

CONCLUSIONS AND RECOMMENDATIONS

1. The traffic deficiencies are reaching serious proportions and should be cause for concern.
2. The economic health and future growth of the area is contingent upon prompt and effective traffic solutions.
3. The business interests of the area cannot solve this problem without adequate support from local government agencies and some legislative action.
4. The supply of off-street parking spaces are inadequate, and depending on proximity to the shopping center, either over-taxed or under-used.
5. The recommended parking solution, while simple and practical, will require a bold assault upon archaic and unrealistic zoning practices.
6. The parking solution is financially feasible on a self-liquidating basis.
7. Biscayne Boulevard should be kept attractive as well as a functional traffic-way.
8. That the Biscayne Plaza Shopping Center does not gain maximum utilization from their parking facilities because of inadequate usage control.
9. It is recommended that a two phase off-street parking program be advocated and sponsored by the Northeast Miami Improvement Association:

Phase I -- Immediate acquisition and development of the off-street parking facilities east of Biscayne Boulevard as described in Plate 6.

Phase II - 18 to 24 months. Restudy potential of
proposed parking area south of NE 79th Street
between Biscayne Boulevard and Little River Canal.

10. It is recommended that Biscayne Boulevard be widened and beautified from NE 55th Terrace to NE 87th Street.
11. It is recommended that the Biscayne Plaza Shopping Center institute parking controls on its lots for the purpose of affording its patrons greater service and availability of space.
12. It is recommended that the following listed streets be paved between Biscayne Boulevard and a point approximately 225 feet east, and that they be widened and fully developed with curb and gutter to City Standards:

NE 80th Street

NE 81st Street

NE 82nd Street

NE 82nd Terrace

NE 83rd Street

Chapter I
Introduction

The northeast section of Miami, with an increasingly important concentration in the vicinity of Biscayne Boulevard and NE 79th Street, is an older but steadily growing district containing a great variety of business, professional service, warehousing, light industrial and retail activities, surrounded by fully developed residential areas.

The district as a whole makes an important and substantial contribution to the economy of the area, pays a high share of local taxes, and provides a significant amount of employment. As an area it contains all of the elements and characteristics of a self-contained community of 15,000 to 18,000 population. While many of the problems experienced are similar to those of other sections of the city, the appropriate solution must reflect the particular needs of this area both as to timing and extent.

The principal concern of this report is correction of the traffic deficiencies which are now reaching serious proportions. At the present stage of development it appears that practical and comparatively inexpensive remedies properly timed and of appropriate quantity and quality can preserve and expand a healthy growth. There are all too many examples in Metropolitan Miami of the stagnation, blight, and deterioration that occurs in this type of district if timely measures are not taken. Adjacent Little River is a prime example.

Very often general planning and zoning policies intended to promote the value of property and land use and to generally create a more favorable environment, operate to defeat the purpose for which they were intended by creating a rigid structure incapable of adapting itself to changing needs.

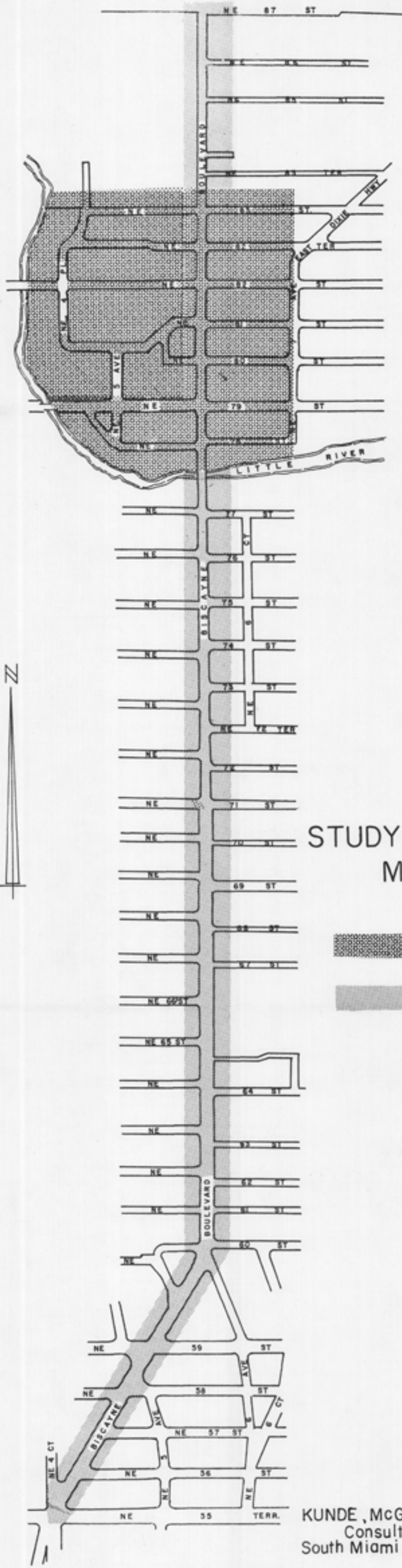
There are a number of sections throughout Miami which, while strategically located, have been precluded from developing their potential as business districts because of the rigidity of the Off-Street Parking Ordinance and a corollary failure to promote a flexible off-street parking program on a district basis.

It is not the intent of this report to criticize public policy or to recommend solutions for any but the problem at hand. However, an example of the applicability of this subject can be shown along many stretches of Biscayne Boulevard, where if adequate parking facilities could be financed and developed, the value of property and business volume would be substantially increased.



For functional purposes of this study we have divided the district into two areas (see Plate 1). Area 1, bounded by NE 84th Street on the north, NE 7th Avenue on the east, and the Little River Canal on the west and south, contains a high concentration of professional service and retail business. Area 2, extending along Biscayne Boulevard between NE 55th Terrace and NE 87th Street, contains retail establishments, service businesses, professional offices, with a high concentration of tourist facilities (food and lodging). The improper use of existing parking facilities in some instances, and the lack of adequate parking facilities in others, are directly responsible for the major difficulties being experienced in Area 1.

