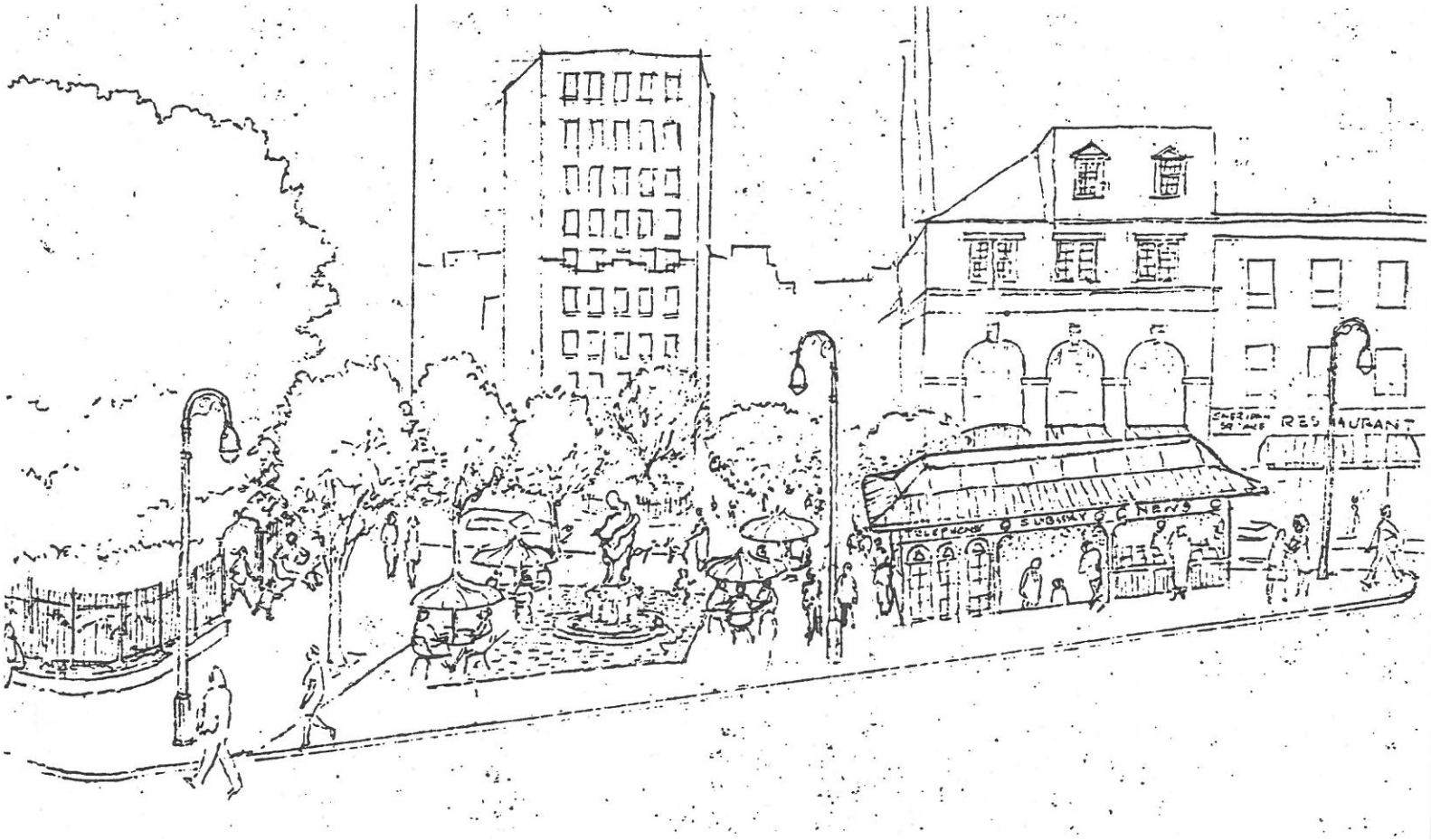
Streets for People

Traffic Calming in Community Board 2

Greenwich Village **New York City**

by Barry Benepe and George Haikalis



A Phase Two Report for Transportation Alternatives

Made possible by a grant from the office of Ruth Messinger, Borough President of Manhattan

GREENWICH VILLAGE TRAFFIC CALMING STUDY

Phase Two

prepared by

Barry Benepe
George Haikalis

for

Transportation Alternatives
92 St. Marks Place
New York, NY 10009

October 1992

Table of Contents

List of Figures and Tables

Acknowledgements
The authors wish to thank Manhattan Borough President Ruth Messinger for her generous grant to Transportation Alternatives in making this report possible. We would also like to thank the following for their counsel and guidance throughout its progress.

Judy McClain, Transportation Planner, Office of the Manhattan Borough President
Jon Orcutt, Executive Director, Transportation Alternatives
Dan Greenbaum and Ed Maloney of Vollmer Associates
Bob Cohen, Director of Community Affairs, New York University
Keith Crandall, Chairman, Community Board Two
Rita Lee, District Manager, Community Board two
Tim James, Chair, Traffic Committee, Community Board Two
Gerard Soffian, Assistant Commissioner, NYC Department of Transportation
Michael Harnett, District Engineer, NYC Department of Transportation
Glyniss Berry, Pedestrian Coordinator, NYC Department of Transportation

Executive Summary

Like much of New York City, Greenwich Village is overwhelmed with motor vehicular traffic. Reducing through traffic and creating more pedestrian space was the theme of a "Traffic Calming" study of the Manhattan Community Board Two area completed last spring by Transportation Alternatives. The study recommended a network of pedestrian streets and described what this might look like at four locations in the Village. The study was led by two long time residents of CB2, traffic planner George Haikalis and architect/urban planner Barry Benepe, with the assistance of Michael King, a recent graduate in Architecture from Columbia University.

With funding from Manhattan Borough President Ruth Messinger, two of these sites were selected for more detailed analysis and development by Benepe and Haikalis under the auspices of Transportation Alternatives. The two street segments selected were: (1) Washington Place between Greene Street and Washington Square East and (2) West 4th Street between Seventh Avenue South and Grove Street.

The study of these two street segments required traffic counts and surveys to supplement data provided by public agencies. At both locations daytime hourly pedestrian counts greatly exceed motor vehicle counts. On Washington Place, where counts were taken during the less busy summer school session, 1,600 pedestrians per hour crossed the street at crosswalks or mid-block, while vehicle counts through the street were only about 130/hour. At West 4th Street, just east of Sheridan Square, comparable counts were 920 and 160 respectively. A license plate survey indicated that around a quarter of the motor vehicles passing through this block were through

trips reaching LaGuardia Place. Washington Place serves primarily as a truck unloading area and for parking NYU cars with special permits. NYU as part of its requested closing of the street has agreed to forgo the permits and relocate truck deliveries to other streets. Traffic on both of these segments is local, much of it looking for free parking space or just cruising. While some inconvenience to motorists can be expected, alternate streets have adequate capacity to handle the relatively small volumes involved.

Permanently closing these two street segments to private vehicles allows this valuable urban space to be reused as public space for the community. Preliminary designs for the two spaces were developed, Washington Place, framed by handsome and richly detailed turn of the century buildings, would be transformed into a public garden, with lawns, planters and fountains. West 4th Street, at Sheridan Square, would become a safe link between two public spaces -- the triangle that houses the northbound entrance to the #1 train and Christopher Park. The proposed design combines these spaces, and provides a canopy over the stairs leading to the subway, newsstand and a proposed minicafe.

This report provides a basis for continuing the dialogue with the community about traffic calming measures that can improve the livability of the Greenwich Village area.

I. Introduction

Improving the livability and attractiveness of New York City by reducing excessive motor vehicle traffic has long been a goal of Transportation Alternatives. T.A., a non-profit organization established in 1973, is committed to advancing alternatives to the automobile such as better transit service and improved facilities for walking and cycling in the nation's most crowded city.

Recently, with financial assistance from the New York State Council on the Arts, T.A. completed an urban planning study that focused on options for improving the pedestrian environment in the Greenwich Village area of Manhattan. The study provided an overview of existing conditions, a documentation of "traffic calming" measures now gaining favor elsewhere and some examples of how these measures might be applied in specific locations in the Manhattan Community District Two area.

Taking several of these recommendations and moving them toward implementation is the critical next step for this effort. This report describes the work undertaken in Phase Two of the Greenwich Village Traffic Calming Study. This includes the selection of two of the proposals contained in the initial study, detailed traffic and urban design analyses of these proposals, and assistance in gaining community and agency support of these measures. Transportation Alternatives will also continue to assist in implementation efforts.

II. Selection of Case Study Locations

A number of problem areas, where excessive motor vehicular traffic seriously damages the livability of the Greenwich Village community, were identified in the first phase of this study. A variety of traffic calming techniques were also described. For four locations, specific concepts for shifting street space from motor vehicle use to space for pedestrians and urban amenities were outlined. In addition, in the course of the discussion at CB2 Traffic and Transportation Committee meetings and at a community forum on the first phase results, several other proposals for traffic restraint measures were offered. Figure 1 shows the 42 miles of street in CB2. Figure 2 identifies the four locations where initial pedestrianization opportunities were explored.

With the help of the Manhattan Borough President's staff, two of these proposals were selected for more detailed analysis. One of these is the block-long segment of Washington Place between Greene St. and Washington Square Park. This was the location of the tragic accident that occurred on April 23, 1992 when an out-of-control auto plunged into Washington Square Park killing five people and injuring many more. Only a few days before this accident, New York University had submitted a proposal requesting a daytime demonstration project, closing this block to traffic, Monday-Friday, from 9am to 5pm. The Phase I traffic calming study had suggested that possibly all three blocks of this street, from Broadway to Washington Square Park be permanently closed to traffic and be made into a pedestrian space. Not only would this provide much needed public open space for the community but would also create a campus for New York University which owns all the property that abuts this street. Figures 3 and 4 from Phase 1 study illustrate this proposal.

Many residents who live in the two buildings on Washington Place in the middle block of this three block stretch expressed their concern about the problems they anticipated with even the NYU one-block demonstration, let alone the full proposal. On the other hand NYU students, faculty and administration expressed strong support. The single block stretch was selected for further study, as a potential full-time pedestrian street. Having heard all views, the Community Board voted to support this one block demonstration at its July 1992 meeting.

The other proposal selected was for pedestrianization of West Fourth Street at Sheridan Square. A complex intersection was created at this location when Seventh Avenue South was extended through the Greenwich Village grid in the early part of this century. Christopher St., West 4th St. and Grove St. all converge at this location. The Phase I study recommended that pedestrian improvements be considered for the busy 8th St./Christopher St. corridor, including the possibility of adding a crosstown "trolley" on this route. The Phase I study also recommended that segments of West 4th St. be closed to traffic and made into pedestrian-only space. Figures 5 and 6 show this proposal. For the purpose of this Phase II study only the short block of West 4th St. between Grove St. and Seventh Ave. S. was selected for more detailed analysis. This segment connects the traffic island with the island which contains Christopher Park. No private property abuts this segment. These two segments were selected for detailed analysis because they are busy pedestrian locations, but only modest volumes of traffic would be dislocated.

REFERENCE MAP

The area of Manhattan bounded by the Bowery, Fourteenth Street, the Hudson River and Canal Street containing Little Italy, SoHo, NoHo and Greenwich Village known as Manhattan Community District 2. About 1.25 square miles with 42 linear miles of streets (24% of the total land area).

