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July 3, 2001

VIA HAND DELIVERY
Mr. Kenneth Laden
Department of Public Works
2000 14th Street, N.W.
Washington, DC 20009

Re: Traffic and Parking Impact Assessment
Board of Zoning Adjustment Case No. 16744
500 New Jersey Avenue, N.W., Square 627

Dear Mr. Laden:

Enclosed please find a copy of the report by the Applicant's transportation consultant in the above-referenced Board of Zoning Adjustment case. In accordance with Section 3113.9 of the Zoning Regulations, a copy of this report is being provided to the Department of Public Works at least twenty (20) days prior to the public hearing scheduled for July 24, 2001.

Thank you for your attention to this information. Should you have any questions, please do not hesitate to call me.

Sincerely,

Christine Shiker

Christine Moseley Shiker

Enclosure

cc: Board of Zoning Adjustment (with enclosure)
Jay Hellman, The Hellman Companies, inc. (with enclosure)
Whayne S. Quin, Esq. (with enclosure)

WAS1 #991102 v1

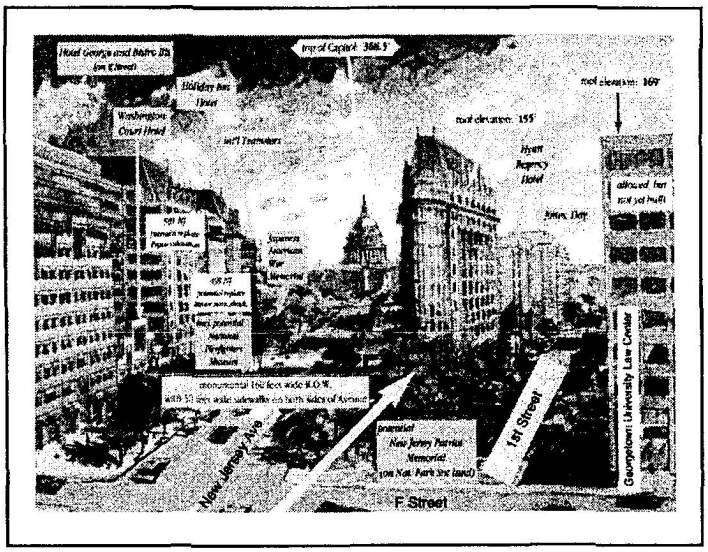
BZA
Case No. 16744
Exhibit No. 42

Board of Zoning Adjustment
District of Columbia
CASE NO.16744
EXHIBIT NO.42

Technical Memorandum:

TRAFFIC AND PARKING IMPACT ASSESSMENT, BOARD OF ZONING ADJUSTMENT VARIANCE APPLICATIONS FOR 500 NEW JERSEY AVENUE, N. W. WASHINGTON, D. C.

(Application No. 16744)



Prepared for:

THE HELLMAN COMPANY, INC.
1828 L Street, N.W.
Washington, D.C. 20036
Mr. Jay John Hellman, *Ph. D., President*

Correspondents:

HOLLAND & KNIGHT, LLP
2099 Pennsylvania Avenue, N.W., Suite 100
Washington, D.C. 20006
Ms. Christy M. Sheiker, *Esquire*
Mr. Whayne S. Quinn, *Esquire*

Prepared by:

O. R. GEORGE & ASSOCIATES, INC.
10210 Greenbelt Road, Suite 310
Greenbelt, MD 20706

July 3, 2001

O. GEORGE & ASSOCIATES, INC.
Traffic Engineers – Transportation Planners

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TECHNICAL MEMORANDUM

DATE: July 3, 2001

TO: Jay John Hellman, Ph.D., President
THE HELLMAN COMPANY, Inc.

