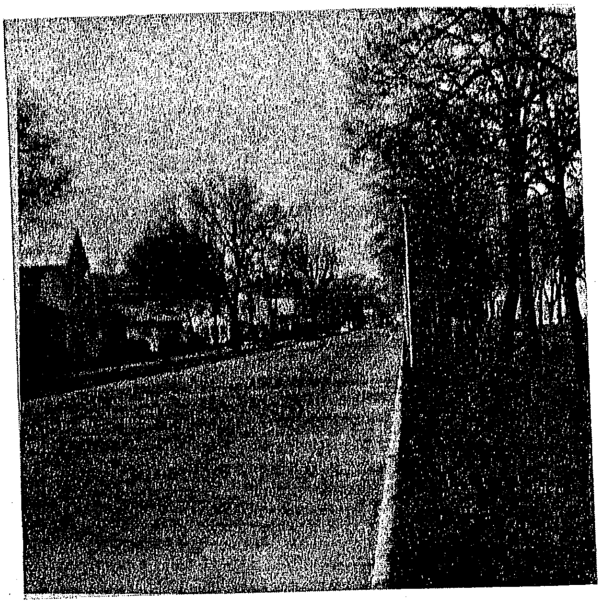
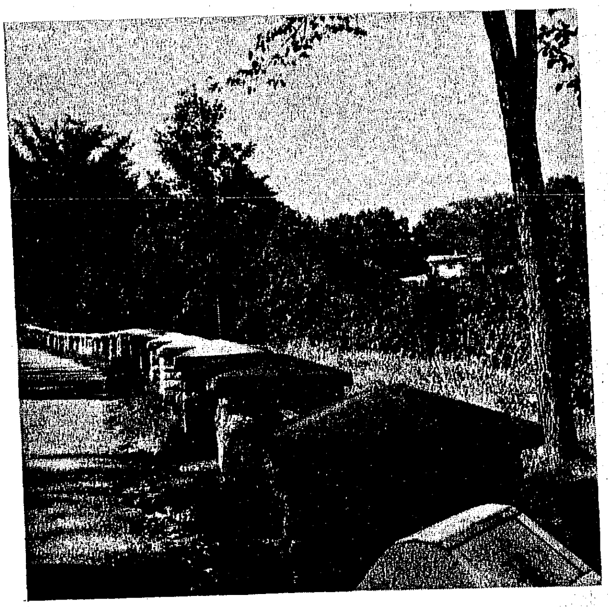




STREETS

STREET SYSTEM

EXISTING STREET SYSTEM

Purpose

Only by analyzing the existing street system can proposals be made to improve the system. The street system in Guttenberg is typical of those found in mid-western communities. Streets were laid out on a grid pattern running north-south and east-west at regular intervals with little regard given to the topography or other pertinent features. The pattern of streets is determined principally by the geographical features surrounding the area, and Guttenberg's riverfront location dictates the development of a linear city with the streets extending north and south.

The street system in a community is more than a means of access to adjoining properties, but actually establishes the size and shape of blocks that will be divided into building lots. In Guttenberg the blocks are generally 800 feet long and 200 feet wide, excluding alleys. Many of the lots in the community are 50 feet wide and 100 feet deep. Alleys are present in most of the community, including the central business district. They vary in width, but are generally 20 feet wide and run north and south.

Surfacing and General Conditions

Most of the streets in Guttenberg are paved with asphaltic concrete or seal coat, although U.S. 52 and its sideroad intersections are surfaced with portland cement concrete. Of the total streets approximately 11% are surfaced with portland cement, 55% with asphaltic concrete, 27% with seal coat, 5% with gravel and less than 1% are dirt. The length of streets and alleys can be found in Table 4-1.

Table 4-2 lists each street, surface type, surface condition and whether or not it has curbs, gutters and sidewalks. It can be noted from the table that there are a large number of streets in fair or poor condition. This would indicate that an extensive street improvement program is in the offering in the near future. In addition, the large number of streets that are surfaced with seal coat indicate that permanent all-weather surfacing has been postponed in favor of the seal coat treatment.

