

TRAFFIC IMPACT ANALYSIS – 1600 NORTH CAPITOL STREET PLANNED UNIT DEVELOPMENT AND REZONING APPLICATION, NORTHWEST, WASHINGTON, D.C.

(Case No. 06-04)

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CASE NO. 06-04
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District of Columbia
CASE NO. 06-04
EXHIBIT NO. 33

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1.0 INTRODUCTION

1.1 Project Background

Florida & Q Street, LLC ("The Applicant") plans to redevelop a 0.44 acre site within the northwest quadrant of the North Capitol Street/Florida Avenue intersection in Northwest, Washington, D.C. The property is zoned C-2-A (Community Business Center – Low Moderate Density). The Applicant has submitted a Planned Unit Development (PUD) application under which the property would be rezoned to C-2-B (Community Business Center – Medium Density), and approximately eighty-five (85) apartment units and 4,000 GSF commercial space would be developed. The proposed development would be served by approximately 85 parking spaces in an underground garage, which would be accessed via an entrance off Florida Avenue. Exhibit 1 shows the location of the site.

A number of factors make the proposed development attractive from the perspective of traffic generation and parking demands as well as considering transportation access within the immediate area. These are as follows:

- a) The site until recently was improved with a Gas Station with entrances off both North Capitol Street and Florida Avenue. The proposed development entrance coincides with the previous gas station entrance (on Florida Avenue). The previous Gas Station entrance off of North Capitol Street will be eliminated.
- b) The subject site is within easy reach of major regional arterials, including Rhode Island Avenue, New York Avenue and the I-395 Expressway; and
- c) The site is situated adjacent to bus stops of Metrobus routes along North Capitol Street and Florida Avenue, giving access to other Metrobus routes with the local area.
- d) It is also within walking distance of the New York Avenue Metro Station as well as the major employment centers of the Union Station-Capitol Hill-Judiciary Sq. area.

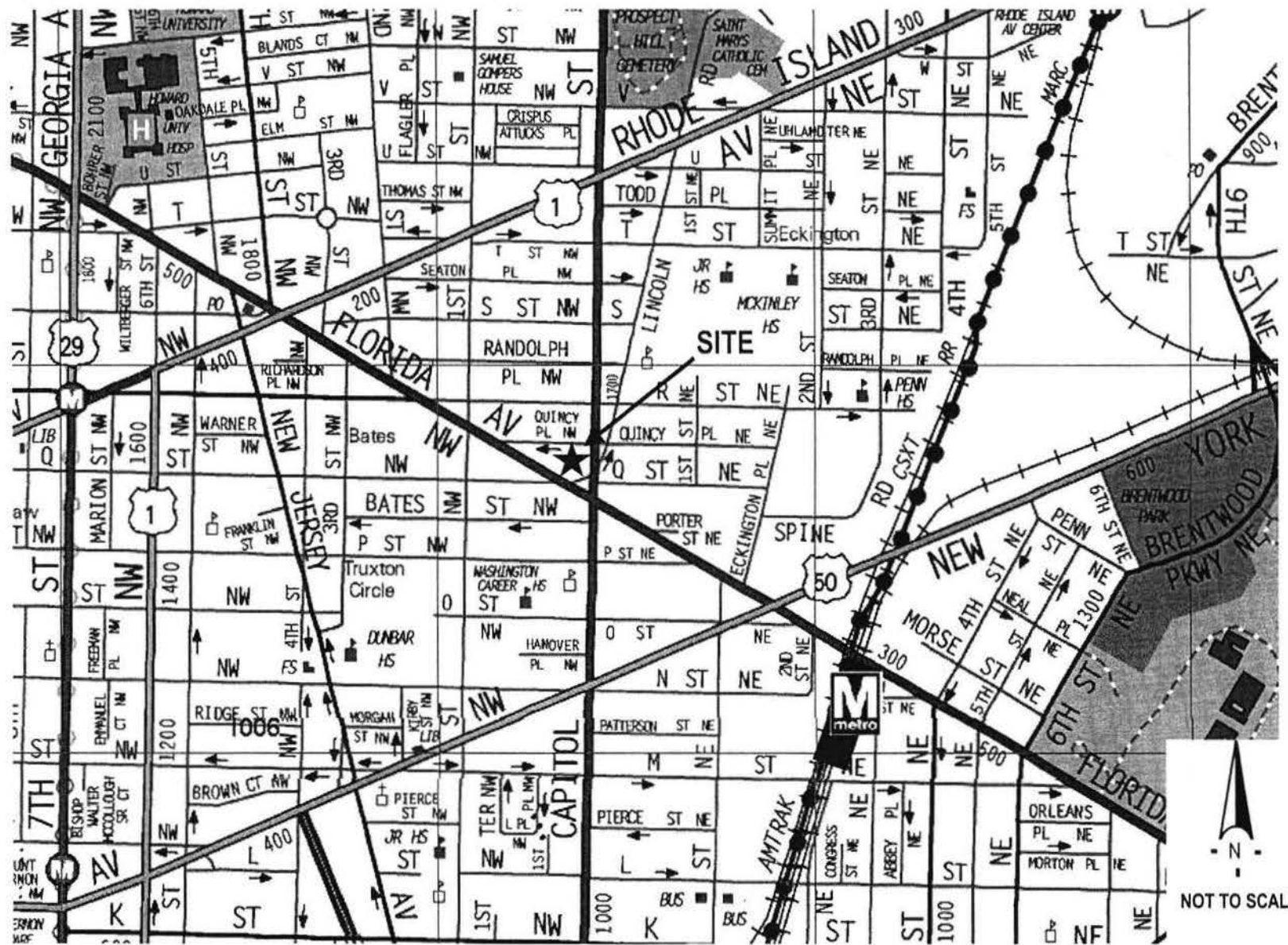
As will be discussed later in the report, the above factors would have impact in lowering the trip generation, parking demands and related impacts of the proposed development, particularly during the morning and afternoon peak periods. These factors are further considered in the relevant sections of this report.

1.2 Study Purpose and Scope

This study was prepared as supporting documentation to the current PUD Application. The purpose and key elements of the study are to evaluate and document the following:

- 1) Existing roadway and traffic conditions within the immediate area of the subject site;
- 2) Future "background" traffic conditions, based on a generalized examination of planned developments within the study area, and potential annual growth in through traffic along the key study area roadways;
- 3) The traffic impact of the development proposal, considering existing and planned transportation facilities, site trip generation, access and on-site circulation; and
- 4) Any capacity, safety or operational constraints to the proposed development, as well as potential measures to mitigate such constraints, where appropriate.

The methodology used in this analysis is in accordance with the current guidelines established by the District of Columbia Department of Transportation (DDOT) for the assessment of the transportation impacts and access requirements associated with the PUD process. The study area and other key parameters considered were also discussed with the responsible DDOT staff, and correspondence outlining the scope of the study is presented in Appendix A.



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EXHIBIT 1

SITE LOCATION MAP- 1600 North Capitol Street
 Planned Unit Development Application No. 06-04, Northwest, Washington D.C

1.3 Report Organization and Summary

This report is organized into five (5) sections. The current Section presents the background, purpose and scope for the study, and summarizes the findings. Section 2 evaluates existing roadway, traffic and parking conditions. Section 3 addresses projected growth in traffic due to the impact of approved and potential developments within the general study area, as well as potential growth in through traffic along the key study area roadways. Section 4 analyzes the traffic impact of the Applicant's proposal, and assesses related site access, circulation and parking provisions. Section 5 summarizes the study findings and makes recommendations, where appropriate, to mitigate any potential transportation impacts identified.

The Applicant projects that the development would be built-out by the year 2009. The future traffic conditions included the application of a 2.0% growth factor to through traffic along North Capitol Street and Florida Avenue, as well as the projected traffic assignment for approved developments and the subject PUD. The study has concluded that the existing study area road network can accommodate the Applicant's development proposal, based on the following principal considerations:

- a) The subject development would generate an average of twenty-two (22) peak hour trips. This trip generation is quite low and would be well within the daily fluctuations that are experienced on major arterials such as North Capitol Street and Florida Avenue, therefore resulting in quite minimal traffic impacts on the local area.
- b) The dominant trip orientation, for the proposed development, would be to the south and west toward the City's Downtown and Central Employment Area. Based upon the site location, a high percentage of the generated trips would be by public transit and walk modes towards the City's Employment Area's.
- c) The projected year 2009 total traffic situation, including the proposed development, would be accommodated by the existing roadway network, with acceptable Levels of Service at all study area intersections.
- d) The subject PUD would be provided with adequate off-street parking spaces, well in excess of the City's requirements, and should not result in any adverse impacts on the neighborhood.

Based on those considerations, this study finds that the proposed development would satisfy the City's general criteria regarding adequacy of transportation facilities. This considers general accessibility by the various modes of transportation, particularly transit and access to the City's employment areas by non-vehicular modes. The project is also well served with parking; and this should ensure no impacts on the parking demands within the impacted area that would make the project objectionable. The remaining sections of the report present the basis for this assessment.

2.0 EXISTING ROADWAY AND TRAFFIC CONDITIONS

2.1 Land Use and Zoning

The subject property is located in Square 3100; and is zoned C-2-A (Community Business Center – Low Moderate Density). The site is currently vacant but was previously utilized as a Gas Station. The Florida Avenue and North Capitol Street corridors are also zoned C-2-A but R-4 (Row Dwellings and Flats) and R-5-B (Moderate Density Apartment Houses) dominate the surrounding areas.

2.2 Study Area Road Network

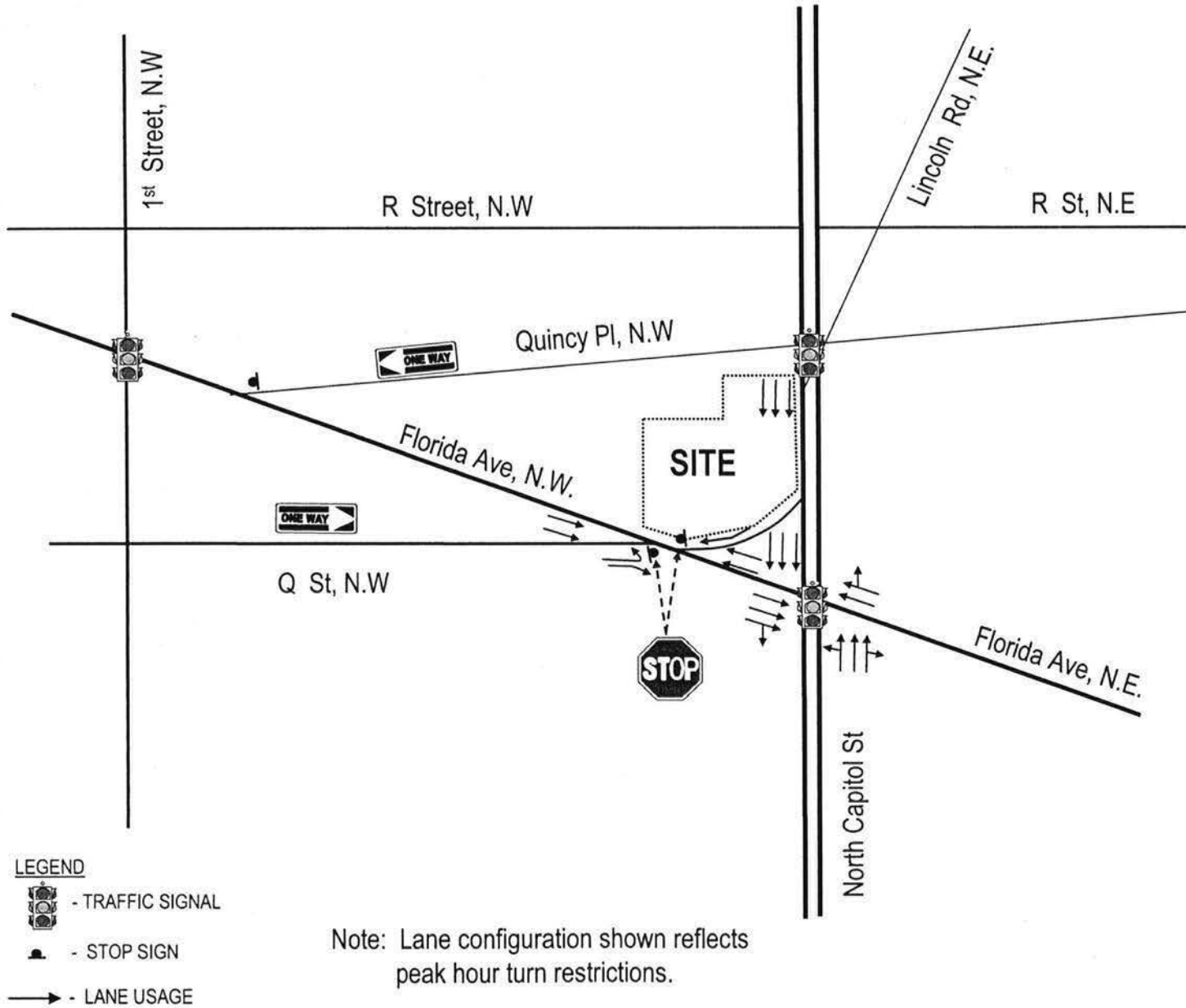
Regional access to the subject site is well served by Rhode Island Avenue (to the north), North Capitol Street and New York Avenue (to the east), as well as Florida Avenue to the immediate south. These are all principal arterials on the City's transportation system. Immediate local access to the site is provided via Florida Avenue. Based on discussions with the DDOT Transportation Policy and Planning Administration staff, a study area roadway network consisting of two (2) intersections was identified for evaluation. These intersections are as follows:

- a) North Capitol Street at Florida Avenue (Signalized); and
- b) Florida Avenue, NW at Q Street , NW. (Stop-Sign Controlled).

The general physical characteristics and service functions of the key study area roadways are summarized below:

- **North Capitol Street and Florida Avenue:** North Capitol Street and Florida Avenue are both Principal Arterials on the City's roadway network. Both roadways serve approximately 35,000 vehicles per average weekday and are primary commuter routes into the Downtown/Central Employment Area.
- **Q Street, NW:** This is classified as a Minor Arterial on the City's roadway network. It runs one-way eastbound in the vicinity of the subject site. Parking is allowed on both sides. This roadway serves approximately 3,000 vehicles per average weekday. The posted speed is 25 MPH.

