

PART THREE

ZONE DISCUSSION

CHAPTER 7

MASTER PLANNING CRITERIA

The purpose of this chapter is to provide visual instructions regarding choices to be made concerning Master Planning Criteria.

SECTION A

GENERAL CONCEPTS

MP/IDG Relationship

The Master Plan Report (MPR) is a written record of existing operational and environmental conditions at the Installation, and an expression of the rationale used to determine the Installation's long-range goals and objectives which result in land use, circulation and utility service plans. The IDG will affect the Future Development plans and the Project Phasing sequence as well as the Contributing Plans such as the Visual Enhancement Studies. Through the incremental implementation of design guidelines which are unified and consistent, the entire appearance of the Post can be changed and greatly improved.

Higginbotham & Assoc
April 1987

Land Use Analysis

It is first necessary to identify existing and proposed land uses throughout the installation in order to gain an understanding of the compatibility of the land use with the installation's development and operation. Awareness must be maintained of the sensitivity of adjacent land uses to high-level noise operations. Land uses and points of access must be analyzed for the intensity of use and the projected character. The integrity of historical and architectural sites must be maintained. Projected changes of land use must be considered, obvious land use conflicts must be resolved and land use controls must be implemented so that the

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eight Zones can co-exist harmoniously (Fig. F-7-A).



Fig F-7-A



Fig F-7-B

Site Selection

Individual sites should be selected based on a number of considerations related to the individual characteristics of the site and the purpose and size of the building to be placed upon it. The objective is to integrate the building into the natural landscape. Sufficient space must be available for ancillary functions such as parking.

The specific site should be chosen based on:

- Compatible building area to site area.
- Site orientation to meet passive energy requirements of the building.
- Avoidance of destruction of beautiful

natural environment (Fig. F-7-B).

- Suitability of soil condition for bearing requirements.
- Acceptable natural drainage conditions in conjunction with an acceptable storm water management plan.
- Consistent land use
- Available utilities
- Workable grade changes (Fig. F-7-C).



Fig F-7-C

- Adjacent circulation systems.
- Acceptable access.
- Adequate space for required parking and hardstand areas.
- Acceptable safety considerations.
- Avoidance of visual/sonic pollution. Set-backs may be required (F-7-D)

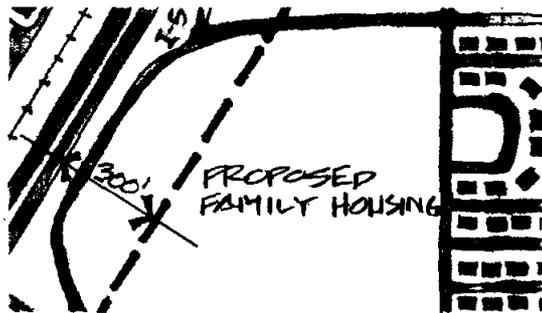


Fig F-7-D

The resulting Site Development Plan should function as a bridge between the MP and IDG and the individual construction project.

Site design approval based on the IDG will be required by the Installation Planning Board for all MACOM future facilities, as well as additions and relocations, and temporary or portable structures, regardless of size.

Environmental Considerations

Natural environmental values become more important outside of the built-up cantonment area; here the concerns are to preserve the wildlife habitat, to limit air and noise pollution and to protect the unbuilt physical environment. Green belts and natural areas need to be established throughout the Post to buffer and reduce the impact of visual intrusions. The emphasis must be on creating a successful relationship between the built and natural environments. Dense tree cover needs to be maintained or re-established on hillside slopes.

Remaining forested areas, the shoreline of lakes such as American Lake, rivers, streams and Puget Sound are considered environmentally sensitive and in need of protection from the destructive intrusions of man. Marshy areas such as Kennedy Marsh, located south of the Jackson Avenue Troop Complex, and Spanaway Marsh need to be protected from encroachment. Existing springs and wells must be protected from damage and pollution. Existing prairie environments outside the cantonment area require protection from the gradual invasion of Scotchbroom and trees through the use of prescribed burns.

Utilities

Provision for inconspicuous utility systems is vitally important to the appearance of the installation; instead of the traditional approach of locating power, light and communication systems solely along street rights-of-way, priority must be given to alternate locations so as to minimize or totally avoid a cluttered street appearance. These alternate locations may be underground or above grade on less significant thoroughfares or along rear alleyways or rear sides of significant buildings if sufficient, appropriate landscaping is provided. Substations and distribution transformers should be located so that they are not readily seen and buffered from view with plantings.

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The goal is to have utility systems which do not attract attention visually. These utility systems provide the basic infrastructure of power, communication, water, sewer and drainage services necessary for the operation of the installation. As extensive roadwork along major streets is required, or new structures, renovation or demolition of existing structures occurs, every effort should be made to bury existing utilities at that time. Overhead transmission lines should be located to be as visually unobtrusive as possible (Fig. F-7-E).

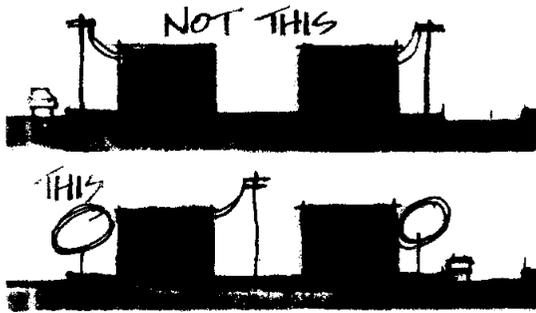


Fig F-7-E

The existing street lighting system needs to be expanded to adequately and uniformly light the entire Post; the conversion to 100 percent high pressure sodium in conjunction with the Bonneville Power Administration is expected to be completed within two years. Specialized flood lighting for high security purposes, organized sports areas, parking areas, building illumination and Gray Army Air Field must be coordinated to present a regular appearance by having similarly designed fixture in use. It is important that the floodlight sources be screened so that the light does not shine into the observer's eye, but rather it should shine directly onto the object (Fig. F-7-F).