The functional obsolescence of narrow Biscayne Boulevard is bringing about business deterioration and blight to Area 2. Biscayne Boulevard, in the study area, has been unable to handle the demands upon it for many years and the situation is progressively worsening.

It is realized that certain recommendations in this report appear drastic and expensive. It must be borne in mind that serious problems require serious action. Delay of corrective and preventive measures will only increase the problems. It takes longer to bail out a boat than it does to sink it, and costs less to maintain it than it does to repair it.



STUDY AREA
MAP

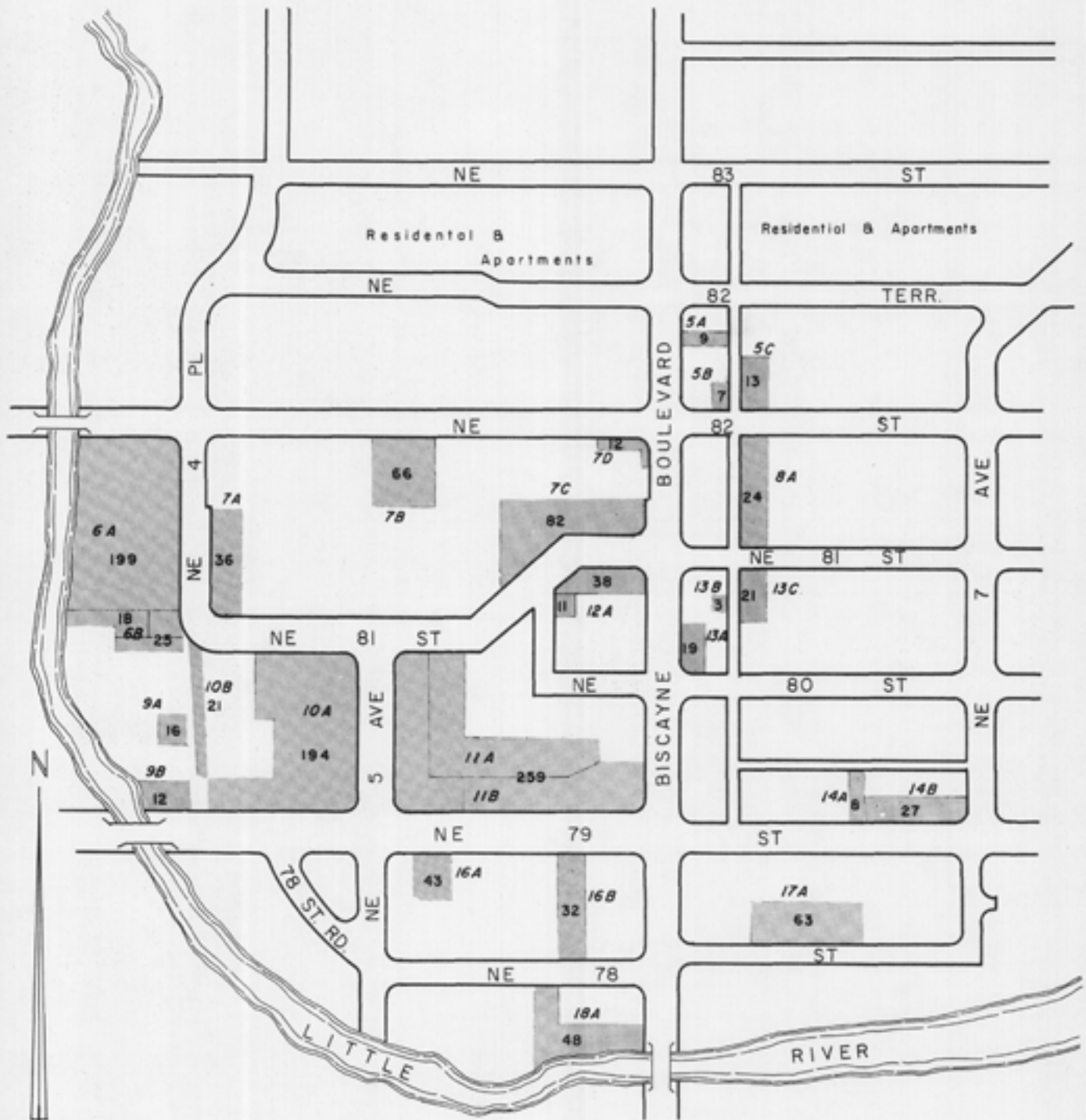
-  AREA ONE SHOPPING PLAZA
-  AREA TWO STRIP

Chapter II
Area 1

Nearly all of the existing vacant land is devoted to supplying approximately 1280 parking spaces (Plate 2). Only 15% of these spaces are located in the east half of the corridor where future development is likely to occur. As shown in Plates 3, 4, and 5, these existing facilities are crowded throughout the day.

