#05-30

6000 NEW HAMPSHIRE AVENUE
WASHINGTON, DC
PLANNED UNIT DEVELOPMENT

STATEMENT

OF THE APPLICANTS

TO THE
DISTRICT OF COLUMBIA ZONING COMMISSION
FOR A
CONSOLIDATED PLANNED UNIT DEVELOPMENT
AND
ZONING MAP AMENDMENT

September 12, 2005

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PREFACE

This statement and attached documents are submitted by the WEST*GROUP Development Company LLC, and The Jarvis Company, LLC, the developers, on behalf of 6000 New Hampshire Avenue LLC, the owner of the subject property (collectively referred to herein as the "Applicants"), in support of their applications to the Zoning Commission of the District of Columbia for the consolidated review and one-step approval of a Planned Unit Development ("PUD") and related Zoning Map Amendment.

The property that is the subject of this application consists of Parcel 126/74, Lots 69, 70, 71, 72, 73, 801, 824 and 826 in Square 3714, and Lot 858 in Square 3719 (the "Subject Property"). The Subject Property is located in the northeast quadrant of the District. Parcel 126/74 and Lot 858 in Square 3719 are bounded by Rittenhouse Street, New Hampshire Avenue, Peabody Street, Chillum Place and Sligo Mill Road. Lots 70, 71, 72, 73, 801, 824 and 826 in Square 3714 are bounded by Peabody Street, New Hampshire Avenue, a 15 foot public alley, and 1st Street. The Subject Property is currently zoned R-1-B, which permits a maximum height of forty feet and 3 stories. A maximum floor area ratio ("FAR") is not prescribed in the R-1-B District.

The Applicants are seeking consolidated PUD approval and rezoning of the Subject Property to the R-5-A District, and intend to construct to a residential development of 199 units containing approximately 417,802 square feet of gross floor area dedicated to residential uses, with approximately 27 detached single family dwellings, 111 townhomes and 61 condominium apartments, on the Subject

Property. The detached single family dwellings will have a height of approximately 35 feet above the first floor elevation. The townhomes will have a height of approximately 30 feet above the first floor elevation. The existing buildings to be converted into condominiums are approximately 40 feet in height above the first floor elevation. The project will have an overall floor area ratio ("FAR") of approximately 0.83 and will include approximately 381 off-street parking spaces.

As set forth below, this statement and the attachments meet the filing requirements for a PUD application under Chapter 24 of the District of Columbia Zoning Regulations.

DEVELOPMENT TEAM

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Developer:	The Jarvis Company, LLC 2600 Virginia Avenue, N.W., Suite 701 Washington, DC 20037
Builder:	Linde Development Companies 711 8th Street, SE Washington DC 20003
Master Planner:	Ferrell Madden Associates 19 14th Street, SE Washington DC 20003
Architect:	Frank Lohsen McCrery Architects 1750 Pennsylvania Avenue, NW, Suite 810 Washington DC 20006
Architect:	Eric Colbert & Associates 717 5th Street, NW Washington DC 20001
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I. INTRODUCTION

This statement and the attached documents support the applications of the WEST*GROUP Development Company LLC, and The Jarvis Company, LLC, the developers, on behalf of 6000 New Hampshire Avenue LLC, the owner of the subject property (collectively referred to herein as the "Applicants"), to the Zoning Commission for the District of Columbia ("Commission") for the consolidated review and one-step approval of a Planned Unit Development ("PUD") and related Zoning Map Amendment. The Applicants are seeking PUD approval and rezoning of the Subject Property to the R-5-A District.

The property that is the subject of this application consists of Parcel 126/74, Lots 69, 70, 71, 72, 73, 801, 824 and 826 in Square 3714, and Lot 858 in Square 3719 (the "Subject Property"). The Subject Property is located in the northeast quadrant of the District. Parcel 126/74 and Lot 858 in Square 3719 are bounded by Rittenhouse Street, New Hampshire Avenue, Peabody Street, Chillum Place and Sligo Mill Road, N.E. Lots 69, 70, 71, 72, 73, 801, 824 and 826 in Square 3714 are bounded by Peabody Street, New Hampshire Avenue, a 15 foot public alley, and 1st Street, N.E. The Subject Property is currently zoned R-1-B, which permits a maximum height of forty feet and three stories. A maximum floor area ratio ("FAR") is not prescribed in the R-1-B District. The Applicants are seeking consolidated PUD approval and rezoning of the Subject Property to the R-5-A District. The requested zoning change is fully consistent with the District of Columbia Comprehensive Plan

("Comprehensive Plan"), including the land use element which designates the Subject Property in the low density residential land use category.

A. **Summary of Project**

The Applicants propose to construct a residential development of 199 units containing approximately 417,802 square feet of gross floor area dedicated to residential uses, with approximately 27 detached single family dwellings, 111 townhomes and 61 condominium apartments, on the Subject Property. The detached single family dwellings will have a height of approximately 35 feet above the first floor elevation. The townhomes will have a height of approximately 30 feet above the first floor elevation. The existing buildings to be converted into condominiums are approximately 40 feet in height above the first floor elevation. The project will have an overall floor area ratio ("FAR") of approximately 0.83 and will include approximately 381 off-street parking spaces.

B. **Background Information Regarding Applicants**

The development team for this project includes the WEST*GROUP Development Company LLC and The Jarvis Company, LLC. WEST*GROUP is a full-service real estate development, construction, brokerage, and management organization with over four decades of experience in the D.C. metropolitan area. WEST*GROUP's experienced team of real estate professionals has developed more than 13 million square feet of quality office, retail, industrial and residential space. The firm specializes in distinctive

build-to-suit projects. WEST*GROUP maintains a strong commitment to innovation, integrity and an active involvement in the community.

The Jarvis Company, LLC, a District of Columbia limited liability company, is a certified local-small-disadvantaged business enterprise founded in 1999 by fifth-generation Washingtonians and long-time, active participants in the business, political, and local community life of the Washington, D.C. metropolitan area. The Jarvis Company, LLC currently provides development consulting and general advice, counsel and assistance to real estate projects and partners; government relations and community development work; and permit acquisition, zoning counsel and/or other development related work, on a project-by-project basis, on projects and opportunities in the District of Columbia, Maryland, Virginia, and nationwide. Currently, The Jarvis Company, LLC is a member of the respective development teams that are engaged in the redevelopment of the old Convention Center site and the historic Franklin School, and on the team that is developing the mixed-use project to construct Radio One's corporate headquarters in Shaw.

II. PROJECT DESCRIPTION

A. Site Location and Description

1. Site Description

The Subject Property consists of consists of Parcel 126/74, Lots 69, 70, 71, 72, 73, 801, 824 and 826 in Square 3714, and Lot 858 in Square 3719. The Subject Property contains approximately 501,691 square feet of land

area.[1] The Subject Property is situated in Ward 4 near the District of Columbia and Maryland boundary line. The Generalized Land Use Map of the Comprehensive Plan designates the Subject Property in the low density residential land use category.

The Subject Property is currently improved with two vacant buildings that previously housed the Masonic and Eastern Star Nursing Home and Infirmary, but were most recently used as offices for Med-Star Health. The Applicants intend to convert these buildings into condominium apartment buildings. The use of these buildings as housing, as opposed to office uses, is more compatible with the surrounding residential uses and enhances the residential character of the neighborhood. The Applicants also propose to construct approximately 27 detached single family dwellings and 111 townhomes on the Subject Property.

2. Description of Surrounding Area

The Subject Property is located in the northeast quadrant of the District. The Subject Property is zoned R-1-B and is surrounded primarily by property also zoned R-1-B. The Comprehensive Plan designates the area to the north, east and south of the Subject Property in the low density

[1] The Applicants are discussing with two of the owners of single family dwellings adjacent to the larger parcel swapping land to even out the parcel. The plans submitted with the application, attached as Exhibit A, identify the locations of the areas to be exchanged. The Applicants will revise the plans to exclude those areas in the event that agreement cannot be reached with the two owners. If agreement is reached, those properties will be a part of the proposed development. For computational purposes, the land areas were adjusted to assume that the properties would be exchanged, which results in a slightly larger land area than is now included in the property.

residential land use category. The area to the west of the Subject Property is designated in the low density residential and production and technical employment land use categories.

B. Project Design

The proposed PUD reflects the careful consideration given by the Applicants and the architects to the unique location of the Subject Property. The proposed PUD and requested rezoning are consistent with the surrounding uses and intensity of uses.

Careful consideration was given to the planning of the site. The goal was to develop the site in keeping with the best traditions of the neighborhoods of the District of Columbia. This proposal for new development is in keeping with, and complementary to, the surrounding neighborhoods. Townhouses are clustered at the core of the site and detached single family residences located at the perimeter. In this way, the existing detached single family houses across the street will face similar detached single family houses.

Green space is used to complement the homes, in the form of street trees and planting strips and also as clear, usable Civic Greens. These areas offer opportunities for play, relaxation, and community interaction. They are also used as locations for underground storm water remediation, eliminating the need for unsightly storm water retention ponds.

The new private streets are laid out to connect to the surrounding street system while at the same time to minimize traffic through the site,

encouraging safe speeds and providing on-street parking. Alleys are provided behind all units, allowing rear loaded garages, trash collection, and utility connections behind the units, rather than on the front.

The development was planned to be an appropriate and fitting example of Washingtonian residential architecture. A purposeful mix of unit types is employed, including condominium units of varying sizes; townhomes; and detached single family residences. Buildings are to be brick on all four sides, reflecting the homes in the surrounding neighborhoods. When complete, the new structures should blend seamlessly not only with each other, but also with the residences found in the neighboring communities.

The units have been designed with flexible layouts, to suit a wide range of family needs and sale prices. Each unit is provided with parking, most of which is off-street in garages. Porches and front stoops are pedestrian in scale, helping to establish a healthy sense of community and promote interaction between neighbors. Most units are also provided with a rear deck or balcony, encouraging interaction along the alleys. The net result is more eyes on the street, which will increase not only the sense of community but also the physical security of the neighborhood.

This project contains an extensive landscaping program. Street trees are to be planted in relatively close proximity, lining the streets with their trunks, and shading the walks and fronts of the houses with their canopies. Elm trees, which have been devastated by disease, are to be re-introduced in

the form of new, disease resistant cultivars such as the Liberty Elm. Red Maple trees surround the public green spaces, accenting them as special places with their dramatic foliage. Evergreen trees are used as screening elements, to contain undesirable views and provide privacy where appropriate.

C. **Matter of Right Development under Existing Zoning**

The Subject Property is zoned R-1-B. The R-1 District is designed to protect quiet residential areas now developed with one-family detached dwellings and adjoining vacant areas likely to be developed for those purposes. 11 DCMR §200.1. The R-1 District is subdivided into R-1-A and R-1-B Districts, providing for districts of low and high density, respectively. 11 DCMR §200.3. The R-1-B District permits a maximum height of forty feet and three stories. 11 DCMR §400.1. Lots in the R-1-B District are required to have a minimum lot area of 5,000 square feet, and a minimum lot width of fifty feet. 11 DCMR §401.3 A maximum FAR is not prescribed in the R-1-B District. 11 DCMR §402.4 One-family detached dwellings are permitted in the R-1-B District pursuant to Section 201.1(b). 11 DCMR § 201.1(b). Parking is required at a rate of one parking space for each dwelling unit. 11 DCMR §2101.1. Under the PUD guidelines for the R-1-B District, the maximum permitted height for a residential use is forty feet, and the maximum FAR is 0.4. 11 DCMR §§ 2405.1, 2405.2.

D. **Matter of Right Development under Proposed Zoning**

Under the proposed PUD, the zoning of the Subject Property would become R-5-A. The R-5 Districts are General Residence Districts designed to permit flexibility of design by permitting in a single district all types of urban residential development if they conform to the established height, density, and area requirements. 11 DCMR §350.1. The R-5-A District is designed to permit low height and density developments. 11 DCMR §350.2. The R-5-A District permits a maximum height of forty feet, with no limitation on the number of stories, and a maximum FAR of 0.9 for all structures. 11 DCMR §§400.1, 402.4. Parking in the R-5-A District is required at a rate of one space for each dwelling unit. 11 DCMR § 2101.1. Under the PUD standards for the R-5-A District, the maximum permissible height is sixty feet. 11 DCMR § 2405.1. The PUD standards for the R-5-A District permit a maximum FAR of 1.0 for residential uses. 11 DCMR § 2405.2.

E. **Tabulation of Development Data**

See tabulation of development data on Sheets D01 and T01 of the Architectural Plans and Drawings attached hereto as Exhibit A.

F. **Flexibility under PUD Guidelines**

The PUD process was created to allow greater flexibility in planning and design than may otherwise be possible under conventional zoning procedures. Thus, the Applicants seek flexibility from several provisions of the Zoning Regulations. As permitted under section 2405.8, the Commission may grant such flexibility without the need for special exception approval

from the Board of Zoning Adjustment or compliance with the special exception standards that might otherwise apply.

1. Flexibility Pursuant to Sections 410 and 2516 of the Zoning Regulations

Section 410.1 of the Zoning Regulations provides that in an R-5 District, if approved by the Board of Zoning Adjustment as a special exception, a group of one-family dwellings, flats, or apartment houses, or a combination of these buildings, with division walls erected from the ground up or from the lowest floor up, may be erected and deemed a single building for the purpose of the Zoning Regulations. 11 DCMR §410.1. Section 2516 of the Regulations allows multiple buildings on a single subdivided record lot, which is useful where as here, there are large deep lots having a smaller amount of street frontage.

As shown on the proposed site plan labeled as Sheet S01 of the Architectural Plans and Drawings attached hereto as Exhibit A, the Applicants propose to erect the townhomes in groups of buildings. All buildings in the group of buildings will be erected simultaneously, and all front entrances of the group will abut either a street, front yard or front court. However, since the Subject Property has a large land area compared to the amount of street frontage, the Applicants propose that the Zoning Commission treat each grouping of townhomes as a single building for the purpose of the Zoning Regulations so that each individual dwelling need not satisfy all the area and bulk provisions.

2. Flexibility from Yard Requirements

Pursuant to Section 405.9 of the Zoning Regulations, side yards provided in the R-5-A District must have a minimum width of not less eight feet. A rear yard with a minimum width of twenty feet is also required 11 DCMR §404.1. For lots having no street frontage, a front yard equal to the minimum required rear yard is also required by §2516.5(b). The Applicants request flexibility from these requirements because a number of the yards provided are less than the required width. As shown on the Architectural Plans and Drawings attached hereto as Exhibit A, including the computations on Sheet T01, the Applicants have designed the layout of the proposed development to meet as many of the applicable zoning requirements as possible. However, due to design and massing features of the project, and the clustering of units to ensure open space, a number of the units do not have complying yards. However, the project includes a significant amount of open space, as the overall lot occupancy is approximately 29.4%, and approximately 34.9% of the Subject Property is devoted to open, green space.

III.
THE PROJECT MEETS THE STANDARDS OF THE ZONING REGULATIONS AND PUD REQUIREMENTS

A. PUD Process is Appropriate Mechanism for the Project

The PUD process is the appropriate mechanism for guiding the development of the PUD Site. It allows the project to be developed within the purview of the Zoning Commission while at the same time providing opportunities for input from various agencies and parties. Through the PUD

process, the Office of Planning and other District agencies will have the opportunity for greater participation in the fulfillment of the District's planning objectives for this area. Similarly, the adjacent property owners and area residents will have the opportunity to express their views about the proposed development. Accordingly, the use of the PUD process gives the community and District agencies an opportunity to work with the Applicants to ensure a well-planned development.

B. PUD Requirements under Chapter 24 of the Zoning Regulations

1. Area Requirements under Section 2402.1(c)

The PUD Site area is approximately 501,691 square feet (approximately 11.5 acres) in land area, which exceeds the minimum area requirement of two acres for a PUD in the R-5-A District. 11 DCMR §2401.1(b).

2. Height and FAR Requirements under Sections 2405.1 and 2405.2

The proposed development has been evaluated under the PUD guidelines for the R-5-A District. As noted above, under the PUD guidelines for the R-5-A District, the maximum height of the project is limited to 60 feet. 11 DCMR §2405.1. The maximum FAR for a PUD in the R-5-A District is 1.0 for residential uses. 11 DCMR § 2405.2. The detached single family dwellings will have a height of approximately 35 feet above the first floor elevation. The townhomes will have a height of approximately 30 feet above the first floor elevation. The existing buildings to the converted into

condominiums are approximately 40 feet in height above the first floor elevation. These heights are less than the permissible height. Moreover, the project will have a residential FAR of 0.83, or 417,802 square feet of gross floor area, which is less than the maximum permitted as a matter-of-right or under the PUD guidelines.

3. Impacts of the Project under Section 2403.3

The proposed PUD will have a positive impact on the surrounding area. Overall, the proposed development will significantly improve the existing area by virtue of the exceptional architectural design, as well as by providing development to a currently underdeveloped site. The proposed PUD's design carefully considers the nearby residences and accordingly, will have a minimal impact on that area.

The proposed PUD will have no unacceptable impact on traffic. As indicated in the traffic impact study, attached hereto as Exhibit F, the proposed development will have no effect on the intersection levels of service and they will continue to operate at levels of service A and B. The traffic impact study also indicates that the area is well served by transit and that pedestrian connections in the area will be enhanced by the development. The traffic impact analysis also concludes that the amount of proposed parking spaces satisfies both the Zoning Requirements and the practical requirements of the development, and as a result, there will be no spillover parking into the surrounding community.

4. Not Inconsistent with Comprehensive Plan under Section 2403.4

As discussed at length below, the PUD project is not inconsistent with the Comprehensive Plan, as discussed at length below.

C. Goals and Objectives of the Proposed PUD

The proposed PUD is designed to achieve several important goals and objectives, as discussed below.

D. Public Benefits and Project Amenities

1. Overview

The PUD guidelines require the evaluation of specific public benefits and project amenities for a proposed project. Public benefits are defined as "superior features of a proposed planned unit development that benefit the surrounding neighborhood or the public in general to a significantly greater extent than would likely result from the development of the site under the matter of right provisions...." 11 DCMR 2403.6. A project amenity is further defined as "one type of public benefit, specifically a functional or aesthetic feature of the proposed development, that adds attractiveness, convenience or comfort of the project for occupants and immediate neighbors." 11 DCMR 2403.7. Additionally, when deliberating the merits of a PUD application, the Zoning Commission is required to "judge, balance and reconcile the relative value of the project amenities and public benefits offered, the degree of development incentives requested, and any potential adverse effects according to the specific circumstances of the case." 11 DCMR 2403.8. Public

benefits and project amenities may be exhibited in a variety of ways and may overlap with furthering the policies and goals of the Comprehensive Plan.

2. Housing and Affordable Housing (Section 2403.9(f))

The single greatest benefit to the area, and the city as a whole, is the creation of new housing consistent with the goals of the Zoning Regulations, the Comprehensive Plan and the Mayor's housing initiative. The proposed PUD will contain approximately 417,802 square feet of gross floor area dedicated to residential uses. The Applicants intend to convert the two vacant buildings on the Subject Property that previously housed the Masonic and Eastern Star Nursing Home and Infirmary, but were most recently used as offices for Med-Star Health, into condominium buildings. The use of these buildings as housing, as opposed to office uses, is more compatible with the surrounding residential uses and enhances the residential character of the neighborhood. Moreover, the Applicants are committed to ensuring that people with low and moderate incomes share the homes and benefits to be provided by the proposed PUD. Therefore, the project will include 10 units offered as affordable housing units. Five of the affordable units will be townhomes and five will be condominium units. The affordable units will be integrated throughout the development. Eligible purchasers will be families and individuals whose annual incomes are no more than 80% of the area median income.

The West condominium building will also be restricted to residency by persons aged fifty-five and older. This will offer the possibility that senior

citizens residing in the community could remain in the community in a smaller, more maintenance friendly home. This building will be designed to be handicapped accessible and will contain additional features to facilitate an independent lifestyle for the residents.

3. Urban Design, Architecture, Landscaping and Open Space (Section 2403.9(a))

The high quality of architectural design in the proposed development exceeds that of most matter of right projects. The Applicants have commissioned the exceptional architectural design firms of Ferrell Madden Associates, Frank Lohsen McCrery Architects and Eric Colbert & Associates to create buildings that will further the goals of urban design and enhance the streetscape and surrounding neighborhood.

The project has an overall lot occupancy of 29.4%. This is 10.6 % less than the matter-of-right lot occupancy of 40% in both the R-1-B and R-5-A Districts. The open spaces are distributed throughout the site, and include Civic Greens that serve as common open focal space.

As noted earlier, this project contains an extensive landscaping program. Street trees are to be planted in relatively close proximity, lining the streets with their trunks, and shading the walks and fronts of the houses with their canopies. Elm trees, which have been devastated by disease, are to be re-introduced in the form of new, disease resistant cultivars such as the Liberty Elm. Red Maple trees surround the public green spaces, accenting them as special places with their dramatic foliage. Evergreen trees are used

as screening elements, to contain undesirable views and provide privacy where appropriate.

4. First Source Employment Agreement and Local, Small and Disadvantaged Business Enterprises (Section 2403.9(j))

Expanding employment opportunities for residents and local businesses is a priority of the Applicants. Indeed, The Jarvis Company, LLC, is a certified LSDBE and has substantial experience in outreach to disadvantaged businesses and a proven track record in working with communities to maximize economic and employment opportunities during development. Moreover, the Applicants will be entering a First Source Employment Agreement with the Department of Employment Services. The Applicants will also be entering a Local, Small, and Disadvantaged Business Enterprises (LSDBE) Memorandum of Understanding with the District's Office of Local Business Development.

IV.
COMPLIANCE WITH THE COMPREHENSIVE PLAN

The proposed PUD advances the purposes of the Comprehensive Plan, is consistent with the Generalized Land Use Map, and furthers and complies with the major themes and elements for the District and Ward 4 in the Comprehensive Plan.

