

COASTAL ZONE  
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**INVENTORY  
of  
LAND USE  
and  
CIRCULATION CONDITION**

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**Blaine, Washington  
March 30, 1977**

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*W.P.*

*Washington State Dept. of Ecology*

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CITY OF BLAINE  
INVENTORY OF LAND USE

AND CIRCULATION CONDITION  
(MARCH 30, 1977)

PHASE II OF THE CITY OF BLAINE  
COMPREHENSIVE PLAN UPDATING PROCESS.

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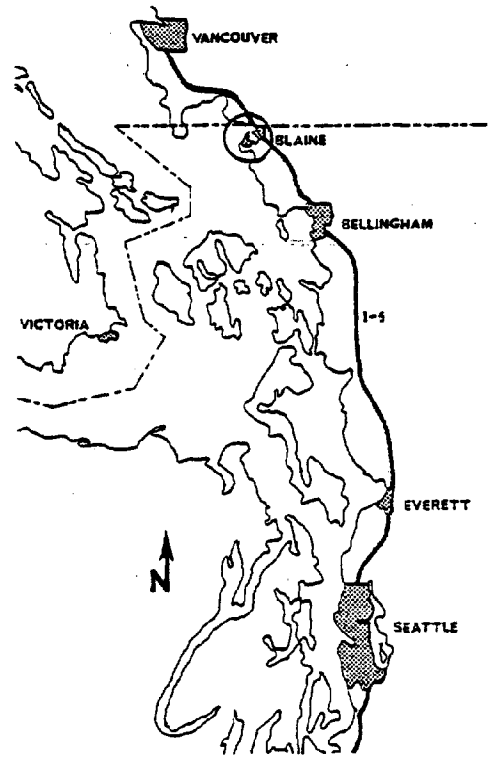
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## PREFACE

During 1976 the City of Blaine Planning Commission began updating the City's Comprehensive Plan. Six "phases" were outlined as steps in the updating process and George H. Raper and Associates, Blaine, was hired to do the first three phases.

*Phase I: Research the possibility of obtaining planning grant and/or matching monies to help fund the project and to prepare applications for same. Two grants were obtained:*

- a. The Department of Ecology gave a grant for revising Blaine's Shoreline Management Master Program and for preparing an Administrative Guide explaining land use administration in Blaine. This project is currently underway and will be completed in June.*
- b. The Economic Development Administration awarded a Technical Assistance grant to Blaine, Bellingham, and Whatcom County for examining the influence of Canada on Whatcom County's economy and for recommending projects to improve the economy of Blaine and Bellingham in particular. The project will begin this spring and last approximately one year.*

*Phase II: Make inventory of land use and generate traffic volume and circulation data so that this information can be incorporated with other data already available and used to prepare an accurate, up-to-date profile of Blaine today. The following document represents the completion of Phase II.*

*Phase III: Perform Goal Study (based on maximum public participation) to determine the goals and aspirations of the people of Blaine.*

*A Goal Study Committee was formed in September, 1976 and met four times during the fall. The resulting Goals Statement is now being reviewed by the Planning Commission.*

*The remaining steps in the updating process are stated below:*

*Phase IV: Write the portion of the Plan pertaining to the current profile of Blaine. Base it on the Land Use Inventory and Traffic Study performed in Phase II together with such other information as is already available.*

*Phase V: Write the main text of the plan, i.e. the "blueprint" for the future development of the City. This should consist of practical, workable suggestions and recommendations based on an objective evaluation of the current profile of the city from Phase IV and the goals and aspirations of the people of Blaine from Phase III.*

*Phase VI: Publish the updated Comprehensive Plan in sufficient quantity for general exposure and use by the people of Blaine and others interested.*

## INVENTORY OF TRAFFIC/CIRCULATION CONDITIONS

### CITY OF BLAINE ARTERIAL STREET SYSTEM (Figure 2)

Figure 2 shows the streets which have been officially designated by the Blaine City Council as arterials plus Interstate 5 and the Truck Route (SR 543).

### CLASSIFICATION OF ARTERIALS (Figure 3)

Figure 3 shows the streets which have been designated by the Washington State Department of Highways as arterials and shows their classification designation based on the "Statewide National Functional Class" system.

Note that the Washington State Department of Highways designation omits Marine Drive and that portion of Bell Road between Peace Portal Drive and Hughes. Note also that it designates 6th Street and 12th Street as arterials while these are not included on the City of Blaine system.

Defacto arterials such as Odell Road, 2nd Street north of I-5, and "G" Street, Martin Street, and 3rd Street in the downtown area have been omitted in both the City of Blaine designations and the Department of Highways designations.



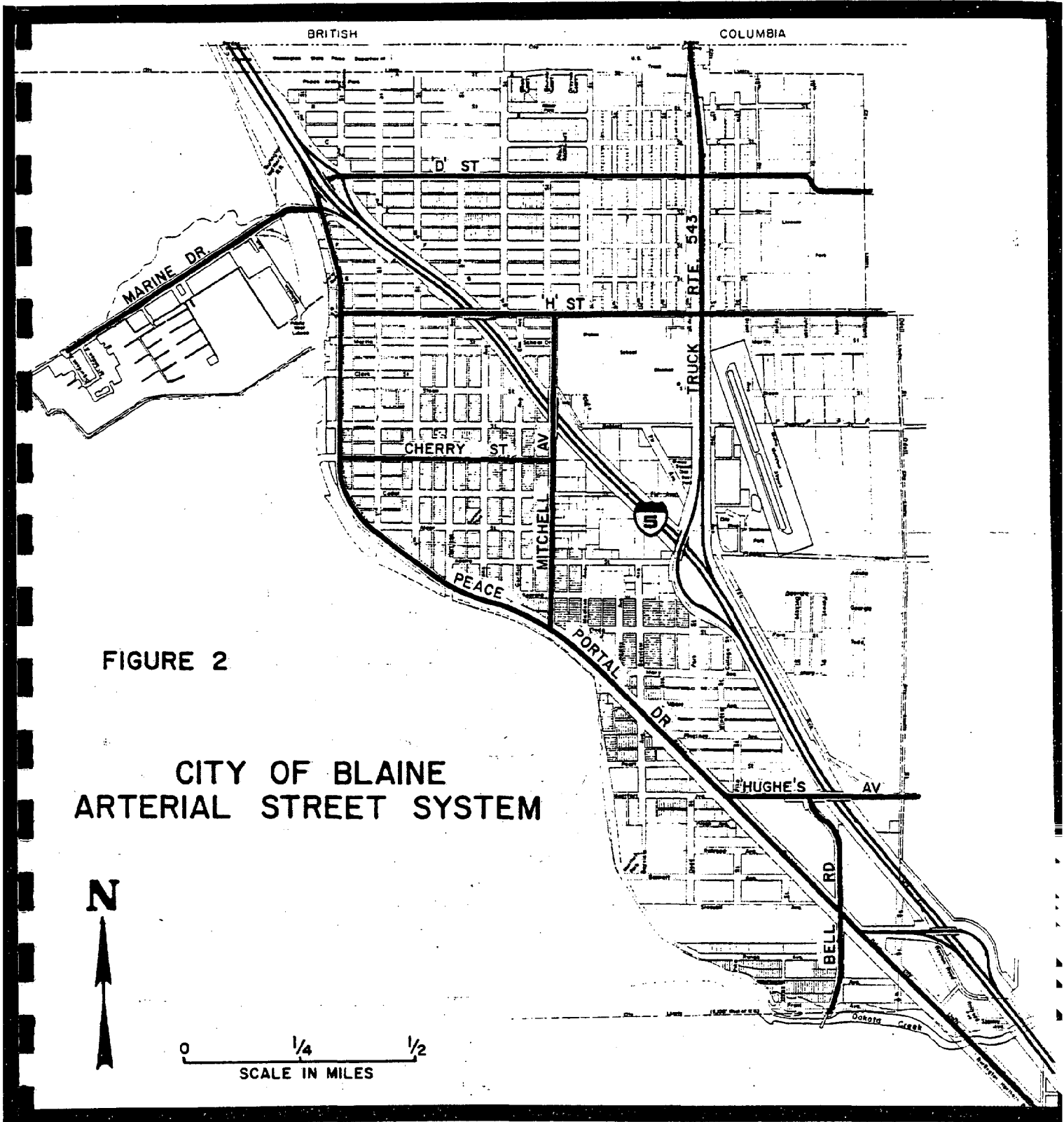


FIGURE 2

CITY OF BLAINE  
ARTERIAL STREET SYSTEM

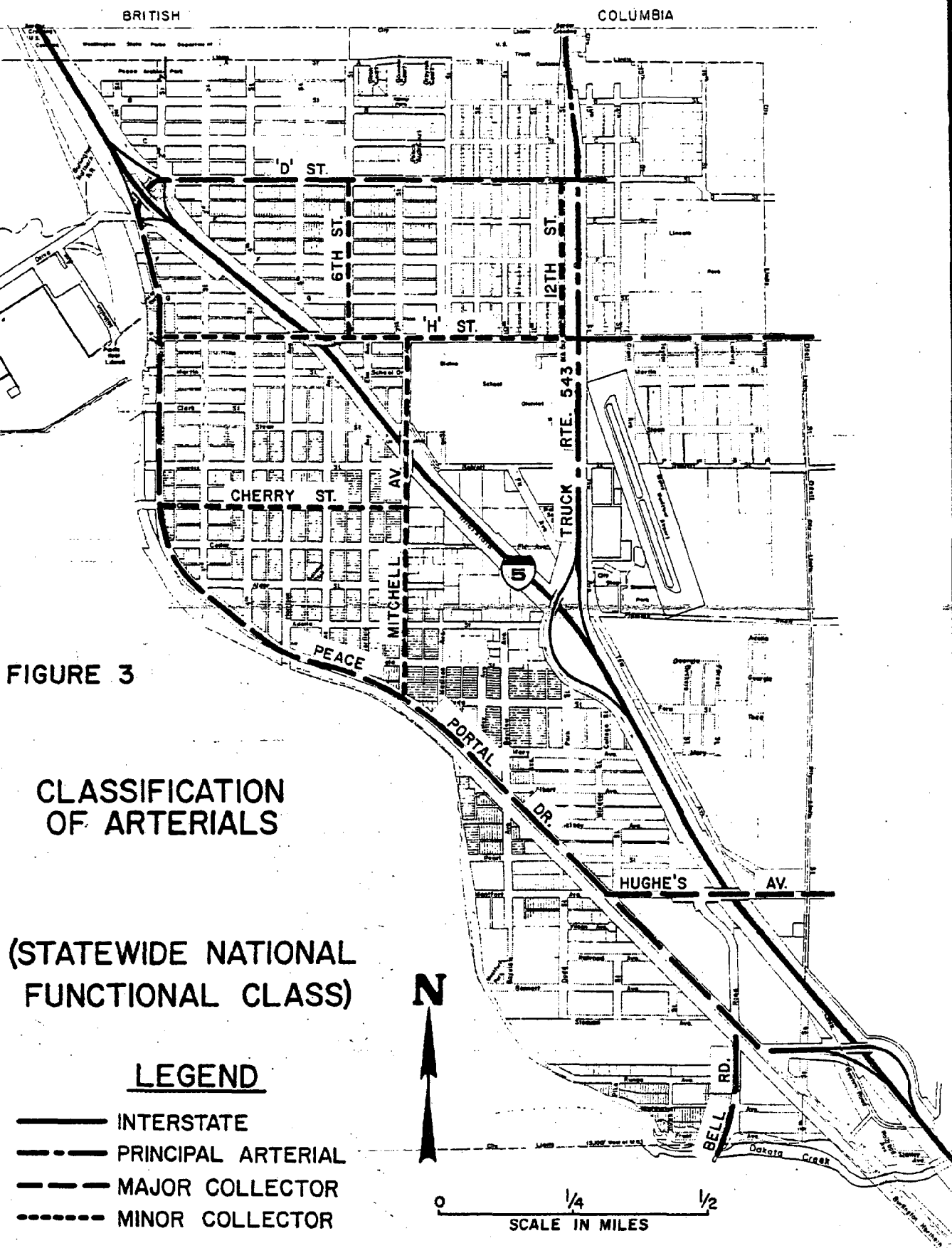


FIGURE 3

CLASSIFICATION  
OF ARTERIALS

(STATEWIDE NATIONAL  
FUNCTIONAL CLASS)

LEGEND

- INTERSTATE
- PRINCIPAL ARTERIAL
- MAJOR COLLECTOR
- ..... MINOR COLLECTOR



0 1/4 1/2  
SCALE IN MILES

## I-5 AND TRUCK ROUTE ACCESS AND CROSSINGS (Figure 4)

Figure 4 shows where access is available to and from the Freeway and Truck Route and where crossings of the Freeway and Truck Route can be made.