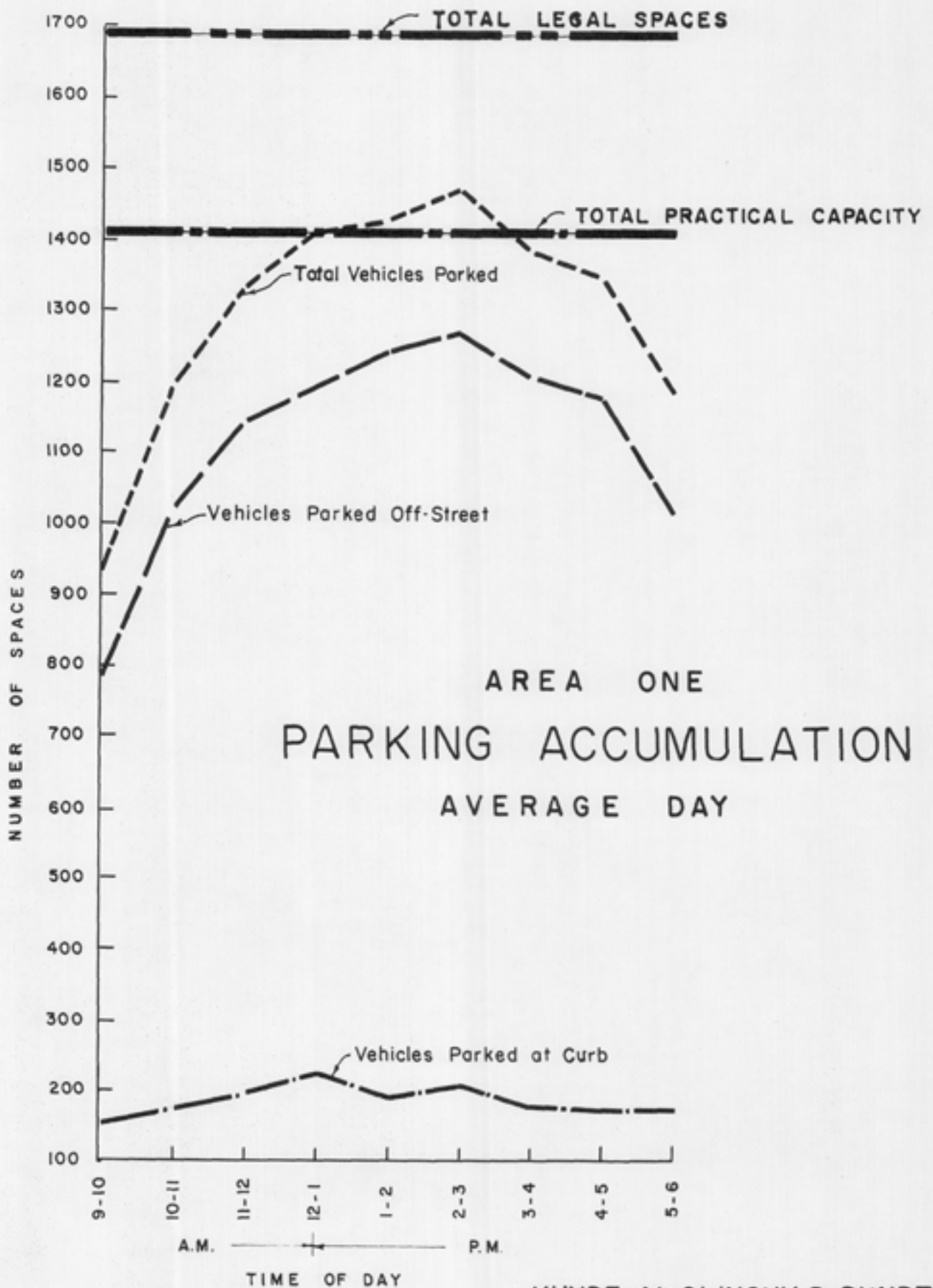
An interview study of patrons entering the stores fronting Biscayne Boulevard indicated that over half used the shopping center parking lot. Fortunately the shopping center has not, to date, restricted such use. The interview study also showed that 57% of all persons sampled patronized establishments along the east side of the Boulevard, yet parked their cars in west side lots. Other field studies disclosed these significant facts:

1. The bulk of the parking demand is centered on the four lots in the southeast quadrant of the shopping center (see Plate 5).
2. Only 17% of all parkers in the area occupy spaces for four hours or more, yet account for nearly 50% of all space hours used (see Tables I and II).
3. The premium parking lots mentioned in No. 1 above experience high levels of usage by long-time parkers, though they are sub-standard in design and operate at maximum capacity throughout most of the day. The average turnover rate is 3 to 9 vehicles per day.
4. 68% of all curb parking is located along the Boulevard, or in the shopping center. Long-time parkers (four hours or more) account for over half of the space hours used.
5. The major lots near the shopping center and the Boulevard are experiencing high levels of usage, resulting in congestion