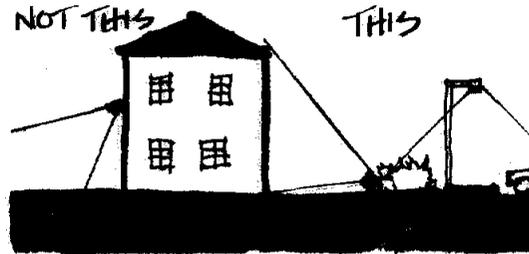


Fig F-7-F

It will still be appropriate to place water, sewer and drainage services along the roadways in order to disturb the natural terrain as little as possible; this efficient location will keep costs to a minimum. All roads are to have storm drainage systems in conjunction with curbs and gutters except for roads in relatively undeveloped areas in which case gravel shoulders shall be provided.

SECTION B CIRCULATION

This section of Chapter 7 graphically portrays the Master Planning Criteria for circulation. Important and/or scenic views and drives should be preserved or improved, as illustrated in Figure F-7-G. The prompt improvement of several key intersections is vital to the visual success of Fort Lewis' circulation systems (Fig F-7-H).

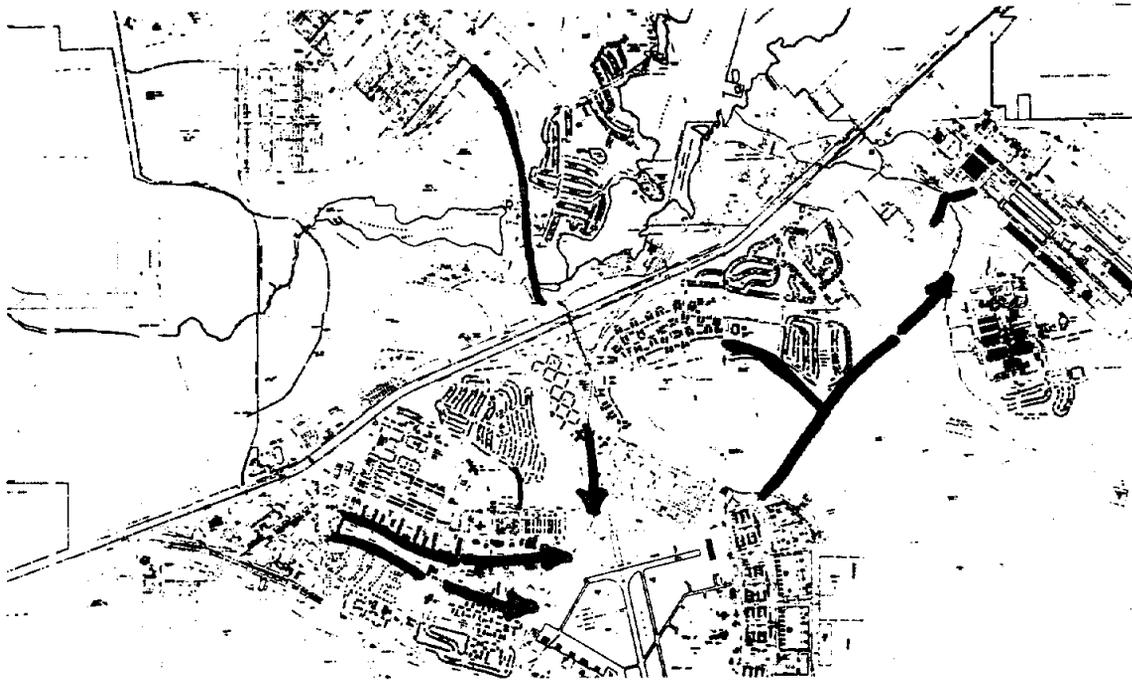


Fig F-7-G

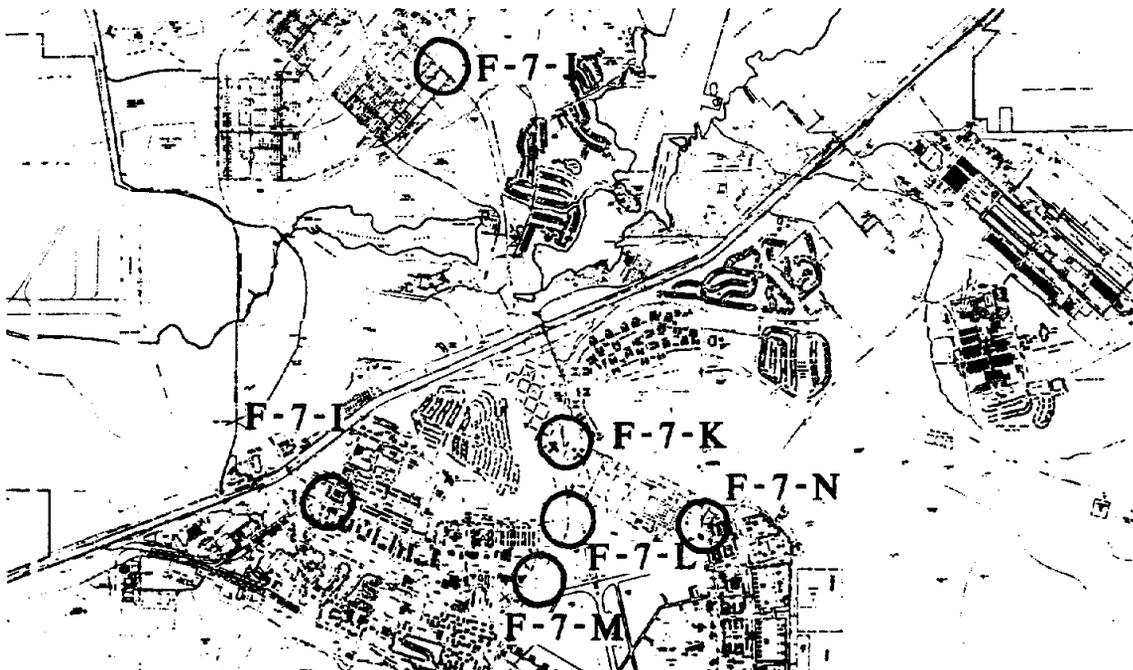


Fig F-7-H

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Pendleton and 1st Street intersection (Fig F-7-I).

- A Dense, evergreen and earth bermed screen at family housing and school.
- B Formal street trees.
