



MEMORANDUM

TO: Arthur Capper/Carrollsbury Team

FROM: Michael P. Hurley
Robert Schiesel, P.E.

DATE: June 13, 2008

SUBJECT: Arthur Capper/Carrollsbury Square 825-South Public Housing Parking Analysis

OVERVIEW

This memorandum provides a summary of parking demand analysis conducted for the existing public housing buildings at Squares 825S by Gorove/Slade Associates, Inc. (G/SA) to determine the level of parking required and the adequacy of parking supplied on-site.

The site is located in near Southeast Washington, DC on M Street between 4th and 5th Streets, as shown in Figure 1. The buildings have 60 senior housing units and 138 workforce housing units and a ground level parking garage with 33 spaces.

In general, this memorandum found the following:

- 33 parking spaces are provided on Square 825S;
- On-street parking reserved for residents is readily available in the immediate vicinity. 59 on-street residential permit parking spaces are available on streets adjacent to Square 825S, of which only 25% were occupied during recent parking surveys on a weeknight;
- The parking demand of Square 825S is approximately 45 to 55 parked cars, which can be easily accommodated within the parking garage and the on-street residential permit parking;
- Additional parking is not required to accommodate Square 825S residents.

ANALYSIS

Square 825S has 60 senior housing units and 138 workforce housing units and a ground level parking garage with 33 parking spaces. The buildings are fully occupied but there are several spaces that remain available in the building's parking garage. G/SA conducted a parking survey, reviewed parking generation manuals, and utilized G/SA parking expertise in Washington, DC to develop a parking demand profile for the senior and workforce housing. This section details the analyses and findings.

Parking Generation Estimates

G/SA referenced two parking generation manuals commonly used to forecast parking demand to develop a parking demand profile for the public housing. These manuals provide parking demand forecasts for residential units but not for public housing. The ITE Parking Generation, 3rd Edition projects parking demand ratio for urban low/mid-rise apartments at 1.00 vehicles per unit. The ULI Shared Parking, 2nd Edition similarly does not have parking generation rates for public housing but does project parking demand ratios for residential units at 1.65 vehicles per unit.

These parking generation forecasts generally apply to developments in suburban areas with little or no transit service. In Washington, DC the maximum residential parking space per unit at buildings located near a Metrorail station is typically 0.80 to 1.00 car per unit rather than 1.65 cars per unit. These rates for parking demand for DC residential buildings should be 40% to 50% less than rates in these manuals. Public housing has less demand than typical housing, so rates for the housing on Square 825S are expected to be even lower. For a housing complex the size of that in question, these rates suggest an expected parking demand somewhere between 35 to 100 spaces.

Census Data

Though the area has changed tremendously since 2000, G/SA referenced 2000 census data as guide for establishing parking demand because the current residential buildings were built to replace housing removed in the area following the 2000 census. US Census data has car ownership rate by household. Squares 825S are located in US Census Tract 72. In 2000, 85% of households in this census tract had no car available, while 10% has 1, 2% had 2, and 2% had two or more cars available per household. If car ownership characteristics were the same or similar to those observed during the 2000 census, current residents would own between 20 and 30 cars total.

Parking Survey

Since calculations of parking demand using census data and standard manuals vary significantly and do not apply directly to the type of housing on the site, G/SA conducted a parking supply and demand survey in the study area at a time when residential parking demand is at its highest. Figure 2 identifies the location and approximate quantity of on-street parking and occupancy observed by G/SA. The study area has a mix of restricted Zone 6 residential permit parking (RPP) and un-restricted metered and non-metered parking. The vast majority of on-street parking was vacant during the observation periods.

Along the streets that border the site are 71 parking spaces. G/SA observed a total of 29 cars parked in these spaces, of which 15 had Zone 6 RPP parking stickers displayed. 3 cars were parked at metered spaces and another 9 were parked adjacent to the DC Public School at the corner of 5th and M Streets where there are no RPP regulations. Table 1 lists the total number of on-street parking spaces in the study

area, the total number occupied spaces, and the number of spaces occupied by Zone 6 permit holders.

Table 1: On-Street Parking Spaces and Occupancy

	Total Spaces	Occupied Spaces	Occupied by Zone 6 Permit Holders
Number of Spaces	610	82	38
Percent of Total Spaces		13%	6%
Percent of Occupied Spaces			46%

Based on Gorove/Slade Associates, Inc. Parking Survey Conducted on Wednesday, May 14, 2008 at 7:30 PM

Although all 33 spaces in the parking garage are not utilized, to provide for a conservative parking profile, this study assumed that the parking garage was fully occupied.

G/SA used parking observations and the parking generation manuals to develop a parking demand profile for the senior and workforce housing on Square 825S. The parking survey observed that up to 33 cars were parked on-site and an additional 29 cars parked on-street in the immediate vicinity. It could not be determined which on-street vehicles were owned by residents of the senior and workforce housing on Square 825S. Of the 29 cars parked on-street 15 cars had Zone 6 RPP parking stickers. To ensure a conservative estimate of Square 825S parking demand, G/SA assumed that all 15 Zone 6 RPP cars parked on-street were residents of the public housing as well as $\frac{1}{4}$ of all other cars, or 7. Combined, this indicates that the parking demand profile for the public housing is between 45 and 55 cars.