In addition, it is noted that the parking within the general area is regulated under the City's Resident Permit Parking (RPP) program, which restricts parking to 2-hour limits between 7:00 AM and 8:00 PM except for Ward 5 permit holders. The layout of the study area roadway network, as well as the lane configuration and traffic control devices provided at the adjacent intersections, are illustrated in Exhibit 2. It is important to note that sidewalks are provided along all roadways in the vicinity and the signalized intersections are equipped with pedestrian countdown signals, which serves to enhance both pedestrian and vehicular flow and promote safety. Safety is also enhanced by provision of a stop sign (as opposed to the more typical yield sign) at the point of intersection of the adjacent southbound right-turn "ramp" from North Capitol Street and Florida Avenue.



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EXHIBIT 2

EXISTING ROADWAY LANE CONFIGURATION - STUDY AREA ROAD NETWORK
 1600 North Capitol Street, PUD Application No. 06-04, Northwest, Washington D.C

2.3 Existing Traffic Situation

In order to assess current traffic operating conditions, field observations were made of the weekday traffic flow conditions, within the defined study area, during the morning and afternoon peak periods. In addition, peak period turning movement counts were undertaken at the study area intersections. Exhibit 3 shows the morning and afternoon peak hour volumes. The count summaries are included as Appendix B.

The peak hour traffic volumes were analyzed using the Highway Capacity Manual (HCM) capacity analysis procedures, in accordance with the DDOT requirements. The results show that the study area intersections currently operate at acceptable Levels of Service², during the morning and afternoon peak hours. The Level-of-Service results are based on the average control delay computed by the HCM procedures for all vehicles utilizing the intersections during the peak hours. Table 1 presents the summary of the capacity analysis results for the existing traffic situation. Detailed capacity analysis worksheets are presented in Appendix C.

TABLE 1
SUMMARY OF CAPACITY ANALYSIS RESULTS -
EXISTING TRAFFIC SITUATION

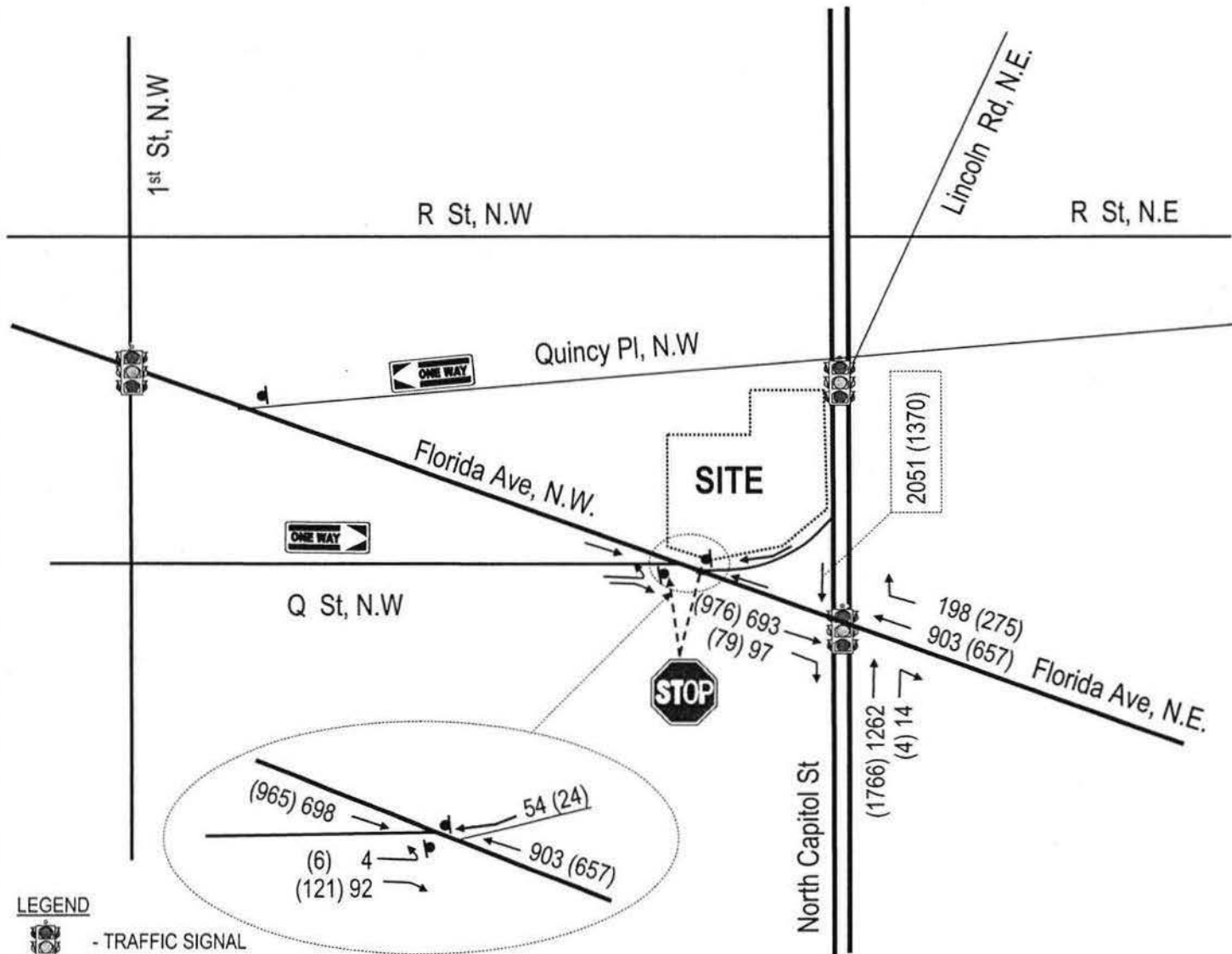
Intersection	AM Peak Hour		PM Peak Hour	
	Level of Service	Avg. Delay (Sec/Veh)*	Level of Service	Avg. Delay (Sec/Veh)*
1) Q Street @ Florida Avenue, N.W. (Stop Sign Controlled)	C	21.7	D	25.1
2) North Capitol Street @ Florida Avenue.(Signalized)	C	29.2	C	24.1

Sec/Veh = Seconds per Vehicle

Source: O. R. George & Associates.

The intersection of North Capitol Street and Florida Avenue serves significant levels of traffic during the weekday peak hours. However, the operational situation is favorable due in large measure to the left-turn restrictions along all approaches during these periods. Q Street intersects Florida Avenue at a point approximately 350 FT from North Capitol Street. As a result there are brief periods particularly during the afternoon peak period when eastbound queues along Florida Avenue extend towards Q Street. However, vehicles approaching along Q Street do not experience excessive delays due in part to "courtesy" gaps in the Florida Avenue traffic stream when these queues occur.

² "Level of Service" is a qualitative measure describing operational conditions within a traffic stream or at an intersection, and reflects their perception by drivers and other roadway users. Principal considerations are factors such as speed and travel time, delay, and freedom of maneuver, traffic interruptions, comfort, convenience and safety. Current engineering practice defines six (6) Levels of Service (A-F), with "A" representing best operating conditions, and Level of Service "F" representing the worst conditions. Level-of-Service D is generally considered by the District of Columbia as the minimum acceptable conditions for planning and design purposes.



LEGEND



- TRAFFIC SIGNAL



- STOP SIGN

XX (XX) - AM (PM) PEAK HOUR VOLUMES

Note: Some left-turn violations were noted particularly on the eastbound Florida Avenue approach during the PM peak hour.



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EXHIBIT 3

EXISTING PEAK HOUR TRAFFIC TURNING MOVEMENT VOLUMES

1600 North Capitol Street, PUD Application No. 06-04, Northwest, Washington D.C.

2.4 Traffic Safety Situation

In order to assess the traffic safety situation within the study area, accident data was obtained from the District of Columbia Department of Transportation Traffic Services Administration for the study area intersections. These data covered the most recent three-year period, (i.e., 2002 – 2004) for which such data was available. Copies of the accident data summaries are included as Appendix D. The levels of accident occurrences are shown in Table 2 below.

TABLE 2
ACCIDENT RECORD SUMMARY (2002- 2004)
STUDY AREA INTERSECTIONS

Intersection	2002	2003	2004	Avg./ Year	MEV*	Accident Rate
1) Q Street @ Florida Avenue, N.W. (Stop Sign Controlled)	3	4	3	3.33	6.61	0.50
2) North Capitol Street @ Florida Avenue.(Signalized)	14	15	16	15	19.22	0.78

*MEV = Million Entering Vehicles.

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

The accident rate is defined as the number of accidents per million entering vehicles (MEV's). The MEV's were developed by estimating average annual traffic based on the existing peak hour traffic volumes (presented in Exhibit 3), and applying procedures recommended by The Institute of Transportation Engineers (ITE). The factors applied allows for the statistical data which shows that the typical weekday peak hour represents between 8.00 – 12.00 % of the Average Daily Traffic volume.

Typically, intersections with accident rates of 2.0 (and greater) warrant further evaluation to determine appropriate remedial safety measures. However, due to the high number of accidents at the North Capitol Street/Florida Avenue intersection, DDOT has recognized this location as a high-accident location and the Agency is currently examining this location to determine long-term solutions to increase safety for both vehicular and pedestrian traffic³. The North Capitol Street Transportation Study, completed recently in November, 2005, recommends a number of improvements for the North Capitol Street/Florida Avenue intersection, particularly in regard to pedestrian safety. Specifically DDOT is recommending the following;

- 1) Crosswalks are re-striped and upgraded to include in-roadway warning lights;
- 2) Additional time is given to pedestrians crossing Florida Avenue;
- 3) Enhancement of roadway signage to warn drivers of pedestrians; and
- 4) Improvement disabled ramps at the intersection crosswalks.

The relevant excerpts of the study are included as Appendix E. Based on the accident occurrences and rates indicated in Table 2, there are currently no significant safety deficiencies at the Florida Avenue/Q Street intersection, warranting further analysis and evaluation.

³ "North Capitol Street Transportation Study" DDOT, November 2005.

3.0 BACKGROUND TRAFFIC SITUATION

3.1 Projected Year 2009 Background Traffic Situation

The Applicant's development plan calls for the project to be built-out by the end of 2009. Therefore, for the purposes of this study, the year 2009 was considered the "design year". Considering the City's guidelines and procedures, the 2009 projected design year traffic conditions would consist of the following key elements:

- a) Projected trip generation for other planned developments, within the immediate site area, which are likely to be built-out by year 2009; and
- b) Potential increase in through traffic based on historical growth trends.

Based on information provided by the Office of Planning, no significant land use developments are planned for the immediate area of the site. Review of historical Average Daily Traffic (ADT) provided by DDOT, indicates that traffic volumes on the study area roadways have remained relatively stable over the last six (6) years. It is therefore projected that an increase in traffic within the study area over the next three (3) years, i.e., by year 2009, would be marginal. However, to comply with DDOT's typical growth assumptions for roadways serving significant through traffic volumes, an annual growth factor of two percent (2.0%) was applied to the existing traffic volumes unto the year 2009. The 2009 base year traffic volumes, reflecting that annual growth, are presented as Appendix G.

3.2 Traffic Analysis - Year 2009 Background Traffic Situation

Since no planned developments were identified for consideration, the year 2009 background traffic situation would be the same as the year 2009 "base" traffic situation. The projected year 2009 background traffic situation is presented in Exhibit 4. These volumes were analyzed using the HCM analysis procedures, as was done for the existing traffic situation.

Table 3 below summarizes the capacity analysis results for the projected year 2009 background traffic situation. The results show that the study area road network would continue to operate within the City's acceptable planning standards, during the morning and afternoon peak hours. Appendix G presents the capacity analysis worksheets for the background traffic situation.

TABLE 3
SUMMARY OF CAPACITY ANALYSIS RESULTS -
PROJECTED YEAR 2009 BACKGROUND TRAFFIC SITUATION

Intersection	AM Peak Hour		PM Peak Hour	
	Level of Service	Avg. Delay (Sec/Veh)*	Level of Service	Avg. Delay (Sec/Veh)*
1) Q Street @ Florida Avenue, N.W. (Stop Sign Controlled)	C	23.7	D	27.8
2) North Capitol Street @ Florida Avenue.(Signalized)	C	32.5	C	25.4

Source: O. R. George & Associates.

LEGEND

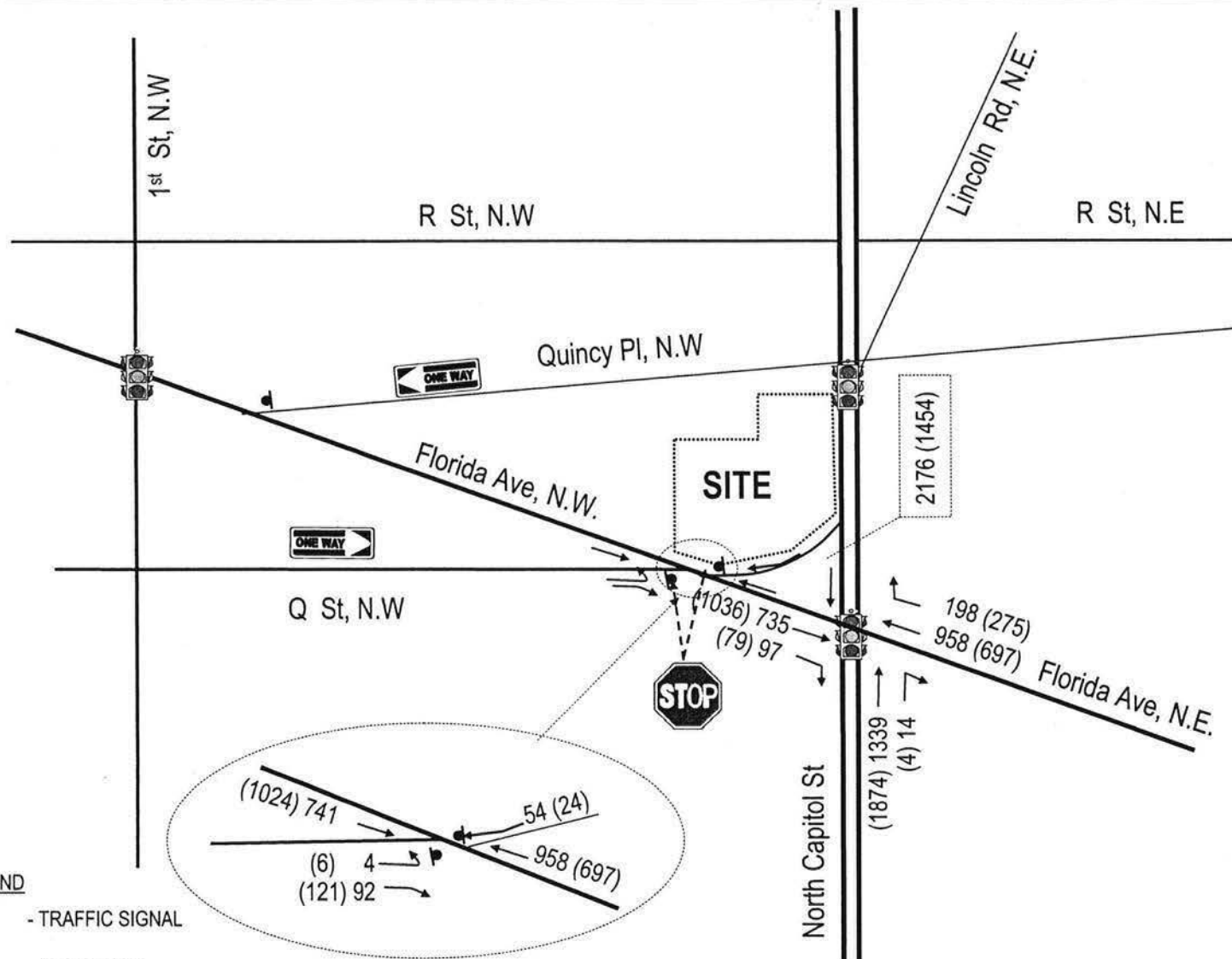


- TRAFFIC SIGNAL



- STOP SIGN

XX (XX) - AM (PM) PEAK HOUR VOLUMES



NOT TO SCALE

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EXHIBIT 4

PROJECTED YEAR 2009 TOTAL BACKGROUND TRAFFIC SITUATION
 1600 North Capitol Street, PUD Application No. 06-04, Northwest, Washington D.C

4.0 FUTURE TRAFFIC SITUATION

4.1 Proposed Development Plan

As noted earlier, this analysis is in support of the Planned Unit Development and Rezoning application for the development of approximately 85 apartment units and 4,000 GSF commercial space on the site. The proposed development would be served by approximately 85 parking spaces and one (1) loading berth with platform. Immediate vehicular access to the site would be provided via an entrance off Florida Avenue, in the southwestern extremity of the property.