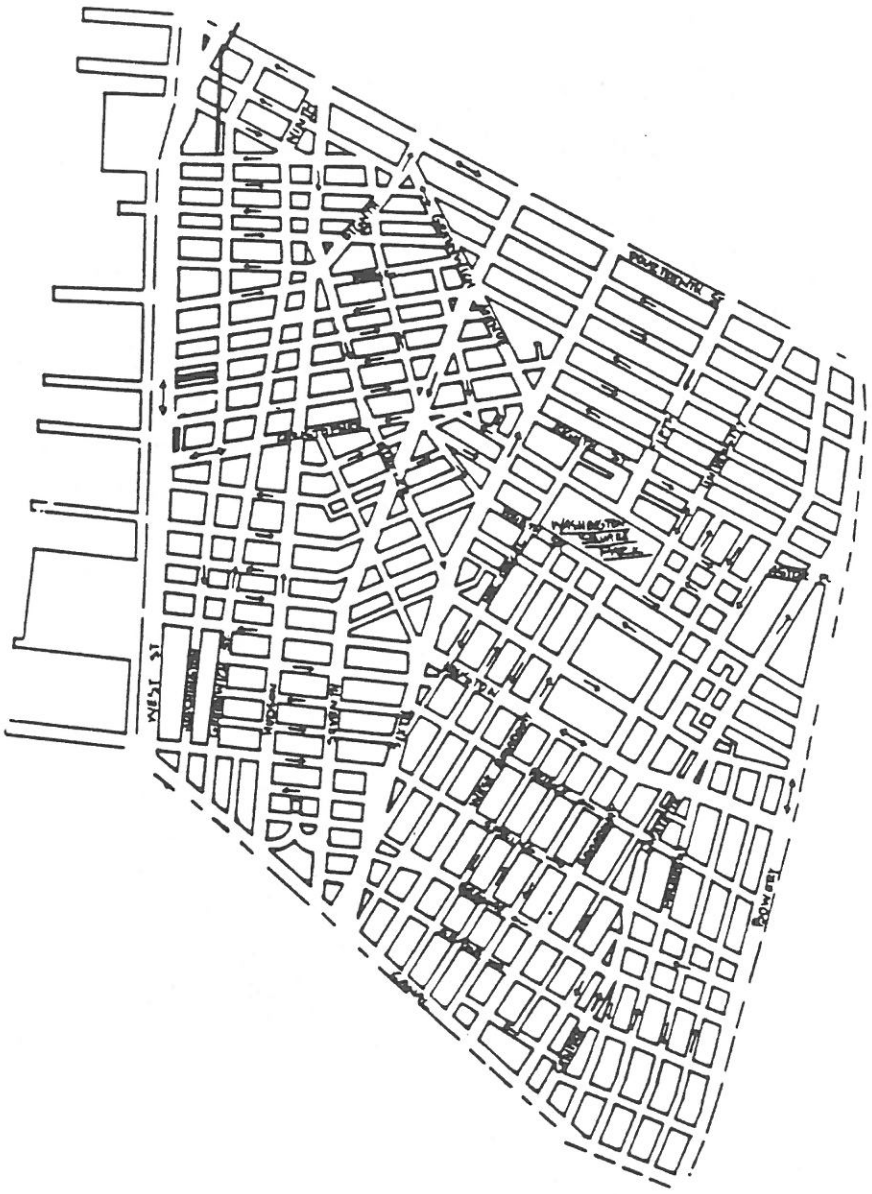


Figure 1

BASE MAP

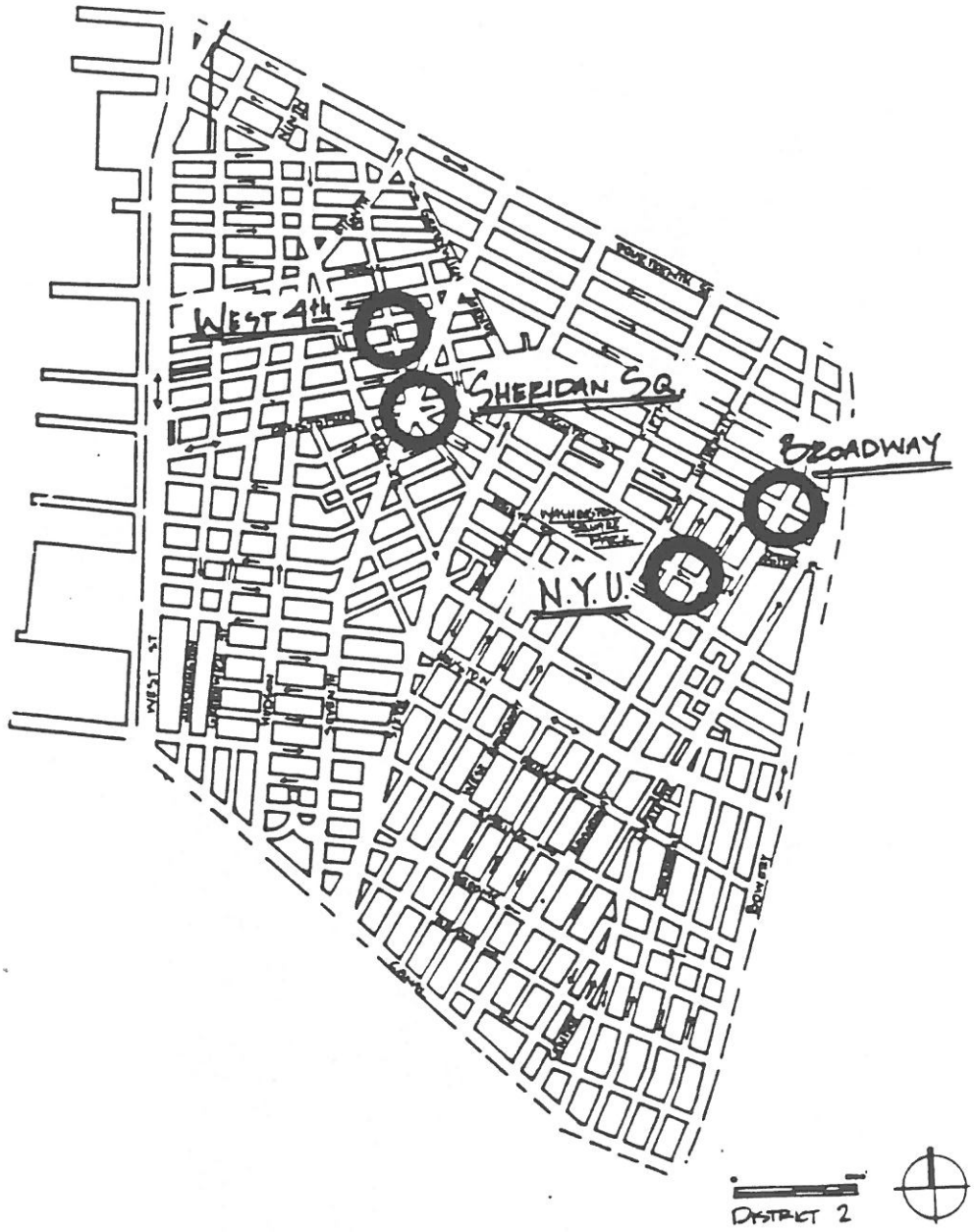


Figure 2

NEW YORK UNIVERSITY
Washington Place

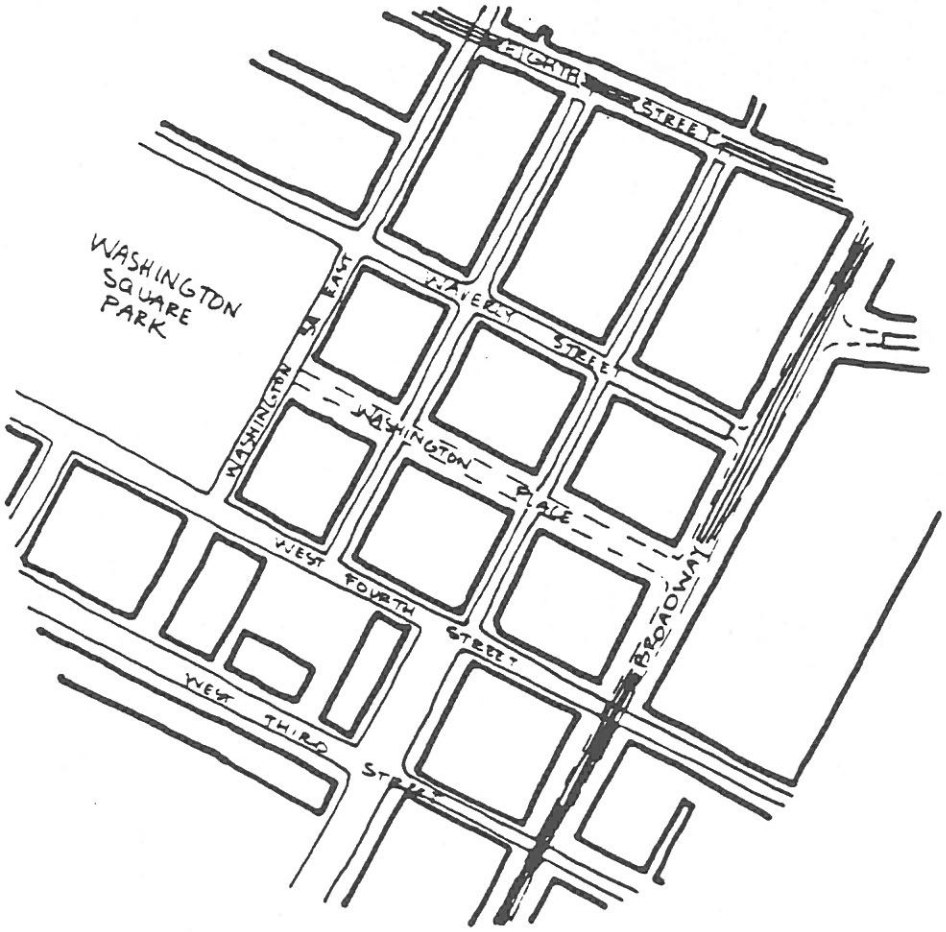
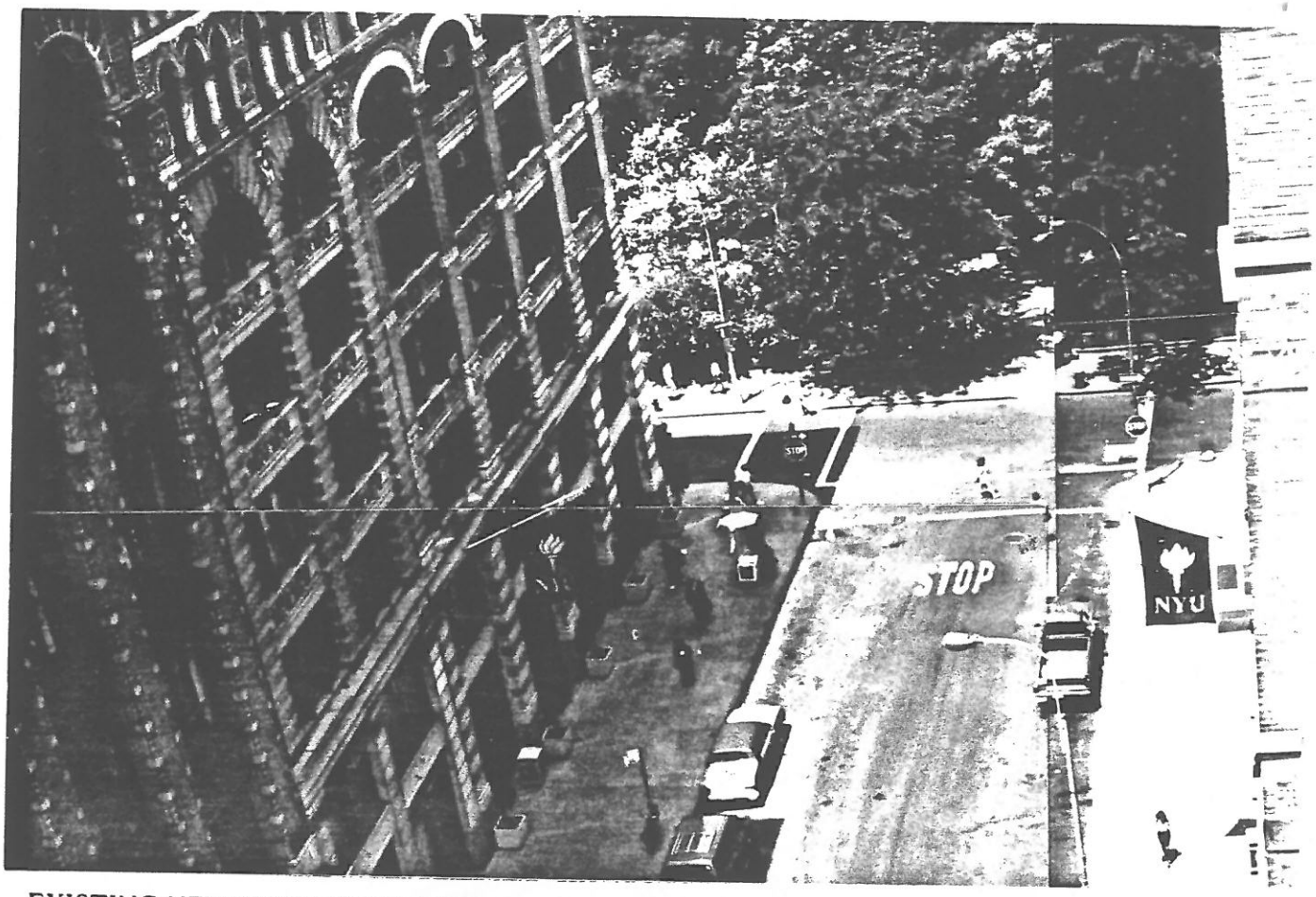


Figure 3



EXISTING NEW YORK UNIVERSITY - Washington Place

TRAFFIC-CALMED NEW YORK UNIVERSITY - Washington Place

Figure 4

SHERIDAN SQUARE
Seventh Avenue at Christopher and West Fourth Streets.

We propose transforming Christopher and Eighth Streets into a traffic-free transit corridor; reserved for 'trolleys', bicycles, deliveries and pedestrians. This corridor would traverse the Village from West Street to Astor Place. There it could link with St. Mark's Place and continuing to Tompkins Square. Replacing the existing M13 bus route, the 'trolley' would provide superior crosstown transit service, a clear link from the West to the East and improve commercial activity along its path.

At Sheridan Square, we propose calming West Fourth Street. This would serve two functions: enhance the existing park and cut off the busy West Fourth 'short-cut'. Presently many automobiles use West Fourth between Seventh and Broadway as their personal expressway in a race towards the free East River bridges, leaving exhaust fumes, noise and accidents in their wake.

