



MEMORANDUM

To: JBG SMITH
From: Christopher Forinash
Date: May 22, 2024
Subject: Parking Analysis for RiverHouse Neighborhood

This memo accompanies the draft Multimodal Transportation Analysis (MMTA) dated October 2023¹, and expands on vehicle parking requirements, provision, and sharing arrangements.

CONTEXT

Zoning Requirements

The Arlington County Zoning Ordinance² requires minimum vehicle parking spaces per unit under RA6-15 Multiple-Family Dwelling:

- Residential: One and one-eighth (1.125) spaces for the first 200 dwelling units and one (1) space for each additional dwelling unit.
- Retail: One (1) space per 1,000 square feet of floor area.
- Elder Care (proposed use in Building C2): minimum 0.5 vehicle parking spaces per bedroom for assisted living and independent living units.³

¹ Available from [RiverHouse Neighborhood – Official Website of Arlington County Virginia Government \(arlingtonva.us\)](https://www.arlingtonva.us/).

² Arlington County Zoning Ordinance (effective 11/11/2023), §14.3.7, https://www.arlingtonva.us/files/sharedassets/public/v/1/building/documents/codes-and-ordinances/aczo_effective_11.11.2023.pdf.

³ Arlington County Zoning Ordinance (effective 11/11/2023), §14.3.7, https://www.arlingtonva.us/files/sharedassets/public/v/1/building/documents/codes-and-ordinances/aczo_effective_11.11.2023.pdf.

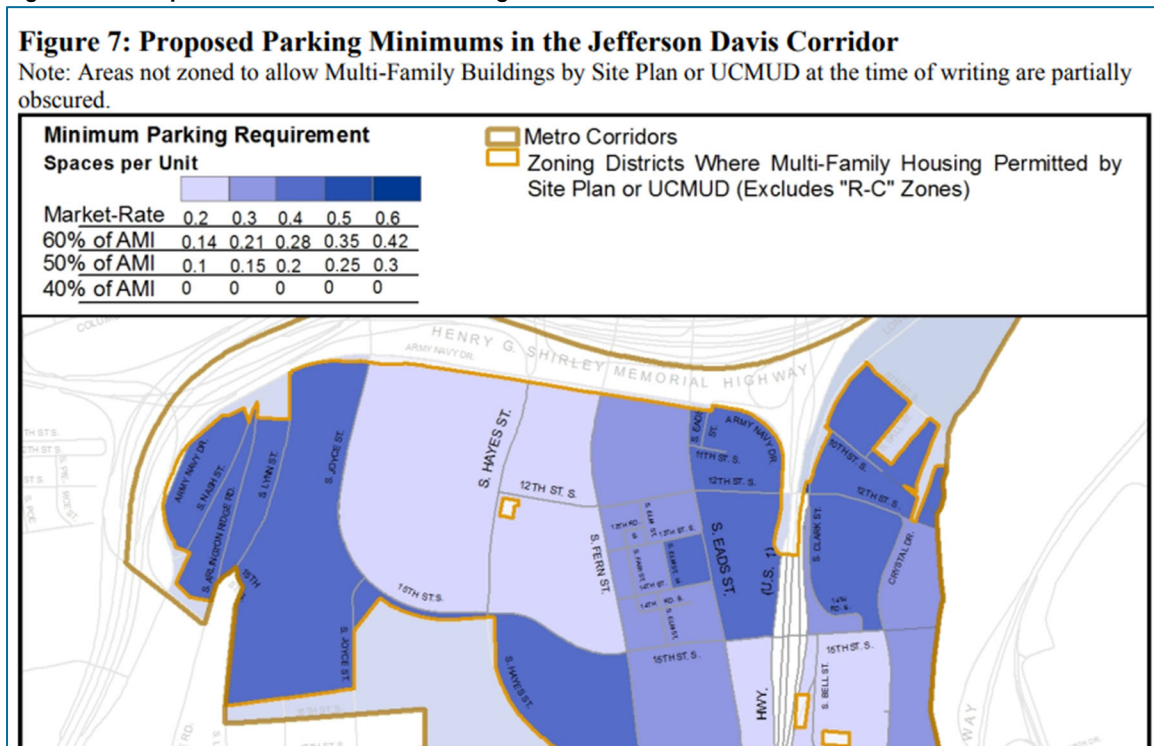
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In 2017 the County Board adopted guidelines⁴ for multi-family residential projects in Metro corridors that recognize lower vehicle-ownership in these developments and locations. These guidelines provide for reductions for market-rate housing from 1 space per unit to as little as 0.2 spaces per unit, depending on a project site’s distance to Metro. For RiverHouse, the guidelines require a **minimum of 0.4 spaces per unit**. See Figure 1.