A. Purposes of the Comprehensive Plan

The purposes of the Comprehensive Plan are six-fold:

> (1) Define the requirements and aspirations of District residents, and accordingly influence social, economic and physical development; (2) Guide executive and legislative decisions on matters affecting the District and its citizens; (3) Promote economic growth and jobs for District residents; (4) Guide private and public development in order to achieve District and community goals; (5) Maintain and enhance the natural and architectural assets of the District; and (6) Assist in conservation, stabilization, and improvement of each neighborhood and community in the District.

D.C. Code §1-245(b).

The PUD project significantly advances these purposes by promoting the social, physical and economic development of the District through the provision of a quality residential development that is affordable to a range of incomes; and the replacement of a primarily unimproved property with development that will enhance the built environment.

B. Generalized Land Use Map

The proposed rezoning is consistent with the Generalized Land Use Map, which designates the Subject Property in the low density residential land use category. The project will have an overall FAR of approximately 0.83, which is below the effective density of 1.2 FAR (40% lot occupancy times three stories) permitted in the R-1-B District. The number of units proposed is approximately seventeen units per acre. The R-1-B, District permits approximately 8.5 units per acre, the R-2 District permits approximately

fourteen units per acre and the R-3 District permits approximately twenty-two units per acre. The proposed development is therefore within the limits of the range of single-family zones.

Further, the overall density of the broad swath designated for low density residential along the northeastern boundary of the District would remain essentially unchanged. Since the Generalized Land Use Map does not drill down to establish the density permitted on each site, the Zoning Commission can appropriately increase the density on a particular site as long as the overall character and density are maintained. The Subject Property is the only large underdeveloped residential site in this area. Allowing the density proposed with the clustered site plan will result in a variety of housing types to hit different segments of the local housing market, consistent with other policies of the Comprehensive Plan discussed below.

C. Compliance with Major Themes of the Comprehensive Plan

The Project is consistent with many of the Comprehensive Plan's major themes as follows:

1. Stabilizing and Improving the District's Neighborhoods

The proposed PUD will significantly increase the availability and variety of housing in the District. Moreover, the proposed residential use will create a stable and vibrant neighborhood. Finally, the inclusion of a number of affordable housing units will increase housing opportunities in Ward 4 and the District.

2. Increasing the Quantity and Quality of Employment Opportunities in the District

The Applicants are committed to expanding employment opportunities for residents, and will be entering both a First Source Employment Agreement with the Department of Employment Services and a Local, Small, and Disadvantaged Business Enterprises (LSDBE) Memorandum of Understanding with the District's Office of Local Business Development.

3. Respecting and Improving the Physical Character of the District

The Applicants' proposal respects and improves the physical character of the District through the construction of a well-planned and carefully designed development that provides a mix of housing types and includes affordable housing units.

4. Reaffirming and Strengthening the District's Role as an Economic Hub

The Comprehensive Plan encourages maximum use of the District's location for both private and public growth to promote economic development. Housing construction for all income levels is paramount to the success of the economic goals of the District. This mixed-income, mixed-housing type project furthers this theme by incorporating residential development to promote the economic health and well-being of the region.

D. Compliance with Major Elements of the Comprehensive Plan

The proposed PUD furthers the objectives and policies of many of the Comprehensive Plan's major elements as follows:

1. Housing Element

According to the Housing element of the Comprehensive Plan, housing in the District is viewed as a key part of a total urban living system that includes access to transportation and shopping centers, the availability of employment and training for suitable employment, neighborhood schools, libraries, recreational facilities, playgrounds, and other public amenities. *See* 10 DCMR § 300.4. Also as stated in the Housing element of the Comprehensive Plan, the District recognizes its obligation to facilitate the availability of adequate, affordable housing to meet the needs of current and future residents. The District strives to stimulate a wider range of housing choices and strategies through the production of new units for a variety of household types. A priority under the District's housing element of the Comprehensive Plan is to maintain and upgrade the District's affordable rental stock, a goal that is supported by the proposed PUD. *See* 10 DCMR §§ 300.1 – 300.3.

The proposed PUD meets this goal by providing a total of approximately 417,802 square feet of gross floor area dedicated to residential uses. Moreover, the Applicants are committed to ensuring that people with low and moderate incomes share the homes and benefits to be provided by

the proposed PUD. Therefore, the project will include 10 units offered as affordable housing units. Five of the affordable units will be townhomes and five will be condominium units. The affordable units will be integrated throughout the development. Eligible purchasers will be families and individuals whose annual incomes are no more than 80% of the area median income.

2. Urban Design Element

The Urban Design element states that it is the District's goal to promote the protection, enhancement and enjoyment of the natural environs and to promote a built environment that serves as a complement to the natural environment, provides visual orientation, enhances the District's aesthetic qualities, emphasizes neighborhood identities, and is functionally efficient. *See* 10 DCMR § 701.1.

The Urban Design element also has an objective of encouraging new construction or renovation/rehabilitation of older buildings in areas with vacant or underused land or structures in order to create a strong, positive physical identity. *See* 10 DCMR § 712.1.

The proposed PUD has been designed to enhance the physical character of the area and complement the materials, height, scale and massing of the surrounding development. *See* 10 DCMR § 708.2.

The streetscape objective of this element is to establish a clear classification of streets and sidewalks that is functionally efficient and visually coherent, enhances the pedestrian environment, and provides for the

orderly movement of goods and services. *See* 10 DCMR § 709.1. The new private streets are laid out to minimize traffic through the site, encouraging safe speeds and providing on-street parking. Alleys are provided behind all units, allowing rear loaded garages, trash collection, and utility connections behind the units, rather than on the front.

3. Land Use Element

The Land Use element encourages a substantial amount of new housing in order for the District to perform its role as the region's urban center providing the greatest density of jobs and housing. 10 DCMR § 1100.2. Policies designed to support residential neighborhoods include promoting the enhancement and revitalization of District neighborhoods for housing and related uses; ensuring a broad range of residential neighborhood options, and providing wide-ranging assistance for neighborhoods for relatively poor quality by joint public and private action and concentrated governmental attention and resources. 10 DCMR §§ 1104.1 (a), (c), and (e), and 1118.6. The proposed PUD responds to these goals with the development of a high-quality residential project that includes housing opportunities for a range of incomes.

E. Compliance with Ward 4 Elements of the Comprehensive Plan

1. Ward 4 Housing Element

A primary objective for housing in Ward 4 is to provide for the housing needs of low- and moderate-income households, and the Ward 4 housing

element calls for stimulating new and rehabilitated housing to meets all levels of need and demand. 10 DCMR §§1508.1(a), 1509.1(a). The proposed PUD will contain a total of approximately 417,802 square feet of gross floor area dedicated to residential uses. Moreover, the Applicants are committed to ensuring that people with low and moderate incomes share the homes and benefits to be provided by the proposed PUD. Therefore, the project will include 10 units offered as affordable housing units. Five of the affordable units will be townhomes and five will be condominium units. The affordable units will be integrated throughout the development. Eligible purchasers will be families and individuals whose annual incomes are no more than 80% of the area median income.

2. Ward 4 Transportation Element

An objective for transportation in Ward 4 is to support the living environment and commerce of the ward and the District and to support development objectives for expanded housing opportunities for ward residents. 10 DCMR § 1514.1(a). Moreover, one of the policies in support of transportation is to continue to require developers to provide appropriate traffic studies and mitigation measures prior to major development. 10 DCMR § 1515.1(a), (2), (D).

The Applicants have submitted a Traffic Impact Study, which is attached hereto as Exhibit F, in connection with this application. As indicated in the study, the proposed development will have no effect on the intersection levels of service and they will continue to operate at levels of

service A and B. The traffic impact study also indicates that the area is well served by transit and that pedestrian connections in the area will be enhanced by the development. The traffic impact analysis also concludes that the amount of proposed parking spaces satisfies both the Zoning Requirements and the practical requirements of the development, and as a result, there will be no spillover parking into the surrounding community.

3. Ward 4 Urban Design Element

The objectives for urban design in Ward 4 include preserving and enhancing the physical qualities and character of the ward's neighborhoods through preservation and enhancement of its built environment, and encouraging well-designed developments in areas that are vacant, underused or deteriorated. 10 DCMR §§ 1520.1(a), (b). The Applicants has commissioned the architectural design firms of Ferrell Madden Associates, Frank Lohsen McCrery Architects and Eric Colbert & Associates to create impressive buildings that will further the goals of urban design and enhance the streetscape and surrounding neighborhood. The development was planned to be an appropriate and fitting example of Washingtonian residential architecture. A purposeful mix of unit types is employed, including condominium units of varying sizes; townhomes; and detached single family residences. All are to be brick on all four sides, reflecting the homes in the surrounding neighborhoods. When complete, the new structures should blend seamlessly not only with each other, but also with the residences found in the neighboring communities.

4. Ward 4 Land Use Element

A key land use concern in Ward 4 is preserving, protecting, and stabilizing the ward's residential neighborhoods. §§ 1528.11(a), 1529.1(a). The proposed PUD responds to these goals with the development of a high-quality project that includes housing opportunities for a range of incomes.

V.
CONCLUSION

For the reasons stated above, the Applicants submit that the PUD and related map amendment meet the standards of Chapter 24 of the Zoning Regulations and are consistent with the purposes and intent of the Zoning Regulations and Zoning Map. Accordingly, the Applicants request that the Zoning Commission determine that the applications have merit and that a public hearing on the applications should be scheduled.

Respectfully submitted:

HOLLAND & KNIGHT LLP

By: _____
Norman M. Glasgow, Jr.

By: _____
Steven E. Sher, Director of
Zoning and Land Use Services

By: _____
Kyrus L. Freeman

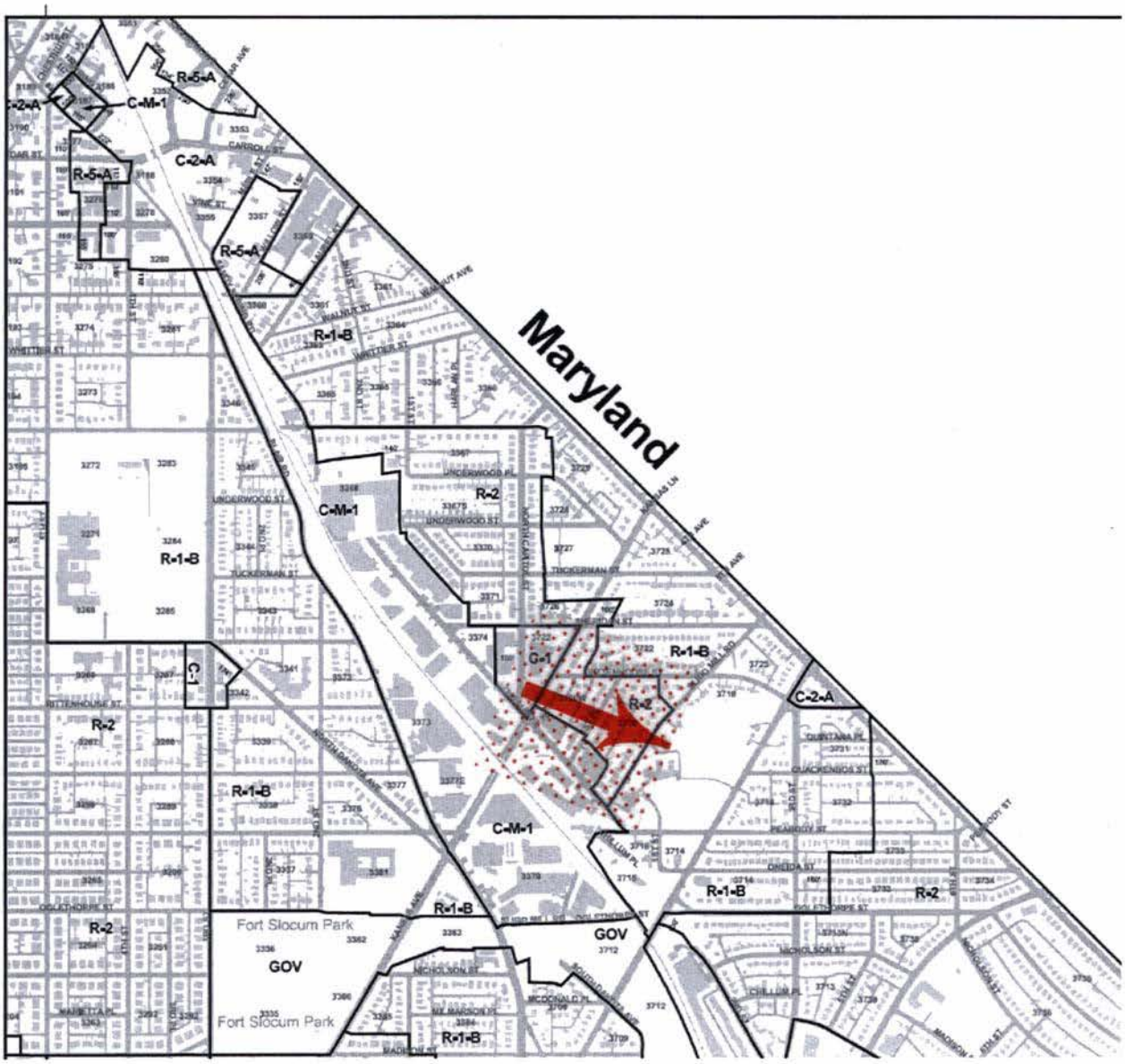
2099 Pennsylvania Ave., N.W.
Suite 100
Washington, D.C. 20006
(202) 955-3000

2958492_v5

Exhibit A

Architectural Plans and Drawings

Submitted as Separate Attachments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R-5-A
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Fort Slocum Park
GOV
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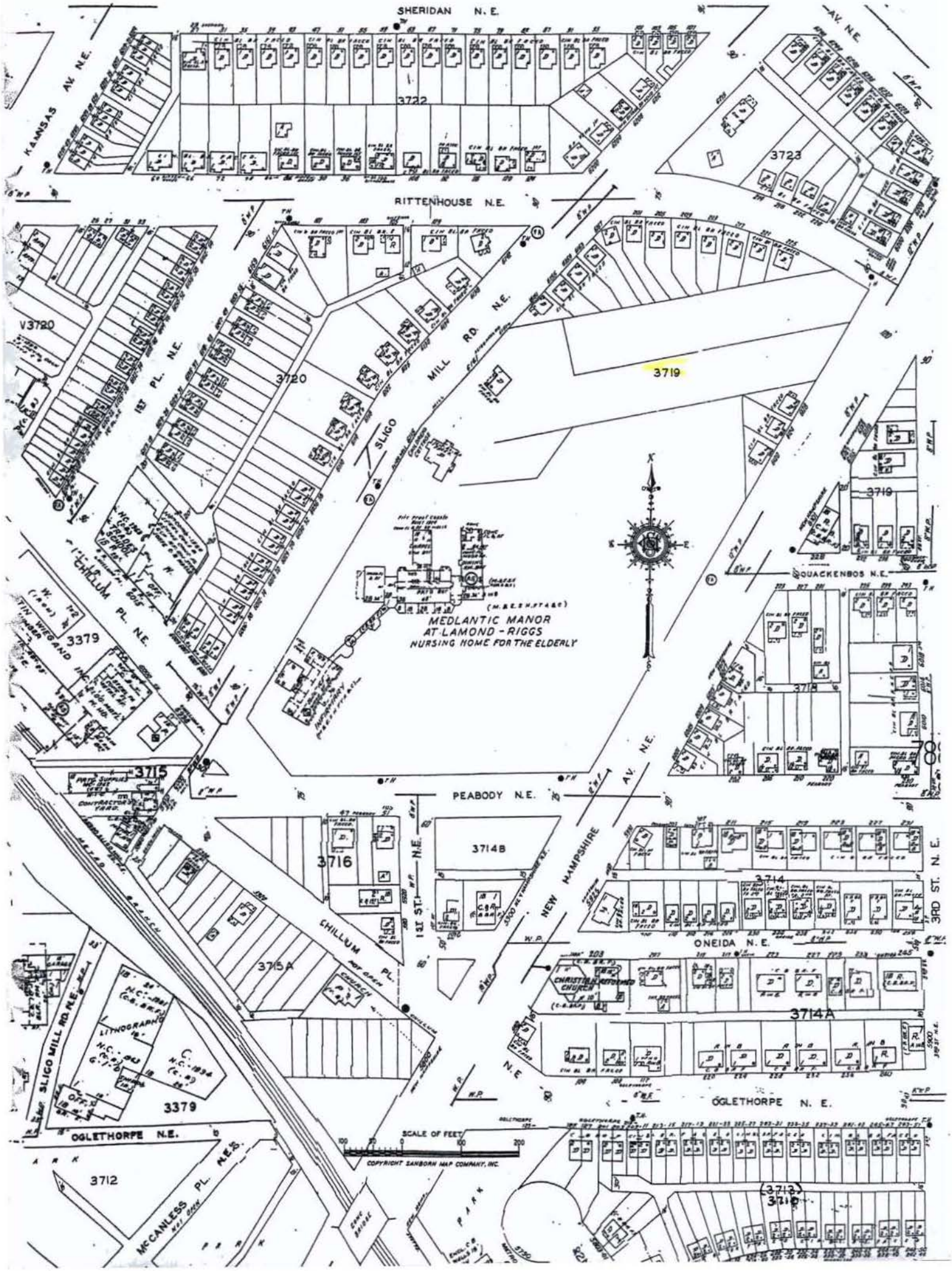
R-2
GOV


SHERIDAN N. E.
KANSAS AV. N.E.
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3723
RITTENHOUSE N.E.
MILL RD. N.E.
SLIGO
V3720
3720
3719
MEDLANTIC MANOR
AT LAMOND - RIGGS
NURSING HOME FOR THE ELDERLY
QUACKENBOS N.E.
CHILLUM PL. N.E.
3379
3715
3718
PEABODY N.E.
NEW HAMPSHIRE AV. N.E.
3716
3714B
3714
3RD ST. N.E.
ONEIDA N.E.
CHILLUM PL.
3715A
3714A
OGLETHORPE N.E.
SLIGO MILL RD. N.E.
LITHOGRAPH
3712
MCCANLESS PL. N.E.
SCALE OF FEET
COPYRIGHT SANBORN MAP COMPANY, INC.
PARK

DISTRICT OF COLUMBIA GOVERNMENT
OFFICE OF THE SURVEYOR

Washington, D.C., September 6, 2005

Plat for Building Permit of SQUARE 3719 LOTS 858 & 126/74

Scale: 1 inch = 80 feet Recorded in A & T Book Page 3819-S

Receipt No. 22420

Furnished to: HOLLAND & KNIGHT

Surveyor, D.C.

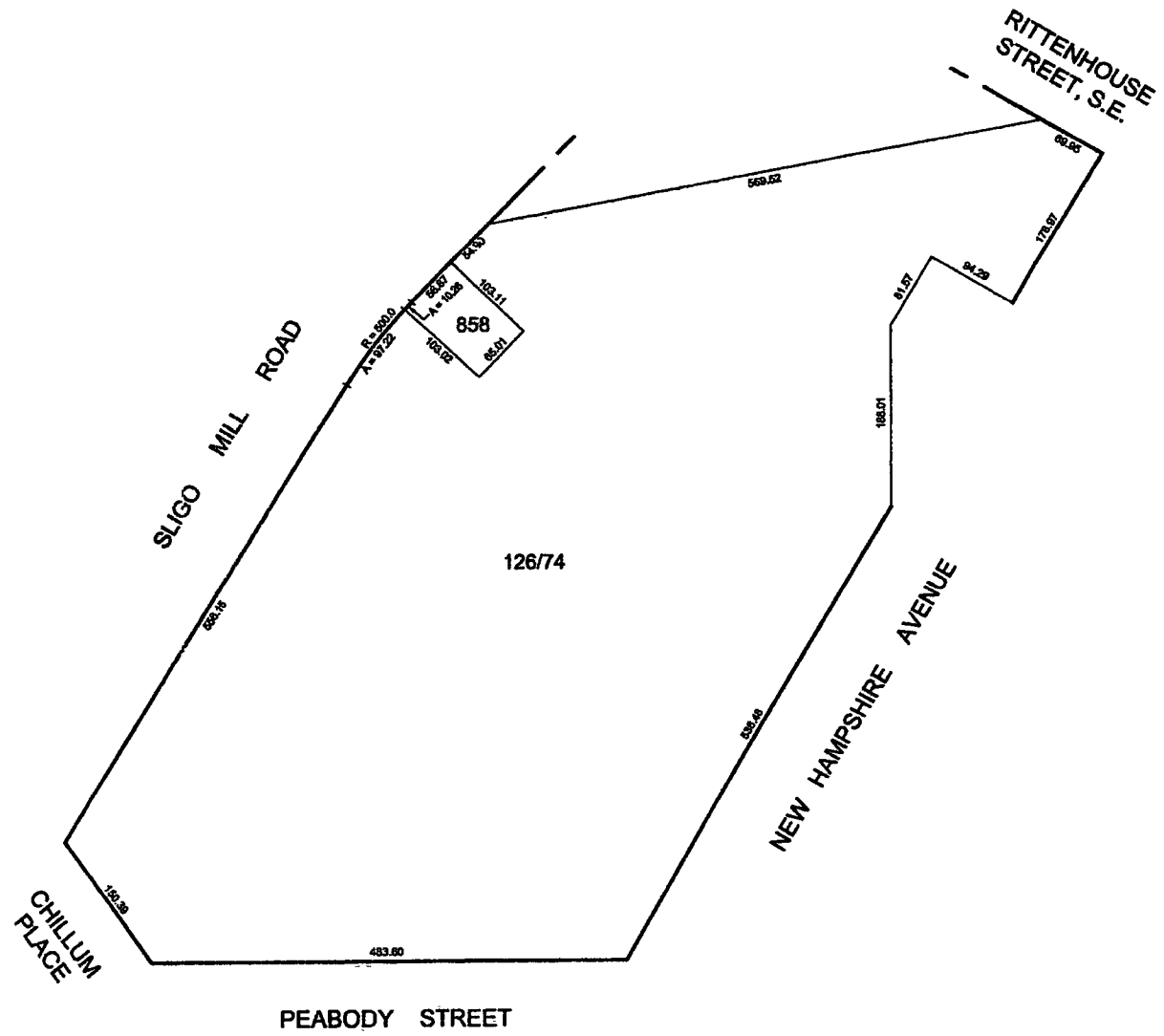
By: L.E.S.

