



TECHNICAL MEMORANDUM

TO: John Dapogny

Comstock Communities, L.C.

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DATE: June 20, 2006

SUBJECT: 1700 East Capitol PUD

Preliminary Traffic Findings

INTRODUCTION

This memorandum summarizes a preliminary transportation assessment for the proposed 1700 East Capitol Planned Unit Development (PUD) application. The site is located in Lots 51 through 55, Square 1096, Ward 6, Southeast D.C. Comstock is currently proposing to develop approximately 133 residential condominium units along with approximately 117 below grade parking spaces. A full traffic impact study will be submitted at a later date.

EXISTING CONDITIONS

Traffic counts were conducted at four (4) major study intersections and spot counts were conducted at two (2) minor study intersections on Thursday, May 11, 2006, between the hours of 6:00 a.m. to 9:00 a.m. and 4:00 p.m. to 7:00 p.m. The key study intersections are shown on the site location map (Figure 1) and include:

1. East Capitol Street SE and 17th Street SE
2. East Capitol Street SE and 18th Street SE
3. 17th Street SE and Alley Way SE
4. 18th Street SE and Alley Way SE
5. 17th Street SE and A Street SE
6. 18th Street SE and A Street SE

In addition to collecting turning movement counts, the geometry of the study area and traffic control information including signal timings was also collected. Annual Average Daily Traffic (AADT) volumes collected by the District Department of Transportation in 2002 for the portions of roadway near the study area can be found in Table 1.



Figure 1 – Site Location & Study Intersections

Table 1 – AADT of Roadways around Study Area

Roadway	AADT
	Vehicle Trips
17 th Street, SE North of East Capitol St	11,900
19 th Street, SE bet. East Capitol & A St.	5,000
East Capitol Street, SE, West of 17 th St.	9,300
East Capitol Street, SE, between 17 th St & 18 th St.	11,300
East Capitol St. East of 18 th St, SE	14,000
Independence Ave., West of 17 th St SE	12,800
Independence Ave SE., between 17 th & 18 th St.	13,100
Independence Ave East of 18 th St, SE	12,900

FUTURE CONDITIONS

The number of anticipated trips to be generated by the new development was estimated using the Institute of Transportation Engineers (ITE) *Trip Generation*, 7th edition rates/equations and the *Development-Related Ridership Survey 2005* published by the Washington Metropolitan Area Transit Authority (WMATA). A high percentage of trips to and from residential developments near Metrorail stations use transit; therefore it is expected that some residents of 1700 East Capitol Street would take advantage of the nearby Stadium Armory Metrorail station. Based on the WMATA *Development-Related Ridership Survey 2005*, the transit mode share for developments within a quarter mile of Metrorail stations is expected to be approximately 50 percent. Similarly a significant walk and other mode share are also expected in the traffic generated by the proposed development; however, to be conservative, this mode reduction was not applied to the trip generation. With the reductions applied, a total of 33 AM peak hour trips (6 in and 27 out) and 39 PM peak hour trips (26 in and 13 out) will be generated by the development as shown in Table 3.

Table 3 – Trip Generation

PUD Component	ITE Code	Amount	Trip Generation					
			AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Residential Condominium/Townhouse	230	133 Units	11	54	65	51	25	76
Residential Transit Mode Reduction		50%	(5)	(27)	(32)	(25)	(12)	(37)
Total New Trips			6	27	33	26	13	39

Parking

The existing site currently has 81 apartment dwelling units. These units are currently empty and therefore do not generate parking or traffic. Although the site does not currently have any occupied apartment dwellers, it has the potential to generate traffic and parking associated with 81 apartment dwelling units.

Currently the site does not have any on-site parking spaces. Therefore, all 81 units would be required to park within the neighborhood on the streets.

The proposed project will provide approximately 117 below-grade parking spaces all contained within the site (104 Standard, 8 Compact, & 5 Handicap). This equates to a parking ratio of 0.88 parking spaces per unit (117 spaces per 133 units). This exceeds the zoning requirements of the District of Columbia for areas zoned R5B (currently zoned for R-4, being rezoned to R5B), which is 1 space for every 2 units or a requirement of 67 spaces in this case. The planned onsite parking spaces will eliminate the potential for the existing 81 apartment units from parking on the street within the neighborhood.

Loading

Currently, there are no loading bays located on the site for the 81 apartment dwelling units. The existing apartment units would be required to park on the street in front of the apartment buildings along East Capitol Street or load and unload within the alleyway located mid-block between 17th and 18th Street.

The current proposal will include a 45-foot deep loading berth for a single truck up to 45 feet in length or two (tandem) 20-foot vans. The loading berth will be located within the alleyway south of East Capitol Street between 17th and 18th Street. The DCMR, Title 11, Chapter 22 states that all residential developments with 50 or more dwelling units are required to accommodate a 55-foot berth and a 20 foot service/delivery space. The current proposal is requesting flexibility to the DCMR regulation from a 55-foot loading berth and 20-foot service/delivery space to a 45-foot loading/delivery and service berth.

Larger 55-foot trucks are typically utilized for larger residential development units. The average unit size of the proposed development is approximately 900 square feet per unit. A 900 square foot unit can typically be accommodated within a 16 foot moving truck. It is not envisioned that a 55-foot truck would access the proposed development due to the typical sizes of the units. Of note, the existing constraints of the alleyway entrances at 17th and 18th street also make for difficult maneuvering into and out of the alleyway for a 55-foot truck.

Next Steps

This technical memorandum will be updated with a full traffic analysis report that will include the following additions:

- Details on the background developments and improvements;
- Truck loading provisions.
- Figures of study area intersections, including traffic volumes for existing and future conditions; and
- Full capacity analysis details and worksheets.