TABLE 4-1

Street Data, Guttenberg, 1969

Type of Surface	Length
Concrete	3.7 miles
Asphalt	18.7 miles
Seal Coat	9.2 miles
Gravel	1.7 miles
Dirt	0.2 miles
Total Length of Streets	33.5 miles
Total Length of Alleys	8.5 miles
Total Length of Sidewalks	4.2 miles

Appearance

The appearance of a community's streets, including that portion of the public right of way between the roadway and private property, exerts a major influence on the over-all appearance of the community. In many instances it is the streets which will convey a lasting impression to those visiting the community.

Curb and gutter not only facilitates the removal of storm water but defines the edge of the roadway and prevents vehicles from being parked on the lawn areas between the curb and sidewalks. This can do a great deal to enhance the appearance of the street. Other "fixtures", however, generally found between the curb and sidewalk also play an important role. Among these are street signs, utility poles, wires, and trees. It should be the general practice to erect as few signs as possible along streets, combining several signs on a single post where possible, such as street markers atop stop signs. Generally, the fewer signs in a neighborhood, the better the appearance.

Sidewalks

Sidewalks on one or both sides of the street extend north and south between Mozart and Sherman Streets. The sidewalks are located between River Park Drive and the Chicago, Milwaukee, and Saint Paul Railroad tracks. The sidewalks in the central business district are generally adequate in width and their condition is sound. The areas which do not have sidewalks are also without curbs and gutters.

Table 4-1 reveals the low percentage (15%) of streets that have sidewalks on one or both sides. This is the result of many of the streets extending into relatively undeveloped areas and the absence of walks on the longer streets extending north and south. In addition, only surfaced streets were considered as to whether or not public sidewalks were present.

Street Names

All the streets in the community have been named, however, only the streets extending north and south have been named according to sequence. Although the east-west streets do not adhere to a given pattern, the community should be commended for the choice of names, i.e., the 18th Century German cultural figures. Most of the streets have identification signs and there is no duplication of names.

Storm Drainage

The hard surfaced streets with curb and gutter can accommodate the movement of most storm waters but the resurfacing of the existing streets may reduce the capacity of the gutters to adequately serve the community. It may be necessary in the future to consider the removal of the excess pavement.

Summary

Over 94% of Guttenberg's streets are paved, either with asphaltic concrete (56%), seal coat (27%), or portland cement concrete (11%). Highway 52 is the major thoroughfare and most of the collectors are surfaced with asphaltic concrete. There are few sidewalks and the streets have been artfully named, but only the north-south streets are named in a sequential manner. The existing storm sewers appear to be adequate, however, the water-carrying capacity of curb and gutter have been reduced by resurfacing.

Traffic circulation is generally good but on Highway 52 through traffic is partially restricted by the unrelated highway commercial activities and there are some circulation conflicts in the central business district.

Circulation in the central business district is characterized by two-way traffic with on-street parking which often results in traffic congestion during the summer months. In addition visibility is restricted at intersections of the sidestreets with River Park Drive. Access from Highway 52 to the central business district is somewhat restricted by the lack of adequate streets linking the two.

Table 4-2 lists the surface type and condition of all the streets in the community. In addition, the table also indicates whether or not sidewalks and curb and gutter facilities are present.

TABLE 4-2

STREET CONDITIONS

East-West Streets

Street	Surface Type[1]	Surface Condition[2]	Curb & Gutter[3]	Sidewalks[3]
Koszciusco	S	FR	No	No
Lafayette				
Fifth to Second	S	FR	No	No
Broadway				
Fourth to Second		FR	No	No
Second to River Park Drive	S	FR	No	No
Jefferson				
Alley to Third	A	PR	No	No
Third to River Park Drive	A	FR	No	No
Washington				
Sixth to Railroad tracks	S	PR	No	No
Railroad tracks to River Park Drive	A	PR	No	No
Hayden				
Highway 52 to Second	A	FR	No	No
Second to First	A	FR	Yes	N partial
First to River Park Drive	A	FR	No	No
Mozart				
Railroad tracks to River Park Drive	A	FR	No	No