Blaine has only one full interchange on the freeway where on and off ramps are provided for both north and south moving traffic and where a crossing can be made. This is located at the north end of the city at "D" Street.

There are two "partial interchanges", one at the south end of the city by Dakota Creek and one at the Truck Route junction. Both of these locations have off-ramps only for north bound traffic and on-ramps only for south bound traffic. Neither location provides a crossing for local traffic and neither location provides south bound off-ramps or north bound on-ramps. Traffic leaving the Freeway at either of these locations cannot then re-enter the Freeway at these locations and continue along in the direction it was originally going.

Three over-crossings without access ramps are provided, two of which ("H" Street and Hughes Avenue) are east-west crossings and one of which (Mitchell Avenue) is north-south.

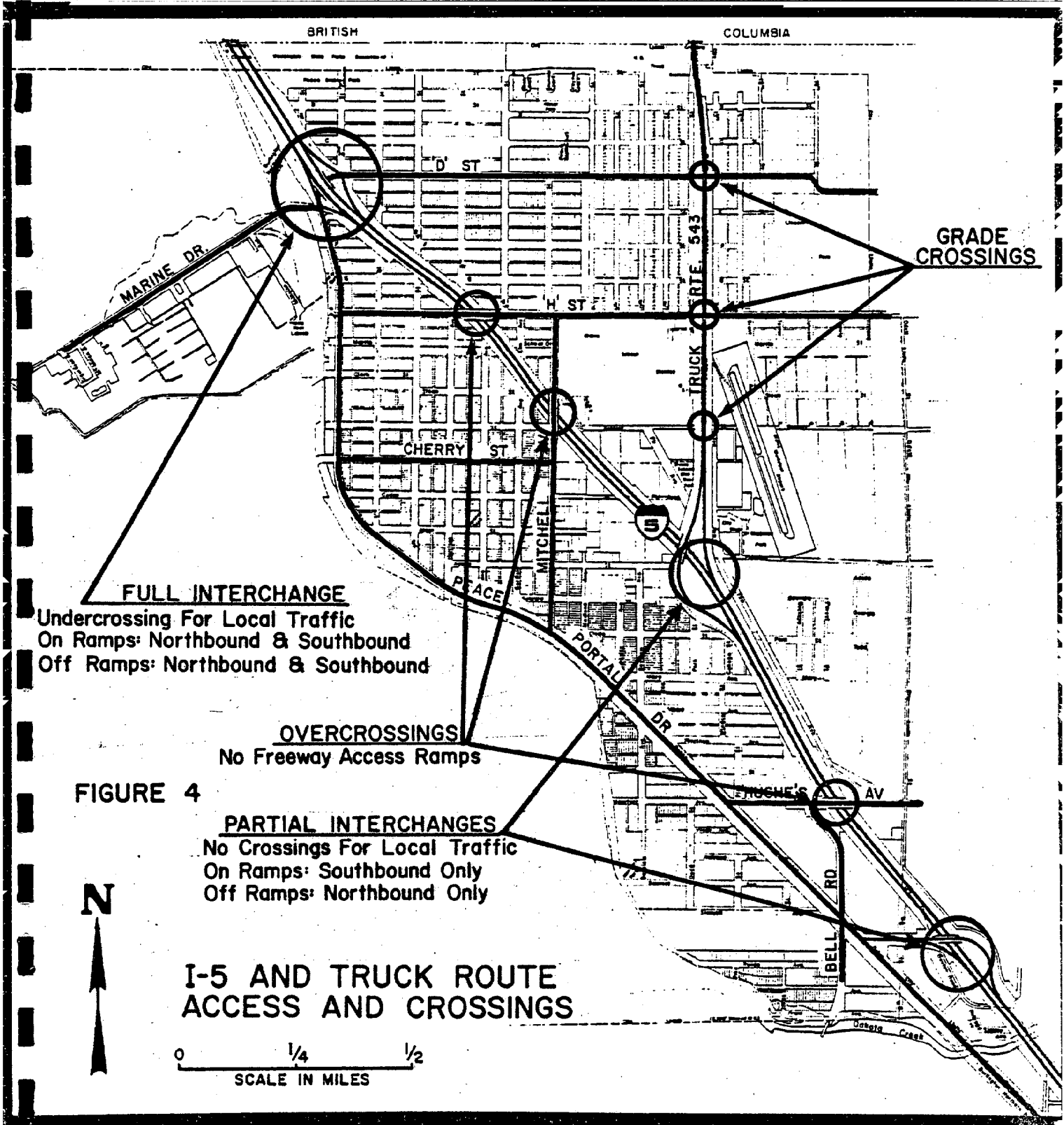
Three grade crossings exist on the Truck Route: "D" Street, "H" Street, and Boblett Street.

## STREET RIGHTS-OF-WAY BLOCKED BY I-5 AND TRUCK ROUTE (Figure 5)

Figure 5 shows the Blaine city street rights-of-way which have been truncated by the Freeway and Truck Route.

Sixteen east-west and ten north-south city street rights-of-way have been truncated by the Freeway and six east-west city street rights-of-way have been truncated by the Truck Route.

"F" Street and 2nd Street in downtown Blaine have been truncated in such a way that they have been left as dead end streets with no right-of-way being provided to connect the ends of them together to allow the thru movement of traffic.



BRITISH

COLUMBIA

GRADE CROSSINGS

**FULL INTERCHANGE**

Undercrossing For Local Traffic  
 On Ramps: Northbound & Southbound  
 Off Ramps: Northbound & Southbound

**OVERCROSSINGS**

No Freeway Access Ramps

**PARTIAL INTERCHANGES**

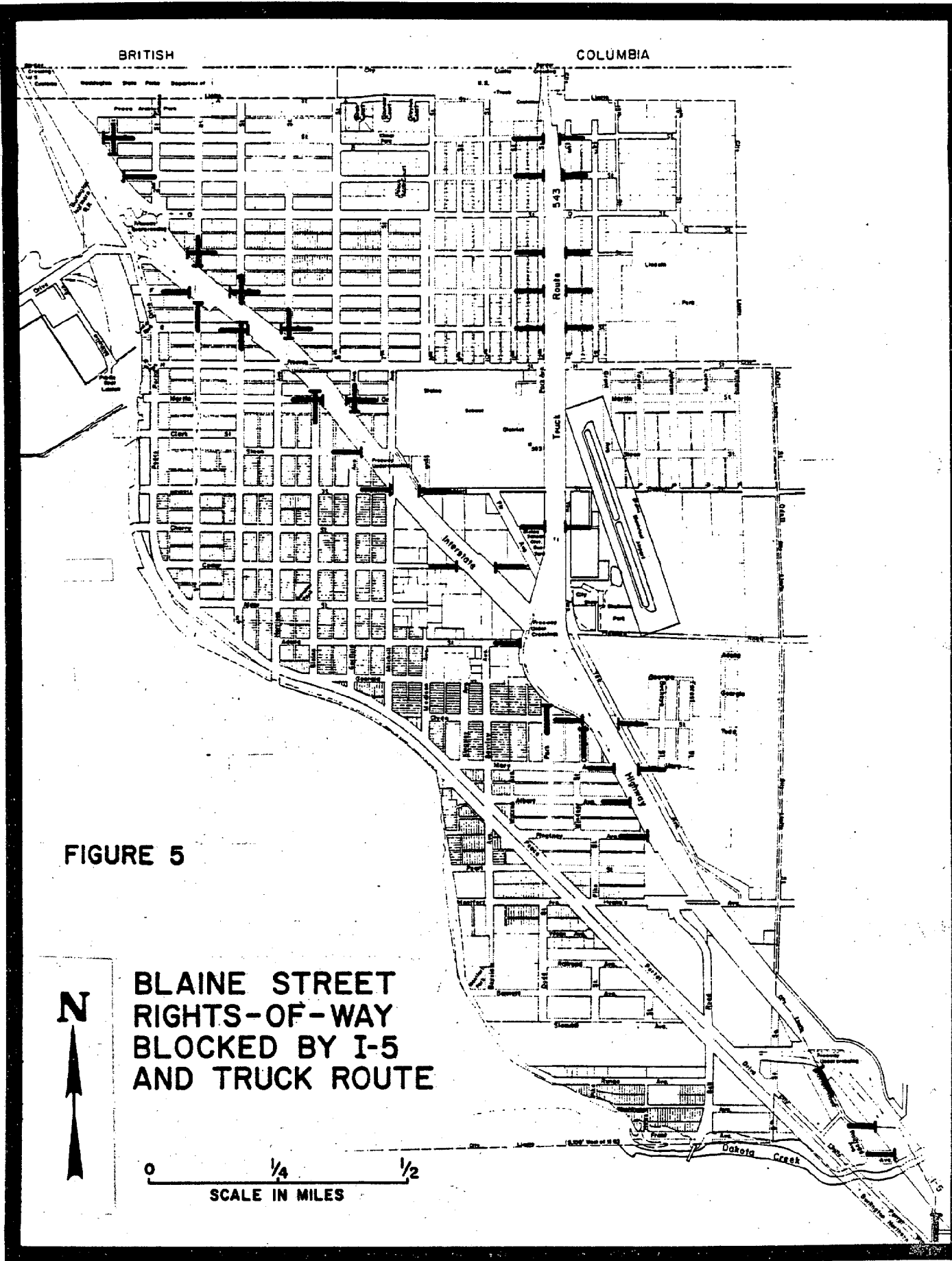
No Crossings For Local Traffic  
 On Ramps: Southbound Only  
 Off Ramps: Northbound Only

FIGURE 4



**I-5 AND TRUCK ROUTE  
 ACCESS AND CROSSINGS**

0      1/4      1/2  
 SCALE IN MILES



BRITISH

COLUMBIA

FIGURE 5



BLAINE STREET RIGHTS-OF-WAY  
BLOCKED BY I-5  
AND TRUCK ROUTE

0 1/4 1/2  
SCALE IN MILES

TRAFFIC COUNTS (Figure 6)

Traffic counts were taken during late October - early November 1976. Depending on location the counts were taken either during the period October 28 thru November 4 or the period November 6 thru November 17. The counters were kept at each location a minimum of seven days and were read and recorded each afternoon.

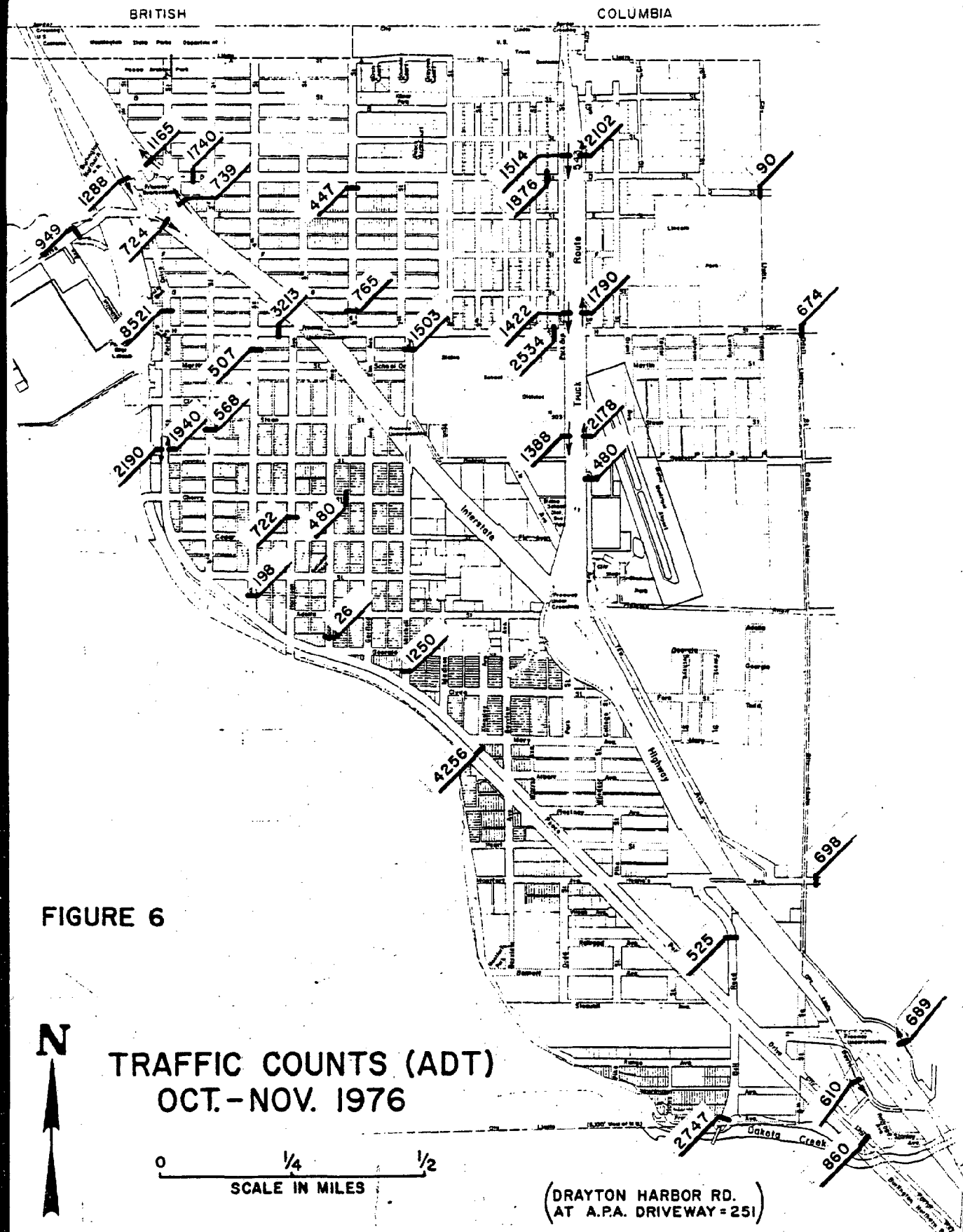
The counts shown on Figure 6 are the daily average over the entire week and thus reflect both weekend and weekday traffic. With few exceptions the counts were highest on weekends and lowest during the week. (The exceptions include streets like Marine Drive and Yew Avenue which carry heavy workday traffic.) The low count recorded at each site was usually between 65% to 85% of the average count shown on Figure 6 while the high count was usually between 125% to 135% of the average count.