- C Partial screening with existing trees.

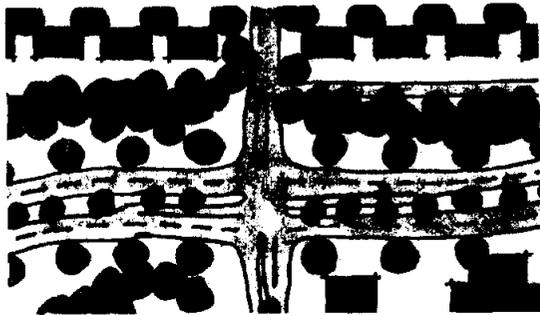


Fig F-7-I

41st Division Drive and A Street intersection (Fig F-7-J).

- A Dense trees angling away from road to provide "gateway."
- B Dense evergreen and earth bermed screen at barracks.
- C Sign and plantings for N. Ft. facilities.
- D Partial screen.



Fig F-7-J

41st Division Drive and Ohio/Colorado Avenue intersection (Fig F-7-K).

- A Dense evergreen and earth bermed screen at family housing and school.
- B Park-like moderately full treed areas.
- C Partial screen at Gas Station.

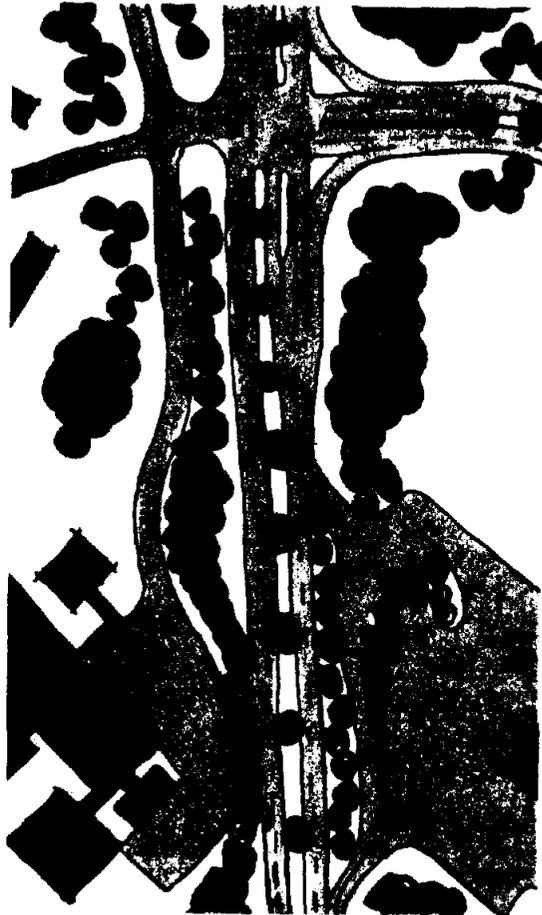


Fig F-7-K

41st Division Drive and Nevada Avenue inter-
section (Fig F-7-L).

- A Signs and plantings for Community Center and Gray Army Airfield.
- B Existing reforested area.
- C Partial screening.
- D Small, informally-grouped trees.

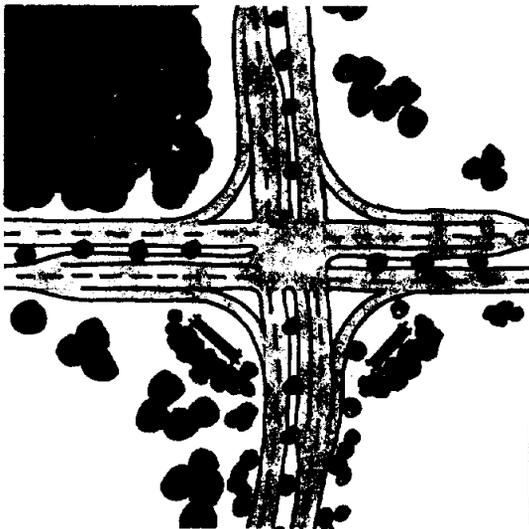


Fig F-7-L

41st Division Drive and Liggett Avenue inter-
section (Fig F-7-M).

- A Signs and plantings for Gray Army Airfield and Community Center.
- B Park-like dense trees for moderate screening.
- C Small, informally-grouped trees.

