



WELLS + ASSOCIATES

MEMORANDUM

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TO: Murat Omay, District Department of Transportation

CC: T. James Truby, Synthesis Incorporated

FROM: Jami L. Milanovich, P.E.
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BOARD OF ZONING ADJUSTMENT
District of Columbia

CASE NO. 18412

EXHIBIT NO. 44

DATE: September 25, 2012

RE: Transportation Assessment for North Capitol Commons (BZA Case #18412)
1005 North Capitol Street, NE (Square 674, Lot 439)
Washington, DC

OVERVIEW

"Be the Change" (the Applicant) is proposing to construct a residential development consisting of 124 units in a 14-story building on North Capitol Street in the northeast quadrant of Washington, DC (development site shown in Figure 1). The site is located on Lot 439 in Square 674. Square 674 is bounded by North Capitol Street to the west, Ist Street, NE to the east, L Street, NE to the north and K Street, NE to the south. The site is in the C-3-C district and located in Ward 6.

Approximately 60 of the 124 units would be permanent supportive housing serving the chronically homeless, 63 units would be affordable housing (less than or equal to 60 percent Area Median Income, or AMI), and one unit would be allocated for the building supervisor. Support facilities would be located on the first and second floors, and a portion of the third floor. These support facilities include 5,367 square feet (SF) of office space that will be used by staff who operate the building and provide support services to the tenants. Additionally, 2,982 SF of neighborhood-serving retail is proposed on the first floor.

The proposed development does not include on-site parking spaces. Two options for loading are contemplated. Option 1 would provide an on-street loading zone on the east side of North Capitol Street that would accommodate anticipated deliveries. Option 2 would provide loading on-site and would be accessed by a curb cut on North Capitol Street. Trucks would access the proposed 30-foot loading berth by backing in from North Capitol Street and would exit front-first onto North Capitol Street. The site plan for Option 1 is depicted on Figure 2 and the site plan for Option 2 is depicted on Figure 3.

The Applicant is seeking relief from both the required number of on-site parking spaces and the loading requirements set forth in the District of Columbia Municipal Regulations (DCMR). To support the requested variances, the Applicant commissioned this transportation assessment. This memo specifically summarizes: (1) an inventory of alternative transportation options in the site vicinity, (2) the anticipated trip generation for the proposed development, (3) a parking assessment, (4) the proposed loading management plan for the loading operations (under both options), and (5) a safety evaluation of the two intersections adjacent to the site.

ALTERNATE MODES OF TRANSPORTATION

Metrorail Service/Facilities

Both Union Station and the NoMA-Gallaudet U (New York Avenue) Metro Stations are located approximately 0.5 miles (walking distance) from the site (see Figure 4). Union Station is located at 701 1st Street, NE near Columbus Circle and is the busiest station in the Metrorail system with an average weekday ridership of approximately 70,000 passengers.¹ The NoMA-Gallaudet U (New York Avenue) Station is located at 200 Florida Avenue, NE.

Union Station and the NoMA-Gallaudet U (New York Avenue) Station provide service to Metro's Red Line and provide direct service to Metro Center and stations in Montgomery County. Red Line passengers can transfer to the Green and Yellow Lines at the Gallery Place – Chinatown Station or the Fort Totten Station and to the Blue and Orange Lines at Metro Center.

Bus Service/Facilities

The Washington Metropolitan Area Transit Authority (WMATA), the Maryland Transit Authority (MTA), DC Circulator, and the Loudoun County Commuter Bus currently provide public bus service near the site. As shown in Table I and Figure 4, the site is well served by numerous bus routes and bus stops within an approximately three block radius of the site, including one bus stop immediately in front of the subject site on North Capitol Street. Figure 4 displays the bus stops and the various bus routes that service the area surrounding the site.

Zipcar Facilities

Zipcar, an automated car rental or car sharing system in the Washington, DC area, will be readily available for residents and staff of North Capitol Commons. Currently, 15 Zipcars (at five different stations) are located within an approximately four to five block radius of the site, as shown on Figure 5.

¹ Washington Metropolitan Area, Union Station Simulation, [<http://planitmetro.com/2010/10/19/union-station-simulation/>]

Capital BikeShare

Capital BikeShare, an automated bicycle rental or bicycle sharing system in the Washington, DC area, also is available near the proposed development. Specifically, three BikeShare stations are located within an approximately four to five block radius of the site, as shown on Figure 6.

Table I
Public Bus Service

Bus Stop Location		Bus Routes											
		Anacostia – Eckington Line (Route P6)	North Capitol Street Line (Route 80)	East Capitol Street – Cardozo Line (Route 96)	Ivy City – Dupont Circle Line (Route D3)	Ivy City – Franklin Square Line (Route D4)	Hospital Center Line (Route D8)	Benning Road Line (Route X1)	Benning Road – H Street Line (Route X2)	Benning Road – H Street Limited (Route X9)	Charlotte Hall/Waldorf to Washington DC MTA 903	Kent Island & Annapolis to Washington DC MTA 922	Kent Island & Annapolis to Washington DC MTA 950
1	M Street, NW & I st Street, NW	✓		✓									
2	M Street, NW & I st Place, NW	✓											
3	M Street & North Capitol Street (NW/SE Corners)		✓										
4	M Street & North Capitol Street (SW Corner)			✓									
5	North Capitol Street & Pierce Street		✓	✓									
6	K Street & North Capitol Street (on North Capitol Street)		✓	✓									
7	K Street & North Capitol Street (on K Street, NE)				✓	✓							
8	K Street & North Capitol Street (on K Street, NW)					✓							
9	K Street, NE & I st Street, NE				✓	✓							✓
10	K Street, NW & New Jersey Avenue			✓									
11	K Street, NW & I st Street NW					✓							
12	North Capitol Street & I Street		✓			✓							
13	North Capitol Street & H Street		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14	H Street, NW & I st Street, NW					✓							

Walk and Transit Scores

The proposed development site is considered to be “very walkable” with “excellent transit” according to the Walk Score website (www.walkscore.com). The walk score considers how close various amenities, such as coffee shops, grocery stores, schools, parks, and banks are to the site. The transit score considers how close rail and bus services are to the site. The scales utilized by Walk Score are shown in Table 2. The North Capitol Commons site scores an 88 out of a possible 100 on the walk score scale and an 84 out of a possible 100 on the transit score scale.

Table 2
Walk and Transit Score Scales

WALK SCORE	DESCRIPTION
90–100	Walker's Paradise — Daily errands do not require a car.
70–89	Very Walkable — Most errands can be accomplished on foot.
50–69	Somewhat Walkable — Some amenities within walking distance.
25–49	Car-Dependent — A few amenities within walking distance.
0–24	Car-Dependent — Almost all errands require a car.
TRANSIT SCORE	DESCRIPTION
90–100	Rider's Paradise — World-class public transportation.
70–89	Excellent Transit — Transit is convenient for most trips.
50–69	Good Transit — Many nearby public transportation options.
25–49	Some Transit — A few nearby public transportation options.
0–24	Minimal Transit — It is possible to get on a bus.

Pedestrian Facilities

The District of Columbia Pedestrian Master Plan (DCPMP) strives to make Washington, DC safer and more walkable by improving sidewalks, roadway crossings, and the quality of the pedestrian environment as well as by ensuring that the District's policies and procedures support walking. The Plan provides an overview of existing pedestrian conditions, recommends new pedestrian projects and programs, establishes performance measures, and provides a plan for implementation through 2018. The DCPMP estimates areas of pedestrian activity and deficiency as well as provides pedestrian crash data for the years 2000 through 2006. The DCPMP indicates that nine to 13 pedestrian injury crashes occurred at North Capitol Street and K Street between the years of 2000 and 2006. The North Capitol Street and L Street intersection is noted to have experienced between two and four pedestrian injury crashes between the years of 2000 and 2006. The DCPMP also indicates moderate pedestrian activity and moderate pedestrian deficiency in the area.

Crosswalks and pedestrian signals with countdown heads are present at both adjacent intersections (North Capitol Street/K Street and North Capitol Street/L Street). At the North Capitol Street/L Street intersection, pedestrian push buttons are provided to activate the walk signal. A more detailed pedestrian safety discussion is included in the Safety Evaluation section of this memorandum.

Bicycle Facilities

The District of Columbia Bicycle Master Plan (DCBMP) seeks to create a more bicycle-friendly city by establishing high quality bicycle facilities and programs that are safe and convenient. The DCBMP indicates that North Capitol Street operates at a Bicycle Level of Service (BLOS) "E" or "F" in the vicinity of the subject site. On Ist Street, NE BLOS varies from a BLOS "D" to a BLOS "F". L Street, NE operates at a BLOS "C" in the study area while a K Street operates at a BLOS "E".

A dedicated bicycle lane exists adjacent to the northbound lane of Ist Street, NE; however, the DCBMP also indicates that zero to 0.4 percent of the area residents commute by bicycle (at the time the report was drafted). The DCBMP indicates that from 2000 to 2002, one bicycle related crash occurred at each the North Capitol Street/K Street intersection and the North Capitol Street/L Street intersection.

The DCMR does not require bicycle parking for residential uses. However, the proposed plans include an indoor storage space for bicycles that will accommodate between 27 and 48 bicycles depending on the type of bicycle rack system installed. Additionally, outdoor bicycle racks are proposed on the sidewalk adjacent to North Capitol Street (near the northern

SITE TRIP GENERATION

As shown in Table 3, the Institute of Transportation Engineers' (ITE) Trip Generation Land Use Code 220 (Apartments) was utilized for determining the baseline trip generation for the proposed development. Several adjustments then were made to the baseline trip generation to account for the unique nature of the proposed development. The proposed development is unique on three fronts: (1) the trip generation rates provided in ITE are based on suburban data with little or no public transportation and with minimal walkability, (2) tenants of the permanent supportive housing, which will serve the chronically homeless, are not anticipated to own a vehicle and (3) the development will accommodate a support staff for the tenants.