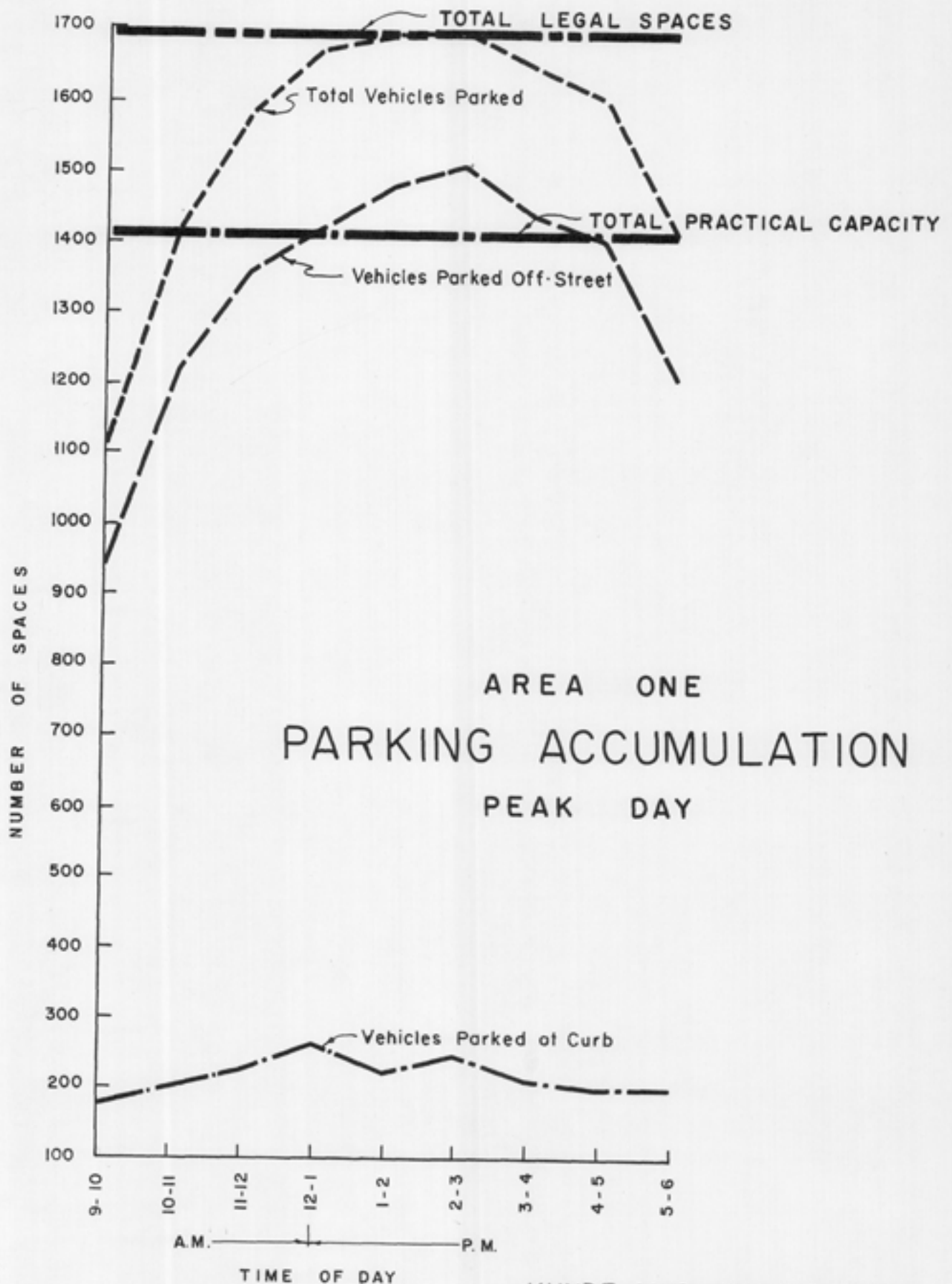


A R E A O N E
 EXISTING PARKING INVENTORY

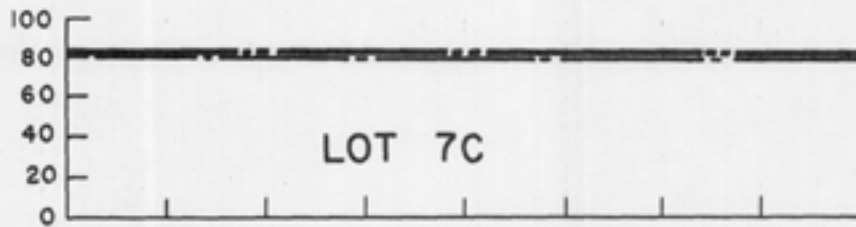
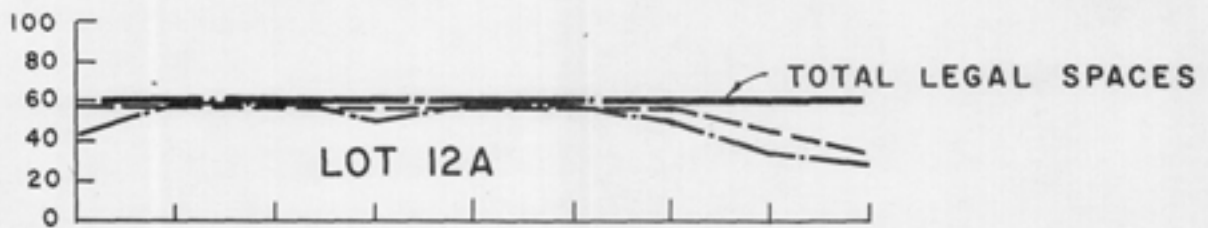
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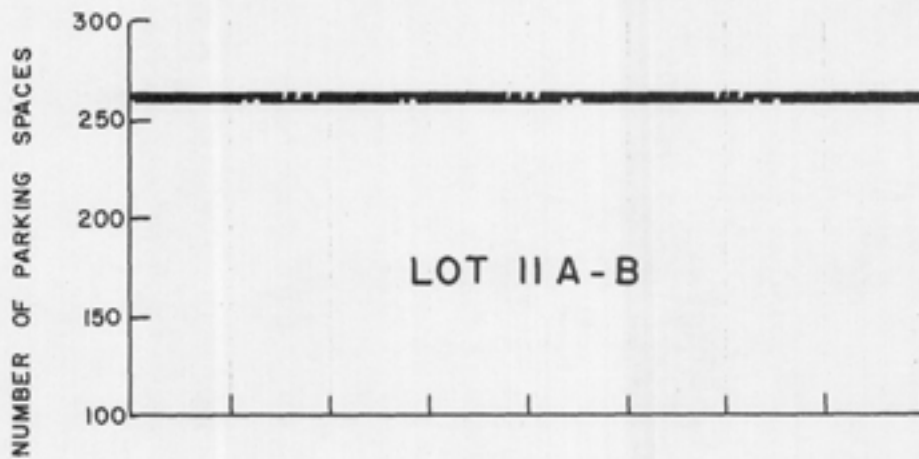
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 PLATE 3



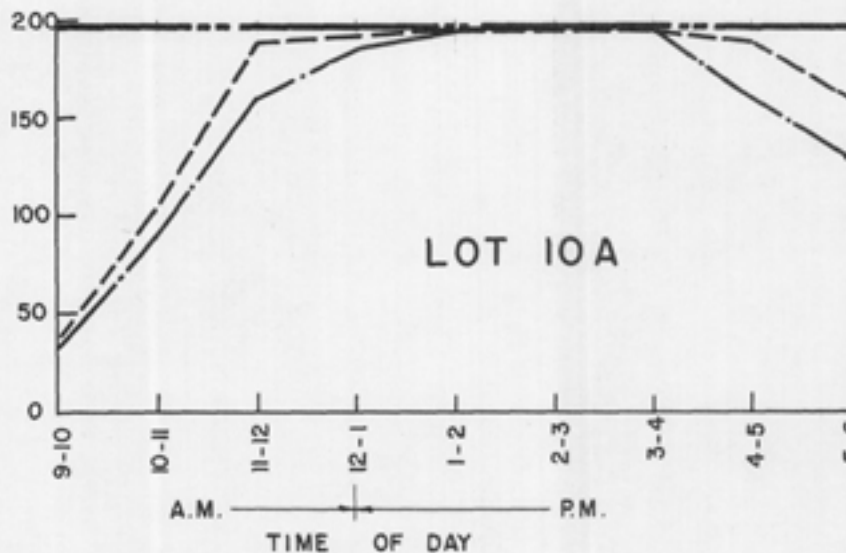
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 PLATE 4



