BEFORE THE DISTRICT OF COLUMBIA
BOARD OF ZONING ADJUSTMENT

In Re: Application No. 18505 of Keystar Spring Place LLC and Anabel Pestana pursuant to Section 3103.2 for variance relief under Section 2101.1 to reduce the number of required parking spaces and under Section 2201.1, to reduce the required length of the loading berth, to eliminate the required service/delivery space and to reduce the size of the loading platform to permit the construction of a 87-unit rental apartment building within the C-2-A Zoning District.

Subject Property:
Lots 0052 and 0822, Square 3185
1795 Bull Place, N.W. and 7051-7053 Spring Place N.W.

In Re: Application No. 18503 of Keystar Spring Place LLC pursuant to Section 3103.2 for variance relief under Section 2101.1 to reduce the number of required parking spaces and under Section 2201.1 to eliminate the required loading berth and loading platform to permit the construction of a 64-unit rental apartment building within the C-2-A Zoning District.

Subject Property:
Lots 0001 and 0804, Square 3186
Spring Place N.W.

SUPPLEMENTAL MATERIALS

JORDAN & KEYS, PLLC
George R. Keys, Jr.
910 17th Street, N.W. - Suite 317
Washington, DC 20006-2604

Dated: February 12, 2013

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+Also Admitted in Maryland

February 12, 2013

OF COUNSEL
HAROLD E. JORDAN

HAND-DELIVERED
Lloyd Jordan, Esq., Chairman
District of Columbia Board of Zoning Adjustment
441 4th Street, N.W. - Room 210 South
Washington, D.C. 20001

Re: BZA Application Nos. 18503 and 18505 – Lots 0001 and 0804, Square 3186 and Lots 0052 and 0822, Square 3185

Dear Mr. Jordan:

This firm represents Keystar Spring Place LLC and Anabel Pestana (the "Applicant"), the owners of the above-referenced real property. The two applications have been consolidated for public hearing on February 26, 2013. The Applicant has applied for variances pursuant to §§ 2101.1 and 3103.2 to reduce the parking requirements for the two apartment buildings and pursuant to § 2201.1 to reduce the length of the required loading berth for one building and to eliminate the required loading berth and service/delivery space for the other in the C-2-A zoning district. For convenience of reference, we shall refer to Application No. 18503 as "Building 1" and Application No. 18505 as "Building 2".

Pursuant to § 3113.8 of the Board of Zoning Adjustment Supplemental Rules of Practice and Procedure, the Applicant herewith submits the enclosed information as a supplement to its application for special exception. In addition to this letter, we attach a bound set of supplemental materials to illustrate the discussion below and for use in the course of the public hearing.

1. Traffic Impact Assessment

As part of the dialogue with DDOT, OP and ANC 4B, the Applicant commissioned the Technical Memorandum, dated January 31, 2013, prepared by O.R. George & Associates, Inc. (the "traffic study"). While much of the traffic study responded to questions and issues not specifically relevant to the variance request, the traffic study did conclude that the proposed off-street parking spaces would fully satisfy the needs of building occupants given the low vehicle ownership trends, the low trip generation and the proximity to the Takoma Metrorail Station.

2. Revised Site Plan

After extensive discussion with the District Department of Transportation ("DDOT"), the Applicant has revised the site plans for Buildings 1 and 2 to reflect certain understandings and agreements with that agency. A copy of the revised Site Plan (Drawing A1-1) showing both buildings is attached. There are several changes from the site plans originally included in the two applications: (1) the course of the easement for the bicycle path in front of Building 1 has been adjusted and the parking area reconfigured; (2) the 30-foot loading berth is now located behind Building 2 with an enlarged loading platform; and (3) the apex of Building 1 is further chamfered to permit a 30-foot truck to "head-in and head-out" of the public alley servicing the loading berth. These changes are discussed more fully below.

Reconfiguration of Bicycle Path and Building 1 Parking Area

In consultation with DDOT, the Applicant has relocated the easement area across the property containing Building 1 to minimize the potential for pedestrian, bicycle and vehicle conflicts. The bicycle path is pulled away from Building 1 with a more gradual curve leaving a larger area of greenspace between the path and the CSX and Metrorail Rights-of-Way. The eleven (11) parking spaces provided will be accessed directly from Spring Place.

Relocation of Loading Berth.

The initial site plan submitted with the application showed the 30-foot loading berth and the service/delivery space as being located behind Building 1. Further engineering and structural study revealed a complex of problems associated with the topography and the adjacency to the CSX and Metrorail Rights-of-Way. As evidenced by Drawing A1-2, the solution to the problem was to construct new retaining walls tying into the existing CSX and Metrorail Rights-of-Way retaining walls. In the final analysis, only the service/delivery space and the transformer pad and emergency generator could be located behind Building 1. The 30-foot loading berth and the loading platform are now located behind Building 2. It is the intention of the Applicant that since the buildings will have common ownership and management the loading and delivery facilities will be shared by both buildings.

Loading and Delivery Access.

DDOT encouraged the Applicant to adjust the site plan in such a way that service vehicles could utilize the public alley between Building 1 and 2 so that no backing maneuvers were necessary. The tracking diagrams attached to the Supplementary Information, dated February 7, 2013, prepared by O.R. George & Associates, Inc., demonstrate that 30-foot and 20-foot truck are able to "head-in and head-out."

3. Advisory Neighborhood Commission 4B

The Applicant has met on several occasions with neighbors and Advisory Neighborhood Commission 4B in connection with both the Historic Preservation Review Board process and with the instant application in order to obtain their comment and support. The Applicant presented the revised site plan to ANC 4B, which voted unanimously with one abstention on February 5, 2013 to support the requested variances subject to several conditions: (i) the residents of the subject property will not be eligible to apply for Residential Parking Permits; (ii) the Applicant will extend the bicycle path to Cedar Street; (iii) the Applicant will construct a sidewalk along Spring Place and along Chestnut to Blair Road. The conditions (ii) and (iii) above are expensive undertakings that will require the cooperation and participation of third parties over whom the Applicant has no control. The Applicant is willing to commit to work diligently to achieve ANC 4B's objectives in conjunction with stakeholders in the area, including DDOT.

4. Witnesses

The Applicant anticipates using three witnesses at the public hearing: Bruce Levin, the Managing Member of the owner of the subject property; Donald E. Tucker, RA, AIA, LEED AP of EDG Architects, LLC and Osborne R. George, P.E., PTOE of O.R. George & Associates, Inc. The professional resumes of Mr. Tucker and Mr. George are attached and we shall seek their admission as expert witnesses in the subjects of architecture and transportation engineering, respectively.

Respectfully submitted,

George R. Keys, Jr.

Attachment: Supplementary Materials

cc: Advisory Neighborhood Commission 4B
Karen Thomas, Office of Planning
Anna Chamberlin, District Department of Transportation

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SOUTH ELEVATION

SOUTH PERSPECTIVE

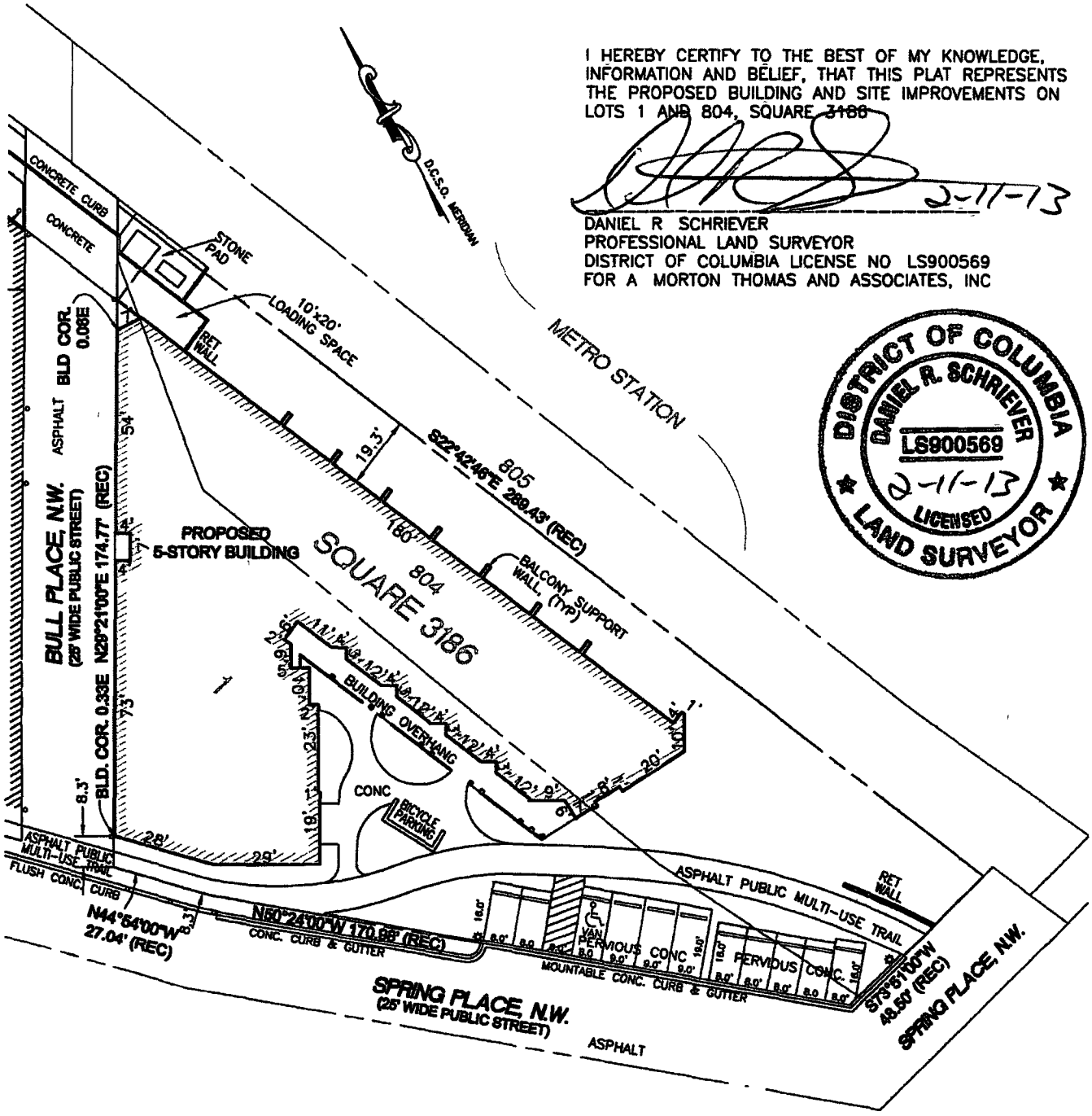
EDG ARCHITECTS, LLC
3 Bethesda Metro Center
Suite 110
Bethesda, MD 20814
(301) 654-0058

METRO VILLAGE

TAKOMA , WASHINGTON, DC

ELEVATIONS

SEPT 2012



PLAT OF PROPOSED SITE IMPROVEMENTS

METRO VILLAGE APARTMENTS

LOTS 1 AND 804 SQUARE 3186

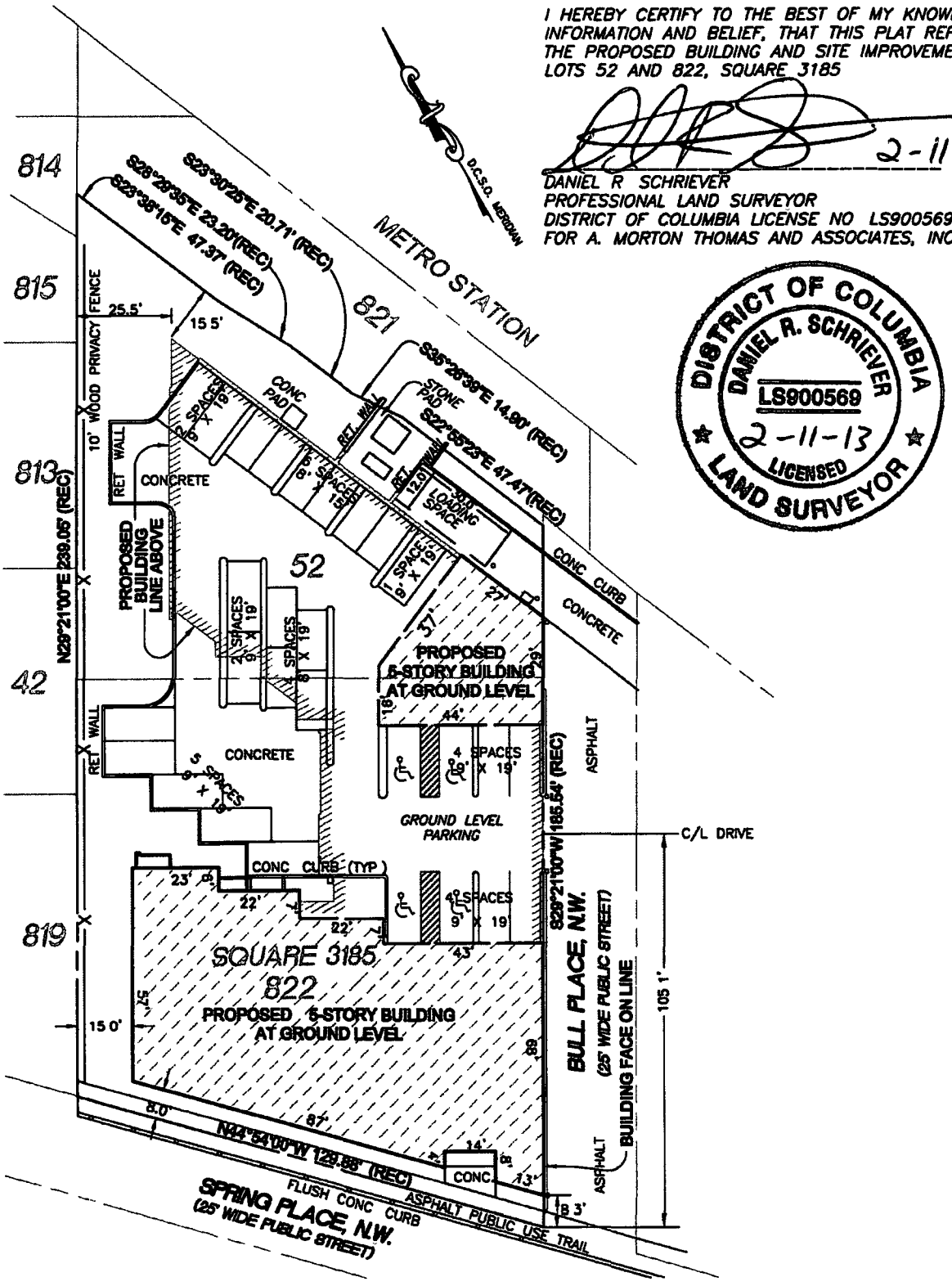
DISTRICT OF COLUMBIA

SCALE:1"=40' DATE: FEBRUARY 11, 2013

AMT JOB #112-588.001

AMT

A MORTON THOMAS AND ASSOCIATES INC
CONSULTING ENGINEERS
12750 TWINBROOK PARKWAY ROCKVILLE, MD 20852
(301) 881-2545 FAX:(301) 881-0814
EMAIL. AMT1@AMTENGINEERING COM



I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THIS PLAT REPRESENTS THE PROPOSED BUILDING AND SITE IMPROVEMENTS ON LOTS 52 AND 822, SQUARE 3185

2-11-13

DANIEL R SCHRIEVER
PROFESSIONAL LAND SURVEYOR
DISTRICT OF COLUMBIA LICENSE NO LS900569
FOR A. MORTON THOMAS AND ASSOCIATES, INC

DISTRICT OF COLUMBIA
DANIEL R. SCHRIEVER
LS900569
2-11-13
LICENSED
LAND SURVEYOR

PLAT OF PROPOSED SITE IMPROVEMENTS

METRO VILLAGE APARTMENTS
LOTS 52 AND 822 SQUARE 3185
DISTRICT OF COLUMBIA

SCALE:1"=40' DATE: FEBRUARY 11, 2013

AMT JOB #112-588.001

A MORTON THOMAS AND ASSOCIATES, INC
CONSULTING ENGINEERS
12750 TWINBROOK PARKWAY ROCKVILLE, MD 20852
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Technical Memorandum:

TRAFFIC IMPACT ASSESSMENT, METRO VILLAGE DEVELOPMENT - BOARD OF ZONING ADJUSTMENT APPLICATION, TAKOMA PARK, NORTHWEST, WASHINGTON, D.C.