I hereby certify that all existing improvements shown hereon, are completely dimensioned, and are correctly platted; that all proposed buildings or construction, or parts thereof, including covered porches, are correctly dimensioned and platted and agree with plans accompanying the application; that the foundation plans as shown hereon is drawn, and dimensioned accurately to the same scale as the property lines shown on this pastand that by reason of the proposed improvements to be erected as shown hereon the size of any adjoining lot or premises is not decreased to an area less than is required by the Zoning Regulati... s for light and ventilation; and it is further certified and agreed that accessible parking area where required by the Zoning Regulations will be reserved in accordance with the Zoning Regulations, and that this area has been correctly drawn and dimensioned hereon. It is further agreed that the elevation of the accessible parking area with respect to the Highway Department approved curb and alley grade will not result in a rate of grade along centerline of driveway at any point on private property in excess of 20% for single-family dwellings or flats, or in excess of 12% at any point for other buildings. (The policy of the Highway Department permits a maximum driveway grade of 12% across the public parking and the private restricted property.)

Date: _____

_____
(Signature of owner or his authorized agent)

NOTE: Data shown for Assessment and Taxation Lots or Parcels are in accordance with the records of the Department of Finance and Revenue, Assessment Administration, and do not necessarily agree with deed description.



SO-22420(2005)

DISTRICT OF COLUMBIA GOVERNMENT
OFFICE OF THE SURVEYOR

Washington, D.C., September 3, 2005

Plat for Building Permit of SQUARE 3714 LOTS 69,70,71,72,73,801,824,826

Scale: 1 inch =30 feet Recorded in Book 49 Page 2 (LOTS 69-73)
Book A&T Page 785 (LOTS 801,824 & 826)

Receipt No. 22418

Furnished to: HOLLAND & KNIGHT - FREDA

Surveyor, D.C.

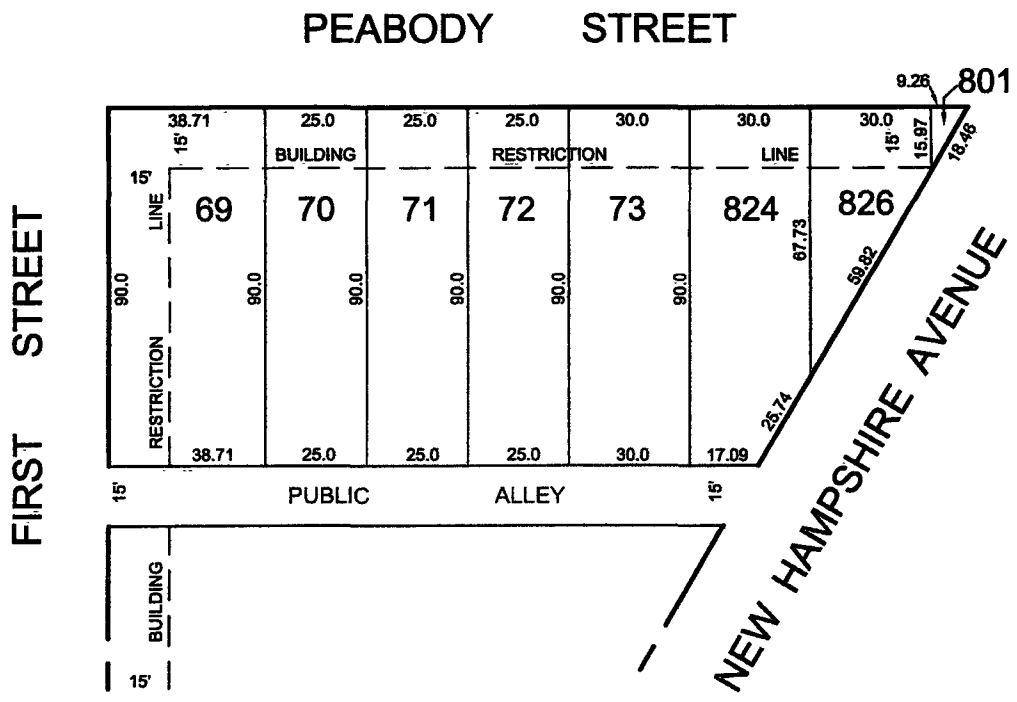
By: L.M.A.

I hereby certify that all existing improvements shown hereon, are completely dimensioned, and are correctly platted; that all proposed buildings or construction, or parts thereof, including covered porches, are correctly dimensioned and platted and agree with plans accompanying the application; that the foundation plans as shown hereon is drawn, and dimensioned accurately to the same scale as the property lines shown on this plat;and that by reason of the proposed improvements to be erected as shown hereon the size of any adjoining lot or premises is not decreased to an area less than is required by the Zoning Regulations for light and ventilation; and it is further certified and agreed that accessible parking area where required by the Zoning Regulations will be reserved in accordance with the Zoning Regulations, and that this area has been correctly drawn and dimensioned hereon. It is further agreed that the elevation of the accessible parking area with respect to the Highway Department approved curb and alley grade will not result in a rate of grade along centerline of driveway at any point on private property in excess of 20% for single-family dwellings or flats, or in excess of 12% at any point for other buildings. (The policy of the Highway Department permits a maximum driveway grade of 12% across the public parking and the private restricted property.)

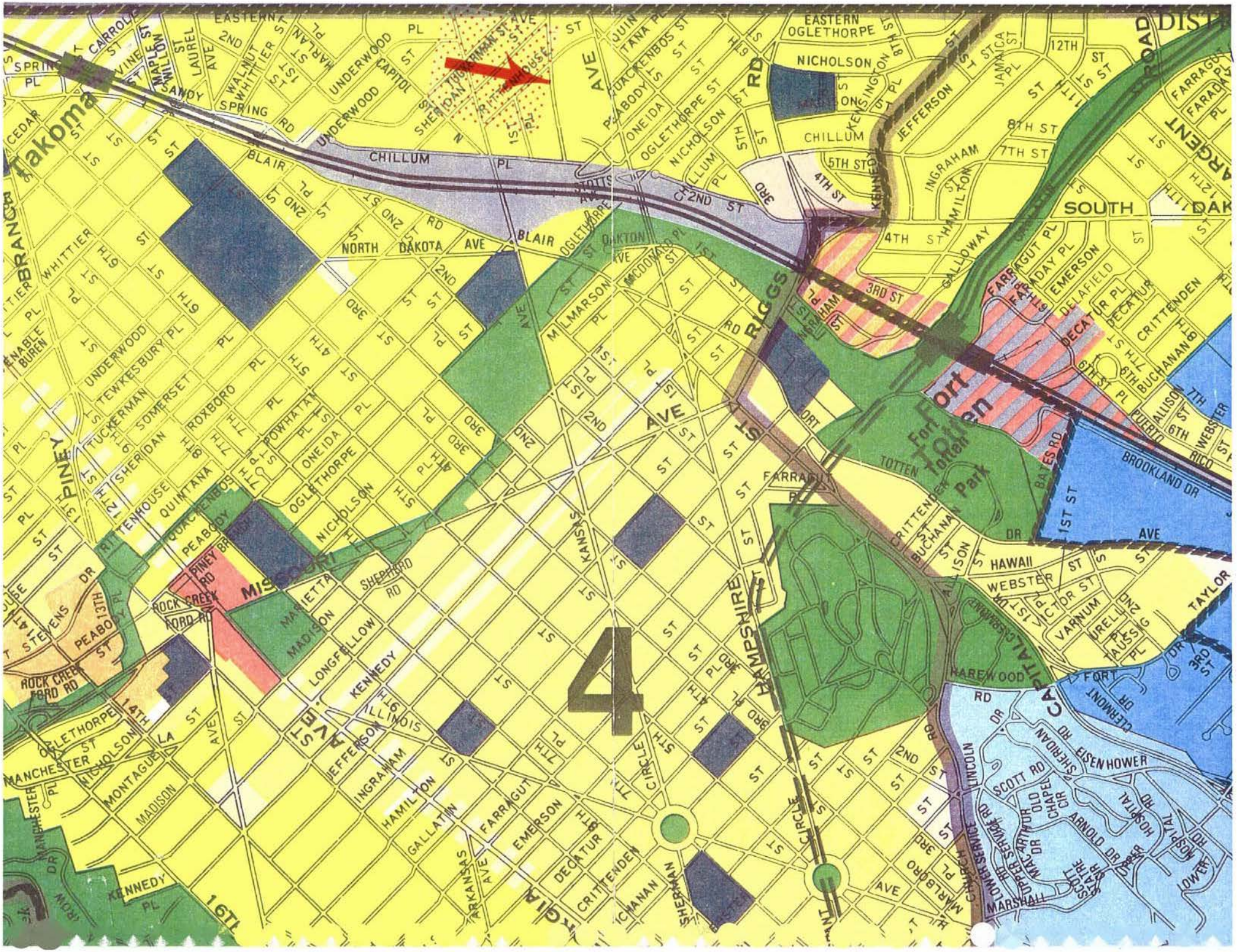
Date: _____

_____
(Signature of owner or his authorized agent)

NOTE: Data shown for Assessment and Taxation Lots or Parcels are in accordance with the records of the Department of Finance and Revenue, Assessment Administration, and do not necessarily agree with deed description.



SO-22418(2005)


Takoma
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CHILLUM
BLAIR
NORTH DAKOTA AVE
OGLETHORPE
2ND ST
3RD ST
4TH ST
5TH ST
7TH ST
8TH ST
SOUTH DAKOTA
RIGGS
PINEY
Fort Totten
Fort Totten Park
BROOKLAND DR
1ST ST
HAWAII
WEBSTER
TAYLOR
FARRAGUT
EMERSON
DECATUR
CRITTENDEN
BUCHANAN
QUINTANA
PEABODY
ROCK CREEK FORD RD
PINEY BR RD
MISSOURI
SHEPHARD RD
MARIETTA
MADISON
LONGFELLOW
KENNEDY
ILLINOIS
JEFFERSON
INGRAHAM
HAMILTON
GALLATIN
KANSAS AVE
ARKANSAS AVE
HAMPSHIRE
CIRCLE
HAREWOOD
FORT
CLERMONT
EISENHOWER
SCOTT RD
OLD CHAPEL CIR
ARNOLD DR
HOSPITAL
MARSHALL
LINCOLN
4

Traffic Impact Study

6000 New Hampshire Avenue PUD
Washington, D.C.

Prepared for:
6000 New Hampshire Avenue, LLC

August 2005

Kimley-Horn
and Associates, Inc.

TABLE OF CONTENTS

LIST OF FIGURES

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INTRODUCTION

This report presents the results of a traffic impact study for the proposed 6000 New Hampshire Avenue development in northeast Washington, D.C. The site is located along the west side of New Hampshire Avenue between Peabody Street and Rittenhouse Street. It is bordered by New Hampshire Avenue to the east, Sligo Mill Road to the west, Peabody Street to the south, and Rittenhouse Street to the north. Included in this site is also a parcel in between New Hampshire Avenue and First Street, south of Peabody Street. The total site location is shown on Figure 1. The proposed development includes approximately 199 residential units, involving a mix of single family detached houses, townhouses, and condominiums. The site currently contains offices for Medstar Health and a vacant nursing home facility.

The following traffic study was prepared to satisfy the traffic requirements associated with the Planned Unit Development (PUD) application and in accordance with the direction provided by the District of Columbia Department of Transportation (DDOT).

The following sections of this report describe the area transportation system, existing traffic volumes, the calculation of background traffic volumes, and the impact of the proposed development.

Map Source:
ADC The Map People,
Permit Auth. No.: 20410152

Kimley-Horn and Associates, Inc.

KHA Project # 110067000

Site Location

6000 New Hampshire Avenue
Planned Unit Development
Washington, D.C.

Figure
1

AREA TRANSPORTATION SYSTEM

Existing Area Streets

Streets considered in this study included New Hampshire Avenue, a key arterial, which traverses the immediate site area, as well as other collector and neighborhood streets. A brief description of the area street system follows:

New Hampshire Avenue – This major north-south arterial serves as a major commuter route between Maryland and Washington, D.C. In the vicinity of the site, New Hampshire Avenue has a four-lane cross-section with sidewalks on both the east and west sides. It forms the eastern boundary of the property. The study intersections of New Hampshire Avenue with Rittenhouse Street and Peabody Street are signalized. The study intersection of New Hampshire Avenue and Quackenbos Street is unsignalized, with the Quackenbos Street approach being stop controlled.

Rittenhouse Street – This local east-west street, which forms the northern boundary of the study area, has a two-lane cross section with on-street parking and sidewalks on both the north and south sides in the vicinity of the site. To the west of Sligo Mill Road, Rittenhouse Street operates one-way westbound only and has a one-lane cross section. The study intersection of Rittenhouse Street and Sligo Mill Road is unsignalized, with all approaches being stop controlled.

Sligo Mill Road – This local north-south street extends northward from Chillum Place. In the vicinity of the site, Sligo Mill Road has a two-lane cross section with on-street parking and a sidewalk on the west side. It forms the western boundary of the study area. The study intersection of Sligo Mill Road with Chillum Place is unsignalized, with the Sligo Mill Road approach being stop controlled

Chillum Place – This local east-west street begins at Peabody Street and provides access to locations northwest of the study area. In the vicinity of the site, Chillum Place has a two-lane cross-section.

Peabody Street – This local east-west street extends eastward from Chillum Place. In the vicinity of the site, Peabody Street has a two-lane cross section. A sidewalk is provided along the north side in between the existing driveway serving the property and New Hampshire Avenue. Peabody Street and Chillum Place form the southern boundary of the study area. The study

intersection of Peabody Street with First Street is unsignalized, with the First Street approach being stop controlled. The study intersection of Peabody Street with New Hampshire Avenue is signalized.

First Street – This local east-west street intersects with Peabody Street at the location of the existing driveway that serves the property. First Street has a two lane cross section, and its intersection with Peabody Street is unsignalized, with the First Street approach being stop controlled.

Quackenbos Street- This local east-west roadway begins at New Hampshire Avenue and provides access to communities east of New Hampshire Avenue. It has a two lane cross section in the vicinity of the site and has sidewalks on both the north and south sides.

Existing Area Transit Service

Existing transit service in the study area includes the nearby Fort Totten Metrorail station on the Red Line and Green Line, as well as Metrobus service.

Metrobus service in the vicinity of the study area is provided along New Hampshire Avenue by the New Hampshire Avenue-Maryland Line (Route K6). The New Hampshire Avenue-Maryland Line serves the White Oak, Northwest Park, Langley Park, Chillum, and Fort Totten Metrorail Station areas. The buses on this route travel north and south along New Hampshire Avenue on weekdays, weekends, and holidays.

There are six bus stops along New Hampshire Avenue in the study area, with three each on the northbound and southbound sides. Two of the southbound bus stops have bus shelters. One shelter is located near the intersection of New Hampshire Avenue and Rittenhouse Street, and the other is located near the intersection of New Hampshire Avenue and Peabody Street.

Future Transportation Improvements

There are no programmed transportation improvements that were considered for this study.

DESCRIPTION OF PROPOSED DEVELOPMENT

Location

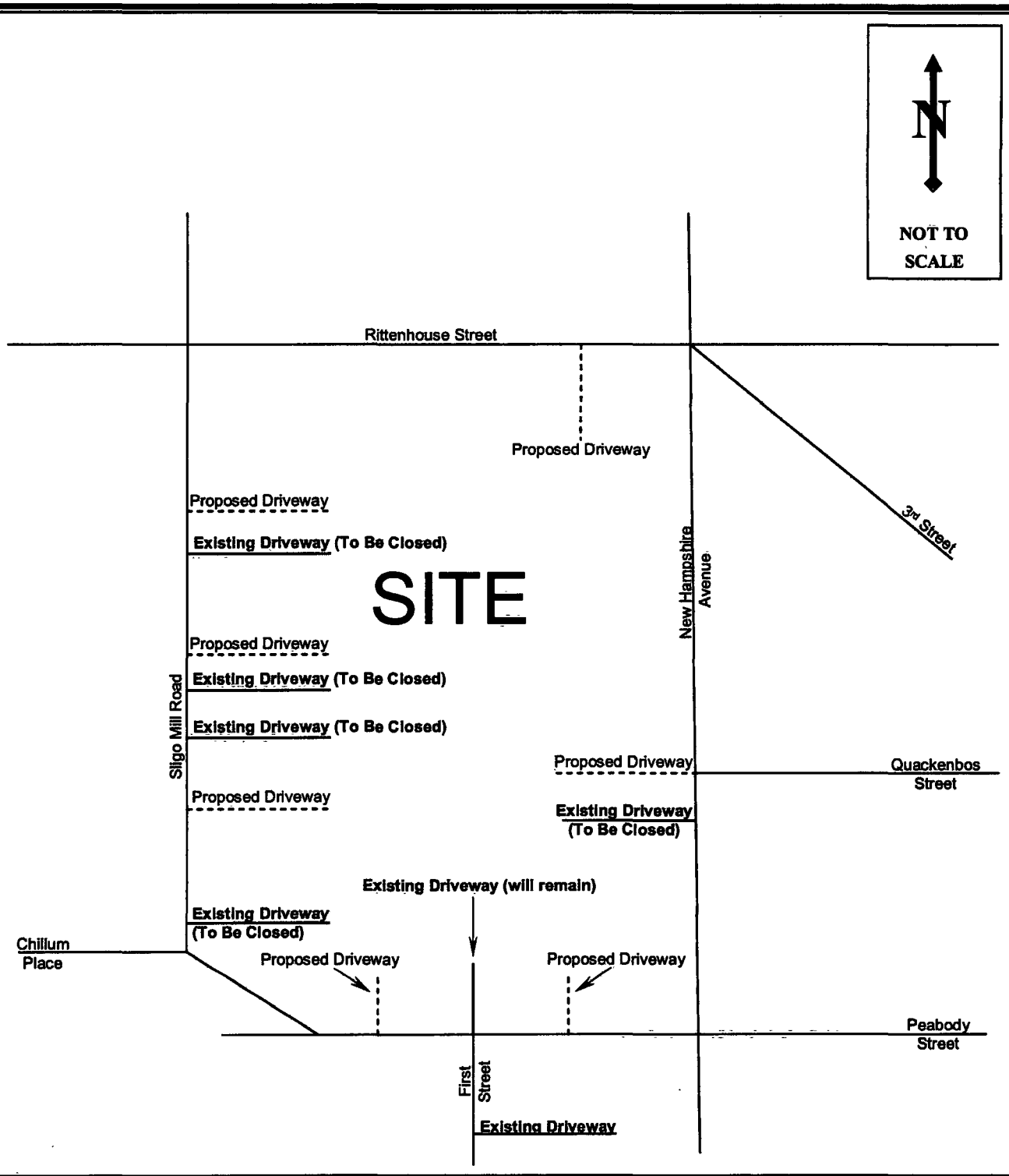
The proposed 6000 New Hampshire Avenue residential development is bordered by New Hampshire Avenue to the east, Sligo Mill Road to the west, Rittenhouse Street to the north, and Peabody Street to the south. Included in this site is also a parcel in between New Hampshire Avenue and First Street, south of Peabody Street. The proposed development consists of 199 residential units, including 27 single family detached homes and 172 multifamily units (townhouses and condominiums). The site currently contains offices for Medstar Health and a vacated nursing home. The property currently has seven vehicle access driveways, including one along Peabody Street opposite First Street, four along Sligo Mill Road, one along New Hampshire Avenue, and one on First Street.

Vehicle Access

Vehicle access is planned to be provided along New Hampshire Avenue opposite Quackenbos Street, at three locations along Peabody Street including the existing driveway opposite First Street, at three driveways along Sligo Mill Road, and at one driveway along Rittenhouse Street. The presence of eight access points to serve 6000 New Hampshire Avenue will result in an effective dispersal of site traffic and the realignment of the existing driveway on New Hampshire Avenue will consolidate two intersections into one. The locations of the existing and proposed driveways are shown on Figure 2.

Parking

The proposed site will include a total of 381 parking spaces. Of these, 280 spaces are provided specifically for the single family detached homes and multifamily units. This exceeds the zoning requirement of 199 parking spaces (1 space per residential unit). These spaces are strategically located to satisfy the needs of the individual residential units. In addition to these 280 spaces, an additional 101 private street parking spaces are also included within the property. The resulting 381 parking spaces will be more than sufficient to satisfy the parking needs for the 199 residential units with no resulting spillover of parking into the surrounding community.



Kimley-Horn and Associates, Inc.

KHA Project # 110067000

Existing and Proposed Site Access Locations

6000 New Hampshire Avenue
Planned Unit Development
Washington, D.C.

Figure 2

TRAFFIC VOLUMES

Traffic volumes used in this study include existing traffic volumes, the projection of traffic volumes to obtain background traffic volumes, and traffic generated by the proposed development to obtain total future traffic volumes. The District of Columbia transportation staff directed that the weekday AM and PM commuter peak hours be studied. Intersections identified for study by District of Columbia Department of Transportation staff are as follows:

- Sligo Mill Road and Rittenhouse Street
- Sligo Mill Road and Chillum Place
- First Street and Peabody Street
- New Hampshire Avenue and Peabody Street
- New Hampshire Avenue and Quackenbos Street
- New Hampshire Avenue and Rittenhouse Street and 3rd Street

Figure 3 shows the lane designations at the study area intersections. The following sections describe the traffic volumes used in this study.