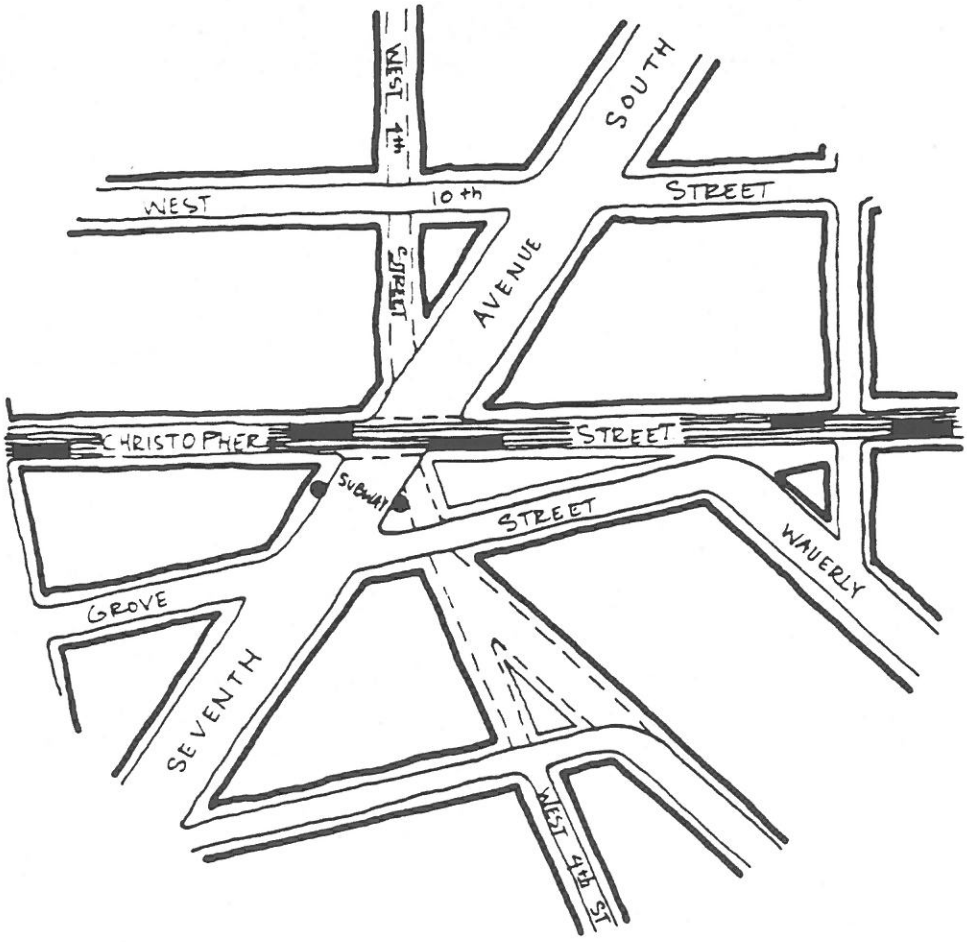
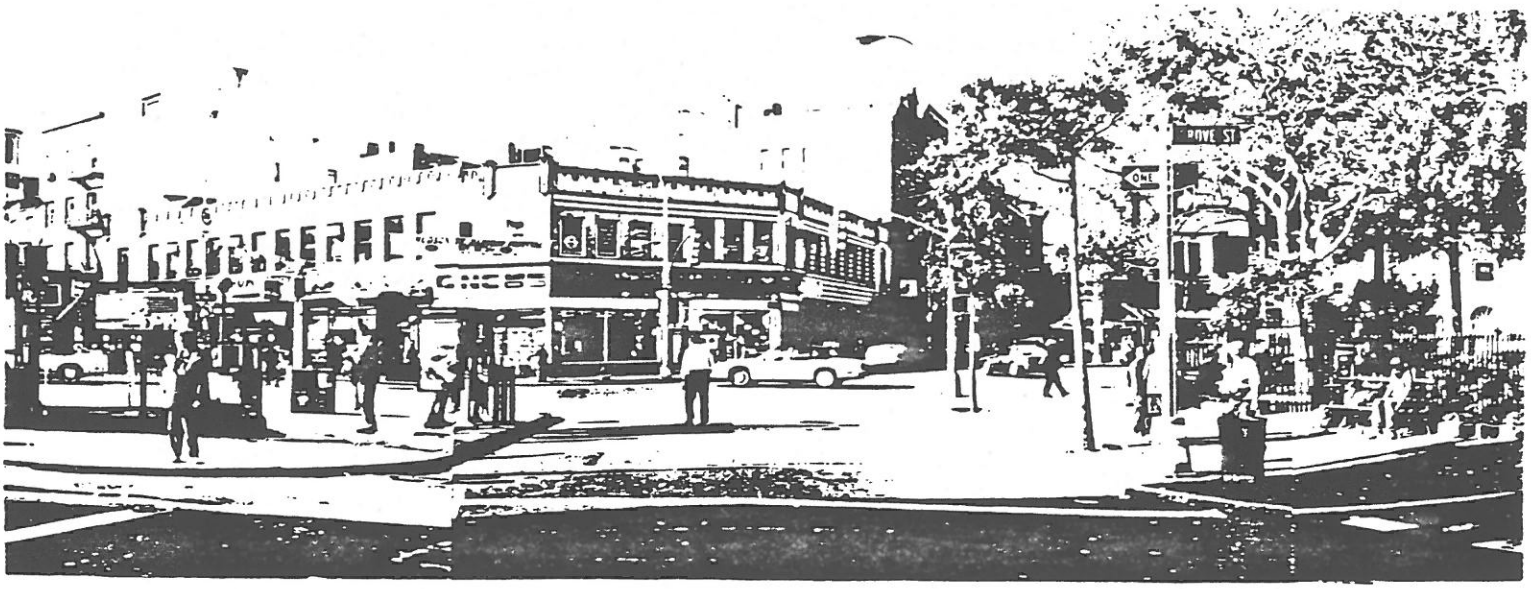
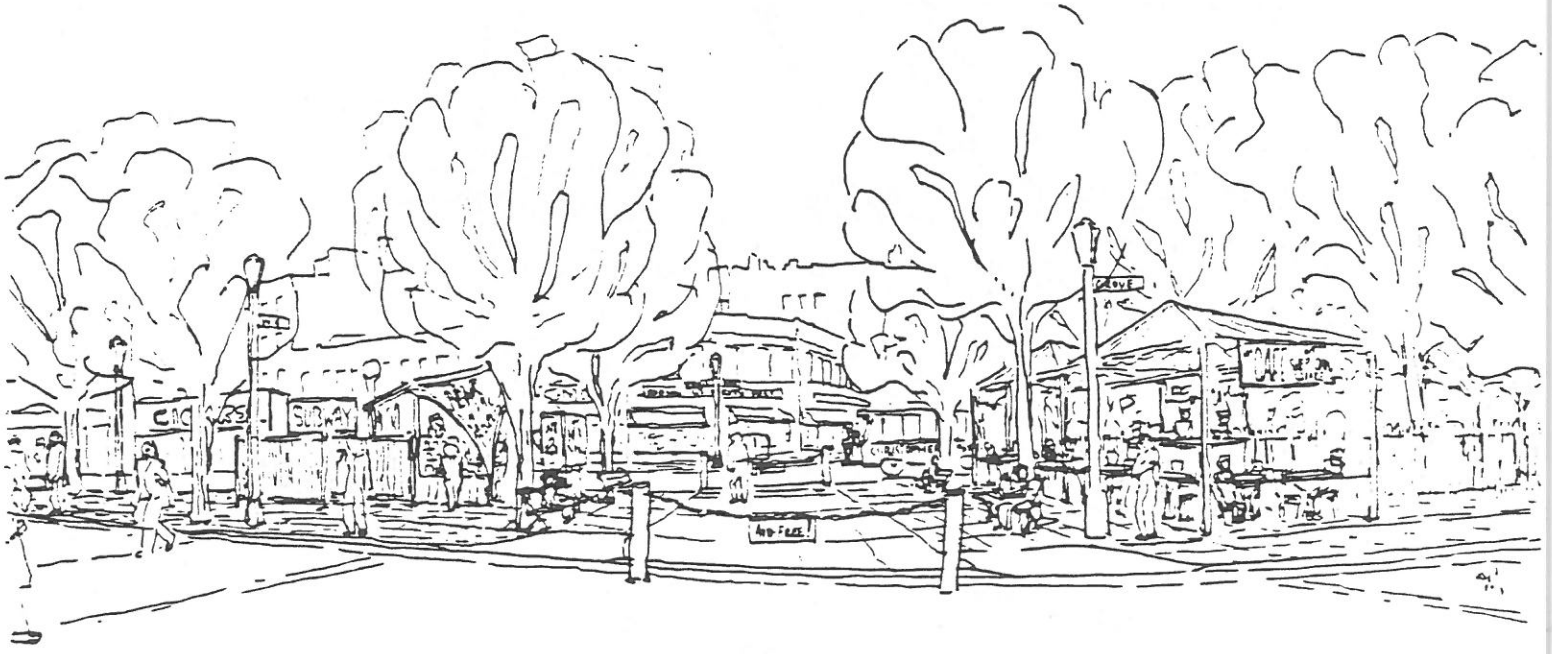


Figure 5



EXISTING SHERIDAN SQUARE



TRAFFIC-CALMED SHERIDAN SQUARE

Note Christopher Street transit corridor, improved news-stand and subway entrance, sidewalk cafes (operators would maintain the park) and removable chains for emergency vehicles.

Figure 6

III. Inventory/Data Collection: Vehicular and Pedestrian Traffic Volumes and Patterns

Detailed vehicular and pedestrian traffic data for these two locations were assembled with the cooperation of NYCDOT and NYSDOT's 9A project and through on-site counts and observations to provide data not available elsewhere.

A. Washington Place

Vehicular volumes on Washington Place are very light, averaging 131 vehicles/hour with 5% of this coming from Greene Street; these are reflected in Table I and Figure 7, Washington Place Vehicular Traffic Volumes. Washington Place functions primarily as a parking lot and delivery bay for trucks loading and unloading goods at the five NYU buildings that abut this street. Three of these buildings have sidewalk doorways that allow goods to be lowered directly into vaults and basements.

Observations of vehicles parked on both sides of the street were made. About half of the curb capacity was used during midday, with truck dwell time averaging less than 30 minutes. On the south side where the curb is reserved for NYU personnel with special plates, little turnover was observed, requiring trucks on this side of the street to double park for deliveries.

Table II, Vehicle Static Count and Description and Figure 8, Curbside Use, reflects a survey made during a two hour period on Wednesday, June 17, along the north curb designated as No Parking Monday - Friday and south curb designated as a No Parking Except Authorized Vehicles, Monday - Friday, 8 AM - 6 PM. Of 15 vehicles parked, 6 were on the south side for the entire period, two for over 90 minutes and the remainder chiefly on the north side for 10 - 60 minutes. In addition, there were short term 5-10 minute double parkers.

Due to the tight time frame for this study pedestrian counts at Washington Place could not be postponed until Fall. Instead they were made in June during the summer session at NYU. These counts shown on Table III and Figure 9, Washington Place Pedestrian Traffic Volumes, give a very conservative measure of activity, perhaps only one fourth of the normal school year volume. Nonetheless they show that typical midday hourly volume of pedestrians crossing the block-long segment of Washington Place was nearly 1,500, mostly at the crosswalks, including over 360 "jaywalking" midblock diagonal crossings.

B. Sheridan Square

Vehicle counts recorded by NYS 9A at the Sheridan Square intersection showed that Seventh Avenue South is a busy arterial carrying 1,400 to 1,500 vehicles/hour during AM and PM peak hours with 11% turning east on West Fourth Street. All other streets have much lower volumes. Counts taken by the project team between 3 PM and 4:30 PM on Friday, June 12, corroborated these figures. Christopher and West Fourth Streets each have around 200 vehicles/hour while each of the others are below a hundred. Volumes and Movements are shown on Tables IV A & IVB and Figure.

Pedestrian counts, done on Wednesday, June 17, over a two hour period 11:50 AM to 1:50 PM show nearly 1900 pedestrians/hour crossing Seventh Avenue at seven crossings between Christopher and Grove Streets.

TABLE I
WASHINGTON PLACE
VEHICULAR TRAFFIC VOLUMES

Surveyor: Melissa Tatg **Date: Friday June 17, 1992**

TIME	A WA → WA	B WA → GR	C GR → WA	D WA → WSE
2:00-2:05	--	--	--	5
2:08-2:13	6	1	2	--
2:16-2:21	--	--	--	14
2:21-2:27	16	6	1	--
2:30-2:35	--	--	--	12
2:38-2:44	14	2	0	--
2:46-2:53	--	--	--	12
2:55-3:00	9	2	1	--
3:02-3:07	10	0	0	9
3:07-3:13	8	3	1	8
3:16-3:21	17	5	0	16
3:22-3:28	10	4	1	12
3:30-3:35	7	3	0	7
3:36-3:41	9	5	1	9
3:41-3:45	11	4	0	12
Hourly Average:	*124*	*33*	*7*	*122*