(Case No. 18503 & 18505)

Prepared for:
KEYSTAR SPRING PLACE, LLC
2300 N Street, NW
Washington, DC 20037
- Attn Mr Bruce Levin, Principal

Land Use Counsel:
JORDAN & KEYS, PLLC
910 17th Street, NW, Suite 317
Washington, DC 20006
- George R. Keys, Jr , Esquire

Prepared by:
O. R. GEORGE & ASSOCIATES, INC.
Transportation Planning & Engineering Consultants
10210 Greenbelt Road, Suite 310
Lanham, Maryland 20706

January 31, 2013

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EXHIBITS

TABLES

ATTACHMENTS

O. R. GEORGE & ASSOCIATES, INC.

Traffic Engineers – Transportation Planners

10210 Greenbelt Road, Suite 310 • Lanham, MD 20706-2218
Tel: (301) 794-7700 • Fax: (301) 794-4400
E-mail: ogeorge@orgengineering.com

MEMORANDUM

DATE: January 31, 2013

TO: **KEYSTAR SPRING PLACE, LLC**
Attn: Mr. Bruce Levin, Principal

FROM: Osborne R. George, P.E., PTOE/Addisu M. Bekele, EIT

RE: Traffic Impact Assessment for Metro Village Residential Development – Takoma Park, Northwest, Washington, DC – BZA Applications 18503 & 18505

1.0 BACKGROUND AND PURPOSE

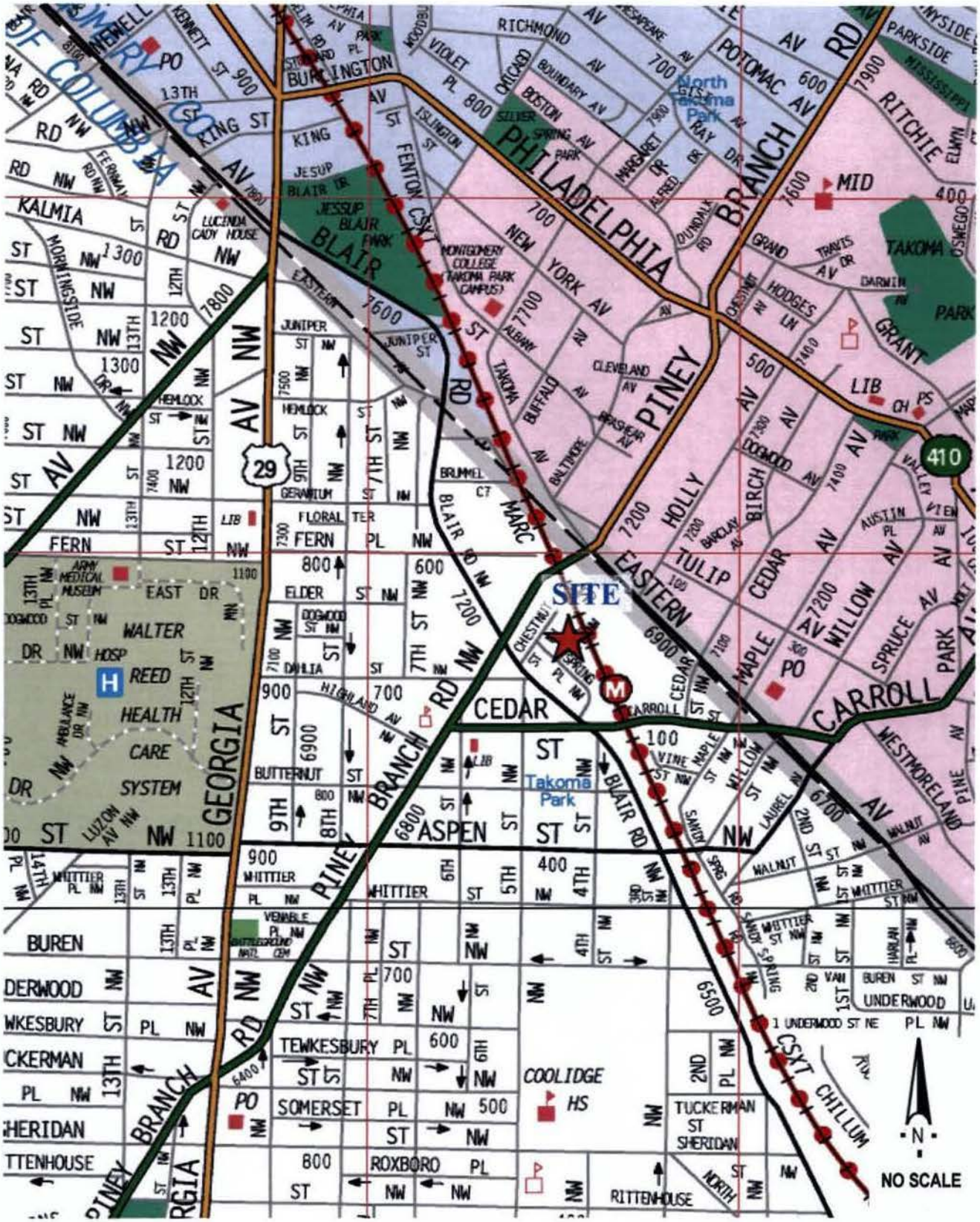
Keystar Spring Place, LLC, ("the Applicant") plans to develop Lots 0052 and 0822 within Square 3185, and Lots 001 and 0804 within Square 3186, which are bordered by Chestnut Street, Spring Place, and the CSX railroad corridor in the Takoma Park area of Northwest Washington, DC. The two (2) squares are separated by an unnamed public alley (shown on some documents as Bull Place), which runs between Spring Place and the CSX railroad corridor. The lots cited within Square 3185 are currently improved with facilities, which house a number of auto repair and related uses, while the lots within Square 3186 are vacant. All lots are classified as C-2-A (Community Business Center-medium density).

The Applicant plans to develop the properties with a combined yield of 150 apartment units, and is seeking relief through the City's Board of Zoning Adjustment review process under two (2) separate (but concurrent) applications. The proposals under the two (2) applications are summarized as follows:

BZA Case No.	Square (Lots)	Development Yield	Parking Spaces		Loading Facilities	
			Required	Proposed	Required	Proposed
18503	3185 (0054, 0053)	86 apt. units	43	28	One 12' x 55'	One 12' x 30'
18505	3186 (0001, 0004)	64 apt. units	32	11	One 12' x 55'	One 10' x 20'*

*Service Loading Space

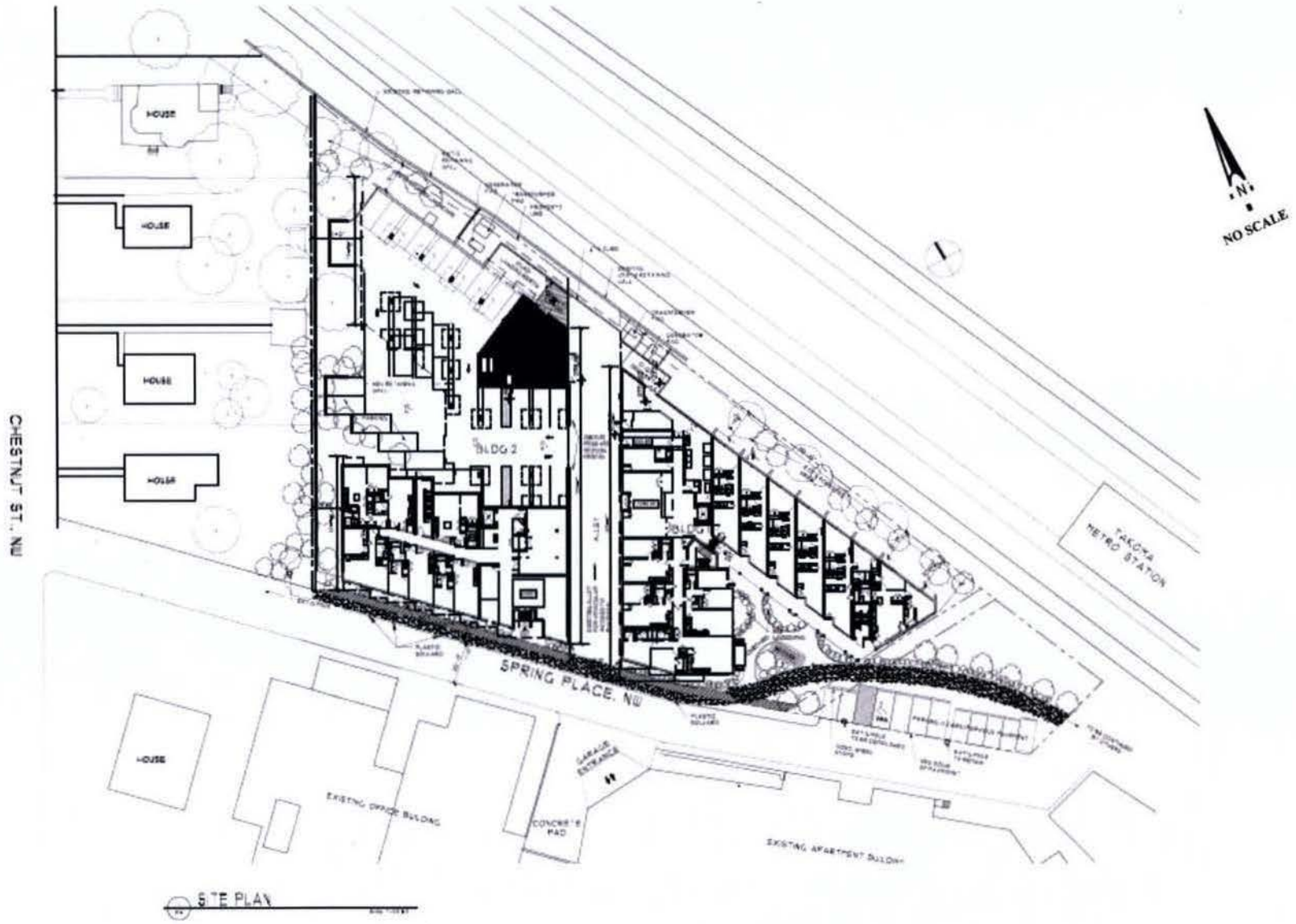
The BZA review process requires the Applicant to demonstrate that the relief sought will not have an adverse or objectionable impact on abutting properties and on land uses within the immediate/local area in general. The study has determined that the relief sought is not likely to cause objectionable adverse impacts on the abutting properties and local area in general. This is due to the low traffic generated by the site and associated parking and loading demand and site operations related to the relief requested. The remainder of this memorandum presents the basis for this conclusion. In order to facilitate the discussion which follows, the location of the property is shown in Exhibit 1, and the submitted site plan is shown in Exhibit 2.



O. R. GEORGE & ASSOCIATES, INC.
Traffic Engineers - Transportation Planners

Exhibit 1: Site Location Map

Metro Village Residential Development, Takoma Park, Norhtwest, Washington, D.C., BZA Applications (Case No. 18503 & 18505)



Source: EDG Architects, LLC

O. R. GEORGE & ASSOCIATES, INC.
Traffic Engineers - Transportation Planners

Exhibit 2: Site Development Map

Metro Village Residential Development, Takoma Park, Northwest, Washington D.C., BZA Applications (Case No.18503 & 18505)

BACKGROUND AND PURPOSE (cont'd.)

The Applicant has submitted a Preliminary Statement of Compliance and Burden of Proof to support the requested relief. The relief sought for the parking reduction is governed by Section 2108 of the Zoning Regulations; and that section stipulates certain criteria which must be addressed. Several of the criteria pertain to transportation conditions and considerations, which fall under the administrative jurisdiction of the District Department of Transportation (DDOT). The Applicant's proposals are therefore expected to also be in general compliance with DDOT's current policies and guidelines.

Through the City's current Comprehensive Transportation Review (CTR) scoping process, it was determined that the level of trip generation marginally exceeds the threshold for a detailed traffic study. Therefore, DDOT requires sufficient data analysis and discussion that would confirm the trip generation and modal split assumptions. Copies of correspondence with DDOT and the approved CTR form are included in Attachment A.

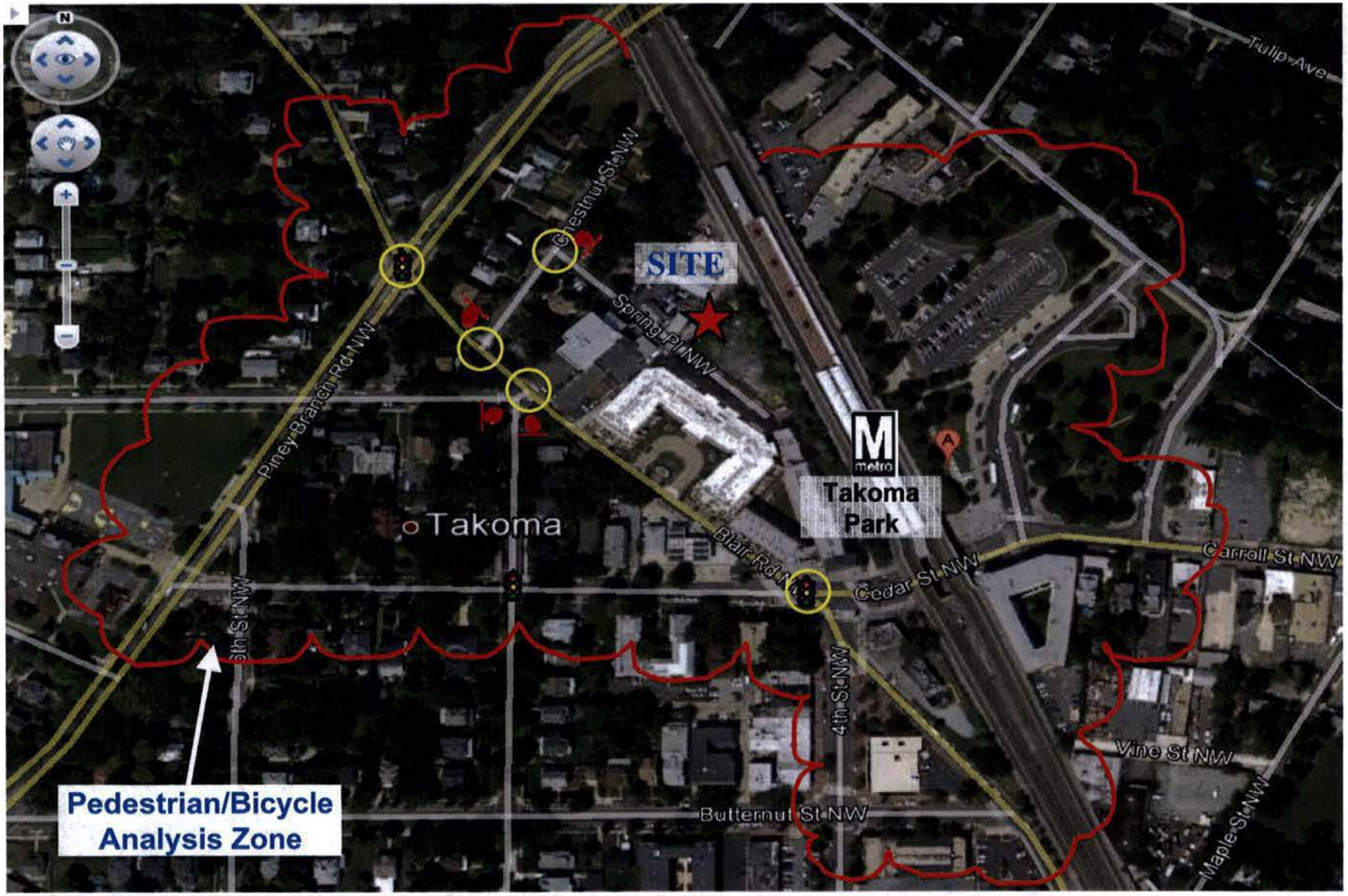
2.0 EXISTING ROADWAY AND TRAFFIC CONDITIONS

2.1 Study Area Roadway Network

Direct access to the subject properties is provided via Spring Place, which connects to the City's broader roadway network principally through Chestnut Street, Blair Road and Piney Branch Road. Exhibit 3 shows the study area roadway network agreed with DDOT, which includes existing traffic control devices and intersection lane configurations. [Details of pedestrian, bicycle and transit facilities, as well as related signage are presented in Section 3.0 beginning on page 8.]