1. Surface Type
   - C=Concrete
   - A=Asphalt
   - S=Seal Coat
   - G=Gravel
   - D=Dirt

2. Surface Condition
   - GD=Good
   - Fr=Fair
   - Pr=Poor

3. Side of Street
   - N=North
   - S=South
   - E=East
   - W=West
   - No=None
   - Yes=Both sides of street

TABLE 4-2

STREET CONDITIONS

East-West Streets

Street	Surface Type[1]	Surface Condition[2]	Curb & Gutter[3]	Side-walks[3]
Pryam				
Highway 52 to Railroad tracks	A	PR	No	No
Railroad tracks to First	A	FR	No	No
First to Alley	A	FR	No	No
Alley to River Park Drive	A	FR	N partial	No
Regent				
Bluff to Highway 52	S	FR	No	No
Highway 52 to Rail-road tracks	G	PR	No	No
Railroad tracks to First	A	FR	Yes	No
First to River Park Drive	A	FR	No	Partial
China				
Highway 52 to Second	A	FR	No	No
Second to First	A	FR	N partial	No
First to River Park Drive	A	FR	N partial	N
Main				
Highway 52 to Hospital	A	GD	No	No
Hospital to First	A	GD	Yes	Yes
First to River Park Drive	A	GD	N	Yes
Pearl				
Highway 52 to Second	A	FR	No	No

TABLE 4-2 (continued)

STREET CONDITIONS

East-West Streets

Street	Surface Type[1]	Surface Condition[2]	Curb & Gutter[3]	Sidewalks[3]
Second to First	A	GD	Yes	Yes
First to River Park Drive	A	FR	Partial	Yes
Prince				
Railroad tracks to Second	A	FR	No	Partial
Second to First	A	FR	S	Yes
First to River Park Drive	A	GD	Yes	Yes
Goethe				
Bluff to Highway 52	S	PR	No	No
Highway 52 to River Park Drive	A	GD	No	Partial
Herder				
Bluff to Highway 52	S	GD		No
Highway 52 to Railroad tracks	A	FR	No	No
Railroad tracks to Second	A	FR	No	Yes
Second to First	A	FR		Yes
First to River Park Drive	A	FR	Yes	Yes
Schiller				
Bluff to Highway 52	S	FR	No	No
Highway 52 to Fourth	A	GD	Yes	No
Fourth to Railroad tracks	A	GD	No	No
Railroad tracks to River Park Drive	A	GD	Yes	Yes
Lessing				
Highway 52 to Railroad tracks	G	FR	No	No

TABLE 4-2 (continued)

STREET CONDITIONS

East-West Streets

Street	Surface Type[1]	Surface Condition[2]	Curb & Gutter	Sidewalks
Lessing				
Highway 52 to Railroad tracks	G	FR	No	No
Alley to Second	A	FR	No	No
Second to River Park Drive	A	GD	No	Yes
Weiland				
Bluff to Fourth	G	FR	No	No
Alley to Second	A	PR	No	No
Second to River Park Drive	A	GD	No	No
Sherman				
Bluff to Second	G	GD	No	No
Second to First	A	GD	No	No
First to River Park Drive	A	FR	No	No
Koerner				
Bluff to Railroad tracks	S	FR	No	No
Railroad tracks to First	A	FR	No	No
First to River Park Drive	A	FR	Yes	No
Dekalb				
Highway 52 to River Park Drive	S	PR	No	No

TABLE 4-2 (continued)