4.2 Trip Generation

DDOT typically requires that the trip rates recommended by the Institute of Transportation Engineers (ITE) be utilized in conducting traffic impact assessments. As such, the trip estimates for the proposed development were based on the current ITE Trip Generation Manual (7th Ed., 2003). It is important to note that the ITE rates are for stand-alone suburban sites, which have little or no public transportation services or significant opportunities for weekday work trips via alternative modes. Accordingly, the rates were adjusted to reflect the location of the property within the downtown area with opportunities for use of transit facilities and travel by other modes. The trip rates and projected vehicular trips for the subject development are presented in Table 4.

TABLE 4
PROJECTED PEAK HOUR TRIP GENERATION –
1600 NORTH CAPITOL STREET PUD

Trip Rates	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
• Trips per Mid-Rise Apartment Unit (With 35% Transit, Walk, and Other Non-vehicle Trips)	0.09 (0.06)	0.21 (0.14)	0.30 (0.20)	0.23 (0.15)	0.16 (0.10)	0.39 (0.25)
• Trips per 1,000 GSF Retail (With 80% Transit, Walk, and Other Non-vehicle Trips)	0.63 (0.13)	0.40 (0.08)	1.03 (0.21)	1.80 (0.36)	1.95 (0.39)	3.75 (0.75)
Trip Generation						
• Trips/85 Mid-Rise Apartment Units	5	12	17	13	9	22
• Trips/4,000 GSF Retail	1	1	2	2	2	4
TOTAL	6	13	19	15	11	26

Source: WMATA 1989 Development Ridership Survey Report, ITE Trip Generation Manual (2003), and O. R. George & Associates.

It is important to note that the trips shown in Table 4 represent the projected trip generation for the **peak hour** only, and not for the entire peak period. The peak period generation occurs over a 3 - 4 hour period between 6:00 – 10:00 AM and 3:00 – 7:00 PM. This takes into consideration various types of workers, distances traveled between home and work, as well as transportation demand management measures such as flexible work hours, which are being encouraged by both public and private sector employees and government agencies.

4.3 Trip Distribution and Traffic Assignment

The peak hour trip generation and distribution patterns for the proposed residential uses would be related primarily to the location of the site relative to regional employment opportunities, available transportation modal splits and associated travel patterns. Accordingly, the projected trip generation would largely be oriented toward the City's Central Employment Area to the south and west. The in-town location and road network provides considerable flexibility and opportunity as far as directions of approach for vehicular traffic. These take into consideration the directional flow patterns and turn restrictions in the immediate vicinity of the site (these were discussed in greater detail in Section 2 regarding the existing roadway conditions). Based on the above, the assumed distribution pattern and the projected traffic assignment for the proposed development are shown in Exhibit 5.

4.4 Capacity Analysis - Year 2009 Total Traffic Situation

The year 2009 total traffic situation was derived by combining the traffic assignment for the proposed development (Exhibit 5) with the year 2009 total background traffic situation (Exhibit 4). The year 2009 total traffic situation is illustrated in Exhibit 6 (on page 15). These volumes were analyzed using the Highway Capacity Manual (HCM), as was done for the existing and background traffic conditions. The level of service results are presented in Table 5.

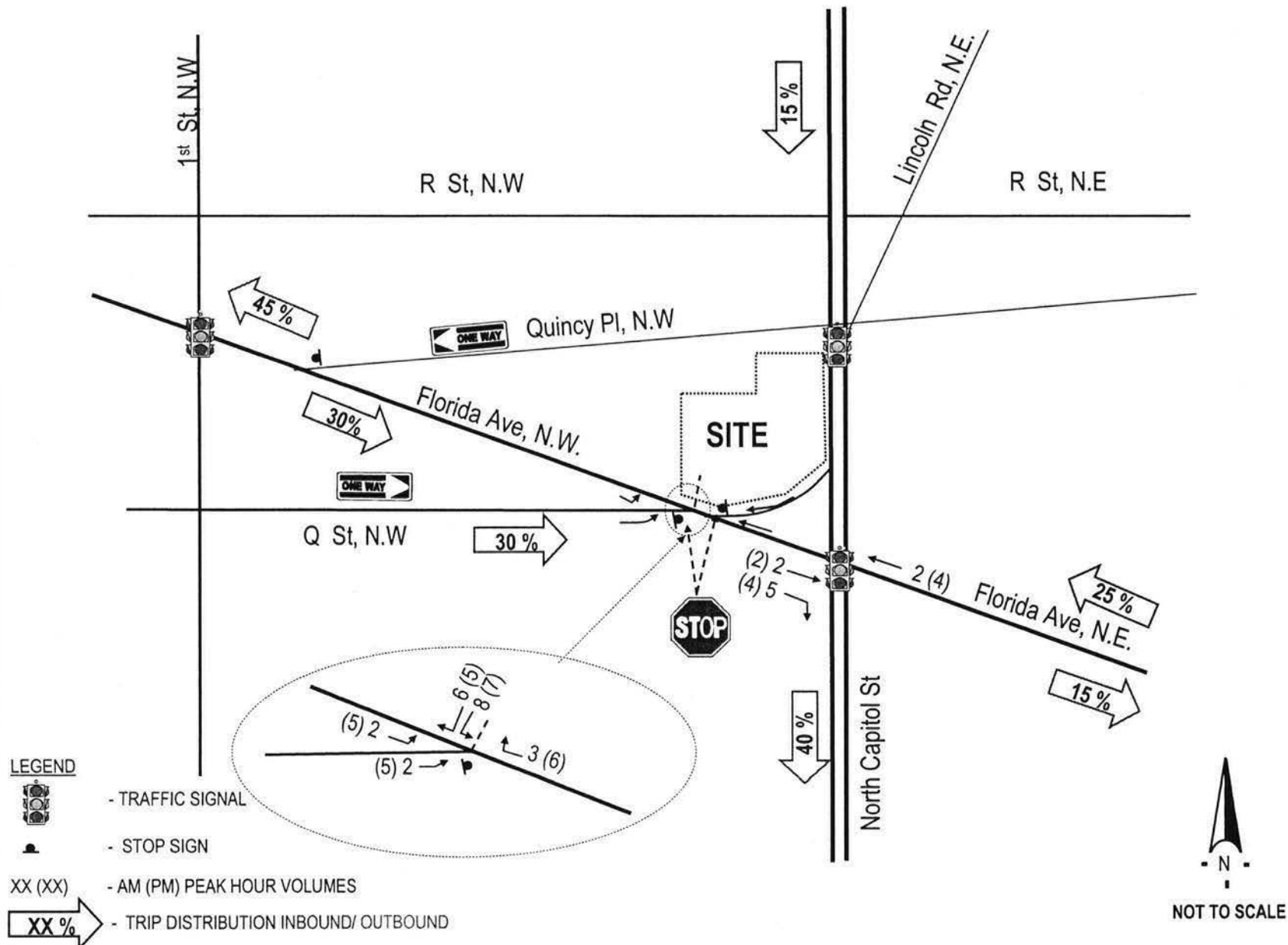
With the projected low trip generation of the proposed development, the capacity analysis results indicate that, upon build-out of the proposed development, the study area intersections would continue to operate acceptably, during the morning and afternoon peak periods. The capacity analysis worksheets for this situation are presented in Appendix H.

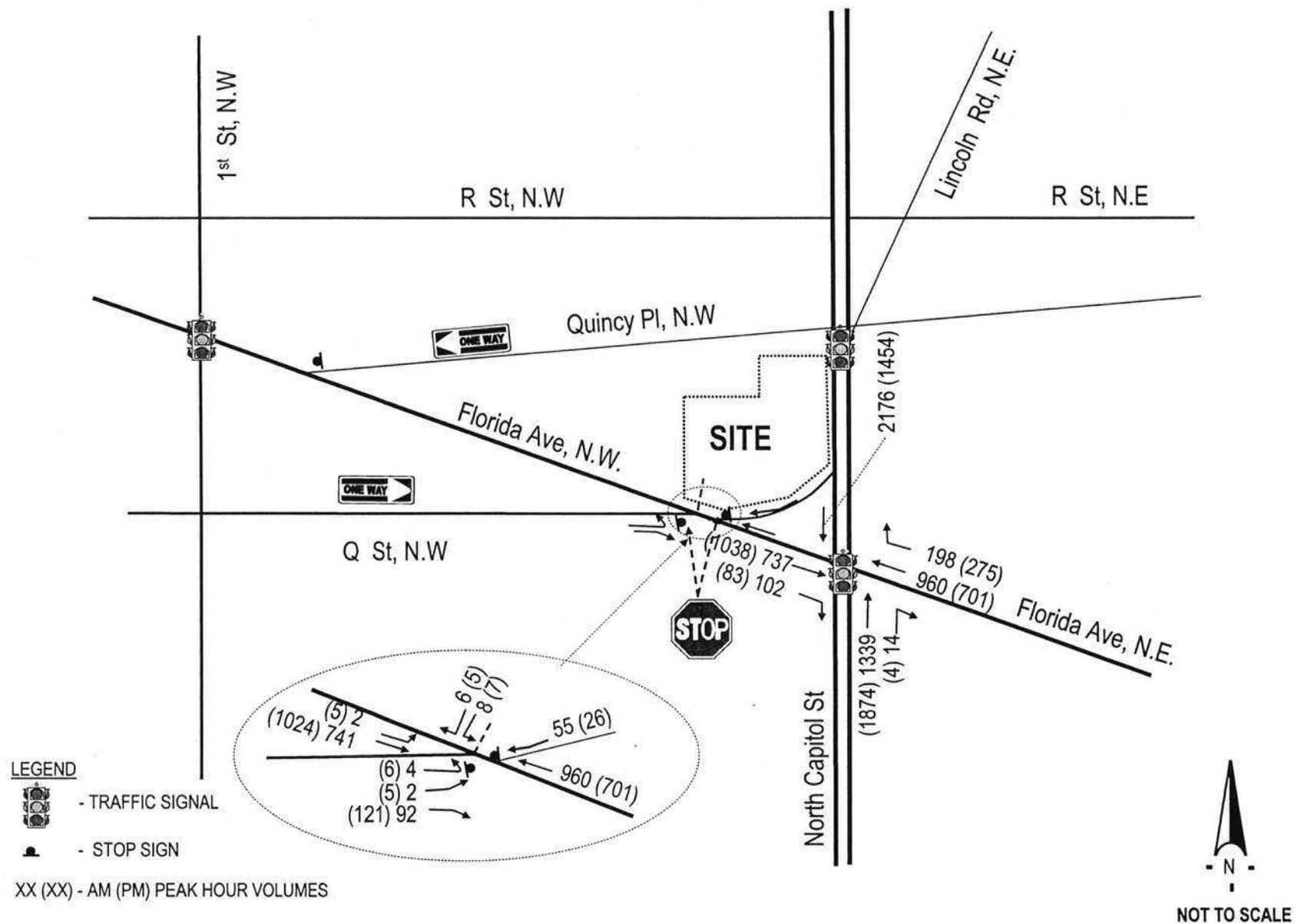
TABLE 5
SUMMARY OF CAPACITY ANALYSIS RESULTS -
PROJECTED 2009 TOTAL TRAFFIC SITUATION
(INCLUDING THE SUBJECT DEVELOPMENT)

Intersection	AM Peak Hour		PM Peak Hour	
	Level of Service	Avg. Delay (Sec/Veh)*	Level of Service	Avg. Delay (Sec/Veh)*
1) Q Street @ Florida Avenue, N.W. (Stop Sign Controlled)*	D	29.3	D	34.5
2) North Capitol Street @ Florida Avenue.(Signalized)	C	33.8	C	25.5

* Minor adjustments were made to account for the geometric configuration of the Q Street approach.

Source: O. R. George & Associates.





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EXHIBIT 6

PROJECTED YEAR 2009 TOTAL TRAFFIC SITUATION
 1600 North Capitol Street, PUD Application No. 06-04, Northwest, Washington D.C

4.5 Parking and Loading Evaluation

The subject property would be rezoned to C-2-B and the proposed improvements would be provided with off-street parking spaces. The City's parking requirements, based on the proposed zoning and land uses, are compared with the off-street parking proposed for the subject development, in Table 6 following:

TABLE 6
REQUIRED VS PROPOSED OFF-STREET PARKING

Land Use	Required Parking Supply	Proposed Parking Supply
- Apartments (85 Units) (1 per 3 units)	29	n/a
- Commercial Space (4,000 gsf) (In excess of 3,000 gsf, 1 per 750 gsf)	2	n/a
TOTAL	31	85

Source: DCMR Title 11 – Zoning and O. R. George & Associates.