Note: This lot operates at capacity throughout the day



Note: This lot operates at capacity throughout the day



LEGEND

- Average Day
- - - Peak Day

PARKING ACCUMULATION
FOUR MAJOR LOTS IN AREA ONE
AVERAGE AND PEAK DAY

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South Miami Florida
PLATE 5

TABLE I

SUMMARY

Off-Street Parking Duration
(11 Hr. Sample)

Lot Number	Percent Parkers Over 4 Hrs.	Percent Space Hrs.
5 A	28	70
5 B	80	94
5 C	33	67
6 A	76	93
6 B	77	95
7 A	04	20
7 B	85	86
7 C	25	73
7 D	43	78
8 A	02	10
9 A	63	86
9 B	100	100
10 A	12	33
10 B	25	50
11 A	06	21
11 B	04	15
12 A	60	58
12 B	24	48
13 A	13	42
13 B	20	45
13 C	06	26
14 A	22	66
14 B	27	62

16 A	18	49
16 B	66	79
17 A	20	49
18 A	28	50
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TOTAL	17	48

TABLE II

Curb Parking Summary
(11 Hr. Sample)

Block & Face	Percent Parkers Over 4 Hrs.	Percent Space Hrs.
2 E	50	86
2 S	45	86
2 W	100	100
2 N	48	78
4 E	12	37
4 S	38	55
4 W	-	-
4 N	28	69
7 E	0	0
7 S	0	0
7 W	47	75
7 N	22	58
12 E	-	-
11 E	-	-
11 S	-	-
11 W	0	0
11 N	0	0
12 W	14	36
12 S	0	0
10 S	-	-
10 W	09	14
10 N	0	0
10 E	0	0

15 E	-	-
16 W	-	-
18 N	06	14
17 W	0	0
17 N	0	0
17 E	-	-
17 S	-	-
14 W	-	-
14 N	28	69
14 E	0	0
14 S	-	-
13 W	14	43
8 W	0	0
8 N	43	85
8 E	0	0
8 S	80	93
5 W	0	0
5 N	25	50
5 E	-	-
5 S	35	77
3 W	0	0
3 N	50	89
3 E	0	0
3 S	33	69
B S	0	0
1 E	0	0
6 E	<u>53</u>	<u>88</u>
TOTAL	17	54

and inconvenience, while the outlying lots have relatively low levels of usage because of long-time parkers.

Briefly, to summarize, outlying lots appear to receive little usage because the longer walking distance discourages persons requiring relatively short-time parking. The long-time parking use of the close-in lots is evidently caused by employees in the area. Close-in lots are used to capacity.

In addition to the off-street parking problem there exists a general congestion on the access streets leading to the shopping center. It is caused by vehicles circulating to and from the parking areas.

The volume of circulating vehicles is extensive enough to warrant full roadway capacity utilization. Permitting long-time curb parking prevents full utilization.

The logical area for expansion of the Biscayne Plaza Shopping Center economic community appears to lie east and south of the present center.

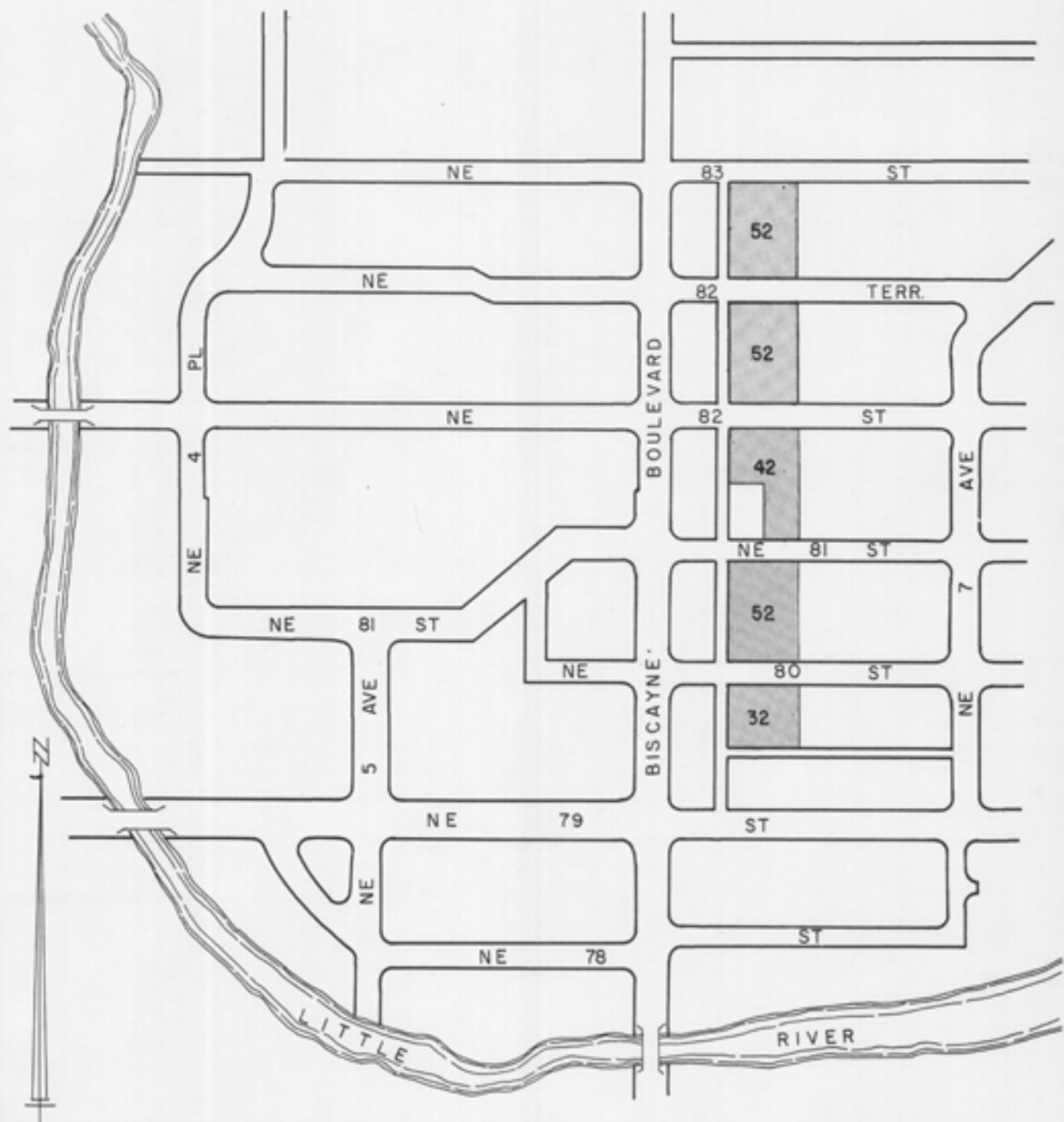
Movement in this direction is beginning to take place. Should this become a trend, existing parking facilities will become increasingly taxed.