The Consultant conducted turning movement counts within the agreed study area roadway network, and made general observations of traffic flow conditions during weekday morning and afternoon peak periods. The data was used for the typical roadway capacity and operational analyses using the Synchro software. The turning movement count data is presented in Attachment B, and the results of the capacity analysis are summarized in Table 1. Copies of the Synchro output for each intersection are also included as Attachment C. *[Note: Volume-to-Capacity (V/C) ratios for both the existing and future traffic conditions are provided in Table 4 for purposes of comparison as required by DDOT.]*

The intersection of Blair Road at Chestnut Street has the greatest significance to the future site access for the subject development. Field observations and the results of the Synchro analysis show that traffic flow within that section of Blair Road is significantly constrained during the weekday peak periods. While the results of the analysis show the levels of service to be currently acceptable, it is noted that the software relies on the assumption that courtesy gaps would be afforded in the Blair Road traffic stream. The consultants note that this is often the case but cannot be assumed to be the 'universal' experience of all motorists exiting Chestnut Street. This intersection is discussed further in Section 8 which presents the recommendations for improvement within the local area.



O. R. GEORGE & ASSOCIATES, INC.
Traffic Engineers - Transportation Planners

Exhibit 3: Study Area Roadway Network Map

Metro Village Residential Development, Takoma Park, Northwest, Washington D.C., BZA Applications (Case No.18503 & 18505)

Table 1:
Summary of Capacity Analysis Results – Existing Traffic Situation (2012)

Intersections	AM Peak Hour		PM Peak Hour	
	Level of Service	Avg. Delay (Secs/Veh)*	Level of Service	Avg. Delay (Secs/Veh)*
1) Blair Rd @ Cedar St./4th St , NW	E	63.3	E	67.4
2) Blair Rd @ Chestnut St , NW	C**	19 2	B**	14.7
3) Blair Rd. @ Piney Branch Rd , NW	E	56 9	E	56 7
4) Chestnut St @ Spring Pl , NW	A	8 6	A	8 7
5) Blair Rd @ Dahlia St /5th St., NW***	B	N/A	B	N/A

* Secs/Veh = Average Control Delay (in Seconds per Vehicle)
** See discussion on page 4, last paragraph
*** Intersection configuration not supported by HCM methodology Results are based on ICU methodology
Source: O R. George & Associates, Inc

Based on field observations made during the peak period turning movement counts and at other times, the following aspects of traffic operations within the local area roadway network are worthy of note

- Blair Road Function and Use. This roadway is designated as a Minor Arterial on the City's roadway network, and functions as an "extension" of North Capitol Street Blair Road therefore serves as a connection roadway to the Silver Spring area of Montgomery County and beyond, and therefore carries significant volumes of commuter traffic on weekdays. Between Piney Branch Road and Juniper Street in the Shepherd Park area, Blair Road consists of a single lane in each direction. Because of the roadway configuration and traffic volumes served, considerable southbound congestion and delays are experienced, particularly between the area of Geranium Street to the north and Cedar Street to the south during the morning peak period During the afternoon peak period, the reverse situation occurs, particularly between Butternut Street to the south and Piney Branch Road to the north These levels of congestion may not be accurately reflected in the Synchro analysis results due to limitations of the software

  As part of the City's program for facilitating neighborhood access, "All-Way" stop signs are provided for all intersections along Blair Road north of Piney Branch Road Such control is not provided at the Blair Road/Chestnut Street intersection. However, a "DO NOT BLOCK INTERSECTION" sign is provided along Blair Road (northbound) approaching Chestnut Street. The issues associated with this location are discussed further in Section 8 0 (page 25) in the context of potential signage and other mitigation measures, which the City may consider. *[Note Performing daily/24-hour counts for study area roadways is outside the scope of this study However the City's Traffic Volume data shows that there was a noticeable decrease in daily traffic along Blair Road between 2009 and 2010, which was the last year for which data is currently available]*

Study Area Roadway Network (cont'd.)

- Chestnut Street/Spring Place Access Considerations As noted in the Background and Purpose section of this report, the subject properties and several abutting/neighboring properties within the triangular area bordered by Blair Road, Piney Branch Road, the CSX railroad corridor, and Cedar Street are all accessed principally via Chestnut Street east of Blair Road The study therefore surveyed the land uses and current vehicle trip generation for this sub-area. The investigations are summarized below:

Land Use	Description	Location/Remarks
1) Single-Family Residential	13 units	All fronting on Chestnut Street, and accessed exclusively onto Blair Road
2) Multi-Family Residential/ Apts (The Gables)	140 units	Pedestrian and limited vehicular access from Blair Road; garage access inbound via Spring Place, and outbound via Blair Road
3) Auto Repair and Other Service Businesses	5 businesses	All access via Spring Place

With respect to vehicular activity generated by the above uses, turning movement counts conducted at the intersections of Chestnut Street @ Blair Road and @ Spring Place The counts were conducted such that origins and destinations could be determined, and this information is summarized in the table below:

AM Peak Period (6:30 – 9:30)	Inbound	Outbound	Total
1) Trips from Single-Family Residential	3	6	9
2) Trips from Gable Apartments	8	37*	45
3) Trips from Auto Repair Uses	6	3	9
4) Trips from other Non-Residential Uses	6	5	11

PM Peak Period (3:30 – 6:30)	Inbound	Outbound	Total
1) Trips from Single-Family Residential	6	4	10
2) Trips from Gable Apartments	33	16	49
3) Trips from Auto Repair Uses	24	23	47
4) Trips from other Non-Residential Uses	7	4	11

The data presented above shows that the majority of trips generated by land uses within the immediate area are from the Auto/Service-related that are located on the properties that are the subject of the current BZA applications This activity also appears to generate significant on-street parking demand which was observed along certain sections of Spring Place and within the public alley separating the two properties The issue is also addressed in Section 8, which presents recommendations for the local area This data is discussed further in connection with the modal splits and trip generation from the proposed development

3.0 EXISTING TRANSIT, PEDESTRIAN AND BICYCLE FACILITIES

In keeping with the scoping agreed with DDOT for this assessment, this section presents information on available facilities and services that support non-auto modes of travel within the area of the site These facilities and services were discussed extensively with DDOT as part of the study scoping process

3.1 Transit Facilities and Services

The proposed development abuts the Takoma Park Metrorail Station, and is currently connected via an unimproved pathway running between the southern end of Spring Place and the sidewalks along the north side of Cedar Street. Metrorail services are via the Red Line, which connects to the Silver Spring and Wheaton areas of Montgomery County to the north, and to the Central Employment Area of Washington, DC, to the south While the Red Line also provides connections to Upper Northwest areas of Friendship Heights in the City and to Bethesda and Rockville in Maryland, it is also noted that the Takoma Park area is in proximity to stations that are planned along the Circle Line, which will provide more direct connection to areas to the north and west. During the peak periods of travel on weekdays, trains run in 10 – 15-minute headways.

The area is also served by Routes K2, F1, F2, 52, 53, 54, 62, and 63 on the Metrobus system, and by Routes 3, 12, 13, 14, 16, 18, 24, and 25 on the Montgomery County Ride-On bus system For reference, copies of relevant section of both transit system maps are included as Exhibit 4 Related information regarding transit stop locations within the area are presented in Exhibit 5

3.2 Pedestrian/Bicycle Facilities

In keeping with DDOT's requirements, the Consultant performed an inventory of pedestrian/bicycle facilities and other related signage and amenities within the study area Emphasis was placed on crosswalks and pedestrian ramps The inventory is summarized in Exhibit 5, which shows no major deficiencies in the pedestrian facilities with the exception of there being no sidewalks along Spring Place (detailed levels-of-service relevant to pedestrian facilities will be provided in the final report) Since this is a residential development, it is relevant to note that the Applicant proposes to provide approximately 40 bicycle spaces, meeting the standards of the City's Design and Engineering Manual.

In addition to the pedestrian and bicycle facilities described above, Exhibit 5 shows that there are two (2) Zipcar stations serving the local area one within the Metro Station and one off 5th Street. Approximately 65 bicycle racks are located at the Takoma Park Metrorail Station. Bicycle routes along Piney Branch Road are also shown on Exhibit 5.

In keeping with DDOT's current CTR guidelines, the Consultant documented existing signage and pavement markings within the study area More specifically, the requirements are that the Consultant inventory and make general observable conditions of the regulatory and warning signs and pavement markings, in order to assess observable conditions and general compliance with the standards of the Manual of Uniform Traffic Control Devices (MUTCD).

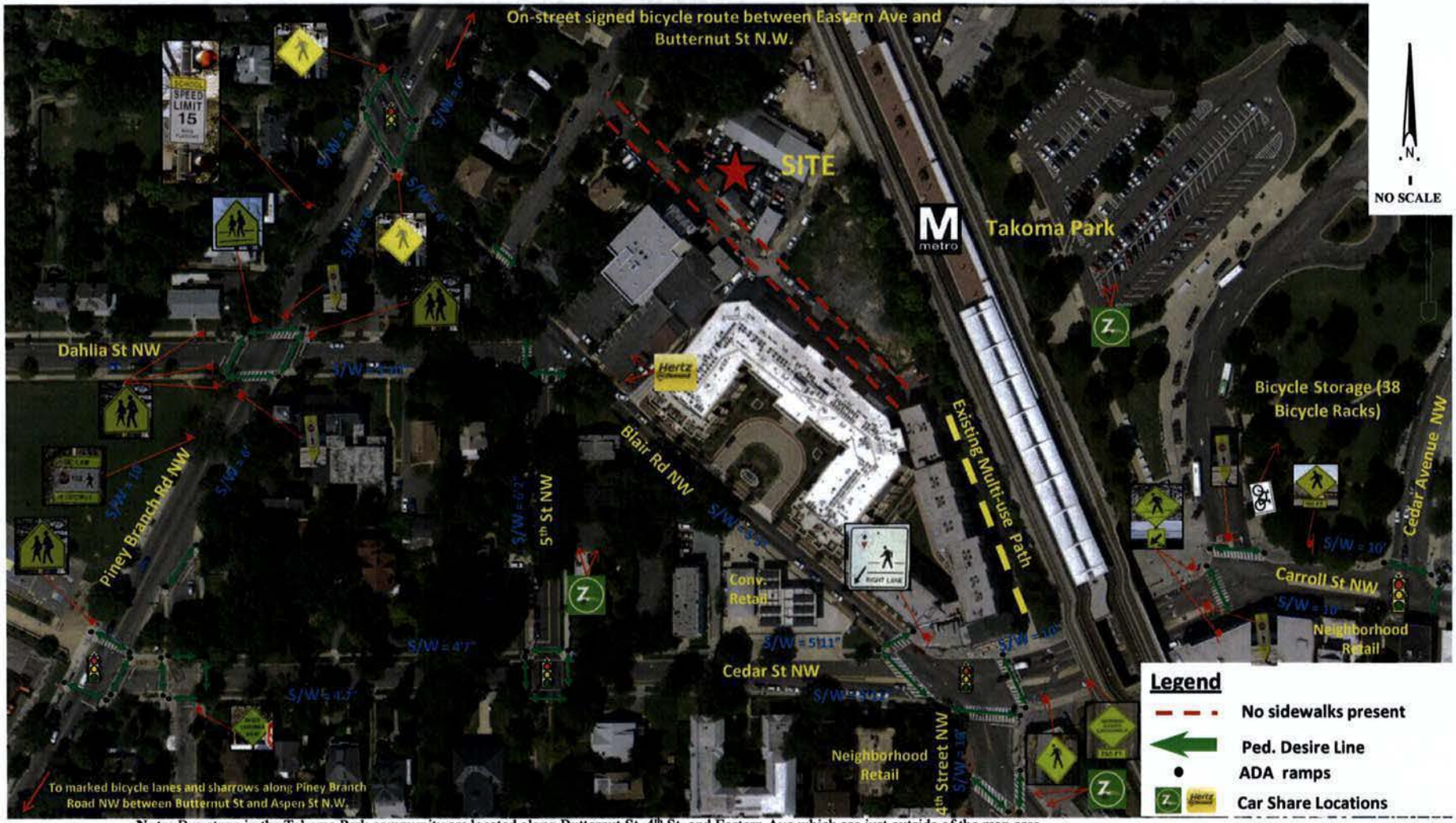
Note: Metrobus Route K1 is no longer operational

Source: Washington Metropolitan Area Transit Authority

O. R. GEORGE & ASSOCIATES, INC.
Traffic Engineers - Transportation Planners

Exhibit 4: Transit System Map

Metro Village Residential Development, Takoma Park, Northwest, Washington D.C., BZA Applications (Case No.18503 & 18505)



Note: Bus stops in the Takoma Park community are located along Butternut St, 4th St, and Eastern Ave which are just outside of the map area.

O. R. GEORGE &ASSOCIATES, INC.
Traffic Engineers - Transportation Planners

Exhibit 5: Pedestrian, Transit, and Bicycle Facilities Map

Metro Village Residential Development, Takoma Park, Northwest, Washington D.C., BZA Applications (Case No. 18503 & 18505)

The signs appeared to be properly positioned, in terms of their lateral clearance from the edge of the roadway and their heights, which allow them to be visible to motorists and other roadway uses There was no evidence of significant deterioration within the message board or the sign supports. Furthermore, the Consultant performed a windshield survey during night-time hours in order to make a visual/qualitative assessment of the retro-reflectivity of the signs within the study area It was noted that all signs within the study area appear to be quite visible during the night-time With respect to pavement markings, the main features were the double centerline yellow pavement markings, lane separation lines, and crosswalks Exhibit 5 also shows the location of all ADA ramps and signs within the study area.

4.0 PROJECTED BACKGROUND TRAFFIC SITUATION (2015)

The Applicant anticipates build-out of the Metro Village project by the end of 2014 In accordance with DDOT guidelines for traffic studies, a planning horizon year of 2015 was used (reflecting build-out plus one year) The projected 2015 background traffic situation was derived by combining 1) growth in through traffic; and 2) projected traffic from approved (but un-built) developments impacting the study area.