The location with the highest count was on Peace Portal Drive between "H" and "G" Streets. The high count here was 11,075 cars for the day ending at 4:00 p.m. Monday (thus including Sunday evening traffic). The low count here was 5,644 cars for the period from Thursday afternoon to Friday afternoon.

Other representative high count locations and their maximum 24 hour counts are listed below:

<u>LOCATION</u>	<u>MAXIMUM COUNT</u>	<u>24 HOUR PERIOD ENDING</u>
Peace Portal Dr. at Bayview	5,807	Saturday afternoon
Truck Route north at "D"	4,133	Monday afternoon
"H" Street east of 4th	3,940	Saturday afternoon
Blaine Road at Dakota Creek	3,752	Saturday afternoon
"D" Street west at 12th	2,552	Saturday afternoon
Mitchell Avenue south at "H"	1,759	Saturday afternoon

The traffic counts taken represent late October-early November traffic volumes and thus do not include the traditionally heavy summer traffic loads.



## STREET SURFACING (Figure 7)

Blaine has approximately 25.6 miles of existing streets (exclusive of Interstate 5 and SR 543, Truck Route) which are open and driveable plus many additional miles of existing street rights-of-way which are not at present drivable.

Figure 7 shows Blaine streets as of March 1977. Symbols depict the streets which are paved and have curbs and gutters, those which are paved and do not have curbs and gutters, those which are surfaced with oil mat, and those which are surfaced with gravel. The street rights-of-way showing no surfacing symbols are not drivable at present.

The following table shows the approximate mileage of each surface type:

<u>SURFACE TYPE</u>	<u>LENGTH(miles)</u>	<u>PERCENTAGE OF TOTAL</u>
Paved (with curb & gutter both sides)	2.69	10.5%
Paved (with curb & gutter one side)	0.43	1.7%
Paved (without curb & gutter)	8.51	33.2%
Oil Mat Surface	4.49	17.6%
Gravel Surface	9.47	37.0%
	Total 25.59 miles	100.0%

The paved streets with curbs and gutters on one or both sides include old streets in downtown Blaine, the freeway over and under crossings, recent L.I.D. work and the 2nd Street access to Peace Arch Park, plus the streets in Peace Arch Plaza. With the exception of portions at the old downtown streets these streets are in good condition.

The paved streets without curbs and gutters include part or all at the designated arterials (Marine Drive, "D" Street, "H" Street, Cherry Street, Hughes Avenue, Bell Road, Mitchell Avenue, and Peace Portal Drive) plus a scattering of other streets. For the most part these streets are in fair to good condition and could, if underground storm drains and curbs and gutters were installed, be widened to full street standard without reconstructing the existing paving.

The oil mat streets are scattered throughout the city and with few exceptions are in poor condition. All of them, without exception, will require partial to complete reconstruction in order to be improved to full street standard.



The gravel streets also are scattered throughout the city and with few exceptions are in poor or worse condition. All of them, also without exception, will require partial to complete reconstruction in order to be improved to full street standard.

BRITISH

COLUMBIA

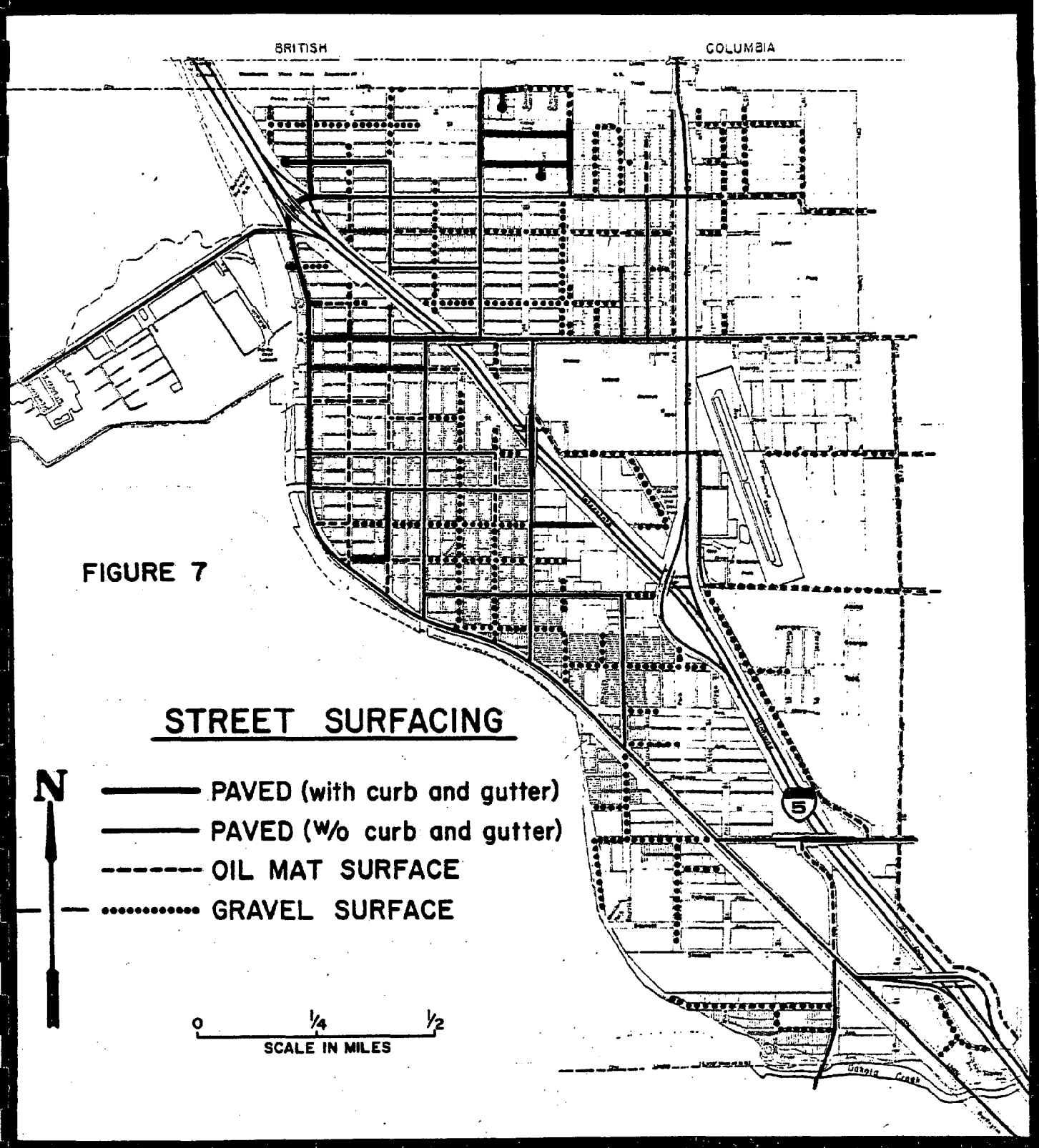
FIGURE 7

### STREET SURFACING

N

- PAVED (with curb and gutter)
- PAVED (w/o curb and gutter)
- - - - OIL MAT SURFACE
- ..... GRAVEL SURFACE

0      1/4      1/2  
SCALE IN MILES



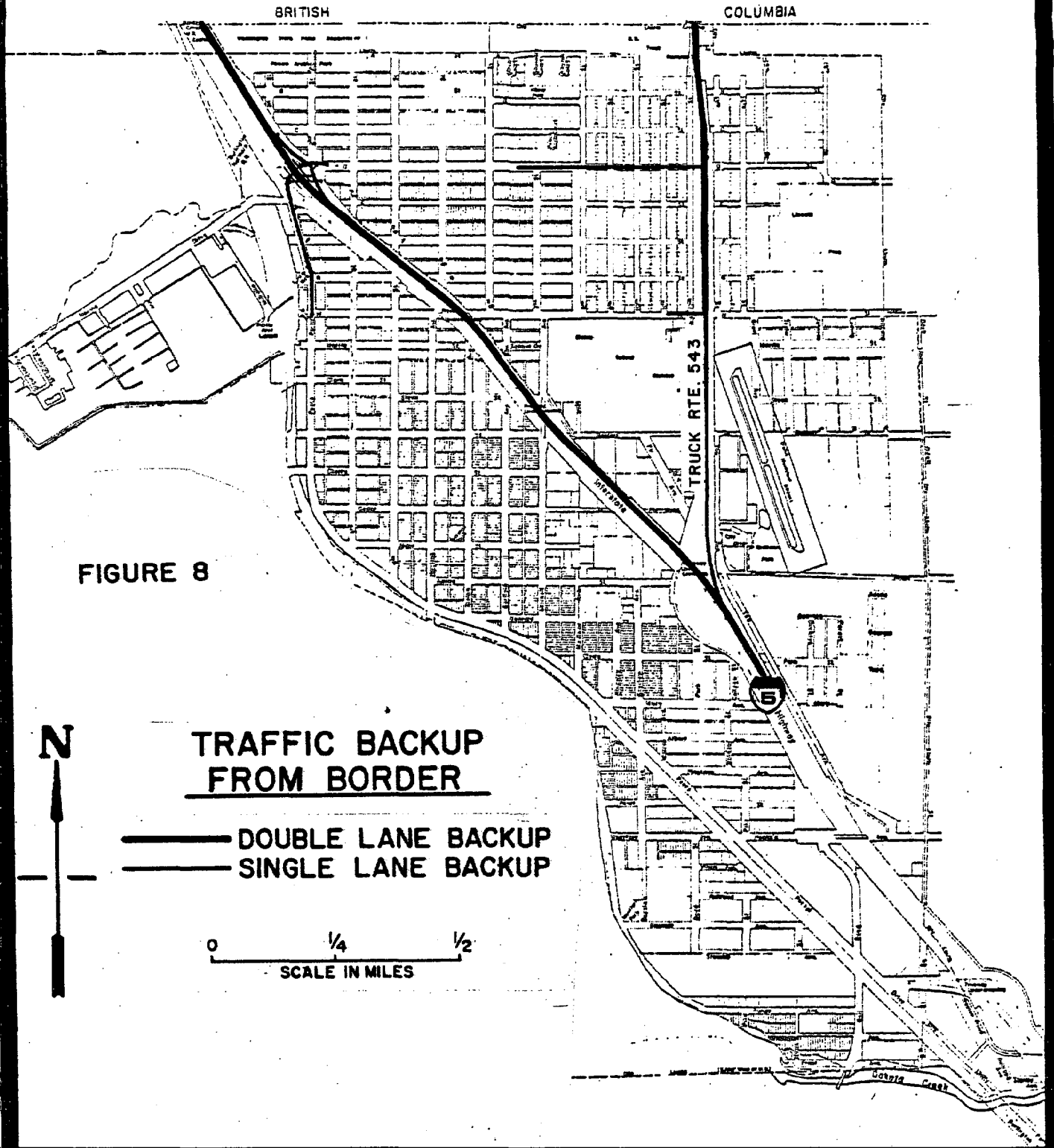
## TRAFFIC BACKUP FROM BORDER (Figure 8)

There are two points of entry on the International Boundary at the north edge at Blaine. One on Interstate Highway 5 and the other on SR 543 (Truck Route). During fiscal year 1975, beginning July 1, 1974, and ending June 30, 1975, 1,716,734 automobiles, 37,975 trucks, and 8,940 busses crossed the border at these two points. The total number of people crossing the border during this period was 5,168,876. Border crossings have been increasing at a rate of up to 10% per year.