As stated previously, approximately half of the dwelling units will be permanent supportive housing. The 60 permanent supportive housing units will be occupied by tenants that are chronically homeless and, based on information provided by the Applicant, none of these tenants will own a vehicle. Therefore, the 60 permanent supportive housing units were assumed to generate no vehicle trips, as shown in Table 3.

For the affordable housing units, the 2010 U.S. Census Data for the surrounding area was examined. Based on 2010 census data, 71 percent of rental households, within the census tract in which the subject site is located, do not own a vehicle. Consequently, a 71 percent non-auto mode split was assumed for the remaining 63 affordable housing units and the building supervisors unit, as shown in Table 3.

It is expected that the proposed development will accommodate a support staff of approximately 15 total employees. Based on information provided by the Applicant, it is anticipated that 70 percent or fewer of the employees will use personal vehicles when traveling to/from the site. Therefore, a 30 percent non-auto mode split was assumed for the staff trip generation. Furthermore, based on information provided by the Applicant with regard to typical work hours and shifts, the employee trips were distributed to the AM, PM, and Sunday peak hours (see Attachment A for further details regarding the employee trip generation).

Table 3 Site Trip Generation Summary

Land Use / Trip Type	AM Peak Hour			PM Peak Hour			Sunday Peak Hour			Daily Weekday
	In	Out	Total	In	Out	Total	In	Out	Total	
Apartment (ITE LUC 220) 124 Dwelling Units										
Total Trips ¹	13	51	64	56	30	86	32	31	63	875
<i>Non-Auto Mode Split for Permanent Supportive Housing Units ²</i>	(6)	(25)	(31)	(27)	(15)	(42)	(15)	(15)	(30)	(423)
Vehicle Trips after Permanent Supportive Housing Non-Auto Trips Removed	7	26	33	29	15	44	17	16	33	452
<i>Non-Auto Mode Split for Affordable Housing Units ³</i>	(5)	(18)	(23)	(21)	(11)	(32)	(12)	(11)	(23)	(321)
Vehicle Trips after Affordable Housing Non-Auto Trips Removed	2	8	10	8	4	12	5	5	10	131
Staff Vehicle Trips (including non-auto mode split) ⁴	5	2	7	-	5	5	2	2	4	21
Vehicle Trips	7	10	17	8	9	17	7	7	14	152

¹ Trip generation based on the Institute of Transportation Engineers' Trip Generation, 8th Edition. For Sunday peak hour, a directional distribution is not provided in ITE; therefore, it was assumed to be 50/50 inbound/outbound.

² 60 of 124 units will be permanent supportive housing. None of these residents will own vehicles.

³ The Census data for this Census Tract indicates 71 percent of rental households do not own a vehicle.

⁴ Assumed 7 staff arrive during AM peak hour and depart during PM peak hour. Also, assumed 3 staff depart during AM peak hour. On Sunday, assumed 3 staff arrive and 3 staff depart during peak hour. For daily, assumed all 15 staff arrive and all 15 staff depart in same day. Also includes a 30 percent mode split per Applicant's site-specific information regarding employee travel behavior.

As shown in Table 3, after the non-auto mode splits were applied and the employee trip generating characteristics were determined, the proposed development is anticipated to generate 17 AM peak hour vehicle trips, 17 PM peak hour vehicle trips, and 14 Sunday peak hour vehicle trips.

Note that the small proposed retail component is intended to be neighborhood-serving. As such, the vast majority of trips are expected to be non-auto trips, primarily walking. Additionally, no parking is proposed on-site furthering the likelihood that retail patrons will not drive to the site. Consequently, it is expected that the small neighborhood-serving retail component will generate very few vehicle trips throughout the day.

PARKING ASSESSMENT

Parking Requirements

According to the DCMR, in the C-3-C district, one parking space is required for every four dwelling units. Therefore, the proposed 124 residential units would require 31 off-street parking spaces. Additionally, the DCMR indicates that, in the C-3-C district, one parking space for every 1,800 SF of office space, in excess of 2,000 SF, is required. Therefore, the proposed 5,367 SF of support office space would require two off-street parking spaces. Finally, in the C-3-C district, the DCMR indicates that one space for every 750 SF of retail space, in excess of 3,000 SF, is required. Since 2,982 SF of retail space is proposed, the retail component of the proposed development would not require any off-street parking.

Therefore, in total, the proposed development would require 33 off-street parking spaces. Since no parking is proposed on the site, relief from the requirement to provide the 33 off-street parking spaces is being sought by the Applicant.

Off-street Parking

To accommodate staff of North Capitol Commons that may drive to/from work and to accommodate any residents that wish to obtain off-street parking for their vehicles, nearby public parking garages were identified. There are eleven public parking garages located within a two block radius of the site, as shown on Figure 7.

On-Street Parking Inventory

To assess the available on-street parking capacity near the site, Wells + Associates performed a detailed parking inventory within an approximately three block radius of the site. Figures 8, 9 and 10 show the on-street parking restrictions on each block and the number of on-street parking spaces on each road segment.

On-Street Parking Occupancy

In order to determine the existing parking demand in the adjacent neighborhood, parking occupancy counts were conducted. The area selected for the study generally was bounded by New Jersey Avenue to the west, the Metrorail tracks to the east, M Street to the north, and the H Street to the south.

The peak parking demand associated within a residential land use generally occurs between 10:00 PM and 6:00 AM. In order to provide a thorough assessment of the peak parking demands given the variety of land uses (i.e., residential, office, church, etc.) in the site vicinity, parking occupancy counts were conducted on Tuesday, June 12, 2012 at hourly intervals from 5:00 PM to 11:00 PM, on Sunday, July 1, 2012 from 7:30 AM to 1:30 PM, and on Sunday, July 15, 2012 from 9:30 AM to 11:30 AM. The Sunday counts conducted on July 1, 2012 were performed in the midst of a major power outage in the area; therefore, the Sunday counts on July 15, 2012 were conducted to verify the results of the original Sunday counts. Parking occupancy counts are included in Attachment B.

As shown in Table 4, the weekday peak parking demand for the entire neighborhood occurred at 5:00 PM when 323 of the 428 neighborhood street parking spaces were occupied, resulting in a 75 percent parking occupancy. The peak Sunday parking demand for the entire neighborhood occurred at 11:30 AM when 321 of the 622 neighborhood street parking spaces were occupied, resulting in a 52 percent parking occupancy, as shown in Table 4.

It should be noted that at the time the parking inventory and parking occupancy counts were conducted, there were several areas where parking was restricted or permitted on a limited basis due to construction, including M Street, NE at North Capitol Street and the north side of H Street, NW. Note that areas where parking was not permitted due to construction were excluded from both the parking inventory and the parking occupancy counts. Once these construction projects are finished, the number of available parking spaces will increase, thereby likely reducing the overall parking occupancy percentages presented in Table 4.

Also of significance, there were a few locations where over 100 percent occupancy during certain hours of the day was observed. This is due to drivers parking illegally during restricted hours (i.e., some parking restrictions are in place until 6:30 PM but vehicles were parked illegally during the 5:00 PM count).

Table 4
On-Street Parking Occupancy Summary for Entire Neighborhood

Road Segment	Weekday (Tuesday, June 12, 2012)			Sunday (Sunday, July 15, 2012)		
	# of Parking Spaces	Maximum Parking Occupancy (5:00 PM)		# of Parking Spaces	Maximum Parking Occupancy (11:30 AM)	
		Spaces	Percent		Spaces	Percent
H Street, NE	0	0	-	0	0	-
H Street, NW	12	3	25%	36	1	3%
I Street, NW*	31	31	100%	31	28	90%
K Street, NE	18	13	72%	41	16	39%
K Street, NW	10	21	210%	69	11	16%
L Street, NE	32	3	9%	32	11	34%
L Street, NW	56	52	93%	56	39	70%
M Street, NE	44	27	61%	58	32	55%
M Street, NW	47	26	55%	47	24	51%
Pierce Street, NE	28	28	100%	28	13	46%
Pierce Street, NW	51	28	55%	51	18	35%
I st Street, NE	45	36	80%	45	34	76%
I st Street, NW	30	22	73%	30	18	60%
N. Capitol Street	24	33	138%	92	76	78%
TOTAL	323	428	75%	622	321	52%
* Jesuit School Parking Only – lot vehicles and inventory were not included in the analysis of I Street NW. The on-street parking spaces were conservatively assumed to be fully occupied even though the school lot occupancy varies.						

As shown in Table 5, the peak weekday (Tuesday) parking demand for the roadways nearest the site (North Capitol Street, L Street, NE, and K Street, NE) occurred at 5:00 PM when 49 of the 74 on-street parking spaces were occupied, resulting in a 66 percent parking occupancy. As previously mentioned, this includes several vehicles illegally parked on North Capitol Street during restricted time periods. The peak Sunday parking demand for the roadways nearest the proposed site occurred at 11:30 AM when 103 of the 171 on-street parking spaces were occupied, resulting in a 60 percent parking occupancy, as shown in Table 6.