FROM: Osborne R. George

RE: Board of Zoning Adjustment Application No. 16744
500 New Jersey Avenue, NW, Washington, DC

1.0 INTRODUCTION AND PURPOSE

In accordance with your request, we have reviewed and evaluated your company's proposal to develop an office building at the referenced location, based upon the details presented in the subject application. The purpose of the assessment was to determine whether the proposed development can be undertaken such that it *"will not tend to affect adversely the use of neighboring property..."* based upon the variance relief sought. This evaluation was made based upon traffic generation, site access and related issues and perspectives. Accordingly, this evaluation has considered the following specifics of the application:

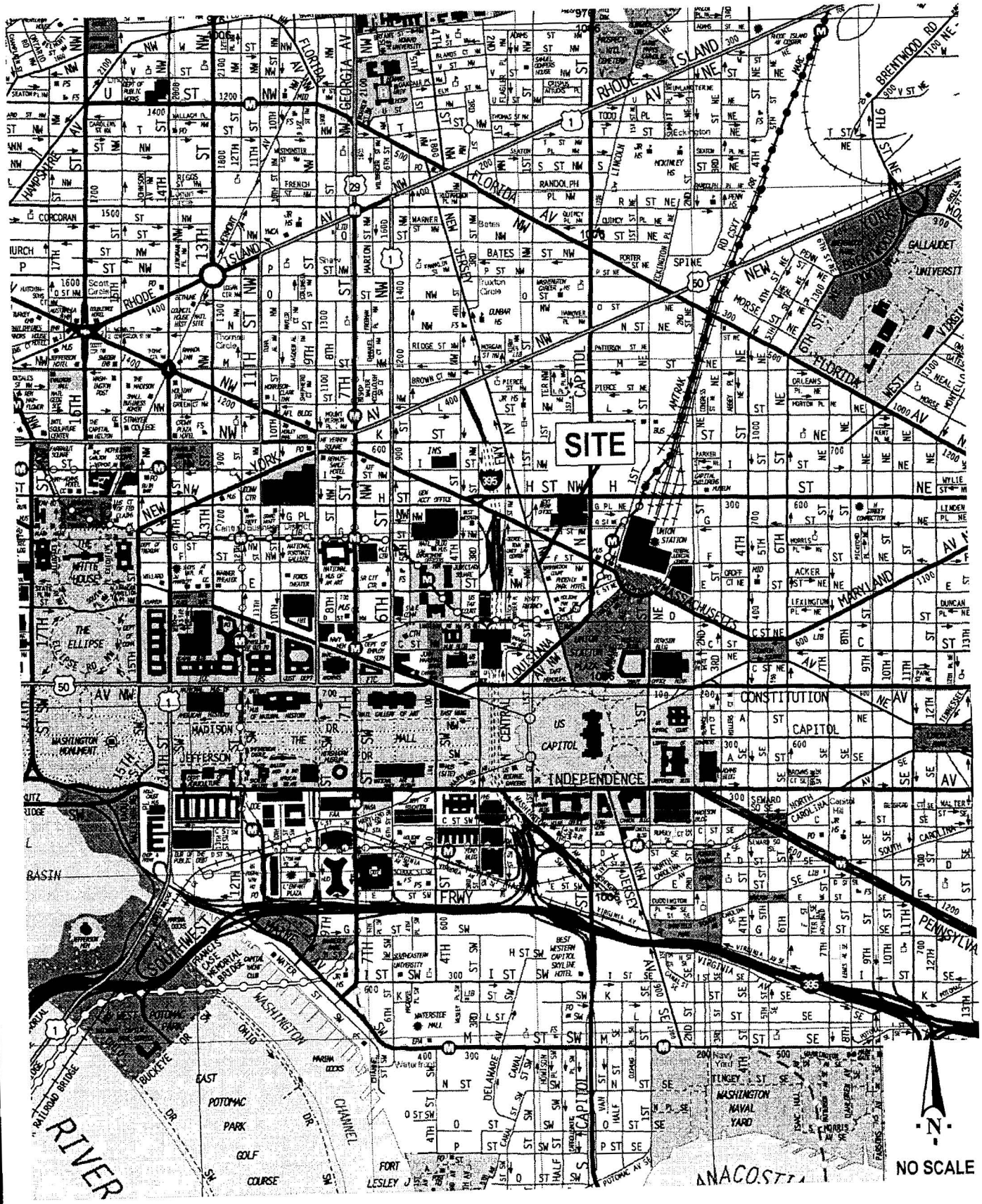
(a) ***A variance from the Floor Area Ratio (FAR) requirement*** - Under the Applicant's proposal, the development would yield a Gross Floor Area (GFA) of 92,350 Square Feet, versus 54,030 Square Feet under a matter-of-right development.