New parking facilities must be provided if the same fate which befell the Little River business community is to be avoided.

Obviously, the task of providing adequate facilities represents a financial venture far beyond the resources of any individual business enterprise now in the area.

A logical and practical means of financing would be a revenue bond issue repaid from revenues derived solely from parking meters installed on the facilities.

The site plan shown on Plate 6 depicts the desirable location for



S I T E P L A N
 P R O P O S E D A D D I T I O N A L P A R K I N G F A C I L I T I E S

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 P L A T E 6

new parking facilities, and Plate 7 shows a typical lot layout.

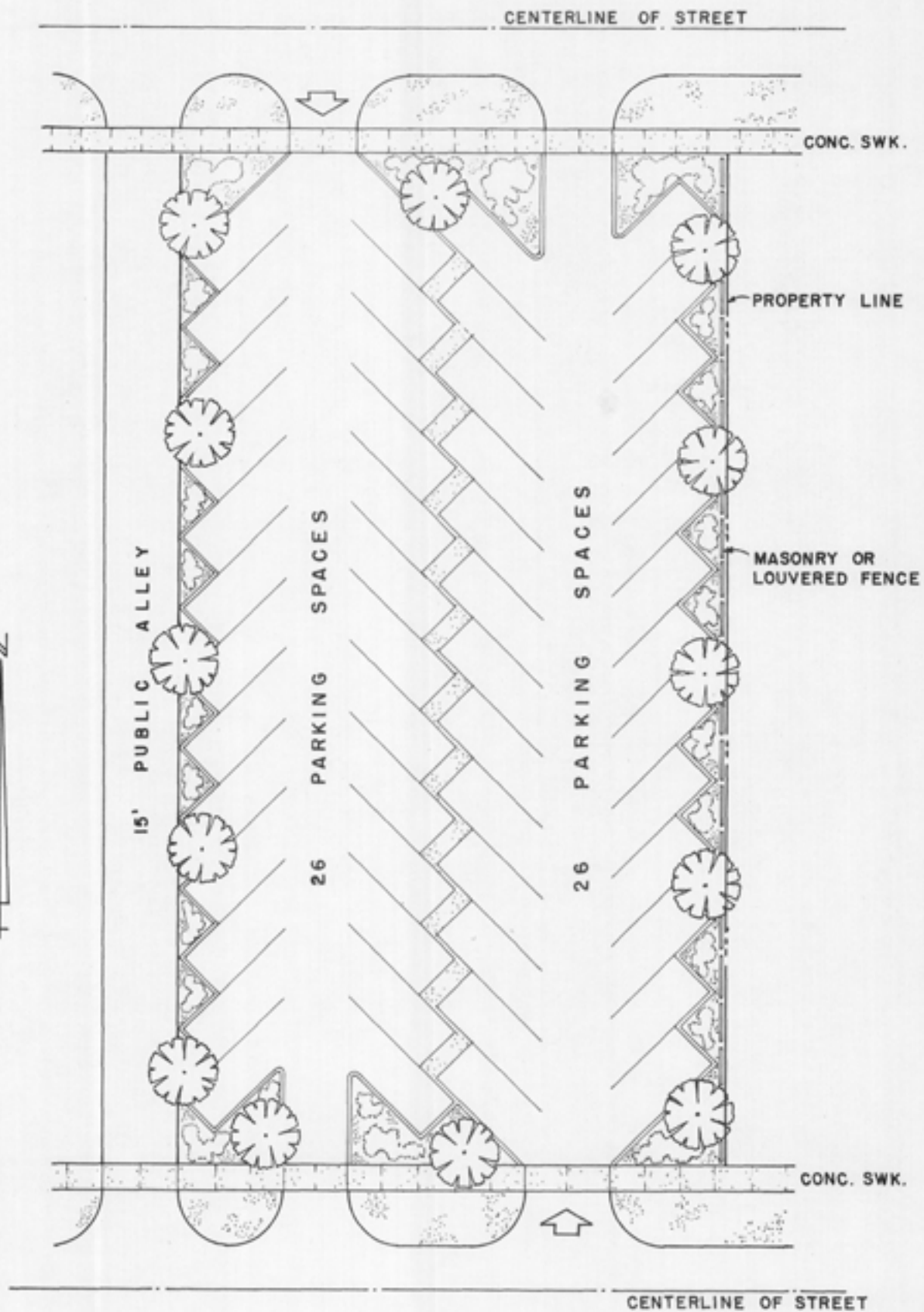
The project as outlined here will provide new parking spaces adjacent to the heart of the business community and will insure an adequate reserve of parking for the newer, larger developments which will eventually replace the present multitude of small shops and stores.