Table 5
On-Street Parking Occupancy Summary for Road Segments Adjacent to Site (Weekday)

Road Segment	Weekday					
	# of Parking Spaces	Minimum Parking Occupancy (10:00 PM)		# of Parking Spaces	Maximum Parking Occupancy (5:00 PM)	
		Spaces	Percent		Spaces	Percent
K Street, NE	41	2	5%	18	13	72%
L Street, NE	32	0	0%	32	3	9%
N. Capitol Street	82	0	0%	24	33	138%
TOTAL	155	2	1%	74	49	66%

Table 6
On-Street Parking Occupancy Summary for Road Segments Adjacent to Site (Sunday)

Road Segment	Sunday					
	# of Parking Spaces	Minimum Parking Occupancy (12:30 PM)		# of Parking Spaces	Maximum Parking Occupancy (11:30 AM)	
		Spaces	Percent		Spaces	Percent
K Street, NE	41	15	37%	41	16	39%
L Street, NE	32	7	22%	32	11	34%
N. Capitol Street	98	0	0%	98	76	78%
TOTAL	171	22	13%	171	103	60%

Site Parking Demand

Based on the expectations that (1) staff of North Capitol Commons will use nearby public parking garages, (2) none of the 60 permanent supportive housing units will own a vehicle, (3) 71 percent of the affordable housing units will not own a vehicle, and (4) the small neighborhood-serving retail component will not require vehicle parking (per the DCMR), the site is anticipated to generate a peak parking demand of approximately 19 vehicles. The weekday and weekend peak parking demand for residential uses typically occurs overnight (i.e., generally 10:00 PM to 6:00 AM).

As shown in Tables 3, 4, and 5, the weekday and Sunday peak parking demand in the site vicinity occurs at 5:30 PM and 11:30 AM, respectively. Therefore, the peak parking demand for the proposed residential use would not overlap the existing peak parking demand in the neighborhood.

Nevertheless, as shown in Tables 3, 4, and 5, the site's peak parking demand of 19 vehicles actually could be accommodated during each of the existing peak parking demand time periods in the neighborhood.

It should be noted that the proposed residential site is located in the area north of Massachusetts Avenue known as NoMA. This is an area experiencing major redevelopment efforts and has been thoroughly studied by DDOT in recent years to determine the most efficient use of space. These studies include the investigation of parking needs and requirements in which it was explained that: *"There are currently more than 7,400 parking spaces in NoMA, a number expected to more than double with proposed development."*² Although the on-street parking inventory likely will not change significantly in the future, off-street parking options will increase significantly with future redevelopment in NoMA.

LOADING EVALUATION

Loading Requirements

In the C-3-C district, the DCMR states that residential buildings, with 50 or more dwelling units, are required to provide one 55-foot loading berth, one 200 square foot loading platform, and one 20-foot service/delivery loading space. The retail and office components do not have any loading requirements per the DCMR.

The Applicant is considering two loading options. Option 1 would provide an on-street loading zone on the east side of North Capitol Street that would accommodate anticipated deliveries. Under Option 1, the Applicant would require relief from the DCMR loading requirements for the 55-foot loading berth, the 200 square foot loading platform and the 20-foot service/delivery space. Option 2 would provide loading on-site and would be accessed by a curb cut on North Capitol Street. Trucks would access the proposed 30-foot loading berth (and the proposed 200 square foot loading berth) by backing in from North Capitol Street and would exit front-first onto North Capitol Street (see Figure 11). Under Option 2, the Applicant would require relief from the DCMR loading requirements for the 55-foot berth and the 20-foot service/delivery space.

Loading Management Plan

In order to minimize the impact of the loading for the site, the Applicant has agreed to implement a loading management plan (LMP) outlining the loading operations for the proposed development. The purpose of the LMP is to promote safe and efficient travel for all users (e.g. cars, trucks, and pedestrians) and to set forth guidelines and procedures for loading and delivery operations that will avoid adverse impacts on the tenants of the proposed building and the surrounding community. The following are the proposed components of the LMP:

² District Department of Transportation, NoMA Neighborhood Access Study and Transportation Management Plan, March 31, 2010

- 1) The LMP will designate a member of the on-site management team as a loading coordinator (duties may be part of other duties assigned to the individual). He or she will coordinate loading activities of the building (including non-FedEx/UPS deliveries, trash disposal, retail deliveries, and residential move-in and move-out activities). The loading coordinator will be responsible for informing tenants of the guidelines and procedures for loading and delivery operations. The loading coordinator will inform residential tenants of DDOT's regulations for moving trucks and will work with tenants when applying for DDOT permits for moving trucks.
- 2) A lease provision will require all tenants to use only the loading zone (if Option 1 is implemented) or to use only the on-site loading berth (if Option 2 is implemented) for deliveries and move-in/move-out activities.
- 3) A lease provision will restrict all tenants from using trucks longer than 30 feet, except in special circumstances as outlined in #5 below.
- 4) All residential tenants will be required to notify the loading coordinator before moving in or out so that the loading coordinator can ensure no conflicting loading activities will occur. Residential tenants shall provide the loading coordinator the following information: time and date that the truck is anticipated to arrive, size of truck being used, and name of the moving service, if applicable.
- 5) The retail tenant(s) will be required to notify the loading coordinator of all regularly schedule deliveries and of any occasional deliveries so that the loading coordinator can ensure no conflicting loading activities will occur. The retail tenant(s) shall provide the loading coordinator the following information: time and date that trucks are anticipated to arrive each day of the week, size of trucks being used, and the name of the delivery company.
- 6) In the rare event that a truck longer than 30 feet is required a temporary no parking zone can be established on an adjacent street to allow for curb-side loading or unloading adjacent to the building. Under Option 1, the on-street loading zone would be extended to include additional space (for the applicable truck size) as a temporary no parking zone. Under Option 2, a temporary no parking zone for the full length of the applicable truck would be established. The tenants shall notify the loading manager at least four weeks in advance so proper permits can be obtained from DDOT and Emergency No Parking signs issued. The tenant shall provide the loading coordinator the following information: time and date that the truck is anticipated to arrive, size of truck being used, and name of the moving service.
- 7) Trucks will be required to use the following truck circulation route: trucks will enter the site loading zone (if Option 1 is implemented) or on-site loading berth (if Option 2 is implemented) northbound on North Capitol Street, and then exit the site loading zone (if Option 1 is implemented) or on-site loading berth (if Option 2 is implemented) northbound on North Capitol Street.

- 8) Permits are required by DDOT for oversize and overweight vehicles in the District (e.g., trucks longer than 40 feet long or wider than 8½ feet). The loading coordinator will assist tenants in obtaining appropriate permits; however, issuance of permits is at the discretion of DDOT.
- 9) No truck idling shall be permitted in the loading zone.

If Option 2 is implemented (on-site loading berth), move-in/move out activities and retail deliveries will be restricted between the hours of 7:30 AM and 9:30 AM and 4:30 PM and 6:30 PM.

SAFETY EVALUATION

Crash data for the intersections of North Capitol Street/K Street and North Capitol Street/L Street was requested from DDOT on September 21, 2012 (i.e., after receiving comments on September 21, 2012 from DDOT on the scoping form that crash data should be provided). However, at the time this memo was drafted, the crash data has not been received. This information will be included under separate cover once it has been received.

Field observations were conducted for the roadways immediately adjacent to the proposed development site. Recent improvements were made at the intersection of North Capitol Street and K Street to improve the curb ramps to include detectable warning strips in compliance with the Americans with Disabilities Act (ADA) standards. However, field observations conducted on Friday, September 22, 2012 indicate that the brick gutters in front of the accessible ramps on the northwest and northeast corners of the intersection are deteriorating and pose a potential hazard to pedestrians, especially disabled persons.



North Capitol Street/K Street – Northwest Corner



North Capitol Street/K Street – Northeast Corner

The curb ramps at the North Capitol Street and L Street intersection do not include detectable warning strips. Additionally, there is minor deterioration of the brick gutter in front of the accessible ramp on the northeast corner of the intersection.



North Capitol Street/L Street –Northeast Corner



North Capitol Street/L Street –Northeast Corner

The pavement markings in the area appear to be sufficiently visible for the roadway users despite some cracking in certain areas. In two locations, portions of the crosswalks appear to have been paved over recently: (1) the crosswalk on the east leg of the North Capitol Street/L Street and (2) the crosswalk



North Capitol Street/L Street – East Leg



North Capitol Street/K Street – West Leg

The traffic control signs in the site vicinity also remain in good condition with the exception of two parking signs that are worn beyond legibility, as shown below. Additionally, one parking sign in the vicinity of the site was obstructed by foliage.



West side of North Capitol Street between K and L Streets



West side of North Capitol Street north of L Street



South side of L street east of North Capitol Street

During the field observations, the following issues were noted regarding the sidewalks in the area: (1) the sidewalk on the west side of North Capitol Street, between K and L Streets is very narrow, (2) the base of a missing directional sign causes an obstruction in the pedestrian walkway on the west side of North Capitol Street at L Street, and (3) a water valve cap is not flush with the sidewalk on the southeast corner of the North Capitol Street/L Street intersection.



West side of North Capitol Street between K and L Streets



West side of North Capitol Street between K at L Street



North Capitol Street/L Street – Southeast Corner

It should be emphasized that all of these situations exist today; therefore, remediation of these issues is not the responsibility of the Applicant.

CONCLUSIONS

In summary, the North Capitol Commons site is well served by alternate modes of transportation and, as a result, the traffic impact of the proposed development on the surrounding roadway network will be minimal. A limited number of vehicles are anticipated to access the site due to the unique nature of the residential, retail, and office uses proposed, the prevalence of public transportation, and the walkability of the surrounding area. Furthermore, the existing on-street parking supply will adequately accommodate the limited future parking demand of the proposed development. Finally, the Applicant's proposed loading management plan will maximize the safety and efficiency of the loading operations at the site.

Considering all of the transportation related elements discussed herein, the requested parking and loading variances for the proposed development will not have an adverse impact on the traffic operations on the surrounding roadway network. We hope that this memorandum provides you with adequate information regarding the transportation issues related to the proposed development. Should you require any additional information, please do not hesitate to contact us at 724-933-9010, jlmilanovich@mjwells.com, anmikec@mjwells.com, or klbrown@mjwells.com.