Northbound crossings are particularly heavy on Sunday afternoons and at the end of Canadian holidays as visitors from Canada return home. Backups of traffic from the Canadian Customs at these two points extend down into Blaine clogging city streets, halting cross-town traffic flow and city emergency vehicles.

Figure 8 shows traffic backup on a typical non-holiday weekend Sunday afternoon. Both north bound lanes of I-5 are backed up with stopped cars as far south as the Truck Route off-ramp. The Truck Route is backed up with two lanes of stopped cars as far south as "H" Street and with a single lane the rest of the way to the freeway. "D" Street, "H" Street, and Peace Portal all have cars stopped on them for a number of blocks each.

A busy summer weekend or a holiday weekend will find traffic backed up on the freeway as far south as Loomis Trail Road some five miles south of the border. The Truck Route, "D" Street, "H" Street, and Peace Portal are blocked solid during these peak periods.



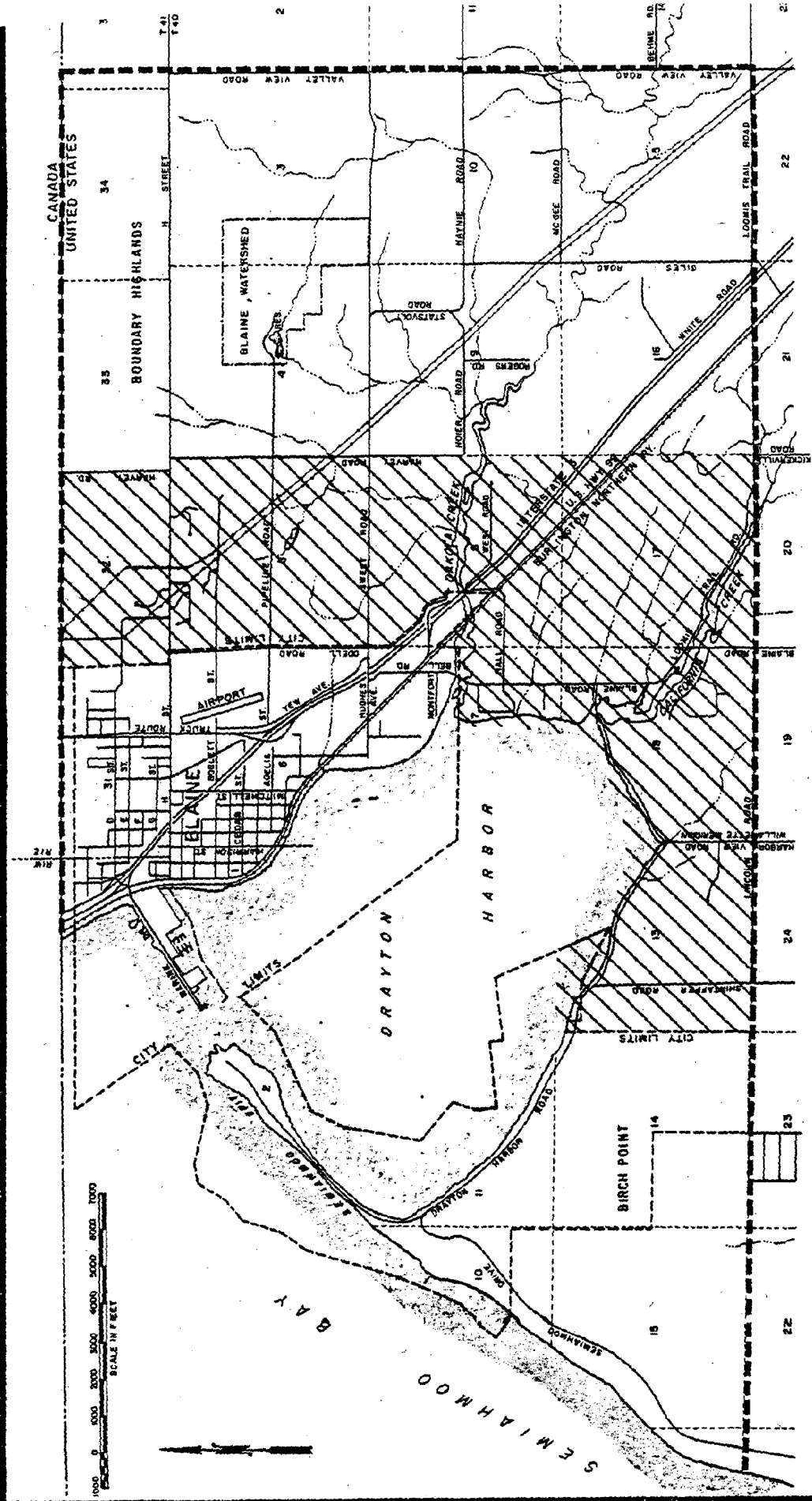
## PUBLIC FACILITIES

Public facilities are property, utilities and buildings owned by the city and any plans for their expansion. Plans for the sewer and water system are by Hammond, Collier and Wade - Livingston. Information regarding parks and recreation is from the 1976 City of Blaine Park Plan. The 1976 planning work did not add any new material to this section except as necessary to prepare goals and policies of the Goals Study Committee.

The following maps have been included for reference and because few copies of the complete planning documents are available. Figure 9 is taken from the 1976 Facilities Plan for Municipal Wastewater Treatment Works and shows the sewer system planning area and boundaries. It is considerably larger than the area which the Goals Committee recommended for sewer service, but includes the areas recommended by the committee for consideration of annexation.

Figure 10 shows areas presently being served by Blaine's sewer system.

Figure 11 shows Blaine's existing parks and those listed in Blaine's Park Plan for future acquisition and/or development.



**BLAINE SEWER PLANNING AREA**

**AREA RECOMMENDED FOR ANNEXATION BY GOALS STUDY COMMITTEE**

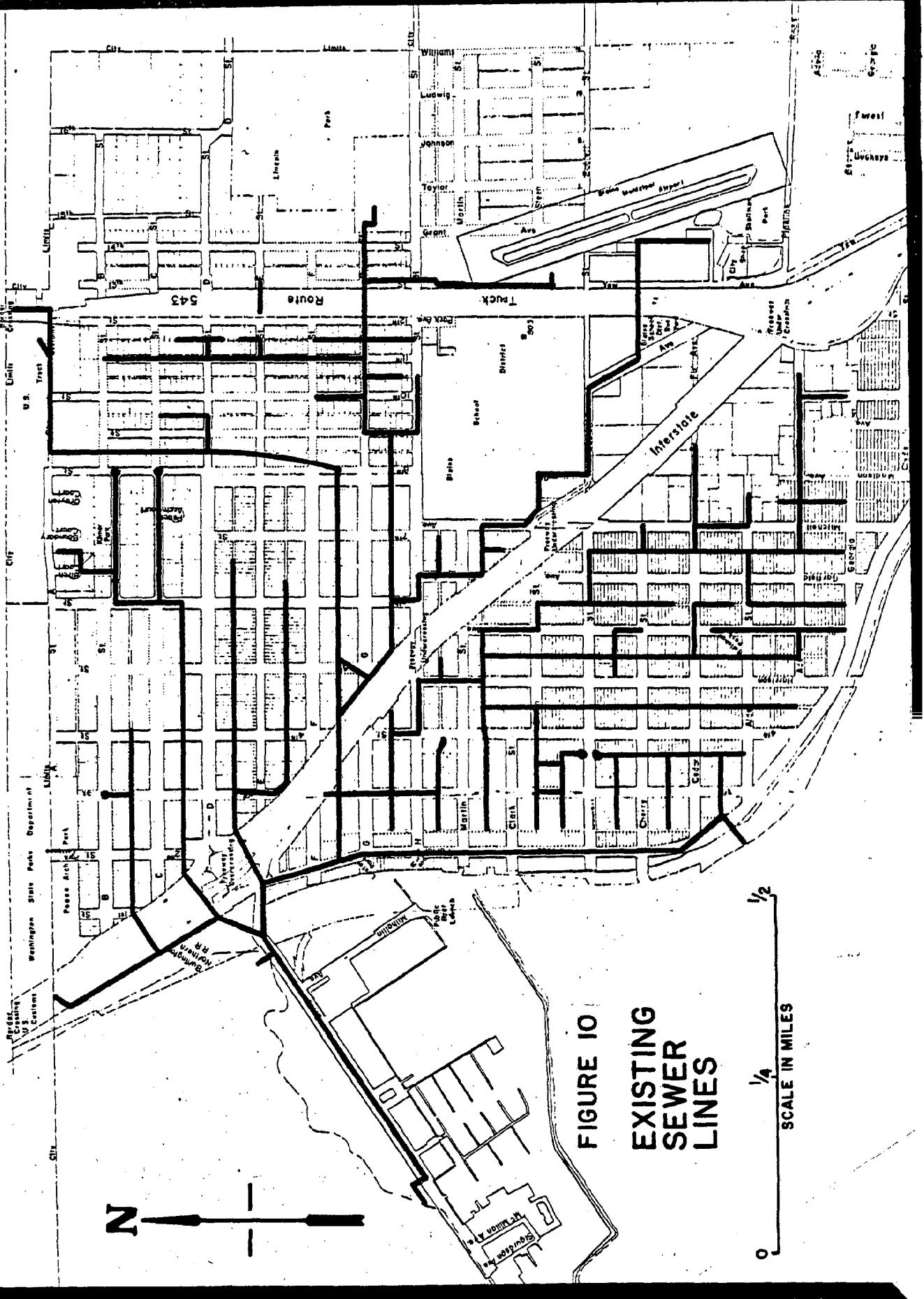
**BLAINE PLANNING AREA BOUNDARY**

**FIGURE 9**

**CITY OF BLAINE AND VICINITY**

COLUMBIA

BRITISH



**FIGURE 10**  
**EXISTING**  
**SEWER**  
**LINES**

0 1/4 1/2  
 SCALE IN MILES

## LAND USE INVENTORY

The land use inventory chapter is divided into the subheadings of residential, commercial, light manufacturing and marine. Under each subheading maps have been prepared showing uses in each existing zone. The inventory was made during October, November and December 7, 1976 and involved ground observation of land use, supplemented by city utility service records. A single map showing uses of buildings is located in the Building Inspector's Office. The Building Inspector will be keeping this map up to date.

Commercial buildings are shown in solid black with marine-related uses designated by an "M" and light manufacturing by "LM". Multi-family buildings are circled with the number of dwelling units given inside. Single family residences, mobile homes and accessory buildings are not marked. The inventory does not include Alaska Packers property.