Each lot is 110 feet wide and provides angled vehicle stalls for ease of entry and exit. Additionally, the driving aisles are designed for one-way operation, to permit ease of access and internal circulation between lots. Vehicle stalls are of sufficient width to permit ease in getting in and out of automobiles. Each lot would be adequately lighted for safety from hazard and to deter crime.

The one lot immediately behind the Miami National Bank has been omitted because of the bank's drive-in teller window system which is extremely useful in reducing the total parking requirements. Its location does not have an adverse influence on the continuity of flow through the area.

Existing commercial zoning boundaries incorporate only half of the property required for this project. To carry out this proposal it would require a zoning action by the City of Miami. The existing commercial zoning line must be relocated approximately 55 feet (one lot width) eastward from its present location.

The study of Area 1 also has disclosed a serious but not critical shortage of adequate parking immediately south of the Biscayne Plaza Shopping Center and between Biscayne Boulevard and the Little River Canal. However, it is our opinion that this is a second phase development. It should be restudied within the next two years. Firm recommendations as to location and number of spaces to be supplied could be developed at that time. During this period particular business developments will take place which will solidify the characteristics of the area.



TYPICAL PARKING LOT LAYOUT

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 SOUTH MIAMI FLORIDA
 PLATE 7

It should be noted that while there is a maximum potential need for 476 vehicle spaces in the area east of Biscayne Boulevard, the actual day to day demand arrived at by factoring the various effects of parking fees, etc., would be 283 spaces. The total practical number of spaces that can be supplied at this time is 221. This does not mean that there would be complete saturation in this area, but that there would be days when a shortage of space would be noticeable.

REVENUES AND FINANCING

Standard revenue bond financing practices require that a proposed project display an adequate estimated annual income to meet maintenance costs plus annual interest and principal payments throughout the amortization period.

Usage estimated for the facilities recommended in this report is based on two factors:

1. Parking needs stemming from current patronage of adjacent businesses along the Boulevard.
2. New parking needs engendered by increased building construction in the area.

Development of the estimate for purposes of tabulating a theoretical annual income involves calculating an annual average accumulation of vehicles in all proposed lots. Table III describes the method used in preparing the estimate.

Based on the annual accumulation figure and using a nominal parking fee of five cents per hour, the gross annual income from the project would be approximately \$39,803.40. Allowing \$4,000 annually for maintenance, utilities, etc., the net annual income available for retirement of interest and principal will be \$35,803.40.

Land Cost	\$ 355,000
Development Cost	50,830
Engineering	3,000
Appraisals	1,300
Legal	3,000
Bond Discount	<u>20,000</u>
	433,130
Interest Reserve (5½%)	<u>23,822</u>
	\$ 456,952

Annual Debt Service @ 5½% = \$31,269.12

TABLE III
ANNUAL SPACE HOURS

PARKING DEMAND

- Factors:
1. Parking needs associated with businesses along the Boulevard.
 2. Parking needs resulting from new building construction anticipated in the area.

Existing Needs:

- A. 3275 persons represents current patronage along the Boulevard.
 - B. 57% of these persons patronize establishments along the east side of the Boulevard, but many of them park in the west side lots.
 - C. Correcting for vehicle occupancy, the 1860 patrons represented in B above utilize 1290 vehicles a day (occupancy factor: 1.44 persons/veh).
- . . 1290 vehicles represents existing needs.

New Needs:

- A. Additions to the Miami National Bank represent an increase of 56,000 sq. ft. in economic floor space.
 - B. Research throughout the country indicates that new office buildings generate an average of 1.1 trips per day for each 1000 sq. ft. of floor space.
- . . 60 vehicles represents new needs.

Total Needs equal 1350 vehicles per day.

AVERAGE ANNUAL SPACE HOURS

- Given:
1. Total possible usage of 1350 vehicles per day.
 2. Average parking duration per vehicle equals 2.14 hours per day.
 3. Increase factor for average day equals 1.47.
- Assume:
1. 40% reduction in total possible usage to reflect effect of parking fee.
 2. An average week of six 9-hour days.
 3. Characteristics of turnover and accumulation in existing lots will be reflected in proposed lots.

(Average Annual Space Hours - Continued)

Then: [wks/yr] [days/wk] [(1.47) (2.14) (810 veh)] = Annual
Average Space Hrs.

312 [3.15 (810 veh)] =

312 [2551.5] = 796,068 space hours per year

ANNUAL REVENUE

796,068 vehicles @ 5¢ = \$39,803.40

Area 2

The financial and aesthetic benefits derived from attractively landscaped streets cannot be discounted. Every effort should be made to make Biscayne Boulevard aesthetically appealing, as well as more functionally practical for traffic purposes.

Biscayne Boulevard is presently operating beyond its capacity. It is readily apparent that action must be taken to preserve the characteristics of not only Biscayne Boulevard, but of the neighboring residential streets.