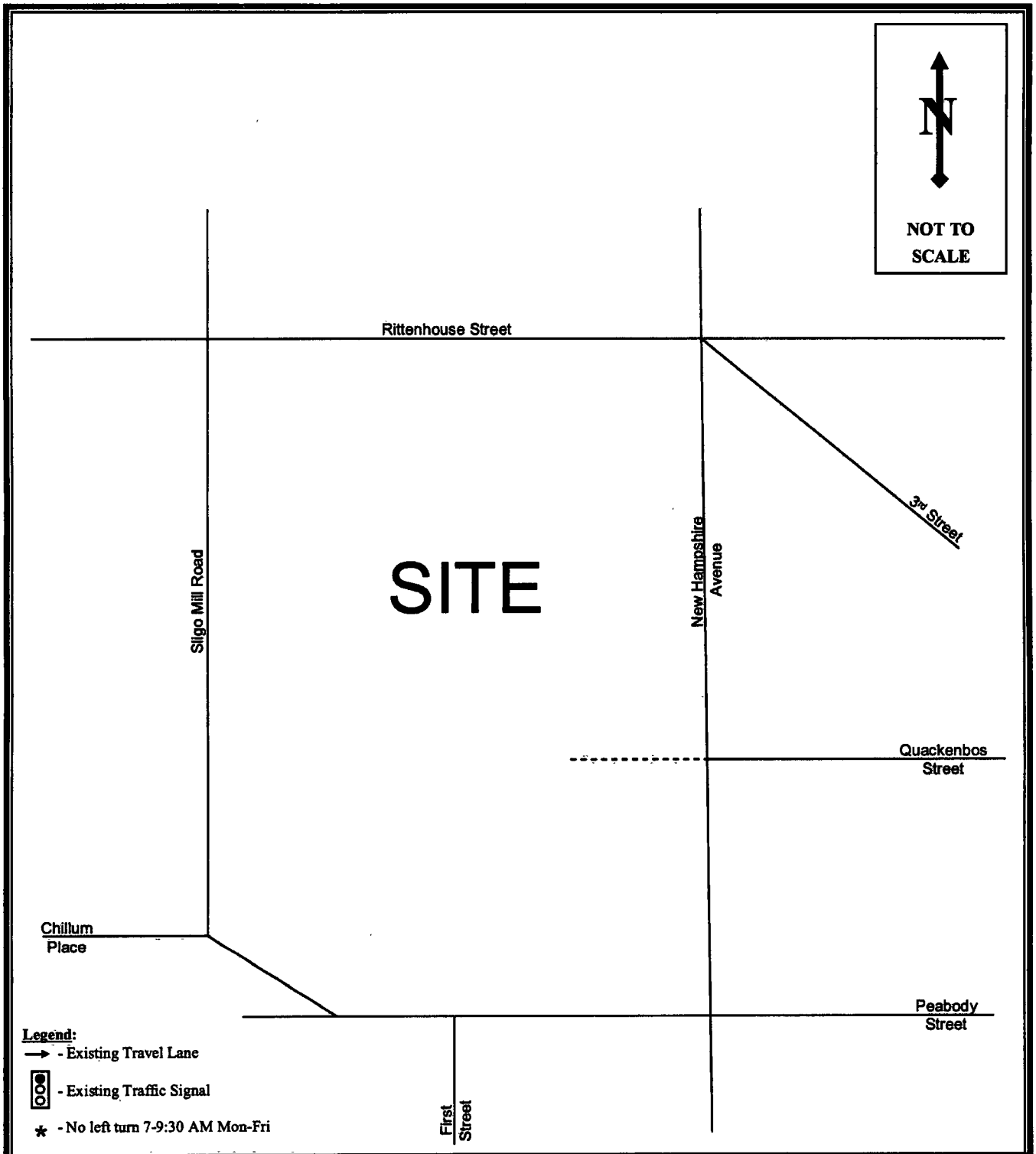
Existing Traffic Volumes

Traffic counts were conducted at the study area intersections before schools closed in May 2005 between 7:00 AM and 9:00 AM and between 4:00 PM and 6:00 PM. These counts were used to establish current peak hour traffic conditions. The peak hours at each intersection were established by identifying the peak 60 minutes of traffic during the AM and PM peak hours. From these traffic counts, the peak study hours were identified for each intersection as follows:

- Sligo Mill Road and Rittenhouse Street – 7:30 to 8:30 AM, 5:00 to 6:00 PM
- Sligo Mill Road and Chillum Place – 7:45 to 8:45 AM, 4:30 to 5:30 PM
- First Street and Peabody Street – 7:15 to 8:15 AM, 5:00 to 6:00 PM
- New Hampshire Avenue and Peabody Street – 7:15 to 8:15 AM, 4:15 to 5:15 PM
- New Hampshire Avenue and Quackenbos Street – 7:00 to 8:00 AM, 5:00 to 6:00 PM
- New Hampshire Avenue and Rittenhouse Street and 3rd Street- 7:15 to 8:15 AM, 5:00 to 6:00 PM

The existing peak hour traffic volumes at the study intersections are shown on Figure 4. The appendix of this report contains the traffic count and pedestrian count summaries. In addition to peak hour volumes, available average annual weekday traffic (AAWT) volumes for streets within

the study area were obtained from the District of Columbia Department of Transportation. These counts were taken by the District along Rittenhouse Street and New Hampshire Avenue. For these streets, AAWT volumes are 5,400 and 28,800 vehicles, respectively, and are shown on Figure 4.



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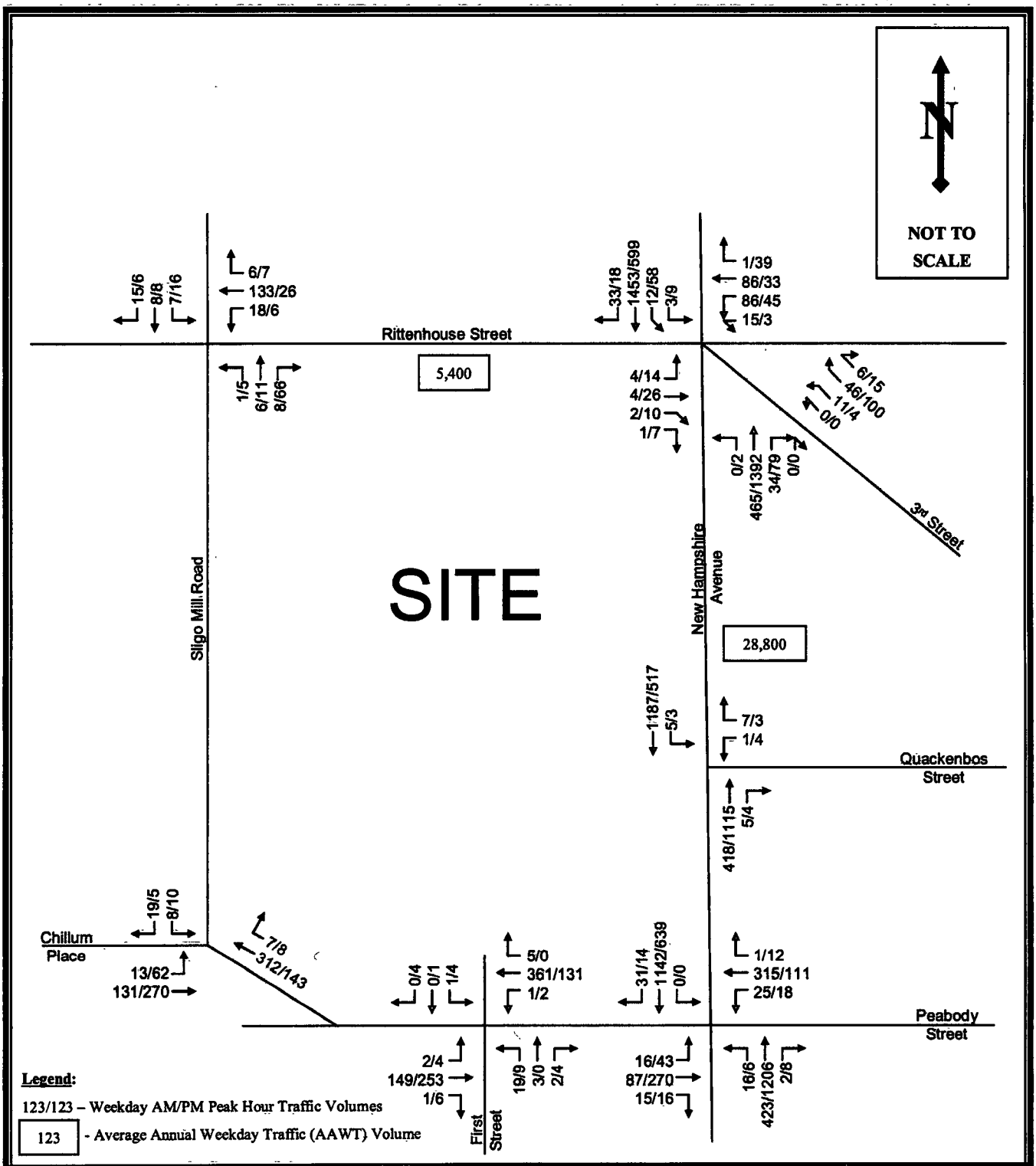
Existing Lane Designations

6000 New Hampshire Avenue
Planned Unit Development
Washington, D.C.

Figure 3



Legend:

123/123 – Weekday AM/PM Peak Hour Traffic Volumes

123 - Average Annual Weekday Traffic (AAWT) Volume

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Existing Peak Hour Traffic Volumes

6000 New Hampshire Avenue
Planned Unit Development
Washington, D.C.

Figure 4

Background Traffic Volumes

Background traffic volumes represent future traffic that would travel through the area intersections without the proposed 6000 New Hampshire Avenue development. In order to represent the growth of traffic resulting from development activity outside the study area, traffic volumes for each of the movements at the study intersections were increased by 1% per year to the horizon year of 2009, as directed by DDOT. These volumes are referred to as 2009 Background Traffic Volumes and are shown at the study intersections on Figure 5.

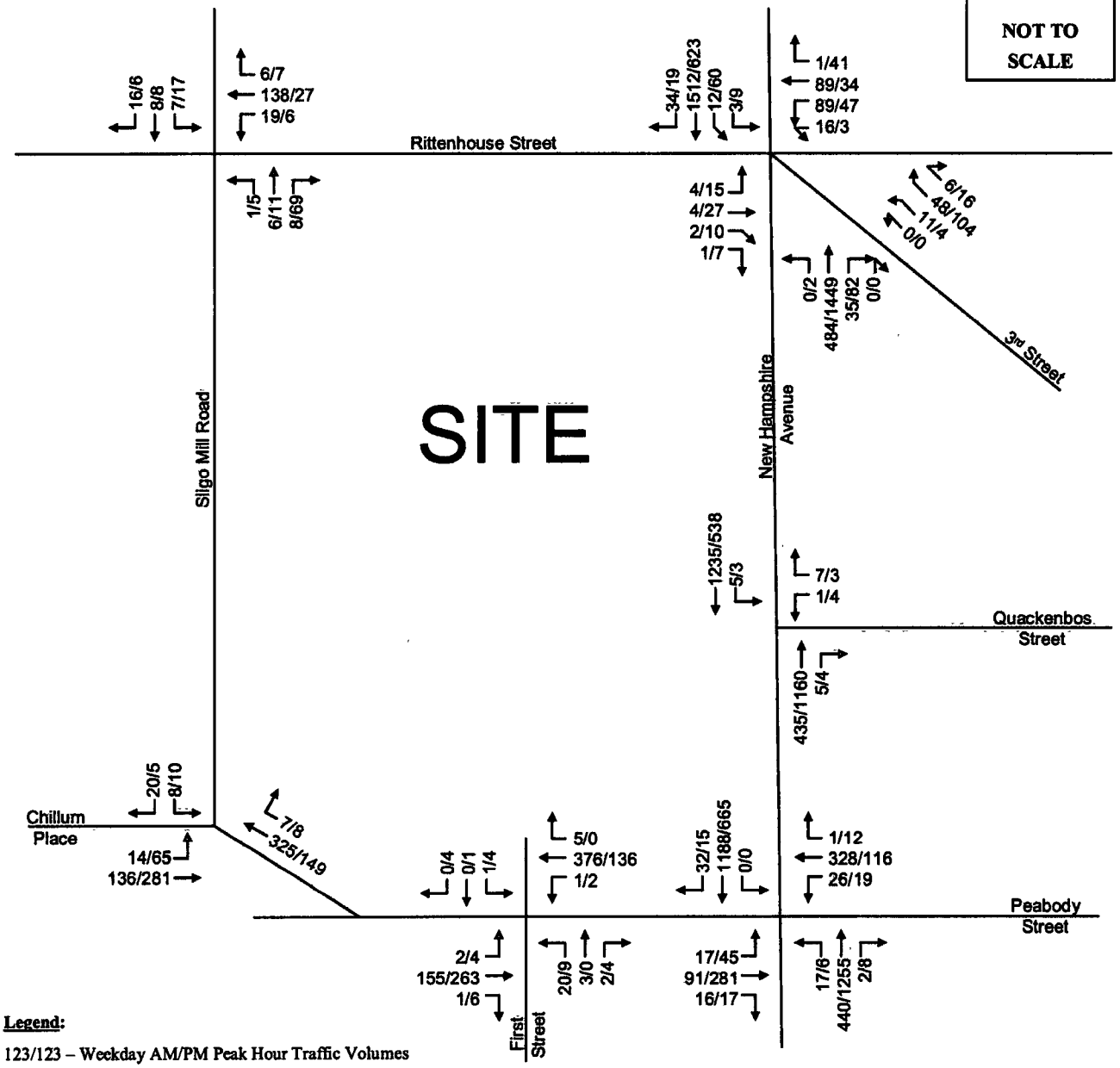
Site Generated Traffic Volumes

Peak hour traffic volumes generated by the proposed residential development were calculated using the *ITE Trip Generation Report* based on trip equations for Land Use Codes 210 (single-family detached housing) and 204 (residential condominium/townhouse). A summary of the trip figures is shown in Table 1.

Table 1
6000 New Hampshire Avenue
Site Generated Traffic Volumes

	AM Peak Hour			PM Peak Hour		
Land Use	**In**	**Out**	**Total**	**In**	**Out**	**Total**
172 Condo/Townhome Residential Units	14	66	80	63	31	94
27 Detached Single-Family Homes	7	21	28	21	12	33
Total	21	87	108	83	43	126

The AM and PM peak hour trips were assigned to the area streets based upon existing traffic volume patterns in the study area as well as the location of the site access points serving the proposed development along New Hampshire Avenue, Peabody Street, and Sligo Mill Road. The resulting percent distributions of site generated trips onto the key streets are listed below in Table 2. Trips were assigned to the site driveways based on two assumptions: (1) vehicles will tend to use the most convenient driveway, and (2) vehicles will tend to avoid using driveways at intersections with relatively high traffic volumes.



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KHA Project # 110067000

2009 Background Peak Hour Traffic Volumes

6000 New Hampshire Avenue
Planned Unit Development
Washington, D.C.

Figure 5

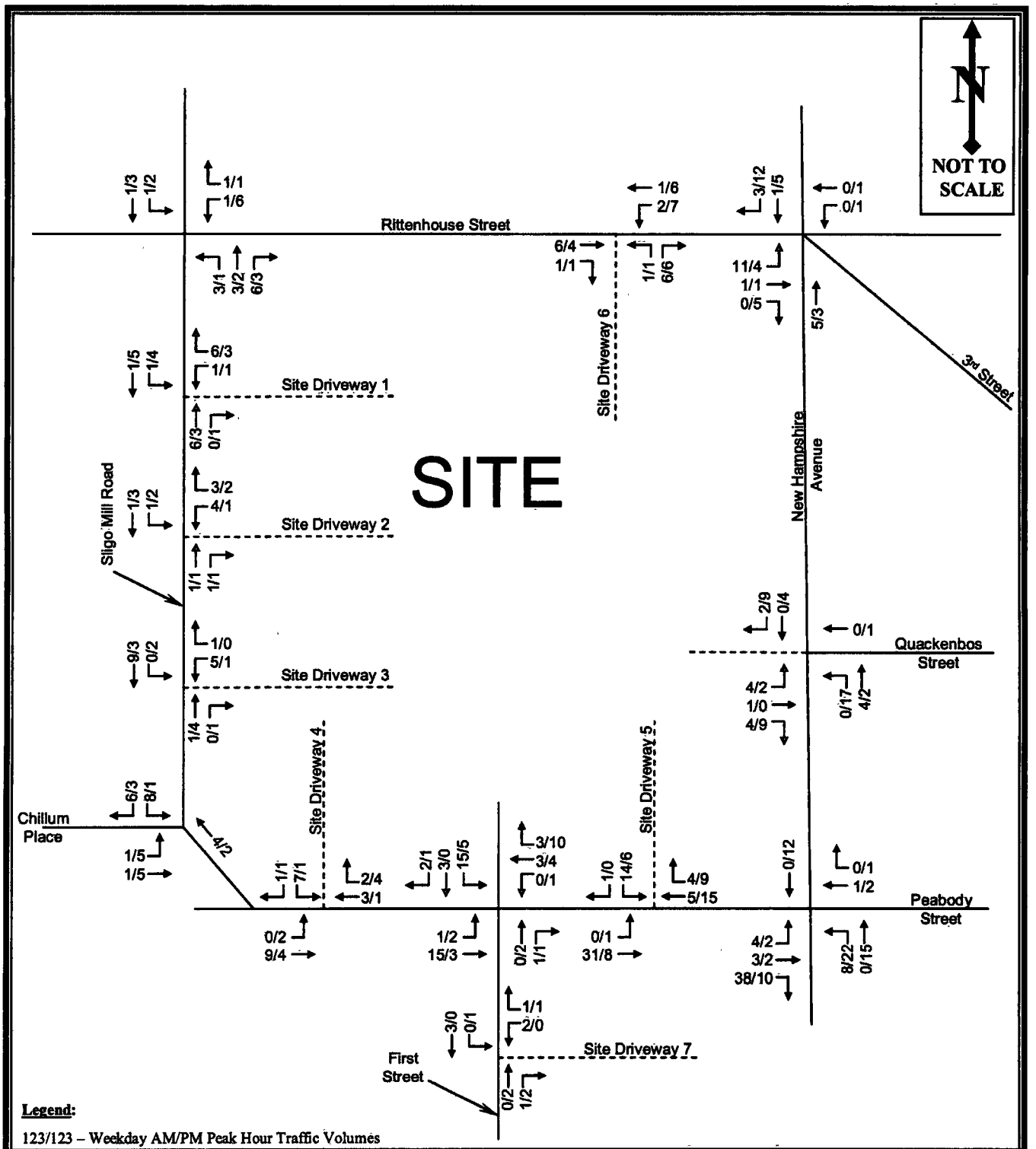
Table 2 Distribution of Site Generated Traffic	
Direction To/From	**Residential Development**
To/From North on New Hampshire Avenue	25%
To/From South on New Hampshire Avenue	50%
To/From West on Chillum Place	12%
To/From East on Peabody Street	4%
To/From West on Rittenhouse Street	3%
To/From East on Rittenhouse Street	2%
To/From East on Quackenbos Street	1%
To/From South on First Street	1%
To/From South on 3rd Street	2%

The assignment of site generated trips is shown on Figure 6.

Total Future Traffic Volumes

Total future traffic volumes represent future traffic volumes with the proposed 6000 New Hampshire Avenue development in place. These volumes were calculated by adding the site generated trips (shown on Figure 6) to the background traffic volumes. The resulting total future peak hour traffic volumes are shown on Figure 7.

Total traffic volumes at site driveways were calculated using the traffic generated by the proposed 6000 New Hampshire Avenue residential development. The resulting driveway volumes are also shown on Figure 7. It should be noted that the existing trips to the Medstar offices were conservatively not subtracted from the site generated trips.



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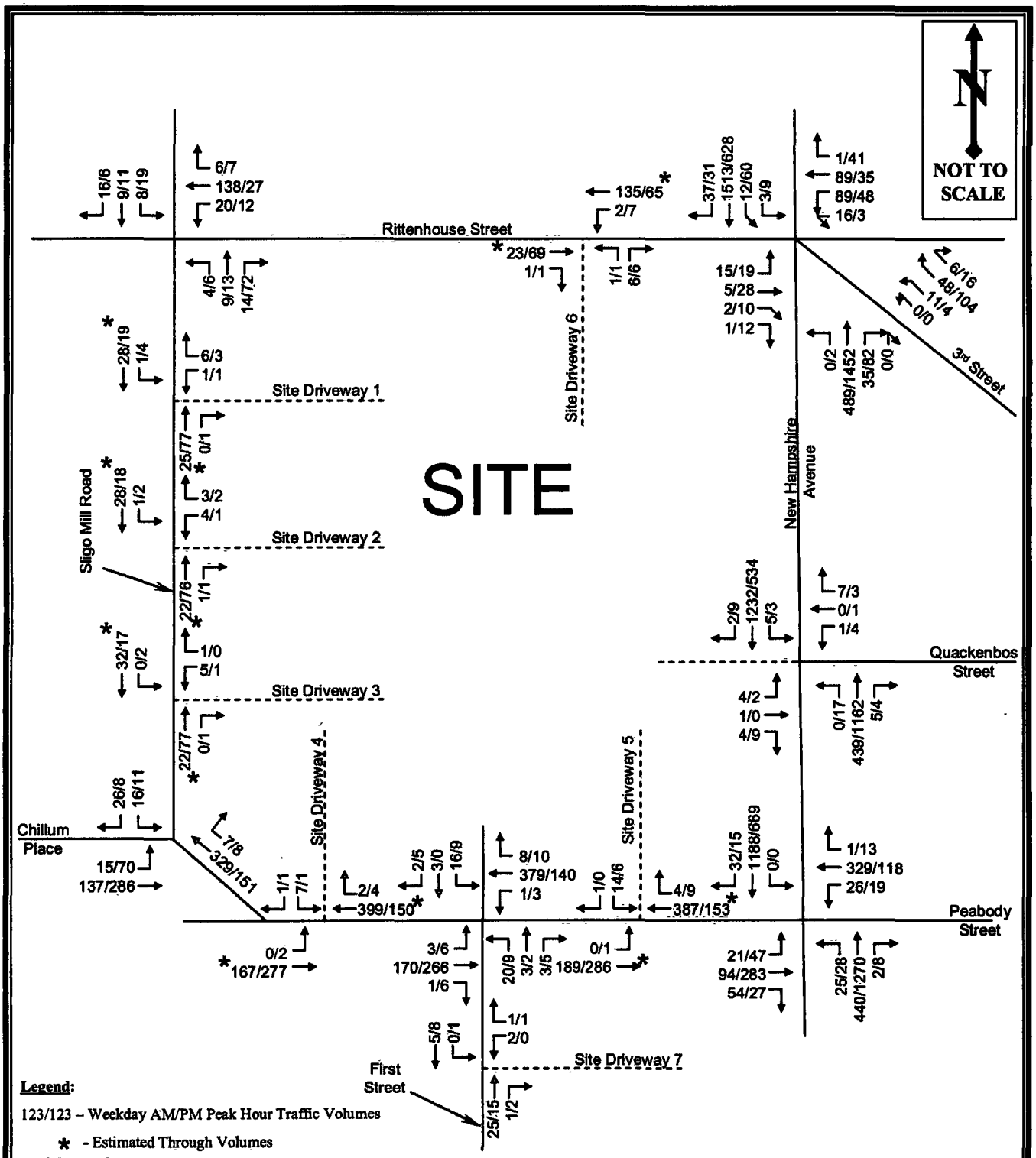
KHA Project # 110067000

Site Generated Peak Hour Traffic Volumes

6000 New Hampshire Avenue
Planned Unit Development
Washington, D.C.

Figure 6



Kimley-Horn and Associates, Inc.