(b) ***A variance from the height requirement of the relevant section of the Zoning Regulations***: From the perspective of traffic generation and associated access issues, the variance in height is "incorporated" in the increased GFA.

(c) ***A variance from the parking requirements under the relevant sections of the Zoning Regulations***. The application proposes a parking supply moderately in excess of the parking required; and the impact relates principally to the point of access, and the ramping arrangement proposed.

(d) ***A variance from the loading requirements***: The application submits that the site dimensions, and the restrictions presented due to the parking location and access, physically preclude provision of the loading facilities required by the Zoning Regulations.

This evaluation has concluded that the relief sought will not tend to adversely impact the use of neighboring property. The remainder of this memorandum addresses the above aspects of the application, specifically from the perspective of the traffic access needs and related issues; and presents the basis for the conclusion stated. For ease of reference, and to facilitate the presentation which follows, the site location is shown in Exhibit 1.



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EXHIBIT 1: Site Location Map - 500 New Jersey Avenue
BZA Application # 16744

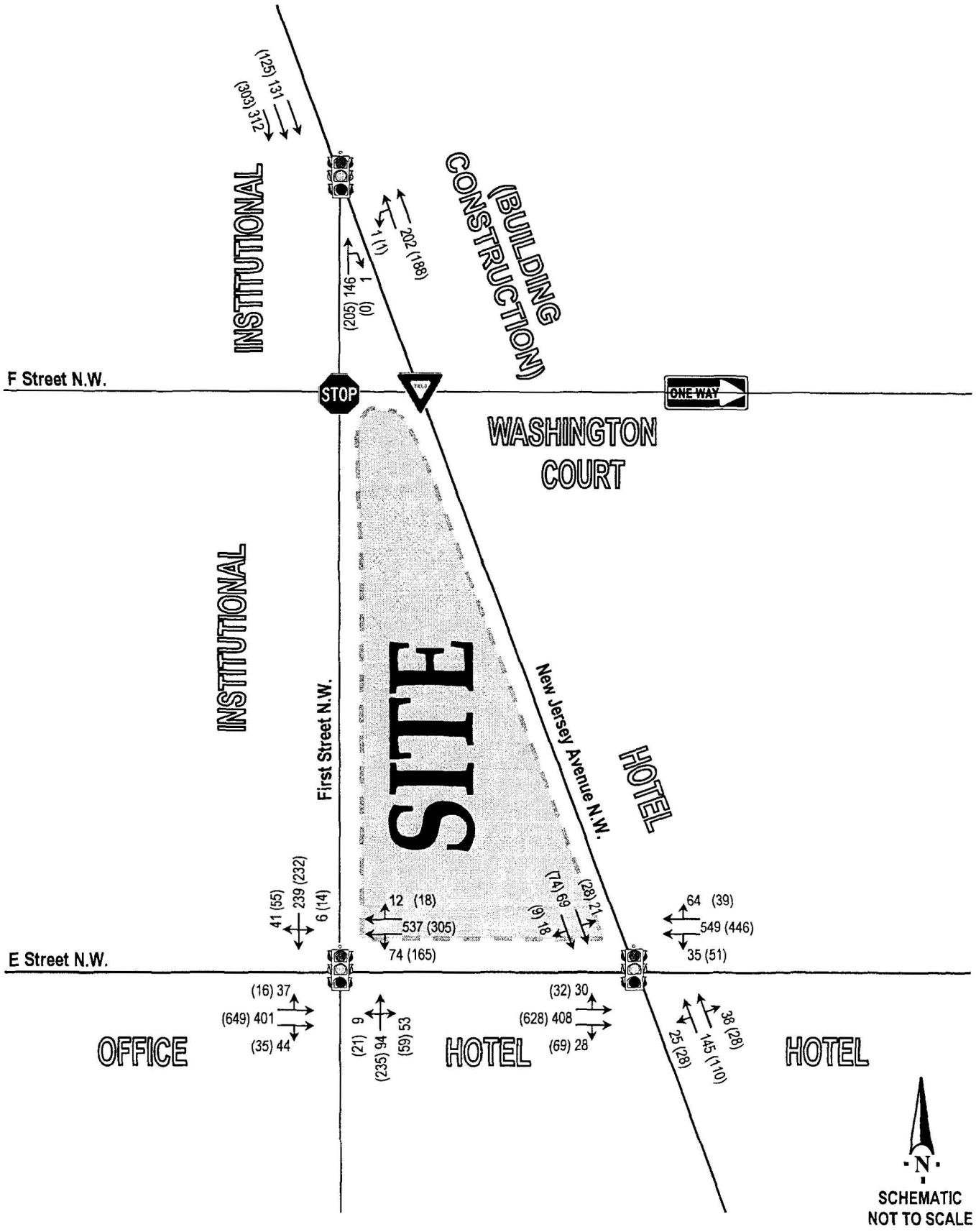
2.0 LOCAL SETTING AND BACKGROUND TRAFFIC/PARKING CONDITIONS

In keeping with the guidelines followed by the City's Department of Public Works in assessing the impacts of development proposals, this section discusses traffic and parking conditions within the local area of the subject property. As noted in the application statement, the site is bounded by New Jersey Avenue on the east, E Street on the south, First Street on the west and F Street (and a park reservation) on the north. The property is situated within easy access to interstate highway facilities (such as I-395 and the center leg expressway), as well as to principal arterials such as Massachusetts Avenue, North Capitol Street, and sections of New Jersey Avenue to the north. In the immediate vicinity of the subject property, the following facilities are provided.

- ***E Street, NW:*** A sixty-foot wide east-west principal arterial serving two (2) lanes of vehicles travel in each direction, with parking along both sides of the roadway. Adjacent to the subject property, parking is prohibited in view of bus stop locations.