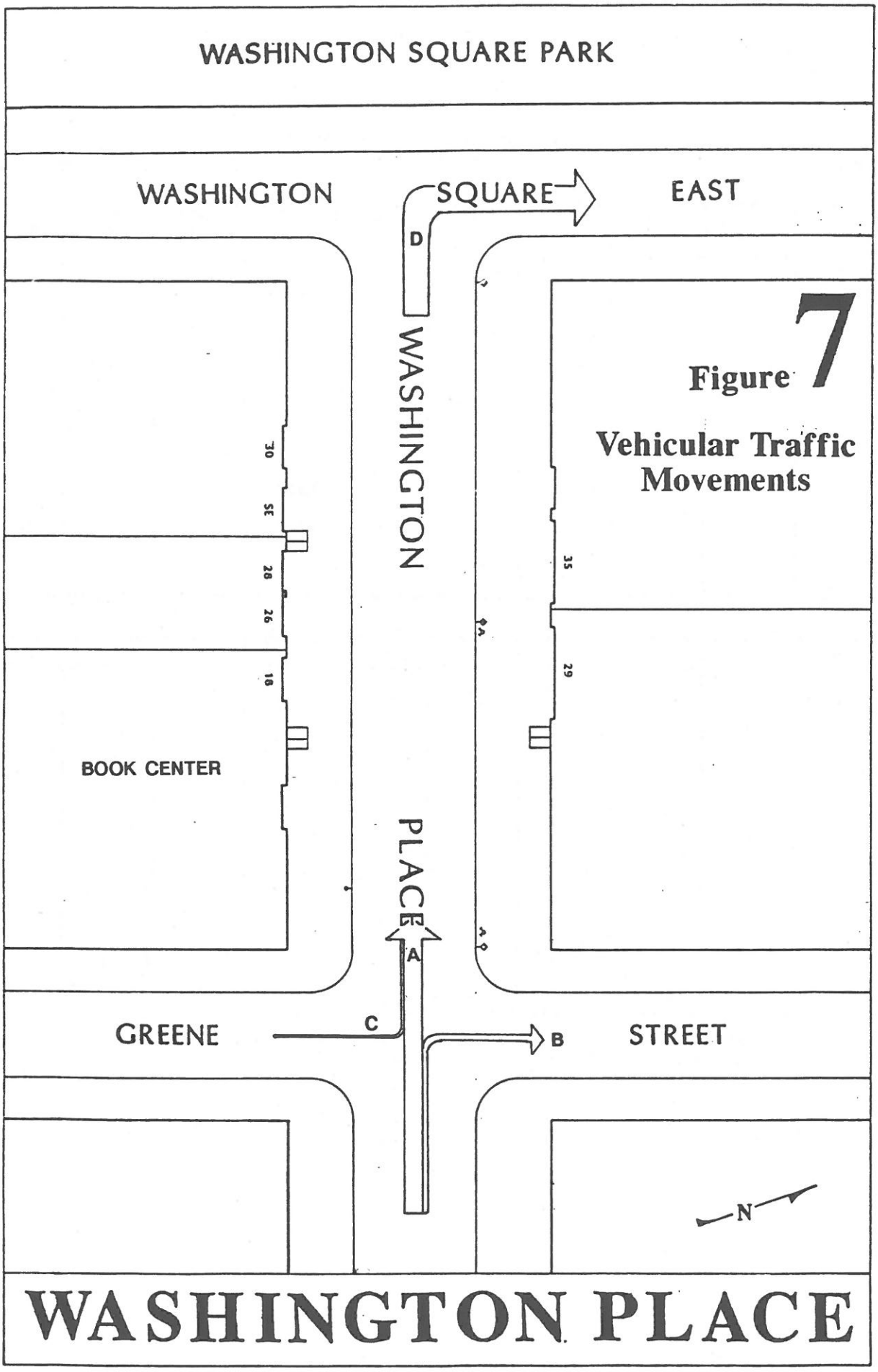


Figure 7

Vehicular Traffic Movements

Barry Benepe AIA APA

0 20 40 60 ft

TABLE II
WASHINGTON PLACE
VEHICLE STATIC COUNT AND DESCRIPTION

Surveyor: Melissa Tatge **Date: Wednesday June 17, 1992**

NORTH

TIME	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10
1:55	--	191 NY (C)	--	--	--	--	--	--	--	--
2:05	--	" "	--	--	--	--	--	--	--	--
2:15	--	" "	--	156 NY (C)	164 NY (C)	--	--	312 NY (C)	--	--
2:28	--	" "	--	" "	" "	--	--	" "	--	--
2:44	--	" "	--	--	--	--	--	--	--	--
3:00	--	717 NY (C)	--	--	--	--	--	--	--	--
3:13	--	--	--	156 NY (C)	--	--	9VS NJ	--	--	--
3:28	--	--	--	--	--	--	" "	--	--	--
3:46	--	--	--	--	--	--	--	--	--	--

SOUTH

TIME	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
1:55	--	--	819 NY	629 NY	ZXA NJ	--	053 NY	--	794 PA	935 NY
2:05	--	--	" "	" "	" "	--	" "	--	" "	" "
2:15	751 (P)	--	" "	" "	" "	--	" "	--	" "	" "
2:28	" "	--	" "	" "	" "	--	" "	--	" "	" "
2:44	--	--	" "	" "	" "	--	" "	--	" "	" "
3:00	--	--	" "	" "	" "	488 NY	" "	--	" "	" "
3:13	544 NY	--	" "	" "	" "	" "	" "	--	" "	" "
3:28	--	--	" "	" "	" "	" "	" "	--	" "	" "
3:46	--	--	" "	" "	" "	" "	" "	--	" "	" "

NOTE: N1...N10 and S1...S10 denote parking spaces on the North and South sides of Washington Place. Plate numbers include last three digits an stat (P) denotes a police car; (C) denotes a commercial vehicles; (--) denotes an empty space; (" ") denotes the continuous occupation of a space by the same vehicle.

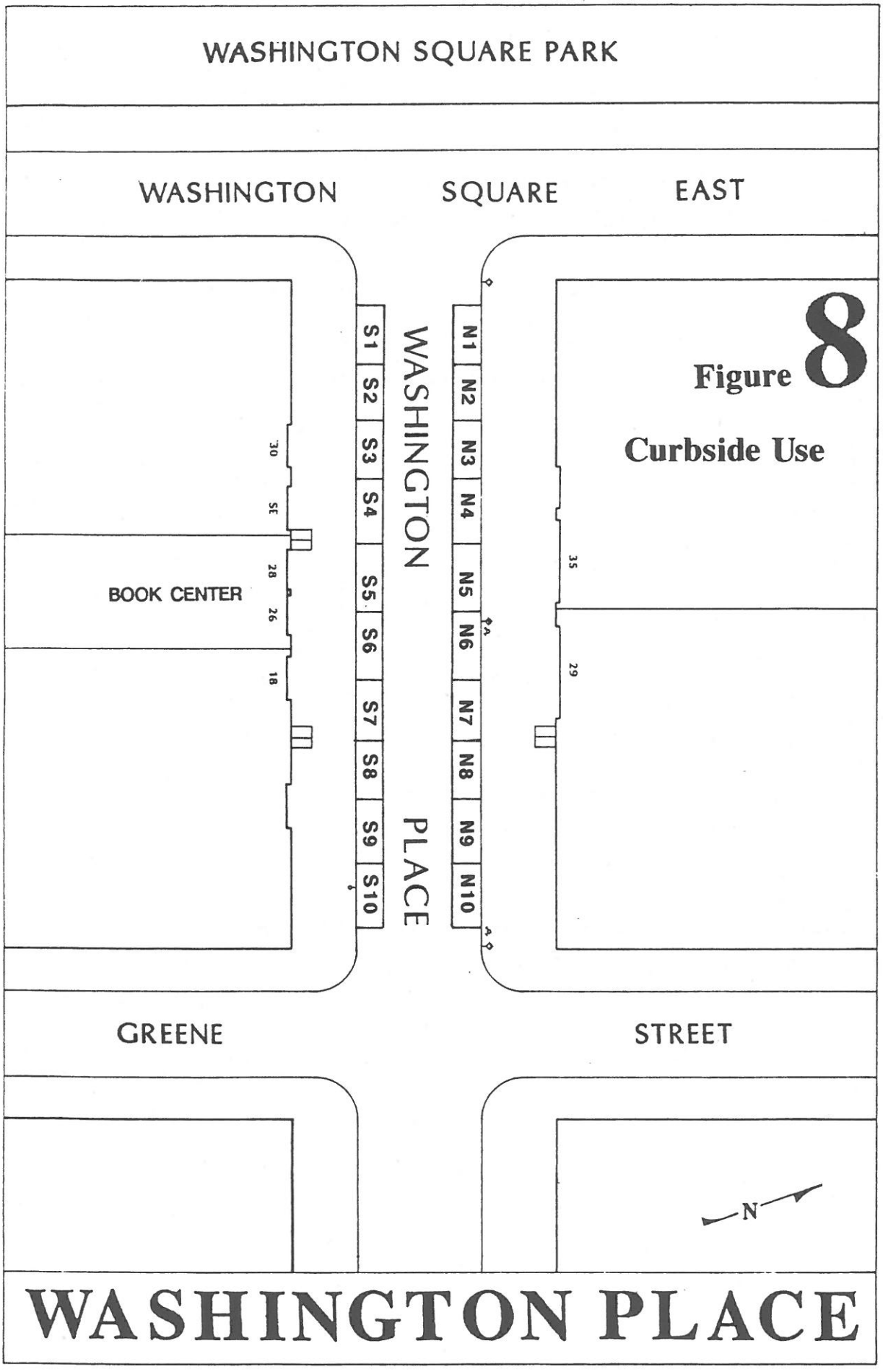


Figure 8

Curbside Use

Barry Benepe AIA APA

0 20 40 60 ft

TABLE III
WASHINGTON PLACE
PEDESTRIAN TRAFFIC VOLUMES

Surveyor: Sarah Brennan **Date: Wednesday June 17, 1992**

	CYCLE I Washington Pl. at Washington Sq. East			CYCLE II Washington Pl at Greene St	
TIME	A xWSE	B xWA	C xWA Unrest.	D xWA	E xGR
1:55-2:00	68	33	27	--	--
2:00-2:05	--	--	--	58	85
2:08-2:13	102	57	36	--	--
2:16-2:21	--	--	--	31	46
2:23-2:28	67	53	13	--	--
2:30-2:35	--	--	--	48	88
2:38-2:43	83*	31*	33*	--	--
2:45-2:50	--	--	--	71*	121*
2:55-3:00	75	39	42	--	--
Hourly Average:	***948***	***511***	***362***	***624***	***1,020***

*Connotes volumes during a class break.

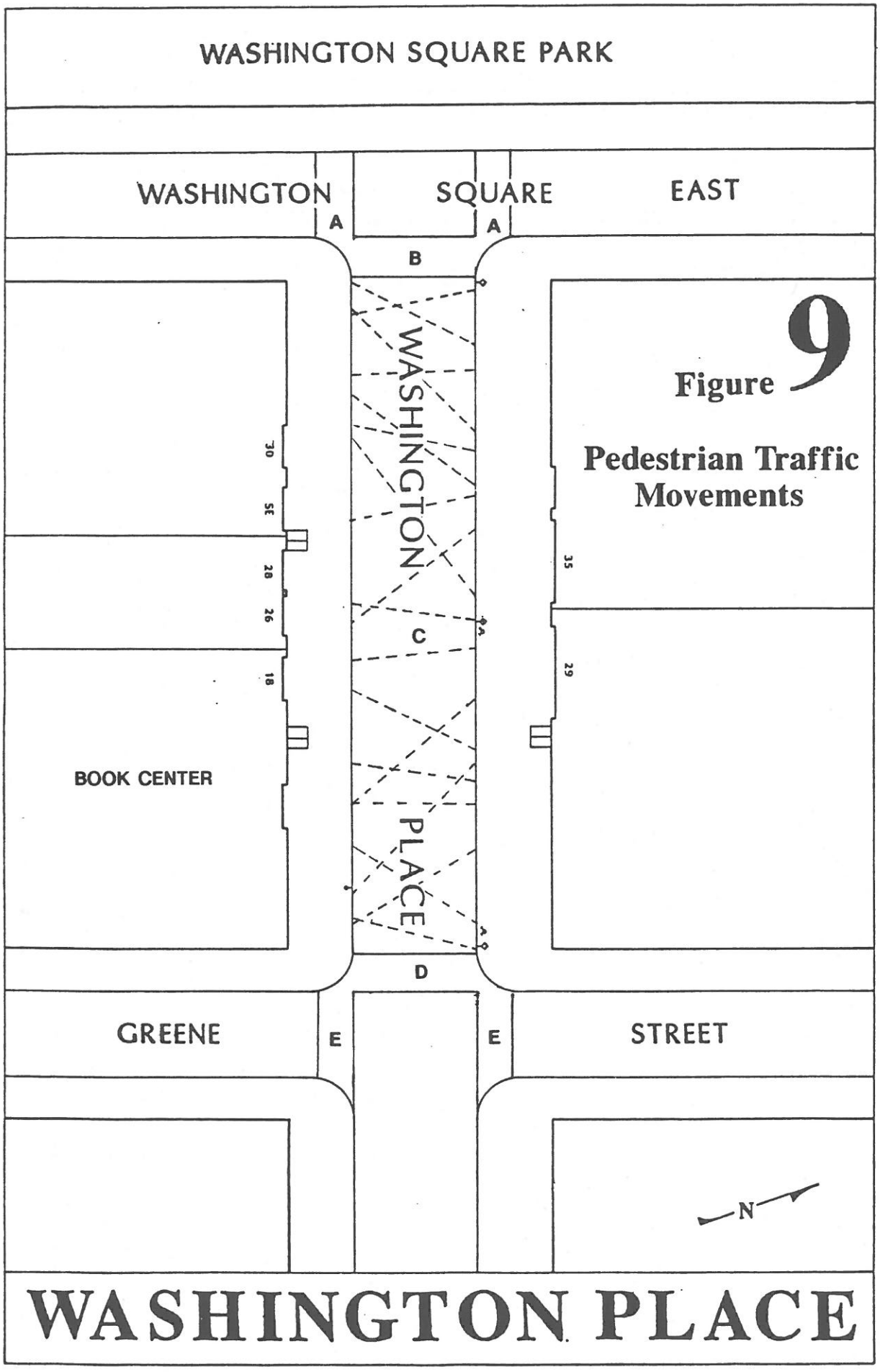


Figure 9

Pedestrian Traffic Movements

Barry Benepe AIA APA

0 20 40 60 ft

TABLE IV A

SHERIDAN SQUARE VEHICULAR TRAFFIC VOLUMES

SURVEYOR NORTH

Surveyor: Melissa Tatge **Date: Friday June 12, 1992**

	Seventh Avenue Green				Seventh Avenue Red		
	An	B	C	D	E	F	G
TIME	7th Ave.	7 → W4n	7 → Ch	7 → W4s	Ch → Ch	Ch → W4n	Ch → 7
3:01	28	1	4	3	3	2	0
3:04	32	2	1	2	6	1	1
3:06	46	0	0	2	3	2	0
3:08	34	1	0	7	6	1	0
3:10	37	2	2	1	5	1	2
3:13	33	1	3	2	8	2	0
3:15	45	0	1	3	4	0	0
3:17	29	2	1	4	6	0	0
3: 19	44	0	1	5	3	1	0
3:21	29	0	2	3	1	1	1
3:24	42	0	1	3	5	0	0
3:26	38	0	1	3	5	5	0
3:30	48	0	0	4	9	1	0
3:32	35	0	4	6	3	2	1
3:34	36	0	0	3	6	4	0
3: 36	37	0	1	2	1	4	0
3:39	38	1	0	1	2	4	0
3:41	36	0	1	2	11	2	0
3:44	41	0	4	6	5	5	0
3:47	31	0	1	7	3	0	0
3:49	30	0	2	8	2	2	0
3:51	39	0	2	2	5	2	0
3:55	28	0	0	3	5	4	0

TABLE IV A (Cont.)