Table 6 shows that the proposed off-street parking will exceed the City's requirements by a factor of approximately 2.75. The proposed off-street parking supply would therefore adequately accommodate the projected needs of the subject development. In addition, the proposed parking supply will ensure that the development will not adversely impact the local community in regard to spillover parking.

With regard to the loading, the PUD plan calls for the provision of one (1) 12' x 30' loading berth with a loading platform and one (1) 10' x 20' service loading area, accessible via the entrance off Florida Avenue. Due to the proposed size of the retail space, a specific loading berth or platform is not required per the Zoning Regulations. A 30 FT berth is provided for the residential uses. The plans call for the approximately 85 condominium units to consist of one-, two- and three-bedroom apartments, with the majority of units being one- and two- bedroom.

The Applicant's experience at other comparable properties is that not more than single-unit trucks would be required for typical moving activities. Also, since the units would be owned, the frequency of such activities would be quite low. It is projected that deliveries would be scheduled during weekday off-peak daytime hours as well as during weekend off-peak periods. Based on these considerations, the Applicant proposes the minor adjustment indicated from the requirements of the Zoning Regulations (one 55 FT berth with 200 FT² platform and a 20FT loading space for residential uses with more than 50 units). This is consistent with the PUD process and would not lead to any operational deficiencies regarding residential or retail loading/delivery needs. The loading issue was discussed extensively with DDOT Transportation Policy and Planning Administration staff as well as Traffic Services Administration staff and the relevant documentation is included in Appendix A.

5.0 SUMMARY OF FINDINGS AND CONCLUSION

5.1 Summary of Findings

This study has examined the potential impacts of the proposed 1600 North Capitol Street development, in keeping with the requirements of the City's Planned Unit Development review process. The PUD process requires the Applicant to demonstrate that increased density and related elements of the proposed improvements would not adversely impact area land uses or be a "burden" to the City. Conversely, it is desirable that public benefits accrue from the development proposal. The study was performed in accordance with the general guidelines stipulated by the District of Columbia Department of Transportation (DDOT) Policy and Planning Administration, regarding the evaluation of the transportation impacts of development proposals. The principal findings of the study are as follows:

- a) The defined study area roadway network currently operates at acceptable Levels of Service, during both the morning and afternoon peak periods.
- b) The proposed development is favorably situated relative to public transportation facilities, as well as major employment and institutional areas;
- c) The design year (2009) "background" traffic conditions considered potential growth in through traffic along the key study area roadways. Based on information provided by the Office of Planning, no background developments are planned for the immediate site area. The roadway network would continue to operate acceptably under the background traffic conditions.
- d) The proposed development would generate an average of twenty-two (22) vehicle trips during the morning and afternoon peak hours. This is significantly lower than the trips generated by previous use of the site as a gas station. These trips would be well distributed (directionally) resulting in minimal impacts on the study area intersections.
- e) The study area roadway network would continue to operate at acceptable Levels of Service, during the morning and afternoon peak periods, under the projected (2009) traffic conditions, including the proposed development.
- f) Although the intersection of North Capitol Street/Florida Avenue has had a relatively high level of accidents over the period 2002-2004, it has been recognized by DDOT and they have begun to upgrade the intersection as outlined in the recommendations within the North Capitol Street Transportation Study.

The proposed development would be provided with approximately 85 off-street parking spaces, a 30 FT loading berth and a 20 FT service area. The parking supply would significantly exceed the number of spaces required by the City's Zoning Regulations, and would adequately satisfy the needs of the prospective uses.

5.2 Conclusion

Based on the foregoing data, discussions and analysis, this study has determined that the 1600 North Capitol Street Planned Unit Development and Rezoning proposal can be accommodated without any appreciable adverse traffic impacts on the local area. The subject proposal should therefore satisfy the City's requirements for adequate public (transportation) facilities.

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APPENDIX

A

TRAFFIC STUDY SCOPING AGREEMENT
AND RELEVANT CORRESPONDENCE
WITH DDOT STAFF

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May 01, 2006

Mr. Abdoulaye Bah, Sr. Transportation Engineer
Transportation Policy and Planning Administration
District of Columbia Department of Transportation
2000 14th Street, N.W. 7th Floor
Washington, D.C. 20009

Re: 1600 North Capitol Street Planned Unit Development Application

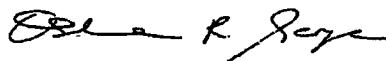
Dear Mr. Bah:

We hereby confirm that the Applicant in the referenced matter, Florida & Q Street, LLC, has retained our firm to prepare a Transportation Impact Analysis in support of the referenced application. The purpose of this letter is to confirm the project background, and the key study parameters we propose to use for the study.

As background, we note that 1600 North Capitol Street is a 0.44 Acre property situated in the northwest corner of the North Capitol Street/Florida Avenue intersection in the Northwest sector of the City. The subject property is zoned Commercial (C-2-A) and the applicant proposes to request a Zoning Map Amendment to Commercial (C-2-B). The property is currently unimproved but was previously utilized as a Gas Station. The applicant proposes to redevelop the site with approximately eighty-five (85) residential apartment units and 4,000gsf of retail space. In order to address the requirements of the Zoning Commission, we propose to evaluate traffic conditions within the adjacent roadway network, i.e. Florida Avenue at the North Capitol Street and Q Street intersections. We will consider traffic growth and background developments in projecting future traffic conditions, in accordance with your Department's usual requirements.

Please confirm that the above is in accordance with DDOT's general requirements, as well as with any specific requirements that may be applicable to the area of the site. We would also appreciate any additional information or perspective that could be useful to our study and to the application process. Thanks for your usual attention and assistance in this matter.

Sincerely,
O. R. GEORGE & ASSOCIATES, INC.



Osborne R. George
President

ATTACHMENT 1

O. R. GEORGE & ASSOCIATES, INC.

Traffic Engineers – Transportation Planners

10210 Greenbelt Road, Suite 310 • Lanham MD 20706

Tel: (301) 794-7700 • Fax: (301) 794-4400

E-mail: admin@orgengineering.com

MEMORANDUM

DATE: June 2, 2006
TO: Kyrus Freeman, Esquire/Steven Sher, Esquire
Holland & Knight, LLP
FROM: Iain Banks/Osborne George
RE: 1600 North Capitol Street – DDOT Discussions

As agreed, we met yesterday with DDOT staff (Ms. Sharlene Reed - Ward 5 Transportation Planner, Mr. Abdoulaye Bah – Senior Transportation Planner, and Gloria Bosse-Kouabo – Ward 5 TSA). The following are the key items discussed.

Key Points Raised by ORGA

- a) The site was previously utilized as a Gas Station with access from both North Capitol Street and Florida Avenue.
- b) The existing curb cuts will be eliminated except for the western most driveway on Florida Avenue, which is approximately 400 ft from the intersection of North Capitol Street, and approximately 80 ft from the adjacent Truxton Circle “ramp”.
- c) The proposed development density would consist of approximately 80 residential units and 4,000 GSF retail space.
- d) Due to the site location and availability of public transportation services, the development would generate very low vehicular trips.
- e) The topography of the site makes access off of North Capitol Street almost impossible, and Office of Planning has indicated their preference that no access be off North Capitol Street.
- f) Traffic volumes using the Truxton Circle “ramp” from North Capitol Street to Florida Avenue are quite low.

DDOT’s Comments/Concerns

- 1) Raised the possibility of an entrance being able to be configured from North Capitol Street [*ORGA – We reiterated point (e) above*]
- 2) Would like to see traffic volumes for the Truxton Circle “ramp” to consider potential configuration options. DDOT undertook a North Capitol Street Transportation Study in late 2005, which investigated the feasibility of alternatives for the North Capitol Street/Florida Avenue intersection. [*ORGA – We now have that study and will review it for anything that may need to be included in the final report*]

- 3) Did the Applicant consider acquisition of the adjacent property to the north of the site abutting Quincy Place? *[ORGA – We advised that we could not confirm this and would raise the issue with the team].*
- 4) Mr. Abdoulaye Bah noted that the project should not present any major issues, although the primary concern would be the loading access and the potential backing-in maneuvers of trucks from Florida Avenue into the loading dock. *[ORGA – We noted that the Applicant would be seeking a waiver from the loading berth regulations requiring a 55 ft berth, and that the current concept only calls for a 30 ft/single-unit truck. DDOT noted the possibility that the occasional 55 ft truck would require “access”.]*
- 5) What is the possibility of configuring the loading dock area to include maneuvering space within the garage/dock area so that vehicles could turnaround and not have to back into the berths from Florida Avenue. *[ORGA –The concept plans showed constraints to such a maneuver. The Architects response confirmed that the space needed for a turnaround would cut significantly into the cellar level of the site and provide further constraints to the residential and retail portions of the site]*
- 6) Was a one-way external service drive wrapping around the building from North Capitol Street and exiting onto Florida Avenue considered? *[ORGA – Given the size and irregular configuration of the property, the concept might not be feasible. The Architects confirmed that this concept would not be feasible based upon the size and grade differences of the property as well as the space required for the turning radii of trucks to make such a maneuver.]*
- 7) The loading concern might be mitigated with a condition prohibiting truck access to the loading dock during weekday peak periods. *[ORGA – to raise the issue with the Applicant]*

SUMMARY

ORGA noted that the site had some access challenges but appreciated DDOT’s readiness to work towards a compromise. DDOT confirmed that their primary concern was the loading dock access and that it would be the Applicant’s burden to convince the Zoning Commission of the waiver for the 55 ft berth. It was agreed that the development would have low vehicular trip generation. ORGA will make sure that the Traffic Study includes the relevant data to respond to DDOT’s concerns. DDOT was willing to work with the situation and craft appropriate conditions that would be the subject of further discussions with the team.

We are copying this to DDOT for their records, please let us have your thoughts so that we can move forward with finalizing the study and with further discussions with DDOT as we move forward. Thanks.

IJB/ORG

cc: Ms. Sharlene Reed – DDOT TPPA
Mr. Abdoulaye Bah – DDOT TPPA
Ms. Gloria Bosse-Kouabo – DDOT TSA

APPENDIX

B

TRAFFIC TURNING MOVEMENT COUNT
SUMMARIES - EXISTING TRAFFIC
SITUATION

O.R.George & Associates

10210 Greenbelt Road, Suite 310

Lanham, MD 20706 - 2218

Tel: (301) 974-7700 Fax: (301) 794-4400

Counted By: TJD

Board: D4-1234

City/County: Washington D.C.

Weather: Cold/Clear/Dry

File Name : FLA@Q

Site Code : 12202005

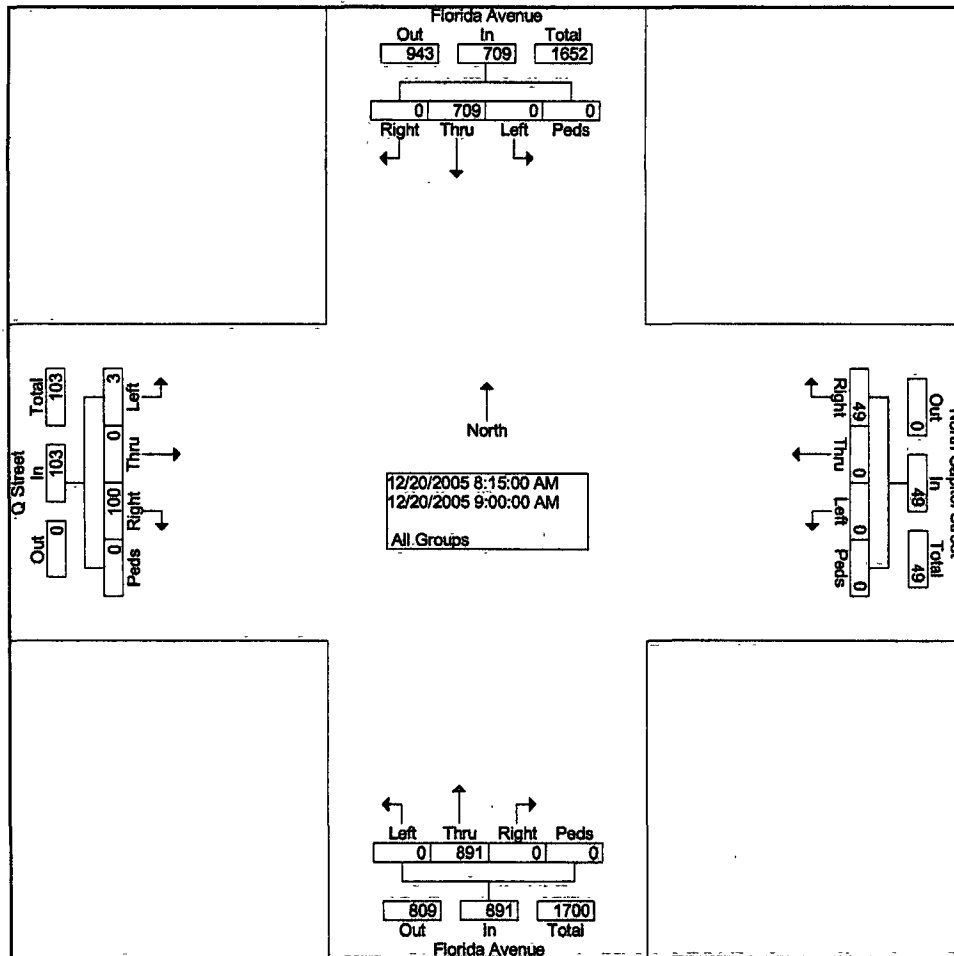
Start Date : 12/20/2005

Page No : 1

Groups Printed- All Groups

End Time	Florida Avenue From North					North Capitol Street From East					Florida Avenue From South					Q Street From West					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:15	0	116	0	0	116	16	0	0	0	16	0	186	0	0	186	7	0	0	0	7	325
07:30	0	124	0	0	124	9	0	0	0	9	0	229	0	0	229	10	0	0	0	10	372
07:45	0	121	0	0	121	12	0	0	0	12	0	207	0	0	207	18	0	0	0	18	358
08:00	0	178	0	0	178	13	0	0	0	13	0	225	0	0	225	19	0	1	0	20	436
Total	0	539	0	0	539	50	0	0	0	50	0	847	0	0	847	54	0	1	0	55	1491
08:15	0	160	0	0	160	13	0	0	0	13	0	243	0	0	243	15	0	2	0	17	433
08:30	0	187	0	0	187	19	0	0	0	19	0	221	0	0	221	26	0	1	0	27	454
08:45	0	173	0	0	173	9	0	0	0	9	0	214	0	0	214	32	0	0	0	32	428
09:00	0	189	0	0	189	8	0	0	0	8	0	213	0	0	213	27	0	0	0	27	437
Total	0	709	0	0	709	49	0	0	0	49	0	891	0	0	891	100	0	3	0	103	1752
*** BREAK ***																					
16:15	0	264	0	0	264	3	0	0	0	3	0	166	0	0	166	33	0	2	0	35	468
16:30	0	251	0	0	251	9	0	0	0	9	0	174	0	0	174	26	0	2	0	28	462
16:45	0	227	0	0	227	6	0	0	0	6	0	171	0	0	171	24	0	1	0	25	429
17:00	0	243	0	0	243	9	0	0	0	9	0	164	0	0	164	36	0	1	0	37	453
Total	0	985	0	0	985	27	0	0	0	27	0	675	0	0	675	119	0	6	0	125	1812
17:15	0	246	0	0	246	4	0	0	0	4	0	169	0	0	169	29	0	2	0	31	450
17:30	0	249	0	0	249	5	0	0	0	5	0	153	0	0	153	32	0	1	0	33	440
17:45	0	134	0	0	134	2	0	0	0	2	0	133	0	0	133	36	0	0	0	36	305
18:00	0	163	0	0	163	4	0	0	0	4	0	137	0	0	137	39	0	0	0	39	343
Total	0	792	0	0	792	15	0	0	0	15	0	592	0	0	592	136	0	3	0	139	1538
Grand Total	0	3025	0	0	3025	141	0	0	0	141	0	3005	0	0	3005	409	0	13	0	422	6593
Apprch %	0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		96.9	0.0	3.1	0.0		
Total %	0.0	45.9	0.0	0.0	45.9	2.1	0.0	0.0	0.0	2.1	0.0	45.6	0.0	0.0	45.6	6.2	0.0	0.2	0.0	6.4	