KHA Project # 110067000

Total Future Peak Hour Traffic Volumes

6000 New Hampshire Avenue
Planned Unit Development
Washington, D.C.

Figure 7

ASSESSMENT OF TRAFFIC CONDITIONS

The following is a discussion of the assessment of traffic conditions.

Intersection Capacity Analyses

Intersection capacity analyses were conducted for existing, background, and total future traffic volumes. The capacity analyses were conducted using Synchro Software Package, which utilizes methodologies in the Highway Capacity Manual (2000 Edition) for signalized and unsignalized intersections. The analyses of existing, background, and total future traffic volumes were based on the existing lane uses and operations at the study area intersections.

The results of the capacity analyses are summarized in Tables 3 and 4 for the study area intersections and proposed driveways, respectively. Analysis results show overall level of service and delay information for each intersection for the existing, background, and total future traffic volumes. The Synchro analysis worksheets are contained in the Appendix.

Table 3 - Level of Service Summary at Study Intersections

INTERSECTION	Existing 2005 Conditions		2009 Background Conditions		2009 Total Future Conditions	
	AM	PM	AM	PM	AM	PM
Sligo Mill Road and Rittenhouse Street (Unsignalized)	A (7.9)	A(7.1)	A (8.0)	A (7.1)	A (8.0)	A (7.2)
Sligo Mill Road and Chillum Place (Unsignalized)	A (0.9)	A (1.6)	A (0.9)	A (1.6)	A (1.2)	A (1.7)
First Street and Peabody Street (Unsignalized)	A (0.7)	A (0.8)	A (0.7)	A (0.8)	A (1.1)	A (1.0)
New Hampshire Avenue and Peabody Street (Signalized)	B (14.0)	B (15.5)	B (14.4)	B (16.1)	B (15.0)	B (17.2)
New Hampshire Avenue and Quackenbos Street (Unsignalized)	A (0.1)	A (0.1)	A (0.1)	A (0.2)	A (0.5)	A (0.5)
New Hampshire Avenue and Rittenhouse Street and 3rd Street (Signalized)	B (13.2)	B (15.9)	B (13.9)	B (16.7)	B (17.5)*	B (16.3)*

A (7.9) – Level of Service (Seconds of Delay per Vehicle)

*Results at the New Hampshire Avenue and Rittenhouse Street and 3rd Street are based on optimizing signal timings in order to reduce delay along the eastbound and westbound approaches.

Table 4 - Level of Service Summary at Site Driveways		
INTERSECTION	**2009 Total Future Conditions**	
	AM	**PM**
Sligo Mill Road and Site Driveway 1 (Unsignalized)	A (1.1)	A (0.6)
Sligo Mill Road and Site Driveway 2 (Unsignalized)	A (1.2)	A (0.4)
Sligo Mill Road and Site Driveway 3 (Unsignalized)	A (0.9)	A (0.2)
Peabody Street and Site Driveway 4 (Unsignalized)	A (0.2)	A (0.1)
Peabody Street and Site Driveway 5 (Unsignalized)	A (0.3)	A (0.2)
Rittenhouse Street and Site Driveway 6 (Unsignalized)	A (0.5)	A (0.8)
First Street and Site Driveway 7 (Unsignalized)	A (0.8)	A (0.6)

A (1.7) – Level of Service (Seconds of Delay per Vehicle)

These results show that with existing and background traffic volumes, the study area intersections operate at a high level of service A and B.

The addition of the 6000 New Hampshire Avenue traffic will result in no change in the levels of service at the area intersections. The proposed development will result in marginal increases in vehicle delay. The increases in vehicle delay will range from 0.1 to 4.3 seconds per vehicle. While the traffic effects of the 6000 New Hampshire Avenue development will be measurable, they will not be perceptible.

These results show the benefits of the dispersal of site traffic resulting from the multiple access locations serving this site.

Pedestrian Impact

There are existing sidewalks along all of the adjacent streets. The proposed 6000 New Hampshire Avenue development will provide sidewalk connections to these adjacent streets.

CONCLUSIONS

As a result of this study, it is concluded that the area intersections will all operate at acceptable conditions with the 6000 New Hampshire Avenue residential development in place. The proposed development will have no effect on the intersection levels of service and they will continue to operate at levels of service A and B. The increases in vehicle delay will be marginal. The proposed development will have no perceptible effect on the area intersections.

The site access drives will operate at levels of service A. The multiple driveways will provide the opportunity for the dispersal of site traffic and the realignment of the existing driveway on New Hampshire Avenue with Quackenbros Street will consolidate two intersections into one. As a result, the site access drives and vehicle circulation system will operate in a safe and efficient manner.

The area is well served by transit including Metrorail and Metrobus. Pedestrian connections in the area will be enhanced by this development.

A total of 381 on-site parking spaces will be provided to serve the 199 residential units. This number of spaces satisfies the zoning requirements and the practical requirements of the development. As a result, there will be no spillover of parking into the surrounding community.

APPENDIX

Kimley-Horn and Associates, Inc.

Intersection Turning Movement Count Summary

Sligo Mill Road and Rittenhouse Street

Date Counted: 26-May-05
Day of Week: Thursday
Weather: Sunny, warm

Jurisdiction: Washington, D.C.
Counted by: RD, TJ

	Southbound on Sligo Mill					Westbound on Rittenhouse					Northbound on Sligo Mill					Eastbound					Veh.
Start Time	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Total
7:00 AM	0	1	1	1	*2*	1	24	1	0	*26*	0	2	1	1	*3*	0	0	0	0	*0*	31
7:15 AM	2	4	2	0	*8*	4	19	0	0	*23*	0	0	2	0	*2*	0	0	0	0	*0*	33
7:30 AM	1	3	4	0	*8*	3	31	0	0	*34*	0	0	2	1	*2*	0	0	0	1	*0*	44
7:45 AM	3	2	2	0	*7*	7	38	3	2	*48*	0	3	2	0	*5*	0	0	0	0	*0*	60
8:00 AM	2	3	6	0	*11*	2	38	3	0	*43*	1	0	0	0	*1*	0	0	0	1	*0*	55
8:15 AM	1	0	3	0	*4*	6	26	0	0	*32*	0	3	4	1	*7*	0	0	0	1	*0*	43
8:30 AM	0	5	2	0	*7*	2	22	0	0	*24*	0	2	4	1	*6*	0	0	0	1	*0*	37
8:45 AM	1	3	0	0	*4*	4	15	2	0	*21*	0	1	1	0	*2*	0	0	0	1	*0*	27
9:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
Hourly Totals (Start Time)																					
7:00 AM	6	10	9	1	25	15	112	4	2	131	0	5	7	2	12	0	0	0	1	0	168
7:15 AM	8	12	14	0	34	16	126	6	2	148	1	3	6	1	10	0	0	0	2	0	192
7:30 AM	7	8	15	0	30	18	133	6	2	157	1	6	8	2	15	0	0	0	3	0	202
7:45 AM	6	10	13	0	29	17	124	6	2	147	1	8	10	2	19	0	0	0	3	0	195
8:00 AM	4	11	11	0	26	14	101	5	0	120	1	6	9	2	16	0	0	0	4	0	162
8:15 AM	2	8	5	0	15	12	63	2	0	77	0	6	9	2	15	0	0	0	3	0	107
8:30 AM	1	8	2	0	11	6	37	2	0	45	0	3	5	1	8	0	0	0	2	0	64
8:45 AM	1	3	0	0	4	4	15	2	0	21	0	1	1	0	2	0	0	0	1	0	27
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour (Start Time)																					
7:30 AM	7	8	15	0	30	18	133	6	2	157	1	6	8	2	15	0	0	0	3	0	202

	Southbound on Sligo Mill					Westbound on Rittenhouse					Northbound on Sligo Mill					Eastbound					Veh.
Start Time	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Total
4:00 PM	4	0	0	0	*4*	2	11	2	0	*15*	0	2	7	0	*9*	0	0	0	0	*0*	28
4:15 PM	0	2	1	0	*3*	2	15	1	0	*18*	1	1	15	0	*17*	0	0	0	0	*0*	38
4:30 PM	5	1	1	0	*7*	1	11	0	0	*12*	1	3	9	0	*13*	0	0	0	0	*0*	32
4:45 PM	2	1	1	0	*4*	1	6	3	0	*10*	3	0	12	0	*15*	0	0	0	0	*0*	29
5:00 PM	6	3	1	0	*10*	0	9	2	0	*11*	2	4	13	0	*19*	0	0	0	0	*0*	40
5:15 PM	0	0	3	0	*3*	1	8	1	0	*10*	2	1	20	0	*23*	0	0	0	0	*0*	36
5:30 PM	6	3	0	0	*9*	1	3	4	0	*8*	1	4	13	0	*18*	0	0	0	0	*0*	35
5:45 PM	4	2	2	0	*8*	4	6	0	0	*10*	0	2	20	0	*22*	0	0	0	0	*0*	40
6:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
Hourly Totals (Start Time)																					
4:00 PM	11	4	3	0	18	6	43	6	0	55	5	6	43	0	54	0	0	0	0	0	127
4:15 PM	13	7	4	0	24	4	41	6	0	51	7	8	49	0	64	0	0	0	0	0	139
4:30 PM	13	5	6	0	24	3	34	6	0	43	8	8	54	0	70	0	0	0	0	0	137
4:45 PM	14	7	5	0	26	3	26	10	0	39	8	9	58	0	75	0	0	0	0	0	140
5:00 PM	16	8	6	0	30	6	26	7	0	39	5	11	66	0	82	0	0	0	0	0	151
5:15 PM	10	5	5	0	20	6	17	5	0	28	3	7	53	0	63	0	0	0	0	0	111
5:30 PM	10	5	2	0	17	5	9	4	0	18	1	6	33	0	40	0	0	0	0	0	75
5:45 PM	4	2	2	0	8	4	6	0	0	10	0	2	20	0	22	0	0	0	0	0	40
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour (Start Time)																					
5:00 PM	16	8	6	0	30	6	26	7	0	39	5	11	66	0	82	0	0	0	0	0	151

Kimley-Horn and Associates, Inc.

Intersection Turning Movement Count Summary

Sligo Mill Road + Chillum Place

Date Counted: 26-May-05
Day of Week: Thursday
Weather: Sunny, warm

Jurisdiction: Washington, D.C.
Counted by: MV

	Southbound on Sligo Mill					Westbound on Chillum					Northbound					Eastbound on Chillum					Veh.
Start Time	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Total
7:00 AM	2	0	2	1	*4*	0	56	1	0	*57*	0	0	0	0	*0*	1	13	0	0	*14*	75
7:15 AM	1	0	5	2	*6*	0	76	2	0	*78*	0	0	0	0	*0*	3	16	0	0	*19*	103
7:30 AM	1	0	6	1	*7*	0	77	0	0	*77*	0	0	0	0	*0*	3	23	0	1	*26*	110
7:45 AM	2	0	4	5	*6*	0	96	2	1	*98*	0	0	0	0	*0*	6	34	0	0	*40*	144
8:00 AM	2	0	5	3	*7*	0	77	1	2	*78*	0	0	0	0	*0*	0	31	0	0	*31*	116
8:15 AM	3	0	2	2	*5*	0	72	1	0	*73*	0	0	0	0	*0*	2	37	0	0	*39*	117
8:30 AM	1	0	6	8	*9*	0	67	3	0	*70*	0	0	0	0	*0*	5	29	0	0	*34*	113
8:45 AM	4	0	2	9	*6*	0	66	3	0	*69*	0	0	0	0	*0*	1	46	0	0	*47*	122
9:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
Hourly Totals (Start Time)																					
7:00 AM	6	0	17	9	23	0	305	5	1	310	0	0	0	0	0	13	86	0	1	99	432
7:15 AM	6	0	20	11	26	0	326	5	3	331	0	0	0	0	0	12	104	0	1	116	473
7:30 AM	8	0	17	11	25	0	322	4	3	326	0	0	0	0	0	11	125	0	1	136	487
7:45 AM	8	0	19	18	27	0	312	7	3	319	0	0	0	0	0	13	131	0	0	144	490
8:00 AM	10	0	17	22	27	0	282	8	2	290	0	0	0	0	0	8	143	0	0	151	468
8:15 AM	8	0	12	19	20	0	205	7	0	212	0	0	0	0	0	8	112	0	0	120	352
8:30 AM	5	0	10	17	15	0	133	6	0	139	0	0	0	0	0	6	75	0	0	81	235
8:45 AM	4	0	2	9	6	0	66	3	0	69	0	0	0	0	0	1	46	0	0	47	122
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour (Start Time)																					
7:45 AM	8	0	19	18	27	0	312	7	3	319	0	0	0	0	0	13	131	0	0	144	490

	Southbound on Sligo Mill					Westbound on Chillum					Northbound					Eastbound on Chillum					Veh.
Start Time	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Total
4:00 PM	4	0	1	1	*5*	0	38	3	0	*41*	0	0	0	0	*0*	10	72	0	0	*82*	128
4:15 PM	1	0	1	2	*2*	0	35	3	0	*38*	0	0	0	0	*0*	8	69	0	0	*77*	117
4:30 PM	3	0	2	1	*5*	0	37	3	0	*40*	0	0	0	0	*0*	15	70	0	0	*85*	130
4:45 PM	2	0	1	2	*3*	0	29	1	0	*30*	0	0	0	0	*0*	13	69	0	0	*82*	115
5:00 PM	2	0	1	2	*3*	0	35	3	0	*38*	0	0	0	0	*0*	14	75	0	0	*89*	130
5:15 PM	3	0	1	1	*4*	0	42	1	0	*43*	0	0	0	0	*0*	20	56	0	0	*76*	123
5:30 PM	0	0	1	1	*1*	0	40	3	0	*43*	0	0	0	0	*0*	19	66	0	0	*85*	129
5:45 PM	5	0	2	0	*7*	0	25	6	0	*31*	0	0	0	0	*0*	15	52	0	0	*67*	105
6:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
Hourly Totals (Start Time)																					
4:00 PM	10	0	5	6	15	0	139	10	0	149	0	0	0	0	0	46	280	0	0	326	490
4:15 PM	8	0	5	7	13	0	136	10	0	146	0	0	0	0	0	50	283	0	0	333	492
4:30 PM	10	0	5	6	15	0	143	8	0	151	0	0	0	0	0	62	270	0	0	332	498
4:45 PM	7	0	4	6	11	0	146	8	0	154	0	0	0	0	0	66	266	0	0	332	497
5:00 PM	10	0	5	4	15	0	142	13	0	155	0	0	0	0	0	68	249	0	0	317	487
5:15 PM	8	0	4	2	12	0	107	10	0	117	0	0	0	0	0	54	174	0	0	228	357
5:30 PM	5	0	3	1	8	0	65	9	0	74	0	0	0	0	0	34	118	0	0	152	234
5:45 PM	5	0	2	0	7	0	25	6	0	31	0	0	0	0	0	15	52	0	0	67	105
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour (Start Time)																					
4:30 PM	10	0	5	6	15	0	143	8	0	151	0	0	0	0	0	62	270	0	0	332	498

Kimley-Horn and Associates, Inc.

Intersection Turning Movement Count Summary

Intersection: New Hampshire Avenue + Rittenhouse Street + 3rd. Street

Date Counted: 24-May-05
Day of Week: Tuesday
Weather: sunny, warm

Jurisdiction: Washington, D.C.
Counted by: MV/RD/TJ

	Southbound N. Hampshire Ave to					Westbound Rittenhouse St. to					Northbound N. Hampshire Ave. to					Eastbound Rittenhouse St. to					Northwestbound 3rd. Street to					
Start Time	EB Rittenhouse	SEB 3rd St.	SB N. Hamp Ave.	WB Rittenhouse	*Total*	SEB 3rd St.	SB N. Hamp Ave.	WB Rittenhouse	NB N. Hamp Ave.	*Total*	WB Rittenhouse	NB N. Hamp Ave.	EB Rittenhouse	SEB 3rd St.	*Total*	NB N. Hamp Ave.	EB Rittenhouse	SB N. Hamp Ave.	SEB 3rd. St	*Total*	SB N. Hamp Ave.	WB Rittenhouse	NB N Hamp. Ave	EB Rittenhouse	*Total*	Veh. Total
7:00 AM	0	0	336	4	*340*	1	20	14	0	35	1	78	7	0	*86*	0	0	0	2	*2*	0	1	3	1	*5*	468
7:15 AM	1	3	368	4	*376*	5	24	11	0	*40*	0	105	10	0	*115*	0	1	1	0	*2*	0	3	10	1	*14*	547
7:30 AM	2	6	371	6	*387*	3	28	31	0	62	0	117	7	0	*124*	2	0	0	0	*2*	0	1	11	2	*14*	589
7:45 AM	0	2	398	13	*413*	3	13	24	1	*41*	0	119	11	0	*130*	2	1	0	2	*5*	0	4	15	2	*21*	610
8:00 AM	0	1	316	8	*325*	4	21	20	0	*45*	0	124	6	0	*130*	0	2	0	0	*2*	0	3	10	1	*14*	516
8:15 AM	0	1	322	8	*331*	1	16	28	0	*45*	3	113	9	0	*125*	0	1	1	1	*3*	0	2	10	1	*13*	517
8:30 AM	0	1	342	6	*349*	2	17	18	0	*37*	0	113	14	0	*127*	0	1	1	0	*2*	0	2	10	2	*14*	529
8:45 AM	0	2	280	10	*292*	5	9	13	0	*27*	0	98	4	0	*102*	0	0	0	0	*0*	0	6	11	2	*19*	440
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Totals (Start Time)																										
7:00 AM	3	11	1473	29	1516	12	85	80	1	178	1	419	35	0	455	4	2	1	4	11	0	9	39	6	54	2214
7:15 AM	3	12	1453	33	1501	15	86	86	1	188	0	465	34	0	499	4	4	1	2	11	0	11	46	6	63	2262
7:30 AM	2	10	1407	37	1456	11	78	103	1	193	3	473	33	0	509	4	4	1	3	12	0	10	46	6	62	2232
7:45 AM	0	5	1378	35	1418	10	67	90	1	168	3	469	40	0	512	2	5	2	3	12	0	11	45	6	62	2172
8:00 AM	0	5	1280	32	1297	12	63	79	0	154	3	448	33	0	484	0	4	2	1	7	0	13	41	6	60	2002
8:15 AM	0	4	944	24	972	8	42	59	0	109	3	324	27	0	354	0	2	2	1	5	0	10	31	5	46	1486
8:30 AM	0	3	622	16	641	7	26	31	0	64	0	211	18	0	229	0	1	1	0	2	0	8	21	4	33	969
8:45 AM	0	2	280	10	292	5	9	13	0	27	0	98	4	0	102	0	0	0	0	0	0	6	11	2	19	440
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour (Start Time)																										
7:15 AM	3	12	1453	33	1501	15	86	86	1	188	0	465	34	0	499	4	4	1	2	11	0	11	46	6	63	2262

	Southbound N. Hampshire Ave to					Westbound Rittenhouse St. to					Northbound N. Hampshire Ave. to					Eastbound Rittenhouse St. to					Northwestbound 3rd St. to					
Start Time	EB Rittenhouse	SEB 3rd St.	SB N. Hamp Ave.	WB Rittenhouse	*Total*	SEB 3rd St.	SB N. Hamp Ave.	WB Rittenhouse	NB N. Hamp Ave.	*Total*	WB Rittenhouse	NB N. Hamp Ave.	EB Rittenhouse	SEB 3rd St.	*Total*	NB N. Hamp Ave.	EB Rittenhouse	SB N. Hamp Ave.	SEB 3rd. St	*Total*	SB N. Hamp Ave.	WB Rittenhouse	NB N Hamp. Ave	EB Rittenhouse	*Total*	Veh. Total
4:00 PM	2	19	143	4	*168*	1	24	13	10	*48*	2	320	21	3	*346*	5	7	0	1	*13*	0	3	18	4	*25*	600
4:15 PM	1	9	105	0	*115*	2	10	12	16	*40*	0	329	26	0	*355*	2	11	1	2	*16*	0	1	19	6	*26*	552
4:30 PM	5	20	144	2	*171*	2	9	6	11	*27*	0	331	24	0	*355*	5	12	0	1	*18*	0	3	20	0	*23*	594
4:45 PM	6	16	157	6	*186*	3	6	5	9	*23*	1	319	21	0	*341*	5	9	0	1	*15*	0	3	21	5	*29*	593
5:00 PM	4	15	141	6	*166*	0	13	10	11	*34*	2	360	16	0	*378*	6	4	0	1	*11*	0	0	21	4	*25*	614
5:15 PM	1	20	145	5	*171*	3	15	7	12	*37*	0	337	19	0	*356*	2	8	3	3	*16*	0	4	28	5	*37*	617
5:30 PM	2	7	156	4	*169*	0	7	11	9	*27*	0	343	20	0	*363*	4	8	1	3	*16*	0	0	30	1	*37*	606
5:45 PM	2	16	157	3	*178*	0	10	5	7	*22*	0	352	24	0	*376*	2	6	3	3	*14*	0	0	21	5	*26*	616
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Totals (Start Time)																										
4:00 PM	14	64	549	12	639	6	49	35	46	136	3	1299	92	3	1397	17	39	1	5	62	0	10	78	15	103	2339
4:15 PM	16	60	547	14	637	7	38	32	47	124	3	1339	87	0	1429	18	35	1	5	60	0	7	81	15	103	2353
4:30 PM	16	71	587	19	693	8	43	27	43	121	3	1347	80	0	1430	18	33	3	6	60	0	10	90	14	114	2418
4:45 PM	13	56	599	21	691	6	41	33	41	121	3	1359	78	0	1438	17	29	4	8	58	0	7	100	15	122	2430
5:00 PM	9	58	599	18	684	3	45	33	39	120	2	1392	79	0	1473	14	26	7	10	57	0	4	100	15	119	2453
5:15 PM	5	43	458	12	518	3	32	23	28	86	0	1032	63	0	1095	6	22	7	9	46	0	4	79	11	94	1833
5:30 PM	4	23	313	7	347	0	17	16	16	49	0	695	44	0	739	6	14	4	6	30	0	0	51	6	57	1222
5:45 PM	2	16	157	3	178	0	10	5	7	22	0	352	24	0	376	2	6	3	3	14	0	0	21	5	26	616
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour (Start Time)																										
5:00 PM	9	58	599	18	684	3	45	33	39	120	2	1392	79	0	1473	14	26	7	10	57	0	4	100	15	119	2453

Kimley-Horn and Associates, Inc.