- ***New Jersey Avenue, NW***: A sixty-foot wide collector street serving two (2) travel lanes in each direction, with metered parking along both sides of the roadway.
- ***First Street, NW***: A thirty-eight foot wide north-south collector street serving a single lane of travel in each direction, with metered parking along both sides of the roadway.

All roadway classifications noted above are based on the "Functional Classification Map" published by the Department of Public Works (DPW).

In order to determine current operating conditions within the local area, morning and afternoon peak hour turning movement counts were undertaken between the hours 8:00 – 9:00 AM and 4:30 – 5:30 PM. Exhibit 2 shows the roadway lane configuration and the existing turning movement volumes. The traffic volumes obtained were analyzed by utilizing the Highway Capacity Manual procedures, in accordance with the requirements of the Department of Public Works. As shown in Table 1 on page 5, the adjacent intersections currently operate at quite acceptable levels of service.



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EXHIBIT 2: Study Area Network and Peak Hour Traffic Volumes - 500 New Jersey Avenue
BZA Application # 16744

TABLE 1

CAPACITY ANALYSES RESULTS
SUMMARY - EXISTING TRAFFIC CONDITIONS
(500 NEW JERSEY AVENUE, NW)

INTERSECTION	AM PEAK HOUR		PM PEAK HOUR	
	LOS	AVG. DELAY	LOS	AVG. DELAY
• New Jersey Ave. @ E St. NW	B	16.7	B	14.8
• New Jersey Ave. @ First St. NW	B	12.7	B	12.8
• First Street @ E Street, NW	B	14.8	C	21.2

Source: O. R. George & Associates.

The Highway Capacity Manual defines Level of Service as a "*qualitative measure describing operational conditions within a traffic stream or at an intersection, and their perception by motorists and/or passengers*." The definition generally describes these conditions in terms of factors such as speed and travel time, freedom to maneuver, traffic interruptions, as well as comfort, convenience and safety. Current engineering practice defines six (6) Levels of Service, which are given letter designations A through F. Level of Service A represents best operations, and Level of Service "F" represents worst conditions. Level of Service D/E is generally considered by the District of Columbia as the minimum acceptable standard for planning and design purposes.