STREET CONDITIONS

North-South Streets

Street	Surface Type[1]	Surface Conditions[2]	Curb & Gutter[3]	Side-walks[3]
River Park Drive				
Dekalb to Rotteck	S	FR	No	No
Rotteck to Koerner	A	GD	No	No
Koerner to Pearl	A	GD	Yes	W
Pearl to Main	A	GD	Yes	W & partial E
Main to Pryam	A	GD	Yes	W
Pryam to Washington	A	GD	Yes	No
Washington to Jefferson	A	FR	No	Partial
Jefferson to Broadway	S	FR	No	No
First				
Rotteck to Koerner	G	FR	No	No
Koerner to Sherman	A	GD	No	No
Sherman to Herder	A	GD	Yes	Yes
Herder to Goethe	A	GD	No	No
Goethe to Prince	A	GD	Yes	Yes
Prince to Main	S	GD	Yes	Yes
Main to China	A	FR	Yes	Yes
China to Pryam	A	GD	Yes	Yes
Pryam to Mozart	A	FR	No	Yes
Mozart to Washington	A	FR	W	W
Second				
Jordan to Dekalb	D	PR	No	No
Rotteck to Koerner	G	GD	No	No
Koerner to Sherman	A	PR	No	No
Sherman to Lessing	A	GD	Yes	Yes
Lessing to Schiller	A	GD	W	Yes
Schiller to Prince	A	GD	Yes	Yes
Prince to Pearl	A	FR	No	Yes
Pearl to Main	A	FR	E	Yes
Main to Regent	A	FR	E	No
Regent to Pryam	A	FR	Partial	No
Pryam to Mozart	A	FR	No	No
Mozart to Hayden	A	FR	E	No
Hayden to Broadway	A	FR	No	No
Broadway to Bluff	S	FR	No	No

TABLE 4-2 (continued)

STREET CONDITIONS

North-South Streets

Street	Surface Type[1]	Surface Condition[2]	Curb & Gutter[3]	Side-walks[3]
Third				
Jordan to Dekalb	D	FR	No	No
Rotteck to Pearl	G	FR	No	No
Pearl to Regent	S	FR	No	No
Mozart to Hayden	S	FR	No	No
Hayden to Lafayette	A	FR	No	No
Lafayette to Cincinnati	S	FR	No	No
Fourth				
Koerner to Sherman	G	FR	No	No
Lessing to Herder	A	FR	No	No
Goethe to Mozart (Highway 52)	C	FR	No	No
Broadway to Lafayette	G	PR	No	No
Lafayette to Cincinnati	S	FR	No	No
Cincinnati to Second	G	PR	No	No
Fifth				
County Highway C7X to Goethe (Highway 52)	A	FR	No	No
Washington to Lafayette	S	PR	No	No
Bluff				
Sherman to Regent	S	FR	No	No
Koszciusco to North City Limits	S	FR	No	No
Acre				
South City Limits to North	S	FR	No	No

MASTER STREET PLAN

Purpose

The Master Street Plan for Guttenberg is intended to serve as a guide for the extension and revision of the major street system. It provides a classification system for the various streets in the city according to their function and contains development standards for each classification. It is coordinated with county and regional traffic patterns and recognizes long-range proposals of the Highway Commission.

The Master Street Plan is shown on Map 4-1 and designates those streets classified as thoroughfares and collectors. The map also shows the location of major existing and proposed traffic generators in and near the city.

The Master Street Plan contains recommended policies regarding other street uses such as street trees, lighting and sidewalks. It is, in part, a policy statement, setting forth the prescribed standards to which the city wishes to develop its streets. This is accomplished (1) in new areas through the subdivision regulations, and (2) on existing streets through the annual street improvement program. It is important that the standards for street development in new subdivisions be the same as those for the upgrading or redevelopment of existing streets in the community. The result will be high quality streets throughout the city, which will mean lower maintenance costs, a strengthening of property values and savings to the taxpayer.