Intersection Turning Movement Count Summary

New Hampshire Avenue + Rittenhouse Street

Date Counted: May 24, 2005 (AM) and May 25, 2005 (PM)
Day of Week: Tuesday/Wednesday
Weather: Rainy, warm/Sunny, warm

Jurisdiction: Washington, D.C.
Counted by: TJ, MV, RD

	Southbound on New Hampshire					Westbound on Rittenhouse					Northbound on New Hampshire					Eastbound on Rittenhouse					Veh.
Start Time	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Total
7:00 AM	0	336	4	2	*340*	21	15	4	0	*40*	1	78	7	3	*86*	0	2	0	0	*2*	468
7:15 AM	4	368	4	2	*376*	29	14	11	4	*54*	0	105	10	1	*115*	0	1	1	2	*2*	547
7:30 AM	8	371	8	5	*387*	31	32	13	0	*76*	0	117	7	4	*124*	2	0	0	1	*2*	589
7:45 AM	2	398	13	2	*413*	16	28	18	4	*62*	0	119	11	3	*130*	2	3	0	0	*5*	610
8:00 AM	1	316	8	1	*325*	25	23	11	6	*59*	0	124	6	5	*130*	0	2	0	1	*2*	516
8:15 AM	1	322	8	1	*331*	17	30	11	8	*58*	3	113	9	2	*125*	0	2	1	2	*3*	517
8:30 AM	1	342	6	1	*349*	19	20	12	3	*51*	0	113	14	1	*127*	0	1	1	1	*2*	529
8:45 AM	2	280	10	1	*292*	14	19	13	3	*46*	0	98	4	0	*102*	0	0	0	1	*0*	440
9:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
Hourly Totals (Start Time)																					
7:00 AM	14	1473	29	11	1516	97	89	46	8	232	1	419	35	11	455	4	6	1	3	11	2214
7:15 AM	15	1463	33	10	1501	101	97	53	14	251	0	465	34	13	499	4	6	1	4	11	2262
7:30 AM	12	1407	37	9	1456	89	113	53	18	255	3	473	33	14	509	4	7	1	4	12	2232
7:45 AM	5	1378	35	5	1418	77	101	52	21	230	3	469	40	11	512	2	8	2	4	12	2172
8:00 AM	5	1260	32	4	1297	75	92	47	20	214	3	448	33	8	484	0	5	2	5	7	2002
8:15 AM	4	944	24	3	972	50	69	36	14	155	3	324	27	3	354	0	3	2	4	5	1486
8:30 AM	3	622	16	2	641	33	39	25	6	97	0	211	18	1	229	0	1	1	2	2	969
8:45 AM	2	280	10	1	292	14	19	13	3	46	0	98	4	0	102	0	0	0	1	0	440
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour (Start Time)																					
7:15 AM	15	1463	33	10	1501	101	97	53	14	251	0	465	34	13	499	4	6	1	4	11	2262

	Southbound on New Hampshire					Westbound on Rittenhouse					Northbound on New Hampshire					Eastbound on Rittenhouse					Veh.
Start Time	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Total
4:00 PM	21	143	5	0	*169*	25	16	32	4	*73*	2	320	24	2	*346*	5	12	0	1	*17*	605
4:15 PM	10	105	3	1	*118*	12	13	41	1	*66*	0	329	26	2	*355*	2	13	1	3	*16*	555
4:30 PM	25	144	4	0	*173*	11	8	31	3	*50*	0	331	24	3	*355*	5	17	0	1	22	600
4:45 PM	22	157	2	0	*181*	9	8	35	7	*52*	1	319	21	0	*341*	5	14	0	6	*19*	593
5:00 PM	19	141	4	3	*164*	13	10	36	4	*59*	2	360	16	1	*378*	6	10	0	2	*18*	617
5:15 PM	21	145	2	0	*168*	18	11	45	0	*74*	0	337	19	0	*356*	2	10	3	1	*15*	613
5:30 PM	9	156	4	4	*169*	7	11	40	5	*58*	0	343	20	0	*363*	4	12	1	1	*17*	607
5:45 PM	18	157	5	6	*180*	10	5	33	1	*48*	0	352	24	1	*376*	2	8	3	2	*13*	617
6:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
Hourly Totals (Start Time)																					
4:00 PM	78	549	14	1	641	57	45	139	15	241	3	1299	95	7	1397	17	56	1	11	74	2353
4:15 PM	76	547	13	4	636	45	39	143	15	227	3	1339	87	6	1429	18	54	1	12	73	2385
4:30 PM	87	587	12	3	686	51	37	147	14	235	3	1347	80	4	1430	18	51	3	10	72	2423
4:45 PM	71	599	12	7	682	47	40	156	16	243	3	1359	76	1	1438	17	46	4	10	67	2430
5:00 PM	67	599	15	13	681	48	37	154	10	239	2	1392	79	2	1473	14	40	7	6	61	2454
5:15 PM	48	458	11	10	517	35	27	118	6	180	0	1032	63	1	1095	8	30	7	4	45	1837
5:30 PM	27	313	9	10	349	17	16	73	6	106	0	695	44	1	739	6	20	4	3	30	1224
5:45 PM	18	157	5	6	180	10	5	33	1	48	0	352	24	1	376	2	8	3	2	13	617
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour (Start Time)																					
5:00 PM	67	599	15	13	681	48	37	154	10	239	2	1392	79	2	1473	14	40	7	6	61	2454

Kimley-Horn and Associates, Inc.

Intersection Turning Movement Count Summary

New Hampshire Road + Quackenbos Street

Date Counted: 25-May-05
Day of Week: Tuesday
Weather: Rainy, warm

Jurisdiction: Washington, D.C.
Counted by: MO

	Southbound on New Hampshire					Westbound on Quackenbos					Northbound on New Hampshire					Eastbound					Veh.
Start Time	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Total
7:00 AM	3	306	0	1	*309*	1	0	2	1	*3*	0	103	0	0	*103*	0	0	0	0	*0*	415
7:15 AM	1	368	0	0	*369*	0	0	2	0	*2*	0	124	1	0	*125*	0	0	0	0	*0*	496
7:30 AM	1	368	0	0	*369*	0	0	2	0	*2*	0	129	1	0	*130*	0	0	0	0	*0*	501
7:45 AM	0	145	5	0	*150*	0	0	1	0	*1*	0	62	3	0	*65*	0	0	0	0	*0*	216
8:00 AM	3	208	7	0	*218*	1	0	1	1	*2*	0	76	0	0	*76*	0	0	0	0	*0*	296
8:15 AM	0	334	0	0	*334*	0	0	0	0	*0*	0	104	0	0	*104*	0	0	0	0	*0*	438
8:30 AM	2	280	0	1	*282*	2	0	0	0	*2*	0	106	0	0	*106*	0	0	0	0	*0*	390
8:45 AM	1	214	0	0	*215*	1	0	0	0	*1*	0	88	1	0	*89*	0	0	0	0	*0*	305
9:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
Hourly Totals (Start Time)																					
7:00 AM	5	1187	5	1	1197	1	0	7	1	8	0	418	5	0	423	0	0	0	0	0	1628
7:15 AM	5	1089	12	0	1106	1	0	6	1	7	0	391	5	0	396	0	0	0	0	0	1509
7:30 AM	4	1055	12	0	1071	1	0	4	1	5	0	371	4	0	375	0	0	0	0	0	1451
7:45 AM	5	967	12	1	984	3	0	2	1	5	0	348	3	0	351	0	0	0	0	0	1340
8:00 AM	6	1036	7	1	1049	4	0	1	1	5	0	374	1	0	375	0	0	0	0	0	1429
8:15 AM	3	828	0	1	831	3	0	0	0	3	0	298	1	0	299	0	0	0	0	0	1133
8:30 AM	3	494	0	1	497	3	0	0	0	3	0	194	1	0	195	0	0	0	0	0	695
8:45 AM	1	214	0	0	215	1	0	0	0	1	0	88	1	0	89	0	0	0	0	0	305
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour (Start Time)																					
7:00 AM	5	1187	5	1	1197	1	0	7	1	8	0	418	5	0	423	0	0	0	0	0	1628

	Southbound on New Hampshire					Westbound on Quackenbos					Northbound on New Hampshire					Eastbound					Veh.
Start Time	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Total
4:00 PM	0	57	2	0	*59*	2	0	1	0	*3*	0	257	7	0	*264*	0	0	0	0	*0*	326
4:15 PM	0	123	1	0	*124*	0	0	0	0	*0*	0	265	4	0	*269*	0	0	0	0	*0*	393
4:30 PM	0	71	5	0	*76*	0	0	1	0	*1*	0	183	3	0	*186*	0	0	0	0	*0*	263
4:45 PM	0	40	0	0	*40*	0	0	0	0	*0*	0	84	0	0	*84*	0	0	0	0	*0*	124
5:00 PM	0	93	0	0	*93*	1	0	1	0	*2*	0	200	0	0	*200*	0	0	0	0	*0*	295
5:15 PM	0	145	0	0	*145*	1	0	1	1	*2*	0	316	0	0	*316*	0	0	0	0	*0*	463
5:30 PM	2	143	0	0	*145*	0	0	1	0	*1*	0	311	1	0	*312*	0	0	0	0	*0*	458
5:45 PM	1	136	0	0	*137*	2	0	0	0	*2*	0	288	3	0	*291*	0	0	0	0	*0*	430
6:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
Hourly Totals (Start Time)																					
4:00 PM	0	291	8	0	299	2	0	2	0	4	0	789	14	0	803	0	0	0	0	0	1106
4:15 PM	0	327	6	0	333	1	0	2	0	3	0	732	7	0	739	0	0	0	0	0	1075
4:30 PM	0	349	5	0	354	2	0	3	1	5	0	783	3	0	786	0	0	0	0	0	1145
4:45 PM	2	421	0	0	423	2	0	3	1	5	0	911	1	0	912	0	0	0	0	0	1340
5:00 PM	3	517	0	0	520	4	0	3	1	7	0	1115	4	0	1119	0	0	0	0	0	1646
5:15 PM	3	424	0	0	427	3	0	2	1	5	0	915	4	0	919	0	0	0	0	0	1351
5:30 PM	3	279	0	0	282	2	0	1	0	3	0	599	4	0	603	0	0	0	0	0	888
5:45 PM	1	136	0	0	137	2	0	0	0	2	0	288	3	0	291	0	0	0	0	0	430
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour (Start Time)																					
5:00 PM	3	517	0	0	520	4	0	3	1	7	0	1115	4	0	1119	0	0	0	0	0	1646

Kimley-Horn and Associates, Inc.

Intersection Turning Movement Count Summary

New Hampshire Avenue + Peabody Street

Date Counted: 24-May-05 / 25-May-05
Day of Week: Tuesday/Wednesday
Weather: Rainy, warm / Sunny, warm

Jurisdiction: Washington, D.C.
Counted by: AR, MV, RD

	Southbound on New Hampshire					Westbound on Peabody					Northbound on New Hampshire					Eastbound on Peabody					Veh.
Start Time	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Total
7:00 AM	0	303	3	0	*306*	4	54	1	0	*59*	4	80	0	1	*84*	2	11	0	0	*13*	462
7:15 AM	0	312	6	0	*318*	11	66	0	0	*77*	7	96	0	0	*103*	3	13	2	2	*18*	516
7:30 AM	0	292	8	4	*300*	5	74	0	0	*79*	5	109	2	0	*116*	1	25	6	0	*32*	527
7:45 AM	0	290	10	0	*300*	5	78	1	0	*84*	4	121	0	0	*125*	2	17	6	1	*25*	534
8:00 AM	0	248	7	0	*255*	4	97	0	1	*101*	0	97	0	7	*97*	10	32	1	1	*43*	496
8:15 AM	0	228	2	0	*230*	5	70	0	0	*75*	3	107	0	0	*110*	5	25	3	0	*33*	448
8:30 AM	0	226	5	0	*231*	4	73	3	0	*80*	2	103	1	0	*106*	6	30	1	0	*37*	454
8:45 AM	0	265	2	1	*267*	2	50	0	2	*52*	4	93	0	0	*97*	5	33	1	0	*39*	455
9:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
Hourly Totals (Start Time)																					
7:00 AM	0	1197	27	4	1224	25	272	2	0	299	20	406	2	1	428	8	66	14	3	88	2039
7:15 AM	0	1142	31	4	1173	25	315	1	1	341	16	423	2	7	441	16	87	15	4	118	2073
7:30 AM	0	1058	27	4	1085	19	319	1	1	339	12	434	2	7	448	18	99	16	2	133	2005
7:45 AM	0	992	24	0	1016	18	318	4	1	340	9	428	1	7	438	23	104	11	2	138	1932
8:00 AM	0	967	16	1	983	15	290	3	3	308	9	400	1	7	410	26	120	6	1	152	1853
8:15 AM	0	719	9	1	728	11	193	3	2	207	9	303	1	0	313	16	88	5	0	109	1357
8:30 AM	0	491	7	1	498	6	123	3	2	132	6	196	1	0	203	11	63	2	0	76	909
8:45 AM	0	265	2	1	267	2	50	0	2	52	4	93	0	0	97	5	33	1	0	39	455
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour (Start Time)																					
7:15 AM	0	1142	31	4	1173	25	315	1	1	341	16	423	2	7	441	16	87	15	4	118	2073

	Southbound on New Hampshire					Westbound on Peabody					Northbound on New Hampshire					Eastbound on Peabody					Veh.
Start Time	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Total
4:00 PM	0	125	13	0	*138*	3	28	1	0	*32*	0	283	4	0	*287*	18	59	5	0	*82*	539
4:15 PM	0	173	5	1	*178*	5	23	1	0	*29*	1	289	4	1	*294*	12	58	6	0	*76*	577
4:30 PM	0	161	1	0	*162*	5	22	2	0	*29*	2	275	1	0	*278*	10	58	6	1	*74*	543
4:45 PM	0	156	5	0	*161*	5	33	4	1	*42*	0	310	0	1	*310*	10	74	1	1	*85*	598
5:00 PM	0	149	3	0	*152*	3	33	5	0	*41*	3	332	3	1	*338*	11	80	3	0	*94*	625
5:15 PM	1	139	6	0	*146*	4	30	1	0	*35*	0	298	1	0	*299*	7	69	1	1	*77*	557
5:30 PM	0	128	3	0	*131*	2	25	0	0	*27*	2	292	2	0	*296*	15	60	2	0	*77*	531
5:45 PM	1	119	0	0	*120*	1	33	2	0	*36*	2	243	1	1	*246*	11	54	0	0	*65*	467
6:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
Hourly Totals (Start Time)																					
4:00 PM	0	615	24	1	639	18	108	8	1	132	3	1157	9	2	1169	50	249	18	2	317	2257
4:15 PM	0	639	14	1	653	18	111	12	1	141	6	1206	8	3	1220	43	270	16	2	329	2343
4:30 PM	1	605	15	0	621	17	118	12	1	147	5	1215	5	2	1225	38	281	11	3	330	2323
4:45 PM	1	572	17	0	590	14	121	10	1	145	5	1232	6	2	1243	43	283	7	2	333	2311
5:00 PM	2	535	12	0	549	10	121	8	0	139	7	1165	7	2	1179	44	263	8	1	313	2180
5:15 PM	2	386	9	0	397	7	88	3	0	98	4	833	4	1	841	33	183	3	1	219	1555
5:30 PM	1	247	3	0	251	3	58	2	0	63	4	535	3	1	542	26	114	2	0	142	998
5:45 PM	1	119	0	0	120	1	33	2	0	36	2	243	1	1	246	11	54	0	0	65	467
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour (Start Time)																					
4:15 PM	0	639	14	1	653	18	111	12	1	141	6	1206	8	3	1220	43	270	16	2	329	2343

Kimley-Horn and Associates, Inc.

Intersection Turning Movement Count Summary

Oneida Street and Peabody Street

Date Counted: 25-May-05
Day of Week: Wednesday
Weather: Sunny, warm

Jurisdiction: Washington, D.C.
Counted by: MO

	Southbound					Westbound on Peabody					Northbound on First					Eastbound on Peabody					Veh.
Start Time	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Total
6:30 AM	0	0	0	0	*0*	0	68	2	0	*70*	11	0	1	1	*12*	0	32	2	0	*34*	116
6:45 AM	0	0	0	0	*0*	0	80	0	0	*80*	10	0	0	1	*10*	0	32	1	0	*33*	123
7:00 AM	0	0	0	3	*0*	0	86	1	0	*87*	8	2	0	4	*10*	0	28	3	0	*31*	128
7:15 AM	0	0	0	7	*0*	0	101	1	0	*102*	4	1	0	1	*5*	0	33	1	1	*34*	141
7:30 AM	0	0	0	0	*0*	1	79	2	0	*82*	5	1	1	0	*7*	1	31	0	0	*32*	121
7:45 AM	1	0	0	2	*1*	0	91	2	0	*93*	6	0	0	0	*6*	1	43	0	1	*44*	144
8:00 AM	0	0	0	0	*0*	0	90	0	0	*90*	4	1	1	0	*6*	0	42	0	0	*42*	138
8:15 AM	0	0	0	0	*0*	0	84	0	0	*84*	3	2	0	0	*5*	0	37	0	0	*37*	126
8:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
8:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
9:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
Hourly Totals (Start Time)																					
6:30 AM	0	0	0	10	0	0	335	4	0	339	33	3	1	7	37	0	125	7	1	132	508
6:45 AM	0	0	0	10	0	1	346	4	0	351	27	4	1	6	32	1	124	5	1	130	513
7:00 AM	1	0	0	12	1	1	357	6	0	364	23	4	1	5	28	2	135	4	2	141	534
7:15 AM	1	0	0	9	1	1	361	5	0	367	19	3	2	1	24	2	149	1	2	152	544
7:30 AM	1	0	0	2	1	1	344	4	0	349	18	4	2	0	24	2	153	0	1	155	529
7:45 AM	1	0	0	2	1	0	265	2	0	267	13	3	1	0	17	1	122	0	1	123	408
8:00 AM	0	0	0	0	0	0	174	0	0	174	7	3	1	0	11	0	79	0	0	79	264
8:15 AM	0	0	0	0	0	0	84	0	0	84	3	2	0	0	5	0	37	0	0	37	126
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour (Start Time)																					
7:15 AM	1	0	0	9	0	1	361	5	0	367	19	3	2	1	24	2	149	1	2	152	544

	Southbound					Westbound on Peabody					Northbound on First					Eastbound on Peabody					Veh.
Start Time	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Left	Thru	Right	Peds	*Total*	Total
4:00 PM	1	0	0	0	*1*	0	37	0	0	*37*	2	0	0	1	*2*	0	79	11	0	*90*	130
4:15 PM	0	0	0	0	*0*	0	28	0	0	*28*	1	0	0	1	*1*	0	57	4	0	*61*	90
4:30 PM	1	0	0	0	*1*	0	38	1	0	*39*	1	0	2	0	*3*	1	53	2	0	*56*	99
4:45 PM	0	0	0	5	*0*	0	30	0	0	*30*	1	0	1	0	*2*	0	59	1	0	*60*	92
5:00 PM	1	0	1	2	*2*	0	16	0	0	*16*	1	0	1	0	*2*	1	62	1	0	*64*	84
5:15 PM	1	1	1	0	*3*	0	32	0	0	*32*	1	0	1	0	*2*	1	59	0	0	*60*	97
5:30 PM	0	0	0	0	*0*	1	52	0	0	*53*	1	0	0	1	*1*	1	76	3	0	*80*	134
5:45 PM	2	0	2	2	*4*	1	31	0	2	*32*	6	0	2	0	*8*	1	56	2	0	*59*	103
6:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
6:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*	0
Hourly Totals (Start Time)																					
4:00 PM	2	0	0	5	2	0	133	1	0	134	5	0	3	2	8	1	248	18	0	267	411
4:15 PM	2	0	1	7	3	0	112	1	0	113	4	0	4	1	8	2	231	8	0	241	365
4:30 PM	3	1	2	7	6	0	116	1	0	117	4	0	5	0	9	3	233	4	0	240	372
4:45 PM	2	1	2	7	5	1	130	0	0	131	4	0	3	1	7	3	256	5	0	264	407
5:00 PM	4	1	4	4	9	2	131	0	2	133	9	0	4	1	13	4	253	6	0	263	418
5:15 PM	3	1	3	2	7	2	115	0	2	117	8	0	3	1	11	3	191	5	0	199	334
5:30 PM	2	0	2	2	4	2	83	0	2	85	7	0	2	1	9	2	132	5	0	139	237
5:45 PM	2	0	2	2	4	1	31	0	2	32	6	0	2	0	8	1	56	2	0	59	103
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour (Start Time)																					
5:00 PM	4	1	4	4	9	2	131	0	2	133	9	0	4	1	13	4	253	6	0	263	409