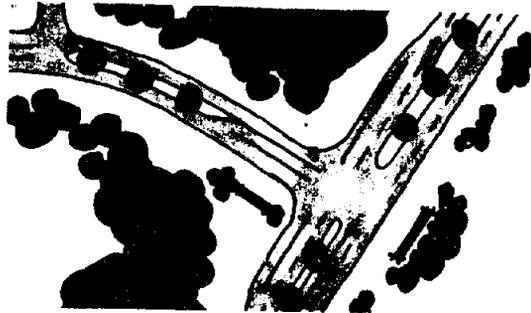


Fig F-7-M

Jackson Avenue and 2nd Division Drive inter-
section (Fig F-7-N).

- A Signs and plantings for new Division Headquarters, Division Area housing and Gray Army Airfield.
- B Solid evergreen and earth berm screens at barracks and NCO/EM Club.
- C Partial screening (high cut branches) to allow some views of Division Headquarters troop housing.

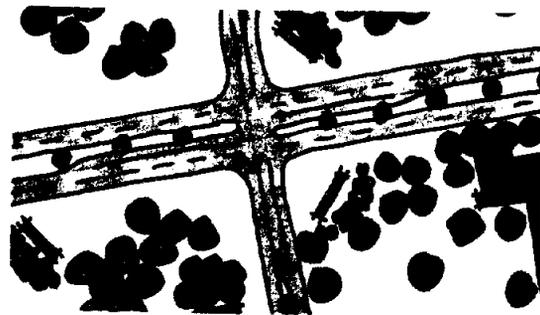


Fig F-7-N

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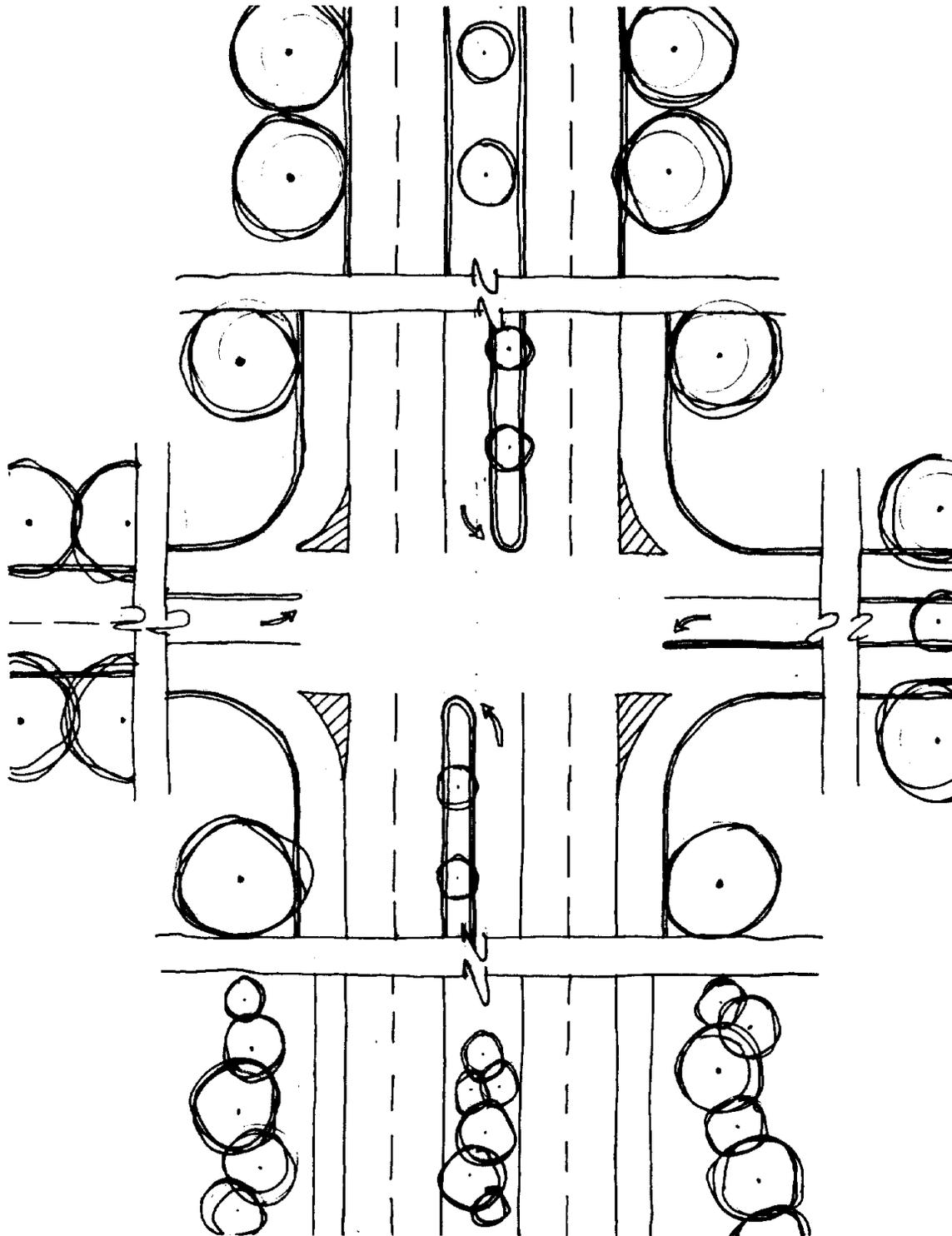


Fig F-7-0

Primary Road Recommendations.

Forms boundaries between zones, not through zones.

Median (15'-0" min landscaped).

Limit curb cuts and major entrance points of major facilities (min 500' centerline to centerline spacing).

On-street parking prohibited.

Sidewalks separated from road by sizable planting strip (12' min).

Medians, lighting, signage and landscaping reinforce importance and high speed nature of the road.

