floor.

8. The draft bulletin is inconsistent with DOB practice, impractical and under-inclusive of what is generally considered to be bona fide mechanical space for at least the following reasons.

9. The list of mechanical equipment under Section A(1) of the draft bulletin does not include certain types of equipment routinely accepted by DOB as mechanical equipment. These include, among others:

- Expansion tanks and air separators
- VFDs and control panels
- Valves
- Gauges
- Fire dampers
- Air plenums
- Cleanouts
- Pool equipment rooms
- HVAC chemical treatment stations
- Humidification systems
- Plumbing zones and rigs
- Smoke purge fans

10. Section A(2) of the draft bulletin establishes a limitation on the amount of deduction allowed for floor space directly adjacent to mechanical equipment used for the purpose of access and servicing. It permits a deduction only for (a) floor space in the amount of a 1:1 ratio of equipment area-to-adjacent service area or (b) floor space in the amount set forth in the manufacturer's specifications for the equipment. Neither standard provides a sufficient amount of

space to ensure that the ongoing maintenance and repair of each piece of equipment can be conducted safely and efficiently. Manufacturer's specifications typically establish a bare minimum clearance. For example, these specification may define clearance next to a control panel only as the area necessary to swing open the door of the panel and change the settings. Depending on the size, shape and nature of a piece of equipment, a 1:1 ratio is also typically insufficient. In order to make sure there is adequate space for continued maintenance and repair over the lifetime of a piece of equipment, many pieces of equipment require an amount of adjacent service area that allows an individual to walk around the entire piece of equipment, open up the piece of equipment, remove parts from within the equipment and set them down safely on the floor, or temporarily remove the entire piece of equipment or a large component thereof from the floor. The limitations set forth in the draft bulletin do not account for the full range of activity required for maintenance and repair and do not reflect best practice. It is my experience that DOB recognizes this and does not apply the rigid standards of the draft bulletin governing access space.

11. The draft bulletin also expressly does not allow deductions for adjacent service area to access and service horizontal piping and ducts. Piping, ducts and other horizontal connections have gauges and valves attached to them that need to be accessed and inspected by an individual without thereby obstructing an egress path. There also needs to be area provided to safely access fire dampers, valves, cleanouts and pull boxes. It is my experience that DOB understands the limitations of the draft bulletin in this regard and recognizes the need for adjacent service areas to be provided for horizontal piping and ducts.

12. In order to comply with life safety standards, mechanical floors, like any floor, require corridors, vestibules and general access routes that allow an individual to traverse the floor and that meet requirements for evacuation in an emergency. The draft bulletin does not provide

for circulation space to be counted as mechanical space, except in a residual provision under Section C that allows a maximum 10% of the floor space for circulation space. In the aggregate, however, the amount of circulation space is typically greater than that. It is therefore long-standing DOB practice to permit the deduction of full mechanical floors, inclusive of circulation space, without applying an artificial 10% cap.¹

13. Overall, the draft bulletin assumes a level of mathematical precision in the calculation of mechanical space which is not achievable in the real world. The assumption that mechanical space can be defined simply as the surface area of an individual piece of equipment and its service area calculated under a 1:1 ratio is a theoretical construct which assumes that a mechanical equipment layout for a large building is a perfect jigsaw puzzle—a collection of equipment spaces that fits perfectly on the floor space it occupies. This is almost never achieved in practice. Mechanical engineers design mechanical floors within a floorplate that has a pre-determined size and shape. They need to incorporate and locate a large number of pieces of equipment that come in a variety of sizes and shapes and that, for a myriad of reasons, need to be located on specific floors or specific portions of floors and/or in proximity to other pieces of equipment. The affidavit of Igor Bienstock from ICOR describes specific examples of these types of factors, which guided the particular layout of the mechanical floors in this building. Laying out a mechanical floor to accommodate these factors inevitably results in the creation of small, irregularly shaped residual areas that cannot practically be put to any use. The draft bulletin fails to account for this, but DOB does so in practice.