FIGURES



Figure 1
Site Location



North Capital Commons
Washington, DC

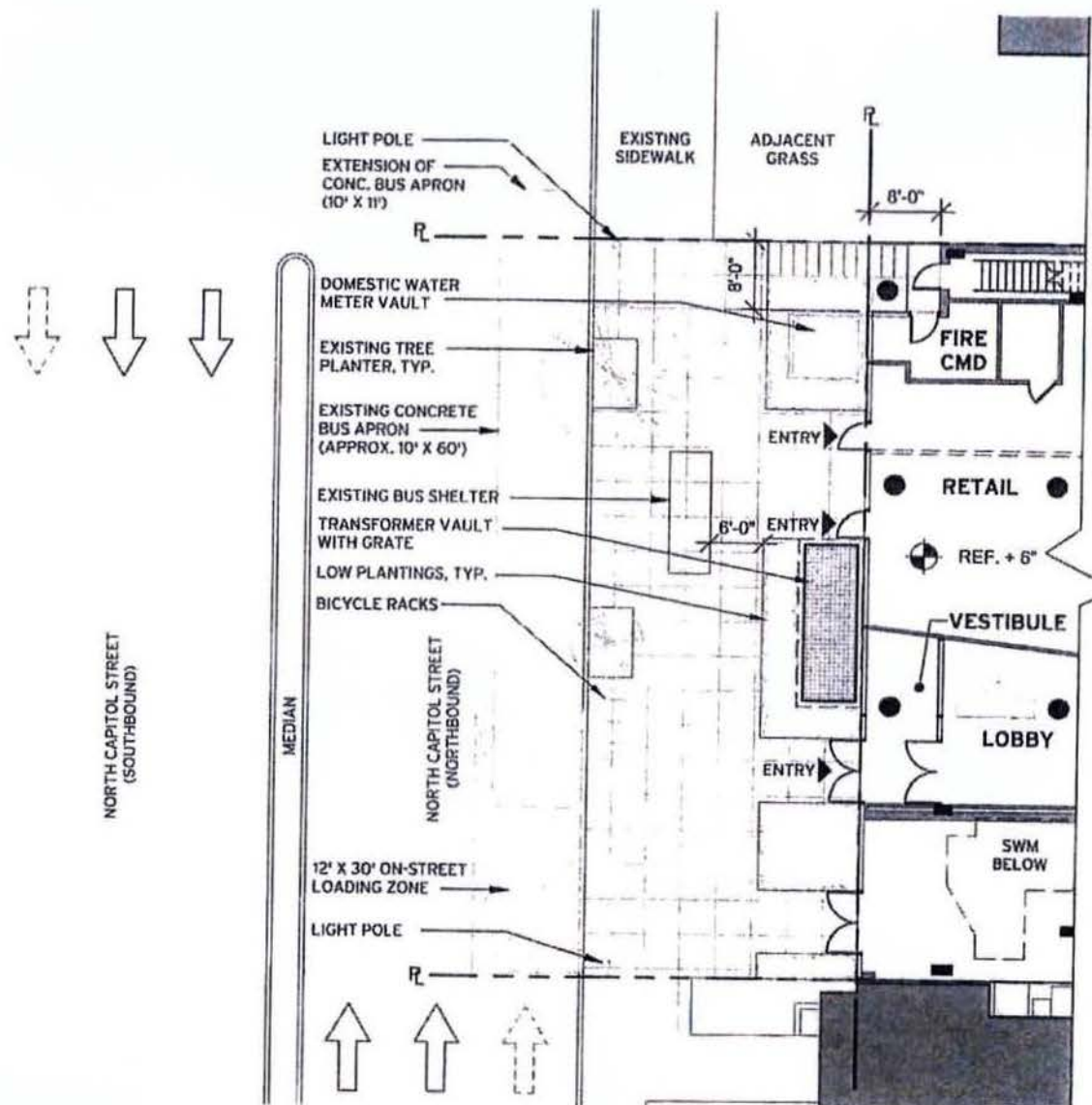


Figure 2
Option I - Site Plan



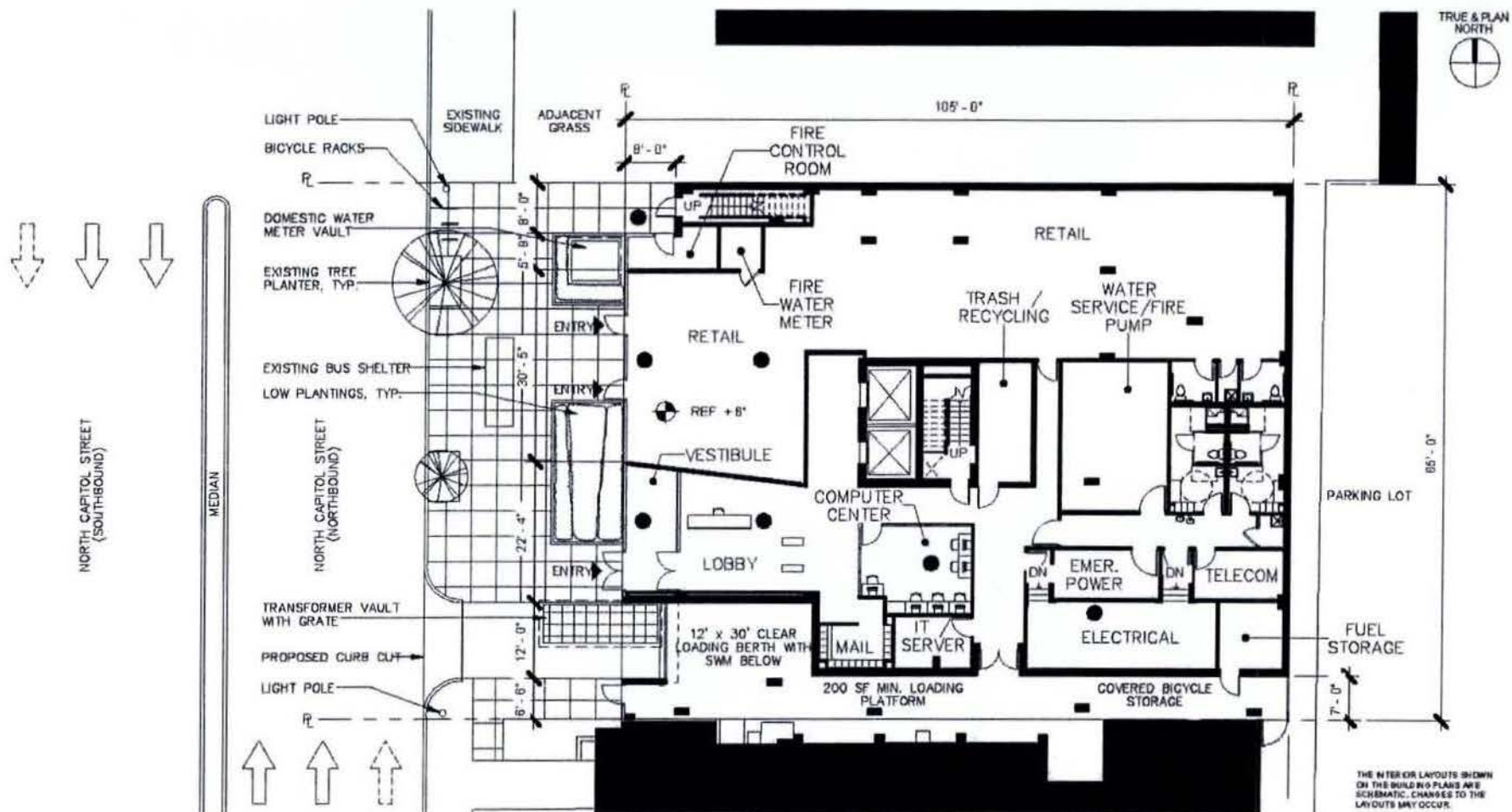


Figure 3
Option 2 - Site Plan

North Capitol Commons
Washington, DC