4.1 Growth In Through Traffic

In order to assess potential growth in through traffic within the area, this study considered traffic volume data obtained from DDOT for the period 2007 through 2010 inclusive, the most recent data 4-year period for which data is available The data is summarized in the table following and shows a generally decreasing pattern in traffic volumes within the area

Recent Traffic Growth Trends

Roadway Segment/Section	Average Volumes				Average Annual Growth Rate (2007-2010)
	2007	2008	2009	2010	
1) Blair Road (North of Piney Branch Road)	14 9	14 8	14 9	11 3	-8 0%
2) Piney Branch Road (East of Blair Road)	15 6	15 5	15.6	15 0	-1 3%
3) Cedar Street (West of Blair Road)	5 5	5 5	5.5	5.3	-1 2%
3) Dahlia Street (West of Blair Road)	2.2	2.2	2 2	2 1	-1 5%

Source: DDOT and O R George & Associates, Inc.

The Consultant used a conservative annual growth rate of 1 0%, compounded annually for all intersection movements through the 2015 design year, as required by DDOT Attachment D shows the 2015 "base" traffic situation

4.2 Background Development

As part of the study scoping process with DDOT, it was agreed that investigations would be made regarding background developments within the immediate area of the site that could have an impact on traffic operational conditions within the study area Based on review of the website of the Deputy Mayor for Economic Development, no background developments were identified The Consultant also contacted the Office of Planning Ward 4 Planner, and the same was confirmed. Accordingly, the 2015 "base year" condition shown in Attachment D was used as the base background situation to develop the projected total traffic situation, which is discussed in Section 5

5.0 PROJECTED TOTAL TRAFFIC SITUATION (2015)

5.1 Proposed Development Plan

As discussed in the Background and Purpose Section of this report (on page 1), the development proposed under the two (2) BZA applications will total 150 rental apartment units, supported by 39 parking spaces that are served by one (1) 12' x 30' loading berth with platform and one 10' x 20' service loading space. The residential units will be mixed, ranging from efficiencies to two-bedrooms Furthermore, a minimum of forty percent (40%) of these units will be allocated as "affordable", targeted at persons with incomes below sixty percent (60%) of the Area Mean Income. These persons are likely to have lower vehicle ownership rates. They would therefore be likely to use transit or other non-auto modes of travel, thus contributing to a lower vehicle trip generation by the site.

With respect to the parking and loading provisions, the table on page 1 shows the City's requirements per the Zoning Regulations as compared with the Applicant's proposal. As shown in Exhibit 2 (page 3), vehicular access will be provided off Spring Place via Bull Place, which runs between Spring Place and the railroad corridor, separating the two (2) properties The plan also shows the following additional features

- A multi-use path running along the east side of Spring Place, connecting to the existing pedestrian pathway to the south, which links properties within the immediate area with the pedestrian network along the north side of Cedar Street
- Bicycle storage facilities located off the un-named alley separating the properties
- The two (2) loading/service facilities provided within the eastern extremity of the properties, with separate berths serving each of the two (2) apartment buildings

Truck access to the loading facilities is discussed in Section 5.6

5.2 Trip Generation

The City's guidelines require that trip rates published by the Institute of Traffic Engineers (ITE) be utilized as part of Traffic Impact Assessments As discussed with DDOT and documented in the scoping agreement (Attachment A), this study utilized the "base" ITE rates for Land Use Code 220 (Mixed Apartment Unit Types), and applied the agreed mode split factors in order to determine the trip generation for the site, both in terms of vehicle and person trips. The derived trips are summarized below in Table 2

TABLE 2:
Projected Vehicle Trip Generation By Mode –
Metro Village Residential Development

	AM Peak Hour			PM Peak Hour		
	In	**Out**	**Total**	**In**	**Out**	**Total**
1) Vehicle Trips (with 50% auto use)	8	31	39	30	17	47
2) Metrorail (persons) @ 30% Mode Share	5	21	26	20	11	31
3) Metrobus/Ride-On (persons) @ 2% Mode Share	1	1	2	1	1	2
4) Bicycle (persons) @ 6% Mode Share	4	1	5	4	2	6
5) Walk (persons) @ 12% Mode Share	2	9	11	8	4	12
Total Persons (Items 2 – 5)	**12**	**32**	**44**	**33**	**18**	**51**

The Consultant notes that surveys of the existing uses on the site show that they generate a significant number of vehicle trips, particularly during the afternoon peak hours and throughout the typical weekday and on Saturday as well Because of these factors, it is reasonable to assume that the new development could result in reduced demand and improved parking management within the area This is further discussed in Section 8, which presents recommendations for improvements within the local area.

It is to be noted that the person trip estimates were developed based on the assumption of a vehicle occupancy rate of 1 1 persons, from which the total person trip generation from the site was derived and factored by the alternative modes listed in the table. The vehicle and person trip generation from the table is utilized and discussed in the sections following, in order to facilitate an assessment of the potential impacts and any mitigation measures that might be associated.

As noted on page 7, the study included a survey of trips generated during the peak period at the Gables Apartments That data was analyzed to show the peak hour trips generated by the Gables Apartments during the peak hour Since the number of apartment units is quite comparable (140 units for the Gables, and 150 units for Metro Village), the table below shows that the trip generation estimates for the subject site may be quite conservative

	AM Peak Hour			PM Peak Hour		
	In	**Out**	**Total**	**In**	**Out**	**Total**
Gables Apartment (140 units) Vehicle Trips per survey	3	22	25	17	7	24
Metro Village (150 units) Projected Vehicle Trips	8	31	39	30	17	47

The previous table shows that our projections for Metro Village are quite conservative (i e on the high side), and would represent somewhat of a worst case scenario

5.3 Trip Distribution and Traffic Assignment

The trip distribution pattern for site traffic generated during the morning and afternoon peak periods are related primarily to the location of the site relative to major employment opportunities within the region. The distribution pattern was agreed with DDOT as part of the study scoping process and is illustrated in Attachment A. Utilizing the total vehicle trips estimated in Table 2 above, the assignment to the study area roadway network is illustrated in Exhibit 6.

Through a similar distribution pattern, the person trips generated by the various modes noted in Table 2 could be assigned to the roadway network However, examination of the trips shows that during both the morning and afternoon peak periods, approximately 60% of the total non-auto trips would occur between the site and the Metro Station (i.e., 26 of 44 trips during the morning, and 31 of 54 trips during the afternoon) The remaining 18 to 20 person trips would be distributed along other roadways and would clearly have no appreciable impact.

5.4 Traffic Analysis –Total Traffic Situation (2015)

The projected 2015 total traffic situation was derived by combining the projected "base" background traffic situation (Attachment D) with the projected traffic assignment for the proposed development (Exhibit 6) The 2015 total traffic situation is shown in Exhibit 7 The volumes were analyzed using the Synchro analysis software, and the results are presented below in Table 3 Copies of output from the Synchro runs are included as Attachment E.

Table 3:
Summary of Synchro Analysis Results – Total Traffic Situation (2015)

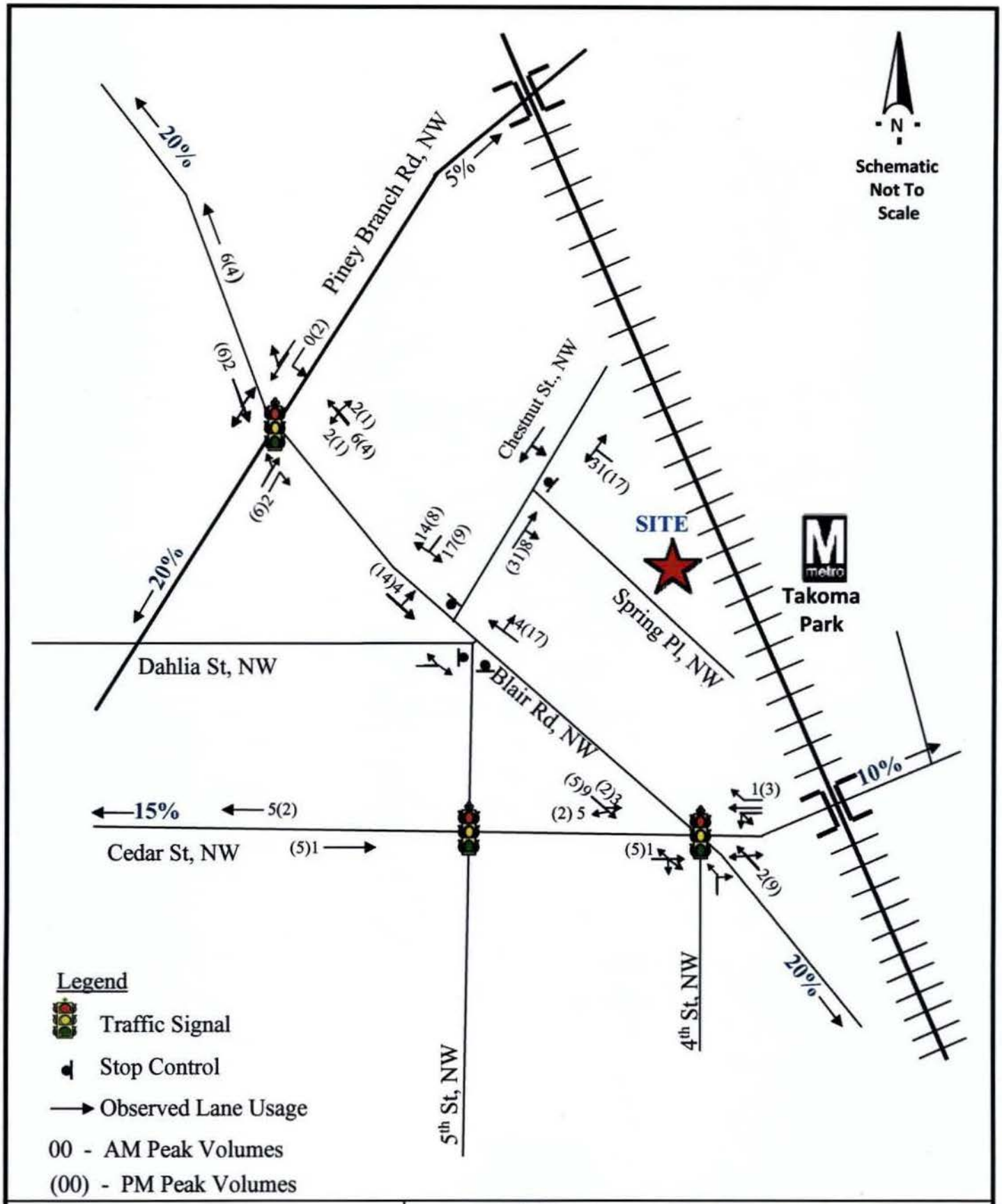
Intersections	AM Peak Hour		PM Peak Hour	
	Level of Service	Avg. Delay (Secs/Veh)*	Level of Service	Avg. Delay (Secs/Veh)*
1) Blair Rd. @ Cedar St./4th St., NW	E	78 1	E	79.1
2) Blair Rd @ Chestnut St., NW	C**	24.2	C**	16.1
3) Blair Rd. @ Piney Branch Rd , NW	E	67 4	E	65 1
4) Chestnut St @ Spring Pl , NW	A	9.0	A	8 9
5) Blair Rd @ Dahlia St /5th St., NW***	B	N/A	B	N/A

* Secs/Veh. = Average Control Delay (in Seconds per Vehicle)

** See discussion on page 4, last paragraph

*** Intersection configuration not supported by HCM methodology Results are based on ICU methodology

Source: O R. George & Associates, Inc



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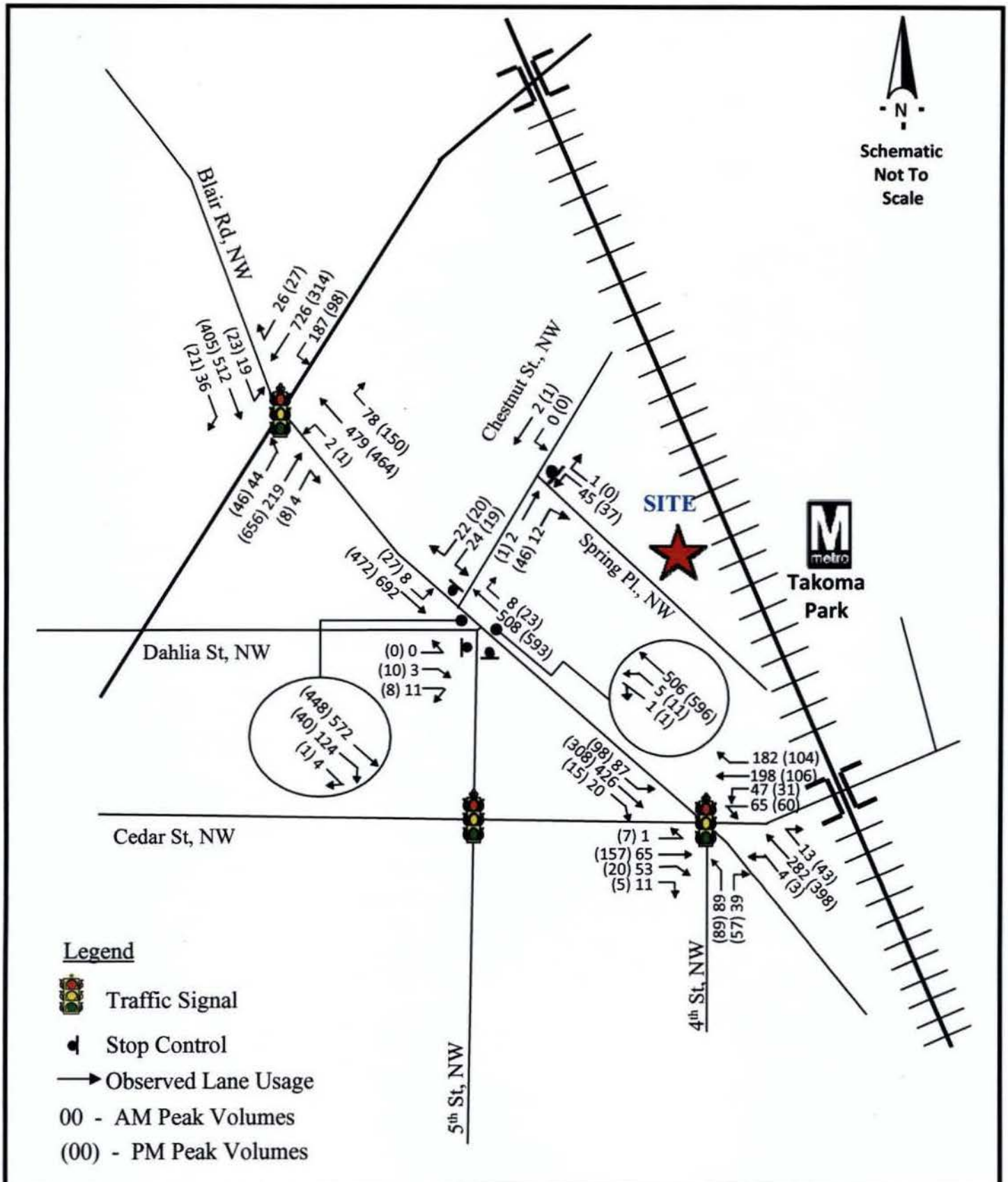
Traffic Engineers - Transportation Planners

Exhibit 6: Site Trip Distribution and Assignment

Metro Village Residential Development, Takoma Park, Northwest, Washington D.C., BZA Applications (Case No. 18503 & 18505)



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Traffic Engineers - Transportation Planners

Exhibit 7: 2015 Total Traffic Situation

Metro Village Residential Development, Takoma Park, Northwest, Washington D.C., BZA Applications (Case No. 18503 & 18505)

In order to further facilitate evaluation of the site impact, the results of the analysis performed for the existing and total traffic situation is presented in Table 4. Since no background developments were considered and a 3% growth in existing traffic was assumed, a separate analysis was not performed for the 2015 "base" year traffic situation. Examination of the results for the existing and total traffic situation shown in Table 4 demonstrates that this separate analysis was not warranted.