¹ The affidavit of George M. Janes argues that the area of FDNY corridors on the mechanical floors—areas that were requested by and designated for the FDNY in the event of an emergency—should not be deducted from floor area because FDNY access corridors are not deducted on other non-mechanical interstitial levels. However, as explained above, the deduction for mechanical space is inclusive of circulation space. On floors that do not contain mechanical equipment, there is no deduction applicable to circulation space.

14. The draft bulletin further assumes that it is possible to produce a precise calculation of the amount of mechanical equipment and related access space on the basis of MEP drawings. This is a false precision. Quite simply, it is not possible to produce an accurate mathematical calculation from the standard mechanical drawings submitted to DOB during the permit application phase. This is in large part because these mechanical drawings do not fully depict the dimensions of most pipes, ducts and other connections. Instead, these are depicted on the mechanical drawings using a simplified graphic, for example, a line or two lines, as a convention to indicate their location. Following coordination, the locations of these connections are confirmed and their actual width is depicted on shop drawings. For these reasons, the MEP drawings submitted for purposes of permit review will understate the amount of area occupied by mechanical equipment.

15. Finally, the draft bulletin's use of a fixed 90% threshold for determining whether there is a sufficient amount of mechanical equipment and adjacent service area to justify the deduction of a full floor is highly artificial (and for the various reasons outlined above, virtually impossible to achieve under the terms of the draft bulletin). The more realistic approach used in practice by DOB looks to whether the floor is used for mechanical equipment, access space, circulation space, and whether there are any left-over, unused spaces which realistically could be utilized for other use.

16. For all of these reasons, Landmark West!'s reliance on the draft bulletin is misplaced. The draft bulletin has a number of significant omissions that, if applied, would systematically preclude buildings from deducting entire mechanical floors. It does not reflect the reality of how mechanical engineers design mechanical floors and how DOB reviews this work in practice.

C. Annotated Diagrams of Mechanical Plans


17. A set of color-coded diagrams were included in the Landmark West! submission as an attachment to the affidavit of Michael Ambrosino (the “Ambrosino Diagrams”). Mr. Ambrosino’s analysis is based on only the HVAC mechanical ductwork plans and does not reflect the equipment shown on the drawings for other trades—the drawings for HVAC mechanical piping, fire protection, and plumbing. Even with respect to the equipment on the HVAC ductwork plans, certain types of equipment are not identified on the Ambrosino Diagrams. The affidavit of Mr. Bienstock identifies the many pieces of equipment that are missing from the Ambrosino Diagrams, including all horizontal ductwork and piping. Beyond those omissions, the Ambrosino Diagrams also do not accurately *represent the mechanical floors because they purport to apply the methodology described in the draft bulletin*, a methodology that DOB does not perform or apply to deductions. Moreover, in calculating the percentage of a floor used for equipment and service area, Mr. Ambrosino divided that area by the gross floor area of the entire floor, which includes the area of the building core, structure and curtain wall—portions of the floor that cannot be occupied by mechanical equipment or any other use. Because the area of the building core by itself is nearly 10% of the gross floor area, including it in the “denominator” for the percentage calculation would make it impossible to deduct an entire mechanical floor under the draft Bulletin methodology. For this reason, including the building core, structure and curtain wall in the calculation of gross floor area is nonsensical.

18. The composite drawings submitted to the BSA by the owner on October 21, 2019² provide a more accurate depiction of the mechanical floors, demonstrating that they are used for the mechanical program and without areas that can realistically be occupied for other uses.


² A composite drawing of the fifteenth floor had previously been submitted to the BSA by DOB on October 16, 2019.

19. The density of the mechanical program at these locations will increase when coordination takes place and shop drawings are prepared. To illustrate this, Exhibit A attached hereto includes examples of MEP design drawings as compared to the shop drawings depicting the same space.

20. As demonstrated above, the Ambrosino Diagrams significantly understate the amount of mechanical programming on the mechanical floors. The composite drawings and the section diagrams attached hereto amply illustrate that the mechanical floors are for mechanical use only and that DOB's determination to allow for the deduction of the full floors was entirely appropriate.


Luigi Russo

Sworn to before me on
this 27th day of November, 2019


Notary Public **MARICELLE M PILAO**
Notary Public, State of New York
No. 01P16398678
Qualified in Richmond County
Commission Expires October 7, 2023