SHERIDAN SQUARE VEHICULAR TRAFFIC VOLUMES

SURVEYOR NORTH

Surveyor: Melissa Tatge Date: Friday June 12, 1992

TIME	An 7th Ave.	B 7 → W4n	C 7 → Ch	D 7 → W4s	E Ch → Ch	F Ch →W4n	G Ch → 7
3:57	35	0	2	6	4	2	0
4:00	27	1	1	7	9	2	1
4:02	30	0	2	6	5	0	1
4:05	36	2	4	3	6	1	0
4:07	38	0	3	3	0	1	0
4:09	30	0	1	4	9	6	0
4:11	39	0	0	7	1	1	0
4:13	24	2	0	5	7	1	0
4:15	35	0	1	3	5	0	0
4:17	40	1	2	3	2	2	0
4:19	37	1	4	4	1	1	0
4:22	35	1	1	3	6	1	0
4:24	35	1	1	6	5	3	1
Hourly Average:	*1422*	*15*	*56*	*163*	*191*	*75*	*8*

TABLE IV B

SHERIDAN SQUARE VEHICULAR TRAFFIC VOLUMES

SURVEYOR SOUTH

Surveyor: Sarah Brennan **Date: Friday June 12, 1992**

TIME	As 7th Ave.	H Gr → 7	I 7 → Wa	J 7 → W4	K Gr → Wa	L 7 → W4
3:00	43	5	0	0	3	1
3:03	37	7	3	1	0	0
3:05	30	4	4	0	3	0
3:07	32	8	4	2	3	0
3:12	30	2	2	1	0	2
3:15	31	3	0	1	4	0
3:17	36	7	0	5	1	1
3:20	37	5	0	2	0	1
3:23	41	5	1	2	0	1
3:27	28	11	0	3	0	1
3:30	28	3	0	4	0	1
3:34	39	8	0	2	0	0
3:37	35	7	0	2	1	1
3:40	41	3	2	7	3	2
3:42	29	0	1	2	2	0
3:45	31	4	2	5	0	0
3:50	29	3	0	3	2	2
3:54	28	7	2	4	1	0
3:57	11	4	0	6	3	2
4:03	33	6	0	5	0	0
4:05	43	5	2	8	0	1
4:07	38	4	1	4	1	1
4:10	37	4	0	3	1	1
4:13	43	3	0	3	0	0

TABLE IV B (Cont.)

SHERIDAN SQUARE VEHICULAR TRAFFIC VOLUMES

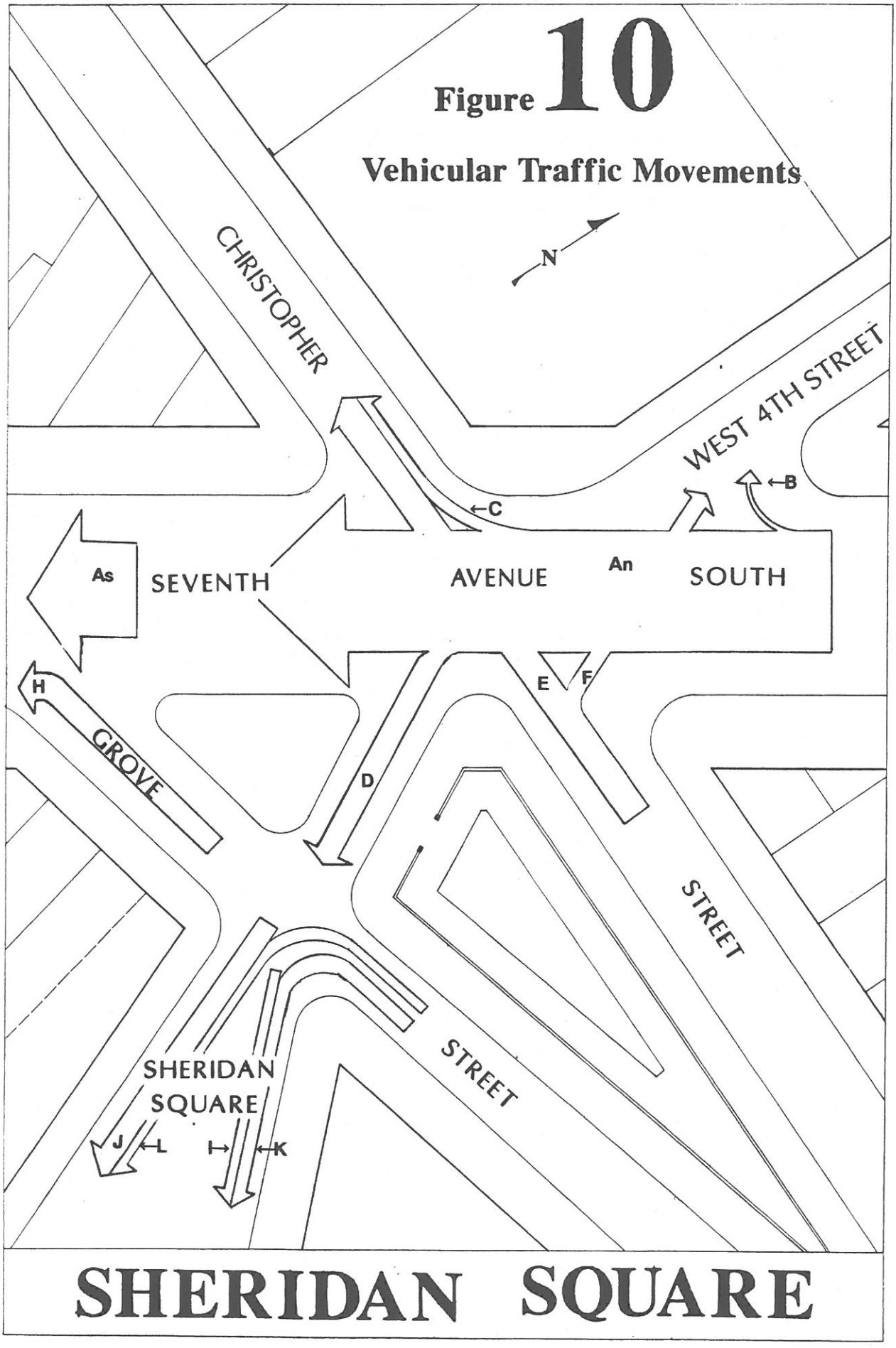
SURVEYOR SOUTH

Surveyor: Sarah Brennan Date: Friday June 12, 1992

TIME	As 7th Ave.	H Gr → 7	I 7 → Wa	J 7 → W4	K Gr → Wa	L 7 → W4
4:15	37	5	0	5	0	1
4:17	32	6	1	3	0	0
4:20	37	5	3	4	0	1
4:25	25	6	0	0	0	1
4:27	48	3	0	3	1	3
4:29	33	8	0	0	0	0
Hourly Average:	*1444*	*209*	*31*	*148*	*40*	*31*

Figure 10

Vehicular Traffic Movements



SHERIDAN SQUARE

Barry Benepe AIA APA

0 20 40 60 ft

Crossing volumes were measured not only at legal crosswalks but also at unrestrained areas between the crosswalks where 25% of the crossings are made. For example pedestrians walking along West 4th Street across Seventh Avenue have no crosswalks at all, nor do walkers along both sides of Christopher Street. (See Tables VA, VB and VC and Figure 11, Sheridan Square Pedestrian Traffic Volumes and Movements Crossing Seventh Avenue)

IV. Traffic Analysis and Evaluation

Closing the two street segments to motor vehicle traffic will produce two contrasting results. On one hand there will be a major benefit to pedestrians who will enjoy a large, safe, attractive space with a quiet, civilized ambience. On the other hand, because of the small volumes involved and the adequate capacity available on other streets, displaced traffic could be accommodated on adjacent streets during weekday AM, PM and midday periods with little perceived negative impact. On evenings and weekends, however, the Greenwich Village area is an important tourist attraction and traffic volumes build substantially by over 25%. Much of the traffic during these busy periods is believed to be vehicles looking for free curbside parking or just cruising. Pedestrian volumes are also much higher and vehicular/pedestrian conflicts increase substantially. Reducing the width of narrow Village sidewalks in order to increase roadway space at the expense of pedestrians will produce little improvement in traffic flow and only attract more vehicles; moreover, such reductions would cause irreparable damage to the neighborhood's historic fabric. The benefits of increasing pedestrian space, especially at the Sheridan Square location, will be substantial and are discussed in section V of this report.

A. Washington Place

The closing of the block nearest the park would not cause traffic problems for two reasons. This short three block street does not function as a through east-west street but as access to University Place and as a parking reservoir. After deducting trips originating from or destined to this street the less than 100 vehicles per hour remaining can be accommodated on West 3rd St., East 9th St. or Houston St. Much of this traffic is local traffic working its way to westbound Waverly Place or northbound University Place or is circling while looking for space to park. Traffic originating on the two easterly blocks of Washington Place will face increased circuity, since it must turn north on Greene St., east on Waverly Place and then south on Mercer St. thereby increasing travel time by two to three minutes. Existing and revised travel patterns are shown in Figure 12, . Peak hour auto and taxi trips originating in the 238 housing units on Washington Place, are about 10 per hour in the AM peak based on CEQR guidelines. Not all of these vehicle trips originate at the front doors of the two apartments.

Changes in methods of goods delivery to the NYU buildings on Washington Place will be required. Trucks will have to use curb space available on Greene St., and goods will have to be hand carted longer distances. In some cases increased use of service entrances on Greene St. is possible. Only delivery of heavy items would be allowed, by special permit, directly onto Washington Place. Cars now parked on Washington Place using special permits would lose this privilege. Overnight parking spaces on this street, for about 18 cars, would be lost.

TABLE V A

SHERIDAN SQUARE PEDESTRIAN TRAFFIC VOLUMES

CROSSING SEVENTH AVENUE

Surveyor: Sarah Brennan **Date: Wednesday June 17, 1992**

	CYCLE I			CYCLE II			
TIME	A CH ⇄ W4	B CH ⇄ CH Unrest.	C W4 ⇄ CH	D W4 ⇄ GR CH ⇄ GR Unrest.	E GR ⇄ GR North Side	F GR ⇄ GR Unrest.	G GR ⇄ GR South Side
11:50-11:57	39	23	102	--	--	--	--
12:00-12:07	--	--	--	32	27	5	14
12:10-12:17	61	32	127	--	--	--	--
12:20-12:29	--	--	--	25	17	3	11
12:30-12:37	41	25	91	--	--	--	--
12:40-12:47	--	--	--	20	23	7	15
12:50-12:57	30	21	97	--	--	--	--
1:00-1:07	--	--	--	26	17	4	19
1:10-1:17	23	30	74	--	--	--	--
1:20-1:27	--	--	--	17	21	15	11
1:30-1:37	29	35	95	--	--	--	--
1:40-1:47	--	--	--	23	30	9	17
Average Hourly:	*302*	*231*	*808*	*192*	*173*	*45*	*118*

NOTE: Capital letters denote crosswalk locations; thus crosswalk A crosses Seventh Avenue from Christopher Street to West 4th Street, crossing B (unrestrained by crosswalk lines) crosses from both Christopher and W. 4th Streets to West 4th and Christopher Streets. Counts ABC and DEFG were done by a single observer changing location every third signal cycle. Hourly averages are double bracketed 30-minute counts.

TABLE V B

SHERIDAN SQUARE PEDESTRIAN TRAFFIC VOLUMES

Surveyor: Melissa Tatge **Date: Wednesday June 17, 1992**

	CYCLE I: Crossing 7th Avenue			CYCLE II: Grove St. Crossing West 4th St.			
TIME	H xCH	I xW4	J xGR	K xW4 North	L xGR South	M xGR East	N xGR West
11:50-12:00	--	--	--	19	12	37	61
12:00-12:07	30	32	24	--	--	--	--
12:08-12:14	--	--	--	12	25	20	41
12:15-12:20	21	17	18	--	--	--	--
12:20-12:25	--	--	--	24	10	11	57
12:25-12:30	16	14	12	--	--	--	--
12:30-12:35	--	--	--	16	25	10	30
12:50-12:55	20	24	15	--	--	--	--
12:55-1:00	--	--	--	8	21	16	48
1:00-1:05	25	34	28	--	--	--	--
1:05-1:10	--	--	--	14	26	21	53
1:10-1:15	30	37	29	--	--	--	--
1:15-1:20	--	--	--	11	31	21	61
1:20-1:25	26	35	19	--	--	--	--
1:25-1:30	--	--	--	10	24	17	68
1:30-1:35	24	28	30	--	--	--	--
1:35-1:40	--	--	--	16	23	21	59
1:40-1:45	27	32	25	--	--	--	--
Hourly Average:	*278*	*324*	*250*	*159*	*262*	*197*	*606*

NOTE: Capital letters denote crosswalk locations; thus crosswalk H crosses (xCH) Christopher St. Counts HIJ and KLMN were done by a single observer changing locations every second signal cycle.