3.0 IMPACT ASSESSMENT – THE TECHNICAL APPROACH

3.1 Technical Approach

Current engineering practice assesses the potential traffic impacts of a development based primarily on the trip-making characteristics of the site during weekday morning and afternoon peak hours. This is also the procedure required (or adhered to) by the District of Columbia Government review process. The process also relies on traditional factors, most notably standardized vehicle trip generation rates.

The application statement is replete with background material, which points to the fact that the proposed building will not be the typical office building which would generate peak activity coinciding with the adjacent and regional vehicular transportation system. In essence, the application submits that the building will target tenants, workers and visitors who would take advantage of the modern advances of technology, particularly as they apply to telecommunications and office support operations. Furthermore, the statement uses these elements and the location of the site relative to the City's major transportation, business and political assets, to develop the concept of *"virtual adjacency"* as it relates to vehicular trip generation and the access needs of the proposed development.

The concept of "virtual adjacency" appears quite reasonable. The approach is also consistent with current research and practice of the transportation engineering profession, as well as with national and local public policy objectives, which emphasize Transportation Management Programs (TMP). However, the analysis, which follows, relies primarily on the guidelines and procedures of the District of Columbia Government review agencies in addressing the transportation related requirements of the Applicant.

3.2 Trip Generation

As noted earlier, the application proposes the development of a 92,350 GFA office. Of this development density, approximately 38,000 GFA (i.e., 41.0 %) represents the variance requested. The City's guidelines require the use of trip generation rates recommended by the Institute of Transportation Engineers (ITE). These rates are directly applicable to stand-alone suburban sites.

Development-Related Ridership Surveys conducted by the Washington Metropolitan Area Transit Authority show transit usage in the range of 60 - 75%, for urban employment uses situated in proximity to Metrorail stations. The subject site is located two (2) blocks from the Union Station, and three (3) blocks from the Judiciary Square Station. In addition, the site is in close proximity to a number of hotels, government offices, and several institutional and organization headquarters. This provides opportunities for a significant level of transit and non-motorized trips. A fifty percent (50.0%) non-auto mode split was considered conservative, and appropriate for the current evaluation. Table 2 following presents the application of the ITE rates as well as the rates reflecting transportation mode split factors considering the opportunities afforded by the location of the subject site.

TABLE 2

PEAK HOUR TRIP GENERATION – VARIANCE APPLICATION FOR 500 NEW JERSEY AVENUE NW, WASHINGTON D.C.

	AM Peak Hour			PM Peak Hour		
Trip Rates	**In**	**OUT**	**Total**	**IN**	**Out**	**Total**
1) Based Upon ITE Trips/1,000 GFA Office	1.37	0.19	1.56	0.25	1.24	1.49
2) Adjusted Trips/1,000 GFA (Office)	0.68	0.10	0.78	0.13	0.62	0.75
Trip Generation						
3) Trips per 54,030 GFA (Matter-of Right Use)	37	5	42	7	34	41
4) Trips per 38,320 (As Variance Request)	26	4	30	5	24	29
TOTAL	**63**	**9**	**72**	**12**	**58**	**70**

Source: O. R. George & Associates

The data presented in Table 2 shows that the development will generate approximately 70 total trips accessing the building during the morning and afternoon peak hours. No adjustment was made for the trip-making characteristics indicated by the Applicant, based on the concept of *"virtual adjacency"* discussed earlier. However, given the relevance of the concept within the context of current engineering practice and public policy regarding transportation impacts and mitigation strategies, this study submits that actual vehicle trips to the site could be well under fifty (50) trips during the morning and afternoon peak hours. It is noted that a trip generation of fifty (50) trips is the typical threshold for the requirement of a "full" traffic study. Further, the trip generation of fifty (50) to seventy (70) trips represent approximately 5 percent of the vehicle trips utilizing the adjacent intersection of New Jersey Avenue and E Street, NW. This level of trip generation is within the typical daily fluctuation of traffic at such an urban intersection.