### LEGEND FOR FIGURES 13-27



COMMERCIAL



LM

LIGHT MANUFACTURING



MARINE



MULTI-FAMILY, UNITS



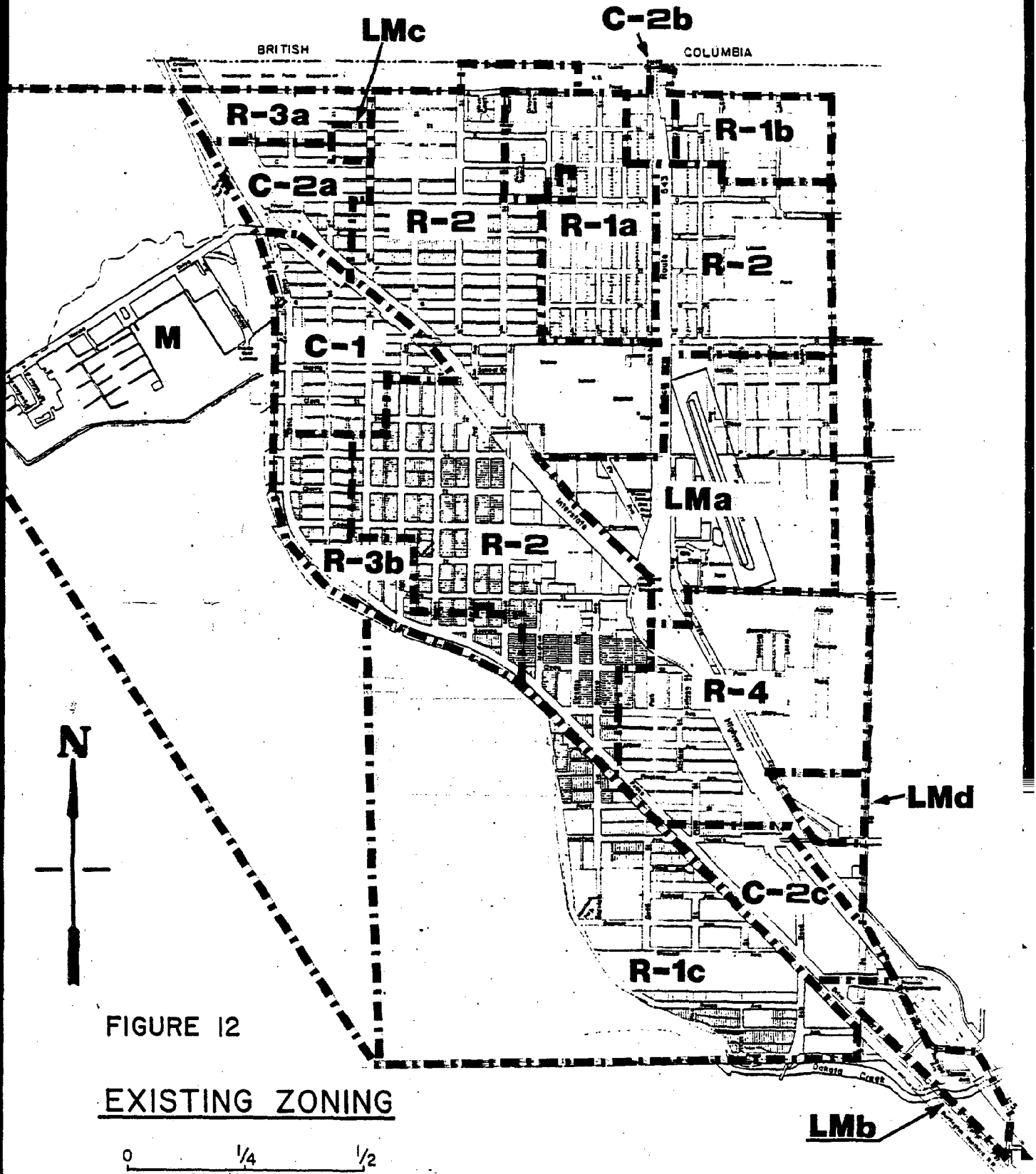


FIGURE 12

EXISTING ZONING

0 1/4 1/2  
SCALE IN MILES

Zone R-1 for Single Family Residences (Figures 13 and 14)

Blaine has three areas zoned for single family residences only. Density of houses in each area reflects the availability or lack of utilities and services:

R-1a 1.2 dwelling units/acre  
R-1b one dwelling unit/2.3 acres  
R-1c one dwelling unit/3 acres

No multi-family structures have been constructed in the R-1. Only one commercial use is located in the R-1 and that is the tavern at the southern end of R-1c. Montfort Park is the only park located in R-1, although the undeveloped Kilmer Park adjoins R-1a and Lincoln Park is near R-1b.

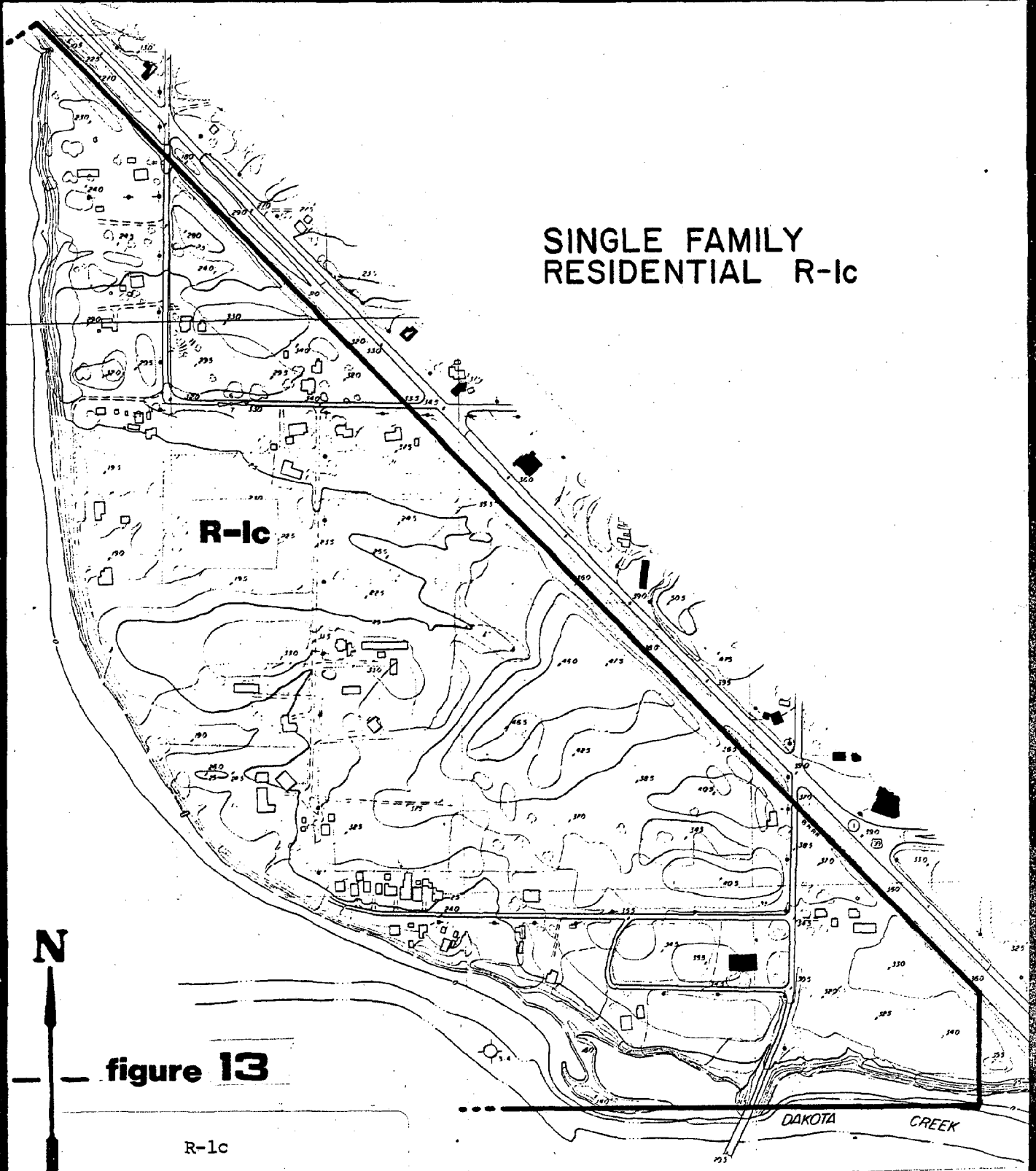
Zone R-2 for Single Family and Duplex Residential (Figures 14 and 15)

This Classification comprises the largest zone in Blaine, and includes land on both sides of the freeway and east of the truck route. ~~Density varies considerably from one part of the zone to another, de-~~ depending upon availability of utilities. East of the truck route density is one dwelling unit per 4.2 acres. However, since 28 acres of the area is Lincoln Park and another parcel belongs to the U.S. Border Patrol, the density for land actually available for housing is approximately one dwelling unit per 2.5 acres.

The portion of R-2 north of H Street and between the truck route and the freeway is somewhat denser, having nearly 1.5 dwelling units per acre. Nine duplexes and five apartment buildings have been constructed there, mostly along the D Street arterial and near the border.

Density for the portion of R-2 south of H Street has been calculated minus the freeway right-of-way and the school grounds. Overall density is approximately 1.8 dwelling units per acre. However, density in the older neighborhood is closer to three dwelling units per acre. Eight duplexes are located in this portion of the R-2 and one four-plex. The only commercial buildings in the R-2 are located along Peace Portal Drive. Recreation facilities include the school grounds and Salishan Park.

# SINGLE FAMILY RESIDENTIAL R-1c



R-1c

N

figure 13

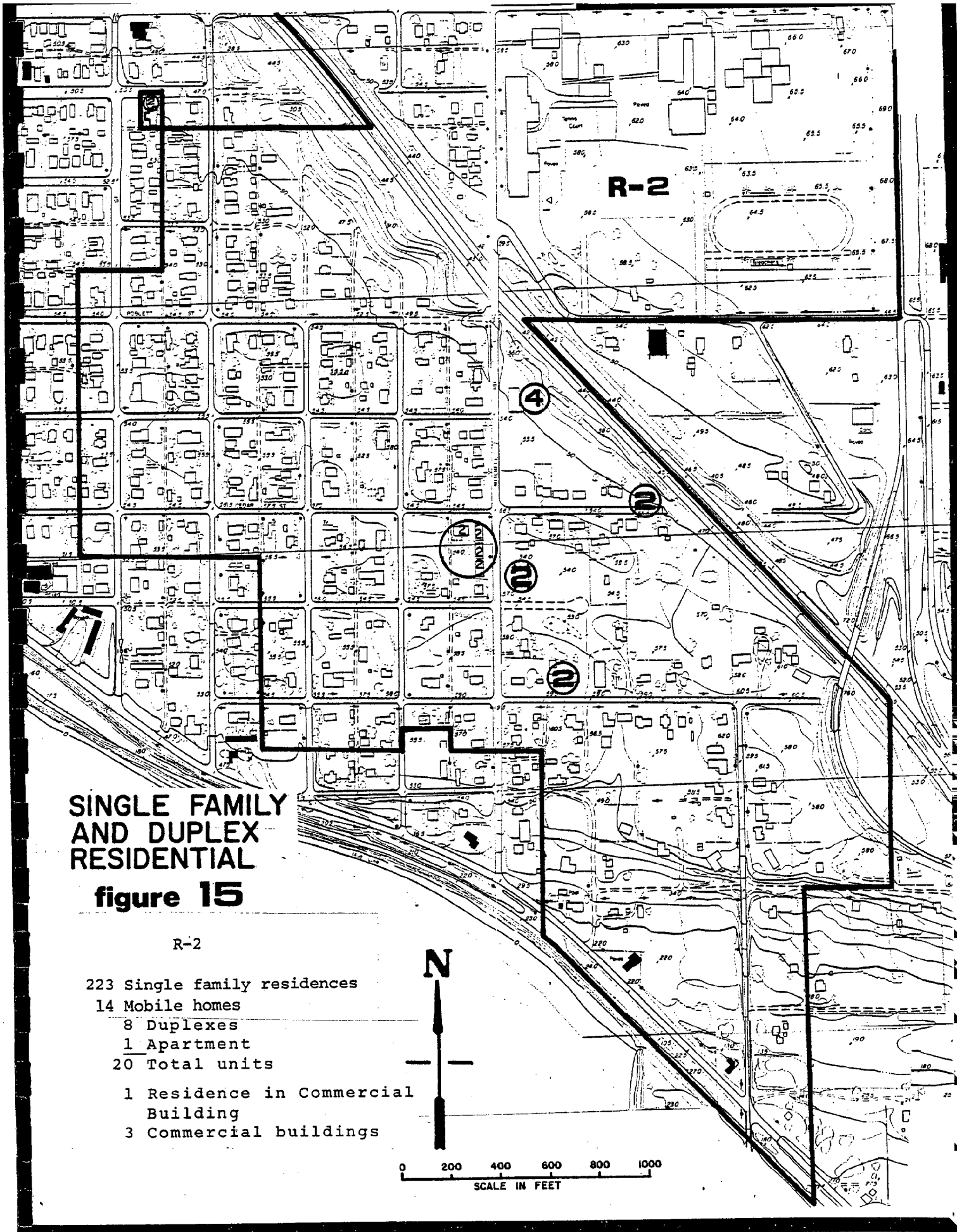
R-1c

- Buildings  
34 Single family residences  
1 Farm  
1 Commercial (dance hall/  
tavern)

0 200 400 600 800  
SCALE IN FEET

DAKOTA CREEK

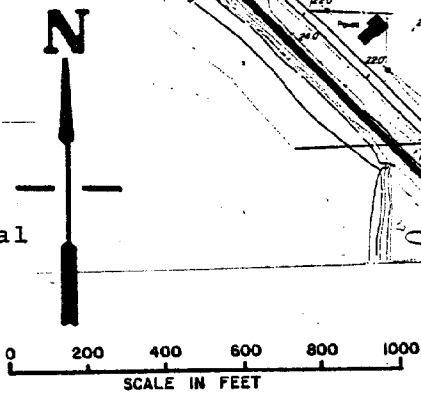




**SINGLE FAMILY  
AND DUPLEX  
RESIDENTIAL**  
**figure 15**

R-2

- 223 Single family residences
- 14 Mobile homes
- 8 Duplexes
- 1 Apartment
- 20 Total units
- 1 Residence in Commercial Building
- 3 Commercial buildings



Zone R-3 for High Density Residential (Figures 16 and 17)

In accordance with Blaine's comprehensive plan both of the R-3 zones are located near parks or in areas with scenic views, R-3a bordering Peace Arch Park and R-3b providing views of Drayton Harbor. The R-3 zones have the highest density in Blaine:

R-3a 3 dwelling units per acre  
R-3b 2.5 dwelling units per acre

Subtracting Peace Arch Park and U.S. Government land from the zone increases density of R-3a to slightly more than 3.5 units/acre.