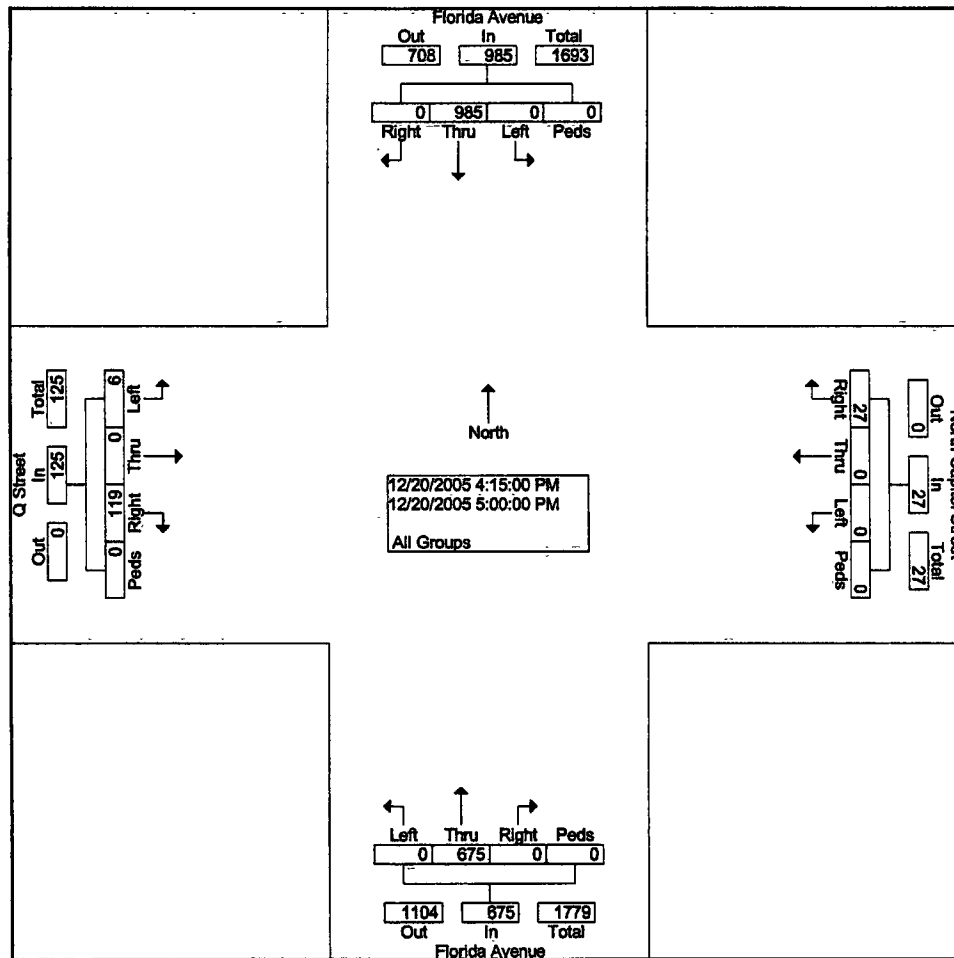
	Florida Avenue From North					North Capitol Street From East					Florida Avenue From South					Q Street From West					
End Time	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Int. Total
Peak Hour From 07:15 to 11:45 - Peak 1 of 1																					
Intersection n 08:15																					
Volume	0	709	0	0	709	49	0	0	0	49	0	891	0	0	891	100	0	3	0	103	1752
Percent	0.0	100.	0.0	0.0		100.	0.0	0.0	0.0		0.0	100.	0.0	0.0		97.1	0.0	2.9	0.0		
Volume	0	709	0	0	709	49	0	0	0	49	0	891	0	0	891	100	0	3	0	103	1752
Volume	0	187	0	0	187	19	0	0	0	19	0	221	0	0	221	26	0	1	0	27	454
Peak Factor																					0.965
High Int. 09:00						08:30					08:15					08:45					
Volume	0	189	0	0	189	19	0	0	0	19	0	243	0	0	243	32	0	0	0	32	
Peak Factor	0.938					0.645					0.917					0.805					



O.R.George & Associates
 10210 Greenbelt Road, Suite 310
 Lanham, MD 20706 - 2218
 Tel: (301) 974-7700 Fax: (301) 794-4400

File Name : FLA@Q
 Site Code : 12202005
 Start Date : 12/20/2005
 Page No : 3

	Florida Avenue From North					North Capitol Street From East					Florida Avenue From South					Q Street From West					
End Time	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Int. Total
Peak Hour From 12:00 to 18:00 - Peak 1 of 1																					
Intersection	16:15																				
Volume	0	985	0	0	985	27	0	0	0	27	0	675	0	0	675	119	0	6	0	125	1812
Percent	0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		95.2	0.0	4.8	0.0		
Volume	0	985	0	0	985	27	0	0	0	27	0	675	0	0	675	119	0	6	0	125	1812
Volume	0	264	0	0	264	3	0	0	0	3	0	166	0	0	166	33	0	2	0	35	468
Peak Factor																					0.968
High Int.	16:15					16:30					16:30					17:00					
Volume	0	264	0	0	264	9	0	0	0	9	0	174	0	0	174	36	0	1	0	37	
Peak Factor	0.933					0.750					0.970					0.845					



O.R. George & Associates

10210 Greenbelt Road, Suite 310

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Tel: (301) 974-7700 Fax: (301) 794-4400

Counted by: ORGA

Board : D4-1576, D4-1607

City/County: Washington, D.C.

Weather : Cold/Clear/Dry

File Name : NCS@FLA

Site Code : 21161576

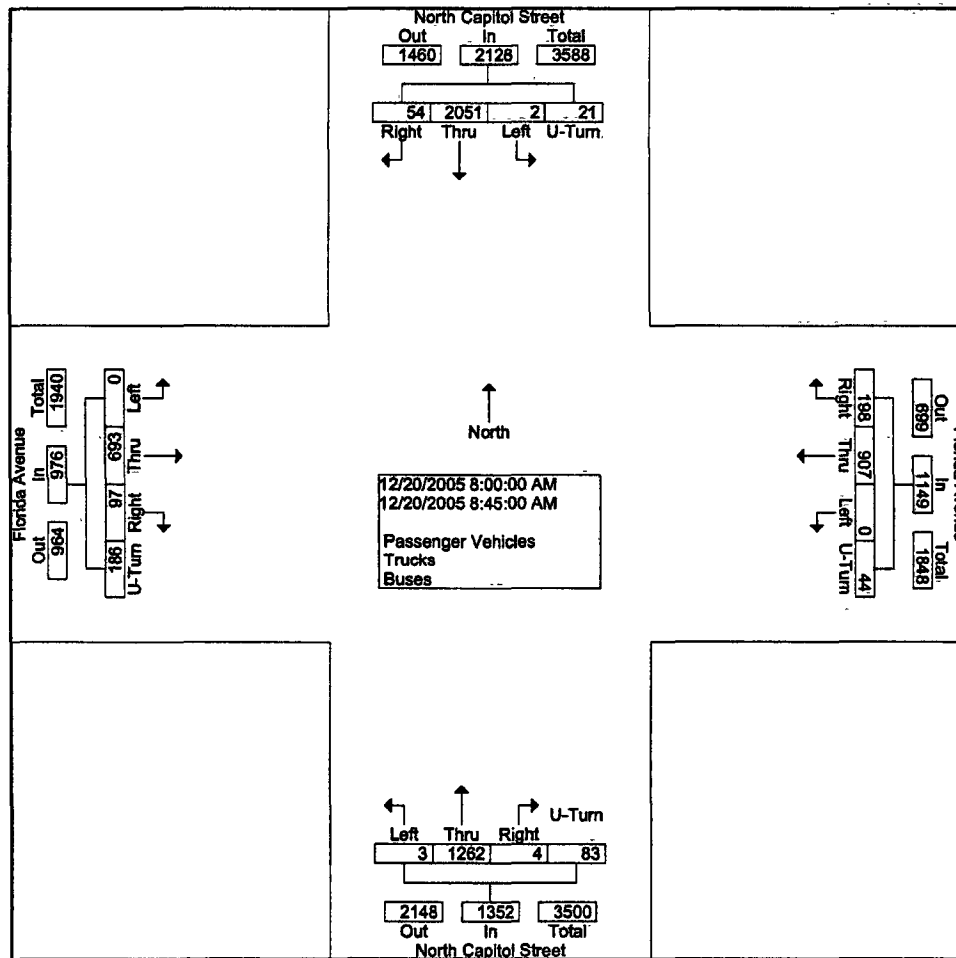
Start Date : 12/20/2005

Page No : 1

Groups Printed- Passenger Vehicles - Trucks - Buses

End Time	North Capitol Street From North					Florida Avenue From East					North Capitol Street From South					Florida Avenue From West					Int. Total
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
07:15	16	384	3	2	405	50	186	0	3	239	1	292	0	10	303	11	111	1	8	131	1078
07:30	9	414	0	5	428	59	229	0	15	303	1	323	0	13	337	18	116	0	19	153	1221
07:45	12	459	1	5	477	63	207	1	12	283	0	331	0	18	349	10	129	0	35	174	1283
08:00	13	485	0	5	503	43	225	0	10	278	2	362	0	24	388	17	180	0	47	244	1413
Total	50	1742	4	17	1813	215	847	1	40	1103	4	1308	0	65	1377	56	536	1	109	702	4995
08:15	13	538	2	3	556	50	247	0	13	310	1	322	0	20	343	23	152	0	29	204	1413
08:30	19	538	0	6	563	57	221	0	8	286	0	288	2	18	308	24	189	0	57	270	1427
08:45	9	490	0	7	506	48	214	0	13	275	1	290	1	21	313	33	172	0	53	258	1352
09:00	8	440	0	0	448	29	213	0	0	242	0	307	0	16	323	36	180	0	52	268	1281
Total	49	2006	2	16	2073	184	895	0	34	1113	2	1207	2	75	1287	116	693	0	191	1000	5473
16:15	3	302	1	5	311	61	166	0	13	240	2	428	2	17	449	23	274	0	24	321	1321
16:30	9	311	1	9	330	62	174	1	16	253	5	415	1	18	439	13	264	0	65	342	1364
16:45	6	336	0	7	349	66	171	1	6	244	7	439	1	13	460	19	232	0	54	305	1358
17:00	9	343	1	7	360	68	164	2	8	242	0	433	0	30	463	22	257	0	65	344	1409
Total	27	1292	3	28	1350	257	675	4	43	979	14	1715	4	78	1811	77	1027	0	208	1312	5452
17:15	4	342	1	10	357	74	169	1	4	248	1	452	0	24	477	21	254	0	32	307	1389
17:30	5	349	1	8	363	67	153	0	8	228	6	444	3	24	477	17	233	31	18	299	1367
17:45	2	287	0	2	291	51	133	0	1	185	0	466	0	9	475	12	158	0	15	185	1136
18:00	4	242	0	0	246	35	137	2	0	174	4	363	0	9	376	20	182	0	25	227	1023
Total	15	1220	2	20	1257	227	592	3	13	835	11	1725	3	66	1805	70	827	31	90	1018	4915
Grand Total	141	6260	11	81	6493	883	3009	8	130	4030	31	5955	10	284	6280	319	3083	32	598	4032	20835
Approch %	2.2	96.4	0.2	1.2		21.9	74.7	0.2	3.2		0.5	94.8	0.2	4.5		7.9	76.5	0.8	14.8		
Total %	0.7	30.0	0.1	0.4	31.2	4.2	14.4	0.0	0.6	19.3	0.1	28.6	0.0	1.4	30.1	1.5	14.8	0.2	2.9	19.4	