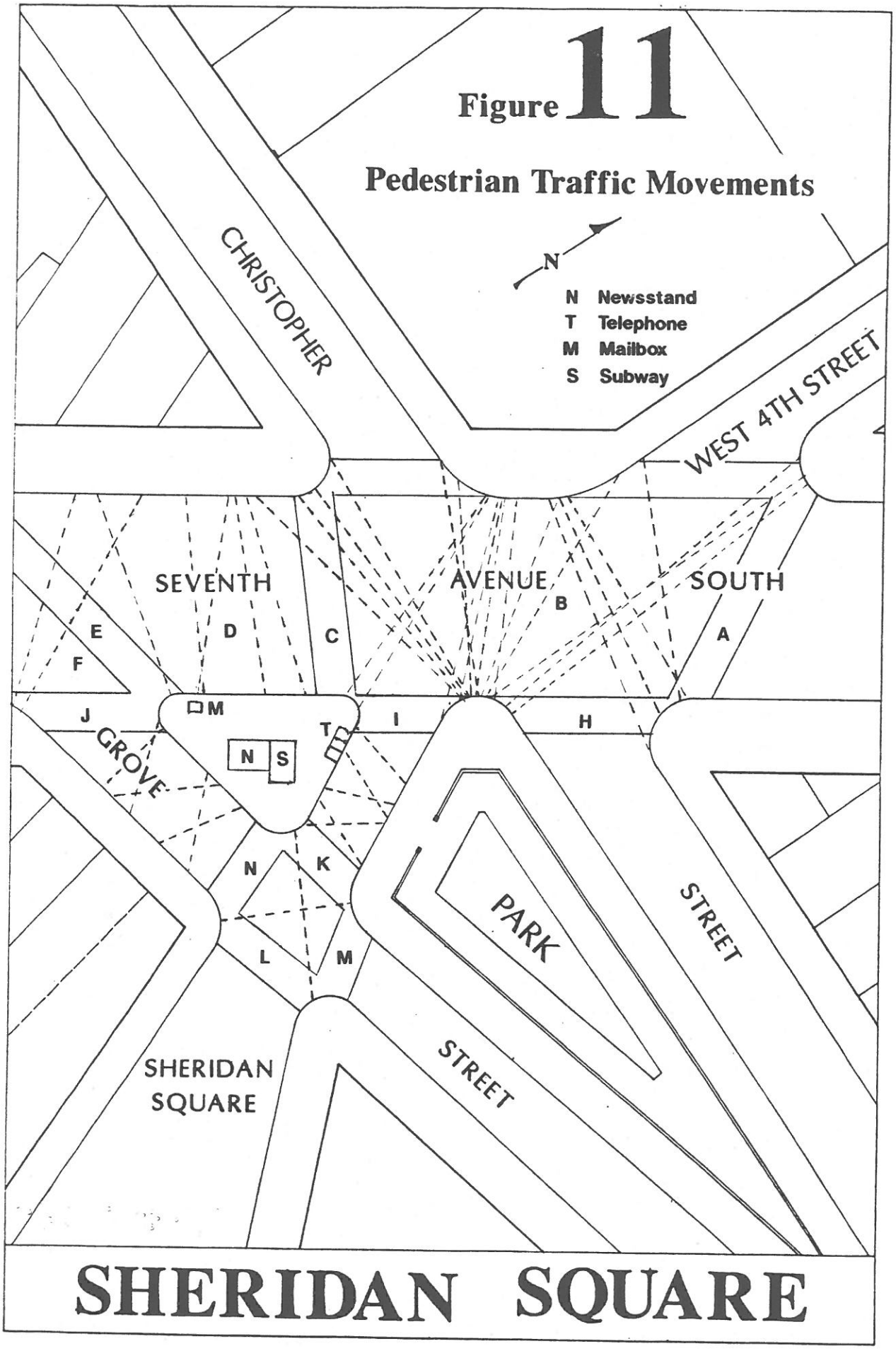
BARRY BENEPE AIA APA

TABLE V C
SHERIDAN SQUARE
PEDESTRIAN TRAFFIC VOLUMES

Surveyor: Joann Ng **Date: Tuesday June 30, 1992**

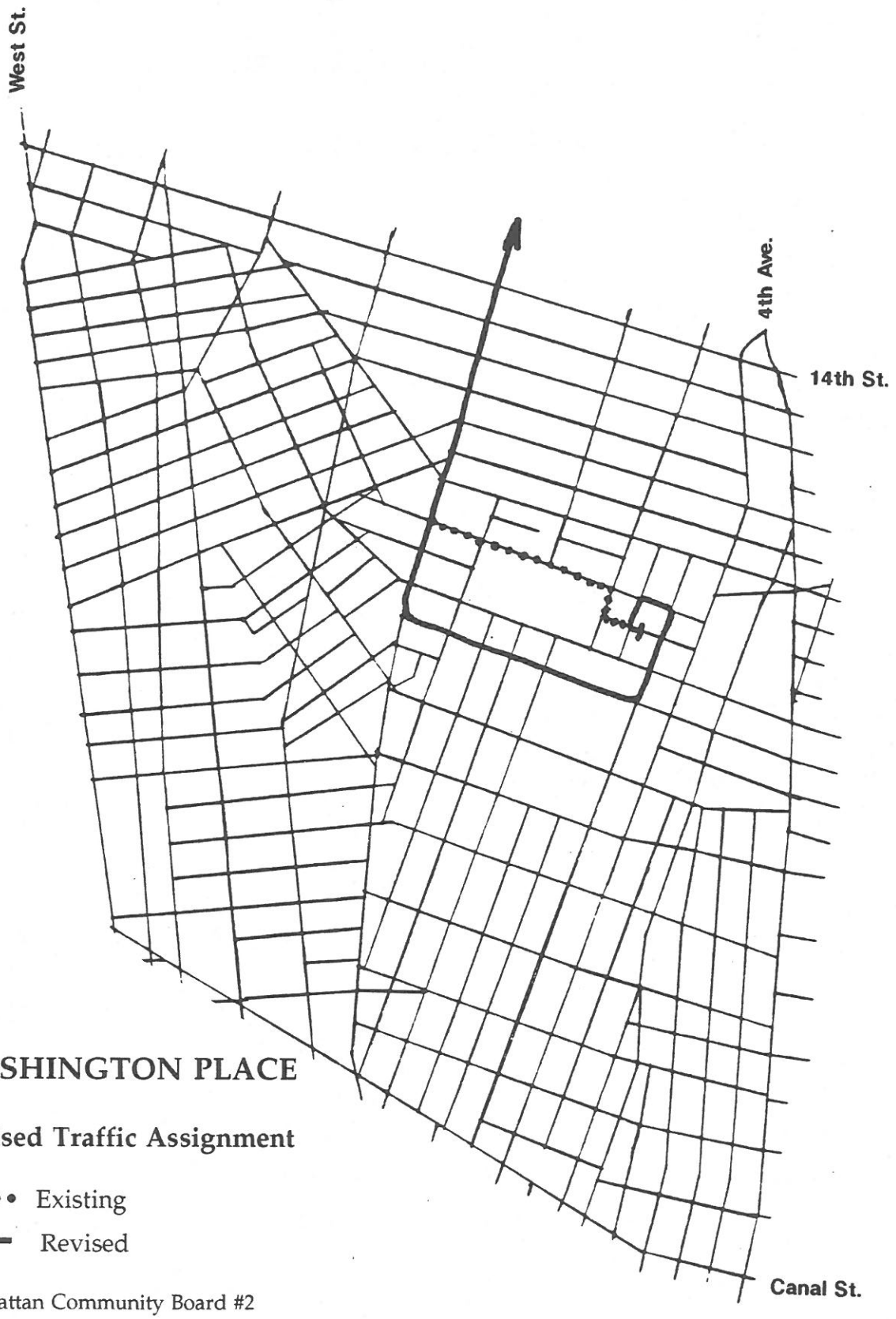
	CYCLE I		CYCLE II: Grove St. Crossing W. 4th St.			
TIME	I xW4th	I/K xW4th Unrest.	K xW4th North	L xGR South	M xGR East	N xGR West
5:00-5:05	--	--	20	--	8	13
5:12-5:20	--	--	23	31	35	105
5:20-5:25	48	18	--	--	--	--
5:25-5:30	--	--	21	12	30	55
5:30-5:35	26	11	--	--	--	--
5:35-5:40	--	--	35	37	41	77
5:40-5:45	48	9	--	--	--	--
5:45-5:50	--	--	21	43	33	90
5:50-5:55	42	19	--	--	--	--
Hourly Average:	*492*	*171*	*257*	*321*	*315*	*728*

NOTE: Capital letters denote crosswalk locations; thus crosswalk I crosses West 4th St. along 7th Ave., while crossing I/K includes all unrestrained crosings between the legal crosswalks I and K.



Barry Benepe AIA APA

0 20 40 60 ft



WASHINGTON PLACE

Revised Traffic Assignment

••••• Existing

——— Revised

Manhattan Community Board #2

Figure 12

These inconveniences must be balanced against the benefit of pedestrian space made available to NYU students and nearby residents. NYU is the largest private university in the nation with 45,000 students, and CB2's largest employer, with about 10,000 of the university's 15,000 employees working in the district. With a budget of over one billion dollars the university is critical to the city's economy. Improving the environs of the campus will strengthen the university's ability to attract students.

B. Sheridan Square

Closing the short segment of West 4th St. at Sheridan Square will displace about 160 peak hour vehicles. Only a small percentage of these vehicles use this segment of West 4th St. as a "through" street. The balance have diverse local destinations in the area which can be reached on other streets. Many of these vehicles are cars and taxies simply cruising or looking for a parking space. This conclusion is supported by a limited one hour license plate survey carried out on July 8, 1992, between 5 and 6 PM. See Appendix, License Plate Survey West 4th Street. Observers at two locations on West Fourth Street, at Grove Street and LaGuardia Place identified vehicles that continued east of that section, probably to Broadway. Of 121 vehicles observed, including 60 taxis, only 33 vehicles, or 27%, passed LaGuardia Place. These 33 were augmented by an additional 197 from Sixth Avenue and such local street as Jones, Cornelia, Washington Square West, Thompson and LaGuardia Place, leaving the "through" traffic a mere 14% of the total 230 vehicles passing LaGuardia Place. This is shown in Figure 13, West 4th Street Through Traffic Volumes.

Two interesting corollary observations were made. First, around 20% of the "through" traffic took the longer route down Washington Place, perhaps to avoid congestion on West Fourth Street, taking from 3-5 minute vs. 3-6 minutes on the shorter route. Second, 14% of this through traffic on West 4th Street took from 20 to 30 minutes to pass through,indicating stops were made along the way.

Through traffic, a small portion of the total, can be easily accommodated on Greenwich Avenue/8th Street or Bleecker Street. Both of these streets have adequate capacity to accommodate displaced vehicles. Local traffic bound for West 4th Street or Washington Place between Sheridan Square and Sixth Avenue would have to use Waverly Place Grove and Barrow Streets or Bleecker and Jones Streets. These alternate routes would entail some additional circuity, and local residents and shopkeepers would need to become familiar with routing options. The one or two tractor trailer deliveries to Sloan's supermarket each day would be rerouted via Grove Street.

Pedestrian safety would be enhanced at Sheridan Square by eliminating the conflict of high speed traffic turning across the crosswalk at West 4th St. Passengers entering and leaving the northbound #1 subway station at Christopher St. would have more space to spread out while waiting for the light to cross Seventh Ave. S. All pedestrians crossing this busy street would benefit by simplifying this intersection.

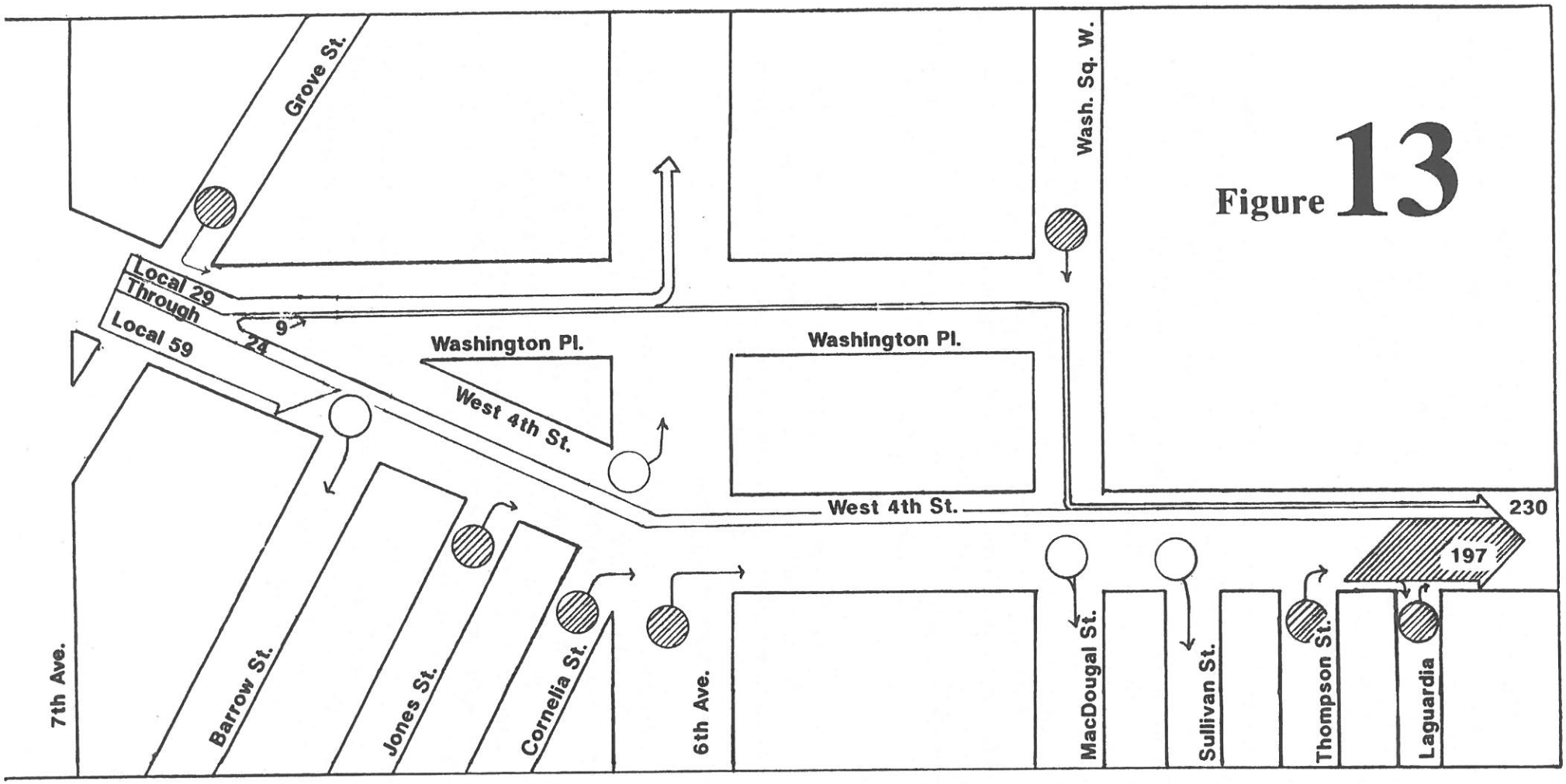


Figure 13

WEST FOURTH STREET

THROUGH TRAFFIC VOLUMES

FROM SEVENTH AVENUE MOVING EAST TOWARD BROADWAY

JULY 8, 1992 Tuesday 5:00-6:00 PM

ADDITIONAL TRAFFIC ENTRIES AND EXITS

Traffic entering east of 7th Ave. Total: 197

Traffic exiting east of 7th Ave. Total: 88

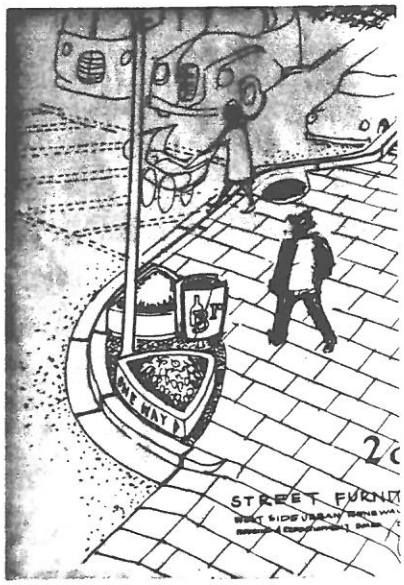
BARRY BENEPE FAIA APA 130 EAST 16TH STREET NEW YORK CITY 10003