Zone R-4 for Low Density (Figure 18)

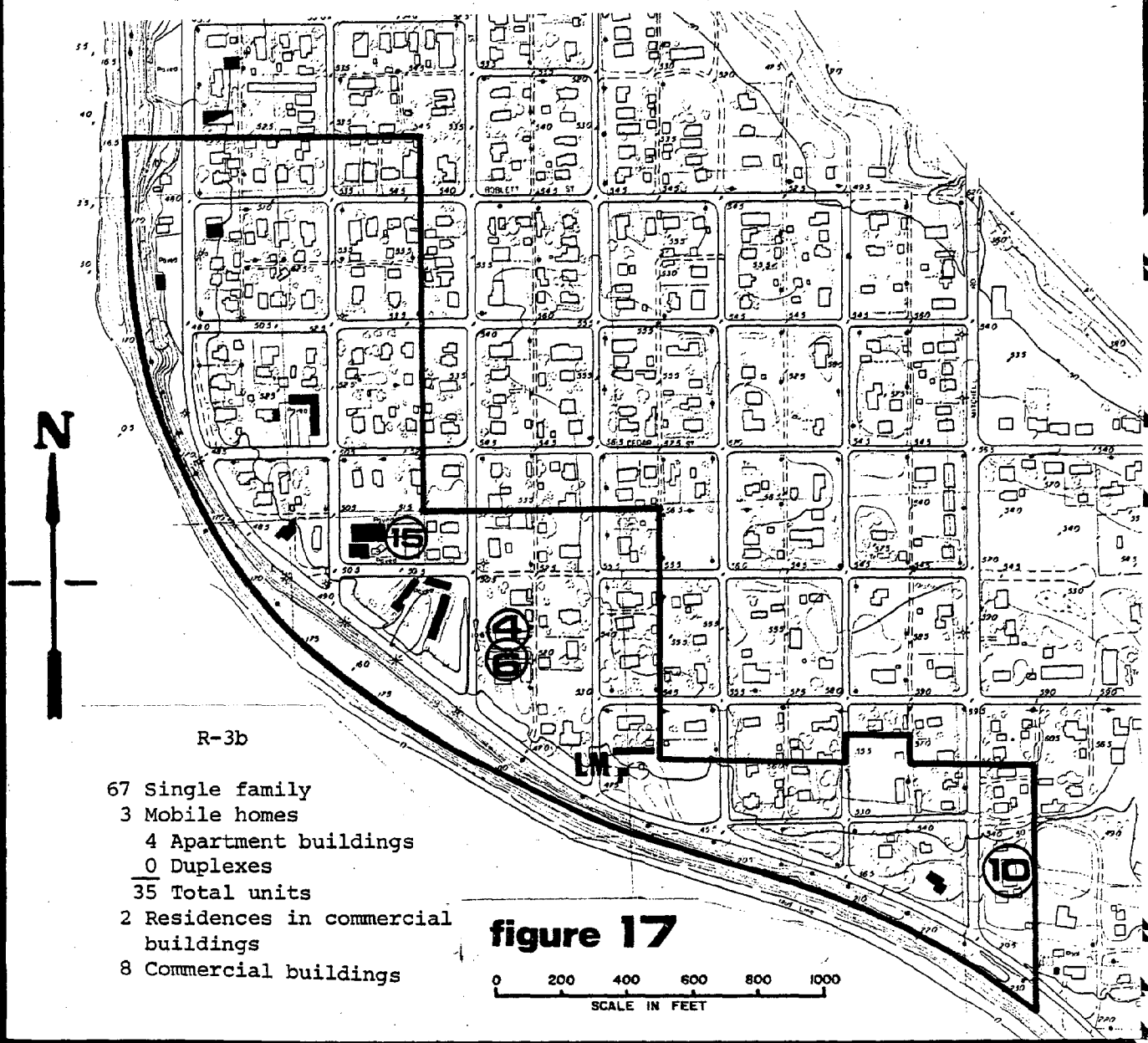
In keeping with the comprehensive plan the R-4 zone has by far the lowest density in Blaine: one dwelling unit per 13 acres. Portions of the zone on both sides of the freeway are currently in agricultural use.

**figure 16**

R-3a

- 18 Single family
- 1 Mobile homes
- 3 Apartment buildings
- 0 Duplexes
- 32 Total units

**HIGH DENSITY RESIDENTIAL**

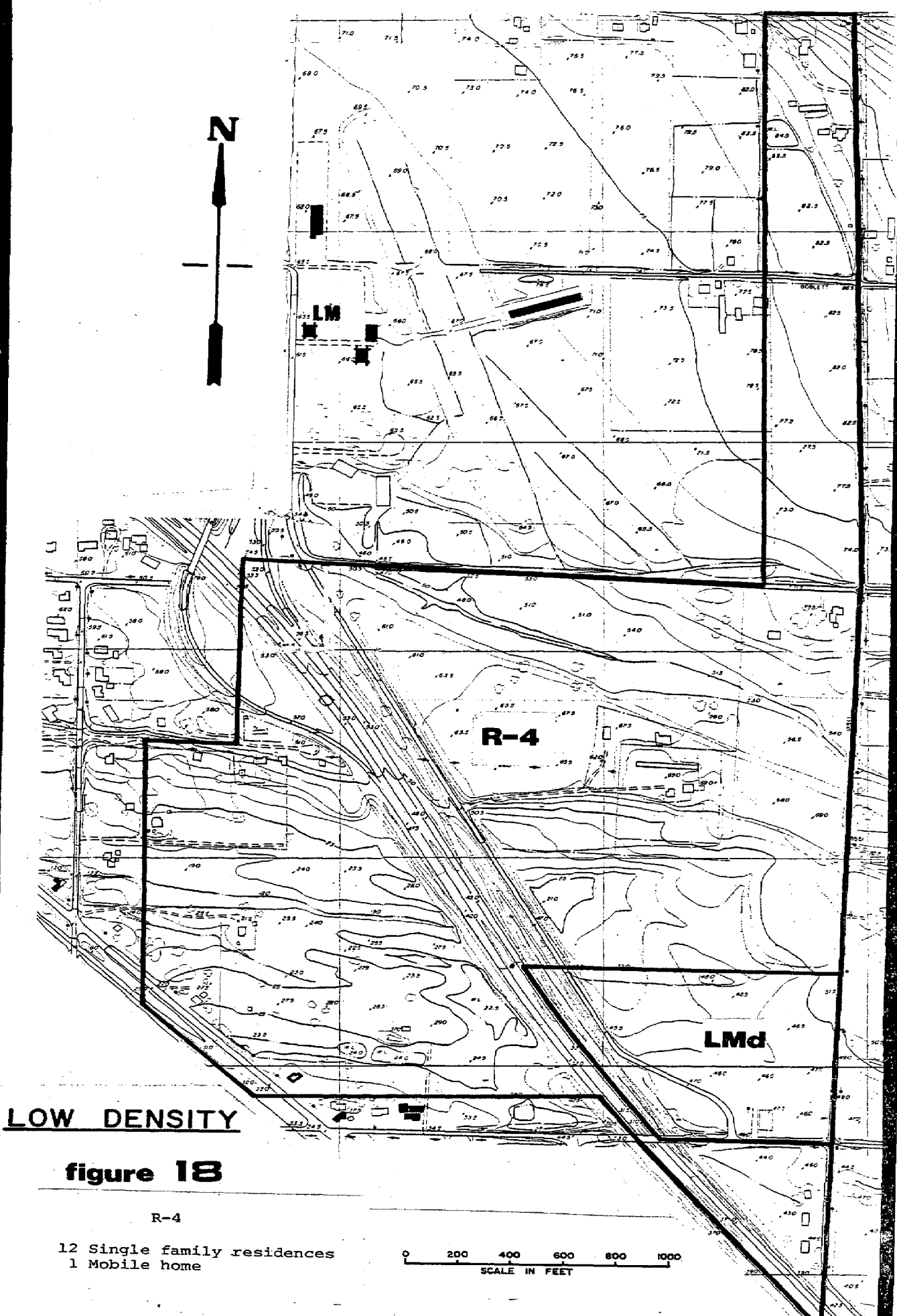


R-3b

- 67 Single family
- 3 Mobile homes
- 4 Apartment buildings
- 0 Duplexes
- 35 Total units
- 2 Residences in commercial buildings
- 8 Commercial buildings

**figure 17**

0 200 400 600 800 1000  
SCALE IN FEET



**LOW DENSITY**

**figure 18**

R-4

12 Single family residences  
1 Mobile home

0 200 400 600 800 1000  
SCALE IN FEET



TABLE 3 RESIDENTIAL USE IN EXISTING ZONES

Zone	Single Family	Mobile Home	In Commercial Buildings	Multi-Family			Acres
				Apartments	Duplexes	Total Units	
R-1a	88	3					78
R-1b	14		1				32
R-1c	34						100
R-2	358	22	1	5	16	55	335
R-3a	18	1		3		32	17
R-3b	67	3	2	4		35	43
R-4	12	1					167
C-1	69		5	3		18	55
C-2a	19	1	1				17
C-2b	2						12
C-2c	7	25					40
LMa	7						130
LMb	2						13
LMc							9
LMd							33
M							40
	697	56	10	15	16	140	

903 Total Living Units

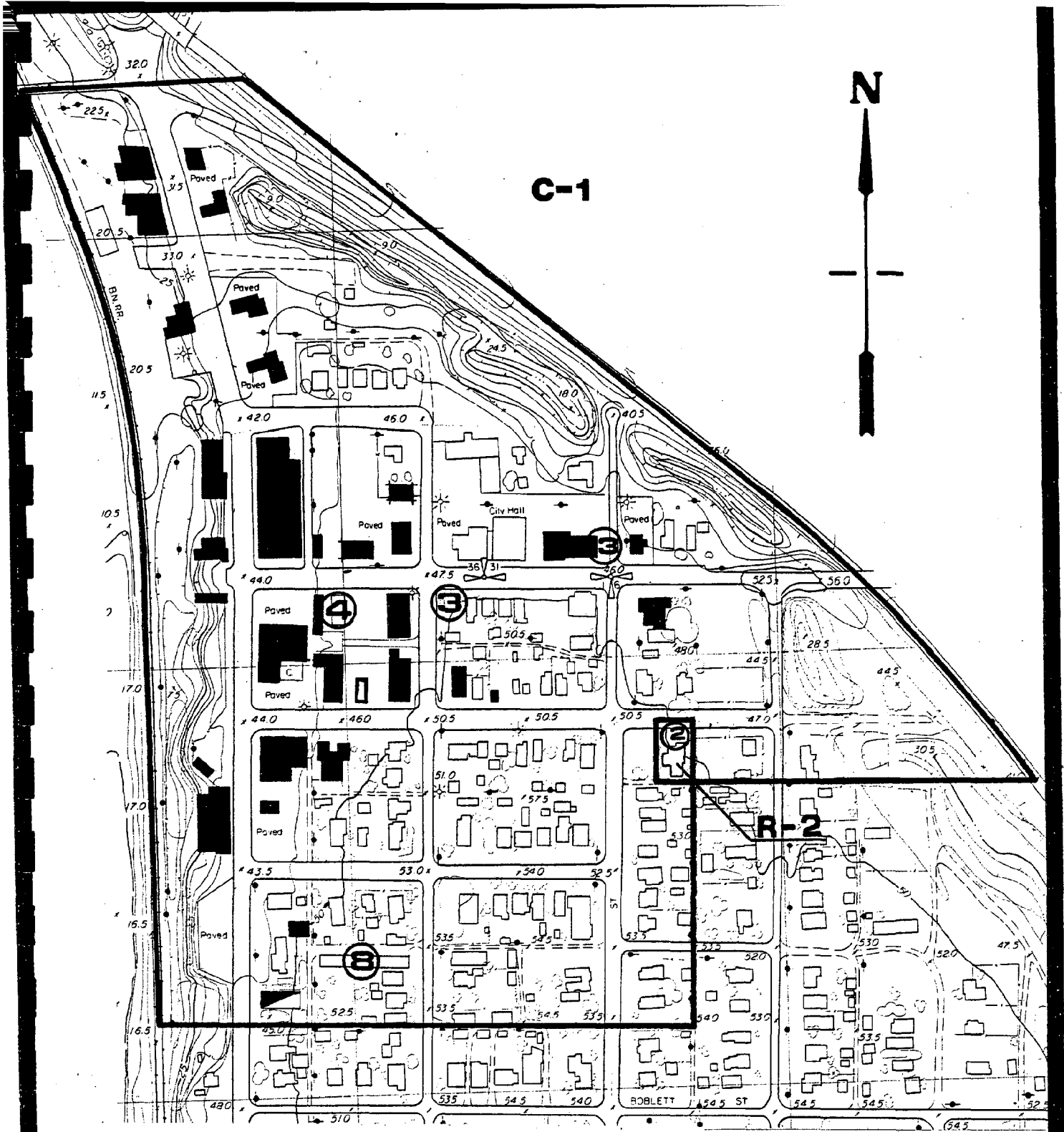
### Zone C-1 for Downtown Commercial (Figure 19)