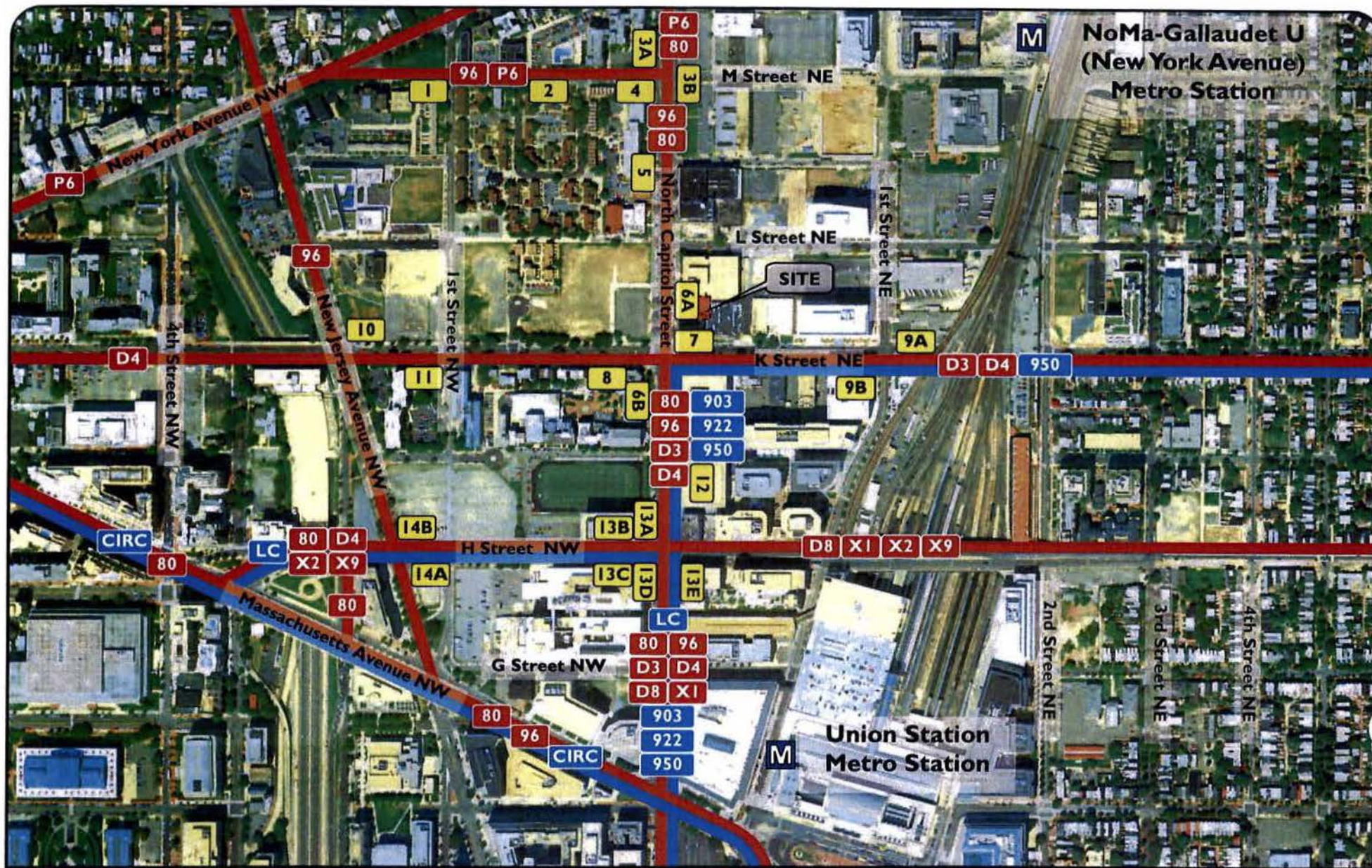


Figure 4
Public Transportation Services

- # Bus Stop
- Metrobus Routes
- Other Bus Operators



North Capitol Commons
Washington, DC



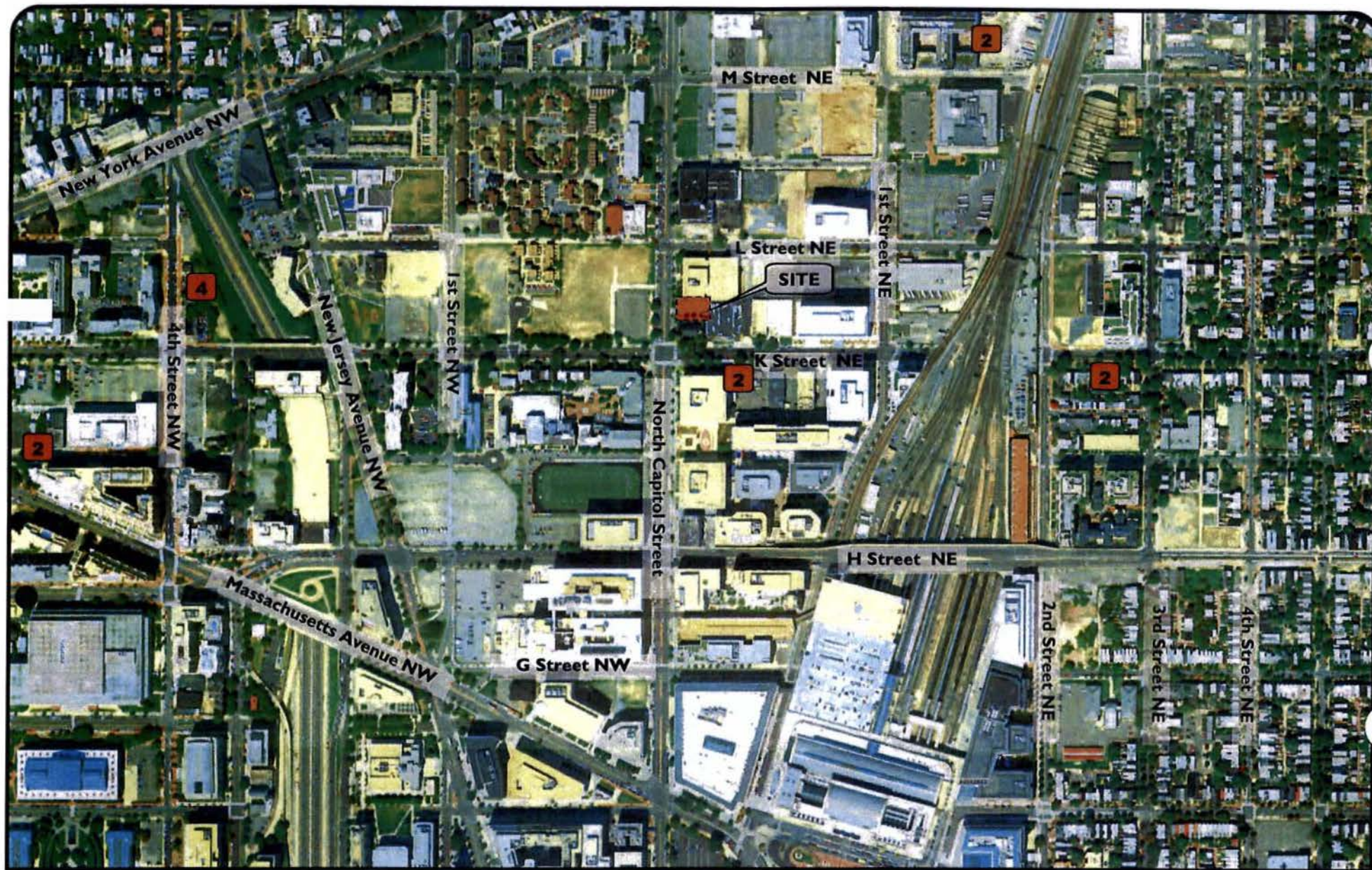


Figure 5
ZipCar Locations

Zipcar Locations (Number of Zipcars)