35' minimum landscaped set-back between street and building or parking.

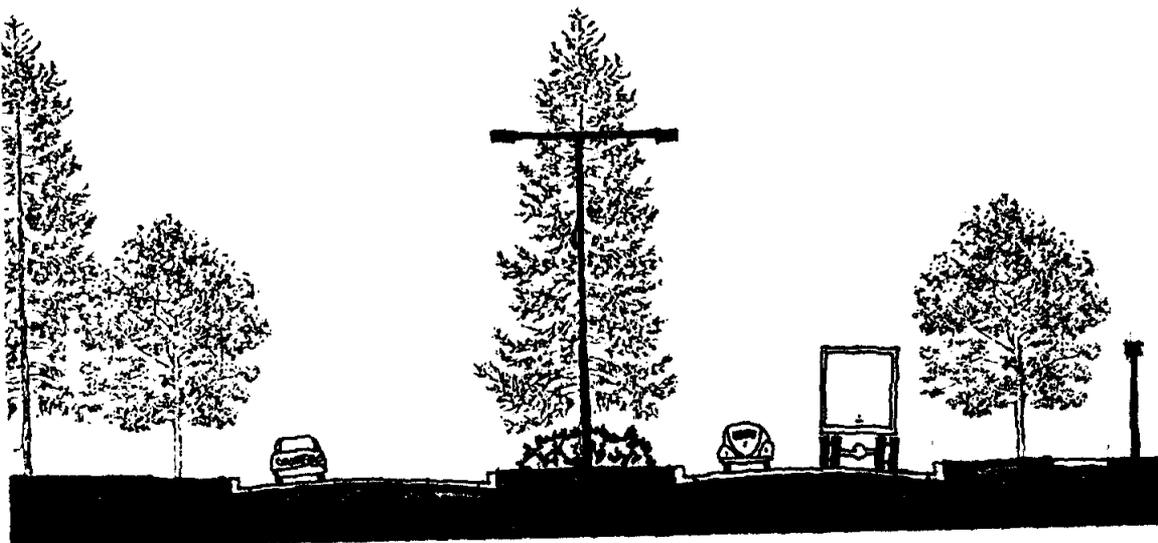


Fig F-7-P

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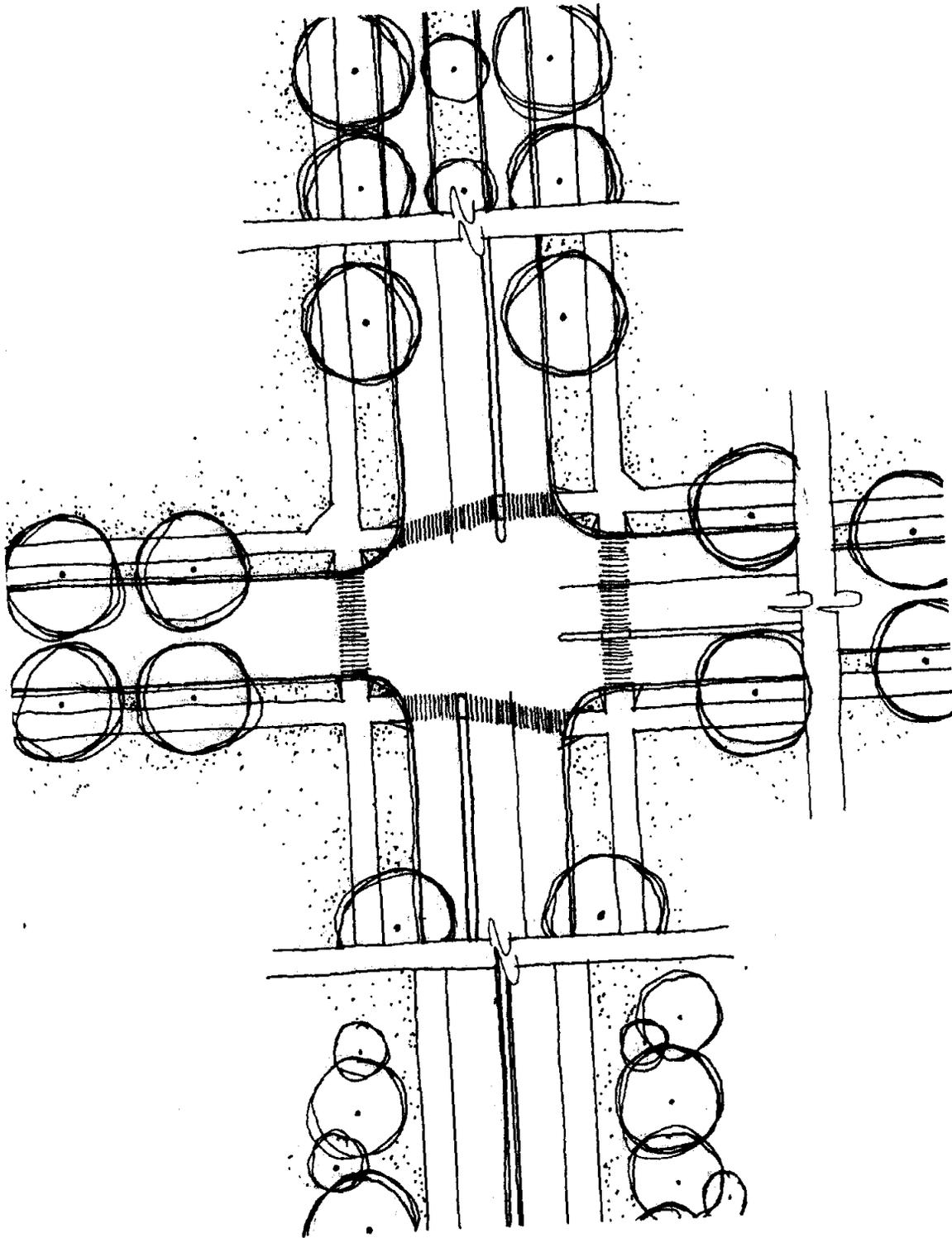


Fig F-7-Q

Secondary Roads Recommendations

Curb & Gutter.