- Residential: 0.4 spaces per unit
- Visitor: 0.05 spaces per unit for the first 200 units

Figure 1: Excerpt from 2017 Off-Street Parking Guidelines



Parking Use and Trends

The current RiverHouse complex has 1,820 parking spaces for 1,676 residential units, a ratio of 1.09 spaces/unit. Recent data shows current utilization is closer to 0.6 spaces/unit—a number that has been trending downward for some time and is expected to approach 0.5 spaces/unit upon completion of the full RiverHouse Neighborhood buildout.

⁴ "Off-Street Parking Guidelines for Multi-Family Residential Projects Approved by Special Exception in the Rosslyn-Ballston and Jefferson Davis Metro Corridors,"

https://arlington.granicus.com/MetaViewer.php?view_id=2&event_id=1106&meta_id=169654.

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The nearest recently approved site plan with a major residential component is the Americana Hotel site at 1400 Richmond Hwy. It was approved in April 2023 with a residential parking ratio of 0.60 spaces/unit (384 spaces for 639 units), of which 178 spaces are provided on site (0.28/unit) and 206 are provided off-site at the Bartlett (0.32/unit).⁵ Other recently approved site plans with residential components near RiverHouse include the Verizon site at 400 11th St S, approved in 2019 with 306 units and 149 parking spaces (0.44/unit)⁶, and the Bartlett itself (520 12th St S), approved in 2016 with 700 spaces for 700 units (1.0/unit).⁷ An unpublished County-commissioned building-level transportation study of the Bartlett showed that as of 2019, roughly 400 permits were in use for a utilization ratio on a typical day of 0.57 spaces/unit. During the COVID era, the typical utilization ratio at the Bartlett rose to 0.71. This oversupply and under-utilization allows the off-site sharing with the recently approved Americana redevelopment.

Figure 2: Parking Supply and Utilization at and near RiverHouse

Location	Parking supply (per unit)	Parking demand/utilization (per unit)
RiverHouse	1.09	~0.63 (in 2023)
Bartlett (520 12 th St S)	1.00 (reduced to 0.70 via Americana SP)	~0.57 in 2019 ~0.71 (in 2023)
Americana (1400 Richmond Hwy)	0.60 (with 0.32 off-site)	--
Verizon (400 11 th St S)	0.44	--

Recent County-developed information on transportation trends in the area does not speak specifically to parking demand, but indirectly does via traffic and trip-generation trends.⁸ From 2000 to 2020, population increased by 50%, developed GFA increased by 28%, transit ridership increased, yet average vehicle traffic *decreased* by 18%. The trends are clear and accelerating. In addition, the number of car-free households continues to increase significantly. These trends argue that the demand for vehicle parking will continue to decrease due to improved conditions for biking, walking, and transit; demographic trends; and other factors.

⁵ <https://www.arlingtonva.us/Government/Projects/Project-Types/Site-Plan/1400-Richmond-Highway>

⁶ <https://www.arlingtonva.us/Government/Projects/Project-Types/Site-Plan/400-11th-St>

⁷ <https://www.arlingtonva.us/Government/Projects/Project-Types/Site-Plan/Bartlett-Apartments>

⁸ "Four Decades (1980-2019) of Transportation, Development & Demographic Data for the 22202 Zip Code Area," https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/31/2020/09/DES-22202-Final_Report_2020_Update.pdf linked from <https://www.arlingtonva.us/Government/Projects/22202-Data>.