North Capitol Commons
Washington, DC

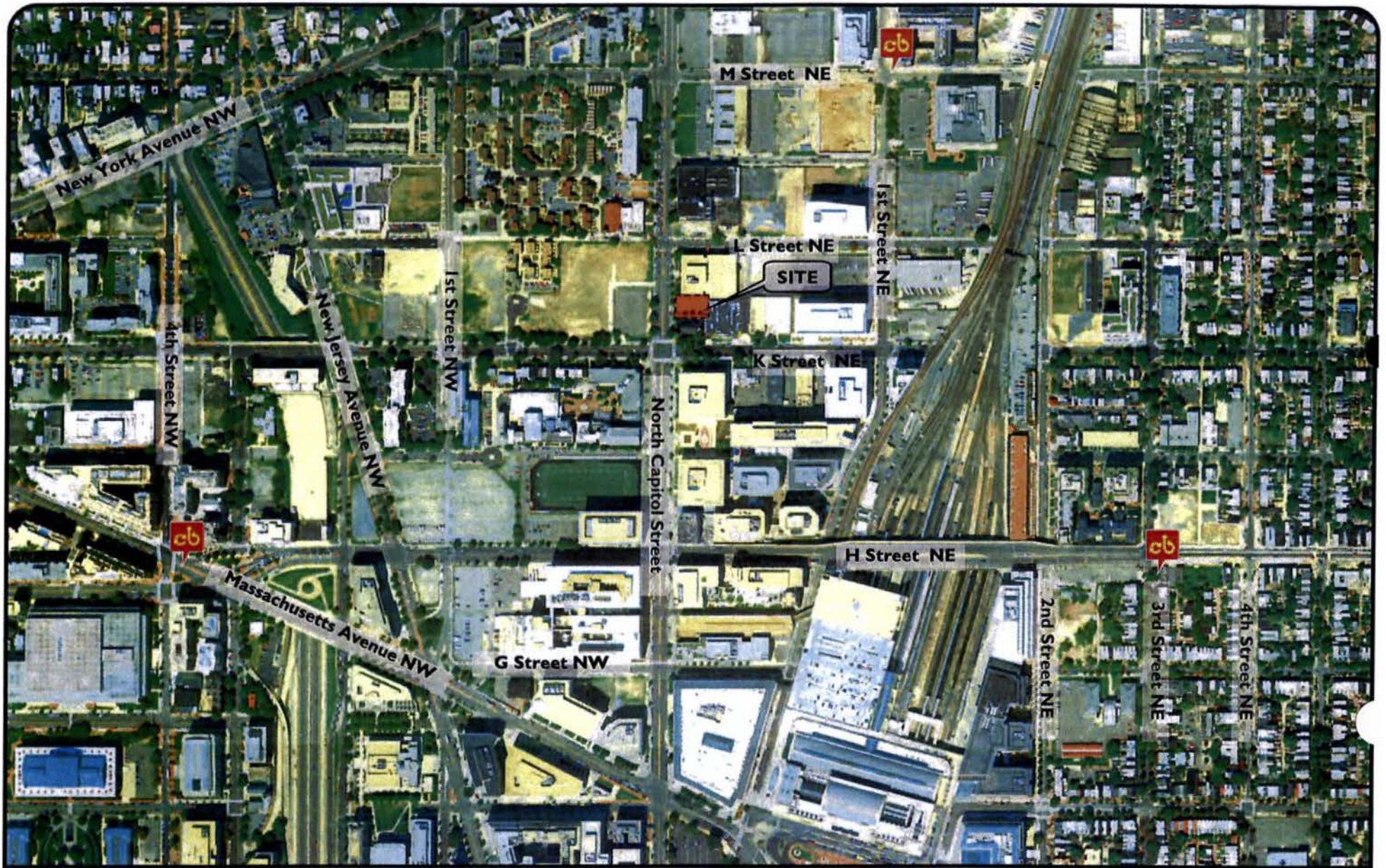


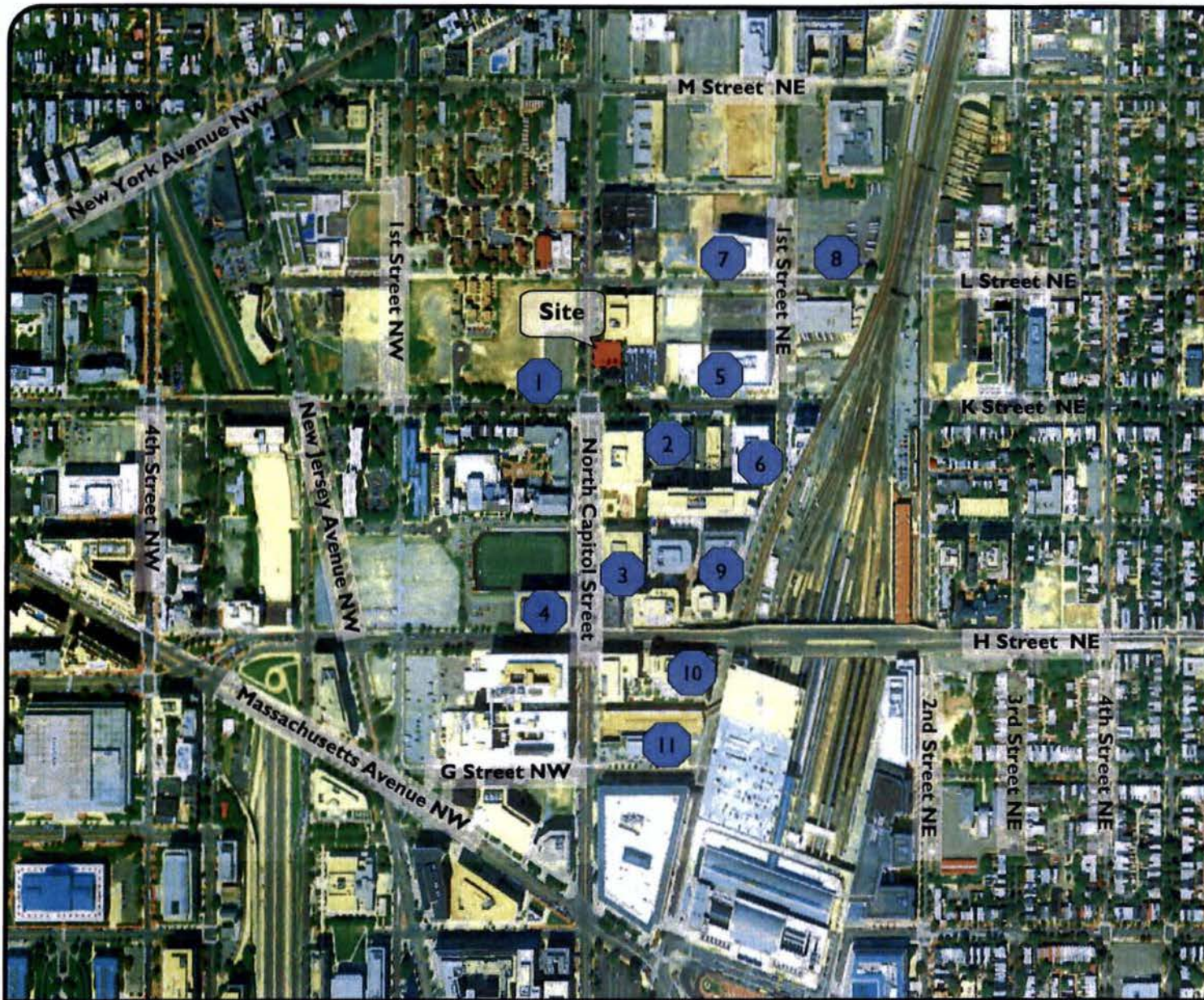
Figure 6
Capital BikeShare Locations

 Current Capital Bikeshare Locations



North Capital Commons
Washington, DC

 WELLS + ASSOCIATES



- 1 U Street Parking Inc.
10 K Street NW
- 2 Federal Parking, Inc.
27 K Street NE
- 3 Federal Parking, Inc.
899 North Capitol Street NE
- 4 Colonial Parking
15 H Street NW
- 5 Colonial Parking
26 K Street NE
- 6 MarcParc Garage
940 1st Street NE
- 7 Central Parking System
4 L Street NE
- 8 PMI Lot
140 L Street NE
- 9 Colonial Parking
810 1st Street NE
- 10 Colonial Parking
750 1st Street NE
- 11 PMI Garage
10 G Street NE

Figure 7
Public Parking Garages



North Capitol Commons
Washington, DC



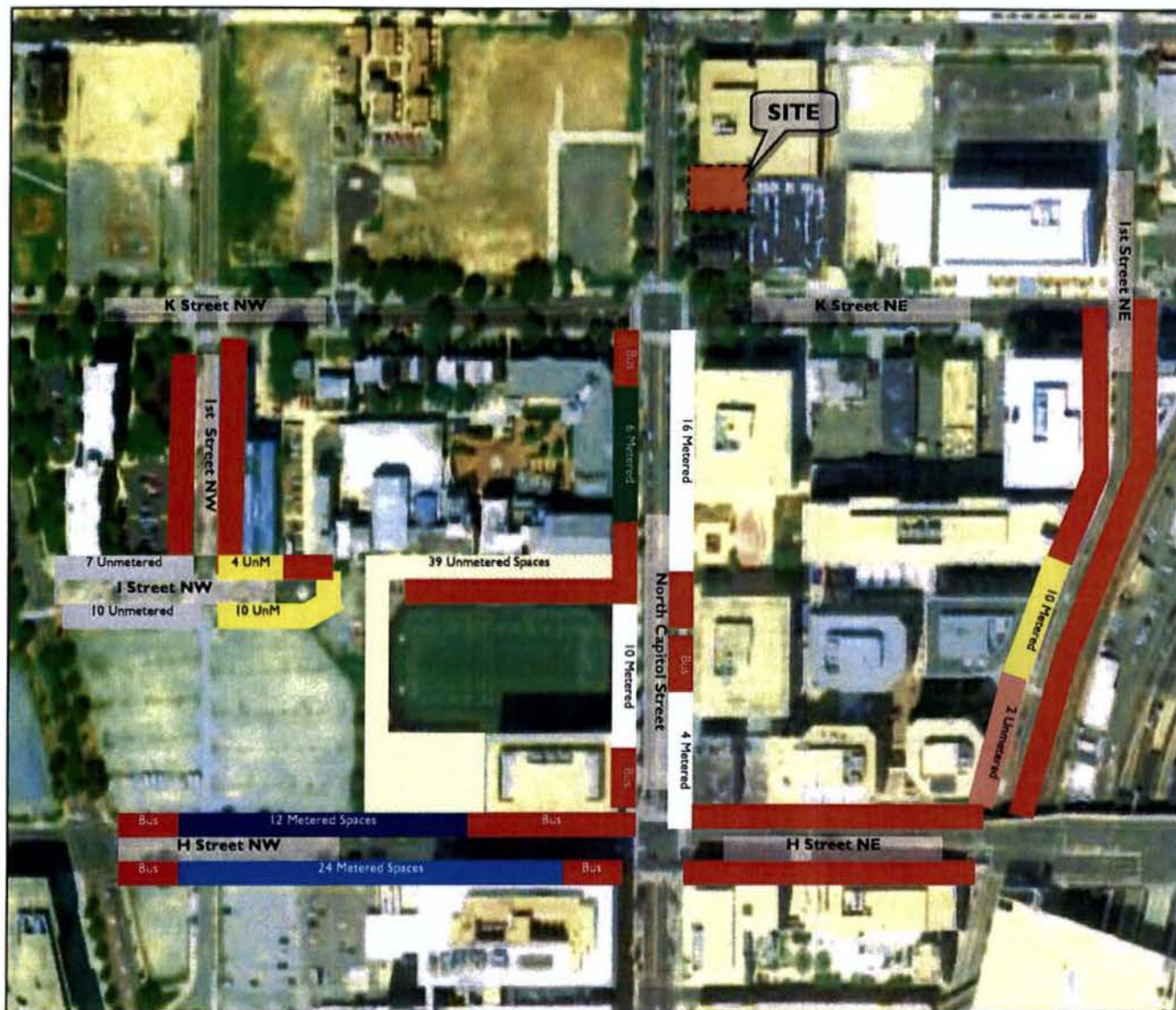
- 2-Hour Parking, Monday-Friday 9:30AM-4:00PM, No Parking, 7:00AM-9:30AM and 4:00PM-6:30PM
- No Parking, Except Sunday 8:00AM-2:00PM
- No Parking, Except Special Permit 6-18
- No Parking Restrictions
- 2-Hour Parking, Monday-Friday 9:00AM-6:30PM
- Church Parking Only, Except Visitor Permit, Monday-Friday 6:00AM-9:00AM
- No Parking, Monday-Friday, 7:00AM-9:30AM and 4:00PM-6:30PM
- 2-Hour Parking, Monday-Friday, 7:00AM-8:30PM, Except Zone 6 Permits
- 2-Hour Parking, Monday-Saturday, 7:00AM-6:30PM
- No Parking School Zone, Monday-Friday, 8:00AM-4:00PM
- No Parking, Monday-Friday, 4:00PM-6:30PM
- No Parking School Zone, Monday-Friday, 7:00AM-6:30PM
- 2-Hour Parking 9:30AM-6:30PM and Saturday 7:00AM-6:30PM, No Parking 7:00AM-9:30AM
- 3-Hour Parking, Monday-Friday, 7:00AM-6:30PM
- 2-Hour Parking, Monday-Friday 8:30AM-4:00PM and Saturday 7:00AM-6:30PM, No Parking 4:00PM-6:30PM
- No Parking Except Sundays
- No Parking/No Parking Anytime
- Bus No Parking - Metro Bus Zone