Limit direct access to adjacent property (300' min centerline to centerline spacing).

Maximum 2 lane each direction (plus turn lanes) with or without median (6'-0" min).

Sidewalks separated from road by planting strip (12'-0").

Lighting, signage and planting reflect the moderate to slow speed nature of traffic and character of adjacent land use.

30' minimum landscaped setback between street and building or parking.

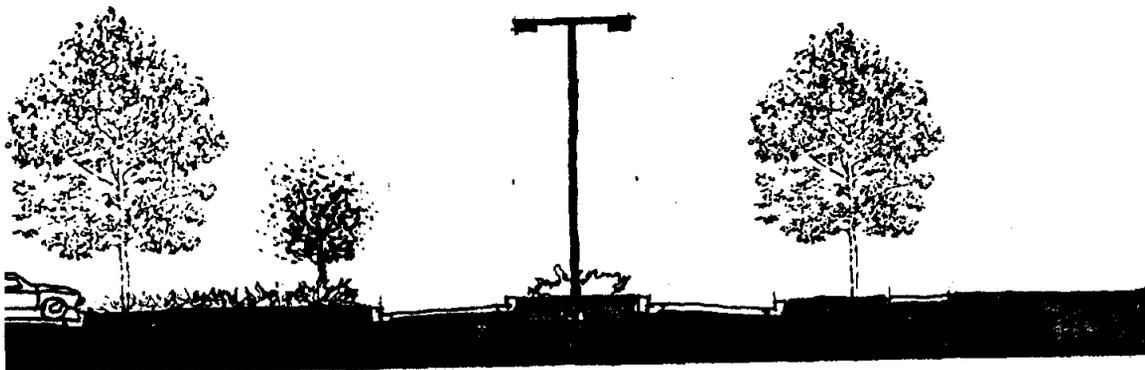


Fig F-7-R

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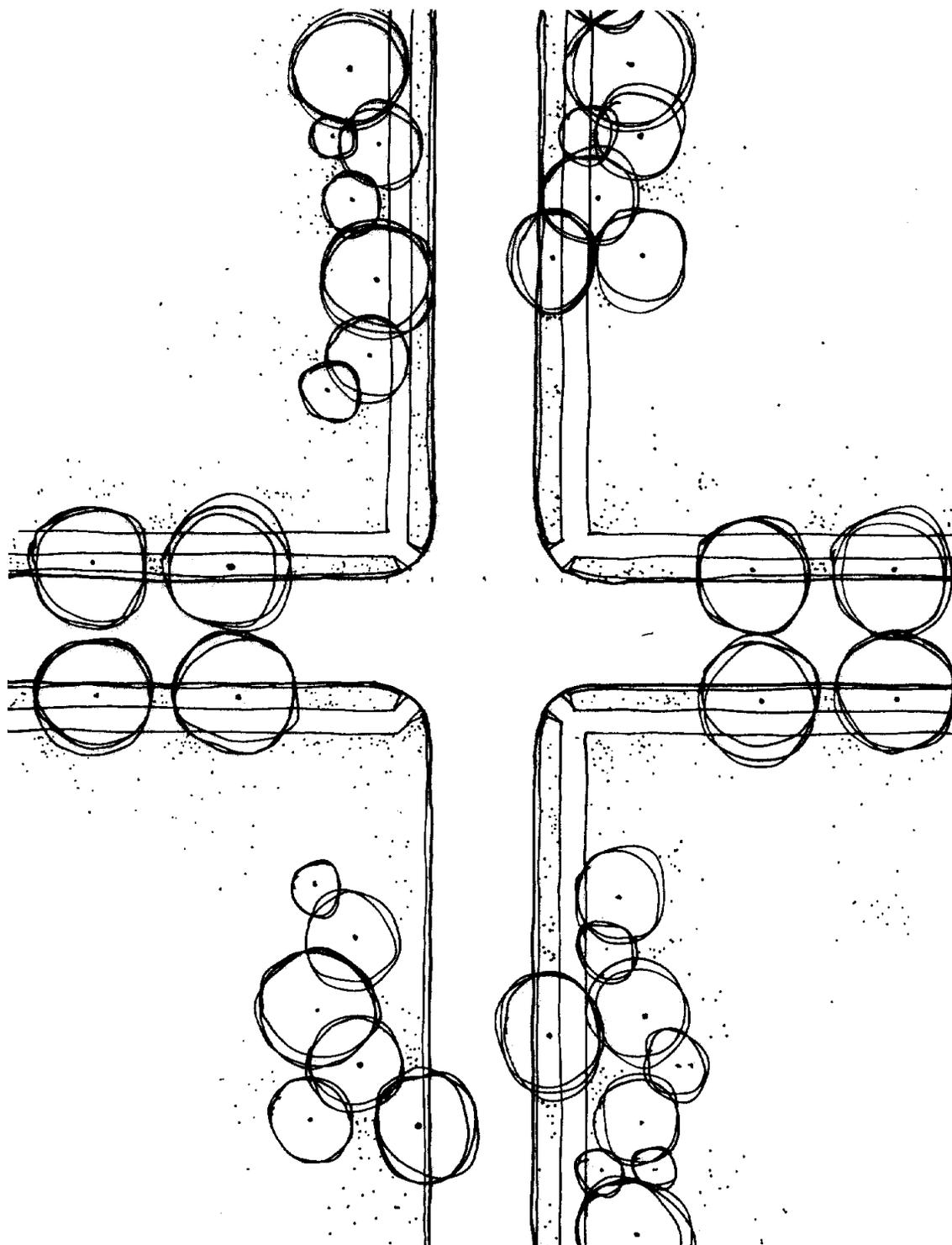


Fig F-7-S

Tertiary Roads Recommendations

Discontinuous alignment, except between secondary streets.