Approximately 40% of the C-1 zone is in commercial use, the remaining 60% being residential. Housing density for the zone is 1.7 dwelling units per acre. Density in the portion of the zone that is still in residential use is 2.6 units per acre. The Goals Study Committee reaffirmed the goal from the 1968 plan which recommended that the downtown commercial area be within the bounds of Peace Portal, Interstate 5 and Cherry or Boblett Streets. The existing southern boundary of the zone is somewhat north of Boblett Street and even though smaller than that suggested by the 1968 plan, includes several blocks which might more appropriately be recognized for their actual residential use.

### Zone C-2 for Highway Commercial (Figures 20, 21 and 22)

Each of the three highway commercial areas has different characteristics, despite their shared classification. Growth in the C-2a is typical of other areas around a freeway interchange, and in fact the type of business is basically the same as that found in the northern portion of the downtown commercial zone. Eighteen single family residences are still located in the zone, but their number is gradually decreasing. Residential density is approximately one dwelling unit per acre. The location of the Icelandic Old Folks Home within the C-2a zone actually increases the actual population density considerably.

The commercial uses in the C-2b zone at the truck route border crossing are all related to the border location, while those at the crossroads (C-2c) include both export sales and highway commercial. Residential density of almost one unit per acre in the C-2c is due to the mobile home park.

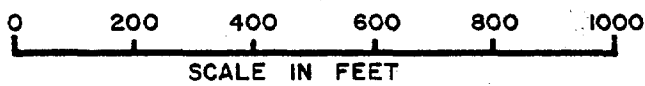


C-1

N

**figure 19**

**DOWNTOWN COMMERCIAL**

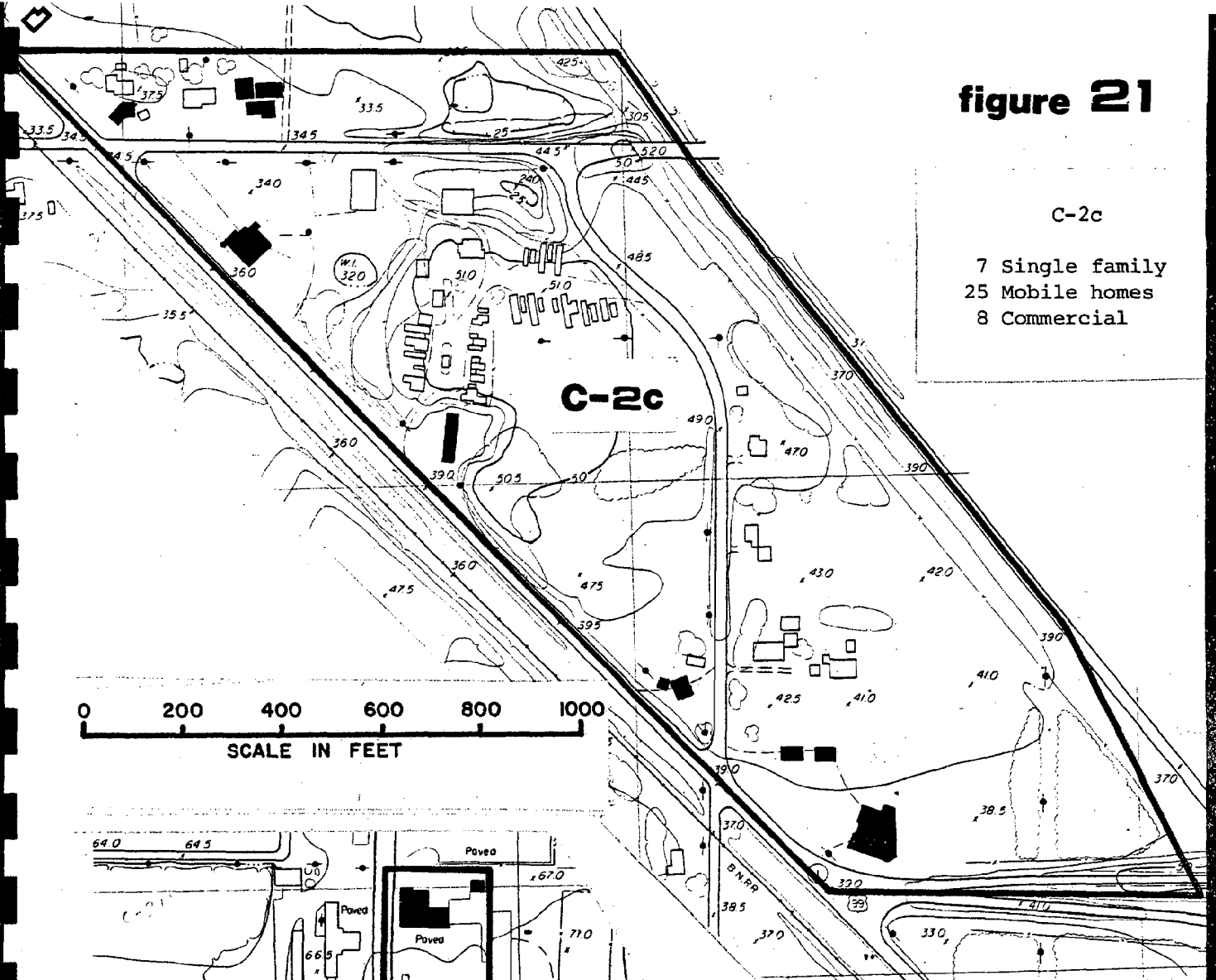


C-1

- 69 Single family residences
- 3 Apartment Buildings
- 0 Duplexes
- 18 Total Units
- 5 Residences in commercial buildings
- 45 Commercial



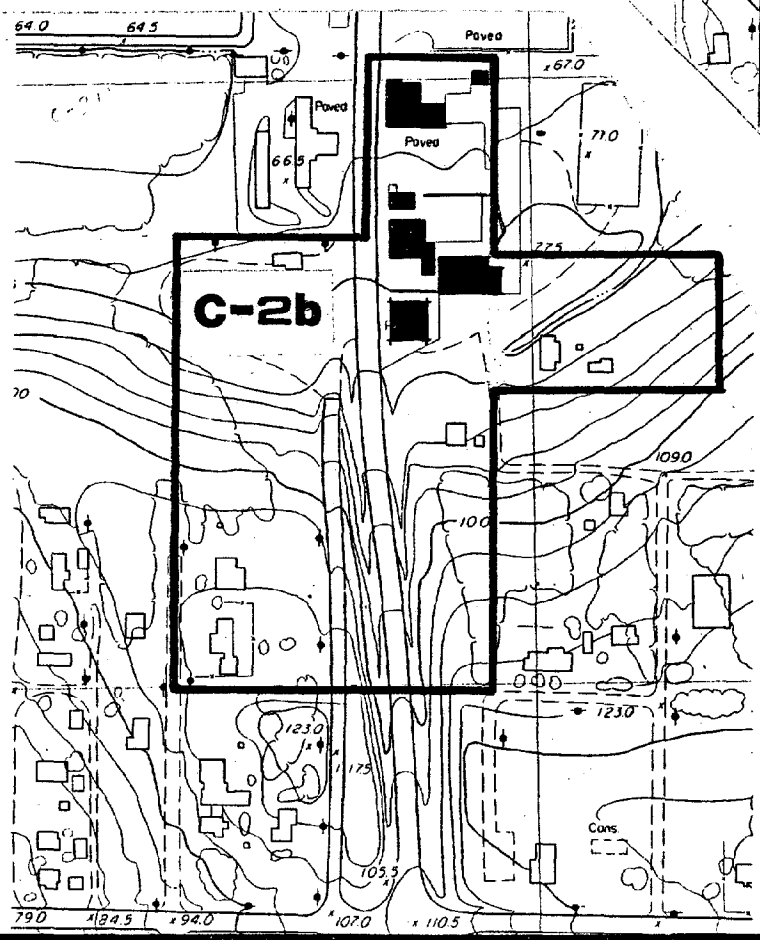
**figure 21**



C-2c

- 7 Single family
- 25 Mobile homes
- 8 Commercial

0 200 400 600 800 1000  
SCALE IN FEET



HIGHWAY  
COMMERCIAL  
C-2b & C-2c



**figure 22**

C-2b

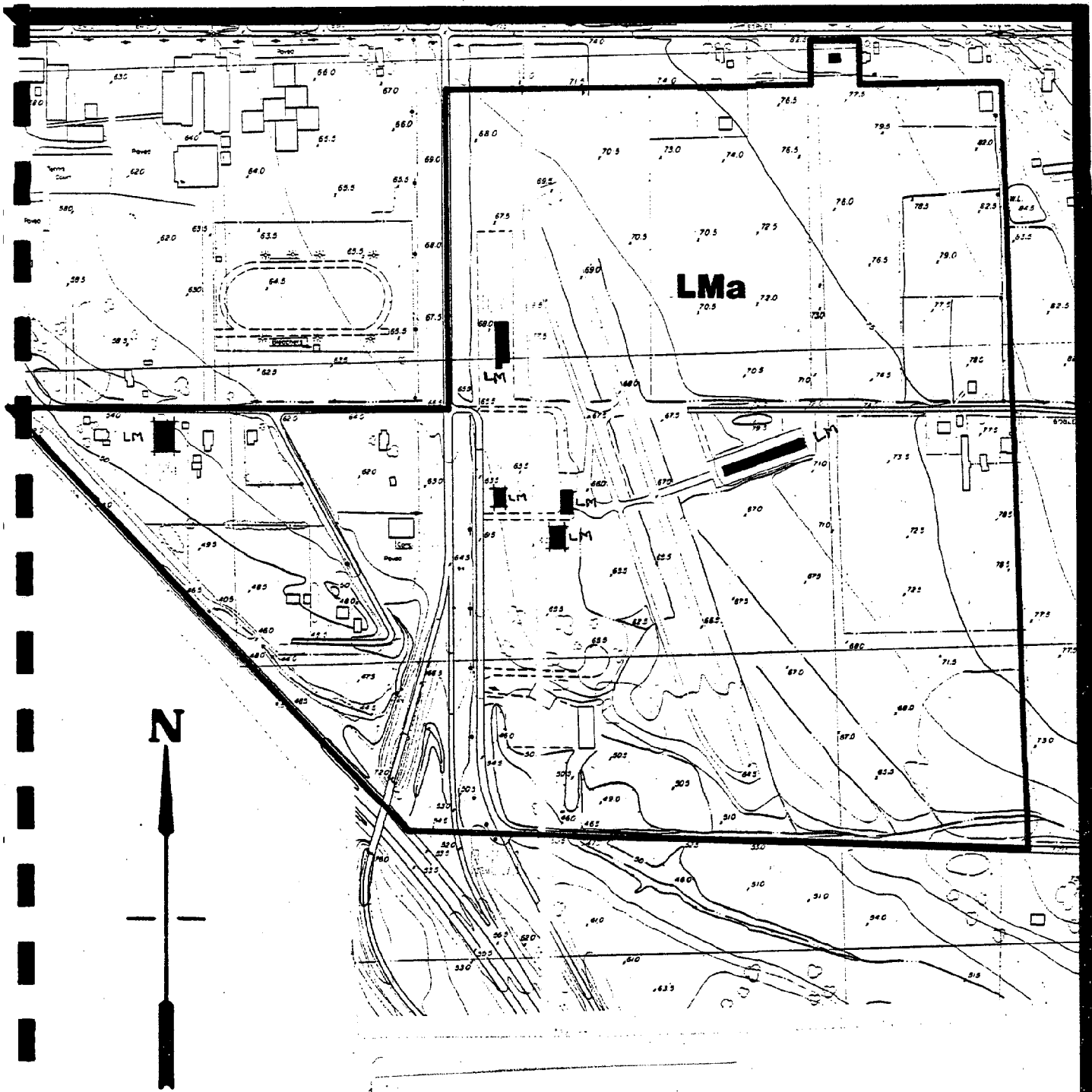
- 2 Single family
- 5 Commercial

Zone LM for Light Manufacturing (Figures 23 - 26)

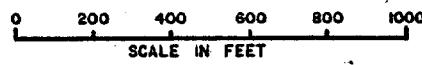
Most land set aside for light manufacturing in Blaine is undeveloped. With the exception of LMc where the net factory is located all LM zones have access to either Interstate 5, the railroad, or the truck route. Residential use is low in all LM zones. In Blaine, Light Manufacturing includes industrial uses and also retail and wholesale activities which require considerable space, such as lumber yards and bulk retail sales.