Street Classification System

In order for Guttenberg to establish a uniform policy for the upgrading and extension of the street system, all streets in the community should be classified according to function, and standards should be established for each classification. In 1970, the 63rd Iowa General Assembly adopted legislation (House File 394) providing for the functional classification of all streets and roads in existence as of January 1, 1970. This classification system provides for 8 categories of municipal streets. Since all categories are not applicable to the Guttenberg, they have been placed in 3 major groups which are discussed below:

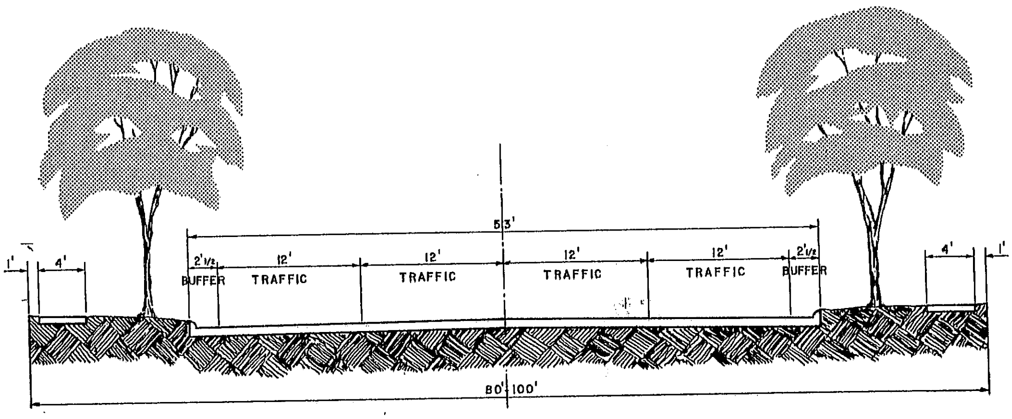
> <u>Thoroughfare</u> is the major traffic carrier and in Guttenberg Highways 52 is placed in this classification. This classification

includes freeway-expressway extensions, arterial extensions and arterial connector extensions. The important consideration from Guttenberg's standpoint will be access control, which must be handled jointly with the Iowa State Highway Commission. Thoroughfares should have a minimum right of way width of 80 to 100 feet. The surface width should be 53 feet, which will include two 12-foot traffic lanes, reserve area for two additional 12-foot traffic lanes, and five feet for buffer strips and curb and gutter.

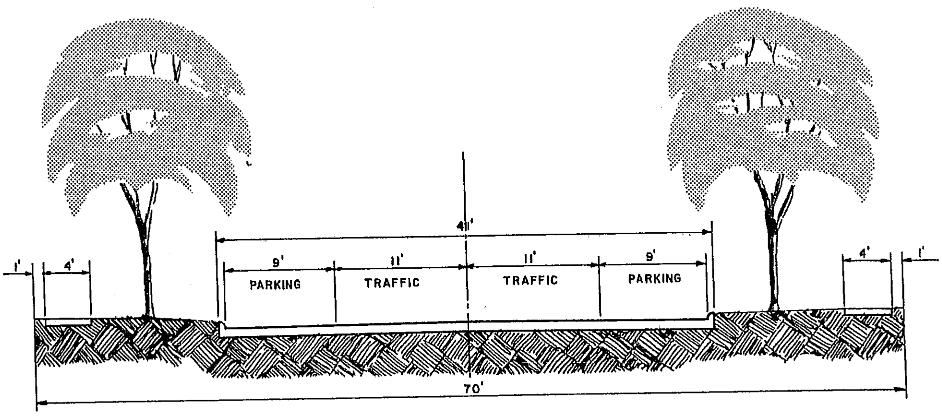
Collector Streets are the immediate streets, and as the name implies, serve to collect traffic from residential and outlying areas and distribute it to the various traffic generators such as the business district, schools, highways and industrial areas. This category includes trunk extensions, trunk collectors, municipal arterials and municipal collector streets. In Guttenberg the collectors are Acres; Koerner, Schiller, Gothe, Pearl, Dekalb and Hayden from U. S. 52 to River Park drive; county road to Garber; and River Park drive to and including the Great River Road. Collector streets should have a 41 foot surface width which will provide two 11-foot lanes for moving traffic and two additional 9-foot lanes for parking. A right of way of at least 70 feet is desirable to accommodate a collector street.