2 lanes.

On street parking discouraged, but allowed in family housing areas when street is wide enough.

Curb & Gutter.

Sidewalk may be adjacent to street - 6-0' planting strip preferred.

Street lighting, signage and planting in character with the slow speed traffic and nature of surround land uses.

Make cul-de-sacs or loops out of grids.

20' minimum landscaped set-back between street and building or parking.

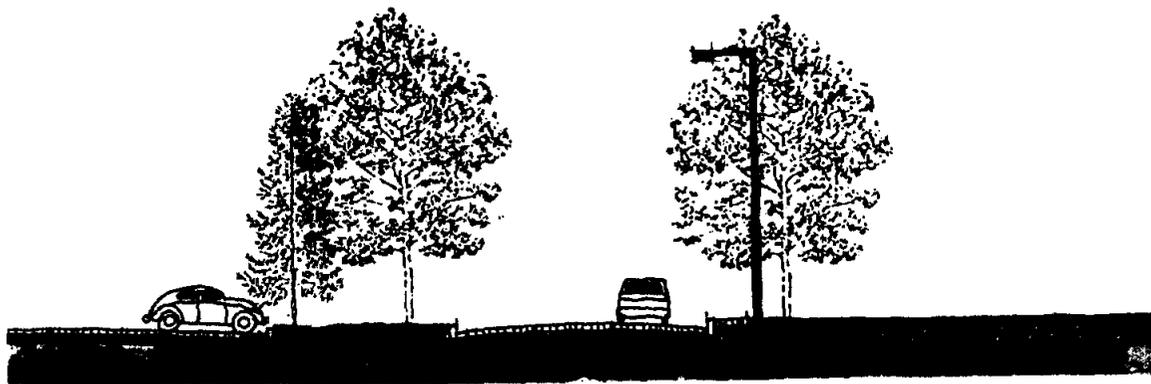


Fig F-7-T

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Street lighting, signage and planting in character with the slow speed traffic and nature of surround land uses.

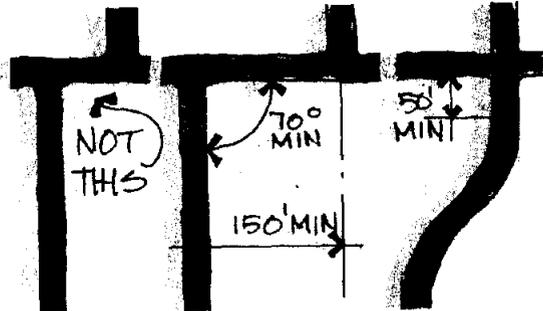


Fig F-7-U

Make cul-de-sacs or loops out of grids.

20' minimum landscaped set-back between street and building or parking.

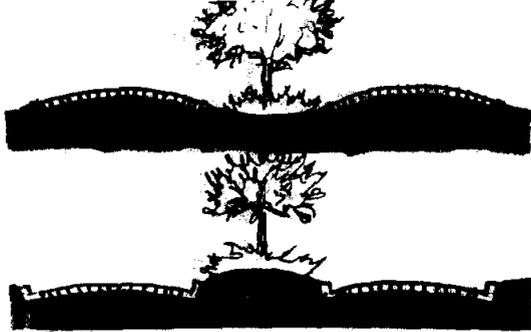


Fig F-7-V

Provide at least 150' between intersections or reroute road to allow at least 50' straight section before intersection (Fig F-7-U).

Road without curb (less developed areas) requires a depressed median to be used for drainage (top). Road with curb (all developed areas) requires a raised median (bottom) (Fig F-7-V).

In built-up areas (esp. Garrison) road should be lined with formal deciduous street trees with flowering trees in middle (top). Use varied-width clearing with informally grouped median plantings in less built-up areas (bottom) (Fig F-7-W).