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			1.00			1.00			1.00	
Flt Protected		0.99			1.00			1.00			1.00	
Satd. Flow (prot)		1814			1854			3530			3522	
Flt Permitted		0.92			0.97			0.90			1.00	
Satd. Flow (perm)		1682			1810			3177			3522	
Volume (vph)	16	87	15	25	315	1	16	423	2	0	1142	31
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	16	90	15	26	325	1	16	436	2	0	1177	32
Lane Group Flow (vph)	0	121	0	0	352	0	0	454	0	0	1209	0
Confl. Peds. (#/hr)	4		7	7		4	4		1	1		4
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0			65.0			65.0	
Effective Green, g (s)		26.0			26.0			66.0			66.0	
Actuated g/C Ratio		0.26			0.26			0.66			0.66	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		437			471			2097			2325	
v/s Ratio Prot											c0.34	
v/s Ratio Perm		0.07			c0.19			0.14				
v/c Ratio		0.28			0.75			0.22			0.52	
Uniform Delay, d1		29.5			34.0			6.7			8.8	
Progression Factor		1.00			1.00			1.00			0.61	
Incremental Delay, d2		1.6			10.4			0.2			0.7	
Delay (s)		31.1			44.3			7.0			6.0	
Level of Service		C			D			A			A	
Approach Delay (s)		31.1			44.3			7.0			6.0	
Approach LOS		C			D			A			A	

Intersection Summary			
HCM Average Control Delay	14.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.58		
Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	B
c Critical Lane Group			

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBT	NBR	SBL2	SBL
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0		4.0			4.0
Lane Util. Factor		1.00					1.00		0.95			1.00
Frpb, ped/bikes		0.98					1.00		1.00			1.00
Flpb, ped/bikes		1.00					0.97		1.00			1.00
Frt		0.96					1.00		0.99			1.00
Flt Protected		0.98					0.97		1.00			0.95
Satd. Flow (prot)		1724					1759		3493			1770
Flt Permitted		0.92					0.83		1.00			0.95
Satd. Flow (perm)		1615					1492		3493			1770
Volume (vph)	4	4	2	1	15	86	86	1	465	34	3	12
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	4	4	2	1	16	92	92	1	500	37	3	13
Lane Group Flow (vph)	0	11	0	0	0	0	201	0	537	0	0	16
Confl. Peds. (#/hr)	10		13	13	13	13		10		14	14	14
Turn Type	Perm				Perm	Perm					Prot	Prot
Protected Phases		4					8				14	14
Permitted Phases	4				8	8			2			
Actuated Green, G (s)		15.0					15.0		60.0			10.0
Effective Green, g (s)		16.0					16.0		61.0			11.0
Actuated g/C Ratio		0.16					0.16		0.61			0.11
Clearance Time (s)		5.0					5.0		5.0			5.0
Lane Grp Cap (vph)		258					239		2131			195
v/s Ratio Prot												0.01
v/s Ratio Perm		0.01					c0.13		0.15			
v/c Ratio		0.04					0.84		0.25			0.08
Uniform Delay, d1		35.5					40.8		9.0			40.0
Progression Factor		1.00					1.00		0.86			1.00
Incremental Delay, d2		0.3					28.5		0.3			0.8
Delay (s)		35.8					69.3		8.0			40.8
Level of Service		D					E		A			D
Approach Delay (s)		35.8					69.3		8.0			
Approach LOS		D					E		A			

Intersection Summary			
HCM Average Control Delay	13.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.3%	ICU Level of Service	D
c Critical Lane Group			

Movement	SBT	SBR	NWL	NWR	NWR2
Lane Configurations					
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0		4.0
Lane Util. Factor	0.95		1.00		0.95
Frpb, ped/bikes	1.00		0.97		0.96
Flpb, ped/bikes	1.00		1.00		1.00
Frt	1.00		0.88		0.85
Flt Protected	1.00		0.99		1.00
Satd. Flow (prot)	3525		1566		1442
Flt Permitted	1.00		0.99		1.00
Satd. Flow (perm)	3525		1566		1442
Volume (vph)	1453	33	11	46	6
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1562	35	12	49	6
Lane Group Flow (vph)	1597	0	61	0	6
Confl. Peds. (#/hr)		4	4	10	14
Turn Type					custom
Protected Phases					
Permitted Phases	6 14		10		2
Actuated Green, G (s)	75.0		10.0		60.0
Effective Green, g (s)	76.0		11.0		61.0
Actuated g/C Ratio	0.76		0.11		0.61
Clearance Time (s)			5.0		5.0
Lane Grp Cap (vph)	2679		172		880
v/s Ratio Prot					
v/s Ratio Perm	c0.45		0.04		0.00
v/c Ratio	0.60		0.35		0.01
Uniform Delay, d1	5.3		41.2		7.6
Progression Factor	1.00		1.00		1.00
Incremental Delay, d2	1.0		5.6		0.0
Delay (s)	6.3		46.9		7.7
Level of Service	A		D		A
Approach Delay (s)	6.6		43.3		
Approach LOS	A		D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	149	1	1	361	5	19	3	2	1	0	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (veh/h)	2	155	1	1	376	5	20	3	2	1	0	0
Pedestrians		2						1				
Lane Width (ft)		12.0						12.0				
Walking Speed (ft/s)		4.0						4.0				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)					351							
pX, platoon unblocked												
vC, conflicting volume	381			157			544	544	157	544	542	381
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	381			157			544	544	157	544	542	381
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			96	99	100	100	100	100
cM capacity (veh/h)	1177			1421			448	445	888	445	446	665

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	158	382	25	1
Volume Left	2	1	20	1
Volume Right	1	5	2	0
cSH	1177	1421	467	445
Volume to Capacity	0.00	0.00	0.05	0.00
Queue Length (ft)	0	0	4	0
Control Delay (s)	0.1	0.0	13.1	13.1
Lane LOS	A	A	B	B
Approach Delay (s)	0.1	0.0	13.1	13.1
Approach LOS			B	B

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	31.1%	ICU Level of Service	A

Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	2	5	6	355	131	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	2	5	7	386	142	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)			569			
pX, platoon unblocked						
vC, conflicting volume	392				209	199
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	392				209	199
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				82	99
cM capacity (veh/h)	1166				778	842

Direction, Lane #	EB 1	WB 1	SE 1
Volume Total	8	392	148
Volume Left	2	0	142
Volume Right	0	386	5
cSH	1166	1700	780
Volume to Capacity	0.00	0.23	0.19
Queue Length (ft)	0	0	17
Control Delay (s)	2.3	0.0	10.7
Lane LOS	A		B
Approach Delay (s)	2.3	0.0	10.7
Approach LOS			B

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	39.1%	ICU Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (veh/h)	0	0	0	18	133	6	1	6	8	7	8	15
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (veh/h)	0	0	0	21	158	7	1	7	10	8	10	18

Direction, Lane #	WB 1	NE 1	SW 1
Volume Total (vph)	187	18	36
Volume Left (vph)	21	1	8
Volume Right (vph)	7	10	18
Hadj (s)	0.0	-0.3	-0.2
Departure Headway (s)	4.0	4.0	4.1
Degree Utilization, x	0.21	0.02	0.04
Capacity (veh/h)	876	844	844
Control Delay (s)	8.1	7.1	7.3
Approach Delay (s)	8.1	7.1	7.3
Approach LOS	A	A	A

Intersection Summary				
Delay			7.9	
HCM Level of Service			A	
Intersection Capacity Utilization		24.6%	ICU Level of Service	A

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	13	131	312	7	8	19
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (veh/h)	15	154	367	8	9	22
Pedestrians					18	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					2	
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	393				574	389
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	393				574	389
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				98	97
cM capacity (veh/h)	1148				467	649

Direction, Lane #	EB 1	WB 1	SW 1
Volume Total	169	375	32
Volume Left	15	0	9
Volume Right	0	8	22
cSH	1148	1700	582
Volume to Capacity	0.01	0.22	0.05
Queue Length (ft)	1	0	4
Control Delay (s)	0.8	0.0	11.5
Lane LOS	A		B
Approach Delay (s)	0.8	0.0	11.5
Approach LOS			B

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	29.9%	ICU Level of Service	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	1	7	418	5	5	1187
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (veh/h)	1	9	516	6	6	1465
Pedestrians	1					1
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			410			598
pX, platoon unblocked	0.81					
vC, conflicting volume	1265	263			523	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1088	263			523	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			99	
cM capacity (veh/h)	168	734			1039	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	10	344	178	495	977
Volume Left	1	0	0	6	0
Volume Right	9	0	6	0	0
cSH	517	1700	1700	1039	1700
Volume to Capacity	0.02	0.20	0.10	0.01	0.57
Queue Length (ft)	1	0	0	0	0
Control Delay (s)	12.1	0.0	0.0	0.2	0.0
Lane LOS	B			A	
Approach Delay (s)	12.1	0.0		0.1	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	53.0%	ICU Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↕			↕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			1.00			1.00	
Flt Protected		0.99			0.99			1.00			1.00	
Satd. Flow (prot)		1835			1826			3534			3525	
Flt Permitted		0.95			0.92			0.95			1.00	
Satd. Flow (perm)		1748			1684			3366			3525	
Volume (vph)	43	270	16	18	111	12	6	1206	8	0	639	14
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	46	287	17	19	118	13	6	1283	9	0	680	15
Lane Group Flow (vph)	0	350	0	0	150	0	0	1298	0	0	695	0
Confl. Peds. (#/hr)	4		7	7		4	4		1	1		4
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0			65.0			65.0	
Effective Green, g (s)		26.0			26.0			66.0			66.0	
Actuated g/C Ratio		0.26			0.26			0.66			0.66	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		454			438			2222			2327	
v/s Ratio Prot											0.20	
v/s Ratio Perm		c0.20			0.09			c0.39				
v/c Ratio		0.77			0.34			0.58			0.30	
Uniform Delay, d1		34.2			30.1			9.4			7.2	
Progression Factor		1.00			1.00			1.00			0.77	
Incremental Delay, d2		12.0			2.1			1.1			0.3	
Delay (s)		46.2			32.2			10.5			5.9	
Level of Service		D			C			B			A	
Approach Delay (s)		46.2			32.2			10.5			5.9	
Approach LOS		D			C			B			A	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.8%	ICU Level of Service	C
c Critical Lane Group			

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL2
Lane Configurations		↔					↔			↑↑		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0			4.0		
Lane Util. Factor		1.00					1.00			0.95		
Frpb, ped/bikes		0.98					0.99			1.00		
Flpb, ped/bikes		1.00					0.98			1.00		
Frt		0.96					0.96			0.99		
Flt Protected		0.99					0.98			1.00		
Satd. Flow (prot)		1725					1694			3503		
Flt Permitted		0.93					0.87			0.86		
Satd. Flow (perm)		1631					1511			3021		
Volume (vph)	14	26	10	7	3	45	33	39	2	1392	79	9
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	14	26	10	7	3	45	33	39	2	1406	80	9
Lane Group Flow (vph)	0	57	0	0	0	0	120	0	0	1488	0	0
Confl. Peds. (#/hr)	10		13	13	13	13		10	4		14	14
Turn Type	Perm				Perm	Perm			custom			Prot
Protected Phases		4					8					14
Permitted Phases	4				8	8			2	2		
Actuated Green, G (s)		15.0					15.0			60.0		
Effective Green, g (s)		16.0					16.0			61.0		
Actuated g/C Ratio		0.16					0.16			0.61		
Clearance Time (s)		5.0					5.0			5.0		
Lane Grp Cap (vph)		261					242			1843		
v/s Ratio Prot												
v/s Ratio Perm		0.03					c0.08			c0.49		
v/c Ratio		0.22					0.50			0.81		
Uniform Delay, d1		36.6					38.3			15.0		
Progression Factor		1.00					1.00			0.66		
Incremental Delay, d2		1.9					7.1			3.5		
Delay (s)		38.5					45.4			13.4		
Level of Service		D					D			B		
Approach Delay (s)		38.5					45.4			13.4		
Approach LOS		D					D			B		

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.73		
Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	99.4%	ICU Level of Service	E
c Critical Lane Group			

Movement	SBL	SBT	SBR	NWL	NWR	NWR2
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0		4.0
Lane Util. Factor	1.00	0.95		1.00		0.95
Frpb, ped/bikes	1.00	1.00		0.96		0.96
Flpb, ped/bikes	1.00	1.00		1.00		1.00
Frt	1.00	1.00		0.86		0.85
Flt Protected	0.95	1.00		1.00		1.00
Satd. Flow (prot)	1770	3520		1531		1442
Flt Permitted	0.95	1.00		1.00		1.00
Satd. Flow (perm)	1770	3520		1531		1442
Volume (vph)	58	599	18	4	100	15
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	59	605	18	4	101	15
Lane Group Flow (vph)	68	623	0	105	0	15
Confl. Peds. (#/hr)	14		4	4	10	14
Turn Type	Prot					custom
Protected Phases	14					
Permitted Phases		6 14		10		2
Actuated Green, G (s)	10.0	75.0		10.0		60.0
Effective Green, g (s)	11.0	76.0		11.0		61.0
Actuated g/C Ratio	0.11	0.76		0.11		0.61
Clearance Time (s)	5.0			5.0		5.0
Lane Grp Cap (vph)	195	2675		168		880
v/s Ratio Prot	0.04					
v/s Ratio Perm		0.18		c0.07		0.01
v/c Ratio	0.35	0.23		0.62		0.02
Uniform Delay, d1	41.2	3.5		42.5		7.7
Progression Factor	1.00	1.00		1.00		1.00
Incremental Delay, d2	4.9	0.2		16.3		0.0
Delay (s)	46.0	3.7		58.8		7.7
Level of Service	D	A		E		A
Approach Delay (s)		7.9		52.4		
Approach LOS		A		D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	253	6	2	131	0	9	0	4	4	1	4
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Hourly flow rate (veh/h)	5	333	8	3	172	0	12	0	5	5	1	5
Pedestrians		2						1				
Lane Width (ft)		12.0						12.0				
Walking Speed (ft/s)		4.0						4.0				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)					351							
pX, platoon unblocked												
vC, conflicting volume	172			342			534	526	338	530	530	174
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	172			342			534	526	338	530	530	174
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			97	100	99	99	100	99
cM capacity (veh/h)	1405			1216			450	454	704	454	451	868

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	346	175	17	12
Volume Left	5	3	12	5
Volume Right	8	0	5	5
cSH	1405	1216	506	575
Volume to Capacity	0.00	0.00	0.03	0.02
Queue Length (ft)	0	0	3	2
Control Delay (s)	0.2	0.1	12.4	11.4
Lane LOS	A	A	B	B
Approach Delay (s)	0.2	0.1	12.4	11.4
Approach LOS			B	B

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	30.4%	ICU Level of Service	A

Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	2	5	6	355	131	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	2	5	7	386	142	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)			569			
pX, platoon unblocked						
vC, conflicting volume	392				209	199
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	392				209	199
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				82	99
cM capacity (veh/h)	1166				778	842

Direction, Lane #	EB 1	WB 1	SE 1
Volume Total	8	392	148
Volume Left	2	0	142
Volume Right	0	386	5
cSH	1166	1700	780
Volume to Capacity	0.00	0.23	0.19
Queue Length (ft)	0	0	17
Control Delay (s)	2.3	0.0	10.7
Lane LOS	A		B
Approach Delay (s)	2.3	0.0	10.7
Approach LOS			B

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	39.1%	ICU Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (veh/h)	0	0	0	6	26	7	5	11	66	16	8	6
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (veh/h)	0	0	0	6	28	7	5	12	70	17	9	6

Direction, Lane #	WB 1	NE 1	SW 1
Volume Total (vph)	41	87	32
Volume Left (vph)	6	5	17
Volume Right (vph)	7	70	6
Hadj (s)	0.0	-0.4	0.0
Departure Headway (s)	4.1	3.6	4.1
Degree Utilization, x	0.05	0.09	0.04
Capacity (veh/h)	855	982	867
Control Delay (s)	7.3	6.9	7.2
Approach Delay (s)	7.3	6.9	7.2
Approach LOS	A	A	A

Intersection Summary					
Delay			7.1		
HCM Level of Service			A		
Intersection Capacity Utilization			16.7%	ICU Level of Service	A

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	62	270	143	8	10	5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (veh/h)	65	281	149	8	10	5
Pedestrians					18	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					2	
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	175				582	171
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	175				582	171
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				98	99
cM capacity (veh/h)	1380				446	860

Direction, Lane #	EB 1	WB 1	SW 1
Volume Total	346	157	16
Volume Left	65	0	10
Volume Right	0	8	5
cSH	1380	1700	532
Volume to Capacity	0.05	0.09	0.03
Queue Length (ft)	4	0	2
Control Delay (s)	1.8	0.0	12.0
Lane LOS	A		B
Approach Delay (s)	1.8	0.0	12.0
Approach LOS			B

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	42.4%	ICU Level of Service	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	4	3	1115	4	3	517
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (veh/h)	4	3	1253	4	3	581
Pedestrians	1					1
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			410			598
pX, platoon unblocked						
vC, conflicting volume	1553	631			1258	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1553	631			1258	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	96	99			99	
cM capacity (veh/h)	103	423			548	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	8	835	422	197	387
Volume Left	4	0	0	3	0
Volume Right	3	0	4	0	0
cSH	153	1700	1700	548	1700
Volume to Capacity	0.05	0.49	0.25	0.01	0.23
Queue Length (ft)	4	0	0	0	0
Control Delay (s)	29.8	0.0	0.0	0.3	0.0
Lane LOS	D			A	
Approach Delay (s)	29.8	0.0		0.1	
Approach LOS	D				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	45.1%	ICU Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↕			↕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			1.00			1.00			1.00	
Flt Protected		0.99			1.00			1.00			1.00	
Satd. Flow (prot)		1813			1854			3530			3522	
Flt Permitted		0.90			0.97			0.89			1.00	
Satd. Flow (perm)		1641			1809			3140			3522	
Volume (vph)	17	91	16	26	328	1	17	440	2	0	1188	32
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	18	94	16	27	338	1	18	454	2	0	1225	33
Lane Group Flow (vph)	0	128	0	0	366	0	0	474	0	0	1258	0
Confl. Peds. (#/hr)	4		7	7		4	4		1	1		4
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0			65.0			65.0	
Effective Green, g (s)		26.0			26.0			66.0			66.0	
Actuated g/C Ratio		0.26			0.26			0.66			0.66	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		427			470			2072			2325	
v/s Ratio Prot											c0.36	
v/s Ratio Perm		0.08			c0.20			0.15				
v/c Ratio		0.30			0.78			0.23			0.54	
Uniform Delay, d1		29.7			34.3			6.8			9.0	
Progression Factor		1.00			1.00			1.00			0.60	
Incremental Delay, d2		1.8			12.0			0.3			0.7	
Delay (s)		31.5			46.4			7.1			6.1	
Level of Service		C			D			A			A	
Approach Delay (s)		31.5			46.4			7.1			6.1	
Approach LOS		C			D			A			A	

Intersection Summary			
HCM Average Control Delay	14.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	B
c Critical Lane Group			

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBT	NBR	SBL2	SBL
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0		4.0			4.0
Lane Util. Factor		1.00					1.00		0.95			1.00
Frpb, ped/bikes		0.98					1.00		1.00			1.00
Flpb, ped/bikes		1.00					0.97		1.00			1.00
Frt		0.96					1.00		0.99			1.00
Flt Protected		0.98					0.97		1.00			0.95
Satd. Flow (prot)		1724					1759		3493			1770
Flt Permitted		0.92					0.83		1.00			0.95
Satd. Flow (perm)		1608					1492		3493			1770
Volume (vph)	4	4	2	1	16	89	89	1	484	35	3	12
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	4	4	2	1	17	96	96	1	520	38	3	13
Lane Group Flow (vph)	0	11	0	0	0	0	210	0	558	0	0	16
Confl. Peds. (#/hr)	10		13	13	13	13		10		14	14	14
Turn Type	Perm				Perm	Perm					Prot	Prot
Protected Phases		4					8				14	14
Permitted Phases	4				8	8			2			
Actuated Green, G (s)		15.0					15.0		60.0			10.0
Effective Green, g (s)		16.0					16.0		61.0			11.0
Actuated g/C Ratio		0.16					0.16		0.61			0.11
Clearance Time (s)		5.0					5.0		5.0			5.0
Lane Grp Cap (vph)		257					239		2131			195
v/s Ratio Prot												0.01
v/s Ratio Perm		0.01					c0.14		0.16			
v/c Ratio		0.04					0.88		0.26			0.08
Uniform Delay, d1		35.5					41.1		9.1			40.0
Progression Factor		1.00					1.00		0.86			1.00
Incremental Delay, d2		0.3					33.7		0.3			0.8
Delay (s)		35.8					74.8		8.0			40.8
Level of Service		D					E		A			D
Approach Delay (s)		35.8					74.8		8.0			
Approach LOS		D					E		A			

Intersection Summary			
HCM Average Control Delay	13.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.5%	ICU Level of Service	D
c Critical Lane Group			

