

Zoning Commission of the District of Columbia
One Judiciary Square, Suite 210 South
441 Fourth Street, NW
Washington, DC 20001

September 24, 2015

Re: ZC Case 08-06A Refining Proposed Definition of “Automated Parking Garage” and Related Issues

Honorable Members of the Commission:

We appreciate the progress you are making in the overall review of DC’s zoning code. When adopted and put into effect, DC’s residents, visitors, and those owning, operating, or employed here will benefit.

Among these, building owners and developers, and their designers will be able to consider an alternative to standard vehicle parking with ramps and drive aisles. This is particularly important in higher density zone districts the District where height limits and limited land result in most parking being underground, below the main building.

Those of us who have been following the technology have now seen two installations, both in Hoboken, New Jersey. We had been impressed by the plans, but seeing them in operation has made us even more convinced that this technology can provide substantial cost, design, and environmental benefits to DC.

What we saw in Hoboken are systems that deploys two low-profile shuttles, one per axle, each of which has components that locate and grasp each of that axle’s tires off the surface. The pair of shuttles then move vehicles into, around in, and then out of the automated environment, doing so without a separate “platform”. By eliminating individual moving platforms, this system reduces overall vertical requirements by about 6 inches, thus the parking decks can be that much closer to each other, reducing overall volume, so excavation itself is further reduced and volumetric efficiency is increased.

We have also learned that installations in Hoboken (and a much smaller one in New York City) range from very small (in New York, under 10 vehicles) to several hundred; another in the Hoboken range is opening this Fall to serve the City Hall in West Hollywood, California. Overseas, some installations are far larger. For ZRR, our focus initial remains on garages in DC that are over 900 square feet, including those being proposed as a “Public Garage” (Subtitle B, Chapter 1, § 100).

Definition of “Garage, Automated Parking” (Subtitle B, Chapter 1, Section 100, Page B-17):

As now proposed, “**Garage, Automated Parking**” (which generally reflects our earlier recommendations), inadvertently, can be interpreted as expecting or requiring a platform. While common, platforms are not universal. Apart from that, the reality is that many places with automated operation will have to provide some conventional spaces for atypical vehicles (e.g., for taller wheel chair vans for those with handicaps) and situations (e. g., limousines), so the word “entirely” is troublesome; in the same vein, we also suggest adding, as in the two other proposed parking garage definitions, “or part thereof.”

Specifically, the definition proposed in ZRR’s May 2015 proposed rulemaking reads (emphasis added):

Garage, Automated Parking: *A building or other structure [implying: the whole building or structure?] in which parking is accomplished **entirely** by means of shuttles, platforms, dollies, **and mechanisms to lift platforms as needed** that move vehicles around and where such movement is controlled by computers. The facility may be self-service or it may be staffed to accept payment or observe operations where vehicles enter or exit the automated environment. May also be a **public garage.***

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To rectify these, we suggest the following, showing our proposed ~~deletions~~ and ADDITIONS:

Garage, Automated Parking: *A building or other structure, OR PART THEREOF, in which parking is accomplished ~~entirely~~ by means of shuttles, platforms, dollies, OR OTHER ~~and~~ mechanisms ~~to lift platforms as needed~~ that move vehicles around and where such movement is controlled by computers. The facility may be self-service or it may be staffed to accept payment or observe operations where vehicles enter or exit the automated environment. May also be a **public garage**.*

If you agree, the Zoning Commission would adopt the definition to read as follows:

Garage, Automated Parking: *A building or other structure, or part thereof, in which parking is accomplished by means of shuttles, platforms, dollies, or other mechanisms that move vehicles around and where such movement is controlled by computers. The facility may be self-service or it may be staffed to accept payment or observe operations where vehicles enter or exit the automated environment. May also be a **public garage**.*

Context of Case to Date and Above Analysis – Should Automated Parking Be Framed as an Allowed System Instead?

Our approach, to date, has been to develop a definition of a use that would supplant the use now known as a “Mechanical Parking Garage.” Those uses, inherently, were stand-alone. While we could imagine a stand-alone automated parking garage, we expect the greatest application in the District of Columbia would be in situations where it is in a below grade garage as an alternative system of parking, not a distinct use in and of itself. As such, we would be pleased to submit language that would re-cast the concept as a system that would be authorized in any garage (or just those you specify). We stand ready to work with you, your staff, or staff in the Office of Planning as needed. Its approval in the context of building permits and zoning could take the form of a “system endorsement” instead of a separate use.

A Quirk in ZRR as Recommended:

In one place, at page H-47, there is a reference to “Automated Parking Garage” that we think is in error; we recommend that the subparagraph there be removed (§ 1109.1(c)(3)). We think this is a case of text substitution for “Mechanical Parking Garage” as that type would have warranted its appearance there.

Should “Automated Parking Garages” be Seen as a Minor Modification in PUDs/Design Reviews?

We would like to offer one other idea to you, this being inspired by thoughtful provisions in the pending “Penthouse” case (ZC 14-13). Our focus is on its proposed sections 411 and 412, which would allow recently allowed occupancy of penthouses to be taken up as “minor modifications” of previously approved Planned Unit Development and design review cases. To us, the same should apply to automated parking in lieu of standard ramps and aisles, in this case with a referral not only to the Office of Planning but also the Department of Transportation.

While you are officially familiar with the terms proposed in that rulemaking, these provisions are not yet in the case record of ZC 08-06A. Accordingly, we copy them below, adding possible edits to suggest how they might be brought into the adopted ZRR (leaving the citations to current sections intact not knowing exactly how or where these should or would appear as ZRR is adopted):

411.24 A request to add penthouse space to OR PROVIDE AN AUTOMATED PARKING GARAGE [or SYSTEM?] IN a building approved by the Zoning Commission as a planned unit development or through the design review requirements of Chapters 16, 18, 28, or 29 prior to (EFFECTIVE DATE OF THIS AMENDMENT) may be filed as a minor

modification for placement on the Zoning Commission consent calendar, pursuant to § 3030 provided:

- (a) The item shall not be placed on a consent calendar for a period of thirty (30) days minimum following the filing of the application; and
- (b) The Office of Planning AND, IF PARKING IS INVOLVED, THE DEPARTMENT OF TRANSPORTATION shall EACH submit a report with recommendation a minimum of seven (7) days in advance of the meeting.

411.25 In addition to meeting the requirements of § 3030, an application made pursuant to § 411.24 shall include:

- (a) A fully dimensioned copy of the approved and proposed ~~roof plan~~ PLANS and elevations FOR ABOVE-GRADE MODIFICATIONS AND CROSS-SECTIONS FOR PROPOSED BELOW GRADE MODIFICATIONS as necessary to show the changes;
- (b) A written comparison of the proposal to the Zoning Regulations; and
- (c) Verification that the affected ANC has been notified of the request.

Finally, “What If?”

The Zoning Commission has been working to create a new regulatory system for years and more than score of hearings, more than a thousand exhibits. Still, while we hope for adoption soon and short-term effective date, delays are possible, even if unwanted. During September 2014, we provided you materials to show how “Automated Parking” could be adopted within the present regulatory framework. We do not wish for that, but if you find that you will get some of the gems of the effort moving sooner in such a manner, we would like to be part of that; we have all waited long enough. Please see Page 4 of Exhibit 856 in the record of ZC Case 08-06A.

Thank you.



Frederick E. Gorove, P.E.



Lindsley Williams

cc: Office of Planning