TABLE 4:
Summary and Comparison of Synchro Analysis Results -
(Existing and Future Conditions)

Intersection	Evaluation Criteria	Existing Situation (2012)		Total Situation (2015)	
		AM	PM	AM	PM
1) Blair Rd. @ Cedar St./4th St., NW	LOS	E	E	E	E
	Delay (secs.)	63.3	67.4	78.1	79.1
	V/C Ratio	0.99	0.96	1.05	1.02
2) Blair Rd. @ Chestnut St., NW	LOS	C*	B*	C*	C*
	Delay (secs.)	19.2	14.7	24.2	16.1
	V/C Ratio	0.32	0.35	0.33	0.37
3) Blair Rd. @ Piney Branch Rd., NW	LOS	E	E	E	E
	Delay (secs.)	56.9	56.7	67.4	65.1
	V/C Ratio	1.00	0.99	1.03	1.02
4) Chestnut St. @ Spring Pl., NW	LOS	A	A	A	A
	Delay (secs.)	8.6	8.7	9.0	8.9
	V/C Ratio	0.03	0.03	0.03	0.06
5) Blair Rd. @ Dahlia St./5th St., NW	LOS	B	B	B	B
	Delay (secs.)	N/A	N/A	N/A	N/A
	V/C Ratio	N/A	N/A	N/A	N/A

* See discussion on page 4, last paragraph

As can be shown in Table 4, vehicle trips generated by the subject development will have a very marginal increase in the delays experienced at the five (5) intersections considered. This issue is further discussed in Section 6.0, which addresses general PUD considerations.

As shown in Table 4, the vehicle trips generated by the BZA site are projected to have a very marginal/insignificant adverse impact on the future levels of service experienced at the study intersections. As discussed earlier, delay experienced at an intersection is one of the principal factors involved in the computations in the levels of service. This issue is discussed further in Section 7.0 (on page 24), which addresses other general factors that were considered relevant to the current BZA application. The change in V/C ratios exceeded DDOT's criteria for mitigation in some cases. While this is due mainly to the conservative growth factor applied, the Applicant proposes mitigation through its TDM measures discussed in Section 6 (page 23).

5.5 Evaluation of Parking Provisions

As discussed earlier, the Applicant is seeking relief from the requirement to provide 36 less spaces than what is required by the Zoning Regulations (75 spaces required versus 39 spaces proposed). In addressing the adequacy of the proposed parking, the Consultants considered that Transportation Planning (and planning in general) takes the empirical approach, and relies on data from existing land uses in order to develop trends and set policies establishing parameters such as parking ratios that are typically reflected in municipal ordinances and codes.

Discussion in this section notes that the current regulations are based on vehicle ownership and travel characteristics which date back to the 1950's. The study therefore made attempts to quantify the levels of parking usage from projects within the immediate area, (such as the Gables 7035 Blair Road Northwest, and Elevation 314 Cedar Street Northwest). Attempts were made to get information from the management of these properties, but these were unsuccessful because of their management policies which treated the information as propriety. The only information obtained was that both developments had 'abundant' parking. The Consultant is continuing these efforts and the information will be supplemented in a submission to DDOT, and at the BZA public hearing, if necessary.

The Applicant's TDM measures are discussed in Section 7.0, and includes recommendations that would support the proposal for reduced parking demand, as well as for management of the parking supply that is proposed. From the general planning and policy considerations, the Consultant finds it relevant to highlight the following considerations regarding emerging trends and policies pertaining to mobility and sustainability within Washington, DC, and urban areas in general.

Changes in City Policies for Off-street Parking Requirements

The most significant is the "Zoning Regulations Review," which the City is conducting.[1] Phase I of this review was undertaken over a two-year period, involving a 24-member Task Force, with support from Nelson Nygaard Associates, a major consulting firm. Part of the focus was to identify changes that were needed to be better in sync with the goals and objectives established in the 2006 Comprehensive Plan. The following are highlights of the principal background, perspectives and recommended changes from the review:

a) The current parking regulations are based on land use and travel demand characteristics of 1958. One of the driving factors for the 1958 parking ratios (for off-street parking requirement) was that public streets had been heavily used for the storage of vehicles, and this was considered undesirable. The current staff report notes that current urban planning principles stipulated that on-street parking is acceptable (and desirable) as a part of urban life, including as an element of traffic calming.

b) The 1956 studies, which drove the provisions of the 1958 Regulations, assumed personal vehicles as the preferred mode of transportation. The District Office of Planning and the Department of Transportation have underscored that this principle runs contrary to its current policies of urban design, mobility and sustainability.

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[1] *"Zoning Regulations Review" of General Parking Chapter, General Bicycle Parking Review Chapter, and General Loading Chapter. (Set-Down Hearing Report for Zoning Commission Case No. 08-06), September 3, 2010.*

c) The 2006 Comprehensive Plan cites the City's Capital Investment in the Regional Metrorail System, noting the City's fifteen Metrorail Stations and requirement for new policies in the management of land in the vicinity of these stations (particularly to de-emphasize auto-oriented uses and surface parking).

Changing Urban Trends – Demographics and Travel Characteristics

With respect to the residential component of the site it is noted that the provision of 30 off-street parking spaces would be required to satisfy the criteria of the Zoning Regulations. The Applicant's Statement has identified practical difficulties and constraints to providing the required parking. In relation to this issue, the Consultant conducted considerable research pertaining to recent change in demographics, auto ownership and travel demand characteristics within the Nation's Capital, urban areas elsewhere in the country as well as internationally. The results of the research are summarized below, under five (5) key headings:

- ***Trends in Vehicle Ownership Within Urban Areas:*** The United States Census Bureau reports that the urban population of the United States increased significantly from 79.0% to approximately 81.0% between 2000 and 2010[2]. While, this increase may seem relatively small, the remarkable statistics is that over 80% of the population of the United States lives in urban areas. During the same period, the population of Washington D.C. increased from 572,059 to 601,723 persons, an increase of over 5.0%. Most of this increase has been with the age group 21-35. The Federal Highway Administration reports that over the 10-year period auto ownership in the District of Columbia fell by approximately 40,200 registrations; and vehicles per person fell from 0.42 to 0.35 a drop of approximately 17.0%[3].

  Along with these basic demographic changes, market surveys have shown that the purchase of new vehicles by adults within the age group of 21-34 has dropped to 27.0% (a 30.0% reduction from the corresponding figure from the peak year of 1985). Current trends dealing with demographic shifts and auto ownership can perhaps be capsulized by reference to a survey cited in the Wall Street Journal publication of January 2011, which sites surveys sighing that approximately 90.0% of younger population choosing to "live in an urban environment ... which feature plenty of walking distance restaurants, retail and public transportation to Washington D.C", even when they may be forced to settle in outlying suburban communities such as Bethesda, Maryland or Arlington, Virginia[4].

- ***Reduction in Vehicle Miles of Travel (VMT):*** The transportation profession recognizes that the concept of Vehicle Miles of Travel (VMT) has a strong link with attitudes of significant segments of population towards ownership of personal vehicles, and travel mode choices. The National Household Travel Survey[5] database reports the VMT for age group 16-34 has dropped from 10,300 to 7,900 miles per capita between 2001 and 2009, a decrease by 23%. While the level of reduction is less for the overall population, a similar downward trend is also evident for all age groups.

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[2] *U S Department of Commerce, Bureau of Census – "2010 Urban Area Facts"*
[3] *U.S. Department of Transportation, Federal Highway Administration – Public Data for Highway Statistics*
[4] *The Wall Street Journal- Real Estate New and Analysis*, January 13, 2011
[5] *U.S. Department of Transportation, Federal Highway Administration - National Household Survey Historical Monthly VMT Report*, 3 May 2011.

With respect to the District of Columbia, statistics published by Federal Highway Administration shows that while the City's population increased by 5.0% between 2000 and 2010, per capita Vehicle Miles of Travel fell by estimated 8.0% to 10.0% over the same period. The impact and implication for transportation policy is perhaps best summarized in an April 2012 article titled "*Transportation and the New Generation... What it Means for Transportation Policy*"[6] which notes the following:

- As the demand for transportation overall stagnates, there is emerging consumer preference for walkable, less auto-dependent forms of developments.
- Decline in Vehicle Miles of Travel improves the competitive positions of transportation alternatives on measures of quality, convenience and cost.

In support of the above, extracts from the referenced article are included as Attachment F.

- ***Trends in Transit Oriented Development in Urban Areas***: The Applicants Statement makes reference to several existing developments within historic districts with in Washington D.C., which provide no off-street parking. It is important to note that several of the sites noted are not located within Transit Oriented Districts. As part of the study effort, the Consultant performed an internet search of urban areas where there has been significant residential development in recent years without off-street parking. The Consultant selected the City of Portland, Oregon for reference and comparison. That city is designated as an urban center is situated within a metropolitan area, and has a population of 583,776, which is quite comparable to Washington, D.C.'s population of approximately 600,000. The City also has a highly reputed public transportation system, consisting of Trimet Rapid Transit and Bus System network. As in Washington D.C. high density development is general concentrated within the downtown areas.

  In an August, 2012 article entitled "No Room for Parking at Many New-Apartment Complexes" by Oregon Public Broadcasting News[7], it is reported that, of 40 apartment building projects for which permits were filed within an approximate one-year period, 25 offered no off-street parking. The number of units ranged from 10 to 282, and averaged 50 units. For convenience, extracts from the article are included in Attachment G.

- ***Proliferation of Car-share Organizations:*** Car-sharing is an emerging trend and serves the primary purposes of providing choice and bridging the gap for households and individuals who elect not to own a car, but may need one occasionally. Currently there are three (3) car-sharing companies operating with the Washington D.C area, namely Zipcar, Hertz On-Demand and Car2go. Zipcar being the pioneer of the concept, other companies are venturing in car-share to address the growing demand. A survey conducted by Flexcar[8] within the Washington D.C. area has shown that 42.0% of car-share members have forgone purchase of a car, and 25.0% of members who own a car have shown willingness to sell their car. In this connection it is noted that the Applicant proposes to provide a car-share space on-site as part of the TDM plan.

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[6] *Frontier Group – U S Public Interest Research Group – Education Fund: "Transportation and the New Generation, Why Young People are Driving Less and What it Means for Transportation Policy" April, 2012*
[7] *Oregon Public Broadcasting News – No Room For Parking At Many Apartment Complexes, August 15, 2012*
[8] *Car-Sharing: Where and How It Succeeds– TCRP Report 108.*

- ***Increase in Bicycle and Pedestrian Travel Mode Share***: As noted on page 19 dealing with reduced Vehicle Miles of Travel in urban areas, the Public Interest Research Group sites statistics that point to significant increase in bicycle and pedestrian travel within urban areas. The Organization notes that a 24.0% increase has occurred over the period 2001 to 2009. Moreover, a study conducted for DDOT by LDA Consulting[9] regarding the impacts of Capital Bikeshare reported that four in ten survey respondents drove a car less often, and 94.0% of respondents indicated that Capital Bikeshare had been a factor contributing to their reduced driving. Thirty-eight percent (38.0%) of respondents who had access to a personal vehicle reduced annual driving by an average 523 miles. This resulted in a reduction of about 5 million Vehicle Miles of Travel per year for the 18,000 Capital Bikeshare members (as of November 2011). It is noted that there are two Bikeshare stations in close proximity to the subject PUD site, and the applicant plans to provide 25 bicycle spaces on-site.

As noted earlier, this study also gave significant consideration to the fact that the City is currently undergoing a review and update of regulations governing off-street parking provisions. As part of public hearing before the Zoning Commission, testimony was provided citing specific examples of residential developments implemented within TOD zones in the City, and which showed significant imbalance between parking supply and demand. For convenience, extract from the testimony by the Smart Growth Organization is included in Attachment H.

The Consultant wishes to note that there is a considerable additional on-going research, pertaining to the subject discussed in this section. In particular, the Consultant wishes to cite the following recent studies, both of which were found to be quite germane to the current discussion and related policy decisions by the City.

1. "Residential Off- Street Parking: Car Ownership, VMT and Related Carbon Impacts (Case Study New York City)" - Transportation Research Board (TRB)[10].
2. "Guaranteed Parking – Guaranteed Driving: Comparing Jackson Heights, Queens and Park Slope, Brooklyn shows that a guaranteed parking spot at home leads to more driving to work." [11]

For convenience and ease of reference, copies of the two studies are included as Attachment I.

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[9] *Capital Bikeshare 2011 Member Survey Report (June 14, 2012) -LDA Consulting Washington, DC 20015*
[10] *Transportation Research Board (TRB) – National Academy of Sciences, Washington D C*
[11] *Prepared for Transportation Alternatives, October, 2008*

5.6 Evaluation of Loading Provisions

The Applicant is requesting relief from providing the two 12' x 55' loading berths, which the Regulations stipulate. The development plan proposes to provide one 12' x 30' loading berth, serving the 86-unit building, and one 10' x 20' service/delivery space serving the 64-unit building. These loading facilities will be well outside the public thoroughfares, and would not conflict with other vehicular or pedestrian movements. [Details are shown on the site plan on Exhibit, page 3.]

In evaluating the adequacy of the proposed loading facilities, the Consultant considered the mix of units proposed for the two building which is summarized in the table following:

	Development Unit Mix		
	Studio	**1-Bedroom**	**2-Bedroom**
Building 1	N/A	41	23
Building 2	22	56	8
Total	**22 (15%)**	**56 (65%)**	**31 (20%)**

As noted above, 80% of the units will be studio and one-bedroom. This points to the fact that move-ins and move-outs would typically be by smaller vehicles, including rental vans such as U-Haul, Budget, etc. Discussions and surveys of management companies confirm this. Even when long-distance moving is handled by large tractor trailer-type vehicles, the logistics typically involves deliveries of "smaller-sized loads" being transferred to smaller trucks at regional distribution centers. It is also noteworthy that the City has approved numerous developments in recent years of comparable developments where the larger sized 12' x 55' loading berths were not required. [Examples of this include Park Triangle (with 141 apartment units) at 1375 Kenyon Street, NW (BZA Case No. 18269); and the Babes Billiards/Bond Building (with 60 units) at 4600 Wisconsin Avenue, NW (Zoning Commission Case No. 10-23).]

With respect to the Babes Billiards/Bond Building referenced above, it is important to note that the building is similarly located within a transit-oriented development zone, but its access was from a relatively heavily used roadway, which also serves significant pedestrian traffic. The supporting traffic study found that access to the loading facilities could be safely accommodated with appropriate management arrangements in place. It was recently approved by the Zoning Commission to be developed with no on-site parking spaces, and with only a 30-Ft. loading berth. As discussed in Section 6 following, the loading facilities would be similarly managed with scheduled move-in/move-out as per the Applicant's Transportation Demand Management (TDM) plan.

Truck tracking diagrams showing movements of single-unit vehicles accessing the loading facilities are included in Attachment J. Our assessment concludes that operationally, the Applicant's proposal is feasible and should not have any adverse impacts on the local area. The trucks would use the same routing to and from Blair Road that similar vehicles accessing the other uses currently utilize.