4.0 ASSESSMENT OF VARIANCE REQUIREMENTS

This section addresses the traffic and parking impacts and/or implications of the variance requests.

4.1 Variance From the Floor Area Requirements

The subject application requests an FAR variance of 4.61. Based upon the 8,312 Square Foot site area, this computes to a Gross Floor Area of 38,320 Square Feet. It is projected that this would generate approximately thirty (30) vehicle trips during the weekday peak hours. Considering the usage characteristics indicated by the Applicant, the actual vehicle trips would likely be less than twenty (20). *This study submits that this level of trip generation is not significant, and would not adversely impact traffic flow within the subject area, or access to neighboring properties*

4.2 Variance From Height Requirements

The variance in height requested is intended to generate additional building square footage based upon the physical constraints of the site. Consideration of traffic implications of the additional square footage is incorporated in the FAR variance dealt with in Section 4.1 above.

4.3 Variance From the Parking Requirements

The application proposes to provide sixty (60) off-street parking spaces, which is just in excess of the requirement per the Zoning Regulations. The variance requested is principally to allow most of these spaces within vault space. Access to the parking is proposed to be off the E Street frontage of the building, which is the only practical location, considering the ramping arrangements that are necessary. (This is per the assessments made by WEIHE Design Group, PLLC, the project architects). The only traffic-related issue pertains to the point of access, and the following factors are noted.

a) The proposed access is close to an existing curb cut, which had served a gas station for a long period of time.

b) Most of the traffic entering the site would approach the area from the east via E Street, the south via New Jersey Avenue, and from the north via New Jersey Avenue, making a right-turn movement into the site.

It is noted that left-turn movements into the parking garage (from eastbound E Street) could present minor operational constraints. This study notes that this left-turn parking access arrangement is not unlike that provided for major parking garages in many locations in downtown Washington D.C. This includes a 700+ space parking garage situated along the south side of E Street, one block to the east of the subject site. Based upon the empirical evidence provided by such locations and considering the small size of the parking garage (at 60 spaces) it is submitted that the parking proposal would not adversely impact neighboring properties, or area roadway users in general.

4.4 Variance From the Off-Street Loading Requirements

Based upon the size of the proposed building and the zoning district in which it is located, the following off-street loading facilities are required:

a) A 30-ft. deep loading berth;

b) At least one (1) 100-square foot loading platform; and

c) At least one (1) 20-ft. deep service delivery space.

The Applicant proposes to provide one ten-foot by twenty-foot service delivery area. Loading provisions for a building typically do not have a material impact on vehicle trip generation. Given the usage characteristics noted by the application, the population density of the building is likely to be comparatively low, and should result in relatively low levels of deliveries. The site plan proposes that such loading activities would occur off First Street. In order to facilitate this arrangement, removal of up to two (2) metered parking spaces may be necessary. The Applicant would be required to obtain all approvals from the responsible agencies of the District of Columbia Government.

4.5 Other General Considerations

Transportation planning and land use development are closely linked elements of the urban planning process. In this connection, it is noted that the immediate area of the site has not been the subject of significant development activity. An office building is under development in the northeast quadrant of the New Jersey Avenue/F Street intersection to the north. It is also noted that the parking lot site immediately to the west (off First Street) has been the subject of development activity proposals, which called for a 0.5 million square foot office building. It is understood from the applicant, that the property, which had previously been owned by the Tobishima Bank of Japan, has now been transferred to the Georgetown University Law Center. Current plans call for the site to be developed as a combination sports fitness and academic facility totaling 200,000 GSF, to be associated with the Law Center. Telephone conversations with the project architects and with staff of the Georgetown University Law Center have confirmed these plans for the adjacent site.

5.0 CONCLUSION

Based upon the foregoing data, analysis and discussion, this assessment concludes from the perspective of vehicular access provisions, and traffic operations within the area of the site, the Applicant's proposals should also not adversely impact the use of neighboring properties. Furthermore, the proposal should not adversely impact users of the adjacent roadway network in general.

We trust that the above meets your requirement. Please let us know if we can be of further assistance in this matter. *Thank you!*

ORG/hw

Attachments: As noted.

WAS1 #991253 v1