Residential Streets are the minor streets used primarily for access to abutting properties and correspond to municipal service streets in the functional classification system. In Guttenberg all streets not designated thoroughfares or collectors fall into this classification. Residential streets should have a surface width of 31 feet which will provide one 12-foot lane for moving traffic and two nine-foot lanes for parking in a 60-foot right of way. However, it should be emphasized that use of streets in residential neighborhoods for parking is not desirable and through the zoning ordinance a minimum of two off-street parking spaces per dwelling unit should be required. Where only a limited number of homes are served and where adequate off-street parking has been provided, the surface width can be reduced to 25 feet, however, it may be necessary to restrict parking to one side or eliminate it entirely in order to adequately move traffic.

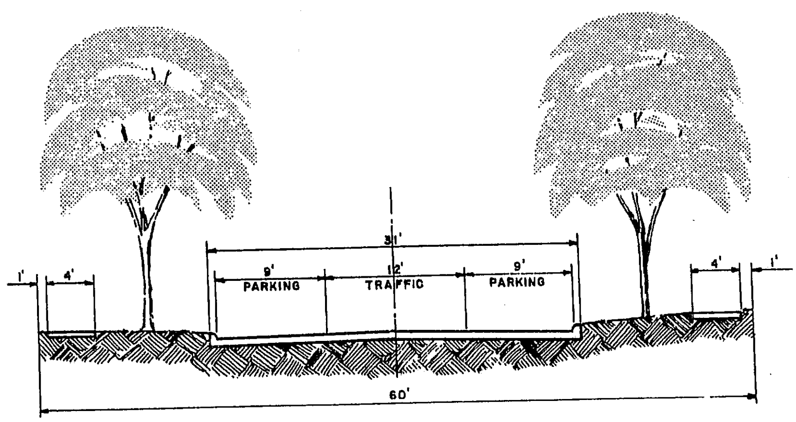
Where a residential street dead ends, a cul-de-sac or turn-around should be required. In such case, the cul-de-sac should have a surfaced diameter of 85 feet at the back of the curb and a right of way diameter of 110 feet. The remainder of the street should conform to the standards of a residential street.



THOROUGHFARE



COLLECTOR STREET



RESIDENTIAL

POWERS·WILLIS & ASSOCIATES PLANNERS·ENGINEERS·ARCHITECTS IOWA CITY, IOWA	RECOMMENDED STREET CROSS SECTIONS	4 0 4 8 16 SCALE IN FEET	FIGURE 4-1

Typical cross sections of thoroughfares, collector and residential streets are shown in Figure 4-1.

Sidewalks and Street Surfacing

Sidewalks should be provided throughout the city's residential and commercial areas and particularly the areas near major traffic generators, such as schools, churches, parks, and business areas. Sidewalks in residential areas basically serve two purposes: to provide a safe place for pedestrians to walk and to provide a space for smaller children to play. In previously developed areas, the city should initiate a sidewalks construction program which would provide new walks where needed and replacement of existing walks that are in poor condition. Sidewalks should be constructed at the expense of the adjoining property owner and at grades and to specifications approved by the city.

Guttenberg will have to take steps in the future to improve street conditions. Approximately 27 percent of the streets are surfaced with seal coat. These streets along with the gravel and dirt streets should be surfaced with a more permanent surface such as portland cement or asphaltic concrete. These street surfaces last longer and require less maintenance, and thus reduce the cost of street operations. Improving street surface conditions and regular street maintenance and cleaning are essential and will enhance the appearance of the community.

Signs, Street Lighting, and Storm Drainage

Many of the traffic control signs, such as stop signs, directional signs, and street name signs, can often be combined on the same standard or post. By eliminating as many posts and unnecessary signs as possible, the appearance of Guttenberg streets can be improved. The street signs in Guttenberg are color coded to aid the motorist in identifying major streets. This is an excellent idea and the present policy should be continued. The appearance of street lighting facilities varies in Guttenberg from many lights within a block (the east side of River Park drive) to one light at intersections (Highway 52 and most streets north of Goethe and south of Lessing). Street lighting along Highway 52 and along Goethe and Lessing Streets leading to the business district should be improved. In addition, lighting in the central business district should also be upgraded. The city should also begin to consider the need to place overhead wiring underground, rather than along the streets. It should be the policy of the city to require that all new and replacement lines be placed underground.