It is also relevant to site other buildings within the local area, including the Gables Apartments at 7035 Blair Road, NW (with 140 units); Elevation at 314 Carroll Street, NW (with 52 units); and the 3 Tree Flats Apartments at 3910 Georgia Avenue, NW (with 130 apartment units). None of these are provided with 12' x 55' loading berths. In addition to the above factors, it is noted that the Applicant plans to have move-ins and move-outs scheduled so that use of the loading facilities can be effectively managed. This is included as one of the TDM measures, which is discussed in the section following.

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6.0 TRANSPORTATION DEMAND MANAGEMENT PLAN

The City's current policies emphasize vehicle trip reduction as one of its objectives for enhancing the quality of life within the urban environment. In support of this objective, developers/applicants are encouraged to incorporate TDM measures, with the goal of reducing vehicle trip generation, particularly during the weekday peak hours. Earlier sections of this report have shown that the subject BZA site is quite favorably situated relative to the City's public transportation system, with the Takoma Park Metro Station less than a block away and with easy access to eight (8) Metrobus routes and eight (8) Ride-On bus routes. As such, vehicular trip generation from the site would be very low, and will not appreciably impact the levels of service at the intersections in the immediate vicinity. In keeping with the City's policies, the Applicant proposes the following as the principal elements of its TDM plan:

a) Resident Transportation Coordinator (RTC): The Applicant's site management will designate one employee as the Resident Transportation Coordinator. This person's duties would principally be to provide information to residents (particularly those incoming) regarding transit opportunities and schedules, as well as the location of Bike Share stations within the area, and bicycle parking provisions within the building. The RTC will generally encourage non-private auto usage and will have related information prominently displayed in the offices, community rooms, and other appropriate common space.

b) Bicycle Usage Program: The Applicant proposes to provide a minimum of 40 bicycle parking spaces in a secure, convenient location that would be accessible to residents at all times. Moreover, a one-time Capital Bikeshare annual membership fee will be paid by the Applicant for initial tenants.

c) Promotion of Car-Share Usage: A one-time Car-Share membership and application fees (totaling $85.00) will be paid by the Applicant for initial tenants. [Both Zipcar and Hertz-On-Demand have stations within the immediate vicinity of the subject site.]

d) Transit Subsidies: The Applicant proposes to provide a one-time $50.00 transit fare card to initial tenants and employees in order to encourage non-auto use.

e) Loading Facility Management: The Applicant proposes to put in place a management arrangement through which move-in/move-out would be scheduled and would generally occur during weekday off-peak periods and on weekends. As noted on the truck-tracking diagrams, the movements of Single Unit trucks exiting the Building 2 loading berth would be facilitated by assistance from site management staff.

f) Monitoring, Feedback, and Audits: The Applicant proposes to work with the DDOT staff to put in place specific program and schedule for monitoring the site to quantify the Measures of Effectiveness embodied in the Consultant's analysis and mode split assumptions. This would include audits to confirm levels of vehicle trip generation, parking demand, pedestrian and bicycle usage and similar factors.

In addition to the above specific items, the Applicant's management will maintain liaison with DDOT staff and the Advisory Neighborhood Commission as needed in order to ensure the continued effectiveness of the TDM measures. It is envisioned that this would apply particularly within the first two years after the issuance of Use and Occupancy permits for the development.

7.0 OTHER BZA REVIEW CONSIDERATIONS

The subject application has been submitted pursuant to Section 3103.2 of the Zoning Regulations. The Applicant is seeking a variance from the parking requirement under Section 2101.1, and the loading requirement under Section 2201.1, among other requests. The parking provisions were addressed in Section 5.5 (on page 18), and the loading provisions were discussed in Section 5.6 (on page 21). The Consultant also notes that Section 2108.3 of the Zoning Regulations cites a number of specific factors, which the BZA may consider in reviewing requests for reduction of parking spaces. For completeness, these factors are highlighted below, along with factors for the City's review:

Section 2108.3(a): Nature and location of the structure.

The current and future improvements within the property are fully in compliance with the uses prescribed for the C-2-A Zone District. The location of the property is also important because of the following considerations regarding transportation and mobility:

i) The property is located within the Takoma Park area, which is part of the "Rock Creek East Planning Area" as defined in the City's Comprehensive Plan[12]. The City's policies emphasize multi-modal transportation facilities and services within this area. The property location and use also fits with the City's criteria for Transit Oriented Development (TOD) zones.

ii) The site is approximately 150 feet from the Takoma Park Metro Station. In addition, the site is conveniently located relative to a number of bus stops on eight (8) Metrobus routes and eight (8) Ride-On routes on the Montgomery County transit system, all of which have stops within the Takoma Park Metro Station.

iii) The site is located within a built-up area, and has easy access to the City's network of sidewalks, crosswalks, and other pedestrian amenities, as well as to bicycle and car-sharing facilities. There are currently no sidewalks provided along Spring Place, which abuts the property, and this issue is being studied further by the Applicant's Civil/Site Design Consultants.

Section 2108.3(b): Maximum number of students, employees, guests, customers, or clients who can reasonably be expected to use the proposed building or structure at one time.

Since this is an exclusively residential building, the issue of maximum number of occupants is not relevant to the scope of this traffic impact assessment.

Section 2108.3(c): Amount of traffic congestion existing or that the building or structure can reasonably be expected to create in the neighborhood.

The analysis has shown that the levels of service at intersections within the defined study area indicate "congestion levels" may be exceeding the City's level of service planning standards. This situation is due in part to some of the traffic control measures that are in place, notably multi-way stop signs along some sections of Blair Road. The addition of residential units within the area would very marginally impact the delays and congestion.

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[12] Comprehensive Plan for the National Capital: District Elements (Chapter 3, Section LU 1.3), October, 2007.

Section 2108.3(d): Quantity of existing public, commercial, or private parking, other than curb parking, on the property or in the neighborhood that can reasonably be expected to be available when the building or structure is in use.

The Applicant's proposal for off-street parking will fully satisfy the needs of the residents, and it is not projected that the development will create demand for on-street parking within the area.

Section 2108.3(e): Proximity to public transportation, particularly Metrorail stations, and the availability of public transportation service in the area or a ride-sharing program approved by the D.C. Department of Transportation.

The subject properties is situated approximately 150 feet from the Takoma Park Metro Station, and is conveniently located relative to a number of bus stops on sixteen (16) Metrobus and Ride-On bus routes serving the area. A windshield survey during weekday peak and off-peak periods indicated that there is considerable seating capacity available on the buses serving the area. The Consultant is seeking information from WMATA regarding that agency's current assessment of capacities along the Red Line train serving the Takoma Park Metrorail Station, and this information will be provided in the final report.

8.0 SUMMARY OF FINDINGS AND CONCLUSION

Based upon the data, analysis, and discussion presented in this report, the Consultant finds that the application satisfies the criteria stipulated in the Zoning Regulations relative to the transportation and parking aspects of the relief sought. More specifically, the Applicant's proposal is not likely to become objectionable to surrounding properties and the local area. This refers particularly to impacts to traffic generation, congestion, and parking demand. It is also noted that the Applicant's proposal is consistent with the City's current policies on mobility and sustainability. The following fact ors are specifically noted:

a) The proposed development is a permitted use based on the zoning category of the property, and the relief sort pertains only to the site parking and loading facilities.

b) The property is within a transit-oriented development zone and is likely to have low vehicle trip generation. The development proposal would replace existing auto repair and related uses, which currently generate significant traffic and on-street parking demands within the immediate vicinity of the site.

c) The study has provided considerable information regarding development trends within the City as well as nationally and internationally, which point to lower auto ownership and its direct linkage to lower parking demand. This is also consistent with the City's ongoing revisions to the parking requirements stipulated by the Zoning Regulations.

d) The study has demonstrated that the proposed loading facilities would meet the needs of the site, considering the mix of apartment unit types, the layout of the loading facilities, and the management provisions, which would include scheduling and on-site support.

e) While the study has identified some deficiencies in existing levels of service relative to the City's standards, it has been determined that the net change in vehicle trip generation will not have an appreciable adverse impact on traffic within the defined study area.

Section 6 of the report presented the Applicant's Transportation Management Plan, which includes provision for monitoring and feedback and continuing engagement with the local Advisory Neighborhood Commission and the DDOT staff. The study has identified the following existing issues related to travel within the local area and which should be the subject of further discussion and potential mitigation.

1. Pedestrian Facilities Along Chestnut Street and Spring Place: There are currently no sidewalks provided along Spring Place, and sidewalks along Chestnut Street do not meet City standards. The Applicant's development plan will provide pedestrian facilities along the Spring Place frontage of the subject properties, and these will connect to the unimproved multi-use path to the south (within the public right-of-way) which connects to Cedar Street. It is felt that this responds to the predominant pedestrian desire lines from the site, and provides for effective pedestrian linkage between the site and the local area, and no mitigation on the part of the Applicant is warranted.
2. Corner Site Distance Availability (Chestnut Street @ Blair Road): There is some restriction of site distance for vehicles exiting Chestnut Street and turning left onto Blair Road. This is due to the location of a utility pole within the public right-of-way and vegetation within the abutting private property. DDOT's records for this location occurring over the 3 year period from 2009 to 2011 show only two (2) crashes (one involving a fixed object and one involving a side-swipe). The low level of crashes and the types do not suggest that the safety improvements at this location need to be prioritized. Furthermore, the potential improvements would be outside the scope of mitigation that could be undertaken by the Applicant. This issue is being examined further for potential mitigation.
3. Signage Improvements for Blair Road @ Chestnut Street: The analysis and field surveys indicate that vehicles exiting Chestnut Street during weekday morning and afternoon peak periods experience some level of difficulty due to queuing along Blair Road. As noted in the report a "DO NOT BLOCK INTERSECTION" sign is provided along the north bound approach. It is the Consultant's view that it may be appropriate to provide a similar sign for the south bound direction; and the Applicant has indicated a readiness to assume the cost for such signage improvements. *(As part of the study, the issue of multi-way stop signs at this intersection was discussed with the DDOT review staff. The Consultant notes that the queuing/storage available between Piney Branch Road and Chestnut Street is quite limited and may present operational constraints. This measure is therefore not recommended.)*
4. Spring Place – Parking Restriction Signage: It is noted that there is virtually no parking restriction signage along this roadway, which varies in width between 20 and 25 Ft. The Consultant recommends that as part of the public space review for the project, the Applicant will reach concurrence with DDOT pertaining to parking restrictions along the frontage of the property, in order to facilitate traffic flow.

This document is submitted as the Consultant's professional opinion on the subject matter, and we look forward to responding to any further requirements the Applicant may have. Consistent with the City's (DDOT's) current policies and procedures, the Consultant envisions engaging in further interaction with the City's staff as the application process continues. Clarifications and submission of supplementary documentation would therefore be provided as may be necessary. This will include further details of intersection corner site distances at relevant locations as requested by the DDOT review staff.

O. R. GEORGE & ASSOCIATES, INC.

Traffic Engineers – Transportation Planners

10210 Greenbelt Road, Suite 310 • Lanham, MD 20706-2218
Tel: (301) 794-7700 • Fax: (301) 794-4400
E-mail: ogeorge@orgengineering.com

MEMORANDUM

DATE: February 7, 2013

TO: Ms. Anna Chamberlain, Transportation Planner .....
Policy Planning and Sustainability Administration (Development Review)
District Department of Transportation

FROM: Osborne R. George, P.E., PTOE/ Addisu M. Bekele, E.I.T.

RE: Supplementary Information on Traffic Impact Assessment for Metro Village Residential Development – BZA Applications 18503 & 18505

Further to our e-mail correspondence of February 4th, 2013, this Memorandum is prepared to respond to DDOT's comments received on the Traffic Impact Assessment (dated January 31, 2013) submitted in support of the referenced application. A copy of the comments is included in Attachment A. The responses are itemized in accordance with the order of DDOT's comments.

Item 1: Trip Generation Credit for Existing Land Uses on Property

Currently, there are five (5) auto repair facilities on the northern portion of the property. The southern portion is currently vacant. During the course of our study, we performed a survey of trips generated by the site as part of our overall assessment. However, as agreed with DDOT, our study made no adjustment to take credit for the existing vehicle trips. This can be seen by the comparison of trip generation shown in Table 2 and the trip assignment in Exhibit 6 of the report. For convenience these two pages are included in Attachment B.

Item 2: Transit Services Within the Immediate Area

The subject development is situated adjacent to the Takoma Park Metrostation. In addition to the Metrorail service, the station is served by seven (7) Metrobus routes operating exclusively in the District of Columbia, two (2) Metrobus routes operating in both Maryland and District of Columbia, and eight (8) routes on the Montgomery County Ride-on System. The WMATA and Montgomery County website shows the following weekday headways and frequency of service.

	Morning Peak Period	Afternoon Peak Period
• Metrorail Service	High frequency (≤ 5 Min.)	High frequency (≤ 5 Min.)
• Metrobus Service	Approximately 15 Min.	Approximately 15 Min.
• Ride-on Service	Range 20 - 30 Min.	Range 20 - 30 Min.

Since all of the buses have stops within the Metrostation, there are no bus stops within the immediate area, such as on Cedar Street, Blair Road or 4th Street. The closest bus stops are on the routes running along Butternut Street and Carroll Avenue, both several blocks away.

Item 3: Parking Inventory and Availability

The Consultant undertook an inventory and availability of the parking spaces along Chestnut Street and Cedar Street, and the results are summarized in the table below.

Parking Location	Total Spaces	Restrictions
1) Cedar St. (between Blair Rd. and Cedar Ave.)	12 (Metered Spaces)	Parking restricted during morning and afternoon peak periods, with 4 Hr. limits during off-peak weekdays and on Saturday. Un-restricted use 6:30 Pm to 7:00 AM
2) Chestnut St. (between Blair Rd. and the Railroad Tracks)	24 Spaces	Residential Parking Permit restrictions apply (7:00 AM to 8:30 Mon-Fri, Zone 4B permit holders excepted)

Surveys were done at various times on weekdays, weekends, and on special event days such as, February 3, 2013 (Super bowl Sunday). Maximum observed occupancy of Chestnut Street spaces was generally in the range of 12 to 15 spaces, with a minimum of 9 spaces typically available. Specific surveys were not performed along Cedar Street, as this location was fairly remote and inconvenient to the site. If required, the surveys can be scheduled and provided to DDOT, at an agreed date in advance of the February 26 BZA hearing date.

Items 4 & 5: Capacity Analysis Adjustment for Signal Timing

We reviewed the traffic signal timing sheets provided by DDOT, and we again note that the timing is different from what was measured in the field. This applies particularly with respect to the total cycle length, which is 10 seconds greater than the values shown in DDOT's records. The Synchro runs were revised to incorporate the timing per the DDOT signal sheets and the table of the results will be forwarded to DDOT tomorrow along with the Synchro files.

Item 6: Intersection Corner Sight Distances

The corner site distances are illustrated in Attachment C. Additional information and discussion regarding the observed sight distances are presented under Item 7 below. It is noted that the Blair Road/Chestnut Street intersection is the only location where sight distances have a relevance to safety at intersections within the defined study area.