Movement	SBT	SBR	NWL	NWR	NWR2
Lane Configurations					
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0		4.0
Lane Util. Factor	0.95		1.00		0.95
Frpb, ped/bikes	1.00		0.97		0.96
Flpb, ped/bikes	1.00		1.00		1.00
Frt	1.00		0.88		0.85
Flt Protected	1.00		0.99		1.00
Satd. Flow (prot)	3525		1564		1442
Flt Permitted	1.00		0.99		1.00
Satd. Flow (perm)	3525		1564		1442
Volume (vph)	1512	34	11	48	6
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1626	37	12	52	6
Lane Group Flow (vph)	1663	0	64	0	6
Confl. Peds. (#/hr)		4	4	10	14
Turn Type					custom
Protected Phases					
Permitted Phases	6 14		10		2
Actuated Green, G (s)	75.0		10.0		60.0
Effective Green, g (s)	76.0		11.0		61.0
Actuated g/C Ratio	0.76		0.11		0.61
Clearance Time (s)			5.0		5.0
Lane Grp Cap (vph)	2679		172		880
v/s Ratio Prot					
v/s Ratio Perm	c0.47		0.04		0.00
v/c Ratio	0.62		0.37		0.01
Uniform Delay, d1	5.5		41.3		7.6
Progression Factor	1.00		1.00		1.00
Incremental Delay, d2	1.1		6.1		0.0
Delay (s)	6.5		47.4		7.7
Level of Service	A		D		A
Approach Delay (s)	6.9		44.0		
Approach LOS	A		D		
Intersection Summary					

HCM Unsignalized Intersection Capacity Analysis
5: Peabody Street & First Street

07/07/2005

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	155	1	1	376	5	20	3	2	1	0	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (veh/h)	2	161	1	1	392	5	21	3	2	1	0	0
Pedestrians		2						1				
Lane Width (ft)		12.0						12.0				
Walking Speed (ft/s)		4.0						4.0				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)					351							
pX, platoon unblocked												
vC, conflicting volume	397			164			566	566	163	566	564	396
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	397			164			566	566	163	566	564	396
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			95	99	100	100	100	100
cM capacity (veh/h)	1162			1414			433	432	881	430	433	652

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	165	398	26	1
Volume Left	2	1	21	1
Volume Right	1	5	2	0
cSH	1162	1414	451	430
Volume to Capacity	0.00	0.00	0.06	0.00
Queue Length (ft)	0	0	5	0
Control Delay (s)	0.1	0.0	13.5	13.4
Lane LOS	A	A	B	B
Approach Delay (s)	0.1	0.0	13.5	13.4
Approach LOS			B	B

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	31.9%	ICU Level of Service	A

Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	2	5	6	355	131	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	2	5	7	386	142	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)			569			
pX, platoon unblocked						
vC, conflicting volume	392				209	199
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	392				209	199
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				82	99
cM capacity (veh/h)	1166				778	842

Direction, Lane #	EB 1	WB 1	SE 1
Volume Total	8	392	148
Volume Left	2	0	142
Volume Right	0	386	5
cSH	1166	1700	780
Volume to Capacity	0.00	0.23	0.19
Queue Length (ft)	0	0	17
Control Delay (s)	2.3	0.0	10.7
Lane LOS	A		B
Approach Delay (s)	2.3	0.0	10.7
Approach LOS			B

Intersection Summary			
Average Delay		2.9	
Intersection Capacity Utilization		39.1%	ICU Level of Service A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (veh/h)	0	0	0	19	138	6	1	6	8	7	8	16
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (veh/h)	0	0	0	23	164	7	1	7	10	8	10	19

Direction, Lane #	WB 1	NE 1	SW 1
Volume Total (vph)	194	18	37
Volume Left (vph)	23	1	8
Volume Right (vph)	7	10	19
Hadj (s)	0.0	-0.3	-0.2
Departure Headway (s)	4.0	4.1	4.1
Degree Utilization, x	0.22	0.02	0.04
Capacity (veh/h)	875	840	842
Control Delay (s)	8.2	7.1	7.3
Approach Delay (s)	8.2	7.1	7.3
Approach LOS	A	A	A

Intersection Summary				
Delay		8.0		
HCM Level of Service		A		
Intersection Capacity Utilization	25.5%	ICU Level of Service	A	

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	14	136	325	7	8	20
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (veh/h)	16	160	382	8	9	24
Pedestrians					18	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					2	
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	409				597	404
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	409				597	404
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				98	96
cM capacity (veh/h)	1133				452	637

Direction, Lane #	EB 1	WB 1	SW 1
Volume Total	176	391	33
Volume Left	16	0	9
Volume Right	0	8	24
cSH	1133	1700	570
Volume to Capacity	0.01	0.23	0.06
Queue Length (ft)	1	0	5
Control Delay (s)	0.9	0.0	11.7
Lane LOS	A		B
Approach Delay (s)	0.9	0.0	11.7
Approach LOS			B

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	30.7%	ICU Level of Service	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	1	7	435	5	5	1235
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (veh/h)	1	9	537	6	6	1525
Pedestrians	1					1
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			410			598
pX, platoon unblocked	0.79					
vC, conflicting volume	1316	274			544	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1130	274			544	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			99	
cM capacity (veh/h)	154	723			1020	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	10	358	185	514	1016
Volume Left	1	0	0	6	0
Volume Right	9	0	6	0	0
cSH	495	1700	1700	1020	1700
Volume to Capacity	0.02	0.21	0.11	0.01	0.60
Queue Length (ft)	2	0	0	0	0
Control Delay (s)	12.4	0.0	0.0	0.2	0.0
Lane LOS	B			A	
Approach Delay (s)	12.4	0.0		0.1	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	54.8%	ICU Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↕			↕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.99			1.00			1.00	
Flt Protected		0.99			0.99			1.00			1.00	
Satd. Flow (prot)		1835			1827			3534			3525	
Flt Permitted		0.94			0.90			0.95			1.00	
Satd. Flow (perm)		1744			1661			3367			3525	
Volume (vph)	45	281	17	19	116	12	6	1255	8	0	665	15
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	48	299	18	20	123	13	6	1335	9	0	707	16
Lane Group Flow (vph)	0	365	0	0	156	0	0	1350	0	0	723	0
Confl. Peds. (#/hr)	4		7	7		4	4		1	1		4
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0			65.0			65.0	
Effective Green, g (s)		26.0			26.0			66.0			66.0	
Actuated g/C Ratio		0.26			0.26			0.66			0.66	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		453			432			2222			2327	
v/s Ratio Prot											0.21	
v/s Ratio Perm		c0.21			0.09			c0.40				
v/c Ratio		0.81			0.36			0.61			0.31	
Uniform Delay, d1		34.6			30.2			9.6			7.3	
Progression Factor		1.00			1.00			1.00			0.76	
Incremental Delay, d2		14.2			2.3			1.2			0.3	
Delay (s)		48.8			32.6			10.9			5.9	
Level of Service		D			C			B			A	
Approach Delay (s)		48.8			32.6			10.9			5.9	
Approach LOS		D			C			B			A	

Intersection Summary			
HCM Average Control Delay	16.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.1%	ICU Level of Service	D
c Critical Lane Group			

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL2
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0			4.0		
Lane Util. Factor		1.00					1.00			0.95		
Frpb, ped/bikes		0.98					0.99			1.00		
Flpb, ped/bikes		1.00					0.98			1.00		
Frt		0.96					0.96			0.99		
Flt Protected		0.99					0.98			1.00		
Satd. Flow (prot)		1728					1694			3503		
Flt Permitted		0.93					0.88			0.86		
Satd. Flow (perm)		1629					1515			3021		
Volume (vph)	15	27	10	7	3	47	34	41	2	1449	82	9
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	15	27	10	7	3	47	34	41	2	1464	83	9
Lane Group Flow (vph)	0	59	0	0	0	0	125	0	0	1549	0	0
Confl. Peds. (#/hr)	10		13	13	13	13		10	4		14	14
Turn Type	Perm				Perm	Perm			custom			Prot
Protected Phases		4					8					14
Permitted Phases	4				8	8			2	2		
Actuated Green, G (s)		15.0					15.0			60.0		
Effective Green, g (s)		16.0					16.0			61.0		
Actuated g/C Ratio		0.16					0.16			0.61		
Clearance Time (s)		5.0					5.0			5.0		
Lane Grp Cap (vph)		261					242			1843		
v/s Ratio Prot												
v/s Ratio Perm		0.04					c0.08			c0.51		
v/c Ratio		0.23					0.52			0.84		
Uniform Delay, d1		36.6					38.5			15.6		
Progression Factor		1.00					1.00			0.66		
Incremental Delay, d2		2.0					7.7			4.2		
Delay (s)		38.6					46.1			14.5		
Level of Service		D					D			B		
Approach Delay (s)		38.6					46.1			14.5		
Approach LOS		D					D			B		

Intersection Summary			
HCM Average Control Delay	16.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.76		
Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.1%	ICU Level of Service	F
c Critical Lane Group			

Movement	SBL	SBT	SBR	NWL	NWR	NWR2
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0		4.0
Lane Util. Factor	1.00	0.95		1.00		0.95
Frpb, ped/bikes	1.00	1.00		0.96		0.96
Flpb, ped/bikes	1.00	1.00		1.00		1.00
Frt	1.00	1.00		0.86		0.85
Flt Protected	0.95	1.00		1.00		1.00
Satd. Flow (prot)	1770	3520		1530		1442
Flt Permitted	0.95	1.00		1.00		1.00
Satd. Flow (perm)	1770	3520		1530		1442
Volume (vph)	60	623	19	4	104	16
Peak-hour factor, PHF	0.99	0.99	0.99	0.90	0.99	0.99
Adj. Flow (vph)	61	629	19	4	105	16
Lane Group Flow (vph)	70	648	0	109	0	16
Confl. Peds. (#/hr)	14		4	4	10	14
Turn Type	Prot					custom
Protected Phases	14					
Permitted Phases		6 14		10		2
Actuated Green, G (s)	10.0	75.0		10.0		60.0
Effective Green, g (s)	11.0	76.0		11.0		61.0
Actuated g/C Ratio	0.11	0.76		0.11		0.61
Clearance Time (s)	5.0			5.0		5.0
Lane Grp Cap (vph)	195	2675		168		880
v/s Ratio Prot	0.04					
v/s Ratio Perm		0.18		c0.07		0.01
v/c Ratio	0.36	0.24		0.65		0.02
Uniform Delay, d1	41.2	3.5		42.6		7.7
Progression Factor	1.00	1.00		1.00		1.00
Incremental Delay, d2	5.1	0.2		17.8		0.0
Delay (s)	46.3	3.7		60.4		7.7
Level of Service	D	A		E		A
Approach Delay (s)		7.9		53.7		
Approach LOS		A		D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	263	6	2	136	0	9	0	4	4	1	4
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Hourly flow rate (veh/h)	5	346	8	3	179	0	12	0	5	5	1	5
Pedestrians		2						1				
Lane Width (ft)		12.0						12.0				
Walking Speed (ft/s)		4.0						4.0				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)					351							
pX, platoon unblocked												
vC, conflicting volume	179			355			554	546	351	550	550	181
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	179			355			554	546	351	550	550	181
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			97	100	99	99	100	99
cM capacity (veh/h)	1397			1203			436	442	692	440	440	860

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	359	182	17	12
Volume Left	5	3	12	5
Volume Right	8	0	5	5
cSH	1397	1203	492	562
Volume to Capacity	0.00	0.00	0.03	0.02
Queue Length (ft)	0	0	3	2
Control Delay (s)	0.1	0.1	12.6	11.5
Lane LOS	A	A	B	B
Approach Delay (s)	0.1	0.1	12.6	11.5
Approach LOS			B	B

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	31.1%	ICU Level of Service	A

Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	2	5	6	355	131	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	2	5	7	386	142	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)			569			
pX, platoon unblocked						
vC, conflicting volume	392				209	199
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	392				209	199
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				82	99
cM capacity (veh/h)	1166				778	842

Direction, Lane #	EB 1	WB 1	SE 1
Volume Total	8	392	148
Volume Left	2	0	142
Volume Right	0	386	5
cSH	1166	1700	780
Volume to Capacity	0.00	0.23	0.19
Queue Length (ft)	0	0	17
Control Delay (s)	2.3	0.0	10.7
Lane LOS	A		B
Approach Delay (s)	2.3	0.0	10.7
Approach LOS			B

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	39.1%	ICU Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (veh/h)	0	0	0	6	27	7	5	11	69	17	8	6
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (veh/h)	0	0	0	6	29	7	5	12	73	18	9	6

Direction, Lane #	WB 1	NE 1	SW 1
Volume Total (vph)	43	90	33
Volume Left (vph)	6	5	18
Volume Right (vph)	7	73	6
Hadj (s)	0.0	-0.4	0.0
Departure Headway (s)	4.1	3.6	4.1
Degree Utilization, x	0.05	0.09	0.04
Capacity (veh/h)	853	982	865
Control Delay (s)	7.3	6.9	7.2
Approach Delay (s)	7.3	6.9	7.2
Approach LOS	A	A	A

Intersection Summary				
Delay		7.1		
HCM Level of Service		A		
Intersection Capacity Utilization	17.0%	ICU Level of Service	A	

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	65	281	149	8	10	5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (veh/h)	68	293	155	8	10	5
Pedestrians					18	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					2	
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	182				606	177
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	182				606	177
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				98	99
cM capacity (veh/h)	1373				431	853

Direction, Lane #	EB 1	WB 1	SW 1
Volume Total	360	164	16
Volume Left	68	0	10
Volume Right	0	8	5
cSH	1373	1700	516
Volume to Capacity	0.05	0.10	0.03
Queue Length (ft)	4	0	2
Control Delay (s)	1.8	0.0	12.2
Lane LOS	A		B
Approach Delay (s)	1.8	0.0	12.2
Approach LOS			B

Intersection Summary			
Average Delay		1.6	
Intersection Capacity Utilization		43.3%	ICU Level of Service A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	4	3	1160	4	3	538
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (veh/h)	4	3	1303	4	3	604
Pedestrians	1					1
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			410			598
pX, platoon unblocked	1.00					
vC, conflicting volume	1616	656			1309	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1615	656			1309	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	95	99			99	
cM capacity (veh/h)	94	407			524	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	8	869	439	205	403
Volume Left	4	0	0	3	0
Volume Right	3	0	4	0	0
cSH	140	1700	1700	524	1700
Volume to Capacity	0.06	0.51	0.26	0.01	0.24
Queue Length (ft)	4	0	0	0	0
Control Delay (s)	32.2	0.0	0.0	0.3	0.0
Lane LOS	D			A	
Approach Delay (s)	32.2	0.0		0.1	
Approach LOS	D				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	46.5%	ICU Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		0.99			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.96			1.00			1.00			1.00	
Flt Protected		0.99			1.00			1.00			1.00	
Satd. Flow (prot)		1755			1854			3527			3522	
Flt Permitted		0.89			0.97			0.85			1.00	
Satd. Flow (perm)		1573			1802			3006			3522	
Volume (vph)	21	94	56	26	329	1	25	440	2	0	1188	32
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	22	97	58	27	339	1	26	454	2	0	1225	33
Lane Group Flow (vph)	0	177	0	0	367	0	0	482	0	0	1258	0
Confl. Peds. (#/hr)	4		7	7		4	4		1	1		4
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.0			25.0			65.0			65.0	
Effective Green, g (s)		26.0			26.0			66.0			66.0	
Actuated g/C Ratio		0.26			0.26			0.66			0.66	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		409			469			1984			2325	
v/s Ratio Prot											c0.36	
v/s Ratio Perm		0.11			c0.20			0.16				
v/c Ratio		0.43			0.78			0.24			0.54	
Uniform Delay, d1		30.9			34.4			6.9			9.0	
Progression Factor		1.00			1.00			1.00			0.20	
Incremental Delay, d2		3.3			12.3			0.3			0.6	
Delay (s)		34.2			46.6			7.2			2.4	
Level of Service		C			D			A			A	
Approach Delay (s)		34.2			46.6			7.2			2.4	
Approach LOS		C			D			A			A	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.0%	ICU Level of Service	C
c Critical Lane Group			

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBT	NBR	SBL2	SBL
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0		4.0			4.0
Lane Util. Factor		1.00					1.00		0.95			1.00
Frpb, ped/bikes		0.99					1.00		1.00			1.00
Flpb, ped/bikes		0.99					0.97		1.00			1.00
Frt		0.98					1.00		0.99			1.00
Flt Protected		0.97					0.97		1.00			0.95
Satd. Flow (prot)		1745					1760		3494			1770
Flt Permitted		0.82					0.82		1.00			0.95
Satd. Flow (perm)		1473					1487		3494			1770
Volume (vph)	15	5	2	1	16	89	89	1	489	35	3	12
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	16	5	2	1	17	96	96	1	526	38	3	13
Lane Group Flow (vph)	0	24	0	0	0	0	210	0	564	0	0	16
Confl. Peds. (#/hr)	10		13	13	13	13		10		14	14	14
Turn Type	Perm				Perm	Perm					Prot	Prot
Protected Phases		4					8				14	14
Permitted Phases	4				8	8			2			
Actuated Green, G (s)		27.0					27.0		44.0			14.0
Effective Green, g (s)		28.0					28.0		45.0			15.0
Actuated g/C Ratio		0.28					0.28		0.45			0.15
Clearance Time (s)		5.0					5.0		5.0			5.0
Lane Grp Cap (vph)		412					416		1572			266
v/s Ratio Prot												0.01
v/s Ratio Perm		0.02					c0.14		0.16			
v/c Ratio		0.06					0.50		0.36			0.06
Uniform Delay, d1		26.3					30.2		18.0			36.5
Progression Factor		1.00					1.00		0.89			1.00
Incremental Delay, d2		0.3					4.3		0.6			0.4
Delay (s)		26.6					34.5		16.6			36.9
Level of Service		C					C		B			D
Approach Delay (s)		26.6					34.5		16.6			
Approach LOS		C					C		B			

Intersection Summary			
HCM Average Control Delay	17.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.6%	ICU Level of Service	D
c Critical Lane Group			

Movement	SBT	SBR	NWL	NWR	NWR2
Lane Configurations					
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0		4.0
Lane Util. Factor	0.95		1.00		0.95
Frpb, ped/bikes	1.00		0.97		0.96
Flpb, ped/bikes	1.00		1.00		1.00
Frt	1.00		0.88		0.85
Flt Protected	1.00		0.99		1.00
Satd. Flow (prot)	3524		1575		1442
Flt Permitted	1.00		0.99		1.00
Satd. Flow (perm)	3524		1575		1442
Volume (vph)	1513	37	11	48	6
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1627	40	12	52	6
Lane Group Flow (vph)	1667	0	64	0	6
Confl. Peds. (#/hr)		4	4	10	14
Turn Type					custom
Protected Phases					
Permitted Phases	6 14		10		2
Actuated Green, G (s)	63.0		14.0		44.0
Effective Green, g (s)	64.0		15.0		45.0
Actuated g/C Ratio	0.64		0.15		0.45
Clearance Time (s)			5.0		5.0
Lane Grp Cap (vph)	2255		236		649
v/s Ratio Prot					
v/s Ratio Perm	c0.47		0.04		0.00
v/c Ratio	0.74		0.27		0.01
Uniform Delay, d1	12.3		37.7		15.2
Progression Factor	1.00		1.00		1.00
Incremental Delay, d2	2.2		2.8		0.0
Delay (s)	14.5		40.5		15.2
Level of Service	B		D		B
Approach Delay (s)	14.7		38.3		
Approach LOS	B		D		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	3	170	1	1	379	8	20	3	3	16	3	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (veh/h)	3	177	1	1	395	8	21	3	3	17	3	2
Pedestrians		2						1				
Lane Width (ft)		12.0						12.0				
Walking Speed (ft/s)		4.0						4.0				
Percent Blockage		0						0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)					312							
pX, platoon unblocked												
vC, conflicting volume	403			179			592	590	179	590	586	401
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	403			179			592	590	179	590	586	401
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			95	99	100	96	99	100
cM capacity (veh/h)	1156			1395			412	418	864	414	420	648

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	181	404	27	22
Volume Left	3	1	21	17
Volume Right	1	8	3	2
cSH	1156	1395	439	430
Volume to Capacity	0.00	0.00	0.06	0.05
Queue Length (ft)	0	0	5	4
Control Delay (s)	0.2	0.0	13.7	13.8
Lane LOS	A	A	B	B
Approach Delay (s)	0.2	0.0	13.7	13.8
Approach LOS			B	B

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	32.3%	ICU Level of Service	A

Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	2	5	6	355	131	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	2	5	7	386	142	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)			569			
pX, platoon unblocked						
vC, conflicting volume	392				209	199
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	392				209	199
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				82	99
cM capacity (veh/h)	1166				778	842

Direction, Lane #	EB 1	WB 1	SE 1
Volume Total	8	392	148
Volume Left	2	0	142
Volume Right	0	386	5
cSH	1166	1700	780
Volume to Capacity	0.00	0.23	0.19
Queue Length (ft)	0	0	17
Control Delay (s)	2.3	0.0	10.7
Lane LOS	A		B
Approach Delay (s)	2.3	0.0	10.7
Approach LOS			B

Intersection Summary			
Average Delay		2.9	
Intersection Capacity Utilization		39.1%	ICU Level of Service A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (veh/h)	0	0	0	20	138	6	4	9	14	8	9	16
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (veh/h)	0	0	0	24	164	7	5	11	17	10	11	19

Direction, Lane #	WB 1	NE 1	SW 1
Volume Total (vph)	195	32	39
Volume Left (vph)	24	5	10
Volume Right (vph)	7	17	19
Hadj (s)	0.0	-0.2	-0.2
Departure Headway (s)	4.1	4.1	4.1
Degree Utilization, x	0.22	0.04	0.05
Capacity (veh/h)	865	834	833
Control Delay (s)	8.2	7.3	7.3
Approach Delay (s)	8.2	7.3	7.3
Approach LOS	A	A	A

Intersection Summary				
Delay		8.0		
HCM Level of Service		A		
Intersection Capacity Utilization	26.0%	ICU Level of Service	A	