Figure 8
On-Street Parking Inventory Northwest





North



-  No Parking Restrictions
-  2-Hour Parking, Monday-Friday 9:30AM-4:00PM, and Saturday 7:00AM-6:30PM; No Parking, 7:00AM-9:30AM and 4:00PM-6:30PM
-  2-Hour Parking, Monday-Friday, 9:30AM-6:30PM and Saturday 7:00AM-6:30PM; No Parking, Monday-Friday, 7:00AM-9:30AM
-  2-Hour Parking, Monday-Friday, 7:00AM-6:30PM
-  4-Hour Parking, Monday-Friday 8:30AM-4:00PM and Saturday 7:00AM-6:30PM; No Parking 4:00PM-6:30PM Monday-Saturday
-  4-Hour Parking, Monday-Friday, 9:30AM-4:00PM
-  Jesuit School Parking Only, Permit Required
-  Dialysis Patients Drop-off and Pick-up Only, Monday-Saturday, 5:30AM-9:00PM
-  No Parking/No Parking Anytime
-  No Parking - Metro Bus Zone

Figure 10
On-Street Parking Inventory South



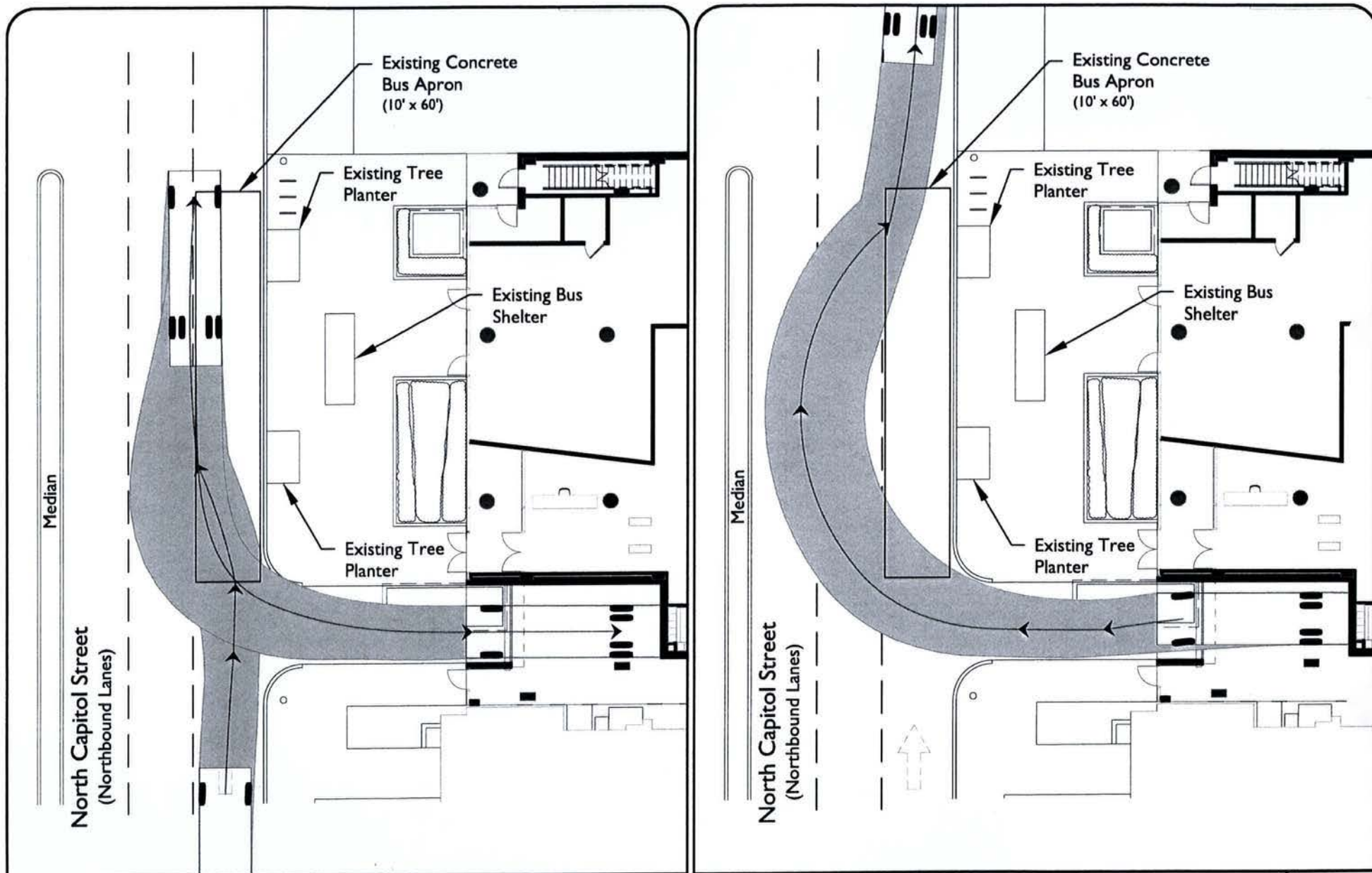


Figure 11
Site Loading Operations (SU-30 Ingress/Egress) Option 2

North
Scale 1:20

**ATTACHMENT A
VEHICLE TRIP
REDUCTION DATA**

#5535 - North Capitol Commons

Auto Availability

U S Census Bureau

		Percent	Cumulative Percent
Total All Census Tracts	3,792		
Owner occupied:	<u>1,296</u>		
No vehicle available	332	25.6%	25.6%
1 vehicle available	679	52.4%	78.0%
2 vehicles available	232	17.9%	95.9%
3 vehicles available	8	0.6%	96.5%
4 vehicles available	14	1.1%	97.6%
5 or more vehicles available	31	<u>2.4%</u>	100.0%
Average Auto Ownership	1.06	100.0%	
Renter occupied:	<u>2,496</u>		
No vehicle available	1,528	61.2%	61.2%
1 vehicle available	734	29.4%	90.6%
2 vehicles available	192	7.7%	98.3%
3 vehicles available	0	0.0%	98.3%
4 vehicles available	0	0.0%	98.3%
5 or more vehicles available	42	1.7%	100.0%
Average Auto Ownership	0.53	100.0%	
Total Average Auto Ownership	<u>0.71</u>		

Note: Data Set: 2006 - 2010 American Community Survey Selected Population Tables
 B25044 TENURE BY VEHICLES AVAILABLE
 - Universe: Occupied housing units

COMMUNITY SOLUTIONS

September 24, 2012

To Whom It May Concern:

As the Director of Creating Homes for Community Solutions, I am writing at this time in regards to support the non-auto requirements for tenants living in supportive housing. Community Solutions and Be the Change are partnering to develop the first supportive housing development in The District, The North Capitol Commons project, located on North Capitol street between K and L Streets, NE.

Prior to the position I currently hold with Community Solutions, I worked at Common Ground Community as the Director of Design and Construction. In that capacity I was responsible for bringing over 1000 units of affordable and supportive housing units online. None of these NYC developments contained parking for tenants for two key reasons: 1) tenants generally do not own cars in urban settings and 2) these developments have been built along transportation corridors/centers to limit the need for car ownership, which can be an unnecessary financial burden on a tenant. While there is no "typical" tenant in the supportive housing unit, there are some consistent demographic trends, and the lack of car ownership is one such characteristic. I am not aware that any tenant in a supportive housing unit operated by Common Ground owns a car.

Also to note, that when these developments have been completed and marketed, all information regarding the amenities within the building are included. Parking not being one of those amenities, has never, to my knowledge, deterred people from renting in a Common Ground building

Please contact me at 212-471-0816 or nmaleh@cmtysolutions.org should you have any questions

Sincerely,



Nadine Maleh

Director, Creating Homes

14 E 28th Street, PH
New York, NY 10016
Tel 212 471 0878
Fax 212 471 0818
www.cmtysolutions.org

North Capitol Commons Trip Generation Summary¹

Land Use	ITE Code	Size	Units	AM Peak Hour			PM Peak Hour			Sunday Peak Hour			Weekday ADT
				IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
Apartment	220	124	DU										
Vehicle Trips				13	51	64	56	30	86	32	31	63	875
Non-auto mode split to account for 60 permanent supportive housing units out of 124 total units ²		48%		6	25	31	27	15	42	15	15	30	423
Vehicle Trips Remaining After Permanent Supportive Housing Trips Removed				7	26	33	29	15	44	17	16	33	452
Non-auto mode split for 64 affordable housing units ³		71%		5	18	23	21	11	32	12	11	23	321
Vehicle Trips Remaining for Affordable Housing Units with Vehicle(s)				2	8	10	8	4	12	5	5	10	131
Staff Vehicle Trips plus non-auto mode split ⁴		30%		5	2	7	-	5	5	2	2	4	21
Vehicle Trips Remaining for Affordable Housing Units with Vehicle(s)				7	10	17	8	9	17	7	7	14	152

Notes

¹ Trip generation based on the Institute of Transportation Engineers' Trip Generation, 8th Edition For Sunday peak hour, a directional distribution is not provided in ITE, therefore, it was assumed to be 50/50 inbound/outbound

² 60 of 124 units will be permanent supportive housing. None of these residents will own vehicles

³ The Census data for this Census Tract indicates 71 percent of rental households do not own a vehicle

⁴ Assumed 7 staff members arrive during AM peak hour and depart during PM peak hour Also, assumes 3 staff members depart during AM peak hour On Sunday, assume 3 arrive and 3 depart during peak hour For daily, assumed all 15 arrive and all 15 depart in same day Also includes a 30 percent mode split per information from Applicant.