Item 7: Mitigation for Blair Road/Chestnut Street Intersection

Discussion in the study addressed the results of the capacity analysis and field observations, which showed significant queuing along Blair Road in the vicinity of Chestnut Street. During the morning peak period, queues in the southbound direction often extend from Cedar Street back to the area of the Chestnut Street intersection. The reverse situation occurs in the afternoon when the northbound queues extend back to the area of the Gables apartment and the gas station located in the northwest quadrant of the Cedar Street/Blair Road. The study notes that "DO NOT BLOCK INTERSECTION" signs are provided south of Chestnut Street in the northbound direction, but no such signs are provided in the southbound direction. It is understood that this is because of the close spacing (approximately 135 Ft.) between Chestnut Street and Piney Branch Road to the north.

The Consultant notes that the situation exists. Furthermore, because of the limited spacing and available storage in the southbound direction, it may not be feasible to install multi-way stop signs and this is not recommended. However, there is a potential to supplement the "DO NOT BLOCK INTERSECTION" signage and marking provisions for the intersection, in accordance with the provisions of the Manual on Uniform Traffic Control Devices (Part 3 Figure 3B-18). For ease of reference, please see the exhibit included as Attachment D. It is therefore recommended that the matter be resolved through further discussions with DDOT, which would include the Traffic Operations Administration. ***The further assessment would be done with the understanding that the Applicant has agreed to bear the cost of additional signage and pavement markings for the subject location, if this is a condition of approval by the Board of Zoning Adjustment.***

The study also noted that there is some restriction to the available corner sight distance (looking left) from the Chestnut street approach to Blair Road. The restriction is caused by vegetation, which appears to be on private property. DDOT has advised that "shrubs or landscaping that are a safety hazard can be removed and trimmed, even on private property". The Applicant has advised that they are prepared to work in collaboration with the Advisory Neighborhood Commission and other community representatives to bring the matter to the appropriate City representatives for remedial action. *[For context, crash data for this location is discussed under Item 9, on page 4. The data shows that there were two crashes at this location over the period 2009 through 2011. The crash types were side-swipe and fixed-object, neither of which indicating a direct relationship to the corner sight distance situation.]*

Item 8: Pedestrian Facility Improvements

There are presently no sidewalks along Spring Place, which has a pavement width varying from 20 to 25 Ft. The Applicant site plan calls for upgrading pedestrian and bicycle facilities, with a multi-use path along the east side of Spring Place within the property frontage. There are sidewalks running along the south side of Chestnut Street between Blair Road and Spring Place. However, they appear to be sub-standard due to limited width, irregular surface, and lack of ADA ramps at the Spring Place intersection. There is also a grass/dirt track within the public right-of-way running between the southern end of Spring Place and connecting with the sidewalks along the north side of Cedar Street. This track is similarly sub-standard.

The Consultant has informed the Applicant of both situations described above, and they have advised that they are in discussions with the Advisory Neighborhood Commission, DDOT and other public agencies regarding potential improvements to the pedestrian facilities within the area. The Consultant notes that it is likely that pedestrian movement to and from the site would be predominantly oriented to the south, connecting to the Metrostation, Cedar Street and land uses within that area. There is no basis for any further recommendation on our part regarding this matter.

Item 9: Safety Analysis for Study Area Intersections

In order to assess safety within the defined study area, the Consultant obtained crash data from the City for the five (5) study intersections covering the most recent 3-year period for which this data is available. The data is summarized in Table 3, and the crash reports are provided in Attachment E.

TABLE 3:
Summary of Crash Data

Intersection	Total Crashes			Average Accidents Per Year	MEV**	Crash Rate*
	2009	2010	2011			
1) Blair Rd. @ Cedar St./4th St., NW	4	5	7	5	5.1	0.98
2) Blair Rd. @ Chestnut St., NW	***	1	1	1	3.8	0.26
3) Blair Rd. @ Piney Branch Rd., NW	7	3	3	4	7.6	0.53
4) Chestnut St. @ Spring Pl., NW	***	1	1	1	0.9	1.11
5) Blair Rd. @ Dahlia St./5th St., NW	2	2	***	2	3.9	0.51

** Crash Rate = computed as Average Crashes per year divided by MEV*
*** MEV = Million Entering Vehicles (estimated for a typical year)*
**** None reported/available.*

The table above shows that, except for the Chestnut Street/Spring place intersection, the computed crash rates for all locations are all less than 1.0. Of the 2 crashes at that location, one involved a parking maneuver and the other involved a fixed object. DDOT's guidelines do not provide specific criteria for evaluating crash rates. However, it is noted that a crash rate of 2.0 is generally considered as the trigger for considering further safety evaluation.

Item 10: Capacity Analysis for Blair Road @ Dahlia Road/5th Street Intersection

In keeping with DDOT's recommendations, the traffic volumes along the Dahlia Street and 5th Street were combined to facilitate the output from the HCM methodology. The results of the analysis are substantially the same as presented in the report. Details will be included along with the Synchro files as noted under Items 4 and 5 on page 2.

Item 11: Spring Place Site Access Considerations

For ease of reference, the Applicant's site plan is included as Attachment F in order to respond to DDOT's request for further discussion of the site access arrangement. The plan shows that vehicular access into the site will be via a 25-Foot driveway from the existing un-named alley (often referred to as 'Bull Place') into the underground garage of Building 2. Vehicular access for Building 1 is provided by eleven (11) surface parking spaces aligned perpendicular to Spring Place within the southern end of the property. The existing 'Bull Place' driveway will maintain the approximately 25 Ft. width, which intersects with Spring Place at slightly less than 90 degree angle. This intersection is roughly opposite to the two-way entry into the Gables Apartment parking. The configuration makes for good visibility, and should continue to function safely and efficiently.

Site Loading Access Arrangement

The site plan provided for a 10-Ft. x 20-Ft loading space to be located within the northeast corner of building 1, and a 12-Ft x 30-Ft loading berth with platform area within the southeast corner of building 2 The arrangement would allow for "head-in" and "head-out" movement of all vehicles as required by DDOT The only exception to the provisions of the design and engineering manual is that the 30-Ft. truck would have to "back-into" the loading space of building 1 in order to make the outbound maneuver The Consultant notes that this movement would occur within the Eastern extremity of both buildings where there would be no conflict with other vehicular and pedestrian activity The tracking diagrams showing all movements into and out of the loading facilities are included as Attachment F

We believe that the above fully responds to DDOT's requirements And we again confirm that the modified Synchro analysis files and summary of results will be submitted to DDOT tomorrow. Please let us know if you have questions or require further information. Thank you

ORG/AB/sd

Attachments. As noted

ATTACHMENT

F

Vehicle Trucking Diagrams

A-1

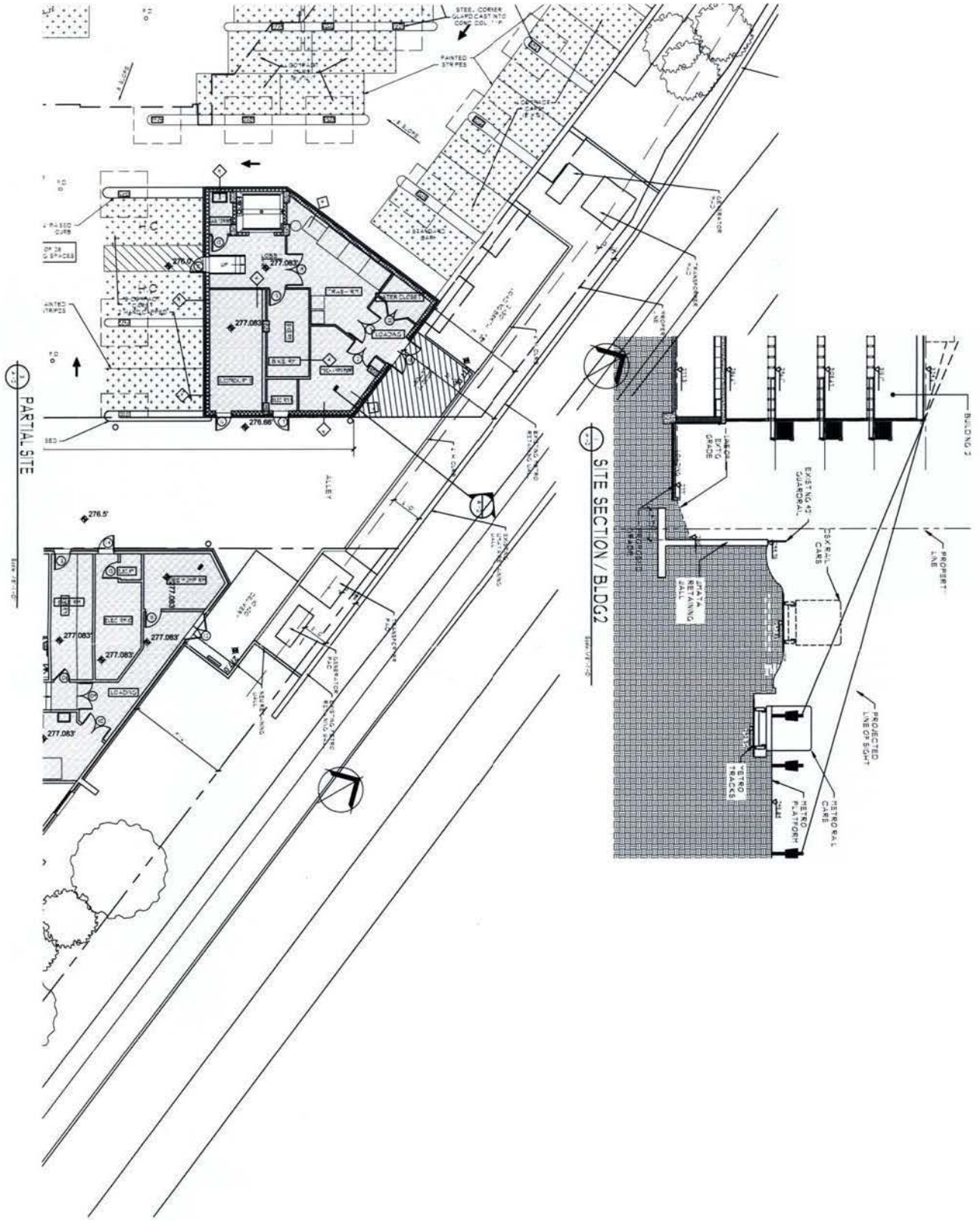
METRO VILLAGE APARTMENTS

TAKOMA, WASHINGTON D.C.

SITE PLAN

PRINTING	DATE
30% PROGRESS SET	[illegible]-2002
PRICING SET	0[illegible]-2002
PROGRESS SET	11-1-2002
PROGRESS SET	12-3-2002
60% PRICING SET	2-17-2003
PROGRESS SET	-21-2003
100% PRICING SET	-28-2003
PDR COMMENTS	5-11-2003

EDG Architects, LLC
3 BETHESDA METRO CENTER
SUITE 110, BETHESDA MD 20814
301.654.0058 - edgarchitects.net
Environmental Design Group



A-2

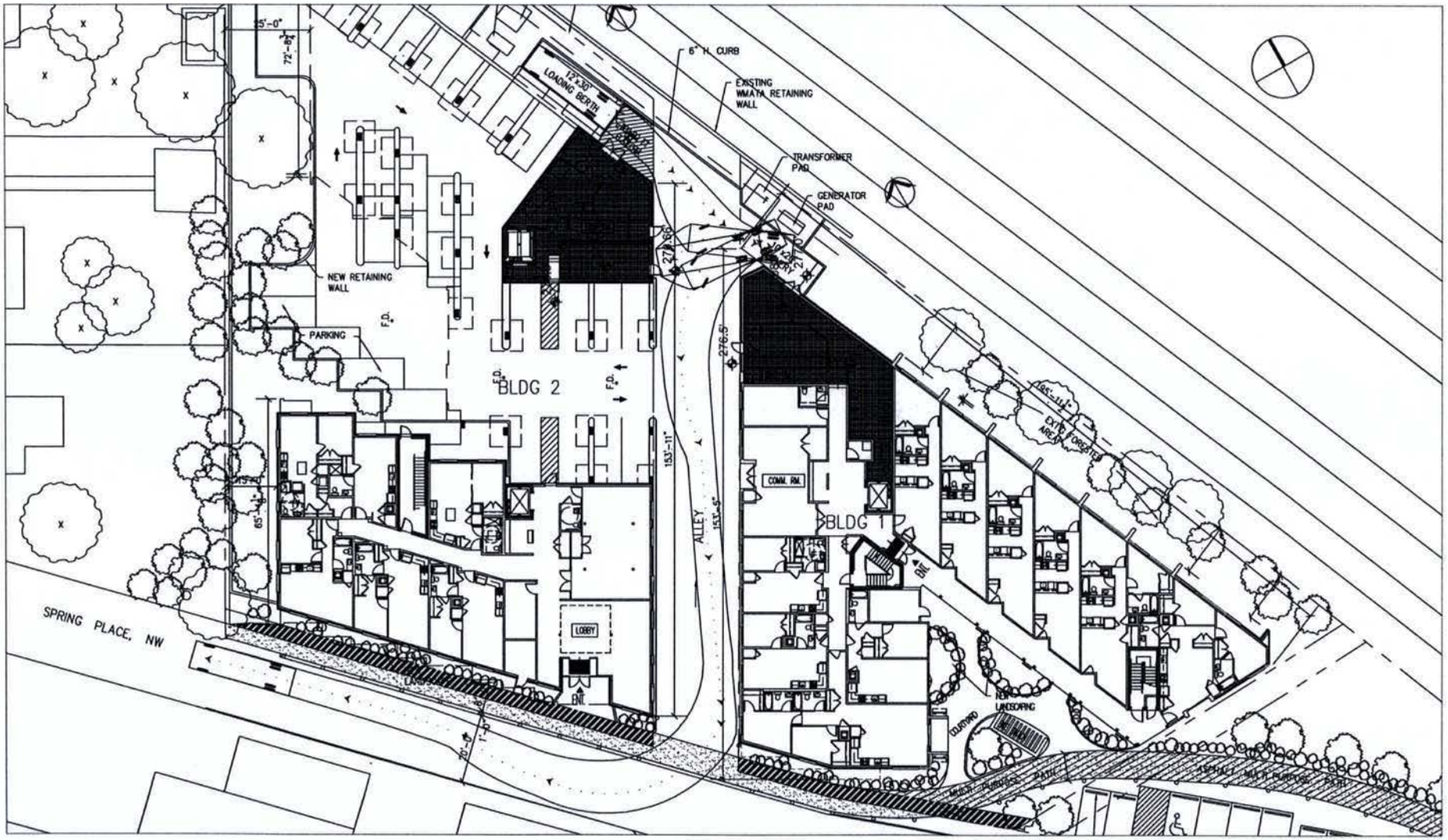
METRO VILLAGE APARTMENTS
TAKOMA, WASHINGTON D.C.