Zone M for Marine Land Uses (Figure 27)

Approximately 40% of the forty acres of land at the port area is in marine land use or parking. The remaining 60% is vacant. Plans for expansion of the port facility would create additional land to the north.



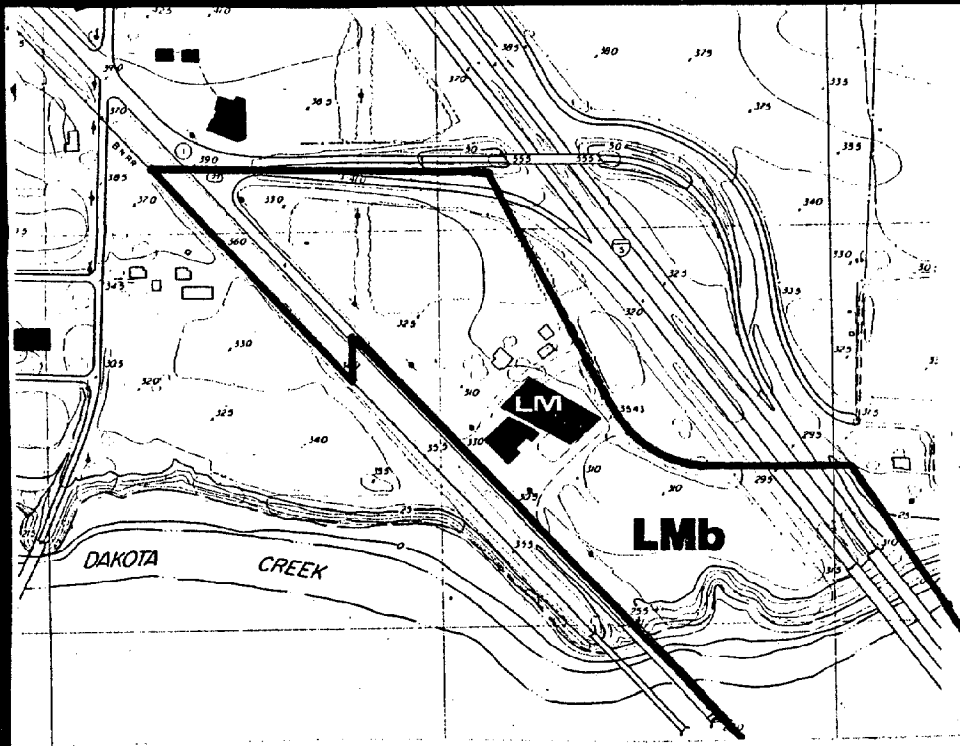
**LIGHT  
MANUFACTURING  
LMa**



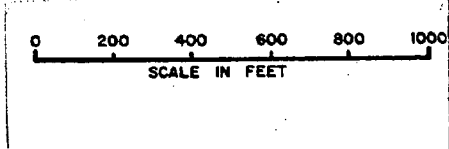
**figure 23**

LMa

- 7 Single family
- 4 Light industrial/manufacturing
- 1 Commercial

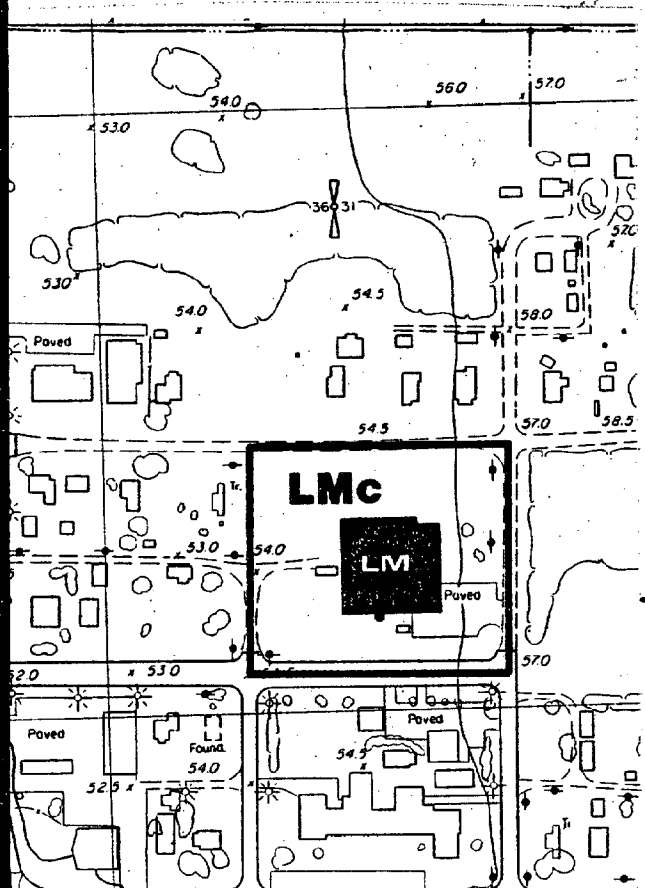


LMB  
2 Single family

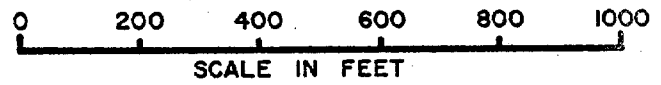
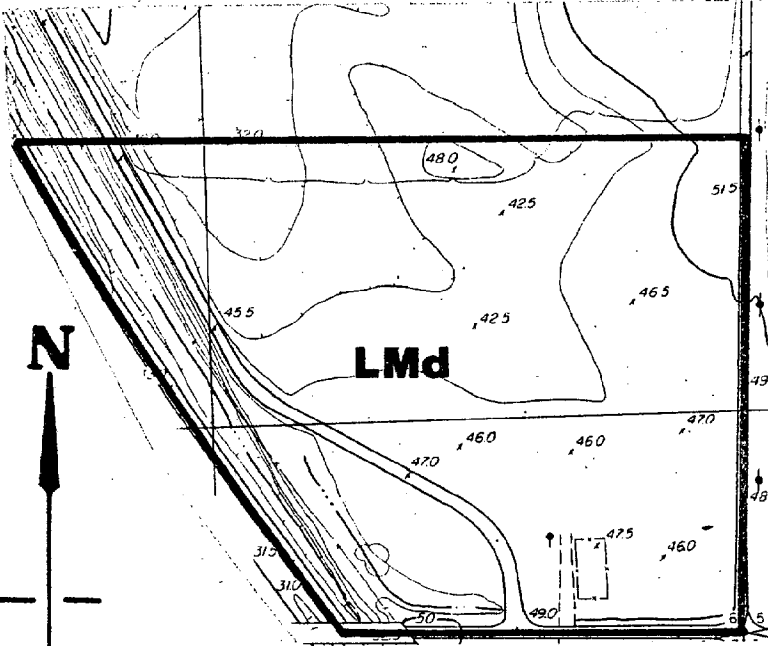


**figure 24**

LIGHT MANUFACTURING LMB, LMc & LMd

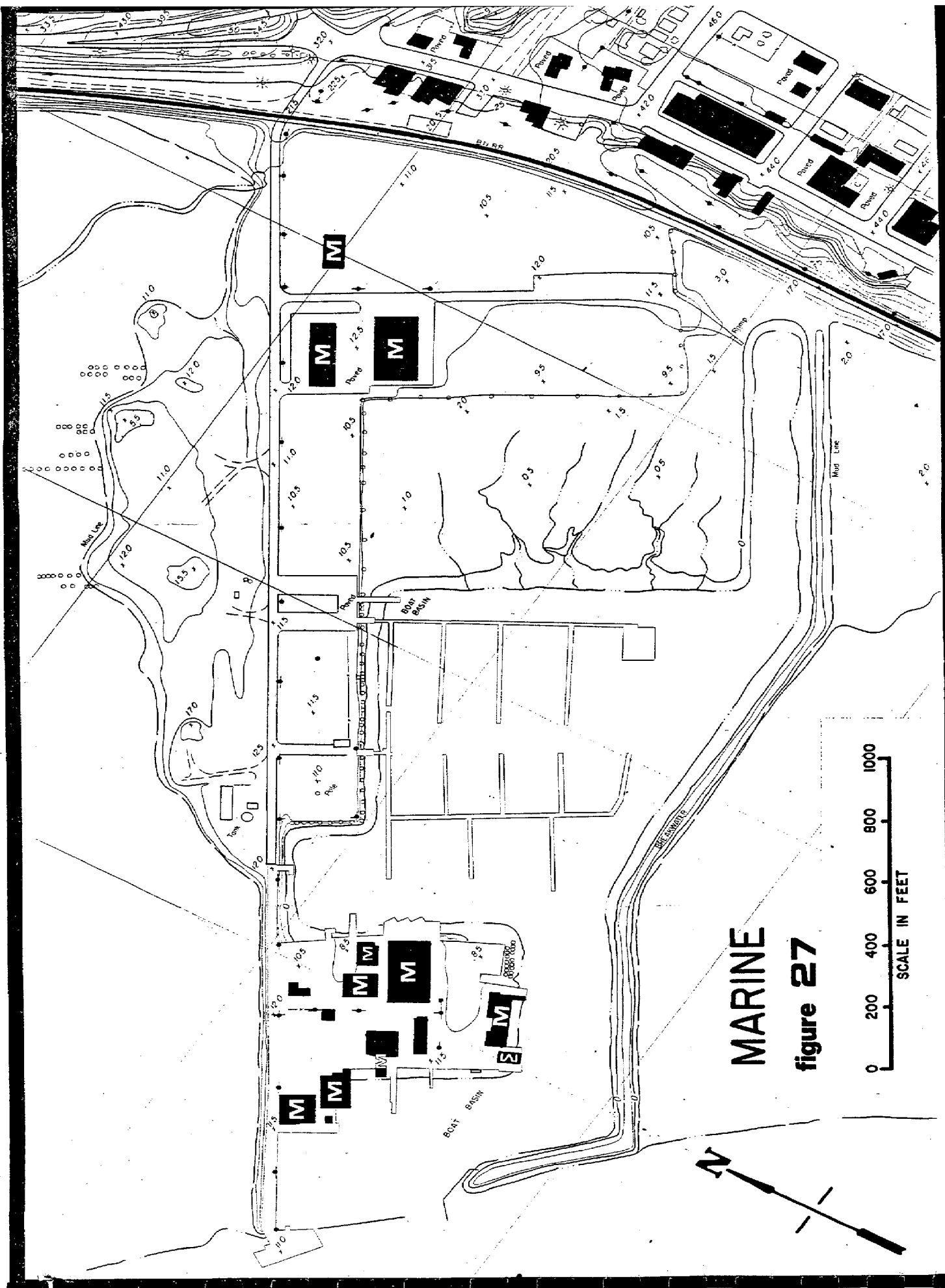


**fig. 26**



**fig. 25**





**MARINE**  
**figure 27**