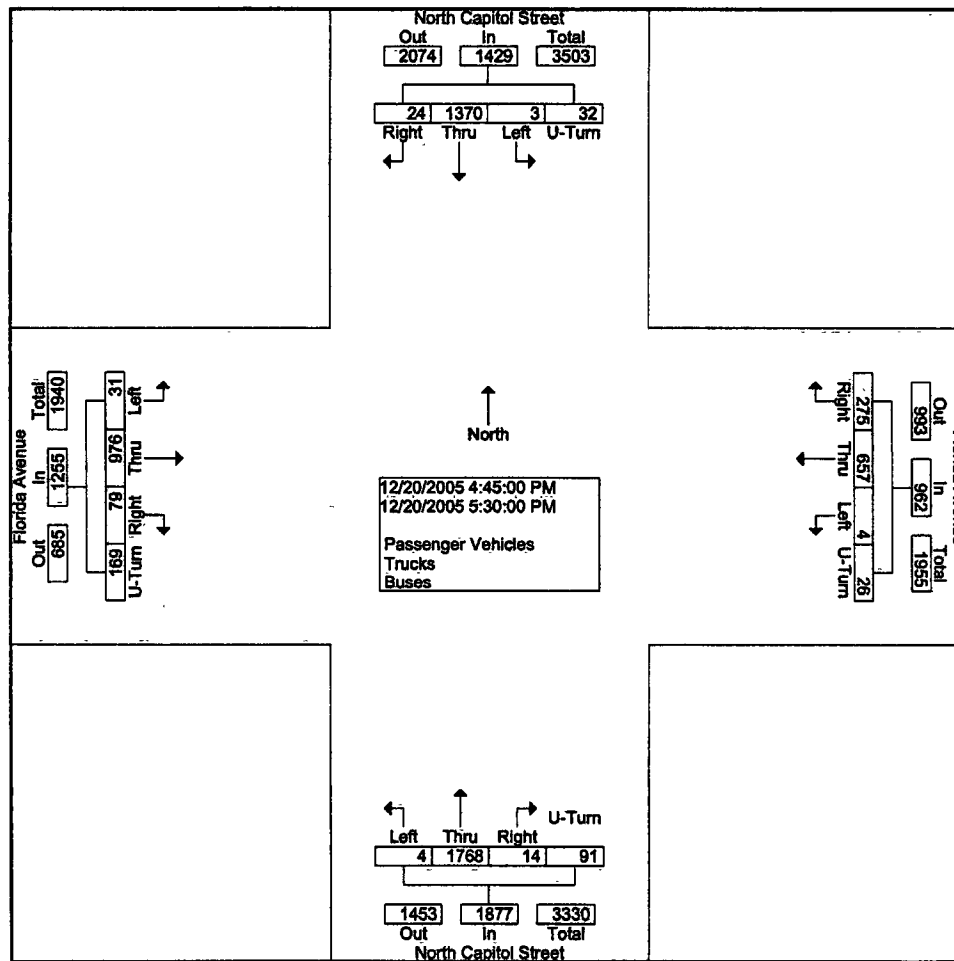
	North Capitol Street From North					Florida Avenue From East					North Capitol Street From South					Florida Avenue From West					Int. Total
End Time	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour From 07:15 to 11:45 - Peak 1 of 1 Intersection 08:00																					
Volume	54	205	2	21	2128	198	907	0	44	1149	4	126	3	83	1352	97	693	0	186	976	5605
		1										2									
Percent	2.5	96.4	0.1	1.0		17.2	78.9	0.0	3.8		0.3	93.3	0.2	6.1		9.9	71.0	0.0	19.1		
Volume	54	205	2	21	2128	198	907	0	44	1149	4	126	3	83	1352	97	693	0	186	976	5605
		1										2									
Volume	19	538	0	6	563	57	221	0	8	286	0	288	2	18	308	24	189	0	57	270	1427
Peak Factor																					0.982
High Int. 08:30						08:15					08:00					08:30					
Volume	19	538	0	6	563	50	247	0	13	310	2	362	0	24	388	24	189	0	57	270	
Peak Factor					0.945					0.927					0.871					0.904	



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File Name : NCS@FLA
 Site Code : 21161576
 Start Date : 12/20/2005
 Page No : 3

	North Capitol Street From North					Florida Avenue From East					North Capitol Street From South					Florida Avenue From West					Int. Total
End Time	Righ t	Thru	Left	U- Turn	App. Total	Righ t	Thru	Left	U- Turn	App. Total	Righ t	Thru	Left	U- Turn	App. Total	Righ t	Thru	Left	U- Turn	App. Total	
Peak Hour From 12:00 to 15:15 - Peak 1 of 1 Intersection 16:45																					
Volume	24	137 0	3	32	1429	275	657	4	26	962	14	176 8	4	91	1877	79	976	31	169	1255	5523
Percent	1.7	95.9	0.2	2.2		28.6	68.3	0.4	2.7		0.7	94.2	0.2	4.8		6.3	77.8	2.5	13.5		
Volume	24	137 0	3	32	1429	275	657	4	26	962	14	176 8	4	91	1877	79	976	31	169	1255	5523
Volume	9	343	1	7	360	68	164	2	8	242	0	433	0	30	463	22	257	0	65	344	1409
Peak Factor																					0.980
High Int. 17:30						17:15					17:15					17:00					
Volume	5	349	1	8	363	74	169	1	4	248	1	452	0	24	477	22	257	0	65	344	
Peak Factor					0.984					0.970					0.984						0.912



APPENDIX

C

CAPACITY ANALYSIS WORKSHEETS
EXISTING TRAFFIC SITUATION

TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information				
Analyst	ORGA-IJB		Intersection	Florida Ave @ Q Street			
Agency/Co.	O.R. GEORGE & ASSOCIATES		Jurisdiction	D.C.			
Date Performed	12/22/2005		Analysis Year	2005			
Analysis Time Period	AM PEAK						
Project Description 1600 NORTH CAPITOL STREET							
East/West Street: Q STREET			North/South Street: Florida Avenue				
Intersection Orientation: North-South			Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	0	957	0	0	698	0	
Peak-Hour Factor, PHF	1.00	0.92	1.00	1.00	0.91	1.00	
Hourly Flow Rate, HFR	0	1040	0	0	767	0	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	2	0	0	2	0	
Configuration		T			T		
Upstream Signal		1			1		
Minor Street	Westbound			Eastbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	0	0	0	4	0	92	
Peak-Hour Factor, PHF	1.00	1.00	0.65	0.81	1.00	0.81	
Hourly Flow Rate, HFR	0	0	0	4	0	113	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	0	0	1	0	1	
Configuration				L		R	
Delay, Queue Length, and Level of Service							
Approach	NB	SB	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration						L	R
v (vph)						4	113
C (m) (vph)						219	766
v/c						0.02	0.15
95% queue length						0.06	0.52
Control Delay						21.7	10.5
LOS						C	B
Approach Delay	--	--				10.9	
Approach LOS	--	--				B	

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Version 4.1f

Version 4.1f

SHORT REPORT

General Information				Site Information			
Analyst	ORGA-IJB			Intersection	North Capitol St. @ Florida Ave		
Agency or Co.	O.R. GEORGE & ASSOCIATES			Area Type	All other areas		
Date Performed	12/22/2005			Jurisdiction	D.C.		
Time Period	PM PEAK			Analysis Year	2005		

Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	3	0	0	2	0	0	3	0	0	3	0
Lane group		LTR			TR			TR			TR	
Volume (vph)	31	976	79		657	275		1766	14		1370	24
% Heavy veh	0	0	0		0	0		0	0		0	0
PHF	0.97	0.97	0.97		0.96	0.96		0.99	0.99		0.98	0.98
Actuated (P/A)	P	P	P		P	P		P	P		P	P
Startup lost time		2.0			2.0			2.0			2.0	
Ext. eff. green		2.0			2.0			2.0			2.0	
Arrival type		3			3			3			3	
Unit Extension		3.0			3.0			3.0			3.0	
Ped/Bike/RTOR Volume	0		0	0		0	0		0	0		0
Lane Width		10.0			10.0			10.0			10.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr		11			7			10			10	
Unit Extension		3.0			3.0			3.0			3.0	
Phasing	EW Perm	02	03	04	Thru & RT	06	07	08				
Timing	G = 38.0	G =	G =	G =	G = 52.0	G =	G =	G =				
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =				
Duration of Analysis (hrs) = 0.25				Cycle Length C = 100.0								

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate		1119			970			1798			1422	
Lane group cap.		1484			1209			2476			2472	
v/c ratio		0.75			0.80			0.73			0.58	
Green ratio		0.38			0.38			0.52			0.52	
Unif. delay d1		26.9			27.6			18.5			16.4	
Delay factor k		0.50			0.50			0.50			0.50	
Increm. delay d2		3.6			5.7			1.9			1.0	
PF factor		1.000			1.000			1.000			1.000	
Control delay		30.5			33.3			20.4			17.4	
Lane group LOS		C			C			C			B	
Apprch. delay		30.5			33.3			20.4			17.4	
Approach LOS		C			C			C			B	
Intersec. delay		24.1			Intersection LOS						C	

SHORT REPORT

General Information				Site Information			
Analyst	ORGA-IJB			Intersection	North Capitol St.@ Florida Ave		
Agency or Co.	O.R.GEORGE & ASSOCIATES			Area Type	All other areas		
Date Performed	12/22/2005			Jurisdiction	D.C.		
Time Period	AM PEAK			Analysis Year	2005		

Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	3	0	0	2	0	0	3	0	0	3	0
Lane group		TR			TR			TR			TR	
Volume (vph)		693	97		903	198		1262	4		2051	54
% Heavy veh		0	0		0	0		0	0		0	0
PHF		0.93	0.93		0.94	0.94		0.87	0.87		0.95	0.95
Actuated (P/A)		P	P		P	P		P	P		P	P
Startup lost time		2.0			2.0			2.0			2.0	
Ext. eff. green		2.0			2.0			2.0			2.0	
Arrival type		3			3			3			3	
Unit Extension		3.0			3.0			3.0			3.0	
Ped/Bike/RTOR Volume	0		0	0		0	0		0	0		0
Lane Width		10.0			10.0			10.0			10.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr		8			17			10			10	
Unit Extension		3.0			3.0			3.0			3.0	

Phasing	Thru & RT	02	03	04	Thru & RT	06	07	08
Timing	G = 38.0	G =	G =	G =	G = 52.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25				Cycle Length C = 100.0				

Lane Group Capacity, Control Delay, and LOS Determination											
	EB			WB			NB			SB	
Adj. flow rate		849			1172			1456			2216
Lane group cap.		1783			1206			2477			2469
v/c ratio		0.48			0.97			0.59			0.90
Green ratio		0.38			0.38			0.52			0.52
Unif. delay d1		23.5			30.5			16.6			21.6
Delay factor k		0.50			0.50			0.50			0.50
Increm. delay d2		0.9			20.0			1.0			5.7
PF factor		1.000			1.000			1.000			1.000
Control delay		24.4			50.5			17.6			27.3
Lane group LOS		C			D			B			C
Apprch. delay	24.4			50.5			17.6			27.3	
Approach LOS	C			D			B			C	
Intersec. delay	29.2			Intersection LOS					C		

TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information				
Analyst	ORGA-IJB		Intersection	Florida Ave @ Q Street			
Agency/Co.	O.R. GEORGE & ASSOCIATES		Jurisdiction	D.C.			
Date Performed	12/22/2005		Analysis Year	2005			
Analysis Time Period	PM PEAK						
Project Description 1600 NORTH CAPITOL STREET							
East/West Street: Q STREET			North/South Street: Florida Avenue				
Intersection Orientation: North-South			Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	0	681	0	0	965	0	
Peak-Hour Factor, PHF	1.00	0.97	1.00	1.00	0.93	1.00	
Hourly Flow Rate, HFR	0	702	0	0	1037	0	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	2	0	0	2	0	
Configuration		T			T		
Upstream Signal		1			1		
Minor Street	Westbound			Eastbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	0	0	0	6	0	121	
Peak-Hour Factor, PHF	1.00	1.00	0.75	0.85	1.00	0.85	
Hourly Flow Rate, HFR	0	0	0	7	0	142	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	0	0	1	0	1	
Configuration				L		R	
Delay, Queue Length, and Level of Service							
Approach	NB	SB	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration						L	R
v (vph)						7	142
C (m) (vph)						186	760
v/c						0.04	0.19
95% queue length						0.12	0.68
Control Delay						25.1	10.8
LOS						D	B
Approach Delay	--	--				11.5	
Approach LOS	--	--				B	

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APPENDIX

D

ACCIDENT RECORDS

DDOT: Accident Summary Report (R-4)

Date:

Prepared By:

Location:

Quadrant: P. EVANS

FLORIDA AVE

And

Q ST

NW

Summary for the time period of:

1/1/2002 To:

12/31/2002

Total Number of Accident

3

Total Number of Injuries

4

Contributing Factors:

Driver:

Vehicle:

Roadway:

Unknown:

2 66.67%

0 0.00%

0 0.00%

1 33.33%

Collision Types:

Right Angle: Left Turn:

Right Turn:

Rear End:

Side

Swiped:

Head On: Parked

0

1

0

1

1

0

0

Fixed Object Ran Off Road:

Pedestrian:

Backing

Non

Collision:

Other:

0

0

0

0

0

0

Accident Times:

Time

Number

Percent

07:30-09:30

0

0.00%

09:30-11:30

0

0.00%

11:30-13:30

0

0.00%

13:30-16:00

1

33.33%

16:00-18:30

1

33.33%

18:30-07:30

1

33.33%

Weekday:

2

66.67%

Weekend:

1

33.33%

DDOT: Accident Summary Report (R-4)

Date:

Prepared By:

Location:

Quadrant: P. EVANS

FLORIDA AVE

And

Q ST

NW

Summary for the time period of: 1/1/2003 To: 12/31/2003

Total Number of Accident 4

Total Number of Injuries 1

Contributing Factors:

Driver:

1 25.00%

Vehicle:

0 0.00%

Roadway:

1 25.00%

Unknown:

2 50.00%

Collision Types:

Right Angle: Left Turn:

0 0

Right Turn:

1 1

Rear End:

1

Side

Swiped:

1

Head On: Parked

0 0

Fixed Object Ran Off Road:

0 0

Pedestrian:

0

Backing

0

Non

Collision:

0

Other:

0

Accident Times:

Time

Number

Percent

07:30-09:30

1

25.00%

09:30-11:30

0

0.00%

11:30-13:30

0

0.00%

13:30-16:00

1

25.00%

16:00-18:30

0

0.00%

18:30-07:30

2

50.00%

Weekday:

2

50.00%

Weekend:

2

50.00%

DDOT: Accident Summary Report (R-4)

Date:

Prepared By:

Location:

Quadrant: P. EVANS

FLORIDA AVE

And

Q ST

NW

Summary for the time period of: 1/1/2004 To: 12/31/2004

Total Number of Accident 3

Total Number of Injuries 3

Contributing Factors:

Driver:

1 33.33%

Vehicle:

0 0.00%

Roadway:

0 0.00%

Unknown:

1 33.33%

Collision Types:

Right Angle: Left Turn:

0 0

Right Turn:

2

Rear End:

0

Side

Swiped:

0

Head On: Parked

0

0

Fixed Object Ran Off
Road:

0 0

Pedestrian:

1

Backing

0

Non

Collision:

0

Other:

0

Accident Times:

Time

Number

Percent

07:30-09:30

0

0.00%

09:30-11:30

0

0.00%

11:30-13:30

1

33.33%

13:30-16:00

0

0.00%

16:00-18:30

1

33.33%

18:30-07:30

1

33.33%

Weekday:

1

33.33%

Weekend:

2

66.67%

DDOT: Accident Summary Report (R-4)

Date:

Prepared By:

Location:

Quadrant: P. EVANS

NORTH CAPITOL ST And FLORIDA AVE NW

Summary for the time period of: 1/1/2002 To: 12/31/2002

Total Number of Accident 14

Total Number of Injuries 11

Contributing Factors:

Driver:	Vehicle:	Roadway:	Unknown:
6 42.86%	0 0.00%	1 7.14%	7 50.00%

Collision Types:

Right Angle:	Left Turn:	Right Turn:	Rear End:	Side Swiped:	Head On:	Parked
4	1	0	4	3	0	0
Fixed Object	Ran Off Road:	Pedestrian:	Backing	Non Collision:	Other:	
0	0	1	0	0	0	

Accident Times:

Time	Number	Percent
07:30-09:30	1	7.14%
09:30-11:30	2	14.29%
11:30-13:30	3	21.43%
13:30-16:00	3	21.43%
16:00-18:30	1	7.14%
18:30-07:30	4	28.57%
Weekday:	10	71.43%
Weekend:	4	28.57%

DDOT: Accident Summary Report (R-4)

Date:

Prepared By:

Location:

Quadrant: P. EVANS

NORTH CAPITOL ST And FLORIDA AVE NW

Summary for the time period of: 1/1/2003 To: 12/31/2003

Total Number of Accident 15

Total Number of Injuries 9

Contributing Factors:

Driver:	Vehicle:	Roadway:	Unknown:
7 46.67%	0 0.00%	0 0.00%	8 53.33%

Collision Types:

Right Angle:	Left Turn:	Right Turn:	Rear End:	Side Swiped:	Head On:	Parked
1	1	1	4	3	0	0
Fixed Object	Ran Off Road:	Pedestrian:	Backing	Non Collision:	Other:	
0	0	3	0	0	1	

Accident Times:

Time	Number	Percent
07:30-09:30	0	0.00%
09:30-11:30	0	0.00%
11:30-13:30	2	13.33%
13:30-16:00	5	33.33%
16:00-18:30	2	13.33%
18:30-07:30	6	40.00%
Weekday:	10	66.67%
Weekend:	3	20.00%

DDOT: Accident Summary Report (R-4)

Date:

Prepared By:

Location:

Quadrant: P. EVANS

NORTH CAPITOL ST And FLORIDA AVE NW

Summary for the time period of: 1/1/2004 To: 12/31/2004

Total Number of Accident 16

Total Number of Injuries 16

Contributing Factors:

Driver:	Vehicle:	Roadway:	Unknown:
3 18.75%	1 6.25%	1 6.25%	8 50.00%

Collision Types:

Right Angle:	Left Turn:	Right Turn:	Rear End:	Side Swiped:	Head On:	Parked
3	2	2	2	5	0	0

Fixed Object	Ran Off Road:	Pedestrian:	Backing	Non Collision:	Other:
0	0	1	0	0	1

Accident Times:

Time	Number	Percent
07:30-09:30	4	25.00%
09:30-11:30	1	6.25%
11:30-13:30	1	6.25%
13:30-16:00	5	31.25%
16:00-18:30	2	12.50%
18:30-07:30	3	18.75%
Weekday:	16	100.00%
Weekend:	0	0.00%

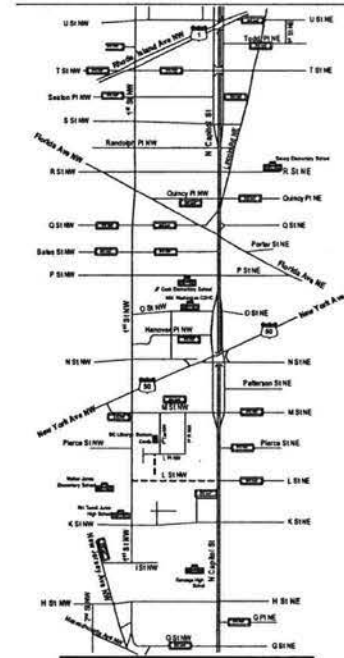
APPENDIX

E

EXCERPTS FROM THE DDOT NORTH CAPITOL
STREET TRANSPORTATION STUDY

North Capitol Street Transportation Study

Draft Final Report



Prepared by:
DMJM Harris, Inc.
for:
District Department of Transportation
District of Columbia

November 2005



TRANSPORTATION ISSUES:

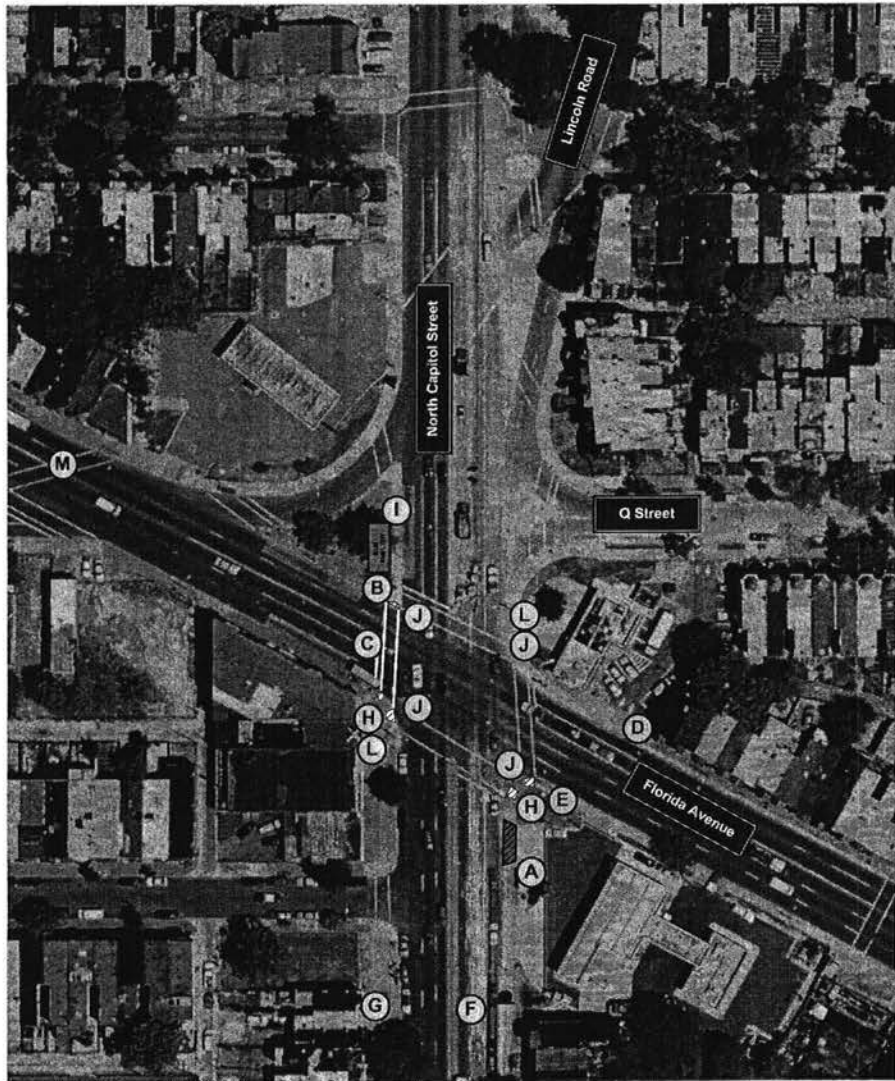
- ① Driveway on the northbound approach is very close to the intersection and adjacent to the bus stop.
- ② ADA ramp is missing on northwest corner across Florida Avenue.
- ③ Eastbound approach needs cross-walk re-striping.
- ④ KFC driveway on westbound approach is too close to the intersection.
- ⑤ Sidewalk on the south side of Florida Avenue, east of North Capitol Street, narrows.
- ⑥ Lack of signing for Lincoln Road and Q Street.
- ⑦ Sign indicating speed limit of "15 mph when children are present" located on southbound North Capitol Street, 150 feet south of the Florida Avenue intersection, does not provide maximum safety.
- ⑧ Inadequate ADA ramps on the southeast and southwest corners.
- ⑨ There is significant pedestrian activity during off-peak hours.
- ⑩ Not enough time for pedestrian to cross Florida Avenue.
- ⑪ The crosswalk across Florida Avenue at Q Street is not as visible as needed.



FIGURE 20A
ISSUES MAP
FLORIDA AVENUE AND
NORTH CAPITOL STREET

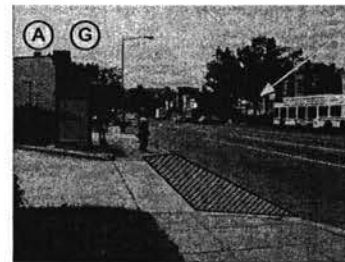


Not to Scale



RECOMMENDED IMPROVEMENTS:

- Close driveway nearest to Florida Avenue for gas station on northbound North Capitol Street.
- Install ADA ramp at northwest corner across Florida Avenue.
- Re-stripe cross-walk for eastbound approach.
- Make KFC driveway that provides ingress from and egress to KFC a right-in-right-out driveway. Include "No Left-Turn" signs.
- Relocate light pole on southwest closer to the curb to provide clearance for pedestrians on sidewalk.
- Add sign saying "Lincoln Road, Q Street Traffic , Use Right Lane", beyond second driveway on northbound approach at a distance of 120 feet from intersection.
- Replace "15 mph when children are present" sign on southbound North Capitol Street with flashing beacons indicating 15 mph. Add "End School Zone" sign at the edge of the school speed zone.
- Fix ADA ramps at southwest and southeast corners (both directions).
- Add shelter to bus stop on northwest corner.
- Install countdown pedestrian signals for all crosswalks.
- Increase law enforcement for speed and parking activities.
- Add two seconds for the pedestrians to cross Florida Avenue.
- Install in-roadway warning lights for pedestrians across Florida Avenue.



Legend

- Roadway construction
- Striping and pavement markings
- Parking and traffic regulations
- Pole relocation
- Signs
- Bus stop/bus shelter
- Traffic signal
- Sidewalks
- Other miscellaneous improvements

FIGURE 20B

IMPROVEMENTS MAP
FLORIDA AVENUE AND
NORTH CAPITOL STREET

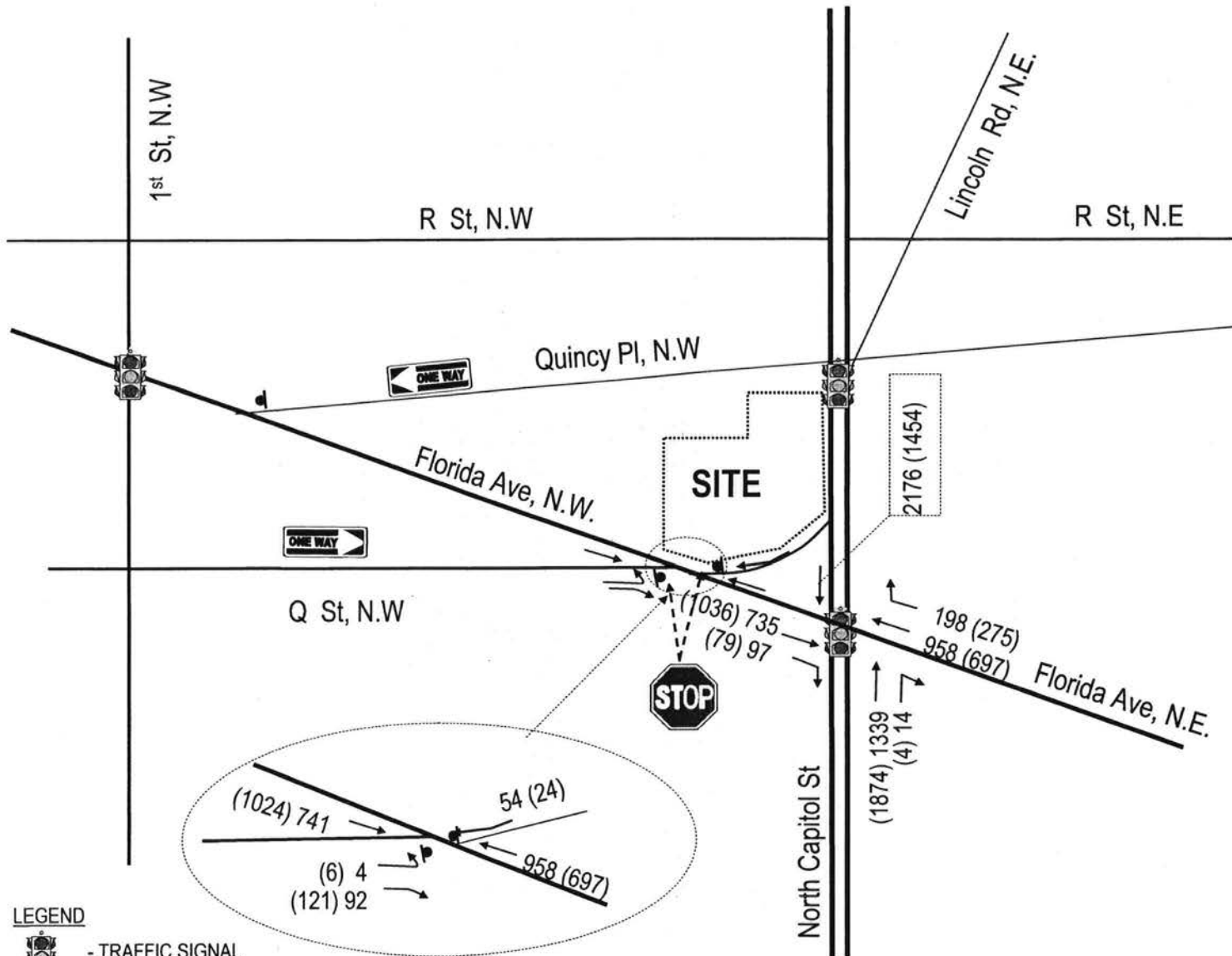


Not to Scale

APPENDIX

F

2009 'BASE' TRAFFIC SITUATION



LEGEND



- TRAFFIC SIGNAL



- STOP SIGN

XX (XX) - AM (PM) PEAK HOUR VOLUMES

O. R. GEORGE & ASSOCIATES, INC.

Traffic Engineers - Transportation Planners

APPENDIX F-1

BASE YEAR 2009 TRAFFIC SITUATION

1600 North Capitol Street, PUD Application No. 06-04, Northwest, Washington D.C



NOT TO SCALE

APPENDIX

G

CAPACITY ANALYSIS WORKSHEETS -
2009 BACKGROUND TRAFFIC SITUATION

TWO-WAY STOP CONTROL SUMMARY

General Information				Site Information				
Analyst	ORGA-IJB			Intersection	Florida Ave @ Q Street			
Agency/Co.	O.R.GEORGE & ASSOCIATES			Jurisdiction	D.C.			
Date Performed	05/01/2006			Analysis Year	Background 2009			
Analysis Time Period	AM PEAK							
Project Description 1600 NORTH CAPITOL STREET								
East/West Street: Q STREET				North/South Street: Florida Avenue				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume	0	1012	0	0	741	0		
Peak-Hour Factor, PHF	1.00	0.92	1.00	1.00	0.91	1.00		
Hourly Flow Rate, HFR	0	1099	0	0	814	0		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	2	0	0	2	0		
Configuration		T			T			
Upstream Signal		1			1			
Minor Street	Westbound			Eastbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume	0	0	0	4	0	92		
Peak-Hour Factor, PHF	1.00	1.00	0.65	0.81	1.00	0.81		
Hourly Flow Rate, HFR	0	0	0	4	0	113		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	1	0	1		
Configuration				L		R		
Delay, Queue Length, and Level of Service								
Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration						L		R
v (vph)						4		113
C (m) (vph)						199		738
v/c						0.02		0.15
95% queue length						0.06		0.54
Control Delay						23.5		10.8
LOS						C		B
Approach Delay	--	--				11.2		
Approach LOS	--	--				B		