V. Urban Design Considerations

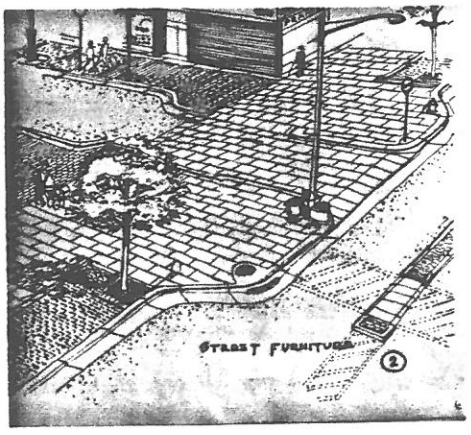
One of the important benefits of traffic calming is the potential for reuse of urban street space. Envisioning how this space will look and operate, with fewer cars, is critical. Refinement of the initial design concepts has been done for the two study locations selected in this second phase of the study. Preliminary plans for each affected site indicating boundary uses and building entrances, and sketches of urban design treatments at the case study locations have been prepared, and contrasted with the existing landscape.

A. Washington Place

The block-long plaza shown on Figures 14 & 15 can be seen as an extension of Washington Square, which would relieve the extreme crowding of that small historic park. It could be a focus for such annual events as the Greenwich Village Outdoor Art Exhibit, NYU graduation ceremonies, book fairs and political gatherings. Generally, as a gathering space for town & gown, there could be periodic informal volley ball, skating and other informal recreation. Bordered entirely by NYU buildings, it would provide a safe haven for students, staff, and the general public which share in events and programs at the University. Well-lit at night, it would allow day classes, events, drawing classes and exhibitions to extend to balmy weekday evenings. Back lighting which highlights and illuminates the architecture would be an improvement over the flood lights that now shine into peoples eyes. There would be space for tables, chairs, and exhibits under trees and alongside the flower beds. A central fountain would form a focal point with the coolness and music of falling water. Curb cuts would be provided for emergency and essential service access.



Initially, as a first stage of construction, the street might be defined by raised cross walks at both ends, thus defining it as a local access street discouraging through traffic. Such treatment is shown in the two illustrations at right which show a similar treatment combined with "neck-downs" proposed for the West Side Urban Renewal Area in the 1960's.



Daily maintenance, operations and security would be chiefly the responsibility of NYU. Pavement surface repairs and long term infrastructure maintenance, landscaping, pavement, lighting, and subsurface utilities would fall under the jurisdiction of the responsible city and private agencies.

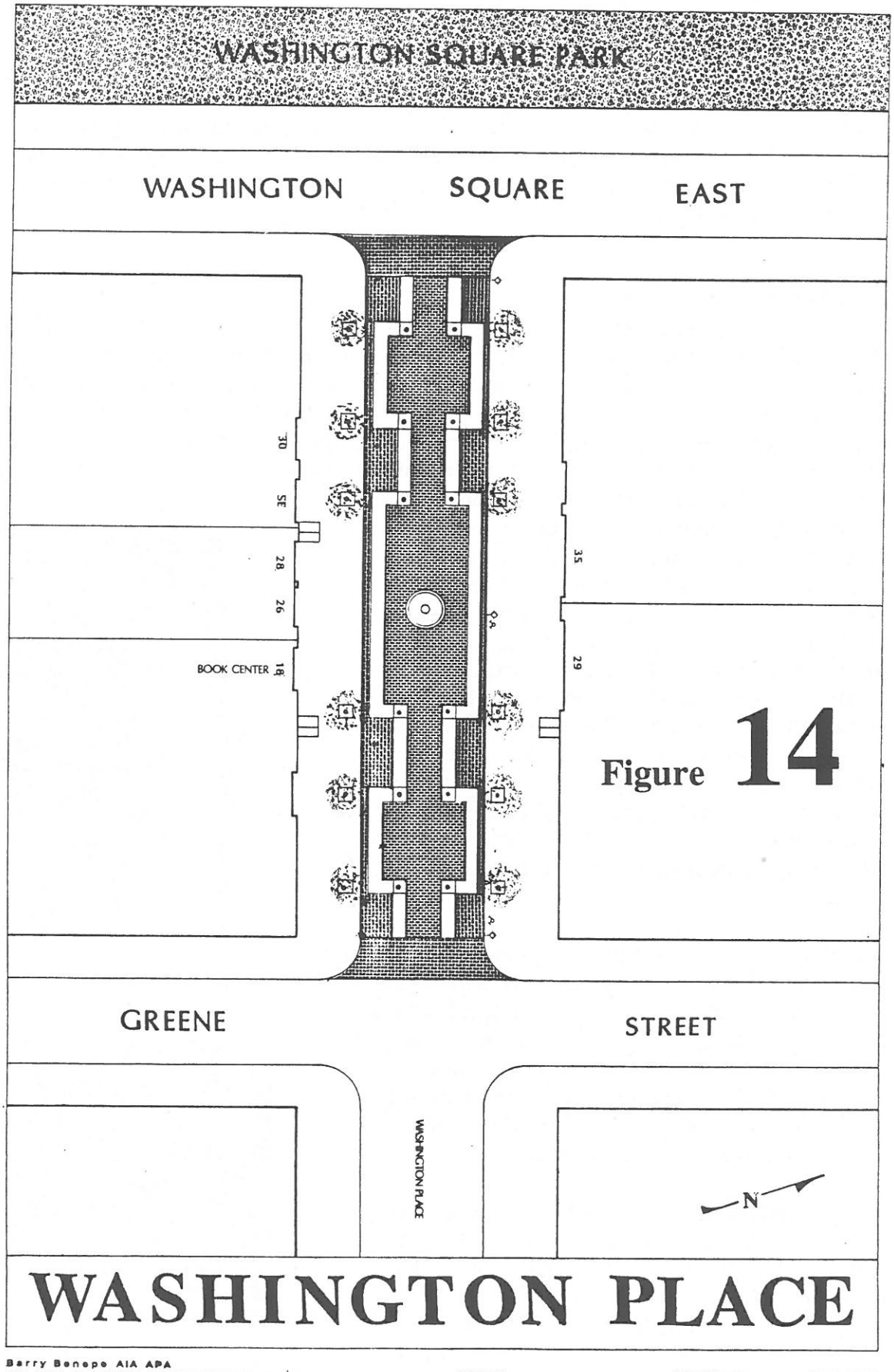


Figure 14

Barry Benepe AIA APA
URBAN, REGIONAL AND ENVIRONMENTAL PLANNING, ARCHITECTURE AND DEVELOPMENT
136 EAST 16TH STREET NEW YORK CITY 10003 (212) 477-2220

Drafted By: Eric

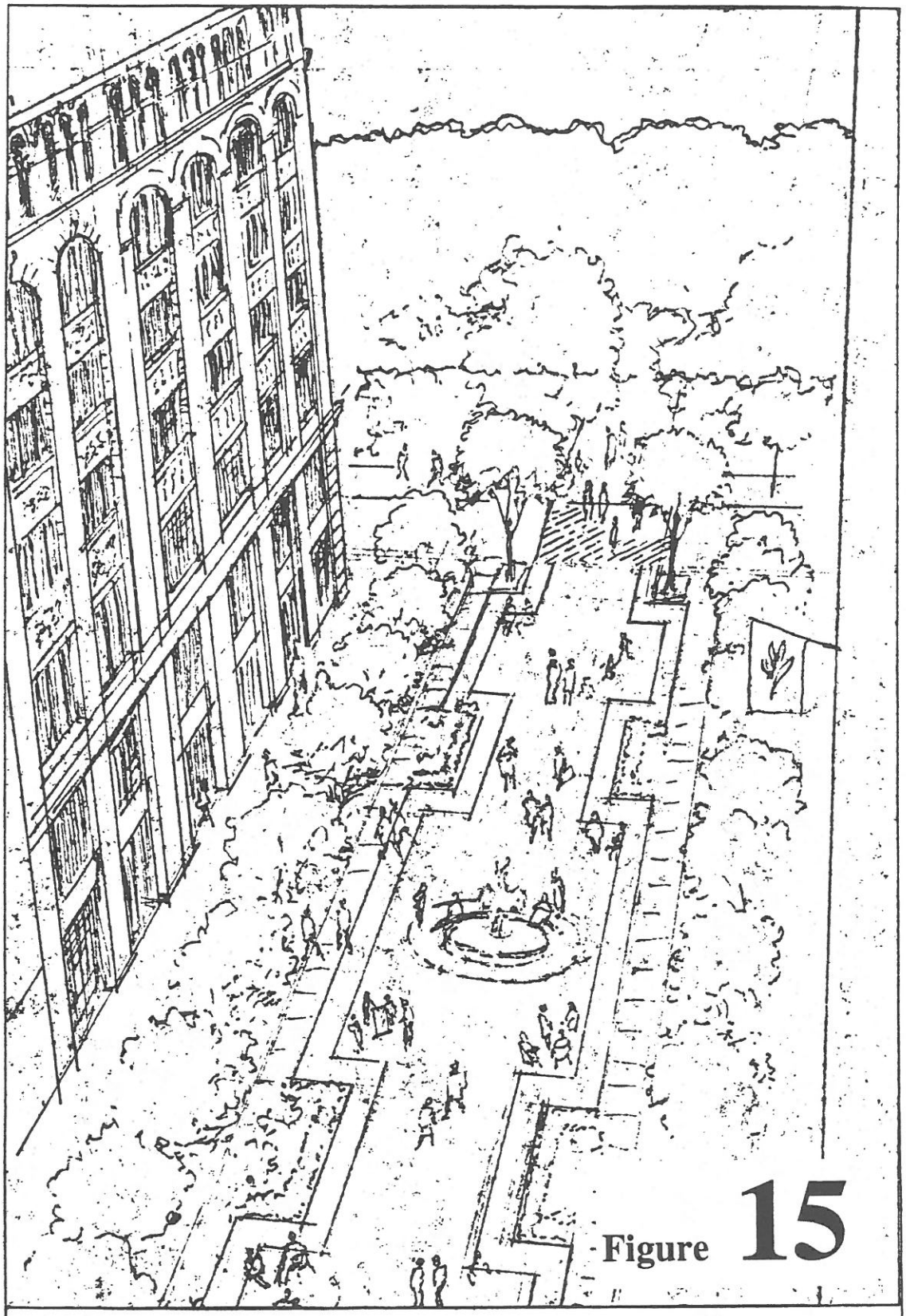
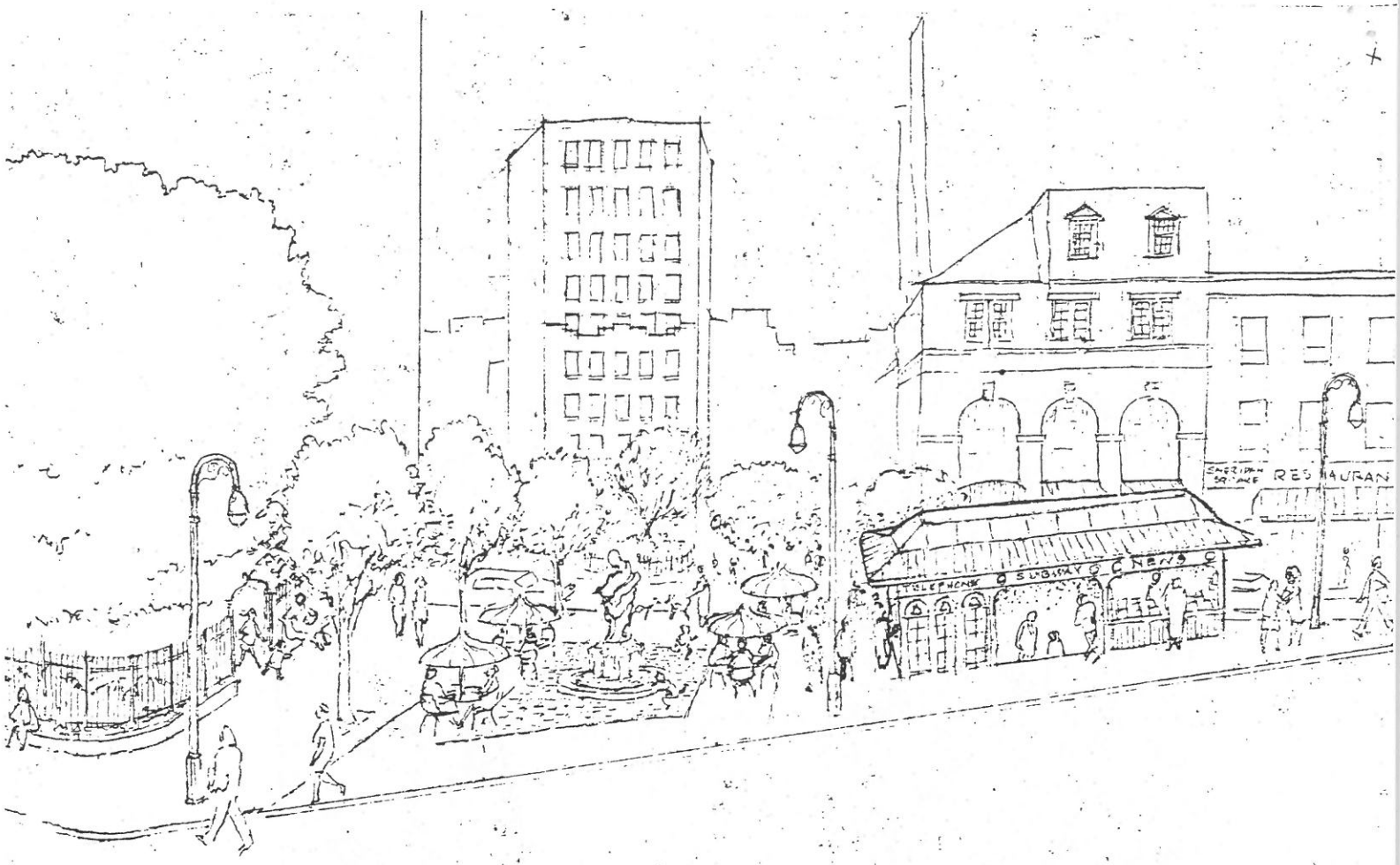