RIVERHOUSE NEIGHBORHOOD

Phased Development Site Plan (PDSP)

The proposed PDSP preserves the existing residential towers which include 1,676 residential units and 2,200 square feet (sf) of retail. The PDSP adds 1,515 new residential units and 26,530 sf of new retail space. The new buildings are largely concentrated on the existing surface parking lots which along with structured parking garages currently provide 1,820 parking spaces. The PDSP results in a total of 2,156 vehicle parking spaces. Figure 3 shows these totals and describes how, in several parts of the site, parking is shared across buildings in an efficient way that allows the total supply to be kept in-line with County standards. The resulting parking supply of 0.67 spaces/unit across the site aligns with current and expected future parking utilization numbers. Given trends as described above, this is expected to sufficiently serve anticipated future levels of parking demand, particularly given that delivery of the new buildings is expected to occur in a phased manner over the next decade. This is supported by conclusions of the MMTA that future RiverHouse development should produce minimal and manageable impacts on the future transportation network.

Figure 3: PDSP Sitewide Parking

Use			Units or Sq Ft	Proposed Ratio	Proposed Spaces	Provided Location of Spaces	
Residential	Existing Multifamily	James (Existing)	452	0.52 Spaces/Unit	233	34 Surface 199 N1/N2 Garage	
		Potomac (Existing)	647	0.53 Spaces/Unit	341	130 Potomac Garage 9 Surface	
		Ashley (Existing)	577	0.63 Spaces/Unit	364	202 N1/N2 Garage 115 Ashley Garage 19 Surface (on-street/ADA) 95 C1 Garage 135 C2 Garage	
		C1	102	0.44 Spaces/Unit	51	45 C1 Garage	
		C1 Visitor Parking		0.05 Spaces/Unit (first 200 units)		6 C1 Garage	
		C2	185	0.68 Spaces/Unit	136	126 C2 Garage	
	C2 Visitor Parking		0.05 Spaces/Unit (first 200 units)	10 C2 Garage			
	C3	162	1.52 Spaces/Unit	255	246 C3 Garage		
	C3 Visitor Parking		0.05 Spaces/Unit (first 200 units)		9 C3 Garage		
	New Development	N1	916	0.50 Spaces/Unit	458	277 N1/N2 Garage	
		N2				181 N1/N2 Garage	
		N1/N2 Visitor Parking				10 N1/N2 Garage	
		O	32	1.41 Spaces/Unit	45	43 Condo Garage	
		O Visitor Parking				2 On-Street	
		TH Multifamily	118	1.96 Spaces/Unit	231	202 TH Garage	
	TH Multifamily Visitor Parking	29 On-Street					
	Future Building	F1	24,000		0	0 Surface	
	Total Residential			3,191	0.67 Spaces/Unit	2,124	
	Retail	N1		15,766	1/1,000 Sq Ft	32	32 N1/N2 Garage - 1st Floor
		N2		10,764			
Total					2,156		

Landbay N Site Plan

Landbay N, at the north end of the RiverHouse Neighborhood, consists of two new buildings (N1 & N2) with a shared garage, replacing the current garage and surface parking between the James and Potomac buildings. Parking in the new garage will be shared among residents of and visitors to N1, N2, and the existing residential buildings as well as the retail space.

Figure 4: Landbay N Parking

LANDBAY N - PARKING REQUIRED					
Use			Units or Sq Ft	Zoning Requirement ^C	Parking Required
Residential	Existing Multifamily	James (Existing)	452	1 & 1/8 for each of the first 200 dwelling units in any structure. Plus 1 for each additional dwelling unit.	477
		Potomac (Existing)	647		672
	New Multifamily	N1/N2	916		941
Retail ^A		N1	15,766 ^B	1 per each 250 sq.ft. of floor area on the first floor of a building	63
		N2	10,764 ^B		44
Total					2,197
^A Retail Parking number assumes standard retail requirement. Depending on final retail use, i.e. daycare, medical office or restaurant the requirement will adjust. ^B Retail Squarefootage assumes no parking requirement for the first 5,000 sq.ft of each multifamily building per ACZO section 14.3.6. ^C Parking requirements per ACZO section 14.3.7.					