ATTACHMENT B
PARKING OCCUPANCY COUNTS

Project: #5535 - North Capitol Commons - Parking Occupancy Counts (Weekday)

Surveyors: Agan, Majda, & Di

Date: 6/12/2012

Hours: 5:00 PM - 11:00 PM

Roadway Segment	Parked Vehicles (Occupied Spaces/Available Spaces/Percent Occupied)																				
	5:00 PM			6:00 PM			7:00 PM			8:00 PM			9:00 PM			10:00 PM			11:00 PM		
	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%
H Street, NE	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
H Street, NW	3	12	25%	0	12	0%	2	36	6%	5	36	14%	5	36	14%	6	36	17%	6	36	17%
I Street, NW ¹	31	31	100%	31	31	100%	31	31	100%	31	31	100%	31	31	100%	31	31	100%	21	31	68%
K Street, NE	13	18	72%	15	18	83%	7	41	17%	6	41	15%	3	41	7%	2	41	5%	2	41	5%
K Street, NW	21	10	210%	15	10	150%	6	69	9%	6	69	9%	0	69	0%	2	69	3%	2	69	3%
L Street, NE	3	32	9%	2	32	6%	0	32	0%	0	32	0%	0	32	0%	0	32	0%	0	32	0%
L Street, NW	52	56	93%	50	56	89%	56	56	100%	34	56	61%	12	56	21%	6	56	11%	3	56	5%
M Street, NE	27	44	61%	31	44	70%	28	58	48%	27	58	47%	24	58	41%	23	58	40%	24	58	41%
M Street, NW	26	47	55%	30	47	64%	28	47	60%	26	47	55%	21	47	45%	28	47	60%	29	47	62%
Pierce Street, NE	28	28	100%	24	28	86%	22	28	79%	22	28	79%	20	28	71%	20	28	71%	20	28	71%
Pierce Street, NW	28	51	55%	28	51	55%	19	51	37%	17	51	33%	16	51	31%	9	51	18%	9	51	18%
1st Street, NE	36	45	80%	28	45	62%	30	45	67%	22	45	49%	16	45	36%	17	45	38%	14	45	31%
1st Street, NW	22	30	73%	24	30	80%	25	30	83%	23	30	77%	16	30	53%	14	30	47%	20	30	67%
North Capitol Street	33	24	138%	28	24	117%	33	82	40%	28	82	34%	9	82	11%	0	82	0%	1	82	1%
Occupied Spaces	323			306			287			247			173			158			151		
Total Spaces		428			428			606			606			606			606			606	
Percent Occupied		75%			71%			47%			41%			29%			26%			25%	

¹ Jesuit School Parking only lot vehicles and inventory were not included in the analysis of I Street NW. The on-street parking spaces were conservatively assumed to be fully occupied while the school lot occupancy varies.

Project: #5535 - North Capitol Commons - Parking Occupancy Counts (Sunday)

Surveyors: Brian & Armin

Date: 7/1/2012

Hours: 7:30 AM - 1:30 PM

Roadway Segment	Parked Vehicles (Occupied Spaces/Available Spaces/Percent Occupied)																				
	7:30 AM			8:30 AM			9:30 AM			10:30 AM			11:30 AM			12:30 PM			1:30 PM		
	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%
H Street, NE	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-
H Street, NW	3	36	8%	1	36	3%	2	36	6%	2	36	6%	2	36	6%	3	36	8%	2	36	6%
I Street, NW ¹	24	31	77%	27	31	87%	28	31	90%	30	31	97%	24	31	77%	24	31	77%	22	31	71%
K Street, NE	1	41	2%	3	41	7%	10	41	24%	17	41	41%	23	41	56%	15	41	37%	21	41	51%
K Street, NW	7	69	10%	6	69	9%	8	69	12%	12	69	17%	9	69	13%	6	69	9%	6	69	9%
L Street, NE	4	32	13%	6	32	19%	6	32	19%	4	32	13%	4	32	13%	7	32	22%	4	32	13%
L Street, NW	4	56	7%	32	56	57%	32	56	57%	28	56	50%	39	56	70%	38	56	68%	34	56	61%
M Street, NE	36	58	62%	35	58	60%	37	58	64%	42	58	72%	38	58	66%	37	58	64%	37	58	64%
M Street, NW	25	47	53%	26	47	55%	25	47	53%	27	47	57%	26	47	55%	28	47	60%	28	47	60%
Pierce Street, NE	9	28	32%	11	28	39%	11	28	39%	10	28	36%	10	28	36%	10	28	36%	12	28	43%
Pierce Street, NW	18	51	35%	22	51	43%	20	51	39%	20	51	39%	24	51	47%	23	51	45%	23	51	45%
1st Street, NE	20	45	44%	23	45	51%	22	45	49%	25	45	56%	29	45	64%	32	45	71%	29	45	64%
1st Street, NW	22	30	73%	18	30	60%	21	30	70%	20	30	67%	21	30	70%	18	30	60%	19	30	63%
North Capitol Street	33	92	36%	28	98	29%	33	98	34%	28	98	29%	9	98	9%	0	98	0%	1	92	1%
Occupied Spaces	206			238			255			265			258			241			238		
Total Spaces	616			622			622			622			622			622			616		
Percent Occupied	33%			38%			41%			43%			41%			39%			39%		

¹ Jesuit School Parking only lot vehicles and inventory were not included in the analysis of I Street NW. The on-street parking spaces were conservatively assumed to be fully occupied while the school lot occupancy varies.

Project: #5535 - North Capitol Commons - Parking Occupancy Counts (Sunday Recount)

Surveyors: Armin

Date: 7/15/2012

Hours: 9:30 AM - 11:30 AM

Roadway Segment	Parked Vehicles (Occupied Spaces/Available Spaces/Percent Occupied)																				
	9:30 AM			10:30 AM			11:30 AM														
	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%
H Street, NE	0	0	-	0	0	-	0	0	-			-			-			-			-
H Street, NW	2	36	6%	1	36	3%	1	36	3%			-			-			-			-
I Street, NW ¹	27	31	87%	29	31	94%	28	31	90%			-			-			-			-
K Street, NE	1	41	2%	9	41	22%	16	41	39%			-			-			-			-
K Street, NW	10	69	14%	13	69	19%	11	69	16%			-			-			-			-
L Street, NE	5	32	16%	8	32	25%	11	32	34%			-			-			-			-
L Street, NW	28	56	50%	32	56	57%	39	56	70%			-			-			-			-
M Street, NE	33	58	57%	33	58	57%	32	58	55%			-			-			-			-
M Street, NW	22	47	47%	24	47	51%	24	47	51%			-			-			-			-
Pierce Street, NE	14	28	50%	12	28	43%	13	28	46%			-			-			-			-
Pierce Street, NW	13	51	25%	13	51	25%	18	51	35%			-			-			-			-
1st Street, NE	25	45	56%	26	45	58%	34	45	76%			-			-			-			-
1st Street, NW	18	30	60%	19	30	63%	18	30	60%			-			-			-			-
North Capitol Street	50	98	51%	70	98	71%	76	98	78%			-			-			-			-
Occupied Spaces	248			289			321			0			0			0			0		
Total Spaces		622			622			622			0			0			0			0	
Percent Occupied		40%			46%			52%													

¹ Jesuit School Parking only lot vehicles and inventory were not included in the analysis of I Street NW. The on-street parking spaces were conservatively assumed to be fully occupied while the school lot occupancy varies.

Project: #5535 - North Capitol Commons - Parking Occupancy Counts (Weekday)

Surveyors: Agan, Majda, & Di

Date: 6/12/2012

Hours: 5:00 PM - 11:00 PM

Roadway Segment	Parked Vehicles (Occupied Spaces/Availabe Spaces/Percent Occupied)																				
	5:00 PM			6:00 PM			7:00 PM			8:00 PM			9:00 PM			10:00 PM			11:00 PM		
	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%
K Street, NE	13	18	72%	15	18	83%	7	41	17%	6	41	15%	3	41	7%	2	41	5%	2	41	5%
L Street, NE	3	32	9%	2	32	6%	0	32	0%	0	32	0%	0	32	0%	0	32	0%	0	32	0%
North Capitol Street	33	24	138%	28	24	117%	33	82	40%	28	82	34%	9	82	11%	0	82	0%	1	82	1%
Occupied Spaces	49			45			40			34			12			2			3		
Total Spaces	74			74			155			155			155			155			155		
Percent Occupied	66%			61%			26%			22%			8%			1%			2%		

Project: #5535 - North Capitol Commons - Parking Occupancy Counts (Sunday)

Surveyors: Brian & Armin

Date: 7/1/2012

Hours: 7:30 AM - 1:30 PM

Roadway Segment	Parked Vehicles (Occupied Spaces/Availabe Spaces/Percent Occupied)																				
	7:30 AM			8:30 AM			9:30 AM			10:30 AM			11:30 AM			12:30 PM			1:30 PM		
	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%
K Street, NE	1	41	2%	3	41	7%	10	41	24%	17	41	41%	23	41	56%	15	41	37%	21	41	51%
L Street, NE	4	32	13%	6	32	19%	6	32	19%	4	32	13%	4	32	13%	7	32	22%	4	32	13%
North Capitol Street	33	92	36%	28	98	29%	33	98	34%	28	98	29%	9	98	9%	0	98	0%	1	92	1%
Occupied Spaces	38			37			49			49			36			22			26		
Total Spaces		165			171			171			171			171			171			165	
Percent Occupied	23%			22%			29%			29%			21%			13%			16%		

Project: #5535 - North Capitol Commons - Parking Occupancy Counts (Sunday Recount)

Surveyors: Armin

Date: 7/15/2012

Hours: 9:30 AM - 11:30 AM

Roadway Segment	Parked Vehicles (Occupied Spaces/Availabe Spaces/Percent Occupied)																				
	9:30 AM			10:30 AM			11:30 AM														
	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%	Occ.	Av.	%
K Street, NE	1	41	2%	9	41	22%	16	41	39%			-			-			-			-
L Street, NE	5	32	16%	8	32	25%	11	32	34%			-			-			-			-
North Capitol Street	50	98	51%	70	98	71%	76	98	78%			-			-			-			-
Occupied Spaces	56			87			103			0			0			0			0		
Total Spaces		171			171			171			0			0			0			0	
Percent Occupied	33%			51%			60%														