This demand profile is consistent with parking demand rates contained in parking generation manuals when accounting for proximity to a Metrorail station, car ownership characteristics in this area prior to this development, car ownership characteristics of public housing residents, and conditions observed during the parking survey.

Parking Supply

The residents of Square 825S are served by two sources of parking, the garage within the building and the residential permit parking on-street surrounding the site. The parking garage within the building has 33 spaces. There are 59 residential permit parking spaces on the streets adjacent to Square 825S. During the parking observations, these spots were only 25% occupied (most likely by building 825S residents). This total supply of 92 spaces is more than enough to handle the anticipated demand of 45 to 55 parked cars.

CONCLUSION

The senior and workforce housing on Square 825S has a parking demand that can be easily accommodated in the existing parking garage and the residential permit parking on-street adjacent to the building. Additional parking is not required to accommodate Square 825S residents.



Figure 1: Site Location

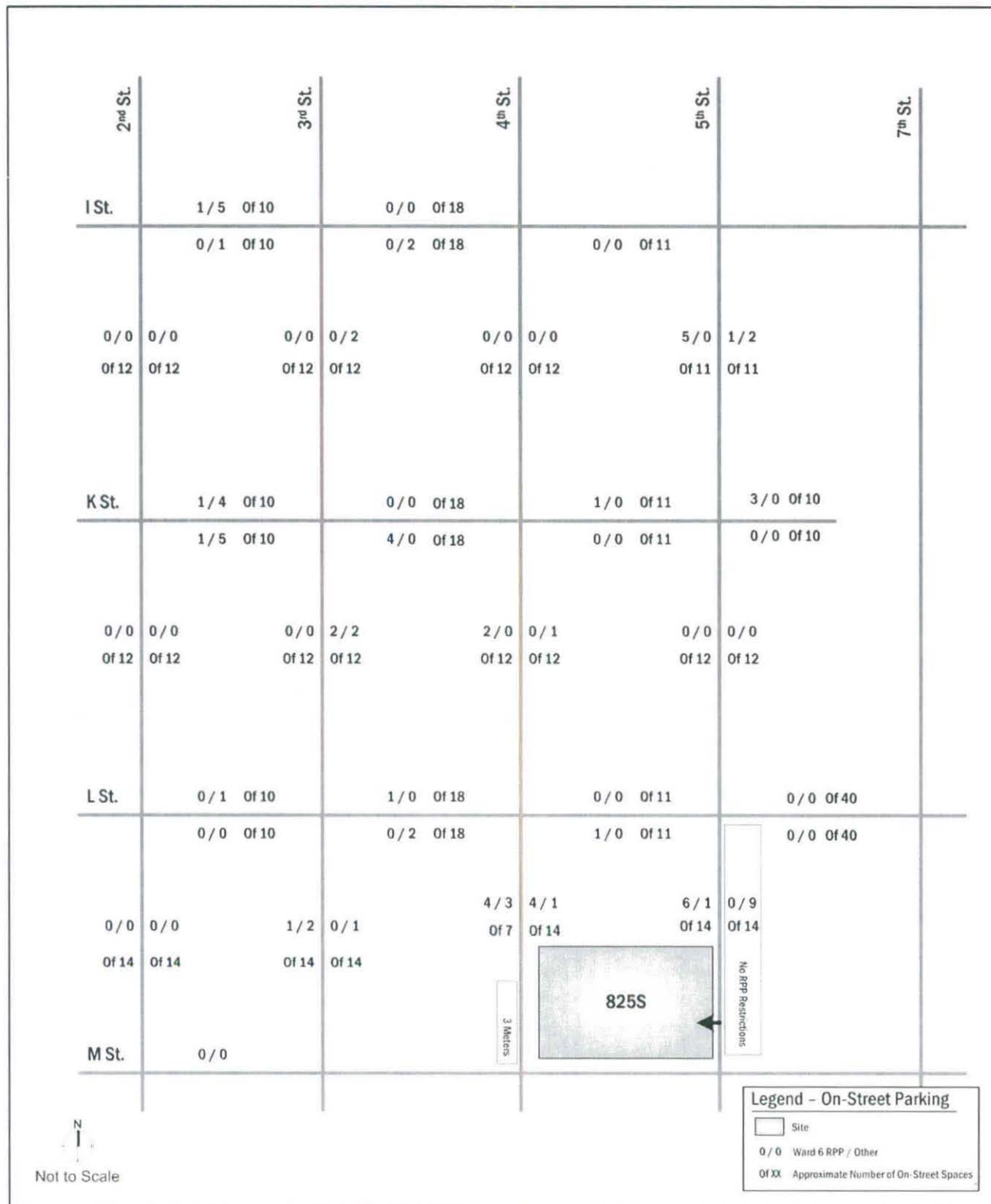


Figure 2: On-Street Parking Supply and Occupancy (Observations at 7:30 PM on May 14th, 2008)