LANDBAY N - PARKING PROVIDED						
Use			Units or Sq Ft	Proposed Ratio	Proposed Spaces	Provided Location of Spaces
Residential	Existing Multifamily	James (Existing)	452	0.52 Spaces/Unit	233	34 Surface - To be removed with future Landbay F redevelopment 199 N1/N2 Garage
		Potomac (Existing)	647	0.53 Spaces/Unit	341	130 Potomac Garage 9 Surface
		N1	551	0.5 Spaces/Unit	458	202 N1/N2 Garage 277 N1/N2 Garage
	N2	365			181 N1/N2 Garage	
	Visitor Parking	916	0.05 Spaces/Unit	10	10 N1/N2 Garage	
Retail ^A		N1	15,766	1/1,000 SF	32	32 N1/N2 Garage - Ground Floor
		N2	10,764	1/1,000 SF		
Total					1,074	

Landbay N provides 2,015 residential units as well as approximately 26,000 square feet of retail. Per the zoning code, Landbay N would require 2,197 parking spaces for residents, visitors, and retail. As proposed, Landbay N includes a total of 1,074 parking spaces, of which 1,032 are for residents. The remainder serve retail (32 spaces) and visitors (10 spaces). The resulting residential parking ratio of 0.51 is expected to provide sufficient capacity given current parking demand at RiverHouse and the trends described above, and exceeds County guidelines for a minimum parking ratio of 0.4 in this area.

Landbay C Site Plan

Landbay C consists of three new buildings, each with a separate garage, in addition to the Ashley building which remains. Anticipated uses include rental apartments in building C1, elder care in building C2, and for-sale condos in building C3. Residents of the Ashley will have access to parts of the C1 and C2 garages along with a small number of surface spaces to meet potential parking demand. Residents of and visitors to buildings C1 and C3 will have

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access to those garages only. Residents, visitors, and employees at the elder care building C2 will have access to that garage only.

The new C buildings will likely be developed at different times and may have different owners. Careful planning and phasing will ensure that sufficient parking is available at all times (before, after, and during construction) for current residents and visitors. In addition, negotiated sharing agreements will ensure the long-term availability of parking for the Ashley in the C1 and C2 buildings as intended.

Figure 5: Landbay C Parking

PARKING REQUIRED					
Use			Units or Sq Ft	Zoning Requirement ^C	Parking Required
Residential		Ashley (Existing)	577	1 & 1/8 for each of the first 200 dwelling units in any structure. Plus 1 for each additional dwelling unit.	602
		C1	102		115
		C2	185		209
		C3	162		183
Total					1,109

^A Retail Parking number assumes standard retail requirement. Depending on final retail use, i.e. daycare, medical office or restaurant the requirement will adjust.

^B Retail Squarefootage assumes no parking requirement for the first 5,000 sq.ft of each multifamily building per ACZO section 14.3.6.

^C Parking requirements per ACZO section 14.3.7.

PARKING PROVIDED									
Use			Units or Sq Ft	Proposed Ratio	Proposed Spaces	Provided Location of Spaces			
Residential	Ashley (Existing)		577	0.63 Spaces/Unit	364	115 Ashley Garage			
						19 Surface (on street/ADA)			
						95 C1 Garage			
						135 C2 Garage			
	New Development	C1	102	0.44 Spaces/Unit	51	45 C1 Garage			
		C1 Visitor Parking				6			
		C2				185	0.68 Spaces/Unit	136	126 C2 Garage
		C2 Visitor Parking							10
C3	162	1.52 Spaces/Unit	255	246 C3 Garage					
C3 Visitor Parking				9					
Total					806				

Per the zoning code, Landbay C would require 1,109 parking spaces to serve residents of and visitors to the Ashley and buildings C1, C2, and C3. As proposed, 781 spaces are provided for residents and 25 for visitors.