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SHORT REPORT

General Information				Site Information			
Analyst	ORGA-IJB			Intersection	North Capitol St.@ Florida Ave		
Agency or Co.	O.R.GEORGE & ASSOCIATES			Area Type	All other areas		
Date Performed	05/01/2006			Jurisdiction	D.C.		
Time Period	PM PEAK			Analysis Year	Background 2009		

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	3	0	0	2	0	0	3	0	0	3	0
Lane group		LTR			TR			TR			TR	
Volume (vph)	31	1036	79		697	275		1874	14		1454	24
% Heavy veh	0	0	0		0	0		0	0		0	0
PHF	0.97	0.97	0.97		0.96	0.96		0.99	0.99		0.98	0.98
Actuated (P/A)	P	P	P		P	P		P	P		P	P
Startup lost time		2.0			2.0			2.0			2.0	
Ext. eff. green		2.0			2.0			2.0			2.0	
Arrival type		3			3			3			3	
Unit Extension		3.0			3.0			3.0			3.0	
Ped/Bike/RTOR Volume	0		0	0		0	0		0	0		0
Lane Width		10.0			10.0			10.0			10.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr		11			7			10			10	
Unit Extension		3.0			3.0			3.0			3.0	

Phasing	EW Perm	02	03	04	Thru & RT	06	07	08
Timing	G = 38.0	G =	G =	G =	G = 52.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25				Cycle Length C = 100.0				

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate		1181			1012			1907			1508	
Lane group cap.		1466			1211			2476			2473	
v/c ratio		0.81			0.84			0.77			0.61	
Green ratio		0.38			0.38			0.52			0.52	
Unif. delay d1		27.7			28.2			19.2			16.9	
Delay factor k		0.50			0.50			0.50			0.50	
Increm. delay d2		4.8			6.9			2.4			1.1	
PF factor		1.000			1.000			1.000			1.000	
Control delay		32.5			35.1			21.6			18.0	
Lane group LOS		C			D			C			B	
Apprch. delay	32.5			35.1			21.6			18.0		
Approach LOS	C			D			C			B		
Intersec. delay	25.4			Intersection LOS						C		

SHORT REPORT

General Information				Site Information			
Analyst	ORGA-IJB			Intersection	North Capitol St.@ Florida Ave		
Agency or Co.	O.R.GEORGE & ASSOCIATES			Area Type	All other areas		
Date Performed	05/01/2006			Jurisdiction	D.C.		
Time Period	AM PEAK			Analysis Year	Background 2009		

Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	3	0	0	2	0	0	3	0	0	3	0
Lane group		TR			TR			TR			T	
Volume (vph)		735	97		958	198		1339	4		2176	
% Heavy veh		0	0		0	0		0	0		0	
PHF		0.93	0.93		0.94	0.94		0.87	0.87		0.95	
Actuated (P/A)		P	P		P	P		P	P		P	
Startup lost time		2.0			2.0			2.0			2.0	
Ext. eff. green		2.0			2.0			2.0			2.0	
Arrival type		3			3			3			3	
Unit Extension		3.0			3.0			3.0			3.0	
Ped/Bike/RTOR Volume	0		0	0		0	0		0			
Lane Width		10.0			10.0			10.0			10.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr		8			17			10			10	
Unit Extension		3.0			3.0			3.0			3.0	

Phasing	Thru & RT	02	03	04	Thru & RT	06	07	08
Timing	G = 38.0	G =	G =	G =	G = 52.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25				Cycle Length C = 100.0				

Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
Adj. flow rate		894			1230			1544			2291	
Lane group cap.		1784			1208			2477			2478	
v/c ratio		0.50			1.02			0.62			0.92	
Green ratio		0.38			0.38			0.52			0.52	
Unif. delay d1		23.7			31.0			17.0			22.2	
Delay factor k		0.50			0.50			0.50			0.50	
Increm. delay d2		1.0			30.5			1.2			7.3	
PF factor		1.000			1.000			1.000			1.000	
Control delay		24.7			61.5			18.2			29.5	
Lane group LOS		C			E			B			C	
Apprch. delay	24.7			61.5			18.2			29.5		
Approach LOS	C			E			B			C		
Intersec. delay	32.5			Intersection LOS						C		

TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information				
Analyst	ORGA-IJB		Intersection	Florida Ave @ Q Street			
Agency/Co.	O.R. GEORGE & ASSOCIATES		Jurisdiction	D.C.			
Date Performed	05/01/06		Analysis Year	Background 2009			
Analysis Time Period	PM PEAK						
Project Description 1600 NORTH CAPITOL STREET							
East/West Street: Q STREET			North/South Street: Florida Avenue				
Intersection Orientation: North-South			Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume	0	721	0	0	1024	0	
Peak-Hour Factor, PHF	1.00	0.97	1.00	1.00	0.93	1.00	
Hourly Flow Rate, HFR	0	743	0	0	1101	0	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	2	0	0	2	0	
Configuration		T			T		
Upstream Signal		1			1		
Minor Street	Westbound			Eastbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume	0	0	0	6	0	121	
Peak-Hour Factor, PHF	1.00	1.00	0.75	0.85	1.00	0.85	
Hourly Flow Rate, HFR	0	0	0	7	0	142	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	0	0	1	0	1	
Configuration				L		R	
Delay, Queue Length, and Level of Service							
Approach	NB	SB	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration						L	R
v (vph)						7	142
C (m) (vph)						165	751
v/c						0.04	0.19
95% queue length						0.13	0.69
Control Delay						27.8	10.9
LOS						D	B
Approach Delay	--	--				11.7	
Approach LOS	--	--				B	

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APPENDIX

H

CAPACITY ANALYSIS WORKSHEETS
2009 TOTAL TRAFFIC SITUATION

TWO-WAY STOP CONTROL SUMMARY

General Information			Site Information			
Analyst	ORGA-IJB		Intersection	Florida Ave @ Q Street		
Agency/Co.	O.R. GEORGE & ASSOCIATES		Jurisdiction	D.C.		
Date Performed	05/01/2006		Analysis Year	Future 2009		
Analysis Time Period	AM PEAK					
Project Description 1600 NORTH CAPITOL STREET						
East/West Street: Q STREET			North/South Street: Florida Avenue			
Intersection Orientation: North-South			Study Period (hrs): 0.25			
Vehicle Volumes and Adjustments						
Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	0	1012	3	2	741	0
Peak-Hour Factor, PHF	1.00	0.92	0.92	0.91	0.91	1.00
Hourly Flow Rate, HFR	0	1099	3	2	814	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration		T	TR	LT	T	
Upstream Signal		1			1	
Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	8	0	6	4	2	92
Peak-Hour Factor, PHF	0.65	1.00	0.65	0.81	0.81	0.81
Hourly Flow Rate, HFR	12	0	9	4	2	113
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	1	0	1	1	1	0
Configuration	L		R	L		TR
Delay, Queue Length, and Level of Service						
Approach	NB	SB	Westbound		Eastbound	
Movement	1	4	7	8	9	10
Lane Configuration		LT	L		R	L
v (vph)		2	12		9	4
C (m) (vph)		812	160		832	262
v/c		0.00	0.08		0.01	0.02
95% queue length		0.01	0.24		0.03	0.05
Control Delay		9.4	29.3		9.4	19.0
LOS		A	D		A	C
Approach Delay	--	--	20.8		10.6	
Approach LOS	--	--	C		B	

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SHORT REPORT

General Information				Site Information			
Analyst	ORGA-IJB			Intersection	North Capitol St. @ Florida Ave		
Agency or Co.	O.R. GEORGE & ASSOCIATES			Area Type	All other areas		
Date Performed	05/01/2006			Jurisdiction	D.C.		
Time Period	PM PEAK			Analysis Year	Future 2009		

Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	3	0	0	2	0	0	3	0	0	3	0
Lane group		LTR			TR			TR			TR	
Volume (vph)	31	1038	83		701	275		1874	14		1454	24
% Heavy veh	0	0	0		0	0		0	0		0	0
PHF	0.97	0.97	0.97		0.96	0.96		0.99	0.99		0.98	0.98
Actuated (P/A)	P	P	P		P	P		P	P		P	P
Startup lost time		2.0			2.0			2.0			2.0	
Ext. eff. green		2.0			2.0			2.0			2.0	
Arrival type		3			3			3			3	
Unit Extension		3.0			3.0			3.0			3.0	
Ped/Bike/RTOR Volume	0		0	0		0	0		0	0		0
Lane Width		10.0			10.0			10.0			10.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr		11			7			10			10	
Unit Extension		3.0			3.0			3.0			3.0	

Phasing	EW Perm	02	03	04	Thru & RT	06	07	08
Timing	G = 38.0	G =	G =	G =	G = 52.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25						Cycle Length C = 100.0		

Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
Adj. flow rate		1188			1016			1907			1508	
Lane group cap.		1464			1212			2476			2473	
v/c ratio		0.81			0.84			0.77			0.61	
Green ratio		0.38			0.38			0.52			0.52	
Unif. delay d1		27.8			28.2			19.2			16.9	
Delay factor k		0.50			0.50			0.50			0.50	
Increm. delay d2		5.0			7.0			2.4			1.1	
PF factor		1.000			1.000			1.000			1.000	
Control delay		32.8			35.2			21.6			18.0	
Lane group LOS		C			D			C			B	
Apprch. delay	32.8			35.2			21.6			18.0		
Approach LOS	C			D			C			B		
Intersec. delay	25.5			Intersection LOS						C		

SHORT REPORT

General Information				Site Information			
Analyst	ORGA-IJB			Intersection	North Capitol St.@ Florida Ave		
Agency or Co.	O.R.GEORGE & ASSOCIATES			Area Type	All other areas		
Date Performed	05/01/2006			Jurisdiction	D.C.		
Time Period	AM PEAK			Analysis Year	Future 2009		

Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	3	0	0	2	0	0	3	0	0	3	0
Lane group		TR			TR			TR			TR	
Volume (vph)		737	102		960	198		1339	4		2176	54
% Heavy veh		0	0		0	0		0	0		0	0
PHF		0.93	0.93		0.94	0.94		0.87	0.87		0.95	0.95
Actuated (P/A)		P	P		P	P		P	P		P	P
Startup lost time		2.0			2.0			2.0			2.0	
Ext. eff. green		2.0			2.0			2.0			2.0	
Arrival type		3			3			3			3	
Unit Extension		3.0			3.0			3.0			3.0	
Ped/Bike/RTOR Volume	0		0	0		0	0		0	0		0
Lane Width		10.0			10.0			10.0			10.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr		8			17			10			10	
Unit Extension		3.0			3.0			3.0			3.0	
Phasing	Thru & RT	02	03	04	Thru & RT	06	07	08				
Timing	G = 38.0	G =	G =	G =	G = 52.0	G =	G =	G =				
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =				
Duration of Analysis (hrs) = 0.25							Cycle Length C = 100.0					

Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
Adj. flow rate		902			1232			1544			2348	
Lane group cap.		1783			1208			2477			2469	
v/c ratio		0.51			1.02			0.62			0.95	
Green ratio		0.38			0.38			0.52			0.52	
Unif. delay d1		23.8			31.0			17.0			22.8	
Delay factor k		0.50			0.50			0.50			0.50	
Increm. delay d2		1.0			31.0			1.2			9.8	
PF factor		1.000			1.000			1.000			1.000	
Control delay		24.8			62.0			18.2			32.6	
Lane group LOS		C			E			B			C	
Approch. delay	24.8			62.0			18.2			32.6		
Approach LOS	C			E			B			C		
Intersec. delay	33.8			Intersection LOS						C		

TWO-WAY STOP CONTROL SUMMARY**General Information**

Analyst *ORGA-IJB*
 Agency/Co. *O.R. GEORGE & ASSOCIATES*
 Date Performed *05/01/06*
 Analysis Time Period *PM PEAK*

Site Information

Intersection *Florida Ave @ Q Street*
 Jurisdiction *D.C.*
 Analysis Year *Total 2009*

Project Description *1600 NORTH CAPITOL STREET*

East/West Street: *Q STREET*

North/South Street: *Florida Avenue*

Intersection Orientation: *North-South*

Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	0	721	6	5	1024	0
Peak-Hour Factor, PHF	1.00	0.97	0.97	0.93	0.93	1.00
Hourly Flow Rate, HFR	0	743	6	5	1101	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration		T	TR	LT	T	
Upstream Signal		1			1	
Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	7	0	5	6	5	121
Peak-Hour Factor, PHF	0.92	1.00	0.92	0.85	0.85	0.85
Hourly Flow Rate, HFR	7	0	5	7	5	142
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	1	0	1	0	1	1
Configuration	L		R	LT		R

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT	L		R	LT		R
v (vph)		5	7		5	12		142
C (m) (vph)		957	143		843	107		751
v/c		0.01	0.05		0.01	0.11		0.19
95% queue length		0.02	0.15		0.02	0.37		0.69
Control Delay		8.8	31.5		9.3	42.9		10.9
LOS		A	D		A	E		B
Approach Delay	--	--	22.2			13.4		
Approach LOS	--	--	C			B		

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