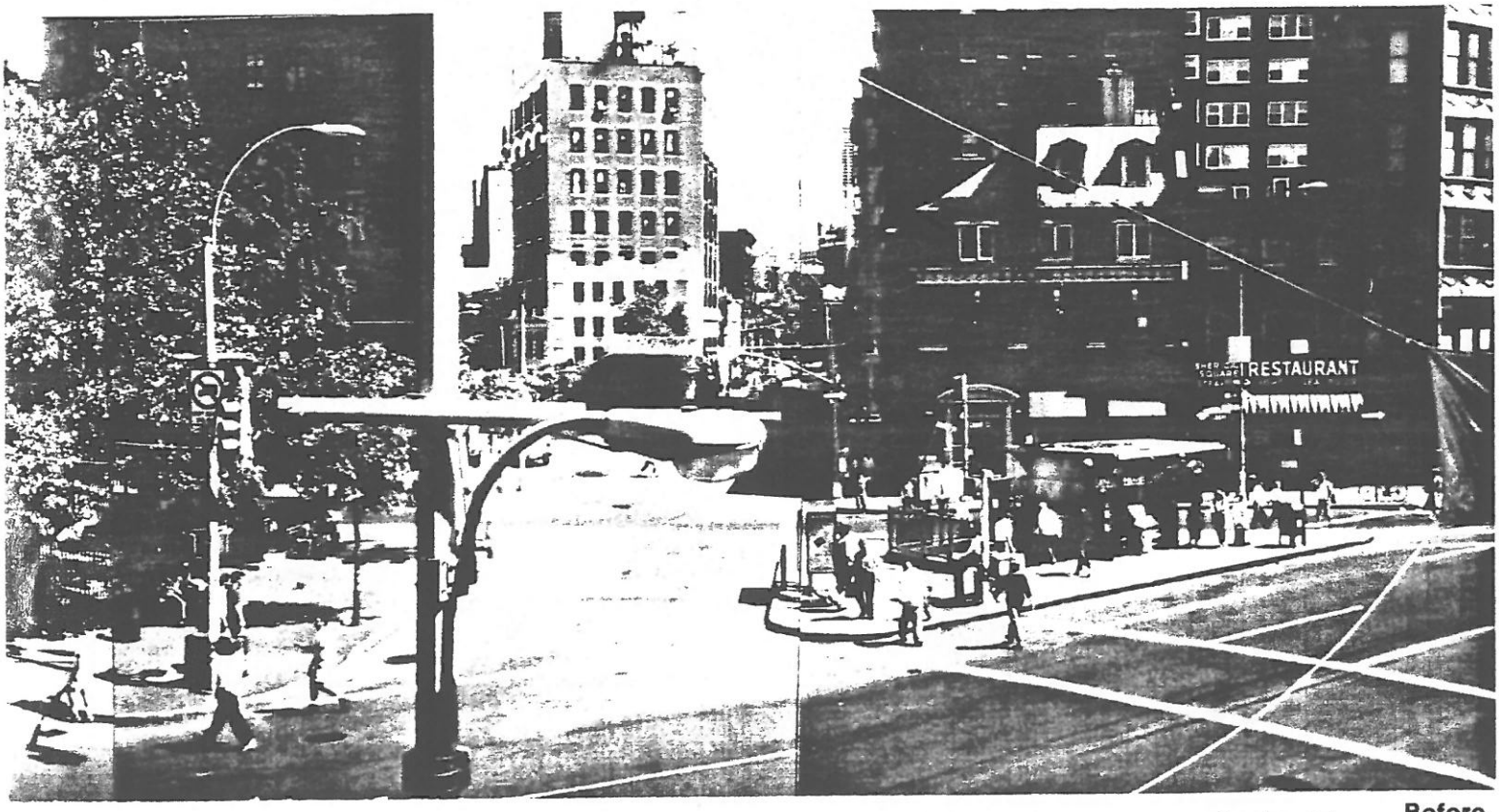
Figure 15

WASHINGTON PLACE

Barry Benepe AIA APA



After

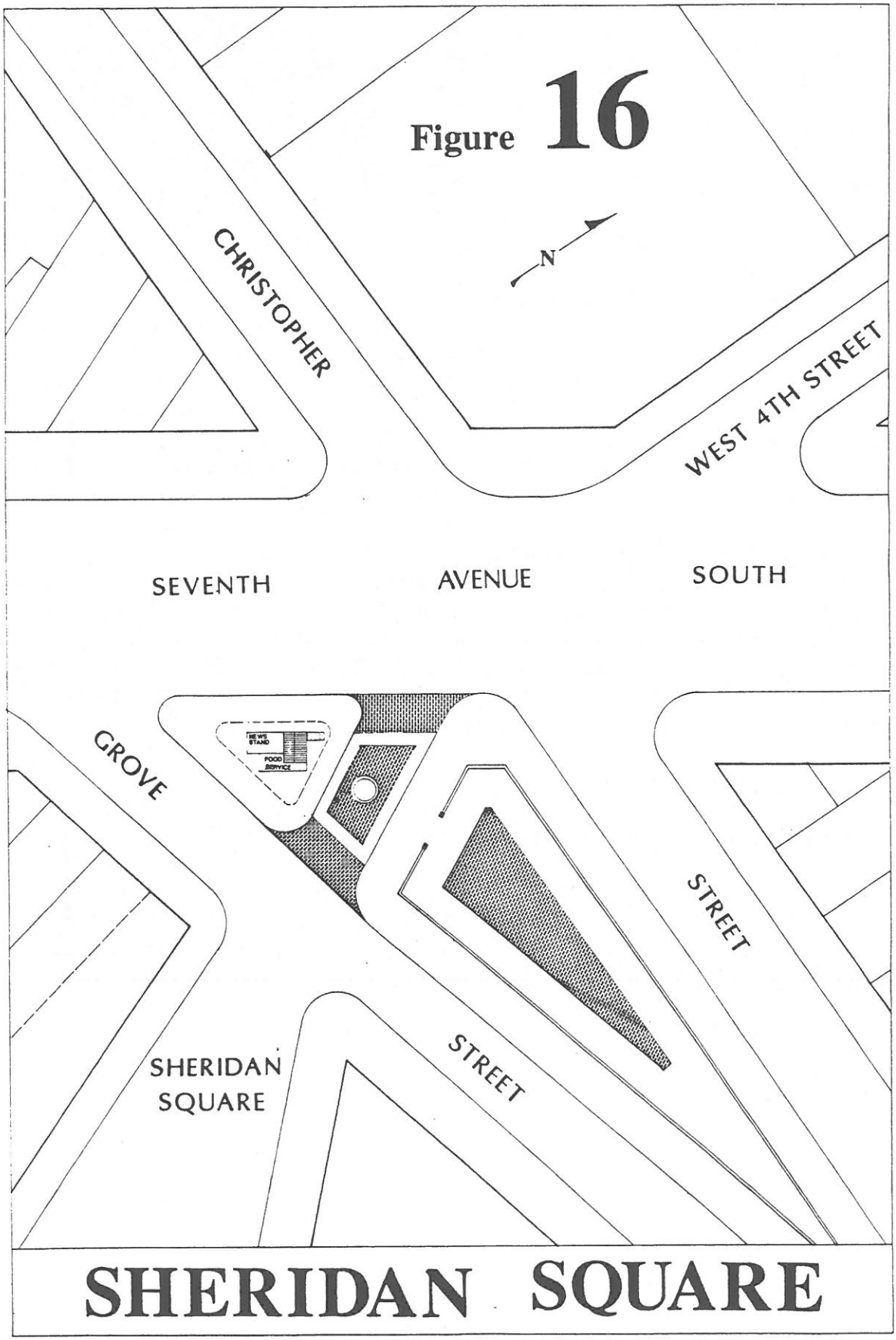


Before

Sheridan Square
(West Fourth Street)

Figure 17

Figure 16



SHERIDAN SQUARE

Barry Benepe AIA APA
URBAN, REGIONAL AND ENVIRONMENTAL PLANNING, ARCHITECTURE AND DEVELOPMENT
139 EAST 16TH STREET NEW YORK CITY 10003 (212) 477-3220

Drafted By: Eric

0 20 40 80

B. Sheridan Square

The closing of this small section of West 4th Street (Figures 16 & 17) provides an extension of the small adjacent park and links it to the IRT subway which is one of the major access portals into the Village. In order to develop this as a distinctive gateway for tourists and visitors, a key feature of this proposal is the grouping of the existing large newsstand, subway entrance and ranked phone booths under a single skylight roof. Also incorporated under it would be a small refreshment kiosk serving light wholesome snacks and beverages to outdoor cafe tables in the former road bed. This use would not only add a reinforcing quiet, clean, and attractive adjunct to the park but would also form a vital, useful bridge to the busy activity around the newsstand and subway, generating hundreds of people an hour. Existing pedestrian paths on the sidewalks would remain open. Maintenance of the space would fall mostly under the Department of Parks and Recreation and the cafe operator.

Cost Estimates and Funding Sources

Preliminary estimates of the type and amount of construction work needed to accomplish the design concepts have been made. Washington Place involves the conversion of about 7,100 square of roadway into bluestone pedestrian pavement. In addition 12 sidewalk trees with cast iron grates, 12 post lights, 200' of seating area, eight planters and a major central fountain are included for a total estimated cost of $364,000. No changes in underground utilities have been included in this estimate.

While the West Fourth Street area is smaller, only 1,400 square feet, the glazed canopy with utility connections to the proposed foodservice unit plus fountain, two trees and two bishop crook streetlights bring the estimated cost up to $180,000.

Under the recently enacted Intermodal Surface Transportation Efficiency Act (ISTEA) states and localities must spend at least 10% of their highway funds for "enhancements", including pedestrian amenities. Substantial additional Federal transportation funds are available under the Congestion Mitigation/Air Quality Program (CMAQ).

VI. Consultation and Implementation

While this research study is being advanced under the auspices of Transportation Alternatives, a non-profit organization concerned about transportation and the environment, it is important to obtain community input if these proposals are to become a reality. The Phase I project was described at a community forum hosted by CB2 and NYU. In the case of Washington Place considerable discussion has already taken place at three lengthy CB2 hearings.

A longer term consultive process with Manhattan Community Board #2 should be established after this report is completed. Key professionals involved with the project have had a long-standing association with the Board. The Board's Traffic and Transportation Committee will be an essential link for this study. The committee will be invited to establish a Traffic Calming Study Task Force, where concerned members of the community can participate.

Equally important is consultation with key city agencies including the NYC Dept. of City Planning, the NYC Dept. of Transportation and the Manhattan Borough President's Office. Consultation with NYU has also taken place. This has been ongoing during the study. Opportunities and problem areas have been identified and solutions worked out.

Converting these proposals to reality will take a long term continuing effort. While there are many legitimate concerns about inconvenience to motorists and abuse of public space the number of pedestrians that would benefit from these new spaces is substantial.
It is important to fully comprehend the revolutionary change in environment that would result from implementing these proposals. As urban residents we so take for granted the negative aspects of our streets that we cannot conceive any improvements. We accept, if somewhat painfully, the night car alarms, the blowing of horns, the constant din of traffic and occasional roar of a truck or motorcycle, the noxious fumes and deadly carbon monoxide, the cramped narrow sidewalks and the endless line of parked cars obstructing our views and enjoyment of our own streets.

The alternative is a street which becomes more of a park outside our front door or part of our occasional walk where calm and quiet are the norm, where one becomes more conscious of the smell of flowers, not fuel, the sounds of voices, human and bird, not auto engines or squealing tires, the feel of sun or breeze and the sense of street as architecture and landscape rather than as a parking lot. These proposals thus represent both a challenge and an opportunity.