PARTIAL SITE & SECTIONS

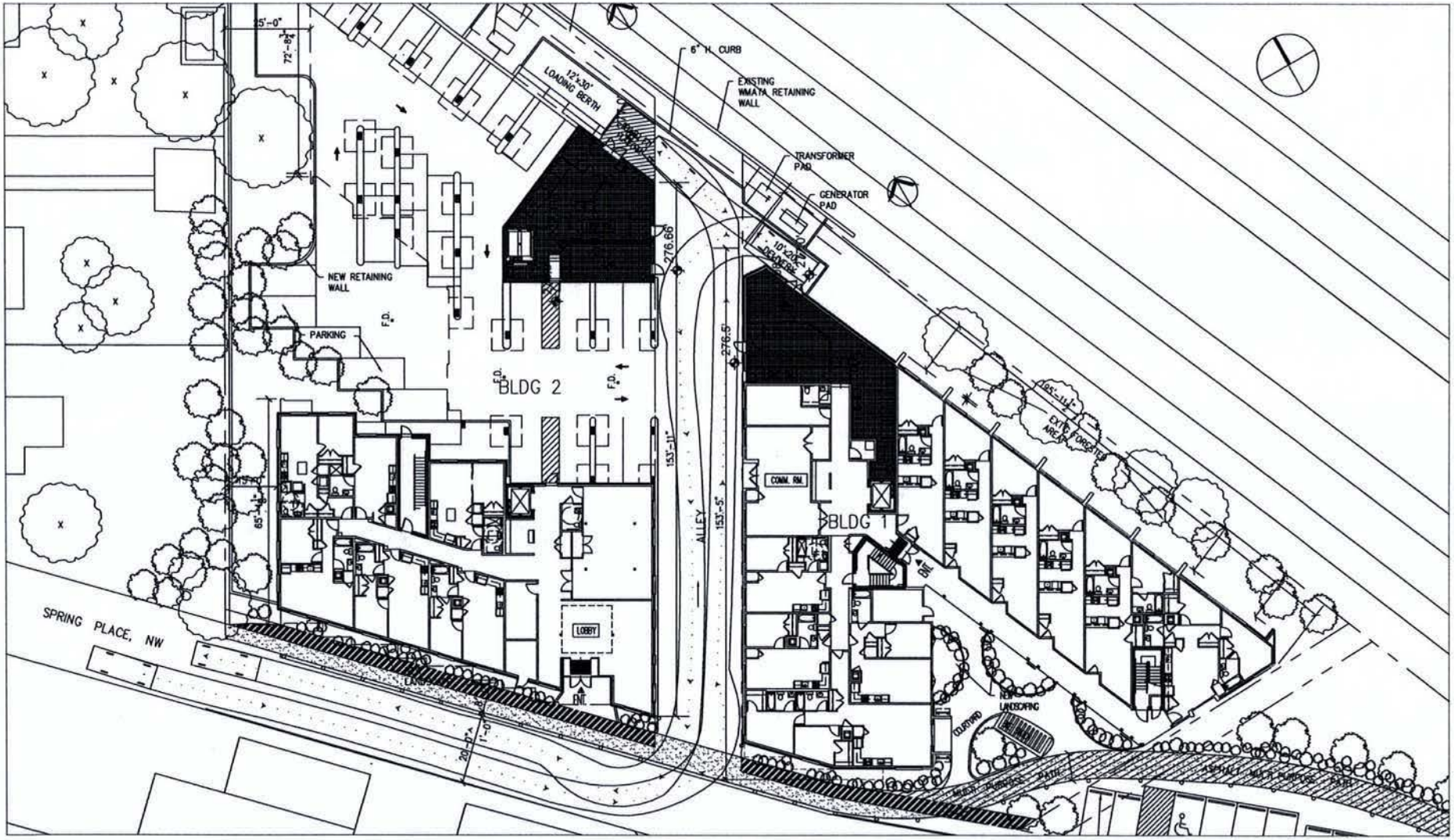
PRINTING	DATE
DC1 PROGRESS SET	11-8-2012
PRICING SET	12-1-2012
PROGRESS SET	1-11-2013
PROGRESS SET	12-3-2012
80% PRICING SET	12-1-2012
PROGRESS SET	1-11-2013
50% PRICING SET	11-28-2012
PDP ZONING	2-1-2013

EDG Architects, LLC
3 BETHESDA METRO CENTER
SUITE 110, BETHESDA MD 20814
301.654.0058 - edgarchitects.net
Environmental Design Group

Vehicle Tracking Diagram: 30-Ft. Single Unit Truck
Outbound Movement (Building 2 Loading Berth)



Vehicle Tracking Diagram: 20-Ft. Delivery Van Type Vehicle
Inbound and Outbound Movement (Building 1 Delivery Space)



OSBORNE R. GEORGE, P.E., PTOE
President
Principal Transportation/Traffic Engineer

EDUCATION:

George Washington University, Washington, D.C., 1974: M.Sc., Engineering and Applied Science, (Focal Area: Transportation Planning & Engineering).

Howard University, Washington, D.C., 1972: B.Sc., Civil Engineering.

Northwestern University, Traffic Institute, Chicago, Illinois, 1991: Highway Geometric Design Course.

George Mason University, Fairfax, VA, 1990: Computer Applications in Transportation Engineering.

EXPERIENCE:

Osborne George is a registered professional engineer and specializing in the field of Transportation Planning and Engineering (including Traffic Operations). As principal of a diversified consulting practice, Mr. George provides consulting services in support of land planning and zoning, infrastructure planning and design, and urban revitalization projects. He has had over thirty (30) years of broad experience in traffic engineering and transportation planning, and in related areas of civil engineering.

He directs all aspects of the firm's consulting activities, which include planning and engineering consulting services to public and private sector clients. Prior to founding O. R. George & Associates, Mr. George worked for nine (9) years with Planning Research Corporation (PRC) where he was involved in a wide range of projects in the United States, Canada and elsewhere internationally, with assignments ranging from project engineer to regional manager.

The following projects are indicative of Mr. George's professional involvement and experience with an emphasis on professional involvement in projects within the Washington Metropolitan region:

- Traffic impact analyses and expert witness testimony in support of a large number of private and public sector development projects. These projects covered a wide range of land uses, from day-care centers and convenience stores to large residential developments, employment/industrial parks, and institutional uses such as hospitals and universities. Involvement has included projects within District of Columbia, Prince George's, Montgomery, Howard, Calvert, Anne Arundel, and Baltimore Counties in Maryland, as well as a number of jurisdictions in Virginia and beyond.
- Traffic impact assessments for the Maryland State Highway Administration, Real Estate Division, in support of real property acquisitions for State projects and to various agencies of the Montgomery County Government for several capitol development projects.
- Traffic engineering studies, neighborhood traffic mitigation studies, signal warrant analyses, as well as extensive data collection and analysis of various intersections within Montgomery County under Maryland State Highway Administration and Montgomery County on-call service contracts.
- Development studies for Metrorail station areas, involving several stations and a transit corridor over the Washington Metropolitan Area Transit Authority (WMATA) system.

- Transportation access and public safety impacts for the Washington Redskins/FedEx Field Stadium, Prince George's County, Maryland.
- Transportation assessment study for Washington Village/Pigtown Area Empowerment Zone, City of Baltimore, Maryland.
- Multi-modal access and feasibility study for the Norfolk International Terminals, Norfolk, Virginia.
- Master plan traffic and parking studies for Medlantic Healthcare Campus, Howard University Law School campus, Washington, D.C. and for Virginia Commonwealth University Medical and Academic campuses, Richmond, Virginia.

Mr. George's responsibilities on the above projects have covered the full range from field reconnaissance and data collection, to analyses, documentation, as well as public presentations and expert witness testimony before administrative and judicial bodies. Supplementary experience specific to the District of Columbia, is presented in the supplement following.

POSITIONS HELD:

Principal, O.R. George & Associates (1985 - Present).

Associate, KELLERCO, Inc., McLean, Virginia (1984 - 1985).

Project Engineer/Regional Manager, Planning Research Corporation, McLean, VA (1972 - 1977 and 1981 - 1984).

Consultant/Resident Engineer, Ministry for The Federal Capital Development Authority, Federal Government of Nigeria (1977 - 1981).

PROFESSIONAL REGISTRATION & AFFILIATIONS:

Registered Professional Engineer (District of Columbia # PE904748; Maryland # 35519; North Carolina # 035173; and Province of Ontario, Canada # 12756)
Fellow, Institute of Transportation Engineers (Professional Traffic Operations Engineer Certificate number 2408)

EXPERT WITNESS EXPERIENCE:

Admitted as Expert Witness in the field of Traffic Engineering & Transportation Planning and/or provided testimony before the following bodies:
- District of Columbia, (Zoning Commission)
- District of Columbia, (Board of Zoning Adjustment)
- District of Columbia, (Mayor's Agent)
- District of Columbia, (City Council)
- Prince George's County, (Zoning Hearing Examiner, and District Council)
- Prince George's County, (Board of Zoning Appeals)
- Howard County, (Board of Appeals)
- Montgomery County, (Planning Board and Board of Appeals)
- City of Laurel, Maryland, (Planning Commission)
- City of Laurel, Maryland, (Board of Zoning Appeals/Public Safety Committee)
- City of Bowie, Maryland, (Planning Commission/City Council)
- Fairfax County, (Board of Supervisors)

Resume Supplement

OSBORNE R. GEORGE, P.E., PTOE

Traffic Engineer/Transportation Planner

The following is a representative list of recent cases on which Osborne R. George has been admitted, and provided testimony as Expert Witness in the Field of Traffic Engineering and Transportation Planning.

2011/2012 – East Capitol Gateway Planned Unit Development Application, Northeast, Washington, D.C. (In Progress)

Comprehensive transportation analysis, agency review and expert witness testimony for development site including WalMart store.

Client: A&R Development

Attorneys: Saul Ewing, LLP
Washington, D.C.

2010/2011 – 64 New York Avenue, Northeast Board of Zoning Adjustment Application, Washington, D.C. (Case No. 18172)

Site access and parking assessment study to support parking reduction relief.

Client: BREOF 64 NEW YORK AVENUE REO, LLC

Attorneys: Holland & Knight, LLP
Washington, D.C.

2010/2011 – 100 K Street, Board of Zoning Adjustment Application, Washington, D.C. (Case No. 18135)

Parking and traffic analysis and expert witness testimony.

Client: J Street Companies (c/o W2007 100 K Street Realty, LLC)

Attorneys: Holland & Knight, LLP
Washington, D.C.

2008 – Union Place Planned Unit Residential Development Application.

Direction of all transportation analyses, site access assessments and provision of expert witness testimony for the large development situated near the New York Avenue Metrorail Station in the Union Station/Eckington area of Northeast, Washington, D.C. (Services in progress.)

Client: ADC Builders

Attorneys: Holland & Knight, LLP
Washington, D.C.

2007 – Stanton Square Planned Unit Development Application, Anacostia/Southeast, Washington, D.C. (Case No. 05-35)

Traffic impact analysis, signal warrant analysis, community meetings and presentations and expert witness testimony before the City's Zoning Commission.

Client: Horning Brothers, Inc.

Attorneys: Shaw Pittman, P.C.
Washington, D.C.

2006/2007 – 5220 Wisconsin Avenue Planned Unit Development Application, Friendship Heights, Northwest, Washington, D.C. (Case No. 06-31)

Traffic impact studies and expert witness testimony, including several community presentations and interaction with the District Department of Transportation.

Client: AKRIDGE Company

Attorneys: Holland & Knight, LLP
Washington, D.C.

2007 – Randall School Planned Unit Development Application, Southwest, Washington, D.C. (Case No. 07-13)

Traffic impact assessment, trip generation reviews and expert testimony before the City's Zoning Commission regarding impacts on adjacent properties and mitigation consideration.

Client: Oak Hill Development

Attorneys: Arnold & Porter, LLP
Washington, D.C.

2006/2007 – Rhode Island Avenue Metrorail Station Planned Unit Development Application, Ivy City, Northeast, Washington, D.C. (Case No. 04-24)

Comprehensive traffic impact analyses, pedestrian study, signal warrant analyses and expert witness testimony.

Client: Mid-City Urban, LLC/A&R Development Companies

Attorneys: Arnold & Porter, LLP
Washington, D.C.

2006/2007 – Washington International School Board of Zoning Adjustment Application. (Case No. 17560)

Traffic impact studies, Transportation Management Plan and expert witness testimony before the City's Board of Zoning Adjustment, Washington, D.C.

Client: Washington International School

Attorneys: Greenstein, DeLorme & Luchs, P.C.
Washington, D.C.

2003/2004 – Capper Carrollsburg (Residential) Planned Unit Development Application, Board of Zoning Adjustments Application, Washington, D.C. (Case Nos. 03-12 and 03-13)

Comprehensive traffic and parking impact analyses to support a large housing redevelopment site near the Navy Yard in Southwest, Washington, D.C.

Client: Mid-City Urban, LLC

Attorneys: Holland & Knight, LLP
Washington, D.C.

2002/2003 Catholic University of America Master Plan Update Northeast, Washington, D.C.

Traffic and parking studies and expert witness testimony before the City's Zoning Commission.

Client: Catholic University of America

Attorneys: Shaw Pittman, P.C.
Washington, D.C.

2000 - 2003 – Re-Zoning Application and Master Plan for Washington Hospital Center/MedStar Health Complex in Northwest, Washington, D.C. (Case No. 02-43)

Comprehensive traffic analyses, Transportation Management Plan, off-site roadway design concepts, community liaison and expert witness testimony.

Client: MedStar Health/Washington Hospital Center

Attorneys: Arter & Hadden, LLP
Washington, D.C.

1999 - 2000 - Pope John Paul II Visitors Center, Northeast, Washington, D.C.

Traffic and parking studies and expert witness testimony before the City's Board of Zoning Adjustment and Zoning Commission.

Client: Pope John Paul foundation, Detroit, Michigan

Attorneys: Wilkes, Artis, Hedrick & Lane Chartered
Washington, D.C.

July, 1998 – Howard University Central Campus Plan, Zoning Commission Application, Northeast, Washington, D.C. (Case No. 14733)

Comprehensive traffic impact study and expert witness testimony before the City's Zoning Commission.

Client: Howard University

Attorneys: Linowes & Blocher, LLP
Washington, D.C.

April, 1998 – Lowell School, Zoning Commission Re-zoning Application, Northwest, Washington, D.C.

Traffic impact studies and expert witness testimony before the City's Zoning Commission.

Client: Lowell School
Washington D.C.

Attorneys: Wilkes, Artis Hedric & Lane, Chartered
Washington, D.C.

February, 1998 – CVS Store, MacArthur Boulevard Board of Zoning Adjustment Application, Northwest, Washington, D.C.

Traffic access, parking and safety studies and expert testimony before the City's Board of Zoning Adjustment.

Client: CVS Stores, Inc.
Washington, D.C.

Attorneys: Linowes & Blocher, LLP
Washington, D.C.

Signed: _____ Date: _____
Osborne R. George, P.E., PTOE, President

DONALD E. TUCKER RA, AIA, LEED AP
RESUME

Donald E. Tucker is Executive VP of AHD, Inc., President of Eco Housing Corporation and Principal of EDG Architects, LLC.

Mr. Tucker is a registered architect as well as real estate developer and is a recognized expert in the programming, design and development of multi-family, elderly and special user housing with an extensive portfolio of successful projects. With more than thirty five years of experience in design and development, Mr. Tucker has been directly responsible for numerous projects ranging from small group homes for seniors to large multi-family residential complexes. His knowledge of real estate development also enables him to assist clients with site procurement, feasibility studies, financing, and development coordination.

As architect and developer Mr. Tucker has consistently focused on user needs, affordability and sustainability. AHD (Affordable Housing Developers), Inc has been responsible for development of more than 5,000 affordable rental units in the Washington, DC market area and is known for its focus on community building and resident services. Award winning EDG (Environmental Design Group) Architects, LLC is known for creative, user driven, sustainable design that works within the tight cost constraints of affordable housing. Eco Housing Corporation has become a national leader in the development of Cohousing communities where end users participate directly in the design and development process.

Prior to 1974, Mr. Tucker was associated with several prominent architectural firms in Philadelphia and San Francisco. He received his Bachelor of Architecture Degree from the University of New Mexico in 1968 and was subsequently awarded a Fellowship in Urban Design at the University of California, Berkeley, where he received a Masters Degree in Architecture in 1970.

In addition, Mr. Tucker has taught Architecture at Temple University, lectured at numerous conferences and written articles on the topics affordable housing, senior housing and cohousing.