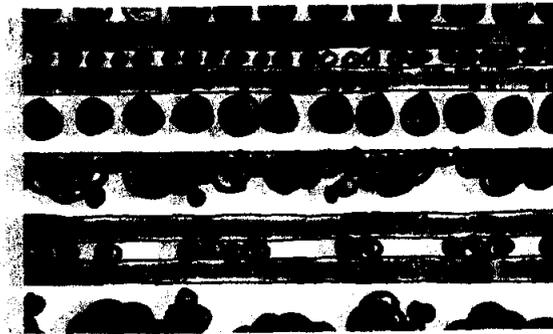


Fig F-7-W

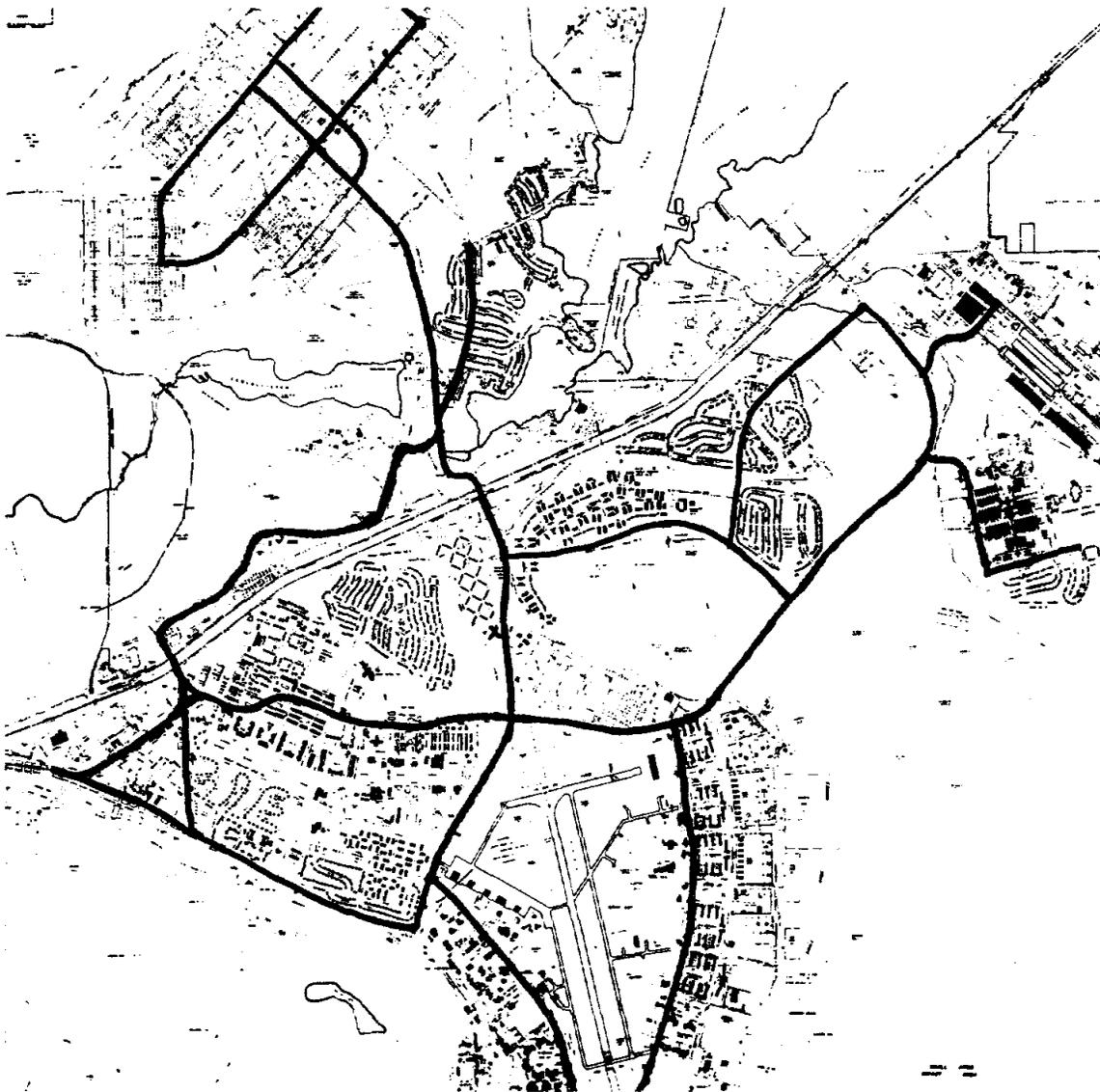


Fig F-7-X

Bikeways

A continuous class I (TM-5-803-5) bikeway should be provided as shown in this figure (Fig F-7-X).

Bicycle circulation routes are needed between the major areas of Fort Lewis, within the main cantonment area and too connect North Fort and the north residential areas to the rest of the Installation. This extensive bicycle network would provide an alternate transportation sys-

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tem for access to work, shop and recreation areas, would be safe for riders of all ages and would reduce the parking and vehicular problems. Separated bike paths should be provided, located away from primary and secondary roads. If there is an exceptional situation where bikeway must be placed adjacent to a roadway, a densely planted buffer strip shall separate them. Berms should be used to provide visual separation when physical separation of bike paths from roads is at a minimum. In outlying areas, the edges of tertiary roads may occasionally be used; it is recommended that a four foot wide bicycle lane be painted along the side of the road to give the cyclist a protected space to ride.

Bike paths should be constructed eight ft. wide to allow for two - way traffic and service vehicles, intersections shall allow riders clear visibility while in forward motion, gradual grade changes and gentle curves are necessary to allow for speed, and a relatively direct route between areas shall be chosen for efficiency. Bike paths require the visual amenities of planned and varied landscaping; hard paved surfaces are best, as loose gravel is unsafe.

Pedestrian Paths

Pedestrian circulation shall have an informal character in work, recreational, and housing areas and shall closely relate to the natural topography and existing natural landscape. Its purpose is to provide both an alternate transportation system and a recreational network; therefore attractive surroundings need to be created where none exists. Flagstone, brick or other such paving should be used for areas of special importance. Crushed gravel is acceptable where greater distances are involved; hard-pack dirt trails are suitable in open spaces where there are no manmade intrusions; however, good drainage practices must be used to avoid problems with mud. Widths of walks should vary from ten feet (where pedestrian traffic is high) to four feet. A grid or rectilinear design is appropriate in formal areas, an angular/geometric pattern is recommended in heavy use areas with less formal require-

ments, and curving/free form designs are appropriate between built-up areas and in residential areas. Areas which would receive high jogger use should have adequate coarse wood chip mulch trails to provide for a healthy form of exercise on a low-injury surface.