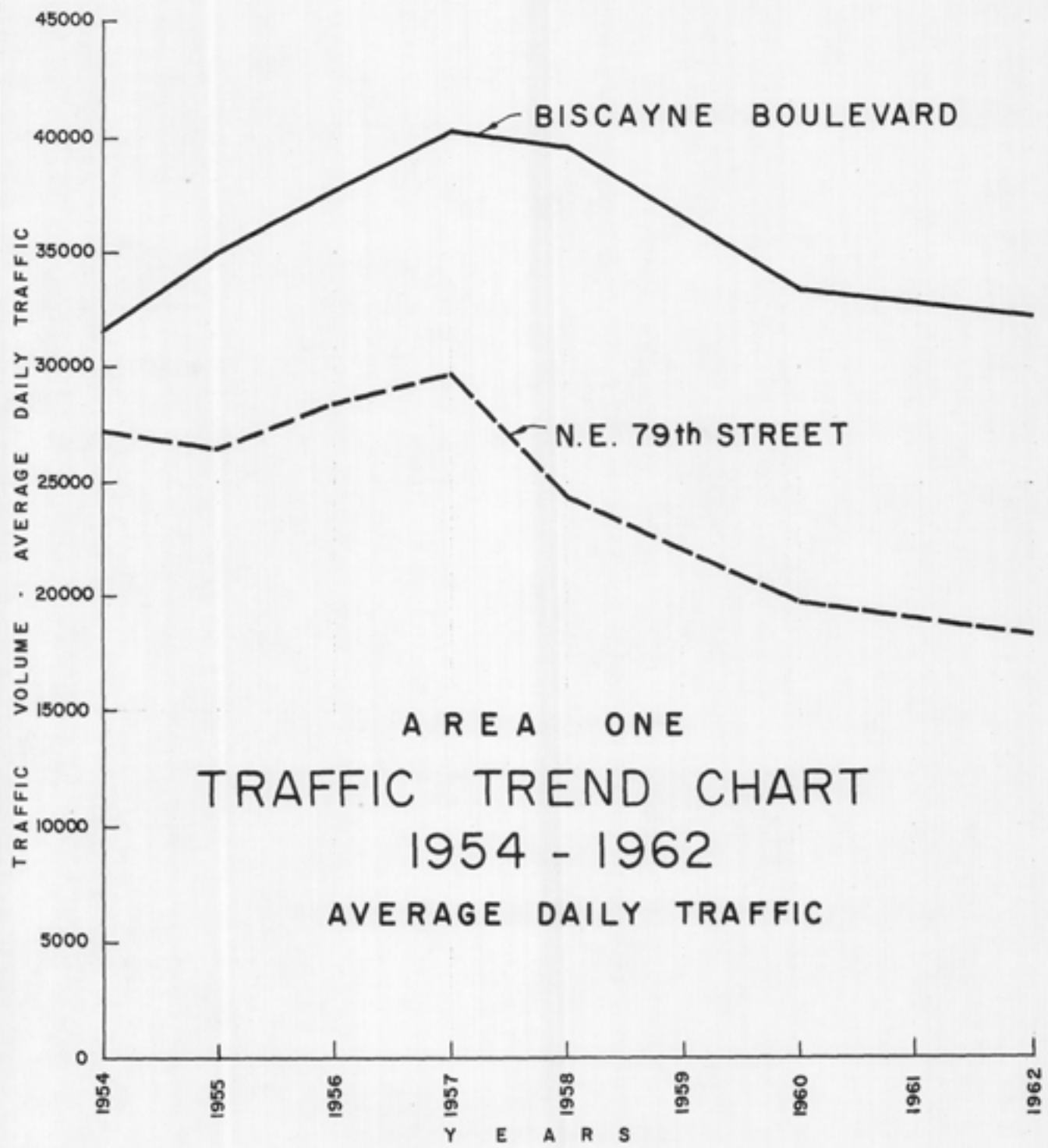
Existing sub-standard lanes cause so much congestion that signalization techniques normally employed to increase capacities are completely ineffective.

Examination of the traffic trend chart (Plate 8) points up the need for action to improve traffic conditions along both the Boulevard and NE 79th Street.

The continuing downward trend of traffic volume at this major intersection is attributable to many factors, including the opening of new expressways, and turning movements onto adjacent streets. An important factor to be considered is the effect of increased traffic density along the primarily residential streets.

The great numbers of vehicles approaching Biscayne Boulevard and NE 79th Street during the morning and evening peak hours are added to the traffic destined to the shopping center and its environs. Together they jam the streets and reduce speed to a "snails pace." The general effect is reduction of the total traffic volume through the intersection.

This condition will not change substantially in the future even though 79th Street has been widened and developed sufficiently to accept the traffic demands placed upon it. Biscayne Boulevard itself can and should be developed to adequately carry the north-south traffic flow which desires passage through the district.



AREA ONE
 TRAFFIC TREND CHART
 1954 - 1962
 AVERAGE DAILY TRAFFIC

We have investigated the various proposed solutions to the problem. The proposed Biscayne Boulevard-NE 4th Court one-way system would unquestionably increase traffic capacity. However, as shown by the property owners and the various governmental agencies, the detrimental economic effect to both Biscayne Boulevard and NE 4th Court would probably overshadow any advantages derived from increased capacity.

The feasibility of providing an overpass at the intersection of the Boulevard and 79th Street to physically separate the traffic has been investigated. Our findings disclose that while the north-south and east-west capacities would be substantially increased, the design and operational problems involved would be extremely difficult to overcome. In addition, Biscayne Boulevard would still be a narrow street which is operating far beyond its designed capacity.

Motels and restaurants in particular, as well as other businesses in general, are apprehensive of the effects upon them of being bypassed by arterial traffic.

Within two years the Interstate Expressway will be completed and opened from the Turnpike through the Golden Glades Interchange, continuing south to 29th Street.

The opening of this road is likely to produce an adverse economic effect on the regional shopping area and the Biscayne Boulevard motel area. It will remove a substantial amount of tourist traffic (and business potential) from this corridor of travel.

In order to preserve the present economic status of Biscayne Boulevard and provide for future growth, we recommend that immediate steps be taken to widen the Boulevard to provide six traffic lanes from NE 55th Terrace to NE 87th Street. We realize that there would be difficulties in

obtaining the normally required 100 ft. right-of-way throughout the length of the area defined. However, it is possible and practical to provide this capacity in less width and, in view of existing conditions, the State Road Department has expressed willingness to cooperate in achieving this. We urge that action be taken without delay to promote the interest and cooperation of Dade County and the State Road Department authorities toward the undertaking of this vital project.