The existing garage under the Ashley will be reserved for residents of the Ashley. Additional parking for those residents will be available (likely on dedicated floors) in the garages under buildings C1 & C2. Thus residents of the 577 units in the Ashley have access to 364 parking spaces, or 0.63/unit.

The garage under building C1 provides parking for its residents and visitors (along with spaces for the Ashley as described above). Residents of the 102 units in building C1 have access to 45 spaces, for a ratio of 0.44/unit.

Building C2 provides 185 one-bedroom units of elder care housing. Parking available for residents includes 126 spaces, for a ratio of 0.68, in excess of the zoning requirement of 0.5

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spaces/bedroom. This excess provides ample capacity for staff serving elder care residents, including at staff changeover times, and 10 additional spaces are allocated for visitors.

Building C3 is anticipated to be for-sale condos. The market demand for parking at owner-occupied units is typically higher than that for rental units, even in Metro corridors. Applicant analysis shows that a ratio of 1.5 spaces/unit should accommodate demand when the building is delivered in the future. The building includes 162 units and 246 vehicle parking spaces for residents, resulting in a ratio of 1.52 spaces/unit. The low site-wide parking ratio, and the minimal and manageable impacts on the transportation network documented in the MMTA, support as reasonable the provision of sufficient parking to meet the anticipated use of building C2.

Landbay S Site Plan

Landbay S consists of 150 units of townhouse-style multifamily, a combination of for-sale and rental units. As rental units constructed to IBC R-2 building standards, the multifamily parking requirements apply. Parking is primarily provided in garages and small shared lots, with visitor parking provided on-street.

Figure 6: Landbay S Parking

PARKING REQUIRED					
Use			Units or Sq Ft	Zoning Requirement ^C	Parking Required
Residential	New Multifamily	Bldg. O		32 1 & 1/8 for each of the first 200 dwelling units in any structure. Plus 1 for each additional dwelling unit.	36
		TH Multifamily		118 1 & 1/8 for each of the first 200 dwelling units in any structure. Plus 1 for each additional dwelling unit.	133
Total					169

^C Parking requirements per ACZO section 14.3.7.

PARKING PROVIDED							
Use			Units or Sq Ft	Proposed Ratio	Proposed Spaces	Provided Location of Spaces	
Residential	New Multifamily	O - Multifamily		32	1.34 Spaces/Unit	43	Condo Garage
		O - Multifamily Visitor Parking			0.06 Spaces/Unit	2	On-street
		TH Multifamily		118	1.71 Spaces/Unit	202	TH Garage
		TH Multifamily Visitor Parking			0.25 Spaces/Unit	29	On-street
Total					276		

Per the zoning code, a minimum of 169 spaces would be required for 150 multifamily residential units. In Landbay S, a total of 245 parking spaces are provided for the 150 multifamily units, for a ratio of 1.63/unit. A total of 31 visitor parking spaces are provided on-street.

Parking During Construction

The proposed RiverHouse Neighborhood PDSP and Site Plans will ultimately include a Multi-Building Phasing Plan as described in Arlington’s standard Site Plan conditions.⁹ This Phasing Plan will include information about providing parking for continuing residential tenants of existing RiverHouse buildings, as well as for construction-related vehicles. Phasing will be coordinated across Landbays N, C, and S. Priority will be placed on providing all such parking within the RiverHouse site. Given the abundance of underutilized surface parking on the site, it is anticipated that all or nearly all replacement and construction parking will be able to be accommodated.

⁹ <https://www.arlingtonva.us/files/sharedassets/public/v/1/projects/documents/site-plan-projects/2022-site-plan-conditions-final-8.2.2022-cmo-version-clean.pdf>, accessed 5/20/2024.