Guttenberg's new street lighting fixtures are mounted on modern metal standards and the community should maintain this standard when upgrading additional lighting facilities. A policy of requiring underground service and the elimination of overhead power lines and wooden poles will enable the city to take on a new look, free from the clutter of wires and unsightly poles.

Storm drainage has always created problems in Guttenberg and the proposed flood control system will help to alleviate this problem. In conjunction with the flood control system, underground storm sewers may also be desirable. If they are needed, they should be separate from sanitary sewers and discharged into the natural courses, i.e., the proposed ponding areas.

Street Trees

A well designed planting scheme will contribute to the beauty of streets and will serve a useful purpose as well. Undesirable views can be screened out and noise diverted by plantings of shrubs and trees.

Healthy existing trees on streets should be saved whenever possible. Planting of street trees is a desirable, standard practice. Straight streets should have regularly planted trees except where building groups indicate different treatment. Narrow streets may have trees on one side only, preferably on the south or west side for effective shading. Trees are commonly planted too close together. Fifty to sixty feet has been found better than 25 to 30 feet, depending on the variety and growing habits.

It is important that a tree replacement program be carried out because of losses, either the result of disease (Dutch Elm disease) or removal for development. Trees selected for planting along the street should be relatively maintenance free.

Table 4-3 contains a list of trees that the city may wish to consider in a planting program. Other trees having desirable characteristics should also be considered. A variety of species is aesthetically pleasing and will prevent wide spread loss due to disease such as has been experienced with the Dutch Elm disease.

TABLE 4-3

Some Recommended Street Trees

Type of Tree	Spacing	Height	Spread
Small Trees - up to 35 feet			
Globe Norway Maple	25	20	18
Globe Red Maple	25	20	18
Amur Maple	25	20	20
Tatarian Maple	25	25	15
Modesto Ash	25	20	15
Dr. Pirone Ash	25	35	20
Katsura Tree	25	30	20
Medium Trees - up to 65 feet			
Norway Maple	40	60	30
Columnar Norway Maple	40	50	20
Columnar Sugar Maple	40	35	10
Columnar Red Maple	40	50	25
Tilford Red Maple	40	35	35
Ginkgo	40	60	40
Little Leaf Linden	40	50	35
Majestic Locust	40	60	40
Marshall's Seedless Green Ash	40	60	30
Amur Cork Tree	25	40	20
Japanese Pagoda Tree	25	40	20
Large Trees - up to 110 feet			
Sugar Maple	60	75	50
Green Ash	60	80	50
White Ash	60	80	50
White Oak	60	75	50
Northern Red Oak	60	75	50
Hackberry	60	65	50
Sycamore	60	110	60
Tulip Tree	60	90	40
Japanese Zelkova	60	80	60

Summary and Recommendations

To assist the city in accomplishing the goals established by the Master Street Plan, a list of needed improvements and policies is provided. Many of these can be carried out over a period of years while others are of a continuous nature and should be implemented immediately.

1. Prevent encroachment upon the street right-of-way by various uses and encourage the appropriate use of land adjoining the highways and major streets by adopting and enforcing zoning.

2. Coordinate street grades with sidewalk, lot and floor elevations.

3. Encourage high quality subdivision design.

4. Widen and improve collector streets as required and initiate the one-way street system as traffic volumes demand.

5. Combine signs and sign posts whenever possible.

6. Initiate a sidewalk construction program to provide sidewalks where needed and replacement or repair of those in poor condition. Initial programs should include areas near traffic generators.

7. Locate telephone and electric lines underground whenever facilities are replaced or upgraded and encourage the installation of decorative street lighting fixtures and standards throughout the city.

8. Implement a street tree planting program.

9. Install curb, gutter and permanent surfacing on all streets through a street improvement program.

10. Provide for the orderly extension of collector streets in accordance with the Master Street Plan and the Subdivision Regulation Ordinance.